0 - OEB STAFF INTERROGATORY - 001

Reference:

No reference provided

Interrogatory:

a) Please file a response to any letters of comment on the public record for this proceeding.

b) Going forward, please ensure that responses are filed to any subsequent letters that may be submitted in this proceeding. Please file responses prior to the argument phase of this proceeding.

Response:

a) A response to customers' letters of comments is filed as Attachment 1 to this response.

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Dear valued customer,

Thank you for taking the time to write a letter of comment to the Ontario Energy Board (OEB) regarding our 2023-2027 Joint Distribution and Transmission Rates Application.

I would like to take this opportunity to provide you with a response to your letter of comment. Letters like yours are an important part of the regulatory process.

Another very important part of this process is the engagement we have had with our customers across the province. Over the past two years, Hydro One has engaged with nearly 50,000 Ontarians through focus groups, telephone surveys and online workbooks to understand customer needs and priorities regarding their electricity service. Customers told us that they expect Hydro One to be a good steward of the electricity system in Ontario and make the investments necessary to maintain the system for future generations.

These insights have guided the development of Hydro One's investment plan for the years 2023-2027. This plan is about building a resilient electricity system ready for the future and strikes a balance to deliver service and reliability outcomes that customers value, while keeping rates as low as possible. With this plan, we expect a typical residential customer's monthly bill (using 750 kWh per month) will increase by an average of $1.68 each year over the five-year period.

To provide additional transparency and demonstrate how we deliver on these promises, the OEB has adopted performance-based rates for utilities in Ontario. This provides strong incentives for Hydro One and other utilities to continue and expand their efforts to control costs, increase efficiency and productivity, and maintain service quality. Productivity and efficiency are important to Hydro One and our customers. From 2015 to 2020, we have achieved approximately $738 million of cumulative productivity savings. For the years 2023-2027, we will target to achieve $750 million in savings.

While the rate increase reflects the feedback we heard during the customer engagement process, we do recognize that some customers have been struggling to pay their electricity bills, especially during the COVID-19 Pandemic. We continue to offer financial assistance, relief measures and other flexibility to help customers in need and encourage them to contact us.

We hope this addresses your questions regarding our Joint Distribution and Transmission Rates Application. To learn more about Hydro One's five-year investment plan, please visit HydroOne.com/InvestmentPlan.

Sincerely,

Frank D'Andrea
Vice President, Reliability Standards and Chief Regulatory Officer

0 - OEB STAFF INTERROGATORY - 002

Reference:

No reference provided

Preamble:

OEB staff notes that Procedural Order No. 1 established November 29, 2021 as the deadline for filing interrogatory responses. OEB staff expects that Hydro One will have 2021 third quarter actuals available by the time that the interrogatory responses are due.

Interrogatory:

a) Please file Hydro One's 2021 Third Quarter Actual results and comment on whether or not they would have any significant impacts on the JRAP application. If so, please state where these significant impacts would be and file any necessary updates to the application.

Response:

a) Please see **A-SEC-002** for Hydro One's 2021 Third Quarter Actual results. These results do not have any significant impacts on the JRAP application.

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A - OEB STAFF INTERROGATORY - 003

Reference:

Exhibit A-4-2, Pages 5, 8
Exhibit H-1-1

Preamble:

On page 5 of Exhibit A/4/2, Hydro One provides Table 1, summarizing the derivation of the Transmission Revenue Requirement for each year of the plan from 2023 to 2027. For 2023, the Transmission Revenue Requirement is based on a cost of service approach to rebase the revenue requirement, while, for 2024 through 2027, the annual revenue requirement will be updated in each year through an annual application. The Transmission Revenue Requirement is shown on line 14 of Table 1.

In Exhibit H/1/1, Hydro One documents its approach for determining the Transmission Revenue Requirement, and the methodology for allocating the revenue requirement to the pools. In Table 1 on page 2 of this exhibit, Hydro One shows the estimate of the total Transmission Revenue Requirement and of other revenues and costs (i.e., revenue offsets) to derive the Rates Revenue Requirement.

Interrogatory:

a) Please confirm that Line 14 on Table 1 of Exhibit A/4/2 is the Total or Service Revenue Requirement.

b) Are any of the other revenues and costs shown in Table 1 of Exhibit H/1/1 subject to updating as part of the annual update for 2024 through 2027 that Hydro One has documented on page 8 of Exhibit A/4/2?

c) If the answer to b) is in the affirmative, please identify which revenue offsets will be updated. Please also provide further explanation of what support Hydro One expects to file for updates to other revenues as offsets for the annual Transmission Revenue Requirement update.

Response:

a) Confirmed.

b) Yes.

c) The only other revenue that is subject to updating as part of the annual update in the period 2024 to 2027 is "Funding for LVSG Credit". As the total revenue requirement is updated annually in 2024-2027 through the Custom IR framework, the credit amount will also be updated[1]. This is consistent with the methodology approved by the OEB in Hydro One's 2020 to 2022 transmission Custom IR framework and subsequent annual revenue requirement applications.[2]

[1] See Exhibit H, Tab 1, Schedule 3, section 3.3 for a detailed description of the derivation of the LVSG credit.
[2] Hydro One Networks' 2020 to 2022 Transmission Custom IR Application (EB-2019-0082); Hydro One Networks' 2021 Transmission Revenue Requirement Application (EB-2020-0202); and Hydro One Networks' 2022 Transmission Revenue Requirement Application (EB-2021-0185).

A - OEB STAFF INTERROGATORY - 004

Reference:

Exhibit A-4-3, Pages 5, 8
Exhibit L-2-1, Attachment 1

Preamble:

On page 5 of Exhibit A/4/3, Hydro One provides Table 1, summarizing the derivation of the Distribution Revenue Requirement for each year of the plan from 2023 to 2027. For 2023, the Distribution Revenue Requirement is based on a cost of service approach to rebase the revenue requirement, while for 2024 through 2027 the annual revenue requirement will be updated in each year through an annual application. The Distribution Revenue Requirement is shown on line 14 of Table 1.

In Exhibit L/1/1, Hydro One documents its approach for allocating the revenue requirement between customer classes based on the OEB's cost allocation methodology, and for its rate design to determine fixed and variable rates to recover the base (distribution) revenue requirement from ratepayers based on the approved load forecast (i.e. billing determinants) for each year. In tables showing the rate design for each year from 2023 to 2027 in Exhibit L/Tab 2/Schedule 1/Attachment 1, pages 1 to 5, Hydro One shows the Total (Service) Revenue Requirement, Other Revenues and Base Revenue Requirement in total and allocated to each customer class.

Interrogatory:

a) Please confirm that Line 14 on Table 1 of Exhibit A/Tab 4/Schedule 3 is the Total or Service Revenue Requirement.

b) Please confirm that some of the Other Revenues are revenue for Specific Service Charges and for Pole Attachment charges, and that some of these charges are also subject to adjustments for inflation in each annual update.

c) Please identify which other revenues will be updated for inflationary adjustments, and what supporting evidence Hydro One expects to file for updates to other revenues as offsets for the annual Distribution Revenue Requirement and Distribution Rates application update.

Response:

a) Confirmed.

b) Hydro One confirms that some of the Other Revenues are revenue for Specific Service Charges and for Pole Attachment charges.

As discussed in Exhibit L, Tab 4, Schedule 1, section 3.0, Hydro One proposes to maintain its specific service charges at the 2022 OEB-approved amount for the 2023 to 2027 period with one exception – Wireline Pole Attachment charges. Hydro One proposes to continue to apply the levels of charges set by the OEB for this charge for the 2023 to 2027 period. Currently, the annual inflationary rate adjustment for this charge is suspended and therefore the charge will remain at $44.50 per attacher per year per pole until further notice.

c) As discussed in part b), the only other revenue that may be subject to inflationary adjustments is the revenues associated with the Wireline Pole Attachment charge. If and when the OEB resumes the annual inflationary adjustment for this charge, Hydro One will update the Wireline Pole Attachment revenues as part of its annual Distribution Rate application update.

As the forecast volume will be examined and approved by the OEB in this Application, the only supporting evidence needed for the update would be the OEB approved inflation number and its impact on the Wireline Pole Attachment component of Other Revenue.

A - OEB STAFF INTERROGATORY - 005

Reference:

Exhibit A-4-2
Exhibit A-4-3
Exhibit B-2-1
Exhibit B-3-1
Exhibit B-4-1

Preamble:

Hydro One has documented its planned capital projects for each year of the plan from 2023 to 2027 in each of its Transmission System Plan (TSP), Distribution System Plan (DSP) and General System Plan (GSP). General plant capex and capital additions in each year are allocated between Transmission and Distribution per Hydro One's proposed methodology.

OEB staff are interested in examining Hydro One's assumptions regarding inflation as factored into the capital budgets in the TSP, DSP and GSP, and hence reflected in the costs factored into Transmission and Distribution capital additions to rate base as shown in Table 1 of Exhibit A/Tab 4/Schedule 2 (Transmission) and Table 1 of Exhibit A/Tab 4/Schedule 3 (Distribution) relative to the assumed Transmission (Distribution) inflation index (Input Price Index).

Interrogatory:

a) Please confirm that, for both Transmission and Distribution, the rate base consists of mid-year or average in-service Net Fixed Assets, a working capital allowance plus an allocated portion of General Plant mid-year or average in-service Net Fixed Assets.

b) Please provide the assumed inflation factor in aggregate capital expenditures for each of:
   i. the TSP
   ii. the DSP
   iii. the GSP

   If different inflation assumptions are made for each year, please provide this information for each year of the plan.

c) Please provide a weighted average inflation factor for capital additions to the Transmission rate base shown in line 1 of Table 1 of Exhibit A/Tab 4/Schedule 2. This would be a weighted average of the TSP capex inflation provided in b) i. and the GSP capex inflation provided in b)

iii. above, with the weights being gross book value of Transmission capital additions for the year from the TSP and the gross book value of General Plant capital additions allocated to the Transmission rate base for that year. If the information is more easily available, Transmission capital expenditures and General Plant capital expenditures allocated to Transmission could be used as weights.

d) Please provide a weighted average inflation factor for capital additions to the Distribution rate base shown in line 1 of Table 1 of Exhibit A/Tab 4/Schedule 3. This would be a weighted average of the DSP capex inflation provided in b) ii. and the GSP capex inflation provided in b) iii. above, with the weights being gross book value of Distribution capital additions for the year from the DSP and the gross book value of General Plant capital additions allocated to the Distribution rate base for that year. If the information is more easily available, Distribution capital expenditures and General Plant capital expenditures allocated to Distribution could be used as weights.

Response:

a) Rate base is further explained in Exhibit C-01-01. Rate base includes a forecast of net fixed assets (including the allocated portion of Common General Plant Assets), calculated on a mid-year basis, plus a working capital allowance. Net fixed assets are calculated as gross plant in service minus accumulated depreciation and minus contributed capital. Working capital includes an allowance for cash working capital as well as materials and supplies inventory.

b) The assumed inflation escalation across the system plans is approximately 2.0% per annum based on CPI projections at the time of plan development. These assumptions are consistent across all system plans.

c) Please refer to part b) above.

d) Please refer to part b) above.

A - OEB STAFF INTERROGATORY - 006

Reference:

Exhibit A-4-3
Exhibit A-4-1

Preamble:

Hydro One describes its general framework as a revenue cap index, of the form:

$$RR_t = RR_{t-1} \times (1 + RCI_t)$$

where

$$RCI_t = I_t - X + C_t$$

where

RR_t is the revenue requirement for period *t*

RCI_t is the revenue cap index for period *t*

I_t is the inflation (Input Price Index or IPI) for period *t*, as calculated and issued by the OEB

X is the productivity factor, composed on a base productivity X-factor and a stretch factor for further incented productivity gains, with the *X* set constant for all years at the outset of the plan

C_t is the capital factor, and is intended to compensate for the additional (incremental) in-service capital additions necessary and approved per the utility's capital system plan, beyond what is funded by the *I – X* adjustment to the annual revenue requirement. The capital factor, proposed by Hydro One in this application, based on previous OEB decisions, also includes an incremental capital stretch factor of 0.15%.

Both the Transmission plan documented in Exhibit A/4/2 and the Distribution plan documented in Exhibit A/4/3 use this formula.

As shown in Table 1 of each of Exhibit A/4/2 and Exhibit A/4/3, the *RCI* formula calculates the aggregate (in dollars) service requirement based on the prior year's approved service revenue requirement.

In traditional forms of revenue cap regulation, the revenue cap formula is often of the form:

$$RCI = I - X + G + other_{factors}$$

where

G is a measure of output growth (i.e., changes in the demand for the products and services of the firm by its customers).

The growth factor can by zero and, in revenue cap-like formulae that the OEB has approved in the past, the OEB has approved no growth factor or a value of zero for the growth factor.[1]

Interrogatory:

a) In line 13 of Table 1 for each of Exhibit A/Tab 4/Schedule 2 (for Transmission) and Exhibit A/Tab 4/Schedule 3 (for Distribution), regarding aggregate OM&A costs for each year from 2024 to 2027 the prior year's aggregate approved OM&A is multiplied by I -X to calculate the new rate year's aggregate OM&A. There is no adjustment for growth in economic demand (whether in customers, kWh or kW, or in some combination thereof). Is Hydro One proposing that OM&A costs are invariant to scale impacts? Please explain your response.

b) Please confirm that, for each of the Transmission and Distribution System Plans, the capital additions to rate base in each year would include capital to accommodate growth in customers, consumption (kWh) or energy demand (kW). In the alternative, please explain your response.

c) If the response to b) is confirmed, please confirm that the absence of a growth factor means that the C-factor (the capital factor) also recovers growth-related capital additions. In other words, please confirm that the C-factor operates differently than the determination of eligible incremental capital funding per the OEB's policy on Capital Funding Options, where growth is factored into the materiality threshold for determining the amount of capex funded by price cap-adjusted rates.[2]

[1] EB-2019-0082, etc.

[2] EB-2014-0219, *Report of the Board: New Policy Options for the Funding of Capital Investments: The Advanced Capital Module*, September 18, 2014 and *Report of the OEB: New Policy Options for the Funding of Capital Investments - Supplemental Report*, January 22, 2016

Response:

a) There are many factors which can impact OM&A costs. Other factors include, but are not limited to, asset condition and demographics, and public policy/regulatory obligations. After rebasing in 2023, Hydro One is proposing that it will manage its OM&A budget within the envelope afforded by Revenue Cap Index outlined in Exhibit A, Tab 4, Schedule 1 for its Distribution and Transmission businesses. This is consistent with the approach approved by the OEB in Hydro One's prior Custom IR applications EB-2017-0049 and EB-2019-0082.

b) Hydro One confirms that its Transmission and Distribution System plans include investments to accommodate growth. Full details regarding the capital investments in Hydro One's Transmission and Distribution System plans can be found in Exhibits B-2-1 and B-3-1, respectively.

c) As noted in Exhibit A, Tab 4, Schedule 1, the C-factor is designed to recover the incremental revenue each year necessary to support Hydro One's proposed system plans, beyond the amount of revenue recovered through the I–X adjustment. Combined with the I-X adjustment, the C-factor will ensure that Hydro One has sufficient resources to execute on its investment requirements, including those investments driven by growth, while also ensuring appropriate productivity incentives are in place.

Through this application, Hydro One is seeking approval of billing determinants for all 5 years of the test period. The expected growth in billing determinants would be captured in distribution rates through the rate design process outlined in Exhibit L, Tab 2, Schedule 1, wherein billing determinants are updated annually in line with the expectation of the load forecast. Similarly, the Uniform Transmission Rates established by the OEB each year will be calculated using the applicable charge determinants outlined in Exhibit H, Tab 7, Schedule 1.

The comparison to the OEB's ICM/ACM mechanism is not relevant. As noted in the OEB's *Report of the Board: New Policy Options for the Funding of Capital Investments: The Advanced Capital Module* (ICM/ACM Report), the ICM/ACM mechanism is not available to utilities under Custom IR.

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A - OEB STAFF INTERROGATORY - 007

Reference:

Exhibit A-4-2, Pages 5-6, Tables 1, 2, 3
Exhibit A-4-3, Pages 5-6, Tables 1, 2, 3

Preamble:

Hydro One has provided Tables 1, 2 and 3 in each of Exhibit A/Tab 4/Schedule 2, for the Transmission Custom Plan, and Exhibit A/Tab 4/Schedule 3, for the Distribution Custom Plan. These tables summarize the following information pertaining to the proposed Transmission and Distribution Custom plans:

- For Table 1, the derivation of the Total (Service) Revenue Requirement from a Cost of Service perspective, with incorporation of the inflation, productivity, and incremental capital stretch factor for each of the 2024 to 2027 years.

- For Table 2, the values of inflation (I), productivity (X), the custom Capital factor (C), and the Revenue Cap Index (RCI) for the years .

- Table 3 demonstrates that, for each year from 2024 to 2027, the Total Revenue Requirement (from Line 14 of Table 1) is calculated as (1+RCI) multiplied by the prior year's Total Revenue Requirement.

These tables were provided in the PDF document, and without showing the calculations.

Interrogatory:

a) For the Transmission Custom Plan documented in Exhibit A/Tab 4/Schedule 2, please provide an Microsoft Excel version of Tables 1, 2 and 3, showing all of the calculations. These calculations should also show the calculations between the tables (i.e., how the entries in Tables 2 and 3 are calculated from the data in Table 1.

b) With respect to the Transmission Custom Plan, please provide the following:

i. Please confirm that, for 2024 through 2027, the Transmission revenue requirement is calculated solely and completely through rows labelled 1 through 14 (i.e., that rows 15 through 18 of Table 1 and Tables 2 and 3 do not provide any additional reductions or additions to the Transmission revenue requirement that is to be recovered for each year). If not, please explain.

ii. Please confirm that the *RCI* value for each rate year is calculated as the annual percentage change of the revenue requirement in the year relative to the previous year's revenue requirement, as shown in labelled row 14 of Table 1.

iii. Table 2 of Exhibit A/4/2 shows the relationship of parameters such that $RCI = I - X + C$, and the proposed and calculated values for each year. However, *I* is exogenously derived, and will be updated annually, with Hydro One using the OEB-issued 2021 transmission inflation factor of 2.0% in the application, *X* will be set for the plan term, and Hydro One is using the proposed 0% for now, and *RCI* is derived as the annual percentage change in the revenue requirement in Row 14 of Table 1, so the only unknown is the capital factor *C*. The formula above can be rearranged in order to calculate *C* as $C = RCI - (I - X)$. Please confirm that the purpose of the *C* factor is to ensure pass-through, subject to the capital productivity target of 0.15%, of the incremental revenue requirement, associated with capital additions each year per the TSP as approved by the OEB, that are not funded through the *I – X* adjustment of the prior year's revenue requirement.

c) For the Distribution Custom Plan documented in Exhibit A/Tab 4/Schedule 3, please provide an Microsoft Excel version of Tables 1, 2 and 3, showing all of the calculations. These calculations should also show the calculations between the tables (i.e., how the entries in Tables 2 and 3 are calculated from the data in Table 1.

d) With respect to the Distribution Custom Plan, please provide the following:

i. Please confirm that, for 2024 through 2027, the Distribution revenue requirement is calculated solely and completely through rows labelled 1 through 14 (i.e., that rows 15 through 18 of Table 1 and Tables 2 and 3 do not provide any additional reductions or additions to the Distribution revenue requirement that is to be recovered for each year). If not, please explain.

ii. Please confirm that the RCI value for each rate year is calculated as the annual percentage change of the revenue requirement in the year relative to the previous year's revenue requirement, as shown in labelled row 14 of Table 1.

iii. Table 2 of Exhibit A/4/3 shows the relationship of parameters such that $RCI = I - X + C$, and the proposed and calculated values for each year. However, I is exogenously derived, and will be updated annually, with Hydro One using the OEB-issued 2021 distribution inflation factor of 2.2% in the application, X will be set for the plan term, and Hydro One is using the proposed 0% for now, and RCI is derived as the annual percentage change in the revenue requirement in Row 14 of Table 1, so the only unknown is the capital factor C. The formula above can be rearranged in order to calculate C as $C = RCI - (I - X)$. Please confirm that the purpose of the C factor is to ensure pass-through, subject to the stretch factor of 0.3% and the capital productivity target of 0.15% (i.e., 0.45% = 0.3% +0.15%), of the incremental revenue requirement, associated with capital additions each year per the DSP as approved by the OEB, that are not funded through the I – X adjustment of the prior year's revenue requirement.

e) For both the Transmission and Distribution Custom plans, in Table 1, row 11 is labelled "Less Removing Working Capital from Capital Factor". In Line 11 of Table 1 of the Transmission Custom plan, the cell entries for 2024 through 2027 are shown as negatives and are added, along with rows 9 and 10, also shown as negatives, to row 8, "Total Capital Related Revenue Requirement (excluding working capital)" to form row 12, "Total Capital Related Revenue Requirement (excluding working capital and Productivity)". Row 12 is then added to Row 13, "OM&A" adjusted by *I – X*, to form the total revenue requirement in line 14.

The same lines and formula are also used in lines 8 to 14 of Table 1 of the Distribution Custom plan. However, OEB staff note that the entries in line 11 in Table 1 of the Distribution Custom plan are shown as positive (while the entries in lines 9 and 10 are negative).

i. Please confirm that the entries in line 11 of Table 1 of the Distribution plan should be shown as negative entries, as they are in line 11 of Table 1 of the Transmission Custom plan.

ii. Please confirm that the Distribution revenue requirement is overstated as a result of the Adjustment for Working Capital being added as a positive entry, and that the overstatement effectively doubles the value shown in line 11 for each year.

Specifically, please confirm or correct the entries in the following table:

($ Million)

Year	2023	2024	2025	2026	2027
Dx Revenue Requirement (as shown in A/4/3/Table 1)	1632.4	1711.3	1785.1	1881.1	1965.0
Dx Revenue Requirement (with Line 11 entries shown as negative)	1632.4	1711.0	1784.3	1879.9	1963.3
Difference	0.0	0.3	0.8	1.2	1.7

iii. Please confirm that this overstatement has been passed through on other models and tables in Hydro One's application for the distribution rate plan. For example, for the rates for 2024 through 2027, as shown in Exhibit L/Tab 2/Schedule 1/Attachment 1/Sheets "2024", "2025", "2026" and "2027", use the revenue requirements shown on line 14 as the service revenue requirement for each year. These revenue requirements are shown as the "Total" under column "Allocated Cost" (Column D for "2024", "2025", "2026" and "2027" of Exhibit L/Tab 2/Schedule 1/Attachment 1).

Response:

a) The requested Excel file has been provided in Attachment 1 to this response as I-01-A-Staff-007-01.

b)

i. Confirmed.

ii. Confirmed. In the November 9, 2020 letter, the OEB released the latest Inflation Factor of 2.0% for transmission, for use in applications for rates effective in 2021. Hydro One has used the 2021 Inflation Factor on a pro-forma basis in its RCI calculation for the years 2024 to 2027. The Inflation Factor will be updated annually over the 2024-2027 period to reflect the applicable factors in those years and the C-factor and RCI updated accordingly.

iii. Hydro One confirms that the *C* factor is the percentage change in the Total Revenue Requirement (line 18 of Table 1) attributable to new capital investment that is not otherwise recovered from customers through the I – X adjustment and is subject to the incremental capital stretch factor of 0.15%.

c) The requested Excel file has been provided in Attachment 1 to this response.

d) Please see responses below:

i. Confirmed.

ii. Confirmed. As noted in part b above, the *RCI* and C-factor values will be updated each year to reflect changes in inflation.

iii. Hydro One confirms that the *C* factor is the percentage change in the Total Revenue Requirement (line 18 of Table 1) attributable to new capital investment that is not otherwise recovered from customers through the I – X adjustment and is subject to the incremental capital stretch factor of 0.15%.

e) There are no overstatements in Table 1 or any other models noted by OEB staff in the preamble for this question. Full calculations of the adjustment to remove working capital from the C-factor are provided in Excel in Attachment 2 (I-01-A-Staff-007-02) to this response. The calculation of the adjustment to remove working capital from the capital factor in line 11 is consistent with the approach reviewed and approved by the OEB in Hydro One's prior Custom IR applications. For example, this calculation was shown in Exhibit 1.7 of the Draft Rate Order in Hydro One Distribution's last Custom IR application (EB-2017-0049).

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A - OEB STAFF INTERROGATORY - 008

Reference:

Exhibit A-4-1, Page 1
Exhibit A-4-2, Pages 5-6, Tables 1, 2, 3
Exhibit A-4-3, Pages 5-6, Tables 1, 2, 3

Preamble:

As documented in Exhibit A/Tab 4/Schedule 1, Hydro One has proposed a common "revenue cap index" approach applicable for both the transmission and distribution Custom Plans, of the form:

$$RCI = I - X + C$$

This is similar to a traditional price cap formula, or a revenue cap formula excluding growth (*g*). The inflation (*I*) and productivity (*X*) factors are derived from external data. In general, the price cap and revenue cap formulae can be derived conceptually from economic principles based on primary drivers of market forces on prices for all firms, specifically the majority of firms operating in competitive markets.

The added component in Hydro One's formula is the Capital (*C*) factor. OEB staff's analysis of Tables 1, 2 and 3 of each of Exhibit A/Tab 4/Schedule 2, for the Transmission plan, and Exhibit A/Tab 4/Schedule 3 for the Distribution plan, indicates that the C-factor acts to ensure pass-through (i.e., recovery through rates), subject to the incremental capital productivity target, of the incremental revenue requirement associated with capital additions each year per the approved capital plan, that are not funded through the *I – X* adjustment of the prior year's revenue requirement.

Interrogatory:

a) Please provide the theoretical derivation of the C factor from economic first principles as it would relate to the drivers of price movements that firms operating in competitive markets face.

Response:

Hydro One has not completed such a theoretical derivation nor does Hydro One believe that one is necessary. In the EB-2019-0082 proceeding Hydro One notes that both expert witnesses (Clearspring and PEG) provided some high-level derivations of the "common" Revenue Cap Index approach in their reports.[1] The derivations of indices in both reports relied on various simplifying assumptions to arrive at the general form noted above. While helpful for arriving at a form of index that is easy to understand and implement, such simplifying assumptions do not fully capture all of the factors that will drive changes in a utility's costs and revenues.

The C-factor essentially acts as a bridge between the highly simplified economic theory and the practical realities of Hydro One's operations in order to yield a rate setting framework that meets the OEB's regulatory requirements while ensuring that Hydro One has sufficient resources to deliver on the necessary investment in its system which is aligned with customer needs and preferences.

Ultimately, utility systems are not built up evenly over time. The formula derivations are based on the "long-run" which in economics would mean that capital is totally flexible rather than fixed. Utility assets have life spans in the decades however, the Custom IR period only covers five years. In the shorter term of the Custom IR period capital is not fully flexible and there are defined needs that require more capital in the near term (i.e. test period) than the indices would suggest in the long-run.

As noted in Exhibit A, Tab 4, Exhibit 1, the C-factor ensures that the resulting total revenue from the RCI is appropriate for Hydro One's specific circumstances while providing appropriate productivity incentives. The need for and drivers of the investments that are funded through the C-factor are outlined in Hydro One's DSP, TSP and GSP.

Hydro One notes that the C-factor is consistent with approaches approved by the OEB in Hydro One's previous Custom IR applications EB-2017-0049 and EB-2019-0082.

[1] See pages 14-15 of Clearspring (formerly PSE) report in Exhibit A-4-1-1 of EB-2019-0082 and pages 46-51 of PEG's report in Exhibit M1 of EB-2019-0082.

A - OEB STAFF INTERROGATORY - 009

Reference:

Exhibit A-1-1, Attachment 1

Preamble:

Hydro One's consultant, Mr. Steve Fenrick of Clearspring Energy Advisors (Clearspring), has filed evidence in several proceedings on behalf of Ontario electricity utilities (transmitters and distributors). Going back to Hydro One's last distribution Custom IR plan, Mr. Fenrick has filed evidence in the following:

- EB-2017-0049 – Hydro One Distribution 2018-2022 Custom IR
- EB-2018-0165 – Toronto Hydro Electric System Limited 2020-2024 Custom IR
- EB-2018-0280 – Hydro One Sault Ste. Marie Revenue 2020-2024 Cap Plan and EB-2019-0082 – Hydro One Transmission 2020-2022 Custom IR
- EB-2019-0261 – Hydro Ottawa 2021-2025 Custom IR

OEB staff have prepared a spreadsheet (attached) with two tables. The first table, labeled "Tx_Sample", shows the U.S. and Canadian utilities that Power Systems Engineering (PSE)/Clearspring has used in its Transmission analyses for the EB-2018-0082 application and the current application, and also identifies which utilities are included in the TFP and the total cost benchmarking analyses.

The second table, labeled "Dx_Sample", shows the U.S. and Canadian utilities as used in the previous Hydro One Distribution case (EB-2017-0049) and the Toronto Hydro and Hydro Ottawa cases, and the current application. The distribution analyses are specifically for total cost benchmarking.

Interrogatory:

a) Please confirm the entries in the spreadsheet.

b) In the Transmission TFP study filed in this case, Clearspring has calculated the TFP on the sample of U.S. utilities only, and has excluded Hydro One from the sample. In the TFP analyses filed in PSE's previous evidence filed in the EB-2018-0280 and EB-2019-0082 cases for Hydro One Sault Ste. Marie and Hydro One Transmission, Hydro One was included in the sample. Please explain why Clearspring has excluded Hydro One from the Transmission TFP analysis in its evidence filed in this proceeding.

c) In EB-2017-0049, PSE included a large sample of U.S. cooperative utilities in its U.S. sample for comparing against Hydro One's distribution operations in the cost benchmarking analysis, but has only included U.S. Investor-owned Utilities (IOUs) who file FERC Form 1 data in its distribution cost benchmarking analysis in the current case. Please explain Clearspring's reasons for dropping U.S. rural cooperatives from its distribution utility sample in this case.

d) In EB-2019-0261, Clearspring included Hydro One, along with a few other Ontario electricity distributors, in addition to U.S. distributors, as comparators for Hydro Ottawa in the cost benchmarking analysis. Please explain why Clearspring has excluded Hydro Ottawa from the cost benchmarking analysis of Hydro One distribution in its evidence filed in this application.

Response:

Response provided by Clearspring

a) Confirmed

b) On p. 46 the Clearspring Report states, "The Base PF should be based on an external measure of the industry TFP trend. Hydro One should have no impact on the measured industry TFP trend. This is because incentive regulation seeks to decouple the link between a utility's costs to the allowed revenue escalation. If a utility's own TFP is used within the formula, it will weaken the incentives to enhance productivity and reduce costs." On p. 46 there is also a footnote (footnote 66) that mentions that Hydro One does not have available data beginning in 2000, which is the start year of the TFP trend.

Even if Hydro One were included in the sample, it would have a minimal impact on the industry TFP trend results. It would only be one of 51 utilities. The conclusion that there is a pronounced negative TFP trend within the transmission industry would not be affected.

c) The Clearspring Report states on p. 32 in footnote 54: "In Hydro One's prior distribution application, we included U.S. rural electric cooperatives in the benchmarking sample. However, to our knowledge, recent cooperative data is no longer being released publicly." The most recent available data that we are aware of for the cooperative dataset is in 2011. In our opinion, utilities with no data since 2011 are not appropriate candidates to include in a benchmark study examining costs through 2027. Not including the cooperative dataset has some advantages which enables more consistent treatment across the sample, such as being able to exclude pension and benefit expenses, customer service and information expenses, and capital cost calculations.

d) Including Ontario distributors would not increase the study accuracy as it pertains to Hydro One, given Hydro One's extreme outlier status within Ontario. Excluding the Ontario distributors has the advantage of allowing us to exclude pensions and benefits from the cost definition and use flexible cost share weights for the OM&A input price index for all utilities. This should reduce the research differences between the benchmarking consultants, as these are two issues PEG has raised regarding prior research. Further reducing methodological differences is the fact that PEG did not include any other Ontario distributors in the last Hydro One distribution application, and they did not include Ontario distributors in the last Toronto Hydro application which is another extreme outlier utility in Ontario for different reasons than Hydro One.

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A - OEB STAFF INTERROGATORY - 010

Reference:

Exhibit A-1-1, Attachment 1, Page 17

Preamble:

One change that Clearspring notes that it has made to the Transmission Cost Benchmarking model is to replace transmission substation capacity with number of transmission substations:

The final modification from the prior model specification for the transmission total cost model is using the "number of transmission substations" variable instead of the "transmission substation capacity" variable. This change is due to the substation capacity variable coming in with the correct sign but statistically insignificant, whereas the number of transmission substations variable does come in correctly signed and statistically significant at a 90% confidence level.

Interrogatory:

a) Does Clearspring have any conceptual basis on which it considers the number of transmission substations to be preferable to transmission substation capacity? Please explain your response.

b) Is the change to number of transmission substations from transmission substation capacity solely based on the statistical significance of the coefficient estimate? Was this relationship consistent across different model and variable specifications that Clearspring tried during its model analysis?

c) Are there other variables retained in either of the Transmission or Distribution Cost Benchmarking models which were selected solely on the basis of statistical significance (i.e., having a higher *t*-statistic in absolute terms) compared to alternatives, conditional on exhibiting the corrected expected coefficient sign. If so, please identify all such variables.

Response:

Response from Clearspring

a) Clearspring only included explanatory variables that meet the following specific criteria: (1) the variable must have a logical reason to impact cost levels, and be signed according to that theory, and (2) the estimated parameter value on the variable must be statistically significant at a 90% or greater level. Both of the above variables pass the first criterion of having a logical reason to impact cost levels, and being correctly signed. However, the transmission substation capacity variable did not meet the second criterion (it was not statistically significant at a 90% or greater level). The number of transmission substations can be included in the model because it passes both tests and meets our variable inclusion criteria. Both variables would be acceptable to include in the final variable specification if they both met the inclusion criteria.

b) The exclusion of the substation capacity variable is due to it not coming in statistically significant. If the parameter estimate did come in correctly signed and statistically significant, we would include it in the model. We did not record results of any preliminary variable specifications.

c) There are no variables retained solely based on statistical significance. As discussed in part (a) there are two necessary criteria for a variable to be included in the model. The variable must have a logical reason to impact cost levels and be correctly signed. It must also be statistically significant at a 90% or greater confidence level.

A - OEB STAFF INTERROGATORY - 011

Reference:

Exhibit A-1-1, Attachment 1, Pages 10, 25, 58

Preamble:

Clearspring notes that it has added a binary variable that it labels the "ISO variable", stating on page 25 of 84: The Independent System Operator (ISO) variable indicates if the utility was operating under an ISO or Regional Transmission Operator (RTO) in the observed year. This variable is a binary variable that will equal "1" if in the observed year the utility is in an ISO or RTO and will equal "0" if this is not the case. We do not have an a priori expectation of the variable sign. While the ISO may take on some planning costs that the utility would have engaged in otherwise, the transmission utility may still be required to undertake some planning costs as well as added investments that the ISO may request to encourage a more efficient energy market. In the model, we find that the ISO parameter estimate is positive, indicating a positive relationship between being in an ISO and transmission total costs.

On page 6 (page 10 of 84) of its evidence, Clearspring states the following in footnote 13:[1]

13 As discussed in Section 6, there may be good reasons for this decline in industry TFP. Increasing but unmeasured outputs such as increased reliability, cybersecurity, environmental, DER connections, geomagnetic protections, and other well-intentioned regulations may be placing higher requirements and cost challenges on utilities, without increasing the measured output growth that impacts TFP trends.

Interrogatory:

a) Does Clearspring not consider that some of the "[i]ncreasing but unmeasured outputs such as increased reliability, cybersecurity, environmental, DER connections … [etc.]" faced by transmission utilities and that place higher requirements and cost pressures on them are due to oversight by their respective RTOs/ISOs? This is not to say that the RTO or ISO is the sole decision maker for these requirements, which ultimately may be due to changes in law and legislation, technology, or other societal requirements, but the RTO/ISO ensures adherence by the utilities it oversees to these new and increased requirements as part of its responsibilities.

[1] Clearspring also lists these factors under bullet 1 on page 54 (page 58 of 84) of its evidence under the topic of transmission TFP.

b) If the response to a) is in the positive, then please explain why Clearspring had no *a priori* expectation of the sign of the ISO variable.

c) In Ontario, the ISO, the Independent Electricity System Operator (IESO), and Hydro One were both formed on April 1, 1999 as a result of the break-up of the former Ontario Hydro, which previously performed all such functions. Does Clearspring consider that the formation of Hydro One and the IESO is different from, and as a result, has resulted in a different working relationship between Hydro One and the IESO,from the situation for U.S. transmitters with their RTOs/ISOs? Please explain your response.

d) Did Clearspring consider any approaches for adjusting for these "increasing but unmeasured outputs" in its transmission TFP and cost benchmarking analyses, such as constructing and using hedonic price indices? Please explain your response.

Response:

Response from Clearspring

a) We considered this as a possibility.

b) As quoted in the preamble of this interrogatory, the ISO may take on some planning costs for the utility but then the utility may also be required to take on additional costs and investments. These impacts work in opposite directions (one lowering costs, the other raising costs) and thus, we had no a priori expectations of which impact may be the dominant one. Empirical results from the econometric model we developed show the presence of an ISO is estimated to increase total costs overall.

c) We did not investigate the formation of the IESO and the impact that may have on the working relationship between the IESO and Hydro One. Such an investigation was not necessary in the construction of the variable.

d) No. It is not clear to us how hedonic price indices would be able to be constructed in a manner that would adequately account for the increasing but unmeasured outputs present in the transmission industry.

A - OEB STAFF INTERROGATORY - 012

Reference:

Exhibit A-1-1, Attachment 1, Page 38 (page 42 of 84)

Preamble:

On page 38 of its report, Clearspring provides its views on the reasonableness of the differences in the cost benchmarking rankings between Hydro One's transmission and distribution scores.

Clearspring states:

> At a high level, Hydro One's transmission system is more similar to its peers and the benchmarking sample than the distribution system is with no available distribution model variables to adjust for this dissimilarity. The transmission system is vast and transmits electricity to rural, municipal, and urban centers. This is similar to many of the transmission utilities in the sample. However, Hydro One's distribution system is unique in serving remote areas, the density of its service territory, and having most of the lower-cost municipal and suburban areas not included within its service territory. This leaves Hydro One with the much higher-cost rural territories to which the Company is required to deliver electricity. This contrasts with its sampled peers whose service territories do include these lower cost suburban areas. Since Hydro One is the only utility with this disadvantage, we cannot develop a variable to adjust for this service territory condition present on the distribution system. Given this reality, we would expect the Company's transmission operations to score better than its distribution operations.

Interrogatory:

a) Please provide Clearspring's definition of "remote" in stating that Hydro One "is unique in serving remote areas".

b) Please identify what remote areas that Clearspring understands that Hydro One distribution serves, as opposed to isolated communities in Remote Northern Ontario that are service by Hydro One Remote Communities, an affiliate of Hydro One.

c) OEB staff understands that Clearspring is contending that another aspect of Hydro One Distribution's uniqueness is in "having most of the lower-cost municipal and suburban areas not included within its service territory". In EB-2019-0261, Clearspring was aware that Hydro One serves areas within the City of Ottawa.

i. Please confirm whether Clearspring is aware of Hydro One's acquisition of former municipal electrical utilities, serving some cities, towns of various sizes and outlying areas, involving over 90 MAADs applications reviewed and approved by the OEB, from late 1999 to date.

ii. For some cities in Ontario, such as Windsor, Kingston and London, Hydro One serves the areas outside of the city boundaries, and thus is the distributor serving residential and commercial subdivision expansion beyond the city boundaries. This is in addition to the service areas of former municipal distributors acquired over the past two decades. On what basis does Clearspring consider that Hydro One does not have a growing portion of its customer base in "lower-cost municipal and suburban areas".

iii. Can Clearspring identify how Hydro One's distribution service area is "unique" in comparison to the service areas of some of the utilities in its U.S. sample, such a Green Mountain Power, Minnesota Power, Black Hills Power and Monongahela Power Company.

Response:

Response from Clearspring

a) By "remote" we mean that Hydro One serves areas that have relatively low customer density that tend to require relatively higher drive lengths and times to service customers. It is also Clearspring's understanding that Hydro One utilizes helicopters in service of its remote territory as need be. We do not believe this is standard practice for most U.S. distributors.

b) While it is true that Hydro One Remote Communities serves 22 communities that are even more remote than some communities served by Hydro One Networks, the comparison Clearspring was making was relative to the U.S. sample included in our benchmarking study. Hydro One's service territory is vast and serves many customers that are relatively remote.

c)

i. Confirmed. It is our understanding that these acquisitions were for communities that are relatively small and do not approach the size of communities served by most utilities in the U.S. distribution sample.

ii. Our statement was not intended to mean that Hydro One serves no municipalities or suburban areas, but that many of the suburban areas in Ontario are outside of its service territory, yet the utility serves many of the higher-cost rural areas, including approximately 75% of the geographic area of Ontario. This is a unique circumstance.

iii. In respect of the listed US utilities, Green Mountain Power is not in the distribution sample. Minnesota Power does not serve much of the rural areas in between their pockets of service territory. Rural Minnesota electric cooperatives serve those rural areas. This is different from Hydro One, which would typically serve those rural areas between suburban pockets. Black Hills is the same story and is different from Hydro One in that way. Monongahela Power similarly has a rural electric cooperative serving some of the rural areas within its service territory.

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A - OEB STAFF INTERROGATORY - 013

Reference:

Exhibit A-6-1, Page 3

Preamble:

Hydro One Limited was granted exemptive relief by the Ontario Securities Commission (OSC) to prepare financial statements under US GAAP. The exemptive relief is to remain in effect for a period of time under certain conditions[1].

Interrogatory:

a) How has Hydro One evaluated and planned for any changes to the OSC exemptive relief going forward, when the relief may no longer be in effect? Please explain Hydro One's plan, including any work that has been undertaken to quantify the transitionary impacts of the initial adoption of IFRS for external reporting and disclosure purposes.

b) If/when the exemptive relief is no longer in effect, the OSC may require Hydro One to prepare its financial statements under IFRS. Does Hydro One have any views on the likelihood of this? If so, please comment.

c) If the OEB and OSC required Hydro One to prepare its regulatory/ external financial statements under MIFRS/IFRS, would Hydro One still be mandated to prepare its financial statements under US GAAP for other purposes?

    i. If so, please explain what the other purposes would be.

[1] Exemption is no longer effective at the earlier of (i) January 1, 2024; (ii) the first day of Hydro One Limited's financial year that commences after Hydro One Limited ceases to have activities subject to rate regulation; and (iii) the effective date prescribed by the IASB for the mandatory application of a standard within IFRS specific to entities with activities subject to rate regulation.

d) Per the Public Accounts of Ontario's Annual Report and Consolidated Financial Statements[2], under Principles of Consolidation, it states "The activities of GBEs are recorded in the financial statements based on their results prepared in accordance with International Financial Reporting Standards (IFRS) using the modified equity method." Please explain whether Hydro One prepares financial statements in accordance with IFRS for the purpose of consolidating with the Province.

   i. Please explain if Hydro One prepares its financial statements in accordance with IFRS for any other purposes. If so, please explain what the other purposes would be.

   ii. Please explain to what extent Hydro One prepares its financial statements in accordance with IFRS (e.g. financial statements fully under IFRS or a reconciliation of USGAAP to IFRS).

e) If the OEB required Hydro One to adopt MIFRS effective January 1, 2023, would Hydro One be able to update its test period revenue requirements to reflect MIFRS?

   i. Please explain what would be required for Hydro One to do so.

   ii. Please quantify the annual revenue requirement impact in the test period if Hydro One were to adopt MIFRS effective January 1, 2023.

Response:

a) Hydro One continues to monitor developments on the OSC's exemptive relief measures and would be supportive of the OSC extending the relief or providing for permanent exemptions.

As explained in Exhibit A-06-01, Hydro One Limited is also permitted to report its financial results in accordance with U.S. GAAP by virtue of being, and for so long as it remains, a U.S. Securities and Exchange Commission (SEC) issuer (within the meaning of National Instrument 52-107 – Acceptable Accounting Principles and Auditing Standards). Furthermore, Hydro One Inc. (a wholly owned subsidiary of Hydro One Limited) is an SEC issuer (within the meaning of NI 52-107) and by virtue of that fact was (and still is) permitted to report its financial statements in accordance with US GAAP.

[2] Page 62 of the 2020-2021 Report, https://www.ontario.ca/page/public-accounts-2020-21-consolidated-financial-statements#section-2

Hydro One has not undertaken further work to quantify the transitionary impacts of the initial adoption of IFRS for external reporting and disclosure purposes, aside from the analysis provided by PwC with respect to the IFRS Transition Analysis. As summarized in Exhibit A-06-01, PwC concluded that, for Hydro One to transition to IFRS, the implementation costs would be significant and there would be ongoing maintenance costs incurred, but there would not be a significant difference in the overall recognition and measurement of common corporate costs or other costs assuming that the OEB's views on the nature and types of costs allowed for Hydro One's recovery in revenue requirement remain consistent. PwC's report, Hydro One US GAAP to IFRS Conversion Impact Review (the PwC Report on IFRS Conversion) is provided in Exhibit A-06-01 Attachment 1.

b) As discussed in part a) above and in Exhibit A-06-01, Hydro One is permitted to use US GAAP for its external reporting purposes by virtue of being, and for so long as it remains, an SEC issuer. This ability applies notwithstanding the exemptive relief granted by the OSC. Moreover, as noted in Interrogatory Response **A-Staff-014 part a)**, Hydro One Inc. is required to use US GAAP for the purposes of preparing its financial statements pursuant to s. 2 of O. Reg. 395/11 under the *Financial Administration Act*.

c) As discussed in parts a) and b) above, Hydro One is required to use US GAAP for the purposes of preparing its financial statements pursuant to s. 2 of O. Reg. 395/11 under the *Financial Administration Act*. Moreover, as discussed in part a) above, Hydro One is permitted to use US GAAP for its external reporting purposes by virtue of being, and for so long as it remains, an SEC issuer. The benefits of maintaining the use of US GAAP for regulatory purposes ensures stability in customer rates, generational equity as the recovery of incurred costs are matched to the period over which customers benefit from them, it allows for the continuation of benchmarking against historical performance and allows for the continuation of benchmarking against North American peers as further discussed in Exhibit A-06-01.

d) Hydro One does not prepare financial statements in accordance with IFRS for the purpose of consolidating with the Province. However, Hydro One does prepare certain other information for this purpose on a best-efforts basis, as described in d) ii below.

   i. Hydro One does not prepare financial statements under IFRS for any purposes.

ii. Hydro One does not prepare financial statements that would be compliant with IFRS. For the **sole purpose** of enabling the Province of Ontario to prepare its consolidated financial statements, Hydro One prepares Special Purpose Financial Information (SPFI) and a US GAAP to IFRS reconciliation, which is prepared on a **best-efforts basis**. As such, there are limitations in Hydro One's ability to provide the SPFI and reconciliation that is in full compliance with IFRS, which Hydro One has communicated to both the Province and Auditor General of Ontario.

The SPFI has been prepared in accordance with the Hydro One IFRS Policy Manual that has been developed on a best-efforts basis and for the sole purpose of reporting the results to the Province of Ontario to enable the preparation of its consolidated financial statements. The US GAAP balances in the Reconciliation are derived from the consolidated financial statements of Hydro One as at and for the three months ended March 31, of a given year. In preparing the SPFI and the Reconciliation, Hydro One is guided by its assessment of all relevant differences between US GAAP and IFRS with a transition date of January 1, 2015, as well as the guidance included in IFRS 14-Regulatory Deferral Accounts (the interim standard).

Hydro One does not have the systems or processes in place to prepare detailed and auditable IFRS financial reports. As such, the IFRS balances included in the SPFI and the Reconciliation include the following:

1. Adjustments supported by Hydro One's systems and processes;
2. Adjustments not readily supported by Hydro One's systems and processes for which only a reasonable estimate was generated; and
3. Areas for which no adjustments can be reasonably estimated by Hydro One, due to system and process limitations

In addition, the SPFI and Reconciliation are prepared using Hydro One's audit materiality. As a result, the above financial information would not be suitable for regulatory purposes and would not be considered fully compliant IFRS financial information.

e)

i. If the OEB required Hydro One to adopt MIFRS effective January 1, 2023, Hydro One would have to recreate its business plan taking into consideration the impacts of MIFRS including its implementation. In undertaking this exercise, the distribution and transmission workplans (both capital and OM&A) would have to be recast anew under MIFRS and a new depreciation study would have to be commissioned that reflects the appropriate level of componentization and tracking of gains and losses on asset retirements separately as further confirmed in Interrogatory Response **E-Staff-284** part c). All of this would entail a significant amount of work and would impose a high degree of administrative and regulatory burden on the organization, as well as the incurrence of significant costs, with no benefit to customers. Moreover, as discussed in A-06-01, the IASB is continuing to develop a standard for rate regulated entities within IFRS. As such, even if a standard is adopted based on the current Exposure Draft, which is not certain, it is not expected that it would be made effective prior to 2024. As a result, if the OEB required Hydro One to adopt MIFRS effective January 1, 2023, those efforts and the associated costs incurred may need to be duplicated, in full or in part, depending on the outcome of the IASB process and the substance of any final standard that may result. Moreover, in Hydro One's view, the foregoing would amount to a fundamental change in the application that is currently before the OEB.

ii. See reply to part e) i above.

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A - OEB STAFF INTERROGATORY - 014

Reference:

Exhibit A-6-1, Pages 5-8, and Attachment 1
EB-2011-0268, Decision and Order, November 23, 2011, Pages 11-12
EB-2013-0416, Exhibit A-13-1, Attachment 1 – 2012 Annual Report, Page 43

Preamble:

Regarding the IFRS Transition Analysis, PwC concluded that for Hydro One to transition to IFRS, the implementation costs would be significant and there would be ongoing maintenance costs incurred. Note that the page numbers referenced in the PwC Report below refer to the page number on the bottom right corner of the page.

Interrogatory:

a) Page 15 of the PwC Report provides two approaches in which Hydro One can convert to IFRS (i.e. all reporting or regulatory reporting only). Please provide Hydro One's estimate of the potential implementation costs and maintenance costs under the two approaches.

   i. Page 8 of the PwC Report, #5 states that costs incurred to convert to IFRS would be significant and would need to be recovered through rates. In the Decision and Order that approved Hydro One's use of US GAAP at the second reference above, the OEB stated "The Board further notes that it has articulated its policy with respect to the costs of two transitions in the Addendum Report, which clarifies that the costs of two transitions may not be recoverable from ratepayers. The Board therefore considers the risk of additional costs being recovered from ratepayers due to two transitions to be minimal." Please comment on Hydro One's view on cost recovery of implementation and maintenance costs given the OEB's finding in the referenced decision.

   ii. Please comment on how the ongoing maintenance costs under IFRS would differ from the ongoing maintenance costs currently incurred under USGAAP.

b) Page 19 of the PwC Report states that under IFRS, there would be a fundamental change required to Hydro One's planning process in order to accommodate planning its capital planning at the component level. Please further elaborate on how capital planning is affected by converting to IFRS. In particular, please confirm that Hydro One's overall capital planning needs would not be driven by a change in reporting standard. If not confirmed, please explain.

c) In section 4 of the PwC Report, there is discussion provided on the impacts to workstreams and reporting activities. Please discuss how Hydro One's past transition from Canadian GAAP to US GAAP compares to the impacts discussed in section 4 of the PwC Report (e.g. were there similar impacts to workstreams and reporting activities).

d) Page 43 of Hydro One's 2012 Annual Report states the following:

> Accordingly, by mid-2011, we had substantively completed our four-phase IFRS Conversion Project…As a result of our 2011 decision to adopt US GAAP, our IFRS Conversion Project efforts were effectively halted. However, our IFRS conversion work has been, and will continue to be, managed in such a way that it can effectively be restarted if a future transition to IFRS is required…Our new financial systems were designed with maximum flexibility given the uncertainty of the outcome of certain impactive IASB projects. Our financial systems have the ability and capacity to handle current accounting and reporting processes in accordance with IFRS, should that be required in the future.

i. As part of PwC's analysis, please explain whether PwC considered the previous work performed in the IFRS Conversion Project and the flexibility of financial systems.

ii. Please explain whether Hydro One would be able to leverage the work previously completed as part of the IFRS Conversion Project as referenced above. If not, please explain why not.

iii. If Hydro One is able to leverage the work previously completed as part of the IFRS Conversion Project, please discuss the amount of incremental work that would still be required to complete the transition to IFRS.

Response:

a) Response from Hydro One:

In terms of the two approaches in which Hydro One can convert to IFRS (i.e. all reporting or regulatory reporting only) an estimate of the potential implementation costs and maintenance costs under either of these approaches is not available as both would require a significant level of effort to assess what changes would be required from a process, technology, tools and training perspective and that assessment has not been conducted.

i. Response from Hydro One:

Hydro One notes that the reference to "Page 8 of the PwC Report, #5" is not correct. Rather, Hydro One understands the intended reference to be to Page 8, item #5 of Exhibit A-06-01, which forms part of Hydro One's description of its proposal for continued use of US GAAP. The PwC Report is provided in Exhibit A-06-01, Attachment 1.

With respect to the substance of the question, Hydro One's view is that if it were required to convert to IFRS that it should be permitted to recover its implementation costs, as well as its ongoing maintenance costs, notwithstanding the referenced decision. The referenced statement by the OEB was from a decision that was issued 10 years ago and is derived from an Addendum Report issued in June 2011 on the OEB's expectations regarding proposals to use US GAAP. In addition to the many changes in circumstances relating to IFRS since the statement was made, and the fact that upon transition from Canadian GAAP to US GAAP Hydro One did not recover any transition costs, the context for the policy and the referenced statement are not relevant to Hydro One's current circumstances, as follows.

First, it is important to understand the context for the referenced statement. It comes from pp. 11-12 of the decision in which the OEB approved Hydro One's use of US GAAP (EB-2011-0268). The OEB explained its view at the time was that although the adoption of modified IFRS for regulatory purposes was the most appropriate step for the utilities it regulates, a utility is free to apply to adopt a different standard if it makes a convincing case to do so. The OEB was satisfied, and "virtually all of the intervenors" agreed, that Hydro One made a compelling case to transition to US GAAP, noting in particular the significant revenue requirement reduction that this would enable. Moreover, the OEB noted on p. 11 of the decision that Hydro

One Inc. became subject to a regulation requiring it to use US GAAP for financial reporting purposes (O. Reg. 395/11 under the *Financial Administration Act*) and obtained securities exemptions that also enabled this. Consequently, the OEB determined that if it required Hydro One to use modified IFRS for regulatory purposes, Hydro One would incur additional expense in maintaining two separate sets of books. This would be contrary to what the OEB said was its "primary concern", which was that utilities could incur additional costs if required to maintain two separate sets of accounting books. After setting out the foregoing rationale for approving Hydro One's use of US GAAP, the OEB responded to one intervenor's concern that the securities exemption was time limited and so additional costs of a second change in accounting standard could potentially result in additional costs being incurred. In responding to that specific concern, the OEB noted that Hydro One indicated the exemption could be extended and, in that context, mentioned the policy it had previously articulated (in the Addendum Report) about the costs for two transitions potentially not being recoverable. It is that policy to which OEB Staff's question relates.

Second, the policy articulated in the Addendum Report was that if a utility were to adopt US GAAP as a short-term solution, that may prove to be counter-productive because, if it is required to transition to IFRS for financial reporting purposes a few years after adopting US GAAP, certain transitional issues may not have been avoided but delayed and additional costs may be incurred if changing accounting standards twice. On that basis, the OEB indicated it would carefully scrutinize the costs incurred to accomplish two successive transitions if the utility seeks to recover these costs from ratepayers. For Hydro One, its transition to US GAAP was not a short-term solution. It has remained on US GAAP for approximately 10 years so far and it is proposing to remain on US GAAP for the foreseeable future. As such, the basis for the OEB's underlying policy does not apply to Hydro One's circumstances.

Third, given Hydro One's proposal to remain on US GAAP, the only reason it would transition to IFRS in the foreseeable future would be if it was required to by the OEB for regulatory purposes, contrary to its preference of remaining on US GAAP. If Hydro One were forced to incur additional costs due to such a requirement being imposed on it, it is Hydro One's view that it would not be appropriate for the utility and its shareholders to bear such additional costs. If the OEB was of the view that requiring Hydro One to adopt IFRS was in the interests of ratepayers, then it would be Hydro One's view that ratepayers should bear the corresponding costs. In this respect, it is also helpful to recall the significant savings that ratepayers enjoyed as a

result of the OEB's decision to approve Hydro One's use of US GAAP in the referenced decision.

ii. Response from PwC:

Page 9 of the Hydro One US GAAP to IFRS conversion impact review ("the PwC IFRS Report"), filed at Exhibit A-06-01 Attachment 1, outlines areas where accounting measurement, presentation and disclosures may differ on adoption of IFRS and on an ongoing basis thereafter. Page 10 of the PwC IFRS Report also notes that the ongoing disclosure requirements under IFRS are significant and would require data from the Company's system and internal reporting processes that may not be reported currently.

b) Response from Hydro One:

Hydro One's capital needs would not be impacted by a change in accounting frameworks. However, the change from US GAAP to IFRS would require a change in the planning process utilized by Hydro One as under US GAAP the planning can be conducted at a higher level (group level), whereas IFRS requires capitalization to occur at the smallest identifiable component level. Given this requirement under IFRS, it would require a fundamental change in the capital planning process, as well as related downstream work delivery processes. The capital plan would now need to be planned, delivered, and tracked at a more granular level, which would require significant changes to the existing planning process, as well as associated software tools and applications, resulting in additional costs with little to no benefit to customers.

c) Response from Hydro One:

When Hydro One transitioned from Canadian GAAP to US GAAP there was limited impact on Hydro One, as Canadian GAAP and US GAAP were closely aligned and in areas where Canadian GAAP did not provide guidance, it referred to US GAAP guidance and practices. In contrast, the transition from US GAAP to IFRS would have a significant impact on Hydro One as outlined in section four of the PwC Report on IFRS Conversion.

d) Please see below responses:

i. Response from PwC:

PwC did not review the outputs related to the conversion from Canadian GAAP to IFRS. International Financial Reporting Standards have changed significantly since 2011 and much of the analysis would be based on outdated accounting guidance. Furthermore, as outlined in Section 3 of PwC's US GAAP to IFRS conversion impact review, the International Accounting Standards Board (IASB) issued a long-awaited Exposure Draft: Regulatory Assets and Regulatory Liabilities (Exposure Draft) that is intended, once finalized, to replace IFRS 14. The Exposure Draft has not been issued as a final standard. However, as drafted, the Exposure Draft would have far-reaching implications on the recognition, measurement, impairment and derecognition of regulatory deferral accounts.

Given the extent of changes to the accounting standards, uncertainty with the direction of potential measurement and presentation changes, and the passage of time from 2011 to today's date, our view is that the historical work performed would no longer be helpful or provide efficiencies in the event HONI were required to convert to IFRS for purposes of determining and tracking its revenue requirements or for external reporting purposes.

ii. Response from Hydro One:

The work previously conducted by Hydro One on the IFRS conversion project that was subsequently halted was conducted over 10 years ago and cannot be leveraged going forward. The work previously conducted was based on technology solutions that were available at that time as well as on the IFRS guidance that was in place at that time, which has changed significantly over the last 10 years. As a result, that work is stale, obsolete and cannot be used for a future IFRS conversion. Any IFRS conversion would have to start anew.

iii. Please refer to d) ii above.

A - OEB STAFF INTERROGATORY - 015

Reference:

Exhibit A-6-1, Pages 5-8, and Attachment 1
Exhibit E-9-2, Attachment 2A

Preamble:

Page 8 of the PwC Report in Attachment 1 states:

> *Subsequent to the adoption of IFRS, using the 2023 forecasted year, there could be up to $208 million of common corporate costs that would be recorded as period expenses to be recovered in the company's annual revenue requirement. Should accounting processes be amended and updated as described above, there could be specific components within these cost categories that may meet the criteria under IFRS to be directly charged to specific capital projects, thereby reducing the impact to revenue requirement. Furthermore, if the OEB maintains the same ratemaking framework and guidance described in the 2007 Handbook outlined above, agnostic to the accounting framework, we would not expect a significant impact, if any to future revenue requirements in respect of Common Corporate Costs at Hydro One.*

Interrogatory:

a) Please clarify whether the $208 million of common corporate costs represents the total 2023 common corporate costs that have been capitalized under USGAAP in the current application or total 2023 common corporate costs (i.e. OM&A and capital).

   i. Please explain how the $208 million of corporate costs correlate to the $135.9 million ($72.6 million for Transmission, $63.3 million for Distribution) shown as capitalized overhead in the reconciliation of accounting to tax additions.

   ii. Please provide the amounts of common corporate costs that have been capitalized in this application, in accordance with USGAAP for each year from 2023 to 2027.

b) Under IFRS, administration and other general overhead costs are explicitly prohibited from capitalization. Please clarify and explain whether the entire $208 million of common corporate costs would be considered administration and other general overhead costs, and therefore, prohibited from capitalization under IFRS.

i. The quote referenced above states that specific components with these cost categories may meet the criteria under IFRS to be directly charged to specific capital projects. Please provide further details and examples of specific components of common corporate costs that may meet the criteria under IFRS to be charged to specific capital projects.

ii. Please provide the net amount relating to the $208 million for 2023, and the net annual amounts for 2024 to 2027, that would no longer be allowed to be capitalized under IFRS (i.e. after considering any specific components that may meet the criteria under IFRS to be charged to specific capital projects) when compared to USGAAP.

c) Please clarify whether Hydro One has other costs beyond common corporate costs that would qualify as administration and other general overhead costs that are prohibited to be capitalized under IFRS. If so, please quantify the annual amounts for 2023 to 2027.

d) The quote referenced above states that if the OEB maintains the ratemaking framework described in the 2007 Handbook, a significant impact would not be expected to future revenue requirement relating to common corporate costs. On page 5 of the PwC Report, it states that the 2012 Handbook would be applicable to Hydro One in the event that it adopts IFRS for regulatory reporting. Please clarify why a comparison was made to the 2007 Handbook when it would not be applicable if Hydro One adopted IFRS for regulatory reporting.

i. Please explain whether a significant impact would be expected if the 2012 Handbook is applied to Hydro One's revenue requirement, and whether the impact would be the up to $208 million of common corporate costs that could be expensed. If not confirmed, please quantify the impact.

ii. Further to the above, page 8 of the first reference indicates that there would not be a significant difference in the overall recognition and measurement of common corporate costs or other costs. Please clarify if the reference to other costs is to mean all other OM&A costs or certain specific costs. If the latter, please explain the specific costs.

iii. Please clarify it the statement regarding other costs in part ii above results from a comparison of costs to the 2007 or 2012 Handbook.

Response:

a) Response from PwC: As stated on p. 6 of the report, the $208 million refers to the total value of common corporate costs capitalized based on the 2023 forecast.

i. Response from Hydro One: The $208 million of corporate costs correlate to the $135.9 million ($72.6 million for Transmission, $63.3 million for Distribution) shown as capitalized overhead in the reconciliation of accounting and tax additions as follows:

(in $ millions)	Transmission	Distribution	HONI	
Capitalized Overheads for Accounting	118.1	90.3	208.4	
Less: Amounts Capitalized for tax	(32.1)	(14.8)	(46.9)	
Sub Total	86.0	75.5	161.5	
Less: Pension and OPEB costs in Capitalized Overheads	(13.4)	(12.2)	(25.5)	**Note 1**
Overheads Deducted for Tax	72.6	63.3	135.9	

Note 1: *Capitalized Overheads includes pension and OPEB costs associated with salaries, which are not deducted as:*

i. Capitalized Pension is deducted on line 16 of the taxable income calculation (Exhibit E-09-02 Attachment 1) and to ensure there is no double counting, pension costs capitalized as part of overheads is not deducted.

ii. OPEB expenses are not deductible for tax. Therefore, any OPEB expenses capitalized as part of salaries embedded in capitalized overheads is not be deducted for tax.

ii. Response from Hydro One: Please refer to Table 1 in Exhibit C-08-02, page 5 of 12.

b) Response from PwC: The accounting treatment for administration and other general overhead costs for a regulated utility such as Hydro One is dependent on the actions of the regulator, in this case the Ontario Energy Board, and whether Hydro One applies IFRS 14 "*Regulatory Deferral Accounts"* as described on page 5 of the PwC IFRS Report. As such, the extent to which the $208 million of common corporate costs may be prohibited from capitalization under IFRS will depend on the actions of the OEB and whether Hydro One applies IFRS 14.

Section 1 of the PwC IFRS Report notes that under IAS 16 *Property, plant and equipment,* directly attributable costs incurred for activities to bring the property, plant or equipment to the condition and location necessary for it to be capable of operating in the manner intended by management may be capitalized. Although administrative and other general overhead costs are explicitly prohibited from being capitalized under IAS 16, IFRS 14 acknowledges the recognition of a regulatory asset for "non-directly-attributable overhead costs that are

treated as capital costs for rate regulation purposes" (IFRS 14.B5.iii). IAS 16 does not define what types of costs are considered "administrative and other general overhead costs".

PwC was not engaged to perform procedures to quantify the differences between the amounts of administration or other general overhead costs capitalized under US GAAP versus IFRS. However, the approach and process to quantify the amounts has been outlined on pages 5 and 6 of the PwC IFRS Report. In the report, PwC notes that changes to existing processes and procedures may include tracking, in a more detailed manner, time and costs for the different projects to be able to quantify the amounts that are directly attributable to the construction of the identified asset.

The following broad categories of Lines of Business would require further evaluation to determine whether we would be able to establish a process to identify and allocate charges directly to a particular capital project:

- costs associated with senior management and governance roles;
- support functions that indirectly provide support to a functioning capital program such as human resources administration costs, workforce acquisition costs, labour relations costs, and talent management, safety meeting and training costs; and
- components of certain support functions such as outsourcing, Indigenous relations, external relations, customer service, finance, audit, tax, treasury, business analysis, facilities and real estate, legal, risk, and regulatory affairs.

i. Please refer to the response to b) above.

ii. Response from Hydro One: As outlined in the response to question b) above, additional guidance issued by the regulator related to treatment of overhead charges for purposes of capital costs would need to be issued and processes would need to be updated to capture additional information that may not currently exist. For these reasons, we are not able to provide the net amount relating to the $208 million for 2023, or the net annual amounts for 2024 to 2027 that would no longer be capitalized under IFRS.

c) Response from Hydro One: There are also costs that are considered directly attributable costs to capital programs and projects under US GAAP that under IFRS may be deemed as indirect overheads beyond the $208M of identified common corporate costs. At this time Hydro One is unable to quantify these costs and can only conduct this quantification in conjunction with updating its capital work program to reflect the requirements under IFRS. As explained in Exhibit A-06-01, if certain accounting processes are amended and updated, specific components of those common corporate costs as well as certain costs that are currently considered directly attributable costs to capital may ultimately meet the criteria under IFRS for being directly charged to specific capital projects.

d) Response from PwC: Reference is made to the Ontario Energy Board Accounting Procedures Handbook for Electric Distribution Utilities ("2007 Handbook") because it has been applicable to Hydro One since the adoption of US GAAP from January 1, 2012 in accordance with the guidance issued in Article 315 of the Accounting Procedures Handbook for Electricity Distributors effective January 1, 2012 ("2012 Handbook"). More specifically, p. 10 of Article 315 states that the 2012 Handbook only applies to a distributor that prepares its financial accounting records on the basis of IFRS. Because the 2012 Handbook is not applicable to US GAAP reporters, the Company refers to the latest guidance that applies to the Company which is the 2007 Handbook.

As well, Hydro One's fillings with the OEB on adoption of US GAAP, in 2012, noted that US GAAP effectively continued the accounting practices previously applied under legacy Canadian GAAP pursuant to Part V of the Handbook of the Canadian Institute of Chartered Accountants, and there were no accounting policy changes arising from the transition from Canadian to US GAAP that impacted Hydro One Distribution's rate base or revenue requirement (EB-2013-0416, Exhibit A, Tab 15, Schedule 2).

i. Please refer to the response to question b).

ii. PwC's analysis was focused on the accounting for the $208 million of common corporate costs as filed in the 2023 revenue requirement.

iii. Please refer to response to question d) - all analyses were performed based on the guidance issued by the Ontario Energy Board in the Accounting Procedures Accounting Procedures Handbook for Electricity Distributors effective January 1, 2012 and the Handbook for Electric Distribution Utilities Revised July 31, 2007.

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A - OEB STAFF INTERROGATORY - 016

Reference:

Exhibit A-6-1, Attachment 1

Preamble:

Page 9 of the PwC Report lists areas where there are potential differences between US GAAP and IFRS. On page 10, under the section MIFRS and IFRS 14, it states "While presentation and disclosures differences are identified, the application of IFRS 14 would act to reduce revenue requirement differences when reporting in accordance with IFRS." Page 9 indicates that IFRS 14 permits entities to continue to apply their previous GAAP accounting policies for the recognition, measurement, impairment and derecognition of regulatory deferral accounts.

Interrogatory:

a) Please explain the above referenced statement and explain how IFRS 14 would act to reduce revenue requirement differences as regulatory assets and liabilities are not a direct line item in revenue requirement.

Response:

a) The response below was provided by PwC:

The treatment of charges for rate making purposes outlined by a regulator generally drives the accounting treatment for those charges. Accounting guidance for companies subject to rate regulation is provided under IFRS 14, Regulatory Deferral Accounts (IFRS 14). In the absence of Hydro One applying IFRS 14, on adoption of International Financial Reporting Standards for rate making and external reporting purposes, assets and liabilities that are recorded on the basis of regulatory guidance may no longer be recognizable under IFRS for external reporting purposes, resulting in a potentially larger impact between externally reported results and Hydro One's regulatory reporting.

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A - OEB STAFF INTERROGATORY - 017

Reference:

Exhibit A-6-1, Pages 5-8, and Attachment 1

Preamble:

Page 20 of the PwC Report in Attachment 1 states that under USGAAP certain leases are accounted for as operating leases. For revenue requirement and regulatory purposes, Hydro One treats lease costs as operating leases.

Interrogatory:

a) Please clarify whether the above statement means that Hydro One may account for leases differently for external and regulatory reporting purposes (e.g. treats certain leases as finance leases for external reporting purposes, but treats all leases as operating leases for regulatory purposes).

b) If part a above is confirmed, please explain why there is a misalignment in lease treatments between external reporting and regulatory reporting purposes.

c) For any leases requested for recovery in this application, where there is such a misalignment, please quantify the revenue requirement impact for i) the difference between the current amount included for recovery and the amount that would be included for recovery if the leases were treated on the same basis as external reporting purposes, and ii) any cumulative revenue requirement transition impact at December 31, 2022 for any leases that were included in a prior application and continues to exist in the current application.

Response:

a) Response provided by PwC:

Confirmed. OEB Staff's description as to the meaning of the statement is correct.

b) Response from Hydro One:

Hydro One currently accounts for leases under US GAAP and at this time only has operating leases. As a result, there is no accounting and measurement adjustment required for regulatory purposes to calculate its revenue requirement.

c) Response from Hydro One:

Not applicable. As indicated in response to part b) above, Hydro One has not requested recovery of any lease charges in this application where there is any such misalignment.

A - OEB STAFF INTERROGATORY - 018

Reference:

Exhibit A-6-1, Page 11
Exhibit A-6-2, Attachments 1 and 3

Preamble:

Hydro One early adopted ASU 2018-15 on April 1, 2019. The ASU allows Hydro One to capitalize implementation costs on hosting arrangements that is a service contract.

Interrogatory:

a) In Hydro One Transmission and Distribution's 2019 audited financial statements, it is indicated that the adoption of ASU 2018-15 was applied prospectively and there was no material impact on adoption. Please quantify the cumulative amount of implementation costs that have been capitalized in the 2023 test year as a result of the adoption of ASU 2018-15.

b) Please explain whether any of the amounts quantified in part a, above, have previously been recovered as OM&A in a prior rate application. If so, please explain why Hydro One is requesting for recovery for these amounts again.

c) Please provide the amounts that have been capitalized each year from 2023 to 2027, that would previously had been expensed prior to the adoption of ASU 2018-15.

Response:

a) The total amount of capitalized implementation costs in the 2023 test year as a result of the adoption of ASU 2018-15 is anticipated to be approximately $11.8M.

b) None of the amounts in part a) above have previously been recovered as OM&A in a prior rate application.

c) The forecasted amounts that have been capitalized each year from 2023 to 2027 are as follows:

$M	2023	2024	2025	2026	2027
Tx ISA	5.9	9.4	17.8	15.3	32.9
Dx ISA	5.9	16.8	20.8	31.5	62.5
Total	**11.8**	**26.2**	**38.6**	**46.8**	**95.4**

The ability to capitalize implementation costs on hosting arrangements that is a service contract per ASU 2018-15 will allow distributors to optimize IT investments and be able to provide service to customers at a lower cost versus on premise solutions.

A - OEB STAFF INTERROGATORY - 019

Reference:

Exhibit A-6-1, Page 10, and Attachment 1
Exhibit A-6-2, Page 10, and Attachments 2 and 4

Preamble:

Hydro One has discussed past changes in accounting policy. In the audited financial statements for Transmission and Distribution, new accounting pronouncements are discussed.

Interrogatory:

a) Please explain whether there is any new accounting standard(s) effective 2021 and beyond that will have an impact to Hydro One's test period revenue requirements.

b) If so, please identify and explain the new accounting standard(s) and its impact to Hydro One's application, including quantification of the revenue requirement impact.

Response:

a) Please refer to page 6 of Attachment 1 in Interrogatory Response **0-Staff-002**. Recently adopted accounting guidance that was effective January 1, 2021 had no impacts to Hydro One's test period revenue requirements upon adoption. For recently issued accounting guidance not yet adopted that will be effective January 1, 2022 and January 1, 2023, Hydro One has assessed that there will be no impact to the Company's test period revenue requirements.

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A - OEB STAFF INTERROGATORY - 020

Reference:

Exhibit A-6-2, Attachments 2 and 4

Preamble:

Under Note 2 of Hydro One Transmission and Distribution's 2020 audited financial statements, under Environmental Liabilities, it indicates that the Transmission and Distribution businesses' record a liability for the estimated future expenditures associated with contaminated land assessment and remediation (LAR) and for the phase-out and destruction of polychlorinated biphenyl (PCB)-contaminated mineral oil removed from electrical equipment.

Under Asset Retirement Obligation, it indicates that the Transmission and Distribution businesses' asset retirement obligations recorded to date relates to estimated future expenditures associated with the removal and disposal of asbestos-containing materials installed in some of its facilities.

Interrogatory:

a) Please confirm that the environmental liability referenced in the financial statements is referring to the expenditures to remediate past environmental contamination as discussed in Exhibit E / Tab 8 /Schedule 1 / p. 9, and is proposed for recovery under amortization expense. If not confirmed, please explain whether Hydro One is requesting recovery of environmental liabilities.
    i. If so, quantify the amount and reference the evidence that lays out Hydro One's proposed recovery for environmental liabilities.

b) Please explain whether Hydro One has requested recovery for asset retirement costs. If so, please quantify the amount and reference the evidence that lays out Hydro One's proposed recovery for asset retirement costs.

Response:

a) Confirmed.
    i. The quantum of the environmental liabilities proposed for recovery in Transmission and Distribution are detailed in Exhibit E-8-1, Tables 3 and 4, page 10. The proposed approach to recover the environmental liabilities starting in 2023 is discussed in Exhibit D-1-1, Section 4.0, pages 12 to 16.

b) Yes, Hydro One has requested recovery for asset retirement costs. If the asset remains in service at the recognition date, the present value of the liability is added to the carrying amount of the associated asset in the period the liability is incurred and this additional carrying amount is depreciated over the remaining life of the asset. Therefore, asset retirement costs are embedded in rate base and recovered via depreciation expense. This is shown and detailed in Exhibit C-1-1, pages 4 and 9. As at December 31, 2020, the asset retirement obligation is $13M.

A - OEB STAFF INTERROGATORY - 021

Reference:

Exhibit A-6-4, Attachment 2 and 4
Exhibit C-4-4, Appendix 2-BA

Preamble:

In the first reference, Hydro One provides for an income statement reconciliation of regulatory financial results to audited financial statements. OEB staff notes that there are differences between the PP&E amounts as shown in Hydro One Transmission and Distribution 2020 audited financial statements (PP&E and Intangible Assets notes) and as shown in Appendix 2-BA. The differences are as follows.

	Transmission ($M)	Distribution ($M)
2020 Financial Statements		
NBV PPE	$13,433	$8,092
CWIP	$(970)	$342
Future Use Assets	$(103)	$(61)
NBV Intangibles	$203	$(150)
	$12,563	$8,223
Appendix 2-BA	$12,621	$8,056
Difference	$58	$(167)

Interrogatory:

a) Please reconcile and explain the differences.

Response:

a) The 2020 financial statement (FS) breakdown provided above is incorrectly labelled, and the actual breakdown is as follows:

	Transmission ($M)	Distribution ($M)
2020 Financial Statements		
NBV PPE	$13,433	$8,092
NBV Intangibles	$(970)	$342
Future Use Assets	$(103)	$(61)
CWIP	$203	$(150)
	$12,563	$8,223

Witness: CHHELAVDA Samir

The reconciliation of the financial statements to Appendix 2-BA is as follows:

Transmission Reconciliation:	
	Transmission ($M)
Balance per FS Calculated per OEB	12,563
CWIP Intangibles not deducted by OEB	(29)
Future Use Assets Adjustment Correction - Only Future Use Land removed from 2-BA	87
Adjusted Balance per FS	12,621
Balance per Appendix 2-BA	12,621
Difference	0

Distribution Reconciliation:	
	Distribution ($M)
Balance per FS Calculated per OEB	8,223
CWIP Intangibles not deducted by OEB	(30)
Future Use Assets Adjustment Correction - Only Future Use Land removed from 2-BA	60
2-BA adjustment for other Non Rate-Regulated Utility Assets not required for FS reporting purposes	(46)
LDC Adjustment - 2018-2022 2B-A figures refer only to Hydro One Distribution excluding Acquired Utilities (Norfolk, Haldimand and Woodstock)	(153)
Adjusted Balance per FS	8,054
Balance per Appendix 2-BA	8,056
Difference	2

Difference of $2M is immaterial

B2 - OEB STAFF INTERROGATORY - 022

Reference:

Exhibit B-2-1, TSP Section 2.1, Page 11
Exhibit B-2-1, TSP Section 2.7, Page 4
Exhibit B-2-1, TSP Section 2.9, Attachment 1
Exhibit B-1-1, SPF Section 1.6, Page 9

Preamble:

As described in the IRG Report, key customer feedback from Phase 1 in respect of transmission included the following:

- *…*
- *Most customers want Hydro One to make investments to improve power quality and reduce the number of momentary outages.*

The application also discusses the importance of power quality in noting "large industrial customers are a critical part of Ontario's economy and … transmission outages and issues can cause significant and costly interruptions to industrial processes and customer equipment." Hydro One also notes "the outcomes of the TSP align with the principles of the [Renewed Regulatory Framework] with the aim to achieve … outcomes" including "Customer Focus: maintaining and improving power quality, equipment availability and customer reliability".

The "Capital Projects Table" in the application identifies that Hydro One made $7.6 million in investments to improve power quality over the three-year 2018 to 2020 period and plans to invest $0 between 2023 and 2027.

Interrogatory:

a) Please provide a list of projects/programs with associated capital and/or OM&A costs, per year during the test period, that will positively impact power quality for transmission connected customers.

b) Given the importance Hydro One has placed on power quality for industrial customers in the application, please explain why Hydro One is planning $0 in investments to improve power quality over the five-year 2023 – 2027 test period.

Response:

a) To clarify, the "Capital Project Table" referenced above (Attachment 1 of Exhibit B-2-1, TSP Section 2.9), has a total spend of $6.4 million in Power Quality (PQ) over the 2018 to 2020 period ($1.4million/$3.1million/$1.9million, respectively). This $6.4 million in PQ investments over the 2018 to 2020 period was associated with the installation of "Cap-Switchers", to replace existing conventional circuit breakers, to reduce capacitor bank energizing transients that may adversely impact nearby industrial and commercial customers.

This program has now been integrated with transmission stations renewal investments (under ISD T-SR-03) for execution efficiency. The Cap-Switcher installations will be considered where capacitor breakers are being replaced at stations.

In addition to the Capital work noted above, Hydro One continues with its Customer PQ program under Transmission OM&A with forecast of $1 million to help customers with their power quality issues. Please refer to Section 2.3 of Exhibit E-2-3 for more details on this program.

b) Please see response to part (a) above, Hydro One is continuing investments in power quality over the five-year 2023 to 2027 test period, the only difference is the integration of the capital work component into the transmission stations renewal investments.

B3 - OEB STAFF INTERROGATORY - 023

Reference:

Exhibit A-7-2, Attachment 1
Exhibit B-3-1, DSP Section 11, SS-04, Page 5

Preamble:

ISD D-SS-04 outlines Hydro One's plans for station battery storage solutions to improve reliability for customers who experience long interruption durations.

In cases where traditional solutions are unable to sufficiently improve reliability in a cost effective manner, battery storage is considered as a viable option to reduce supply interruption and improve reliability. Hydro One proposes to target 24 communities over the plan period.

Interrogatory:

a) Please reconcile the list of First Nation candidate communities for energy storage, on page 9 of the *First Nations Reliability Report 2021,* with *Appendix A: Reliability Data by First Nations Community* of the same report.

b) Page 9 of the *First Nations Reliability Report 2021* contains a list of 24 communities being considered for station battery solutions. How will Hydro One revise its investment plans if detailed studies find that 1 or more of the candidate communities are found to be unsuitable for station battery storage solutions?

Response:

a) The list of First Nation candidate communities on page 9 of the First Nations Reliability Report 2021 lists the names of the First Nation communities. *Appendix A: Reliability Data by First Nations Community* of the same report lists the names of the reserves. A First Nation community may have residents that reside on different reserves and these reserves have different names from the First Nation community name. The table below reconciles the candidate list on page 9 with reserve names from Appendix A.

First Nation Name on Page 9	*Reserve Name in Appendix A*
Anishinaabeg of Naongashiing	Saug-A-Gaw-Sing 1
Atikameksheng Anishnawbek	Whitefish Lake 6
Brunswick House First Nation	Duck Lake 76B
Chapleau Cree First Nation	Chapleau Cree Fox Lake
Chapleau Ojibway First Nation	Chapleau 74A
Dokis First Nation	Dokis 9
Henvey Inlet First Nation	Henvey Inlet 2
Lac La Croix First Nation	Neguaguon Lake 25D
Magnetawan First Nation	Magnetawan 1
Mattagami First Nation	Mattagami 71
Mishkeegogamang First Nation	Osnaburgh 63A Osnaburgh 63B
Moose Deer Point	Moose Point 79
Naicatchewenin First Nation	Rainy Lake 17A
Netmizaaggamig Nishnaabeg	Pic Mobert Reserve North Pic Mobert Reserve South
Ojibway Nation of the Saugeen	Ojibway Nation of Saugeen
Biigtigong Nishnaabeg (Ojibways of the Pic River First Nation)	Pic River 50
Shawanaga First Nation	Shawanaga 17
Sheshegwaning First Nation	Sheshegwaning 20
Shoal Lake #40 First Nation	Shoal Lake 40
Temagami First Nation	Bear Island 1
Wahgoshig First Nation	Abitibi 70
Wahta Mohawk First Nation	Wahta Mohawk Territory
Wasauksing First Nation	Parry Island First Nation
Zhiibaahaasing First Nation	Zhiibaahaasing 19A

b) The list of 24 communities listed on Page 9 of the First Nations Reliability Report 2021 are the top 24 candidates. Should some of the candidate communities be found to be unsuitable for battery storage solutions, Hydro One will expand the candidate list to include other First Nation communities.

B1 - OEB STAFF INTERROGATORY - 024

Reference:

Exhibit B-1-1, SPF Section 1.4, Pages 3-4
Exhibit B-1-1, SPF Section 1.4, Attachment 1, Page 8

Preamble:

As stated on pages 3 through 4:

Through the planning process, each of Hydro One's LOBs are asked to identify incremental productivity initiatives that can produce savings. In consultation with Finance, the LOBs are required to demonstrate that each proposed initiative has an objective baseline as well as a defined and auditable measurement methodology.

Once these points are demonstrated, Finance works with initiative owners to validate specific planning assumptions in order to quantify demonstrable savings, and the LOBs are then asked to embed anticipated productivity improvements in the company's annual business plan and the associated investments. The embedded savings result in actual reductions in the costs required to achieve desired outcomes, which would otherwise not have been attainable if the initiatives were not identified.

Interrogatory:

a) Please provide the business cases produced by LOBs and Finance for the following incremental productivity initiatives identified in the chart on page 8 of Attachment 1.

   i. Move to Mobile / Distribution Optimization & Transformation
      a. Field Force
      b. Workforce Planning

   ii. Telematics, Fleet Telematics and Right-Sizing

   iii. Operations, Flexible Bill Window

   iv. Administrative, Corporate Common Head Count Reductions

Response:

b) The attachment in Interrogatory Response B1-SEC-054, part d) contains initiative specific documents which describe the methodology for each initiative which enables the productivity savings. For each of the initiatives identified above, please refer to the following pages in the aforementioned attachment:

i. Move to Mobile / Distribution Optimization & Transformation: Page 13
   a. Telematics, Fleet Telematics and Right-Sizing
   b. Telematics: Page 1

ii. Capital Reduction: Page 2

iii. Flexible Bill Window: Page 19

iv. Corporate Common Head Count Reductions: Page 20

B1 - OEB STAFF INTERROGATORY - 025

Reference:

Exhibit B-1-1, SPF Section 1.4, Page 3
Exhibit B-1-1, SPF Section 1.4, Attachment 1, Page 3
Exhibit B-1-1, SPF Section 1.4, Attachment 2, Pages 23-24
Exhibit B-1-1, SPF Section 1.4, Attachment 1, Page 8

Preamble:

At the first reference above, the following statement is made:

Through the planning process, each of Hydro One's LOBs are asked to identify incremental productivity initiatives that can produce savings. In consultation with Finance, the LOBs are required to demonstrate that each proposed initiative has an objective baseline as well as a defined and auditable measurement methodology.

Attachment 1, page 3 states:

Capital: In 2018, Hydro One achieved $33.5 million in capital related productivity savings as compared to the $36.4 million previously forecasted in the Application. The main drivers for the lower productivity savings achieved are as follows:

- Hydro One achieved lower than planned savings in the Move to Mobile initiative due to higher than planned unit costs relative to the baseline; and

Attachment 2, page 23 through 24 states (page 21-22 of the report):

Criteria 7 – A productivity program drives benefits that can be considered true productivity gains
Concentric understands that the Productivity Framework itself does not incorporate capital costs incurred to achieve savings. Capital costs incurred to achieve savings (often referred to as "costs to achieve," or "CTAs"), are a common variable considered in savings analyses. For instance, following utility M&A activity, utilities are often provided the opportunity to recover CTAs (e.g., investments in IT) from customers to the extent they can show net savings. While Hydro One does not embed CTAs directly in its Productivity Framework calculations, it instead captures such costs in its business case analyses, from which Hydro One identifies and sets targets for many Productivity Framework initiatives.

Page 8 of Attachment 1 contains a chart (the chart) showing the filed and actual productivity initiative savings from projects from 2018 through 2022.

Interrogatory:

a) Explain in detail how the components of the productivity savings contained in the table were calculated.

b) If capital costs to implement the initiative were included in the chart, were the capital costs the
   i. Capital expenditures that occurred for the year,
   ii. the revenue requirement for the capital additions related to the project for that year,
   iii. a net present value of the revenue requirements of the capital additions for the initiative, or
   iv. another model?

c) Please add the following columns to the chart

2018A	2019A	2020A	2021B	2022P	Capital Investment	Cap Years	Dep Years
a	a	a	a	a	b	c	d

Populate the chart with the following:
   i. Savings realized by the initiative in that year
   ii. Total capital expenditures to implement the initiative
   iii. Years in which the capital expenditures occurred, for example, 2016-2018 or 2018
   iv. Depreciation time of the investment in years, or if multiple asset classes were invested in, the weighted average depreciation time of the assets in years.

If one capital project has been reflected in the chart through multiple row entries, the investment should be shown in one row, with the other rows referencing the spend elsewhere in the table.

Response:

a) There are two main components in the productivity savings table. First is "As Filed". These are based on the targeted savings at the time of filing the application. The second component is results noted as "Actual, Budget or Plan" (denoted A, B, or P). Results based components are determined by comparing the baseline to actual/forecasted costs incurred. These results are the cost reductions or efficiencies, as defined by specific methodology, relative to the established baseline for each initiative. Please see specifics of the initiative measurement in the column with the heading "Measurement and Expected Benefit" on page 8 of Attachment 1. Please see Interrogatory Response **B1-SEC-054** Attachment 1 for briefing documents for the various initiatives.

b) Productivity is measured as an output of business decisions made in an effort to operate the organization more efficiently. As an overarching concept, not every business decision is contingent upon delivering Productivity savings. Most savings initiatives are enabled without any capital outlay, while other business decisions may be driven by non-financial opportunities or needs, and require a capital outlay. The organization recognizes that financially prudent decisions will be of benefit to rate payers, and in turn the productivity program is the mechanism to objectively quantify those savings subsequent to implementation.

c) As noted in part b) above, the majority of Productivity initiatives were not enabled by a Capital investment (and vice versa, not all Capital investments necessarily trigger Productivity savings). The "Project Applicable Capital Investment" column was added in the Chart below to represent the capital associated with the specific project cost and not capital outlay associated with just achieving the productivity savings. While the Capital Investments are representative of implementing the project, non-financial decisions may have been factored into the investment and Productivity savings may not have been the sole determinant of the decision to proceed. There are also various initiatives delivering savings where no Capital expenditure was incurred (primarily the N/A's in the chart).

	Category in Rate Filing	Initiative Summary	Measurement and Expected Benefit	2018A	2019A	2020A	2021B	2022P	Project Applicable Capital Investment	Capex incurred when?	Depreciated over # of years
Capital	Move to Mobile / Distribution Optimization & Transformation	Field Force	Measures Labour Hours per Unit - Historical Baseline vs Actual *Plan allocation to expected unit cost savings in New Connections, Joint Use line Relocations, Field Meter Service, Component Replacement*	$ 2.7	$ (4.2)	$ (2.3)	$ -	$ -	$41.3	2015-2016	Software - 6 years Hardware - 5 years
		Workforce Planning	Workforce planning *Measures the reduction in headcount as a result of the elimination of manual tasks/activities completed by both the BASC and FBC. There are two major projects that contribute to the reduction in headcount; M2M (Move to Mobile) and DOT (Design Optimization and*	$ 1.3	$ 0.7	$ 1.0	$ 2.3	$ 5.0	$30.8	2019-2022	Software - 6 years
	Procurement	Procurement	Lower Cost per Unit - Historical Baseline vs Actual *Savings are estimated at a category level based on historical spend, expected and achieved negotiated savings, and updated per business plan assumptions (Capital program spend)*	$ 7.2	$ 17.7	$ 22.7	$ 16.9	$ 17.2	N/A	N/A	N/A
	Information Techr	Contract Reductions	Infrastructure Rationalization/Contract Reductions *Expected capital allocation of negotiated reductions*	$ -	$ -	$ 0.6	$ -	$ -	N/A	N/A	N/A
	Operations	Stations Efficiencies	Cost Reduction based on Historical spend *Expected Capital allocation based on historical spend for OT reductions and Stations efficiencies*	$ -	$ -	$ -	$ -	$ -	N/A	N/A	N/A
		Pole Replacement	Distribution Pole Replacements *Measures the unit cost reduction of Pole Replacements. Distribution Asset Planning began using the Risk Spend Efficiency (RSE) Planning approach where assets were replaced based on their risk score after an assessment of their impact to Reliability, Safety and Environment.*	$ -	$ -	$ -	$ 11.0	$ 11.2	N/A	N/A	N/A
		Station Design	Padmount Transformers *Improved Planning to enable deployment of lower cost infrastructure with like-for-like service*	$ 1.97	$ 1.51	$ 4.85	$ 13.4	$ 5.9	N/A	N/A	N/A
	Telematics	Fleet Telematics and Right-Sizing	Fleet Rationalization - Unit Based Capital Plan Reduction *Estimated by utilizing Telematics data on fleet utilization and then measures the expected unit based reduction in the capital plan*	$ 20.3	$ 19.3	$ 23.5	$ 22.7	$ 22.8	N/A	N/A	N/A
OM&A	Customer	eBilling	Lower Cost per Customer *Expected customers enrolled in eBilling x Unit Savings*	$ 1.8	$ 3.5	$ 5.5	$ 5.3	$ 6.3	$9.4	2016-2017	Software - 6 years
		Insourcing	*Insourcing the contact centre has improved customer service, increased flexibility, and reduced costs as a result of the decline in the number of FTE required to successfully operate the Customer Contact Centre.*	$ 2.2	$ 9.1	$ 12.8	$ 10.5	$ 12.5	N/A	N/A	N/A
	Information Technology	Contract Reductions	*Expected savings from server/database decommissioning and negotiated infrastructure and application maintenance contract reductions*	$ 9.1	$ 5.4	$ 11.7	$ 14.5	$ 16.7	N/A	N/A	N/A
		Contract Rates - Minor Enhancement	(Old Rate - New Rate) * Expected ME Hours *Negotiated savings x Expected need for minor enhancement hours in business plan*	$ 1.5	$ 0.7	$ 0.6	$ 0.8	$ 0.8	N/A	N/A	N/A
		Telecom Services Contracts	Lower Cost per Contract *Reflects negotiated reduction in contract price*	$ 0.6	$ 0.6	$ 1.1	$ 0.6	$ 0.6	N/A	N/A	N/A
	Move to Mobile / Distribution Optimization & Transformation	Workforce Planning	Workforce planning *Measures the reduction in headcount as a result of the elimination of manual tasks/activities completed by both the BASC and FBC. There are two major projects that contribute to the reduction in headcount; M2M (Move to Mobile) and DOT (Design Optimization and*	$ 0.5	$ 0.3	$ 0.4	$ 0.6	$ 0.7	$4.3	2015-2016	Software - 6 years Hardware - 5 years
		Field Force	Measures Labour Hours per Unit - Historical Baseline vs Actual *Plan allocation to expected unit cost savings in New Connections, Joint Use line Relocations, Field Meter Service, Component Replacement*	$ 1.3	$ (1.9)	$ 2.4	$ -	$ -	$2.5	2019-2022	Software - 6 years
	Operations	Cable Locate Outsourcing	(Historical Cost - New Cost) * # of Units *Reflects negotiated savings for planned units being outsourced*	$ 11.4	$ 14.6	$ 15.5	$ 14.3	$ 14.5	N/A	N/A	N/A
		Crew Dispatch Optimization	Single Person Dispatch *Measures the reduced cost of trouble calls by increasing the instances where trouble calls could be resolved with a single person dispatched*	$ -	$ -	$ 1.2	$ 1.1	$ 1.1	N/A	N/A	N/A
		Fault Indicator Deployment	Lower Labour Hours per Unit *Estimate based on expected time savings for responding to a line fault. Tracked using historical data compared to actual response time*	$ -	$ -	$ -	$ -	$ -	N/A	N/A	N/A
		Forestry Initiatives	Lower Cost per KM *Estimated based on reductions in cost due to bundling overhead asset inspections with defect patrols and expected overall unit volume reduction in trouble calls*	$ 1.5	$ 2.2	$ 14.1	$ 14.6	$ 36.7	As discussed in response to IR I-04-B3-CME-016		
		Stations Efficiencies	Cost Reduction based on Historical spend *Expected OM&A allocation based on historical spend for OT reductions and Stations efficiencies*	$ 0.4	$ 0.1	$ 0.1	$ 0.6	$ 0.6	N/A	N/A	N/A
		Engineering	FTE Reduction *A reduction in support staff that was utilizing the legacy software*	$ 1.3	$ 1.3	$ 1.3	$ 1.3	$ 1.3	$12.6	2016-2019	Software - 6 years
		Flexible Bill Window	Lower Cost per Unit for Meter Reads *Expected savings from a unit reduction in demand for manual meter reads and lower unit cost due to gained scheduling efficiencies*	$ 1.5	$ 1.6	$ 3.5	$ 1.8	$ 1.8	N/A	N/A	N/A
	Procurement	Procurement	IT Software Cost Reduction & RFP Rationalization *Reflects expected and negotiated savings*	$ 1.7	$ 1.5	$ 3.2	$ 4.7	$ 4.7	N/A	N/A	N/A
	Facilities and Real Estate	Property Tax Appeals	Property Tax Reductions and Refunds *Measures benefit as a result of having proceeded through the Statuatory Appeal process*	$ -	$ -	$ 0.1	$ -	$ -	N/A	N/A	N/A
		Facilities Maintenance	Lower Contract Cost *Reduced facilities maintenance costs as a result of re-tendering the contract*	$ -	$ -	$ 0.2	$ -	$ -	N/A	N/A	N/A
	Telematics	Fleet Telematics and Right-Sizing	Lower Liters of Fuel per KM *Reflects results of pilot program with expected reduction in Liters of fuel per KM driven*	$ 0.1	$ 0.1	$ (0.2)	$ 0.2	$ 0.2	N/A	N/A	N/A
CCC	Administrative	Corporate Common Head Count Reductions	FTE Reduction *Identified headcount reductions by position in Corporate Common*	$ 1.3	$ 19.2	$ 18.7	$ 18.2	$ 17.0	N/A	N/A	N/A
	Procurement	Procurement	Lower Cost *Realized reduction in contracted spend in Corporate Common*	$ 4.8	$ 3.9	$ 4.2	$ 3.2	$ 3.2	N/A	N/A	N/A

B1 - OEB STAFF INTERROGATORY - 026

Reference:

Exhibit B-1-1, SPF Section 1.6, Overview: 2023-2027 Draft Investment Plan (Transmission System), Page 30

Preamble:

The 2023-2027 Draft Investment Plan discusses "How Does Hydro One's Transmission System Reliability Compare to Others?" and notes "Between 2014 and 2018, the typical Hydro One delivery point experienced about 60% fewer interruptions per year than the Canadian average. When it comes to the duration, the typical Hydro One delivery point has been interrupted for 55 minutes each year since 2014 — about 38 minutes less than the Canadian average." It further notes "Over the past five years, failing equipment has been the biggest contributor to transmission system outages."

Interrogatory:

a) Please clarify the percentage contribution of failing equipment to transmission system outages over the past five years.

b) Please identify the duration and frequency of interruptions, for 2020, on the same basis as 55 minutes and 60% were derived relative to the "Canadian average".

c) Please clarify what HONI used to represent the "typical" delivery point. Was it the average across 100% of delivery points? If not, please explain what HONI excluded, why those delivery points were excluded and provide the same comparison based on all delivery points.

d) In the TSP, the frequency of two types of outages -- momentary and sustained -- are addressed separately. What did HONI use to represent "interruptions" in this document? If one of those types was used, please use the other reliability measure in providing the same comparison.

e) Was the CEA Composite that was used in the TSP for comparison purposes used to represent the "Canadian average" in this document. If not, please explain why not and identify what was used.

Response:

a) The contribution of equipment to interruptions can be found in TSP Section 2.5 Figures 2, 3 and 4. These figures have been summarized in tabular form in Interrogatory B2-SEC-084.

b) The referenced statement contained a typographical error; the statement referencing 60% fewer interruptions should have read as approximately 0.6 interruptions per delivery point fewer than the Canadian average (approximately 40% fewer interruptions).

For 2020 the statement would read as follows:
Between 2016 and 2020, the typical Hydro One delivery point experienced about 0.56 fewer interruptions per delivery point per year than the Canadian average (about ~35% fewer interruptions). When it comes to duration, the typical Hydro One delivery point has been interrupted for 59 minutes each year since 2016 — about 35 minutes less than the Canadian average.

c) The average across all delivery points was presented as the typical performance.

d) The combined total of momentary and sustained interruptions was presented as "interruptions" in the referenced document.

e) No, the CEA Composite was not used to represent the "Canadian average" in this document. In this document, the "Canadian average" is the average of all utilities participating in the delivery point performance benchmark, excluding Hydro One. Within the TSP, the CEA composite is the average of all participating utilities including Hydro One. Hydro One accounts for ~25% of composite delivery points for CEA. A comparison was made to CEA without the Hydro One weighting to show the difference between Hydro One and the rest of our peers.

B1 - OEB STAFF INTERROGATORY - 027

Reference:

Exhibit B-1-1, SPF Section 1.1, Page 15
Exhibit B-1-1, SPF Section 1.4, Page 9
Exhibit B-1-1, SPF Section 1.4, Attachment 1, Page 11
Exhibit B-1-1, SPF Section 1.4, Attachment 2

Preamble:

At the second reference, Hydro One states that:

Hydro One has embedded $61.0M annually from 2023 to 2027, as outlined in Table 1 below, which represents the 2022 capital commitment in the last Transmission application. Once Hydro One is able to identify $61.0M worth of productivity savings, it expects that these savings will continue in the 2023-2027 period, consistent with the goal of finding sustained productivity improvements. As at the time of filing this application, approximately $36.0M of the $61.0M has been defined by way of specific productivity initiatives annually.

At page 22 of 36 at the fourth reference, Concentric states that "if the Company re-baselines its initiatives, it may be more challenging to continually find meaningful new initiatives that meet the rigorous standards of the Productivity Framework on a long-term basis."

Interrogatory:

a) Table 2 at the first reference includes a Progressive Productivity Placeholder category. Please explain why this is described as a "placeholder". When and how will the progressive productivity value be finalized?

b) Please identify the $36 million of specific productivity initiatives that have been identified.

c) Please provide the documents (business cases) produced by LOBs and Finance for the following incremental productivity initiatives identified in the table on page 11 of Attachment 1.
    a. Capital, Operations, Fleet Telematics and Right-Sizing
    b. Capital, Operations, Procurement
    c. OM&A / External Revenue, Information Technology, Contract Reductions
    d. OM&A / External Revenue, Facilities and Real Estate, Secondary Land Use Revenue
    e. CCC, Corporate, Corporate Initiatives

d) Please comment on how Hydro One intends to address the challenge identified by Concentric of continually finding meaningful new initiatives on a long-term basis.

Response:

a) Please refer to Interrogatory Response **A-CCC-007** for further explanation of the progressive productivity concept. As initiatives are defined, they are removed from the undefined category and into the defined. Once defined, these initiatives become part of regular course planning which is an ongoing process.

b) The $36.0M referenced in SPF Section 1.4, Page 9 should read more specifically $36.6M. Below are the details.

Productivity Initiative	Tx CAP 2021 $M
In-house retorques on light vehicles	0.1
Overtime Reductions	1.6
Remote Impact Recorders	0.1
Straddle Hoist Usage	0.4
Temporary Work Headquarters Stations	0.4
Scheduling Tool	0.5
Reduce perimeter Hydro Vac excavations in Stations	2.0
Temporary portable access roads	2.3
Cadweld vs DMC Connectors / SWAGE Connectors	1.0
Control Optimization Capital Savings	0.3
Foundation Optimization	0.7
Pre-cut cable trench	0.3
Pre-Built Racks	0.5
Continuous Improvement Model 2.0	16.5
Commissioning Purchase Services Agreement (PSA)	0.7
Overtime Reduction for Tx Lines	1.0
Temporary Work Headquarters for Tx Lines	0.5
Tower Conductor Clearance	0.5
Construction Material Ordering	0.5
Continuous Improvement Model 3.0	6.7
Total	**$36.6**

c) The attachment in response to Interrogatory Response **B1-SEC-054**, part d) contains initiative specific documents which describe the methodology which enables the productivity savings.

For each of the initiatives identified above, please refer to the following pages in the that attachment:

i. Telematics, Fleet Telematics and Right-Sizing
    a) Telematics: Page 1
    b) Capital Reduction: Page 2

ii. Procurement: Page 54

iii. Information Technology Contract Reductions:
    a) Achieve Inergi contract reduction: Page 14
    b) Telecom services - Renegotiate contract to reduce costs: Page 16
    c) Renegotiate contracts to reduce hourly Inergi rate for minor enhancements: Page 17
    d) Test Script Automation: Page 44

iv. Secondary Land Use Revenue: Page 41

v. Corporate Common Head Count Reductions: Page 20

d) As stated on Page 6 of the Concentric report, "Concentric also identified a potential challenge and a potential opportunity for Hydro One's program. First, Concentric understands from our review of the Productivity Framework that Hydro One has already achieved significant and material productivity initiatives and savings. This means the Company may be more challenged to continue to find new initiatives and cost savings going forward over the long term that meet the rigorous standards of the existing program. However, we would expect a utility of Hydro One's scale to be able to meet this challenge by continuing to identify opportunities for productivity improvements, even over the long term."

Hydro One agrees with Concentric's findings in this regard. As with all continuous improvement, it may become increasingly challenging over time, however, Hydro One remains committed to finding ways to deliver work at outcomes desired by all stakeholders and to continuing to achieve incremental productivity savings, through its productivity framework. As a result, Hydro One has provided productivity factors and supplemental stretch factors on capital in revenue requirement to customers in advance of having a complete subset of defined productivity initiatives, and is updating and resetting the baselines of its productivity initiatives beginning in 2023.

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B2 - OEB STAFF INTERROGATORY - 028

Reference:

Exhibit B-2-1, TSP Section 2.1, Page 2

Preamble:

At the above reference, Hydro One states that "The proposed System Service and System Access investments are non-discretionary and account for 10% of the total capital plan."

Interrogatory:

a) Please explain why the proposed System Service and System Access investments are non-discretionary.

b) Please comment on whether Hydro One has discretion regarding how it implements a System Service or System Access request.

c) Please explain how Hydro One will ensure System Service and System Access expenditures will be incurred prudently.

Response:

a) The System Service and System Access investments identified in the current plan are required to either:
   - ensure reliability, integrity and adequacy of the transmission system;
   - connect new load (of a distributor or large user) or new generation (connection);
   - address equipment loading or voltage/short circuit stresses when their rated capacities are exceeded;
   - address projects identified in a Board or provincial government approved plan;
   - achieve provincial government objectives that are prescribed in governmental directives or regulations; or
   - meet the need of external third party requests to relocate/modify facilities under the Provincial Secondary Land Use program.

As such all these projects are non-discretionary consistent with the OEB's Filing Requirements definition[1] – i.e., are "must do" projects – the need for which was determined beyond Hydro One's control.

b) Hydro One discretion in implementing the project is limited to ensuring that the new facilities are designed and constructed in such a way as to not adversely impact the system operation or other customers connected to the transmission system.

c) As described in Exhibit B-2-1 TSP Section 2.10, Hydro One has robust processes, project controls, and reporting in place to ensure effective and efficient project planning and delivery.

In particular, Hydro One has a detailed project delivery model that comprises five discrete sub-phases, with Stage Gate reviews and approvals being conducted between each phase which provides senior management with visibility into current project performance, risks and issues allowing for proactive adjustments in project execution plans as required. Hydro One also has robust project controls in place with respect to estimating, scheduling, change management, and risk management that utilize industry standard approaches. Lastly, Hydro One has comprehensive tracking and reporting in place using a combination of standard reporting requirements, key performance indicators, and change management approval processes, both at the project and portfolio levels to provide assurance that its capital work is being well managed.

Utilization of these processes ensures prudent definition and delivery of System Service, System Access and System Renewal expenditures.

[1] Chapter 4 of the Filing Requirements For Electricity Transmission Applications - Section 4.3.2.3.2
https://www.oeb.ca/oeb/_Documents/Regulatory/OEB_Filing_Req_Tx_Applications_Ch4_20140731.pdf

B2 - OEB STAFF INTERROGATORY - 029

Reference:

Exhibit B-2-1, TSP Section 2.1, Pages 2-3

Preamble:

At the above reference, Hydro One states that:

The TSP investments target the most pressing needs (based on asset condition, criticality, performance, etc.) at a pace that maintains the population of deteriorated assets at a manageable level or avoids a material negative impact on system operations and reliability.

System Renewal investments have been reasonably paced to address assets that are in poor condition, have inadequate performance or are obsolete including 3.3% of the transformer fleet per year, 2.5% of the breaker fleet, 3.4% of the protection fleet per year, 1.1% of the conductor fleet per year, 3.3% of the insulator fleet per year, 2.7% of the wood pole fleet, and to coat 1.0% of the steel structure fleet per year to extend their useful life.

Interrogatory:

a) What is "a manageable level of deteriorated assets"? Is this level the same for every asset type (i.e. transformers, breakers, protection, etc.)? How is this level determined? How is the level of deteriorated assets managed?

b) What is a "material negative impact on system operations and reliability?"

Response:

a) Hydro One follows an Investment Planning Process, detailed in TSP Section 2.7, to identify, prioritize and optimize investments to manage asset and system operational risks. Maintaining the population of deteriorated assets at a manageable level is determined and addressed by the total risk mitigated by the portfolio of investments included in Hydro One's capital plan.

b) A "material negative impact on system operations and reliability" would be an outcome affecting reliability, safety or environmental risks where the consequence of an event are high as presented in SPF Section 1.7 pages 18-19.

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B2 - OEB STAFF INTERROGATORY - 030

Reference:

Exhibit B-2-1, TSP Section 2.1, Page 3
Exhibit B-2-1, TSP Section 2.1, Pages 21-22

Preamble:

At the first reference, Hydro One states that "Notably, the unprecedented growth in the Windsor-Essex region of Southwest Ontario is expected to double the region's electricity demand in the next 5 years, requiring significant transmission reinforcements on Hydro One's system at the direction of the IESO."

At the second reference, Hydro One states that:

The IESO has directed Hydro One to develop new 230 kV lines between Chatham and Lakeshore (West of Chatham) and Lambton and Chatham (West of London) because of unprecedented growth in the agricultural sector in the Windsor-Essex region of Southwest Ontario and the need to ensure the necessary bulk transfer capability to support growth in load and generation.

Interrogatory:

a) Please explain the IESO's authority to direct Hydro One to undertake transmission investments or provide clarification.

Response:

a) The IESO is responsible for maintaining the reliability of the IESO-controlled grid, including conducting transmission planning (s. 6 (1) (c) of the Electricity Act, 1998). Accordingly, the IESO engages in regional and bulk planning for the transmission system. Where a need is identified in regional planning, the IESO is required by Section 21.2.2(c) of its OEB licence (EI-2013-0066) to send an "Urgent Letter" to the lead transmitter and relevant distributors notifying them of any necessary investments in transmission and/or distribution facilities. Hydro One commonly refers to these as "Hand-off Letters".

   In this role, the IESO issued two letters dated June 11, 2019, and March 26, 2021 to Hydro One with respect to necessary 230kV transmission reinforcement between Chatham and Lakeshore, and Lambton and Chatham, respectively. The letters identified and supported the need for these investments along with the request and recommendation that Hydro One initiate work on the aforementioned projects.

The letter dated June 11, 2019 for the Chatham x Lakeshore transmission line, “request[ed] Hydro One to initiate the work and activities/ including seeking Environmental Assessment and Leave-to-Construct approvals/ and subsequent construction of a new 230 kV double-circuit line from the Chatham Switching Station ("SS") to the new Lakeshore Transformer Station ("TS") located at Leamington Junction and associated station facilities at the terminal stations.”

Subsequently, the letter dated March 26, 2021 for the Lambton x Chatham transmission line stated that the “IESO recommends that Hydro One initiate the work, engagement and activities, including seeking Environmental Assessment and Leave-to-Construct approvals, that are required to develop and construct a new 230 kV double-circuit line from Lambton TS southwards to Chatham SS and associated station facility expansions or upgrades required at the terminal stations.”

B2 - OEB STAFF INTERROGATORY - 031

Reference:

Exhibit B-2-1, TSP Section 2.1, Page 4

Preamble:

At the above reference, Hydro One states with respect to Air Blast Circuit Breakers (ABCBs) that "By replacing ABCBs with modern technology, Hydro One ensures the integrity of provincial power flow, avoids generation bottlenecks and loss of production as well as secures import and export of electricity in and out Ontario."

Interrogatory:

a) How does replacing ABCBs avoid "generation bottlenecks"? What is the value of the bottlenecked generation?

b) How does replacing ABCBs avoid "loss of production"? What is the value of the lost production?

c) How does replacing ABCBs "secure import and export of electricity"?

Response:

a) As detailed in TSP Section 2.2.2.2 Air Blast Circuit Breakers (ABCB) are the worst performing circuit breakers in Hydro One's fleet and are installed in critical network stations, that interconnect significant generation stations, as further detailed in ISD T-SR-02. Failure of these breakers at a station that interconnects generating stations, such as the Bruce Nuclear facility, may limit the maximum power flow through the station due to operational limits for the remaining in-service transmission equipment. Hydro One cannot provide a value for "bottlenecked generation" as the power market is managed and administered by the IESO.

b) As discussed in part a) above power flow through the station may be limited due to operational limits caused by failed ABCBs which may result in the curtailment or loss of production for connected generators. Hydro One cannot provide a value for "lost production" as the power market is managed and administered by the IESO.

c) As noted in part a) above power flow through the station may be limited due to operational limits caused by failed ABCBs which may impact the level of electricity imports and exports through these stations until the ABCB is repaired and returned to service.

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B2 - OEB STAFF INTERROGATORY - 032

Reference:

Exhibit B-2-1, TSP Section 2.1, Pages 4-5
Exhibit B-2-1, TSP Section 2.2, Page 2

Preamble:

As identified in Table 1:

- Project T-SR-01 "Network Stations Asset Replacement"
- Project T-SR-02 "Air Blast Circuit Breaker (ABCB) Replacement"
- Project T-SR-03 "Connection Stations Asset Replacement"
- Project T-SR-04 to T-SR-08, T-SR-13, T-SR-17: "Transmission Line Components Refurbishment"

As indicated in Lines 11 to 17 in Section 2.2:

Asset condition is generally categorized as "good", "fair" or "poor". Assets with no or out-dated condition data are categorized as "needing assessment".

I. Good: These assets are new or show minimal signs of deterioration.
II. Fair: Assets that are experiencing deterioration and the condition of these assets is monitored for progression of further deterioration.
III. Poor: Assets that have deteriorated to a point where they can no longer provide the intended functionality or service.

Interrogatory:

a) Regarding the Section 2.2 preamble, please explain the differences between Hydro One's use of the following terms: *"poor condition", "poor performing", and "inadequate performance"*.

b) According to the definition above, "poor condition" assets can no longer provide the intended functionality or service. Please provide a table listing the total number of "poor condition" assets in the first column, and the number of "poor condition" assets that no longer provide the intended functionality or service in the second column.

   i. Please explain how Hydro One maintains reliability if a significant proportion of its assets have been assessed as being in the following condition: *"can no longer provide the intended functionality or service"*.

Response:

a) As defined above, poor condition refers to "assets that have deteriorated to a point where they can no longer provide the intended functionality or service." The use of the terms "poor performing" and "inadequate performance" will depend on the context that they are used in but often it is a reference to reliability and means an undesirable number of failures, outages, misoperations, etc.

b) When an asset is in poor condition, it is Hydro One's expectation that this asset is not going to operate and provide the intended functionality reliably, and risk of failure increases.

Hydro One cannot provide the requested table as there are no such categories of assets in "poor condition" and a distinct separate category of "poor condition" assets that no longer provide the intended functionality or service.

B2 - OEB STAFF INTERROGATORY - 033

Reference:

Exhibit B-2-1, TSP Section 2.1, Page 6

Preamble:

As stated in Lines 1 through 7:

Through Hydro One's mature capital delivery process based on strong oversight and governance and an experienced execution organization (see TSP Section 2.10), Hydro One has the ability to carry out the proposed capital plan and continue its successful track record in executing capital investments. In this regard, Hydro One has demonstrated the ability to successfully deliver large capital work plans and reduce the variability of capital expenditures and in-service additions using a skilled internal workforce and qualified third-party contractors (see TSP Section 2.09 Attachment 2).

Interrogatory:

a) Please state whether it is Hydro One's standard practice to not make any further maintenance or refurbishment investments into assets that have passed their Expected Service Life ("ESL").

   i. If this is not Hydro One's standard practice, please describe both from a policy perspective and using specific documented examples the circumstances under which Hydro One would continue to maintain or refurbish assets that have passed their ESL.

   ii. Please provide the criteria or calculation methodology used by Hydro One to determine maximum funding available for ongoing maintenance or refurbishment of individual assets, and the asset age at which such investments should no longer be made.

   iii. Please discuss the cost/benefit trade-off associated with replacement versus repair/refurbishment for equipment that is at or beyond ESL?

      a. Please provide specific examples of the estimated life extensions for assets that Hydro One has repaired or refurbished (for example, steel structures that have been recoated).

Response:

a) ESL does not drive Hydro One's replacement or refurbishment decisions. The decision to repair, refurbish or replace is based primarily on the assessment of asset condition.

i. With respect to lines assets, Hydro One will continue to perform condition assessment and patrols (as part of maintenance activities) on assets beyond their ESL unless replacement is planned in the near-term. Once Hydro One determines that the assets have deteriorated to poor condition, they will generally undergo planned capital replacements since most major line assets (i.e., insulators, wood poles, conductors, shieldwire) cannot be renewed through targeted repairs. For clarity, overheard line refurbishment investments involve the replacement of components in poor condition such as conductor, shieldwire, insulators, etc.

Similarly, from a stations perspective, ESL does not drive the decision to repair, replace or refurbish/maintain transformers. Such decisions are made through Hydro One's asset risk assessment (ARA) process based on a range of factors, including asset condition, demographics, performance, utilization, and economics. If ARA results show that the asset is in good condition, regular inspections will be carried out until the condition deteriorates and a replacement decision is made.

ii. Hydro one maintains its assets on a time-based frequency in most cases, and completes certain major maintenance activities (e.g., selective intrusive maintenance for HV/MV breakers or under-voltage tap changers) on a condition-based cycle. Maintenance funding is determined based on the applicable frequencies and the condition of the assets that require major maintenance.

iii. Please refer to a) (i). ESL is not a driver for replacement/ refurbishment.

a. Please see B2-Energy Probe-024.

B2 - OEB STAFF INTERROGATORY - 034

Reference:

Exhibit B-2-1, TSP Section 2.1, Pages 13-14

Preamble:

As stated in Lines 21 to 25 on pg. 13 and Lines 1 to 3 on pg. 14:

Accordingly, Hydro One cannot wait for delivery point performance to deteriorate before undertaking required investments on dual supplied delivery points where a failure has occurred. Delivery point performance is a lagging indicator of asset condition and the impact of renewal investments (or the absence thereof) and cannot be used to drive future investment decisions. By the time reliability degradation manifests for dual-supplied delivery points, equipment performance would have already unacceptably worsened, with associated impact on customer delivery continuity, system operability, and public safety.

Interrogatory:

a) Please define asset "failure" as used in the above reference.

b) Please list the number of occurrences during the past five (5) years where dual supplied delivery points experienced simultaneous failures on both delivery paths.

c) Please contrast the anticipated reliability degradation for a dual-supplied delivery point if a single path experiences a failure versus if both delivery paths experience failures.

d) Please state how Hydro One assesses and quantifies the extent of reliability mitigation delivered by its renewal expenditures.

    i. Please provide detailed documentation of specific examples.

Response:

a) Asset "failure" as defined in the above reference is when an asset cannot perform its designed functions.

b) Simultaneous failures on dual supplied delivery points are very rare. More common are overlapping outages. One supply was out of service for maintenance or repair and during this time the second supply was interrupted, and this led to the outage of the delivery point. In the past 5 years there have been approximately 200 events impacting approximately 600 delivery point interruptions due to coincident outages, common mode outages or control actions impacting the delivery paths.

c) Failure of a single path for a dual supply delivery point does not affect the delivery point reliability and customers do not see any interruption. However, if an overlapping outage were to occur and the second path fails during the same time all customers at the station would be interrupted until one of the supplies was restored. When examining 10-year average SAIDI and SAIFI for dual supply delivery point versus single supply delivery points, SAIDI for single supply is approximately 18 times worse than for dual supply, and SAIFI is approximately 10 times worse.

d) Hydro One assesses the amount of risk that is expected to be mitigated across three risk taxonomies, one of which is reliability. The reliability risk assessment considers both the probability and consequence of an event materializing, specifically related to the impact on customer load or transfer capability, unsupplied energy, or outage duration of the particular station and impacted equipment. Results of the risk assessments are translated into risk scores, which are used to generate an initial prioritization of investments. TSP Section 2.7.4 (TSP - Investment Planning Process) provides further details of the investment planning process.

   i. For example, for a System Renewal transformer replacement project, the reliability consequences and likelihood scores are derived from the impact of the subject transformer's failure on the amount of potential load interrupted, based on historical average loading, and the probability of the event occurring in the next 1-5 years. They are determined using the baseline risk or status quo of doing nothing versus the risk of and outcome of the transformer replacement investment. The risk score difference between these indicates the reliability risk being mitigated because of the investment being completed.

B - OEB STAFF INTERROGATORY - 035

Reference:

Exhibit B-2-1, TSP Section 2.1, Page 15

Preamble:

As identified in Table 4, regarding the OEB Investment Category *"Progressive Productivity" [table not provided in preamble].*

Interrogatory:

a) Regarding Table 4, has an escalation factor been applied to the annual progressive productivity savings?

   i. If yes, what is the escalation factor?

   ii. If not, please explain why not.

Response:

a) An escalation factor has not been applied to the progressive productivity category. The amounts shown under progressive productivity reflect productivity commitments which continue from the current rate period (2020-2022) into the 2023-2027 period.

   Instead of applying a bottom-line reduction to the capital envelope in respect of progressive productivity as was previously done for Hydro One Transmission, Hydro One will achieve its progressive productivity targets in connection with the Custom IR Framework through productivity factors and supplemental stretch factors, which provides direct and upfront savings and revenue requirement reductions to customers.

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B2 - OEB STAFF INTERROGATORY - 036

Reference:

Exhibit B-2-1, TSP Section 2.1, Page 18

Preamble:

At the above reference, Hydro One states that:

System Renewal investments have been reasonably paced to predominantly address deteriorated assets including 3.3% of the transformer fleet per year, 2.5% of the breaker fleet, 3.4% of the protection fleet per year, 1.1% of the conductor fleet per year, 3.3% of the insulator fleet per year, 2.7% of the wood pole fleet per year, and to coat 1% of the steel structure fleet per year to extend their useful life.

Interrogatory:

a) In Hydro One's view, what constitutes a reasonable pace?

b) How is a reasonable pace determined for each asset category? For example, how has 3.3% of the transformer fleet per year been determined as a reasonable pace of renewal? How has 2.5% of the breaker fleet per year been determined as a reasonable pace of renewal, etc?

Response:

a) In Hydro One's view, a reasonable pace is one which balances asset performance, costs and associated risks during the asset's service life, as detailed within TSP Section 2.7.

b) A reasonable pace is not established for individual asset categories. Hydro One carries out an Investment Planning Process, detailed in TSP Section 2.7, to identify, prioritize and optimize investments to manage asset and system operational risks. Included as part of this process, Hydro One performs a continuous asset risk assessment (ARA) process to determine individual asset needs, and as discussed in TSP Section 2.2, the primary driver for asset replacement is condition. Therefore, the pacing of investments identified in this plan reflects the overall prioritization and optimization resulting from the Investment Planning Process.

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B2 - OEB STAFF INTERROGATORY - 037

Reference:

EB-2019-0082, Exhibit B-1-1, SPF Section 1.4, Attachment 13
Exhibit B-2-1, TSP Section 2.1, Pages 26-28

Interrogatory:

a) Please explain whether and how Hydro One has modified its asset analytics, asset risk assessment and reliability risk model frameworks since the assessment of these elements, dated May 8, 2018, was completed by METSCO and submitted as part of Hydro One's 2019 application.

Response:

Since the METSCO report was completed on May 8, 2018, Hydro One has undertaken the following:

- Review of existing risk factors
- Introduction of Obsolescence and Health & Safety risk factors as part of the analytics solution
- Discontinued use of the Reliability Risk Model

The framework of the prior asset risk assessment remains largely the same. However, Hydro One has clarified through SPF Section 1.7 how the related asset decision support processes tie together. It has been clarified that specific needs are identified through a current state assessment, which includes asset, customer, and system needs assessments which was previously referred to as the Asset Risk Assessment (ARA).

Subsequently, needs are addressed through the development of candidate investments, which undergo a risk assessment against safety, environment and reliability risk taxonomies.

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B2 - OEB STAFF INTERROGATORY - 038

Reference:

Exhibit B-2-1, TSP Section 2.1, Page 29

Preamble:

As stated in Lines 5 to 6:

> *Once candidate investments have been scored and flagged, enterprise-wide calibration sessions occur to ensure comparable and consistent evaluation across investments and lines of business.*

Interrogatory:

a) Please define what activities occur during the *"enterprise-wide calibration sessions"* and provide detailed documentation pertaining to the specific sessions held when preparing the capital expenditure plans included in the present application. Documentation should include meeting agendas, meeting minutes, and any reports/spreadsheets and other quantified data and/or calculations supporting the deliverables produced during these sessions.

b) Please explain how Hydro One, within the context of the "enterprise-wide calibration sessions", compares investment programs with specific projects. In other words, how does Hydro One determine that the marginal value of the budgetary envelope for a specific investment program is comparable to the marginal value of a distinct project within that program?

c) Please explain how these sessions ensure standardized economic and risk scoring practices among the project and program portfolio candidates being evaluated and provide documentation of specific examples representing significant investments.

Response:

a) Hydro One asserts that the requested working papers are not relevant, as calibration represents an interim process step, and that the actual system plan produced at the end of the process is the matter before the OEB. A description of the calibration framework has been provided below.

Enterprise-Wide Calibration Sessions refer to Hydro One's process for aligning the assessment and comparison of candidate investments across the entire portfolio, including the calibration of risk assessments to enable consistent decision making. This approach increases the rigour and robustness around the examination of proposed investments by a broad group of professionals across the company, with a particular focus on risk assessment and application of flags.

Investments are reviewed through a number of lenses, including:

- asset families
- risk profiles
- flags

Similar Asset Families

As an example, when examining similar asset families, investments at load connection stations may be compared by examining the likelihood and consequence associated with a transformer failure. Looking at representative investments in the Hamilton and Guelph area, both investments were considered to have a consequence of "C3" – reflecting the average loading at risk, but the likelihood of failure at each station differed. The calibration discussions focused on the rationale for the risk assessment, including the fact that while principal components at both sites were assessed to be in poor condition, one location had further issues associated with oil leaks and cooling system issues and posed a higher likelihood of the asset being unable to provide the required function or service. The consensus was that an assessed higher likelihood of asset failure (and resulting impact on a station's ability to maintain supply reliability to customers) was appropriate in this case, thus allowing the two investments to be differentiated and compared in terms of their reliability risk.

Risk Mitigation

Across asset and functional groupings, total risk mitigation was reviewed and compared, examining both the range of assessments, the portfolio average, the functional grouping average and outliers. A select number of outliers were identified, which included either very high or very low scores. These outliers were discussed within the context of the broader system and the role served by the associated assets/facilities. For example, in one case a high-score outlier investment was based at a site that interfaces with a major generator. It was recognized during the calibration exercise that the risk of equipment failure at the site could potentially have a direct impact on supply adequacy, lead to bottled generation, and cause health and safety issues as a result of internal plant protocol/impacts. On this basis, the resulting assessment was that the overall risk mitigation associated with this investment was appropriate.

As a further example, another investment examined during calibration had a high reliability consequence score despite the fact the site was a load supply facility. The rationale for the initial reliability assessment was based on the "outage duration" measure in the reliability taxonomy i.e., equipment failure would result in a prolonged equipment outage. Through the calibration session, it was clarified that the outage duration measure should be applied on the basis of direct customer impact, assuming that normal controls are in place (i.e., a redundant configuration with an alternate supply path, which was the case at this site). As a result, the consequence assessment for the investment was revised/during calibration based on the worst reasonable direct impact, with an appropriate and heightened emphasis on the direct impact to connected customers.

Please refer to Exhibit I-03-B1-AMPCO-009 for an example to illustrate the type of information that is discussed as part of these risk review calibrations.

Flags

Investment flags are reviewed during calibration sessions to ensure their application on a consistent and comparable basis across investments. As an example, certain renewal investments were originally tagged with the "strategic" flag. Through calibration review and discussion, it was agreed that although these investments support the achievement of Hydro One's long-term strategic objectives, the flagging for these particular investments was not consistent with the intent of the strategic flag, which requires specific investments be identified as corporate strategic initiatives in alignment with Hydro One's Strategic Pillars. As a result of this review, the assessment for these investments was revised and the strategic flag removed. In general, the application of the strategic flag is used where warranted in limited circumstances; please refer to Exhibit I-22-B1-SEC-058 for investments identified by this flag.

The following table identifies the key calibration sessions (including dates, representative attendees, and key actions) that Hydro One held in connection with the development of its 2023-2027 investment plan.

Session	Attendees	Date	Agenda	Actions
Cross Functional	Planners / Mgrs. Distribution, Transmission/General Plant Mgr., Investment Planning Advisor/Analyst, Investment Planning	February 20 – March 7	• Safety Moment • Flag Review • Risk Review	• Review cross discipline risk assessment and modify as required • Adjust flags to reflect intent of flag
Transmission Calibration	Mgr., Investment Planning Advisor/Analyst, Investment Planning Planners, Tx Planning Mgr, Sustainment Planning Mgr, System planning Dir, Asset Management Dir, System Planning	March 11, 2020	• Safety Moment • Flag Review • Risk Review	• Review cross discipline risk assessment and modify as required • Adjust flags to reflect intent of flag
Distribution Calibration	Mgr., Investment Planning Advisor/Analyst, Investment Planning Planners, Dx Planning Mgr, Sustainment Planning Mgr, Investment Planning Dir, Asset Management	March 11, 2020	• Safety Moment • Flag Review • Risk Review	• Review cross discipline risk assessment and modify as required • Adjust flags to reflect intent of flag
General Plant Calibration	Mgr., Investment Planning Advisor/Analyst, Investment Planning Planners/Mgrs, Technology/Fleet/Facilities/Security Dir. Technology Dir., Facilities Dir., System Operations	March 12, 2020	• Safety Moment • Flag Review • Risk Review	• Review cross discipline risk assessment and modify as required • Adjust flags to reflect intent of flag
Cross-LOB Calibration	Dir., Strategy & Integrated Planning Mgr., Investment Planning Advisor, Investment Planning VP, Planning VP, System Operations VP, Technology VP, Shared Services VP, Security VP, Tx and Stations VP, Distribution	March 17, 2020	• Safety Moment • Flag Review • Risk Review	• Review cross discipline risk assessment and modify as required • Adjust flags to reflect intent of flag • Finalize candidate investments

b) Hydro One does not consider the marginal value of different types of investments at the calibration stage. Hydro One considers and evaluates risk on an investment level, evaluating the individual components of the portfolios against each other, in the context of both site-specific risks, as well as risks assessed on a province/system wide basis. Specific alternatives of programs are evaluated based on the proposed pacing and scope. Hydro One's approach

is to mitigate, where feasible, highest risk assets first, which typically results in a decreasing marginal efficiency.

c) Please refer to response in part (a) above.

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B - OEB STAFF INTERROGATORY - 039

Reference:

Exhibit B-2-1, TSP Section 2.2, Pages 1-2

Preamble:

As stated in Lines 28 and 29 of pg. 1 and Lines 1 of pg. 2:

As the primary driver of replacement decisions, asset condition is verified through the asset risk assessment (ARA) process prior to any replacement being undertaken through investments.

Interrogatory:

a) Please confirm that asset condition is the primary driver for most asset replacement decisions made by Hydro One.

b) Are there asset types or classes for which asset condition is not the primary driver for asset replacement decisions?

   i. If yes, please identify these asset types or classes and the primary replacement driver(s) for these asset types or classes.

   ii. Please explain why asset condition is not the preferred primary driver in these cases.

Response:

a) Yes, asset condition is the primary driver for most asset replacement decisions made by Hydro One.

b) Yes, for some asset types, condition is not the primary driver for asset replacement decisions.

   i. Condition as determined through an assessment of the physical asset is not the primary driver for protection systems, automation devices, or power system telecom assets.

   ii. For protection assets, Hydro One uses expected service life (ESL) as a trigger for replacement assessment. It is not feasible to assess the physical condition of protection assets, so other factors are used to assess the need for asset replacement, including: increased failure rates related to specific models or family of devices, limited or non-existent manufacturer support, and the inability to comply with current reliability

standards. Hydro One targets protection assets with a high likelihood of failure for replacement.

For automation devices, Hydro One uses ESL for the relevant device vintage as a trigger for replacement assessments. Assessment for physical breakdown or loss of strength overtime is not feasible or relevant given the make-up of these electronic devices. As such, Hydro One uses performance, including relevant defect reports, trouble calls, and potential need identifications to identify and assess the need to replace automation devices. Hydro One prioritizes problematic installations of legacy automation devices on the basis of statistics relating to failure/defect rates. Hydro One is also phasing out local maintenance computers and local control computers, which pose high maintenance costs and require frequent software patching and updates, and replace them with more modern solutions.

For power systems telecom assets, it is not feasible to assess their actual physical condition. As such, Hydro One uses ESL as a screening factor for asset replacement assessment. In making replacement decisions, Hydro One considers field deficiency reports, trouble calls, and failure rates/incidents, as well as hardware obsolescence or the level of vendor support, spare equipment availability, and findings from preventative maintenance.

B2 - OEB STAFF INTERROGATORY - 040

Reference:

EB-2019-0082, Exhibit B-2-1, TSP Section 2.2, Page 3
Exhibit B-2-1, TSP Section 2.2, Pages 2, 11, 24, 82, 91, 100, 124, 131, 137

Preamble:

Table 1 at the first reference summarizes the condition of major asset types using the following categories: Very Low Risk, Low Risk, Fair Risk, High Risk, Very High Risk, and To be Assessed.

At the second reference, Hydro One states that "Asset condition is generally categorized as "good", "fair" or "poor". Assets with no or out-dated condition data are categorized as "needing assessment"."

The following table assembles asset condition information from Section 2.2:

	Poor	Fair	Good	Needs Assessment
Transformers	198	74	449	-
Breakers	541	1510	2705	-
Overhead Conductor	3874	3329	13620	7728
Underground Cable	8	92	173	-
Wood Poles	4693	-	23866	11482
Rights-of-Way (hectares)	9110	13422	58987	-
Shieldwire Assets (circuit kms)	3105	7051	15644	8967
U-Bolt Assets (circuit structures)	2644	30651	11331	37446

Interrogatory:

a) Please provide the units for the overhead conductor condition shown in Figure 16 on page 82 at the second reference (and copied into the above table)?

b) Please provide the units for the underground cable condition shown in Figure 20 on page 91 at the second reference (and copied into the above table)?

c) Please state whether or not Hydro One still uses the Very Low Risk, Low Risk, Fair Risk, High Risk, Very High Risk, and To be Assessed asset condition categories for major assets? If yes, please complete the following table:

	Very Low Risk	Low Risk	Fair Risk	High Risk	Very High Risk	To Be Assessed
Transformers						
Breakers						
Overhead Conductor						
Underground Cable						
Wood Poles						
Rights-of-Way (hectares)						
Shieldwire Assets (circuit kms)						
U-Bolt Assets (circuit structures)						

d) If the answer to part a) is No, please explain why Hydro One has discontinued use of these categories.

e) If the answer to part a) is No, please state whether or not the Very Low Risk, Low Risk, Fair Risk, High Risk, Very High Risk, and To be Assessed asset condition categories have been replaced by the Poor, Fair and Good condition categories described in the second reference?

f) If the answer to part c) is Yes, why are these categories preferable?

g) Please state how the Very Low Risk, Low Risk, Fair Risk, High Risk, Very High Risk categories align with the Poor, Fair and Good condition categories used in the current application?

h) In Hydro One's view, do poor condition assets necessarily pose a high risk?

i) Table 1 at the first reference included information on protection system condition, which has not been provided in the current application. If this information is available, please provide it. If not, please explain why not.

Response:

a) & b) The units (unit of measure) for overhead conductors and underground cables are circuit kilometres and have been added to the table below.

	Poor	Fair	Good	Needs Assessment
Transformers	198	74	449	-
Breakers	541	1,510	2,705	-
Overhead Conductor (circuit km)	3,874	3,329	13,685*	7,663*
Underground Cable (circuit km)	8	92	173	-
Wood Poles	4,693	-	23,866	11,482
Rights-of-Way (hectares)	9,110	13,422	58,987	-
Shieldwire Assets (circuit kms)	3,105	7,051	15,644	8,967
U-Bolt Assets (circuit structures)	2,644	30,651	11,331	37,446

**65 km of conductor was incorrectly identified as "Needs Assessment", when in they were in "Good Condition".*

c) Hydro One still uses the Very Low Risk, Low Risk, Fair Risk, High Risk and Very High Risk asset condition categories for major assets as part of its Asset Analytics system. However, as per part f), Hydro One depicts its total asset condition using the 4 categories: Good Condition, Fair Condition, Poor Condition and Needs Assessment. The general relationship between the current and former categories is described in part g). Also see table below showing the categorization of asset condition.

	Very Low Risk & Low Risk (Good Condition)	**Fair Risk (Fair Condition)**	**High Risk & Very High Risk (Poor Condition)**	**To Be Assessed**	**Total Population**	**% High Risk & Very High Risk (Poor Condition)**
Transformers	449	74	198	-	721	27%
Breakers	2,705	1,510	541	-	4,756	11%
Overhead Conductor (circuit km)	13,685*	3,329	3,874	7,663*	28,552	14%
Underground Cable (circuit km)	173	92	8	-	273	3%
Wood Poles	23,866	-	4,693	11,482	40,041	12%
Rights-of-Way (hectares)	58,987	13,422	9,110	-	81,521	11%
Shieldwire Assets (circuit kms)	15,644	7,051	3,105	8,967	34,767	9%
U-Bolt Assets (circuit structures)	11,331	30,651	2,644	37,446	82,072	3%
Insulators	99,120	-	20,339	-	119,459	17%

**65 km of conductor was incorrectly identified as "Needs Assessment", when in they were in "Good Condition".*

d) Not applicable.

e) Not applicable.

f) As part of its ongoing efforts to improve the accuracy and robustness of asset condition ratings, Hydro One has corrected and transitioned away from the use of the word "risk" in describing asset condition, as "risk" is used heavily in our Asset Risk Assessment (ARA). Through the ARA, asset condition and other relevant factors (such as equipment obsolescence or performance) are evaluated against current and future requirements to identify asset risks for further screening and confirmation. As such, to more clearly depict the condition of the system, Hydro One has changed its depiction of how asset condition is stated, moving from showcasing asset condition in five categories that reference "risk" to three categories that focus on the assessed condition.

g) Generally, Very Low Risk, Low Risk, Fair Risk, High Risk and Very High Risk categories (used in EB-2019-0082) align with the Poor, Fair and Good condition categories (used in EB-2021-0110) as per the table below.

EB-2021-0110	EB-2019-0082
Good Condition	Very Low Risk
	Low Risk
Fair Condition	Fair Risk
Poor Condition	High Risk
	Very High Risk

h) Yes, it is Hydro One's view that assets in poor condition generally pose a high risk.

i) As per TSP Section 2.2, page 35, in contrast to other major power system assets like transformers and conductors (which are replaced based on the condition of the equipment), the Expected Service Life (ESL) of protection devices plays an important role in the assessment for replacements of protection relays. This is because assessment for physical breakdown or loss of strength over time is not feasible or relevant given the make-up of these electronic or solid state devices. As such, to prevent the potentially significant reliability and safety impact of a sudden failure, ESL is necessarily a key trigger for further evaluation to confirm replacement needs. The table below highlights the population of protection devices beyond ESL.

Beyond ESL	Total Population	% Beyond ESL
3,397	12,494	27%

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B - OEB STAFF INTERROGATORY - 041

Reference:

Exhibit B-2-1, TSP Section 2.2, Pages 28, 86, 104, 125, 132

Preamble:

There appears to be a relatively common trend throughout Hydro One's TSP related to the duration of outages getting longer over time including some instances where the frequency has declined over the years (with outlier years in some cases). For example:

- Figure 7: Circuit Breaker Forced Outage Duration
- Figure 19: Overhead Conductor Forced Outage Duration
- Figure 29: Forced Outage Duration due to Wood Pole Failures
- Figure 45: Duration of Vegetation Related Outages on Hydro One Circuits
- Figure 48: Duration of Shieldwire Related Outages

Interrogatory:

a) Please explain why this trend related to longer outage durations is occurring across a number of different types of transmission assets.

Response:

a) The figures in TSP 2.2 presenting equipment outage duration reflect the total duration of outages resulting from the associated equipment. These figures do not present the duration of an outage.

The total outage duration is often affected by longer individual outages that had challenging restoration work influenced by the nature of the failure, the location of the failed equipment and feasibility of the repair.

Circuit Breaker Forced Outage Duration:

As discussed in TSP 2.2 page 27 the overall increase in prior years is primarily attributed to the number of ABCB-related forced outages.

Overhead Conductor Forced Outage Duration:

As discussed in TSP 2.2 page 85 outage duration is influenced by the location of the conductor outage and feasibility of the repair. Broken conductors in remote locations or conductors requiring adjacent outages for safe access have longer outage durations due to access difficulties.

Due to single events in each of 2015 and 2020 a higher outage duration was recorded in these years. In 2015, an extended forced outage on circuit A6R accounted for 87% of the total forced outage duration in 2015.

In 2020 a 500 kV circuit, N581M, experienced a fraying of its conductors and resulted in a forced outage. This N581M outage accounted for 76% of the total forced outage duration in 2020.

Forced Outage Duration due to Wood Pole Failures:

As discussed in TSP 2.2 page 85 the majority of the wood pole structure population is located in Northern Ontario, supporting radial circuits typically in remote locations with difficult access. As a result, restoration times are lengthy.

Duration of Vegetation Related Outages on Hydro One Circuits:

Hydro One has provided a correction to TSP Section 2.2 Figure 45 shown below to show NERC reportable, and non-reportable outages. The recent outage trend has been impacted by two events in 2018 and one event in 2020. In September 2018 a severe thunderstorm caused four sustained vegetation related outages on the D1M, D3K, R1LB and W3B circuits, accounting for over 150 hours of forced outages. In December 2018, a winter storm caused a tree to fall on the D6 circuit, resulting in conductor damage and an outage of over 78 hours. In June 2020, high winds resulted in an off-ROW tree falling into the D3K circuit causing an outage lasting over 125 hours.

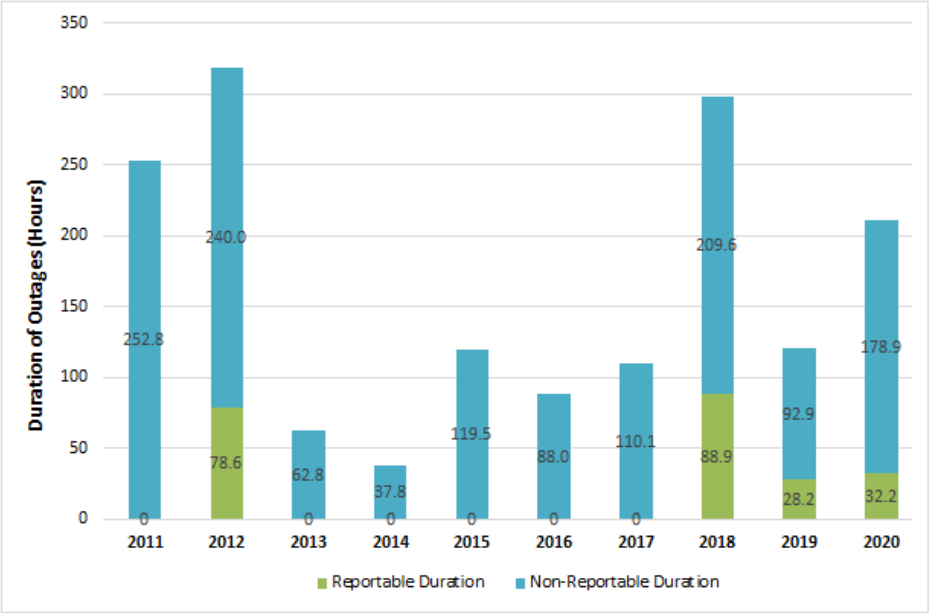


Figure 45 - Duration of Vegetation Related Outages on Hydro One Circuits

Duration of Shieldwire Related Outages:

As discussed in TSP 2.2, page 132, the duration of shieldwire related outages is dependent on the geographic location and accessibility of the fault. The outage trend has been impacted by four events in 2018, four events in 2019, and two events in 2020.

- In April 2018, an ice storm broke the shieldwire on the W8T, H22D, and D10H circuits causing 12,000 hours of forced outages. In December 2018, an outage on the H22D circuit due to the shieldwire caused 7,000 hours of forced outages.

- In the winter of 2019, broken shieldwire on the D2L, W8T, and W23K circuits resulted in a combined forced outage time of approximately 11,000 hours.

- In January 2020, heavy ice loading caused shieldwire failures on the B4V/B5V and B561M circuits resulting in 13,000 hours of forced outages.

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B2 - OEB STAFF INTERROGATORY - 042

Reference:

Exhibit B-2-1, TSP Section 2.4, Pages 15, 16, 17

Preamble:

Hydro One has included charts in the application showing different measures of customer delivery point performance including the list set out below. Those charts provide performance at the provincial level. For regional planning purposes, 21 regions have been established for Ontario.

- Figure 6: Frequency of Momentary Interruption, Hydro One vs CEA Composite
- Figure 7: Frequency of Sustained Interruption, Hydro One vs CEA Composite
- Figure 8: Overall Frequency of Interruptions, Hydro One vs CEA Composite
- Figure 9: Average Duration of Interruption, Hydro One vs CEA Composite

Interrogatory:

a) Please revise the charts listed above as follows: (1) Hydro One provincial bars removed and (2) CEA Composite retained (as it is) and the following charted as lines in a manner that is the same as the CEA Composite – the three (3) regions with the worst delivery point performance and the three (3) regions with the best delivery point performance.

b) Please identify the entities that are currently included in the CEA Composite for the purpose of determining the "Canadian Transmission Utility average performance". Please also clarify if Hydro One remains included in the CEA Composite for the purpose of the benchmarking comparisons to Hydro One that are set out in this application.

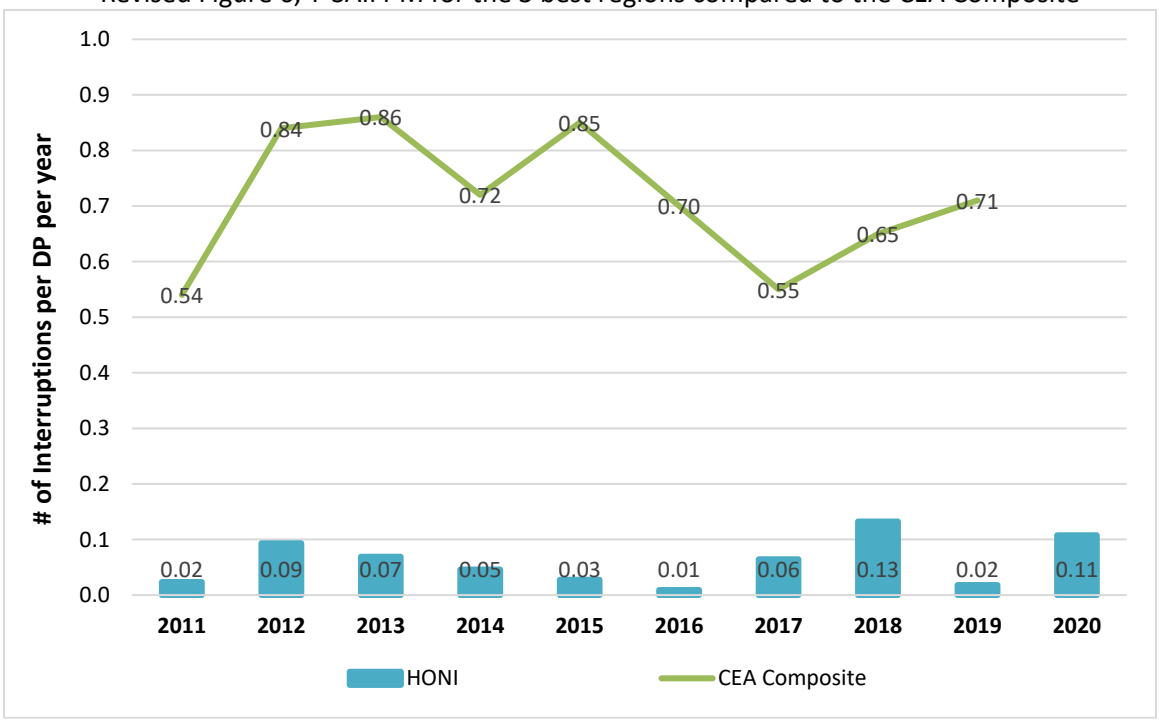
Response:

a) Although there are 21 regions for the purposes of regional planning, Hydro One Networks is accountable for only 19; two regions have been excluded on this basis. The information provided for the 3 worst and 3 best regions are based on these 19 regions, considering the 10-year average (2011 to 2020) across the requested measures and ranked respectively. Within these rankings, the 3 worst and 3 best regions' performances were aggregated respectively, which are presented below in comparison to the CEA Composite. Please see Interrogatory B2-Staff-079 for the updated 2020 CEA Composite.

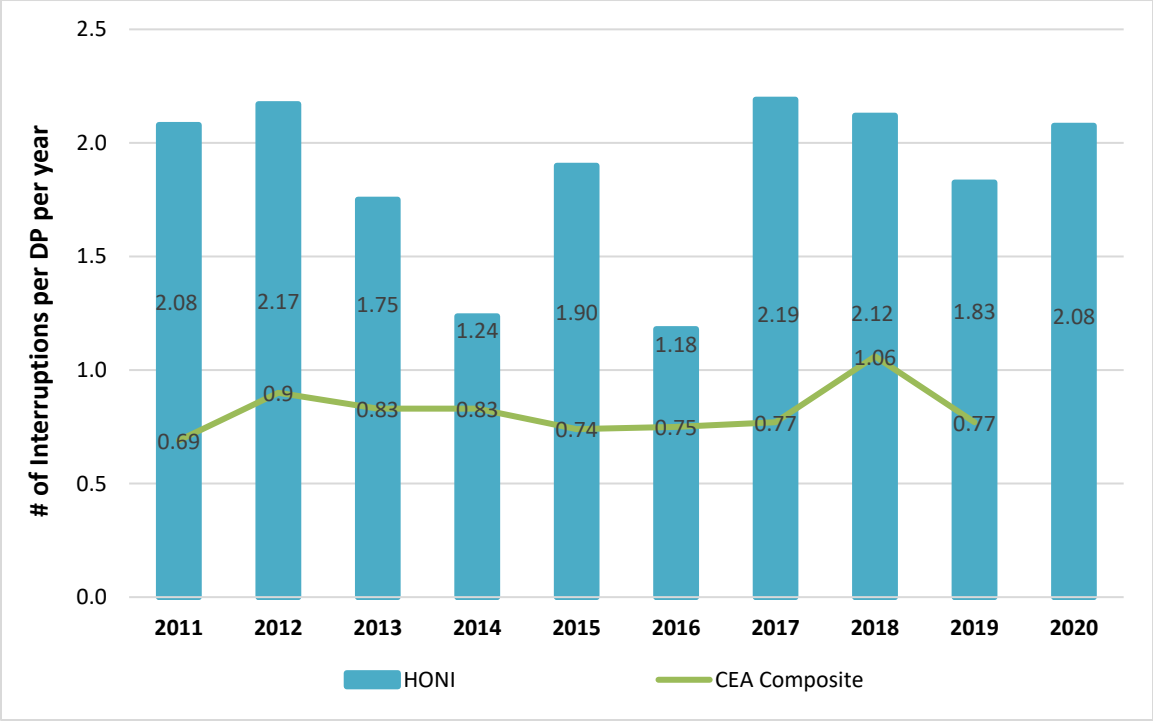
- Revised Figure 6, T-SAIFI-M for the 3 worst regions compared to the CEA Composite



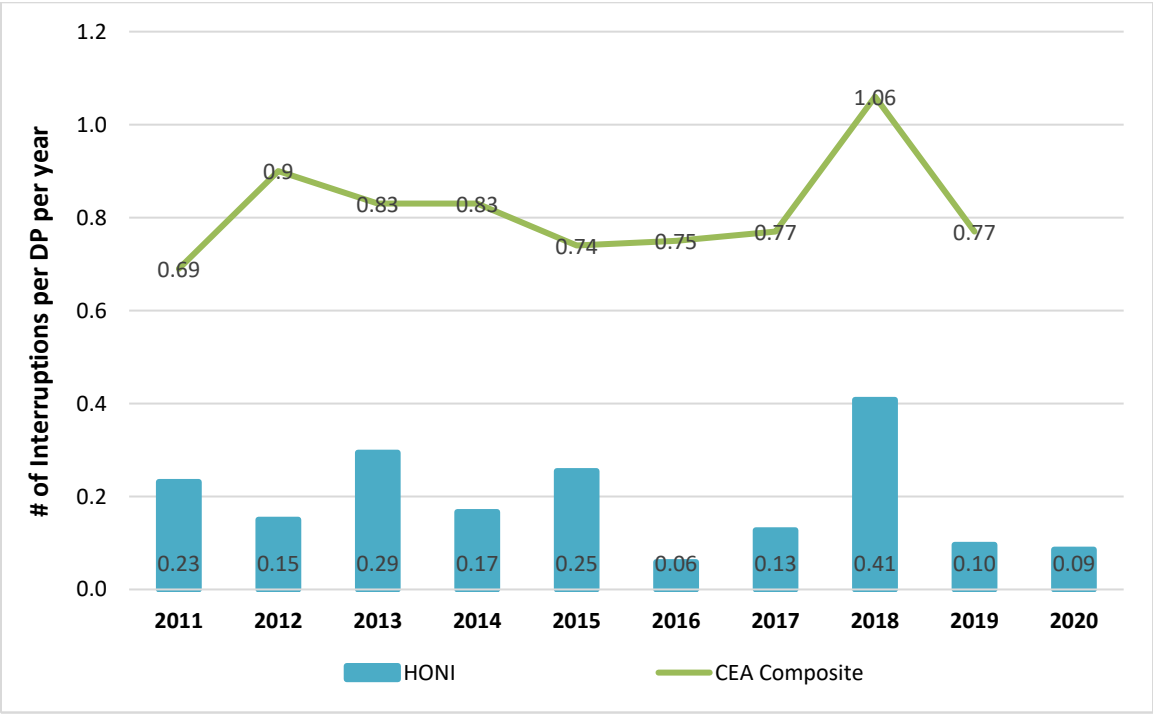
- Revised Figure 6, T-SAIFI-M for the 3 best regions compared to the CEA Composite



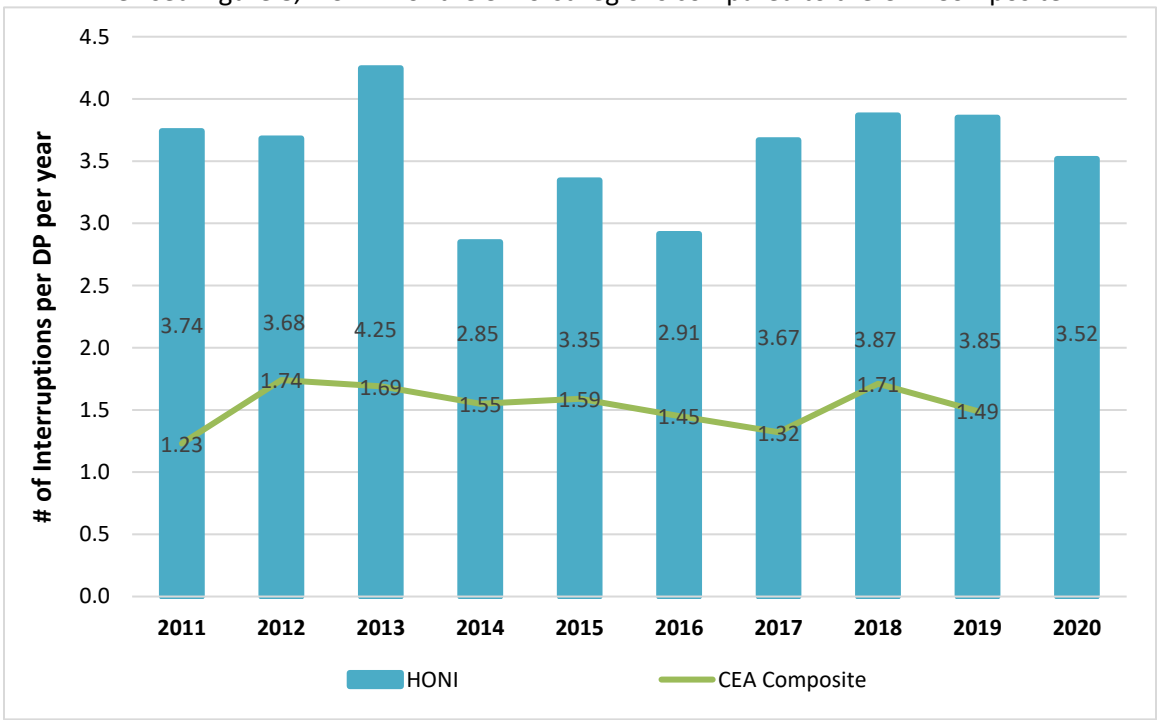
- Revised Figure 7, T-SAIFI-S for the 3 worst regions compared to the CEA Composite



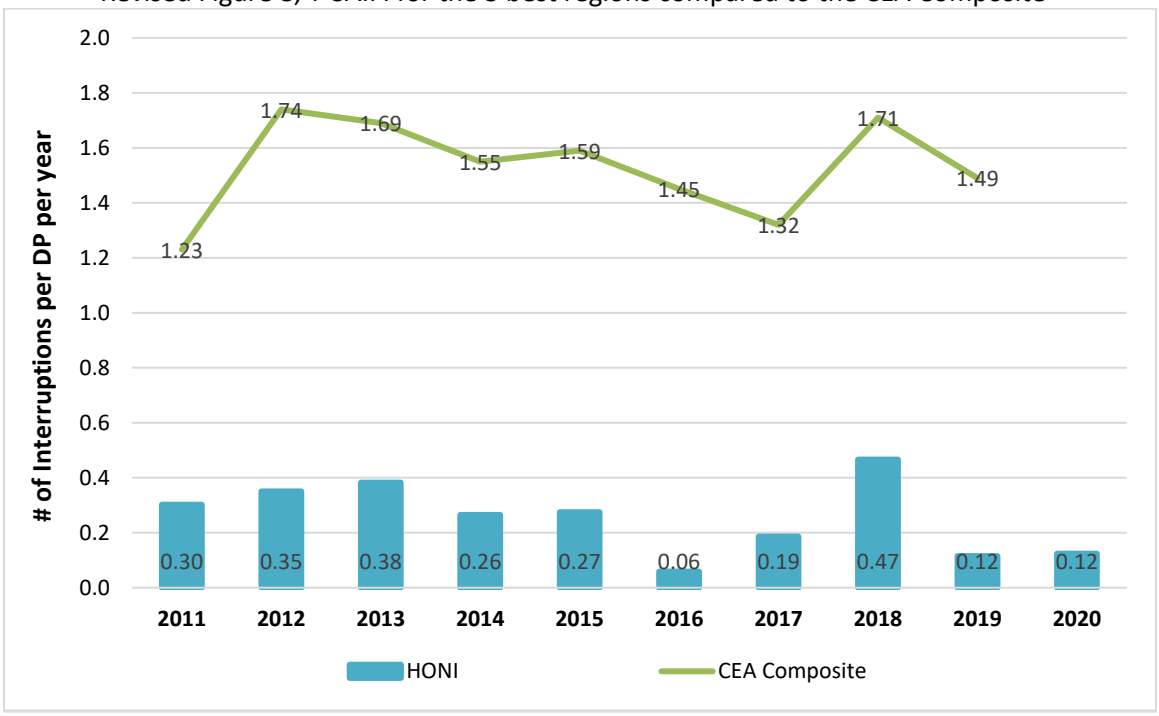
- Revised Figure 7, T-SAIFI-S for the 3 best regions compared to the CEA Composite



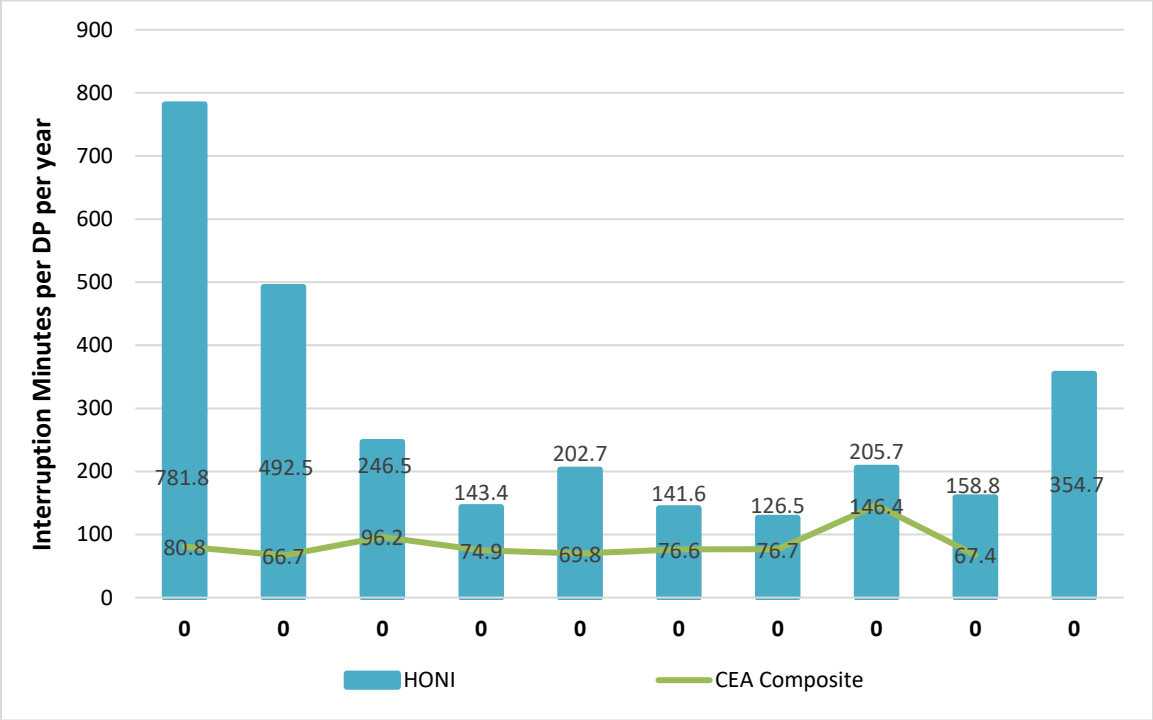
- Revised Figure 8, T-SAIFI for the 3 worst regions compared to the CEA Composite



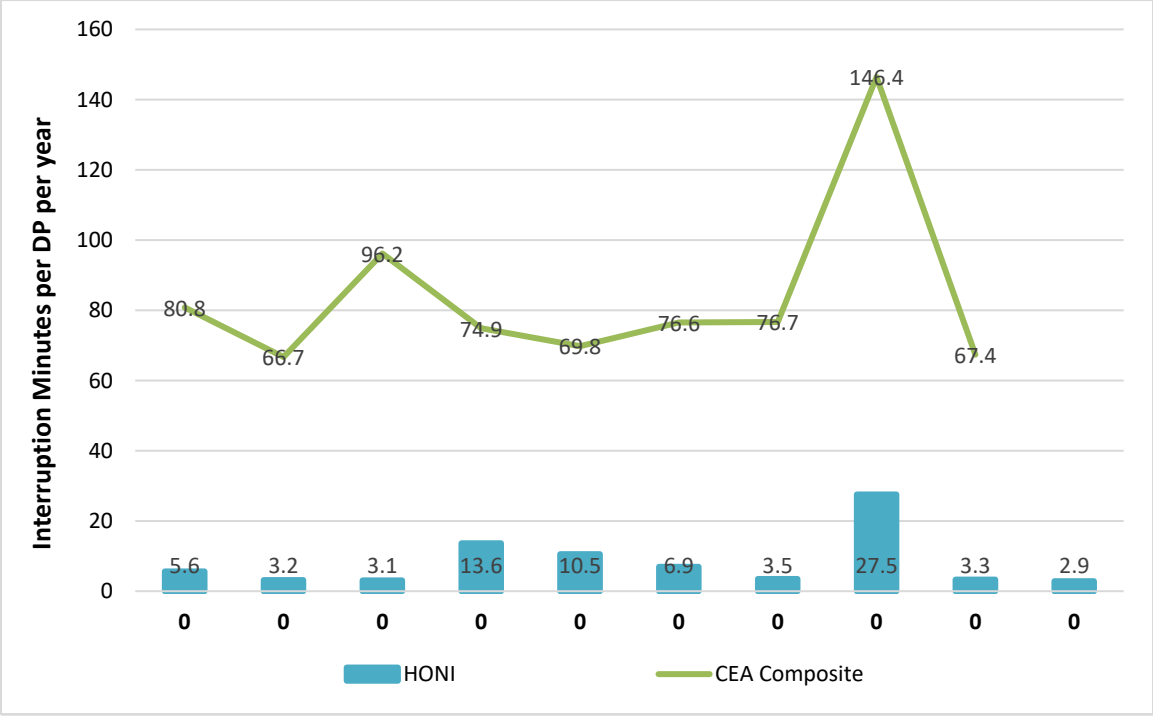
- Revised Figure 8, T-SAIFI for the 3 best regions compared to the CEA Composite



- Revised Figure 9, T-SAIDI for the 3 worst regions compared to the CEA Composite



- Revised Figure 9, T-SAIDI for the 3 best regions compared to the CEA Composite



b) Yes, Hydro One's performance is included as part of the CEA Composite. The CEA members which have contributed to the CEA Composite over the 2011 to 2020 period are listed below. Some utilities may not have submitted data for all 10 years.

i. AltaLink Management Ltd.
ii. ATCO Electric
iii. BC Hydro
iv. ENMAX
v. EPCOR
vi. Hydro One
vii. Hydro-Québec
viii. Manitoba Hydro
ix. New Brunswick Power
x. Newfoundland & Labrador Hydro
xi. Nova Scotia Power Inc.
xii. SaskPower

B - OEB STAFF INTERROGATORY - 043

Reference:

Exhibit B-2-1, TSP Section 2.4, Page 18
Exhibit A-3-1, Attachment 1, Page 26

Preamble:

Hydro One's Business Plan states that "The TSP is targeting to maintain first quartile system reliability performance throughout the Plan". OEB staff notes there are two key charts in the application that benchmarks Hydro One's "system" reliability" against the "CEA 5 year moving average". Those charts are "Unavailability of Major Transmission Station Equipment" (Figure 12) and "Unavailability of Transmission Lines" (Figure 11).

- For Transmission Lines, with the exception of an improvement in 2020, the chart shows a significant and steady increase in unavailability from 2013 to 2019 for Hydro One (while the CEA average steadily improved until an uptick in 2019).

- For Major Transmission Station Equipment, except for 2013, the chart shows there was a similar material and steady increase in unavailability (while the CEA average steadily improved every year). Staff also notes Hydro One's highest unavailability was during the most recent three years (2018-2020) for Major Station Equipment.

Interrogatory:

a) Given the benchmarking results against the CEA composite discussed above, please explain the basis of this "first quartile" designation in relation to "system reliability".

b) In relation to unavailability of Major Transmission Station Equipment, according to Hydro One, "deterioration of this measure" is due to a combination of factors that include the following: (1) transformers were about to be retired and forced outages counted towards unavailability until they were decommissioned; (2) forced outages that occur just before a transformer replacement project causes the whole duration to be counted towards unavailability measures; and (3) repairs to capacitor banks and breakers are usually deferred for significant periods of time since their unavailability does not immediately impact the system. Please clarify the following:

   i. Did the same factors apply before the step jump in unavailability in 2018? For example, were repairs to capacitor banks and breakers also deferred in prior years?

ii. Would those same factors not apply to other utilities in the CEA Composite? If not, please explain why Hydro One is different from other utilities across Canada.

Response:

a) Hydro One's "first quartile" reliability performance refers to the average delivery point interruption duration of multi-circuit supplied delivery points, compared to the CEA composite. Unavailability metrics, including lines and station equipment unavailability, measure equipment performance which is different from delivery point performance.

b)

i. Decisions to expedite or delay repairs are contingent on several factors, including system conditions, site specific considerations, and availability of components. In the post-2018, period Hydro One determined that there was not an immediate need for certain capacitor banks to support system operations after a failure. The repairs were therefore not prioritized. Similarly, some transformers that were about to be retired failed in this period and were counted as unavailable until decommissioned. These types of situations would have existed prior to 2018, but not to the same extent.

ii. The same factors may apply to other utilities if they have similar situations since we are following the same equipment outage reporting rules from the CEA Transmission Committee of Outage Statistics (T-CCOS). Hydro One, however, does not have specific information regarding the operations and maintenance approach of other utilities.

B2 - OEB STAFF INTERROGATORY - 044

Reference:

Exhibit B-2-1, TSP Section 2.4, Attachment 2, Page 5

Preamble:

At the above reference, it is stated that:

> For Group Performance outliers, Hydro One's level of incremental investment for improving the performance of an outlier beyond what was designed originally will be limited to the present value of three years' worth of transformation and/or transmission line connection revenue associated with the delivery point. Any funding shortfalls for improving delivery point reliability performance will be contributed by affected delivery point customers.

OEB staff's understanding is that the limitation referenced above of "three years' worth of transformation and/or transmission line connection revenue" has been in place since Hydro One's CDPP standards document was initially prepared about 15 years ago.

Interrogatory:

a) Please clarify how three years of connection revenue was initially determined to be the appropriate approach to determine the amount the customer should not be responsible for paying.

b) Please identify if Hydro One has done any analysis since 2005 to ascertain if this results in an appropriate amount (i.e., aligns with beneficiary pay principle)? If so, please explain the results of Hydro One's analysis.

Response:

a) The rationale of "three years' worth of transmission and/or transmission line connection revenue" was established through the "Customer Delivery Point Performance Standards Amendment Stakeholder / Customer Consultations" (RP-1999-0057):[1]

[1] https://www.oeb.ca/documents/cases/RP-1999-0057/tsccompliance_dpstakeholdering_051004.pdf

> To encourage proceeding with only those reliability performance improvements that are technically and economically practical and to limit the subsidisation of reliability improvement costs by other pool customers, Networks' level of incremental investment for improving the performance of an "outlier" will be limited to the present value of three years worth of transformation and/or line connection revenue[1] associated with that delivery point. Any funding shortfalls for improving delivery point reliability performance will be made up by affected delivery point customers in the form of a financial/capital contribution.
>
> ---
>
> *[1] In the special case where a delivery point pays only network tariffs, line connection tariffs are to be used as proxy in the revenue calculation.*

b) Hydro One has not undertaken any re-analysis of this long-standing approach. However, Hydro One continues to believe this approach is reasonable and aligns with the beneficiary pay principle as it permits the installation of mitigation options, such as animal guards and digital fault locators, at no additional cost to the affected delivery point's customers while continuing to require that the beneficiaries fund more costly mitigations.

B2 - OEB STAFF INTERROGATORY - 045

Reference:

Exhibit B-2-1, TSP Section 2.5, Page 3

Preamble:

At the above reference, it is noted that the percentage of outliers in 2020 increased by 0.5% (compared to 2019) and the performance trend is indicating an increase in the percentage of delivery point outliers. It is also noted that Hydro One's performance was better than target in each of the years 2018-2020, as shown in the table below.

Table 1 - CDPPS Outliers as Percentage of Total Delivery Points (%)

	2016	2017	2018	2019	2020	Trend
Target	-	-	13.0	12.0	11.7	
Actual	9.7	9.5	10.1	10.9	11.4	▲

It is further indicated that Hydro One's customer DP performance has steadily declined from 2016 to 2020 (9.7% to 11.4% outliers), with an average of 10.3% outliers over that five-year period. The application also provides the target for each year during the 2023-2027 test period which ranges from 11.5% to 10.2%. Hydro One is therefore targeting a declining percentage of outliers to 10.2% by 2027.

Interrogatory:

a) Based on OEB staff's calculations for the 2023-2027 test period, Hydro One's goal is targeting the percentage of outliers to average 10.6%. Please explain why Hydro One expects reduced reliability (i.e., higher percentage of outliers) for customers over the 2023-2027 test period relative to the historic five-year period average of 10.3%.

b) The application also notes "Hydro One's performance was better than target in each of the years 2018-2020." Staff notes that Hydro One's actual performance was 9.7% in 2016, which improved to 9.5% in 2017. Please clarify why Hydro One targeted a material reduction in customer reliability during 2018-2020, with an increase in outliers from below 10% to 13% in 2018 and then remaining relatively high in 2020 at 11.7%?

c) Hydro One notes that it is targeting a steady improvement in outliers over the 2023-2027 test period from 11% to 10.2%. However, there is no explanation of that improvement. Given the application notes "the performance trend is indicating an increase in the percentage of

delivery point outliers", please explain how Hydro One expects to turn that trend around and achieve the referenced targeted decline in outliers.

Response:

a) Beginning in 2019, Hydro One changed the original methodology it established to set targets for outlier performance as discussed in part b). In looking at performance over the 2008 to 2017 period, Hydro One used the 40th percentile performance over the 10 years as the basis for establishing the 2019 target i.e. rounded to 12%. Because 2018 outlier performance was not yet available, when the new methodology was established, results from 2008 to 2017 were used as the 10-year data set for the calculation. Starting in 2020, a 2% annual improvement relative to the prior year was identified as the performance improvement target.

b) 2018 was the first year for which Hydro One established a target for outlier performance. At the time of target setting in early 2017, the 2016 outlier performance data was not yet available. As a result, the target was based on a 5-year average from 2011 to 2015, rounded to 13%. As noted in part a) above, targets established beginning in 2019 were reset based on the new methodology.

c) The outlier performance improvement target is aligned with overall system performance improvement targets, i.e. a 2% annual improvement starting from 2020.

B2 - OEB STAFF INTERROGATORY - 046

Reference:

Exhibit B-2-1, TSP Section 2.7, Page 8

Preamble:

As stated in Lines 4 to 9 of the above reference:

> For each investment candidate, Hydro One assesses the amount of risk that is expected to be mitigated across three risk taxonomies as applicable – safety, reliability, and environmental. Each risk taxonomy features clear definitions and a consistent approach to permit a proper assessment of the risk mitigated for each candidate investment. The assessment considers both the probability and consequence of an event materializing, relying on historical data, condition information and experience to the extent possible and taking into account the risk mitigated by each candidate investment through the comparison of the risk profile pre and post investment.

Interrogatory:

a) Please confirm that the failure probabilities used by Hydro One to calculate asset-related risks are directly correlated to the consequences used in the risk calculations for those asset classes. For example, when calculating risk, if the consequence is derived assuming peak loading conditions, then the probability that should be used to calculate the associated risk is the chance of failure occurring during peak loading conditions (i.e., heaviest loading hours of the year).

b) Please provide specific quantified examples of pre and post mitigation risk calculations carried out by Hydro One when assembling and prioritizing the project portfolios that comprise the largest Transmission spending programs (e.g. ISD T-SR-01, ISD T-SR-02, ISD T-SR-03, ISD T-SR-04, ISD T-SR-09 and ISD T-SR-13).

Response:

a) Confirmed; the probability level reflects the likelihood of the event occurring in concert with the probability of the consequence materializing, as defined according to the worst reasonable direct impact.

b) The assessment of risk for specific projects has three components:

- Baseline risk assessment, which reflects the risk of an adverse event occurring based on a probability and consequence evaluation.
- Residual risk assessment, which reflects the post-investment risk of an adverse event occurring based on a probability and consequence evaluation.
- Total risk mitigation.

For each of the investments cited in the interrogatory, the table below shows an example of the total risk mitigation, as well as the baseline and residual risk assessment.

ISD	Project	Total Risk Mitigation			Risk(s)	Baseline		Residual	
		Environment	Safety	Reliability		Likelihood[1]	Consequence[2]	Likelihood	Consequence
SR-01	Beach	9,742	-	88,774	Environment	P2	C5	P1	C5
					Reliability	P4	C4	P1	C4
SR-02	Essa	32,770		13,726,573	Environment	P3	C5	P1	C5
					Reliability	P5	C7	P1	C7
SR-03	Nebo	7,590		25,345	Environment	P2	C5	P1	C5
					Reliability	P5	C3	P1	C3
SR-04	Wood Pole Replacements		549,336	58,797,338	Safety	P3	C7	P1	C7
					Reliability	P3	C3	P1	C3
SR-09	Demand Capital	1,728		4,308,139	Environment	P2	C3	P1	C3
					Reliability	P6	C5	P2	C2
SR-13	N5K Line Refurbishment		51,465	67,086	Safety	P3	C7	P1	C7
					Reliability	P4	C6	P2	C6

[1] Likelihood scores reflect of the probability framework taxonomies provided in Exhibit B-1-1, SPF Section 1.7, Figure 8 (p.20); "P#" refers to the score metric provided in the taxonomy.
[2] Consequence scores reflect the transmission consequence framework taxonomies provided in Exhibit B-1-1, SPF Section 1.7, Figures 4, 5 and 7 (pp 18-19); "C#" refers to the score metric provided in the taxonomy.

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B2 - OEB STAFF INTERROGATORY - 047

Reference:

EB-2019-0082, Exhibit B-2-1, TSP Section 2.2, Page 8
Exhibit B-2-1, TSP Section 2.2, Pages 11-14
Exhibit B-2-1, TSP Section 2.1, Page 15

Preamble:

The first reference, from the EB-2019-0082 application, contains the following breakdown of transformer condition:

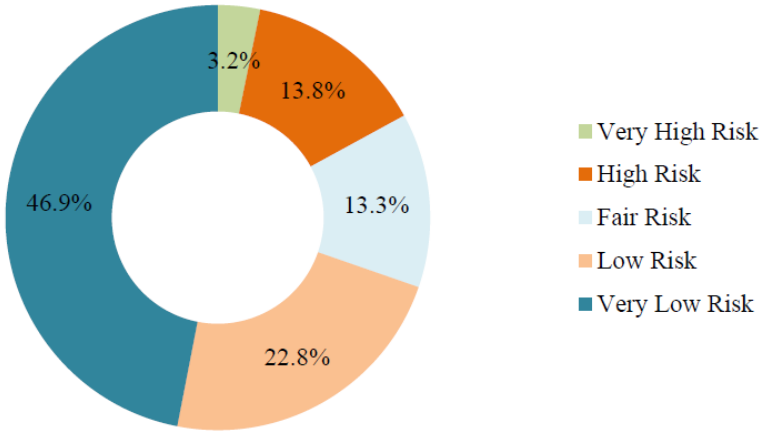


Figure 3 – Transformer Fleet Condition Assessment

Footnote 3 at the second reference (current application) states that:

In the prior transmission application (EB-2019-0082, TSP Section 2.2, p. 8), the 122 (17%) transformers identified as being in poor condition reflected the main tank oil tests results only at a point in time, and not the other condition indicators as discussed below. Based on Hydro One's detailed transformer condition assessments, the number of poor condition transformers at the time of the prior application would have been 181 (as noted above). Similarly, the 2016 values displayed in Figure 1 above have been updated to 116 based on the detailed transformer condition assessment whereas the values shown in the rate application were solely based on the main tank oil assessment at a point in time (EB-2016-0160). It is important to note that Hydro

One's approach for assessing transformer condition (and for prioritizing replacements) has not changed since the last rate application.

The following figure is included at the second reference (current application):

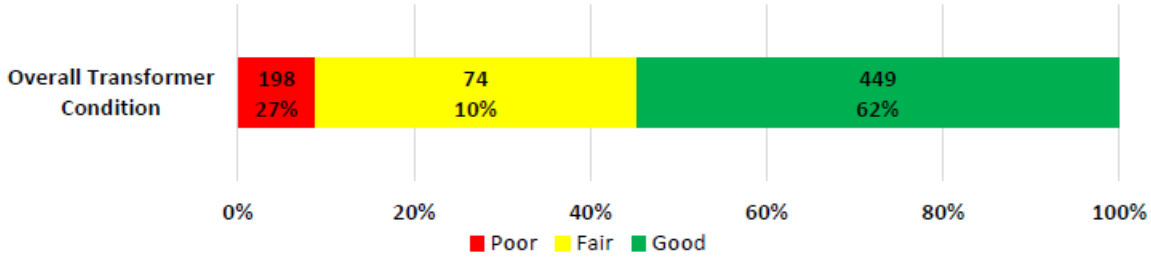


Figure 2: Transformer Condition

Page 13 at the third reference references Figure 2, shown above, stating that:

As shown in Figure 2, out of a total of 721 transmission transformers (i.e., 743 transformer tanks) in service at the end of 2020, 198 transformers (i.e., 208 transformers were deemed to be in poor condition based on a combination of main tank deterioration, oil leaks, cooling system failures, tap changer malfunction, defect reports, and/or PCB contamination.

Page 14 at the third reference states that:

Hydro One engaged Electric Power Research Institute (EPRI) to assess the conclusions of Hydro One's transformer condition assessment process in respect of the transformer main tank insulating oil condition indicator. EPRI assessed the main tank insulating oil condition of all 198 poor condition transformers (i.e., 208 transformers tanks - see TSP Section 2.3 Attachment 3). EPRI found main tank degradation in 155 transformer tanks and deemed them to be in deteriorated condition, 17 transformer tanks were found to be in marginal condition (i.e. close to EPRI's deteriorated condition threshold) based on their level of main tank degradation, and the remaining 36 transformer tanks were not deemed to have main tank deterioration.

Interrogatory:

a) Please explain how the information presented in Figure 3 (first reference), which uses the categories Very High Risk, High Risk, Fair Risk, Low Risk, and Very Low Risk; corresponds to 17% of transformers being identified as being in poor condition.

b) Please explain how Hydro One has increased the number of poor condition transformers at the time of the prior application (from 122 to 181) if Hydro One's approach for assessing transformer condition has not changed.

c) Please specify the condition assessments that have been used to assign transformers to the Poor, Fair, and Good, categories used in Figure 2 (second reference). Please provide the measure (e.g. unit of measurement, or scale) for each condition assessment.

d) Please provide the formula, factor weightings and/or detailed methodology for combining the results from the condition assessments identified in part c) to assign each transformer to either the Poor, Fair, or Good category.

e) Please confirm that applying the methodology described in response to part d) to condition assessment data that was available at the time of the previous application resulted in 181 transformers being assigned to the Poor category. Using this approach, at the time of the previous application how many transformers would be assigned to the Fair category, and to the Good category?

f) Please explain why the methodology described in response to part d) is preferable to the methodology used at the time of the previous application to assign each transformer to either the Very High Risk, High Risk, Fair Risk, Low Risk, or Very Low Risk category.

g) Please explain why Hydro One didn't engage an expert, such as EPRI, to assess the conclusions of Hydro One's transformer condition assessment process in respect of all condition indicators?

h) Please state whether or not the "transformer main tank insulating oil condition indicator" that was assessed by EPRI is the same thing as the "main tank oil tests" that were the sole condition assessment used to categorize transformers at the time of the previous application?

i) Please explain what condition assessments were used to identify the 198 poor condition transformers that were assessed by EPRI. On what basis were these transformers categorized as being in poor condition? Why wasn't EPRI asked to test more transformers?

j) Of the 208 transformer tanks tested, EPRI found 17 transformer tanks to be in marginal condition. How many transformers does this correspond to? EPRI found 36 transformer tanks did not have main tank deterioration. How many transformers does this correspond to?

k) Please confirm that the transformers identified in part j) are within the 198 transformers categorized in the application as being in poor condition. Please explain on what basis these transformers are in poor condition.

l) Did the EPRI study results influence the categorization of transformers into the Poor, Fair and Good categories? If yes, please explain and quantify what changes to the transformer categorization were made because of the EPRI study. If no, please explain why not.

m) What was the cost of the EPRI study?

Response:

a) In the prior transmission application (EB-2019-0082, TSP Section 2.2, p. 8), the 122 (17%) transformers identified as being in poor condition reflected the main tank oil tests results only at a point in time, and not the other condition indicators that inform the overall condition assessment. Based on Hydro One's detailed transformer condition assessments, the number of poor condition transformers at the time of the prior application would have been 181 (as noted above). It is important to note that Hydro One's approach for assessing transformer condition (and for prioritizing replacements) has not changed since the last rate application.

Generally, the Very Low Risk, Low Risk, Fair Risk, High Risk and Very High Risk categories (as used in EB-2019-0082) can be compared to the Poor, Fair and Good condition categories (used in EB-2021-0110) as shown in the table below.

EB-2021-0110	EB-2019-0082
Good Condition	Very Low Risk
	Low Risk
Fair Condition	Fair Risk
Poor Condition	High Risk
	Very High Risk

b) See response in part a).

c) Measures used for transformer condition assessments are primarily based on four main indicators: insulation deterioration within the main tank; oil leaks; cooling system issues; and

tap changer issues. Detailed factors and measurements that support the assessment regarding each indicator are provided in part d) below.

d) While all four indicators outlined in part c) play an important role in determining overall transformer condition, only the insulation deterioration within the main tank has measurable thresholds and a quantifiable formula to indicate condition as informed by IEEE standards and relying on the following measurements:

- Oil quality test
- Dissolved gas analysis
- Furan measurement

The other three indicators are also evaluated by Hydro One subject matter experts to determine transformer condition. A threshold-based analysis like that performed on transformer oil is not appropriate nor necessary for these other indicators. This is because the associated equipment degradation, defect issue(s) or failure is apparent – unlike transformer main tank insulation that requires analysis of the oil to determine the internal insulation condition. On this basis, Hydro One actively reviews these indicators by considering the factors shown below to evaluate transformer condition and plan for replacement. For additional details regarding the assessed overall transformer condition based on multiple indicators, please see Interrogatory B2-SEC-076.

1. Oil leaks are analysed using the following factors:
    - Number of oil top-ups per year and the volume of the top-ups
    - Number of low oil alarms received and the frequency of the alarms
    - Number of leaks and number of temporary fixes applied
    - Measurement of moisture due any water ingress
    - Availability of a containment system (older units may not have a containment system or may not be up to current code)

2. Cooling system failures are analysed using the following factors:
    - Number of fan or pump failures
    - Number of transformer unit failures due to cooling system issues
    - Number of times unit was de-rated
    - Whether the system was replaced previously

3. Tap changer are analysed using the following factors:
    - Total number of operations

- Number of years in service
- Number of lockouts
- Number of Tap Changer oil leaks
- Obsolescence

e) Yes, it is confirmed

EB-2021-0110	EB-2019-0082
Good Condition	466
Fair Condition	69
Poor Condition	181

f) Please see Interrogatory B2-Staff-040 (response a) and c))

g) The PTX tool (Transformer Fleet Management software) developed by EPRI is limited to main tank oil analysis. Hydro One is not aware of any third-party expert that can provide a similar assessment of the other transformer condition indicators. It is important to note the assessment of main tank condition requires substantial processing, interpretation and analysis of oil test results and other relevant diagnostic data, and is thus more suitable for third-party review. While the other indicators involve significant data gathering and analysis, the review and interpretation of that data is more straightforward (i.e., the associated equipment degradation, defect issue(s) or failure is more apparent) in comparison with main tank analysis. Given Hydro One's internal expertise and experience in this area, commissioning an expert study (even if such a third-party expert was available) in relation to the other condition indicators would not have yielded similar benefits/insights as the EPRI study.

h) Yes.

i) Please see response c) and d). Hydro One engaged EPRI to assess the conclusions of Hydro One's transformer condition assessment process. Since Hydro One has a well-established process (see part d)) and the rigorous condition analysis was already done in-house on that basis, Hydro One does not believe that significantly expanding the scope of the study to assess the entire transformer fleet (including new transformers) would have been a prudent or efficient use of resources.

j) 16 transformers (three phase transformers) and 1 tank;
34 transformers (three phase transformers) and 2 tanks

k) Yes, confirmed and they were assessed as per c) and d) above.

l) No, the transformers were already categorized using Hydro One process prior to the EPRI study.

m) Please see interrogatory B1-SEC-048.

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B2 - OEB STAFF INTERROGATORY - 048

Reference:

Exhibit B-2-1, TSP Section 2.2, Pages 21-22

Preamble:

At the above reference, Hydro One states that:

Assessments to refurbish or replace transformers are done on an individual basis considering factors such as condition, performance, utilization, demographics, criticality and environmental factors as well as cost comparison between refurbishment and replacement. Hydro One employs a model that derives the Present Value for three options: maintain status quo, refurbish, or replace. The model uses several factors such as maintenance cost, replacement cost, tax capital cost allowance, and the discount rate to select the appropriate option.

Transformers in poor condition are prioritized for replacement with consideration of those with known manufacturing defects, are obsolete, have higher repair costs or have undergone short term repairs to restore its functionality but continue to pose a performance risk. Transformers that do not meet replacement criteria (particularly those that have reported severe oil leaks or verified PCB concerns) will be prioritized for refurbishment to preserve their expected service life and reliability.

Interrogatory:

a) Please state how many of the 198 transformers that Hydro One has identified as being in poor condition are planned to be refurbished? Please identify the station locations of each of these transformers.

b) Please state how many of the 198 transformers that Hydro One has identified as being in poor condition are planned to be replaced.

Response:

a) All 198 transformers are being replaced. These transformers have been assessed to be in poor condition based on detailed condition assessment using the most recent condition data as well as historical data relating to four main indicators: (i) insulation deterioration within the main tank, (ii) oil leaks, (iii) cooling system failure, and (iv) tap changer malfunction as well as other factors including manufacturing defects, obsolescence, repair costs or have undergone

short-term repairs to restore functionality but continue to pose a performance risk and do not meet the refurbishment criteria.

b) See response above.

B2 - OEB STAFF INTERROGATORY - 049

Reference:

Exhibit B-2-1, TSP Section 2.2, Pages 32-34

Interrogatory:

a) Please state how many of the 541 breakers that Hydro One has identified as being in poor condition are planned to be refurbished.

b) Please state how many of the 541 breakers that Hydro One has identified as being in poor condition are planned to be replaced.

Response:

a) Hydro One does not plan to refurbish the 541 poor condition breakers because they are obsolete, in some cases spare parts are no longer available, and it is not effective or economical to refurbish them.

b) Hydro One's investment plan includes investments that replace 327 poor condition breakers during 2023-2027.

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B2 - OEB STAFF INTERROGATORY - 050

Reference:

Exhibit B-2-1, TSP Section 2.2, Pages 36-44

Interrogatory:

a) Please provide the percentage of beyond ESL protection system assets that are being replaced in the plan.

b) Please also break down this amount across solid state, electro-mechanical, and microprocessor assets.

Response:

a) During the 2023-2027 business plan, 47.3% of the protections system assets replaced would be beyond their ESL.

b) Breakdown by relay type:

Relay Type	Beyond ESL Replaced (2023-2027)	% of Replacements
Electromechanical	721	44.87%
Microprocessor	261	16.24%
Solid State	625	38.89%

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B - OEB STAFF INTERROGATORY - 051

Reference:

Exhibit B-2-1, TSP Section 2.2, Page 47

Preamble:

Regarding Table 14 – Summary of Defect Reports (2011 – 2020) *[Table not provided in preamble].*

Interrogatory:

a) Please state what is considered to be a defect and how a defect occurs.

b) Please describe any means of mitigation used to address these defects and state whether any of the devices were replaced because of a defect.

c) Please state whether it is possible that the same device is counted as having a defect in more than one year, i.e. it was not replaced and then had another defect.

d) Please provide total portfolio numbers and the associated percentage of portfolio failures for each asset type listed in Table 14.

Response:

a) A defect is reported when a device or its subcomponent fails to function or fails to function as designed.

b) When a device or its subcomponent fails to function, either the entire device or the subcomponent is replaced depending on the nature of the failure.

c) Over the 2011-2020 period shown in Table 14, the same device could have had more than one reported defect due to different subcomponents failures.

d) Total portfolio numbers and the associated percentage of portfolio failures for each asset type are listed below. The total portfolio numbers are the total numbers of devices in the fleet for asset types listed in Table 14, at the end of 2020. The portfolio failures are the number of defect reports for each asset type in 2020.

	RTU	**PSR**	**Trans-ducer**	**LMC/LCC**	**Gateway**	**Router**	**Switches**
Total Portfolio	9632	89	278	892	892	1059	3168
Portfolio Failures	673 (6.99%)	36 (40.45%)	8 (2.88%)	80 (8.97%)	86 (9.64%)	35 (3.31%)	74 (2.34%)

B2 - OEB STAFF INTERROGATORY - 052

Reference:

Exhibit B-2-1, TSP Section 2.2, Page 55

Preamble:

Table 15 summarizes power system telecom asset demographics.

Interrogatory:

a) Please state for each of the asset types shown in Table 15, what portion of the beyond ESL devices are being replaced in the plan?

Response:

a) The portion of devices beyond ESL as of December 2020 that are expected to be replaced is shown in the table below. This forecast does not include devices that will reach ESL by 2027:

Telecom System/Asset Class	Asset Type	Portion of Beyond ESL Devices Expected to be Replaced by 2027
SONET Communication Network	Multiplexers	90%
	Digital Radios	70%
	Optical Amplifiers	100%
	48 VDC Batteries	80%
	48 VDC Chargers	50%
	OPGW	0%
	ADSS	80%
Power Line Carrier Systems	PLC Radios	20%
Teleprotection Terminal Devices	T1 Multiplexers & Tone Devices	30%
Microwave Radio Systems	T1 Radios/ Sub-T1	50%
Radio Communication Towers	Hydro One Owned	0%
	Leased space	N/A
High-Voltage Protection System	Neutralizing/Isolation Transformers/ Opto-Isolators	10%
Provincial Mobile Radio System	Radio Base Stations Equipment	100%

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B2 - OEB STAFF INTERROGATORY - 053

Reference:

Exhibit B-2-1, TSP Section 2.2, Page 57

Preamble:

As stated in Lines 15 to 22 with respect to the expected service life (ESL) of All-Dielectric Self-Supporting (ADSS) fibre cable:

> *The ESL of fibre optic cable is based on the type of cable. The manufacturers' recommended ESL is 40 years for OPGW and 25 years for ADSS. Historical performance shows that mechanical stress on ADSS fibre cable installations has prematurely reduced the cables' life span. In the case of ADSS cables, at the time when they were first installed by Hydro One, there was limited research available to fully understand the design principles, maintenance requirements and operational risk related to ADSS cables. Since then, historical performance has shown that a combination of these factors have contributed to unusual mechanical stresses on ADSS cables, as well as some of the early ADSS cable failures, resulting in its ESL being lowered to 15 years.*

Interrogatory:

a) Please describe what design principles and/or maintenance practices Hydro One has introduced or modified in an attempt to achieve a higher ESL than 15 years for ADSS cable.

b) Please clarify whether or not Hydro One is planning to reduce the ESL of its entire ADSS fleet to 15 years, regardless of installation vintage?

c) Please confirm that the problems identified in the reference apply primarily to ADSS cables installed by Hydro One when it first began using ADSS technology.

   i. If not confirmed, please describe all applicable scenarios.

d) What is Hydro One's proposed ESL for its modern ADSS installations?

e) Please categorize Hydro One's ADSS fleet into vintages by installed length.

   i. Please identify which vintages would count as "early" installations, and which would count as "modern" installations.

Response:

a) Hydro One no longer installs ADSS cable and is not able to increase the ESL of the existing fleet ADSS cable as design principles, maintenance requirements and operational risks associated with these cables at the time when they were first installed contributed to unusual mechanical stresses (including failures), the effects of which are not reversible. This resulted in Hydro One lowering the ESL to 15 years. To manage the risk posed by ADSS, Hydro One continues to replace ADSS cable and carries out periodic inspection and close monitoring of the remaining ADSS fleet.

b) Hydro One currently considers all ADSS cables to have an ESL of 15 years. ESL is used as a screening factor for asset replacement assessment, but replacement decisions are not based solely on age. The asset replacement assessment also considers hardware obsolescence or level of vendor support, spare equipment availability, performance or failure rates and preventative maintenance findings.

c) Confirmed.

d) Hydro One no longer installs ADSS cable.

e) Hydro One does not categorize ADSS cable in this way; by 2023 there will only be 50km of ADSS cable left in Hydro One's fleet.

B2 - OEB STAFF INTERROGATORY - 054

Reference:

Exhibit B-2-1, TSP Section 2.1, Page 19
Exhibit B-2-1, TSP Section 2.2, Pages 80-87
Exhibit B-2-1, TSP Section 2.8, Page 13
Exhibit B-2-1, TSP Section 2.11, T-SR-13

Preamble:

At the third reference above, the application states that Hydro One is planning to spend with respect to North American bulk electric system (BES) requirements:

$833M over the five-year period to replace poor condition line assets that form part of BES or regional supply systems serving local areas including 1,571 circuit-kms, or 41% of the known poor condition conductors in the fleet.

Page 81 at the second reference states that:

Testing is limited to conductor spans greater than 50 years of age since based on Hydro One's operating experience, conductors less than 50 years of age have a low likelihood of being in a deteriorated condition and are therefore assumed to be in good condition.

Page 87 at the second reference states with respect to Aluminum Conductor Steel Reinforced (ACSR) type conductors that:

Since 2016, Hydro One has been performing the majority of its ACSR conductor condition assessments through the Kinectrics LineVue tool.

Page 82 at the second reference states that:

The subset of conductors in poor condition includes copper conductors that can no longer be repaired due to components being out of production.

Page 2 at the fourth reference states that:

Hydro One plans to replace 1,879 circuit-kms (of which 1,571 circuit-kms will be in-serviced during the 2023-2027 period) or 49% of the known poor condition conductors in the fleet.

Interrogatory:

a) Please provide an augmented version of Table 20 on page 80 at the second reference, adding a column to show the circuit-km beyond 50 years of age for each conductor type.

b) Please confirm that all conductor less than 50 years old is classified as being in 'good' condition.

c) Please explain the 27% of conductor that is classified as 'needs assessment'.

d) Please complete the following table:

	Poor Condition (Circuit-km)	Fair Condition (Circuit-km)	Good Condition (Circuit-km)	Needs Assessment (Circuit-km)	Total (Circuit-km)
ACSR					27,929
Copper					464
Aluminum					21
ACSS					138
Total	3874	3329	13620	7728	28,552

e) Please describe the condition testing program that has been undertaken since 2016 for ACSR conductors beyond 50 years of age. This should include:
   i. The number of circuit-km tested per year by LineVue and the criteria for prioritizing conductors to be tested using LineVue
   ii. The number of laboratory tests conducted and the criteria for prioritizing conductors for laboratory testing.

f) Please provide the cost of the condition testing program described in response to part e) per year.

g) Please describe how ACSR conductor has been categorized into 'poor', 'fair', 'good' or 'needs assessment', based on the results of LineVue testing and laboratory testing. If additional criteria are used for this categorization, please explain.

h) Please state the proportion of the ACSR conductor that has been categorized as being in poor condition that has been tested with LineVue testing or laboratory testing. If this proportion is less than 100%, please explain on what basis these conductors have been categorized as being in poor condition.

i) For the copper conductor in poor condition identified in part d), please divide this, by circuit-km, into copper conductor that can no longer be repaired due to components being out of production, and other copper conductor that is in poor condition.

j) The expected service life of ACSR conductor has been increased from 70 years to 90 years. Please comment on the potential to increase this further.

k) One of the key criteria for replacing conductors appears to be the conductors being located in "publicly accessible areas". What other criteria did Hydro One use to select the 41% of the known poor condition conductors for replacement?

l) Please explain the potential implications in terms of system and customer reliability (i.e., delivery point performance) for the remaining 59% that will remain in poor condition over the next five years. Please also identify if any of those are located in "publicly accessible areas"?

m) Please explain how Hydro One reached a conclusion that less than half (41%) of the conductors in poor condition should be replaced over the five-year period and please discuss Hydro One's plan to address the remaining 59%.

n) The ISD states that "49% of the known poor condition conductors" would be addressed. This is different from other sections in the application which state that the "$833M would address 41%" of the known poor condition conductors in the fleet, Please clarify whether the portion of conductors in poor condition that are being replaced is 41% or 49%.

Response:

a) The requested table is presented below.

Conductor Type	Circuit-km in Service	Average Age (Years)	ESL (Years)	Circuit-km Beyond ESL	Circuit-km Beyond 50 Years of Age
ACSR	27,929	55	90	965	17,202
Copper	464	102	70	461	461
Aluminum	21	91	100	15	21
ACSS	138	7*	N/A	N/A	0
Total	28,552	56		1,442	17,684

**Due to a coding error, the average age of ACSS conductors was erroneously reported as 28 in the filing. This figure should be 7.*

b) Confirmed.

c) 27% of the Hydro One's transmission conductor fleet are greater than 50 years of age and therefore eligible for testing, but have yet to receive testing, and therefore their condition is unknown.

d) The requested table has been completed below:

	Poor Condition (Circuit-km)	Fair Condition (Circuit-km)	Good Condition (Circuit-km)	Needs Assessment (Circuit-km)	Total (Circuit-km)
ACSR	3,390	3,329	13,547	7,663	27,929
Copper	464	0	0	0	464
Aluminum	21	0	0	0	21
ACSS	0	0	138	0	138
Total	3,874	3,329	13,685*	7,663*	28,552

**Due to a coding error, 65 km of conductor was erroneously filed as "Needs Assessment", when in fact they are in "Good Condition".*

e) TSP Section 2.2, Page 86 to 88 describe the condition testing program and how candidates for testing are prioritized. Since 2016, Hydro One has been performing the majority of its ACSR conductor condition assessments through the Kinectrics LineVue tool. LineVue is non-destructive and allows for a greater number of condition assessments per year and is more cost efficient when compared to removing conductor samples for laboratory testing. Candidates for conductor testing are prioritized by age for conductors without any past test data, and by condition for conductors that were previously tested.

The following table provides the number of circuit-km of testing categorization performed by test type since 2016, as well as the cost of testing by year.

Year	LineVue Testing (circuit-km)	Laboratory Testing (circuit-km)	Cost of the Condition Testing Program
2016	1,512	57	$ 610,026.49
2017	1,225	7	$ 526,382.67
2018	1,854	0	$ 759,541.06
2019	944	0	$ 434,164.62
2020	268	0	$ 266,738.93

f) Please see e).

g) As further discussed in TSP Section 2.2, LineVue testing assesses conductor's tensile strength by magnetically sensing the remaining cross-sectional area of its steel core wires. Short conductor laboratory testing assesses the extent and severity of rust, remaining zinc, torsional ductility, and tensile strength. Long conductor laboratory testing assesses everything what short sample assesses with the addition of the following whole conductor tests: i. Aeolian Vibration Endurance Test, ii. Sheave Test as per IEEE Std. 1138-1994, and iii. Breaking Load Test

ACSR conductor is categorized as being in

- 'poor' condition where it has been verified through testing to have deteriorated to a point where its mechanical strength can no longer withstand adverse weather conditions.
- 'fair' condition where conductor exhibits some deterioration, but not to the extent where the mechanical strength is no longer capable of withstanding adverse weather conditions.
- 'good' condition where conductor is either less than 50 years old or was tested to exhibit insignificant levels of deterioration and can maintain its rated mechanical strength.
- refer to part c) above for the description on conductors categorized as 'needs assessment'.

h) The 52% of poor condition ACSR conductors were established as such through laboratory testing, while 48% of poor condition ACSR conductors were established as such through LineVue testing. 100% of poor condition ACSR conductors were established as so through either Laboratory testing or LineVue testing.

i) Hydro One does not have the requested data regarding which of the 464 km remaining copper conductor can no longer be repaired due to interfacing and supporting components being out of production, or which copper conductors are made with a plant fibre core that cannot be mended. Hydro One believes the cost to sample every dead-end to dead-end segment of copper transmission line in order to establish whether or not they contain a plant fibre core, or whether or not it is of a type that has readily available connecting hardware to be impractical for the remaining relatively small population of copper conductors. Furthermore, the act of sampling a copper conductor to establish whether or not it can be mended could lead to the requirement to replace the entire dead-end to dead-end conductor upon establishing that it cannot be mended.

j) As discussed in detail in EB-2019-0082, Hydro One established its 90 year expected service life (ESL) for transmission ACSR conductor by considering both its historic condition assessment data and overhead conductor replacement data to model a comprehensive hazard curve. At this time, Hydro One is not anticipating to increase the ESL of its ACSR conductors. If Hydro One identifies significant change in the stressors leading to a conductor's degradation (e.g. loading), it may reassess the situation and make appropriate determination at that time.

k) The assessment of safety and reliability risks associated with poor condition conductors are weighed through the investment planning process, further discussed in TSP Section 2.7. Other criteria includes, but not limited to:

- Degree of deterioration of poor condition line assets;
- Whether the line contains copper conductors;
- Whether the line is located in publicly accessible area;
- Number of highway/road or rail crossings by the line;
- Number of customers impacted by the line should it fail;
- The amount of load carried by the line;
- If the line is a radial line;
- If the line is a known performance outlier.

l/m) The proposed plan contains a set of material investments to replace 1,879 circuit-kms of known poor condition conductors. The proposed pacing is the subset of known poor condition conductors that addresses the most pressing asset needs required to mitigate safety and reliability risks. These investments have been identified through the integrated planning process, which included, among other things, asset needs assessment and investment planning process.

As further detailed in TSP Section 2.7, through the asset needs assessment, Hydro One identifies the drivers in the development of candidate investments and analyzes the data necessary to assess risks and facilitate subsequent calibration process. The output of the asset needs assessment is a portfolio of investment candidates that reflects asset-related needs and risks, particularly on the basis of asset condition. The identified investment candidates, comprised of poor condition conductors is then further scored and prioritized through the investment planning process to achieve the optimal balance of risk and benefits.

For each transmission line investment candidate, Hydro One assesses the amount of risk that is expected to be mitigated across two risk taxonomies, namely safety and reliability. Each risk

taxonomy features definition and a consistent approach to allow for a proper assessment of the risk mitigated for each candidate investment. The assessment considers both the probability and consequence of an event materializing, relying on historical data, condition information and experience to the extent possible and taking into account the risk mitigated by each candidate investment through the comparison of the risk profile pre and post investment. Results of the risk assessments are translated into risk scores, based on total risk mitigation, which are used to prioritize investments. For example, a section of poor condition conductor that is energized and crosses a highway will receive higher risk score than a section of poor condition conductor that is idle and located in an empty field.

Risk scores are then normalized by estimated investment cost and used to rank investments by risk mitigated per dollar. The absolute value of the risk scores are reviewed and an investment that has risks that are deemed unacceptable are included into the draft investment plan. Once a prioritized list is determined, challenge sessions are held among a broad set of stakeholders to (i) review the integrated investment portfolio, (ii) evaluate and confirm non-risk parameters, (iii) assess and debate investments, and (iv) confirm trade-off decisions. While the aforementioned process does not describe the integrated planning process in full, it explains how Hydro One determined which of the poor condition conductors have the most pressing needs relative to other investments required to be addressed to mitigate safety and reliability risks.

While the balance of poor condition conductors pose some degree of safety and reliability risks, it will be managed through regular patrols, with special attention given to publicly accessible areas including road and rail crossings and on a reactive basis, where required. Should the degree of risks, associated with poor condition conductors not included in the proposed investment plan increase, Hydro One will reassess if this increase in risk warrants a reprioritization and advance the sustainment work, as needed and appropriate.

n) The 1,879 circuit-km of transmission line refurbishments, or 49% of known poor condition conductors, listed in ISD T-SR-13 consist of multi-year projects, some of which are not planned to be completed, and therefore in-serviced during the 2023-2027 period. 1,571 circuit-kms of transmission line refurbishments, or 41% of known poor condition conductors, is planned for completion during the 2023-2027 period and, accordingly, in-serviced during same period

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B2 - OEB STAFF INTERROGATORY - 055

Reference:

Exhibit B-2-1, TSP Section 2.2, Page 96

Preamble:

As stated in Lines 13 to 19:

> Hydro One has approximately 49,200 lattice steel structures and approximately 1,750 steel poles supporting 115kV to 500kV transmission lines. Current steel structures have an average age of 63 years and an ESL of 80 years if they are not re-coated. However, if re-coated, the steel structures' service life can extend beyond the ESL. The demographics of the steel structure population are outlined in Table 22 below [table not provided in preamble].

Interrogatory:

a) What is the average (or most likely) service life extension that Hydro One anticipates will be achieved by structure re-coating?

b) In addition to Table 22, please provide a table that separately lists re-coated structures and compares their average ages relative to the extended ESLs that Hydro One expects to achieve by re-coating.

Response:

a) The anticipated life extension is 35 years from original ESL if coated in the recommended timeframe.

b) The demographics of the re-coated steel towers are outlined on the table below:

Re-coated Steel Tower Demographics

	Quantity	Average Age	ESL (Years)	Currently Beyond ESL
Steel Towers Re-coated	11,674	74	115	N/A

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B2 - OEB STAFF INTERROGATORY - 056

Reference:

Exhibit B-2-1, TSP Section 2.2, Page 98

Preamble:

At the above reference, it is stated that:

In 2018, Hydro one [sic] discovered that around 7,000 of its 230-kV towers are prone to experiencing middle arm hanger vibration and fatigue causing cracks…. Approximately 2,000 towers have either previously been fixed or will be as part of refurbishment projects, and about 5,000 towers are still in need of repair.

Interrogatory:

a) Please explain how the above discovery was made in 2018.

b) Please state whether or not this discovery was identified in Hydro One's most recent rate application (2019-0082).

c) Please describe the plan to repair the 5,000 towers that are still in need of repair.

d) Please state how many circuits are affected by the 5,000 towers that are still in need of repair? Please comment on the geographic distribution of these towers around Ontario.

e) Please state whether or not the location of the 5,000 towers that are still in need of repair influenced the prioritization of transmission line refurbishments that make up T-SR-13, or any other investment? If yes, please explain how.

Response:

a) The discovery was made during insulator replacement.

b) The discovery was not identified in Hydro One's 2019 rate filing. The forecast costs were under the materiality threshold.

c) Hydro One's plan is to refurbish 533 towers each year as a part of the Tower Member Refurbishment program (T-SR-06). From 2023 to 2027, 2,665 towers will be addressed within the program, which will continue until all the towers have been addressed. In addition,

defective tower members are replaced as part of other lines investments when work is completed on the tower to minimize the need for separate and repeated construction mobilization and outages.

d) There are 70 circuits affected. Most of the affected circuits are located in Southwest Ontario and the GTA.

e) No, defective tower members only influenced the prioritization of investments set out in ISD T-SR-06.

B2 - OEB STAFF INTERROGATORY - 057

Reference:

Exhibit B-2-1, TSP Section 2.2, Page 103

Preamble:

At the above reference, it is stated at Lines 9 to 12 that:

> As shown in Figure 28, the number of forced outages due to wood pole structure failures has increased over the past ten years. Wood pole failure is the result of a combination of factors, such as pole condition, weather condition, physical loading, and the local environment, so the increasing trend is not necessarily indicative of worsening pole condition.

Interrogatory:

a) Please state whether or not pole condition would be expected to significantly influence the probability of transmission wood pole failure for each of the following event types? Please explain for each of the cases shown below:

   i. Trees falling on structures and/or conductors.

   ii. Extreme wind events (e.g., microbursts or tornados).

   iii. Extreme ice loading.

   iv. External interference (e.g., vehicle and equipment contacts).

   v. Forest fires.

   vi. Spontaneous failure due to deteriorated pole condition during meteorological conditions that do not exceed structure design loads.

   vii. Other (please elaborate)

b) Please provide the percentage of transmission wood pole failures attributable to each of these event types for the past five (5) years.

c) Please explain how Hydro One's proposed accelerated rate of transmission pole replacements will directly correlate to improved reliability or safety performance for each of these failure event types.

Response:

a) Please see below:

i. Trees falling on structure and/or conductor: Pole condition is expected to have a significant influence on the probability of failure.

ii. Extreme wind events (e.g., microbursts and tornados): Pole condition is not expected to have a significant influence on the probability of failure, as the force applied by these extreme events exceeds the design strength of a new pole.

iii. Extreme ice loading: Pole condition is expected to have a significant influence on the probability of failure.

iv. External interference (e.g., vehicle and equipment contacts): Pole condition is not expected to have a significant influence on probability of failure as the force resulting from such events may exceed the design strength of a new pole.

v. Forest fires: Pole condition is not expected to have a significant influence on the probability of failure as new poles are just as likely to burn.

vi. Spontaneous failures due to deteriorated pole condition during meteorological conditions that do not exceed structure design loads: Pole condition is expected to have a significant influence on the probability of failure.

vii. Other (Please elaborate): In events where the applied load exceeds design loads, condition of the pole would not have a significant impact on probability of failure.

b) Transmission wood pole failures attributable to each of the event types in part a) for the past five years are shown below.

Trees Falling	Extreme Wind	Extreme Ice	External Impact	Fire	Spontaneous	Other
15%	3%	10%	3%	3%	65%	1%

c) At the proposed pacing of wood pole replacements, Hydro One will be able to address the current population of poor condition wood poles, and mitigate associated system safety and reliability risks. The proposed pacing of wood pole replacements is necessary and appropriate based on verified asset condition and other relevant planning considerations. As Guidehouse's Transmission Pole Replacement study (TSP Section 2.3 Attachment 2) found, compared to other North American utilities in the study, Hydro One has the second highest percentage of wood poles installed before 1960 and Hydro One's replacement rate over the past 5 years (2.1%) has been below the mean of 2.6%.

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B2 - OEB STAFF INTERROGATORY - 058

Reference:

Exhibit B-2-1, TSP Section 2.2, Page 117

Preamble:

The above reference states at Lines 10 to 17:

The need to address the polymer insulator issue is underscored by two failures which occurred in October and November 2016. Both failures resulted from 230 kV polymer suspension insulators on C28C failing mechanically, resulting in a conductor drop, as shown in the photos in Figure 37 through Figure 39. The dropped conductor did not contact the ground but was held in the structure window. Hydro One began replacing polymer insulators in 230 kV dead-end configuration in 2016, and Hydro One is currently in the process of identifying the number of impacted polymer insulators and will explore incorporating them into the insulator replacement program once more information is available.

Interrogatory:

a) Please state whether or not Hydro One is prioritizing replacement of high-risk polymer insulators used in tension applications prior to undertaking replacements of suspension strings that utilize the same insulator types?
    i. If no, please explain why not.
    ii. Is the probability of failure higher for insulators in tension applications?

Response:

Hydro One will be prioritizing the replacement of impacted polymer insulators in tension applications ahead of impacted polymers in suspension applications. This is because polymer insulators in a tension configuration are subject to higher electromagnetic fields than those in suspension and are therefore subject to faster degradation of the rubber housing leading to a higher probability of failure.

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B2 - OEB STAFF INTERROGATORY - 059

Reference:

Exhibit B-2-1, TSP Section 2.2

Interrogatory:

a) Please complete the attached spreadsheet, which is based on the spreadsheet provided by Hydro One in response to Undertaking JT 1.24 in EB-2019-0082. In addition, please update any of the previous values that may have changed since the time of the previous application.

Response:

a) Please refer to the attached spreadsheet.

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I-01-B2-Staff-059

Please fill in the shaded cells

As discussed in EB-2019-0082 the information herein cannot be used to determine unitized costs.

		EB-2016-0160 Application/Proposal					EB-2016-0160 DR0		EB-2019-0082 Application/Proposal							EB-2019-0082 DRO			EB-2021-0110 Application/Proposal							
		2014A	2015A	2016F	2017F	2018F	2017F	2018F	2016A	2017A	2018A	2019F	2020F	2021F	2022F	2020F	2021F	2022F	2019A	2020A	2021F	2022F	2023F	2024F	2025F	2026F	2027F
Transformer Portfolio																											
# Replacements		24	24	19	27	22	27	22	18	15	28	20	9	23	19	6	23	15	24	10	21	19	30	18	27	21	24
% of Fleet		3.3%	3.3%	2.6%	3.7%	3.1%	3.7%	3.1%	2.5%	2.1%	3.6%	2.8%	1.3%	3.2%	2.7%	0.8%	3.2%	2.1%	3.3%	1.4%	2.9%	2.6%	4.6%	2.5%	3.7%	2.9%	3.3%
Capital ($M)[2]		132.0	132.0	104.5	148.5	121.0	148.5	121.0	77.3	75.7	193.6	110.3	50.6	131.9	111.1				94.6	69.9							
Circuit Breaker Portfolio																											
# Replacements		83	31	43	66	132	66	132	73	108	155	88	135	105	88	91	204	44	72	67	168	130	88	107	98	146	154
% of Fleet		1.8%	0.7%	0.9%	1.5%	2.9%	1.5%	2.9%	1.5%	2.4%	3.3%	1.9%	2.8%	2.2%	1.9%	1.9%	4.3%	0.9%	1.5%	1.4%	3.5%	2.7%	1.9%	2.2%	2.1%	3.1%	3.5%
Capital ($M)[2]		58.1	21.7	30.1	46.2	92.4	46.2	92.4	42.4	54.7	77.9	47.5	74.3	58.9	50.3				59.1	73.0							
Protection Systems Portfolio																											
# Replacements		610	266	367	449	528	449	528	627	298	325	453	465	370	503	203	657	252	322	242	521	412	443	278	366	456	554
% of Fleet		5.0%	2.2%	3.0%	3.7%	4.4%	3.7%	4.4%	5.1%	2.5%	2.6%	3.6%	3.7%	3.0%	4.0%	1.6%	5.3%	2.0%	2.6%	1.9%	4.2%	3.3%	3.5%	2.2%	2.9%	3.6%	4.4%
Capital ($M)[2]		76.3	33.3	45.9	56.1	66.0	56.1	66.0	57.3	42.8	60.5	64.7	67.8	54.9	76.2				53.9	72.6							
Conductor Portfolio																											
Replacements (km)		93	201	183	192	440	192	440	183	119	51	140	64	483	795	22	298	314	82	81	18	515	19	300	338	235	679
% of Fleet		0.3%	0.7%	0.6%	0.6%	1.5%	0.6%	1.5%	0.6%	0.4%	0.2%	0.5%	0.2%	1.7%	2.7%	0.1%	1.0%	1.1%	0.3%	0.3%	0.1%	1.8%	0.1%	1.1%	1.2%	0.8%	2.4%
Capital ($M)[1]		40.7	58.4	76.9	67.1	143.1	67.1	143.1	68.0	36.5	52.0	137.6	150.8	191.4	211.7	58.6	91.4	96.9	64.6	54.6							
Wood Pole Portfolio																											
# Replacements		897	845	850	850	850	935	850	761	966	735	560	800	800	800	800	800	800	827	796	1,022	1,024	1,076	1,076	1,078	1,082	1,084
% of Fleet		2.2%	2.0%	2.0%	2.0%	2.0%	2.2%	2.0%	1.8%	2.3%	1.8%	1.3%	1.9%	1.9%	1.9%	2.0%	2.0%	2.0%	2.1%	2.0%	2.6%	2.6%	2.7%	2.7%	2.7%	2.7%	2.7%
Capital ($M)		43.6	38.5	38.3	35.3	35.3	38.8	33.9	42.8	41.2	35.3	34.8	51.0	52.0	53.0	51.0	52.0	53.0	39.8	46.9	58.2	52.7	56.5	57.6	58.8	60.0	61.1
Steel Structure Portfolio																											
# Renewal		153	371	462	1250	1600	1145	1600	86	725	1050	220	260	500	500	260	500	500	245	222	498	487	500	500	500	500	500
% of Fleet		0.3%	0.7%	0.9%	2.4%	3.1%	2.2%	3.0%	0.2%	1.4%	2.0%	0.4%	0.5%	1.0%	1.0%	0.5%	1.0%	1.0%	0.5%	0.5%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Capital ($M)		3.8	5.1	8.8	42.5	54.4	39.0	26.2	2.3	42.1	37.7	9.3	11.4	21.8	22.3	11.4	21.8	22.3	11.1	8.1	21.4	22.6	23.6	24.1	24.5	25.0	25.4
Underground Cable Portfolio																											
Replacements (km)		3.1	0	0	0	4.7	0	4.7	2.3	0	0	4.7	0	0	0	0	0	0	0	4.7	0	0	0	0	7.2	0	0
% of Fleet		1.1%	0.0%	0.0%	0.0%	1.8%	0.0%	1.8%	0.9%	0.0%	0.0%	1.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.7%	0.0%	0.0%	0.0%	0.0%	2.6%	0.0%	0.0%
Capital ($M)		20.6	3.5	1.4	2.3	22.5	2.3	22.5	1.7	10.7	16.5	15.0	7.1	32.5	33.6	7.1	32.5	33.6	14.9	7.1	14.2	27.6	41.1	27.4	6.4	1.9	6.6

Notes

[1] EB-2019-0082 Hydro One's Reply Argument, pp105-109.

[2] The capital in-service additions for these asset-types do not reflect a 1:1 ratio to the in-serviced units because additional costs pertaining to the installation may or may not be reflected. This is because the scope of each installation may vary depending on the nature of the integrated investment or failure replacement that is undertaken. A unit cost cannot be derived from these two quantities.

B2 - OEB STAFF INTERROGATORY - 060

Reference:

Exhibit B-2-1, TSP Section 2.5, Pages pp. 28-31

Preamble:

Page 29 at the above reference states that:

Zero tolerance enforcement of the NERC FAC-003 Standard regarding minimum clearances for vegetation growth has led Hydro One to increase its urban vegetation management resulting in higher costs per kilometer.

With respect to the line clearing cost per kilometer ($/km), pages 29-30 at the above reference further states that:

Over the 2023-2027 period, Hydro One aims to achieve line clearing unit costs averaging $2,927, and to execute over 2,100 km annually. Based on customer feedback, Hydro One introduced flexibility into the Vegetation Management Standard for line clearing, such as increased discretion in clearing or trimming incompatible vegetation in border zones of corridors.

Finally, page 31 at the above reference states that:

Over the 2023-2027 period, Hydro One is targeting average brush control unit costs of $1,712 and planning to execute an average of 11,500 hectares annually.

Interrogatory:

a) Please explain how Hydro One arrived at the target line clearing unit cost average of $2,927 for the 2023-2027 period.

b) Please explain why the $2,927 target is reasonable, considering that in 2020 the actual cost was $3,368/km.

c) Please state whether or not zero tolerance enforcement of the NERC FAC-003 standard is a new policy? If so, please indicate when this policy changed. Is this a policy being enforced by NERC, or is it a Hydro One policy? Please explain.

d) Please state how Hydro One is able to introduce flexibility into the vegetation management standard for line clearing while maintaining zero tolerance enforcement of the NERC FAC-003 standard? Please explain or clarify.

e) Please explain how Hydro One arrived at the target brush control cost average of $1,712 for the 2023-2027 period.

f) Please explain why the $1,712 cost is reasonable.

Response:

a) Hydro One's target line clearing unit cost is found by dividing estimated future line clearing costs by total planned accomplishments.

b) The 2023-2027 average line clearing target of $2,927/km is reasonable as Hydro One will focus on clearing urban and ecologically sensitive ROWs that pose a high risk to system reliability. As discussed in TSP Section 2.2, planned work has included a large urban component in the last few years (2018 to 2020), requiring Hydro One to perform an increased volume of notifications to ensure that vegetation maintenance can be executed to standard on urban ROWs. This resulted in a higher unit cost during this period. Hydro One has adjusted its approach to managing these ROWs by targeting urban ROWs that pose a high risk to system reliability in order to lower the line clearing unit cost.

c) Enforcement of the NERC FAC-003 standard is not a new policy. Hydro One is subject to NERC standards which the IESO is responsible for ensuring compliance with.

d) Hydro One is able to provide flexibility to the vegetation management standard for ROWs with 115kV circuits, as these are not governed by NERC FAC-003, and for urban ROWs where community opposition to vegetation maintenance requires flexibility in respect of the clearing width, notwithstanding that this compromise with customers will result in more frequent clearing cycles over time.

e) Hydro One's target brush control unit cost is found by dividing estimated future brush control costs by total planned accomplishments.

f) The 2023-2027 average brush control target of $1,712 per hectare is reasonable as more mechanical brush control will be completed. The cost to mechanically clear brush is slightly higher than manual methods but achieves a better long-term control of the ROW.

B2 - OEB STAFF INTERROGATORY - 061

Reference:

Exhibit B-2-1, TSP Section 2.5, Pages 33-34
Exhibit B-1-1, SPF Section 1.2, Pages 3-13

Preamble:

Page 3 at the second reference states that "It is intended that regional planning is to be undertaken for each of the planning regions identified in the PPWG Report every five years."

Interrogatory:

a) Please provide the PPWG report.

b) With respect to Table 2, Regional Planning Status Summary, on pages 9 and 10 at the first reference, are the months shown in the table those when the steps (i.e. Needs Assessment (NA), Scoping Assessment (SA), etc.) were initiated, or completed?

c) Please provide a revised version of Table 2, updating the status, where applicable, and including a clarification with respect to part b).

d) For regions where Hydro One is the lead transmitter, does Hydro One determine when the needs assessment will be initiated at the beginning of a regional planning cycle?

e) If the response to part d) is 'yes', please explain how Hydro One determines when to initiate the needs assessment for a region. If the answer to part d) is no, please indicate who makes this determination.

f) For the Chatham/Lambton/Sarnia, Niagara, North/East of Sudbury, Renfrew, and St. Lawrence regions, how does Hydro One expect to meet the PPWG Report expectation that regional planning is to be undertaken every five years if, for each of these regions, more than five years has passed since the previous Needs Assessment, and these Needs Assessments have not yet been initiated? Please explain or clarify.

g) Please explain how the response to part f) aligns with Hydro One's claim in Table 34 and Table 35 at the first reference that Hydro One has met 100% of its regional infrastructure planning deliverable obligations, within the allotted time, for the period 2016 to 2020 inclusive, and plans to maintain performance at 100% from 2021 to 2027 inclusive.

Response:

a) Please see link below to the PPWG report:
https://www.oeb.ca/oeb/_Documents/EB-2011-0043/PPWG_Regional_Planning_Report_to_the_Board_App.pdf

b) The month and year shown in Table 2 of Exhibit B-1-1 SPF Section 1.2 refers to the completion date.

c) Please refer to updated Table 2 below.

Table 2 - Regional Planning Status Summary

Region	Sub-region	1st Cycle (2013-2017)				2nd Cycle (2017→)			
		NA	SA	IRRP	RIP	NA	SA	IRRP	RIP
Burlington to Nanticoke	Brant	May, 2014	Sep, 2014	Apr, 2015	Feb, 2017	May, 2017	Aug, 2017	Feb, 2019	Oct, 2019
	Bronte			Jun, 2016					
	Greater Hamilton			*NR*[1]					
	Caledonia-Norfolk		*NR*	*NR*					
Toronto Area	Central Downtown	Jun, 2014	*Note*[2]	Apr, 2015	Jan, 2016	Oct, 2017	Feb, 2018	Aug, 2019	Mar, 2020
	Northern		*NR*	*NR*					
Windsor-Essex		*Note*		Apr, 2015	Dec, 2015	Oct, 2017	Mar, 2018	Sep, 2019	Mar, 2020
GTA North	York	Jun, 2014	*Note*	Apr, 2015	Feb, 2016	Mar, 2018	Aug, 2018	Feb, 2020	Oct, 2020
	Western		*NR*	*NR*					
Greater Ottawa	Ottawa	Jul, 2014	Nov, 2014	Apr, 2015	Dec, 2015	Jun, 2018	Sep, 2018	Mar, 2020	Dec, 2020
	Outer Ottawa		*NR*	*NR*					
Kitchener-Waterloo-Cambridge-Guelph		*Note*		Apr, 2015	Dec, 2015	Dec, 2018	Apr, 2019	May, 2021	Q4, 2021
GTA West	Northwestern	May, 2014	Sep, 2014	Apr, 2015	Jan, 2016	May, 2019	Aug, 2019	July, 2021	Q1, 2022
	Southern			*NR*					
Greater Bruce/Huron		May, 2016	*NR*	*NR*	Aug, 2017	May, 2019	Sep, 2019	Sept, 2021	Q1, 2022
East Lake Superior		Dec, 2014	*NR*	*NR*	Dec, 2014	Jun, 2019	Oct, 2019	Apr, 2021	Oct, 2021

[1] NR: Not Required
[2] Note: The planning activity in the region was already in progress prior to the commencement of the regional planning process; hence the NA/SA was deemed to be already completed by the Study Team.

Region	Sub-region	1st Cycle (2013-2017)				2nd Cycle (2017→)			
		NA	SA	IRRP	RIP	NA	SA	IRRP	RIP
GTA East	Pickering - Ajax - Whitby	Aug, 2014	Dec, 2014	Jun, 2016	Jan, 2017	Aug, 2019	*NR*	*NR*	Feb, 2020
	Oshawa -			*NR*					
Peterborough to Kingston		Feb, 2015	*NR*	*NR*	Jul, 2016	Feb, 2020	May, 2020	Nov, 2021	Q2, 2022
South Georgian Bay/Muskoka	Barrie/Innisfil	Mar, 2015	Jun, 2015	Dec, 2015	Aug, 2017	Apr, 2020	Nov, 2020	Q2, 2022	TBD
	Parry Sound/ Muskoka			Dec, 2015				Q2, 2022	
London Area	Greater London	Apr, 2015	Aug, 2015	Jan, 2017	Aug, 2017	May, 2020	*NR*	*NR*	Q1, 2022
	Alymer-			*NR*					
	Strathroy			*NR*					
	Woodstock			*NR*					
	St. Thomas			*NR*					
Sudbury/Algoma		Mar, 2015	*NR*	*NR*	Jun, 2016	Jun, 2020	*NR*	*NR*	Dec, 2020
Northwest Ontario	North of Dryden	*Note*	Jan, 2015	Jan, 2015	Jun, 2017	Jul, 2020	Jan, 2021	Q2, 2022	TBD
	Greenstone - Marathon			Jun, 2016					
	Thunder Bay			Dec, 2016					
	West of Thunder Bay			Jul, 2016					
Chatham/Lambton/Sarnia		Jun, 2016	*NR*	*NR*	Aug, 2017	Sept, 2021	Q1, 2022	Q3, 2023	TBD
Niagara		Apr, 2016	*NR*	*NR*	Mar, 2017	May, 2021	Aug, 2021	Q4, 2022	TBD
North/East of Sudbury		Apr, 2016	*NR*	*NR*	Apr, 2017	May, 2021	Aug, 2021	Q1, 2023	TBD
Renfrew		Mar, 2016	*NR*	*NR*	Jul, 2016	May, 2021	Aug, 2021	Q4, 2022	TBD
St. Lawrence		Apr, 2016	*NR*	*NR*	Jul, 2016	Sept, 2021	*NR*	*NR*	Q1, 2022
North of Moosonee		Hydro One Transmission is not the lead transmitter in this region.							

d) Yes, for regions where Hydro One is the lead transmitter, Hydro One (in collaboration with the IESO and distributors) determines when the needs assessment will be initiated at the beginning of the regional planning process.

e) Hydro One determines when to initiate the needs assessment for a region, based on the following planning triggers (as outlined in Exhibit B-1-1 SPF Section 1.2):

- initiate a Needs Assessment on regularly scheduled interval (i.e. within five years of the completion date of the previous Needs Assessment); or,
- early initiation of a Needs Assessment in light of emerging need(s) in the region; or,
- to address a policy directive that may require an early initiation of a Needs Assessment.

f) Hydro One aims to initiate a Needs Assessment within five years of the completion date of the Needs Assessment from the previous planning cycle. In the case of the Chatham/Lambton/Sarnia, Niagara, North/East of Sudbury, and Renfrew regions, the second cycle Needs Assessment was initiated within five years of the completion date of the first cycle Needs Assessment, as noted in the table below. In the case of the St. Lawrence region, Hydro One has discovered an oversight during the process of responding to this Interrogatory, that the second cycle Needs Assessment for the St. Lawrence region was not initiated precisely within five years of the previous Needs Assessment completion date. This oversight is disclosed in the 2021 Regional Planning Annual Status Report.

Region	1st Cycle NA Completion	2nd Cycle NA Initiation
Chatham/Lambton/Sarnia	June, 2016	June, 2021
Niagara	April, 2016	March, 2021
North/East of Sudbury	April, 2016	February, 2021
Renfrew	March, 2016	March, 2021
St. Lawrence	April, 2016	July, 2021

g) Please see response to part (f) above. Other than the minor oversight noted for St. Lawrence in 2021, Hydro One has met 100% of its regional infrastructure planning deliverable obligations within the allotted time over the 2016 to 2020 time period as noted in Table 34 in Exhibit B-2-1 TSP Section 2.5. Furthermore, this oversight does not change the targets going forward in Table 35 or Hydro One's ability to accomplish the targets over the 2023 to 2027 period.

B2 - OEB STAFF INTERROGATORY - 062

Reference:

Exhibit B-2-1, TSP Section 2.5, Pages 34-35

Preamble:

Page 34 at the above reference describes the "End-of-Life Right-Sizing Assessment Expectation" measure as the following:

This qualitative measure gauges Hydro One's performance in meeting the expectation that no more than two (2) assessment opportunities for right-sizing end-of-life equipment are missed during the year, for all regions assessed in the year as part of the Regional Planning Process. The number of regions assessed may vary in each year.

It is also stated that "Based on condition assessment, this application includes over 70 EOL assets projects that have been assessed to be replaced with right size consideration."

Interrogatory:

a) Please list the assessed regions that the evaluation of this measure was based on for each of the years 2018, 2019 and 2020.

b) Please provide for the same years the number of opportunities for right-sizing end-of-life equipment that were missed during each of these years, for the same regions as in part a) above.

c) Please describe any opportunities for right-sizing end-of-life equipment that were identified in response to part b).

d) Please state how many of the 70 EOL assets that have been assessed to be replaced with right size considerations that are included in this application were right-sized. Please confirm that the remainder of the 70 EOL assets were replaced like-for-like or describe other outcomes.

e) Please identify seven examples of assets that were right-sized that are included in this application, or as many as indicated in response to d), if that number is less than seven.

Response:

a) Each of the following regions listed below were assessed taking into account evaluation of need and load forecast between 2018 and 2020:

- Burlington to Nanticoke
- GTA East
- GTA North
- Greater Ottawa
- Metro Toronto
- Sudbury / Algoma
- KWCG
- Windsor-Essex Region

b) There were no opportunities missed for right-sizing equipment for regions assessed in 2018, 2019 and 2020.

c) Please see response to part (b) above, no opportunities were missed.

d) This Application includes 10 transformers assessed to be replaced with right size consideration (8 with a larger size, 1 with smaller size and 1 was decommissioned / retired) as noted in table below in response to part (e). The remainder were assessed for like-for-like replacements.

e) Please see table below for assets that were identified for right-sizing in this Application.

Description	JRAP ISD Reference	Transformers Decommission /Retire	Transformers Replacement with Smaller Size	Transformers Replacement with Larger Size
Longueuil TS: T3, T4 Replacement	T-SR-03.20			Y
Russell TS - T2 & Comp Replacement	T-SR-03.39			Y
Slater TS T2/T3 & Component Replacement	T-SR-03.10			Y
Orangeville TS: T1, T2 & Component Replacement	T-SR-03.07		Y	
Orangeville TS: T3, T4 & Component Replacement	T-SR-03.07			Y
Parry Sound TS: Component Replacement	T-SR-03.01			Y
Algoma TS: Component Replacement	T-SR-01.18			Y
Elliot Lake TS: Component Replacement	T-SR-03.26	Y		
Keith TS: T11, T12 & Component Replacement	T-SR-01.04			Y
Lauzon TS: T6, T8 & Component Replacement	T-SR-03.19			Y

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B2 - OEB STAFF INTERROGATORY - 063

Reference:

Exhibit B-2-1, TSP Section 2.7, Pages 9-12

Preamble:

This section discusses the TSP Investment Planning Process and the approaches used for prioritization and optimization of investments.

Interrogatory:

a) Please explain how the magnitude and pacing of the draft plan is determined. For example, are these based on total risk mitigated, risk level remaining, or total investment?

Response:

a) Hydro One has adopted a multi-step approach to determine the magnitude and pacing of the draft plan, which is ultimately optimized into a final plan that reflects a careful balance between:

- asset-related needs of the system based on factors such as asset condition, performance, obsolescence, and environmental and regulatory compliance requirements;
- customer needs and preferences relating to priority outcomes (including reliability of service) and preferred pacing to mitigate risks on the transmission system;
- regional infrastructure needs and service requirements for timely grid access by customers; and
- Investment cost and overall impact on customer rates.

A cornerstone of the investment planning process is the current state assessment of Hydro One's assets and asset-related needs, with asset condition being the primary consideration (as detailed in Exhibit B-2-1, TSP Section 2.2). Notably, System Renewal investments are underpinned by asset condition data from ongoing asset needs assessment. A significant number of key transmission assets have been verified through condition assessments and diagnostic testing to be in poor condition. Deteriorated assets pose a material risk to Hydro One's transmission system performance, public and employee safety, and compliance with statutory and regulatory obligations. System Renewal candidate investments have been identified and prioritized based on asset condition, their criticality, performance, and obsolescence criteria; while also considering customer needs and preferences and Hydro One's ability to execute the renewal work. In addition, Hydro One plans System Access and

System Service investments based on its mandatory service and system planning obligations, including regional infrastructure needs to address system constraints, enable new load growth and facilitate access and new connections to the transmission system, as well as evolving regulatory standards related to transmission system planning, design and operations.

As outlined in Exhibit B-1-1, SPF Section 1.6, in 2019 and 2020, a comprehensive, two-phase customer engagement exercise was conducted in conjunction with the planning process. Feedback from Phase 1 provided valuable input for the development of initial plan scenarios. Overall, transmission customers prioritized reasonable rates and reliable service. In respect of reliability outcomes, they generally valued reduced restoration duration and fewer outages due to extreme weather. With respect to trade-offs, a majority wanted to see the current level of investment to replace aging transmission infrastructure be maintained or increased, investment in a more reliable transmission system (either as part of ongoing renewal or proactive investments), and investment in power quality improvements. These customer priorities directly informed the candidate investments (including the appropriate pacing for the planning period) that underpin the investment plan.

Subsequently, as described in Exhibit B-1-1, SPF Section 1.7, investments are prioritized within the preliminary plan by considering the efficiency of an investment in terms of risk mitigated per dollar. The operational risks associated with identified needs and corresponding investment candidates are assessed and prioritized to arrive at an investment pacing that aims to maximize value for customers (i.e., achieving relevant outcomes and mitigating the most risk while minimizing cost impact). At the prioritization and optimization stage, the total risk being mitigated by each investment is also assessed to identify investments which mitigate a significant amount of total risk, and is used as a cross-check to verify the ultimate inclusion or exclusion of any investments that were initially prioritized out of the plan based on risk efficiency. Such investments are subsequently reviewed during Hydro One's challenge sessions and trade-off discussions to determine whether funding should be reallocated to address and mitigate any remaining unacceptable operational risks. This approach allows for investments that may be less efficient on a per-dollar basis but mitigate significant total risk to be adequately considered and, where appropriate, included in the draft plan.

Customer engagement feedback, in addition to verified condition data, provided a key input for the development of Phase 2 investment scenarios (with corresponding service outcomes and rate impacts). By engaging customers to provide feedback on trade-off options, Hydro One was able to consider and reflect this feedback as appropriate through its investment decisions. Through the second phase of customer engagement, further customer feedback was collected on the proposed pacing of investments, in the context of representative costs and outcomes.

Through the process highlighted above and detailed in the TSP, the resulting TSP envelope reflects an appropriate balance between costs and outcomes, consistent with customer preferences identified during Phase 1 and subsequently validated during Phase 2.

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B2 - OEB STAFF INTERROGATORY - 064

Reference:

Exhibit B-2-1, TSP Section 2.8, Page 13

Preamble:

At the above reference, Hydro One states that:

For the five year period, individual equipment replacements have been bundled into integrated, larger scale station and line projects in order to address multiple assets and system needs at a specific station or circuit within a single investment. This integrated approach enables efficient project delivery by optimizing project planning and execution, minimizes outage requirements and customer impacts, and achieves outcomes valued by customers (as further discussed in SPF Section 1.6).

Interrogatory:

a) Does Hydro One only bundle investments that have been individually validated and that would be pursued during the plan term?

b) If the response to part a) is no, are investments, which by themselves may not be needed yet or are not cost effective bundled with investments that would individually qualify?

c) If the answer to b) is yes, how does Hydro One evaluate whether the cost savings resulting from bundling investments outweigh the early triggering of investments in assets that otherwise would have remained untouched during the plan term?

Response:

a) For clarity, Hydro One bundles individual assets into a single integrated investment at a particular station or circuit. Through the Asset Management Process, detailed in TSP Section 2.7, driven by the asset risk assessment (ARA) process, individual equipment is identified for replacement, underpinned by condition. The equipment identified through the ARA process is grouped into a single integrated candidate investment that is put forth for consideration in the Investment Planning Process, detailed in TSP Section 2.7.

b) Assets “which by themselves may not be needed yet or are not cost effective” are not included in the scope of the candidate investments put forth for consideration in the Investment Planning Process.

c) See response to part b).

B2 - OEB STAFF INTERROGATORY - 065

Reference:

Exhibit B-2-1, TSP Section 2.9, Page 8

Preamble:

At the above reference, it is stated at Lines 6 to 10:

Over the 2023-2027 period, Hydro One plans to invest an average of $1,452M per year in Transmission capital, for a total of approximately $7,258M to maintain transmission reliability performance, to address customer needs and preferences, and to mitigate asset and operational risks by accomplishing the planned capital work. Hydro One's historical capital spending relative to the 2023-2027 amounts is shown in Table 5 and Figure 1 [Table 5 and Figure 1 not included in preamble].

Interrogatory:

a) Please provide a detailed justification for the lack of pacing demonstrated by the proposed significant step increase in capital expenditures between 2022 and 2023, with particular focus on the step increase in Renewal spending.

b) Please state whether or not Hydro One has quantified the risks of adopting a more paced approach to implementing System Renewal spending, for example, by limiting annual System Renewal spending equivalent to the past 4-year average plus inflationary escalation?

   i. If yes, please provide the anticipated reliability performance degradation associated with this spending level.

   ii. If no, explain why not.

c) If Hydro One was limited to the past 4-year average spending levels plus inflationary escalation, please identify which projects would be eliminated or deferred.

d) If Hydro One was limited to the past 4-year average spending levels plus inflationary escalation, which programs would have the lowest risk impact associated with the decreased spending forecast?

Response:

a) Hydro One disagrees with the premise of the question and believes that its proposed plan is appropriately paced. Please refer to Exhibits I-1-B2-Staff-063 and I-1-B2-Staff-066.

b) Hydro One has not assessed a scenario that limits annual System Renewal spending equivalent to the past 4-year average plus inflationary escalation, however alternative pacing scenarios were developed as part of the investment planning process and presented to customers during Phase 2 of Customer Engagement. The slower pace scenario represents a capital trajectory that is about a 2.2% year-over-year increase relative to the current actual/forecasted 4-year average (2019 to 2022). With regards to System Renewal investments, which customers had previously indicated a preference to see the current level of investment for replacing aging transmission infrastructure maintained or increased, Hydro One presented three scenarios for stations and lines investments as summarized below:

		Accelerated Pace	Draft Plan	Slower Pace
Transmission Lines	**Approach vs. Draft Plan**	+21%	-	-6%
	Expected Outcome	Replace 51% of lines (conductors) in poor condition to moderately improve current level of safety and overall health of transmission lines, and keep rate increases steadier in the future.	Replace 42% of lines (conductors) in poor condition to maintain current level of safety and overall health of transmission lines, and keep rate increases steadier in the future.	Replace 39% of lines (conductors) in poor condition and lower current level of safety and reliability performance. Need for additional investment later on will likely lead to steeper rate in the future.
Transmission Stations	**Approach vs. Draft Plan**	+20%	-	-20%
	Expected Outcome	Improve the overall health of the transmission stations infrastructure and reduce the risk of equipment failure, keeping future rate increases at a steadier rate.	Maintain the overall health of the transmission stations infrastructure and sustain current performance and environmental risk, keeping future rate increases at a steadier rate.	Focus on replacing only the most critical infrastructure now. This increases performance and environmental risks and creates the need for additional investment later on, leading to steeper rate increases in the future.

Phase 2 of Customer Engagement provided customers with an opportunity to confirm the outcomes that they value, as well as the level of spending and mix of investments that they would like to see included in the investment plan. In general, a majority of customers preferred the draft transmission investment plan (Scenario 2) over the accelerated or slower paced options. This input ultimately informed the finalization of the investment plan.

c) If Hydro One were to be limited to the past 4-year average spending levels plus inflationary escalation, then Hydro One would need to re-run and re-engage its prioritization process for candidate investments as described in Exhibit B-1-1, SPF Section 1.7 to determine the reductions and deferrals that would be required.

d) Please refer to response in part (c) above.

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B2 - OEB STAFF INTERROGATORY - 066

Reference:

Exhibit B-2-1, TSP Section 2.9, Page 11

Preamble:

Based on Table 7 at the above reference, the average actual/forecast system renewal expenditure for 2018 – 2022 inclusive is $816.78 million. The planned average system renewal expenditure, for 2023-2027 inclusive is $1,239.84 million. This is a 51.8% increase in the five-year average.

Interrogatory:

a) Please explain why the proposed 51.8% increase in the five-year average system renewal expenditure is reasonable.

Response:

a) As detailed in the TSP, the System Renewal plan for 2023 to 2027 is underpinned by, and necessary to address, the verified condition of deteriorated and at-risk lines and stations assets (detailed in Section 2.2). Hydro One's System Renewal plan must be assessed at the investment and asset level and not period over period comparisons. Since the last transmission application, the population of poor condition assets has continued to exist or increased across major asset classes. As the asset fleet continues to deteriorate, based on verified condition assessments, Hydro One has undertaken prudent transmission system planning that reflects a rate of planned replacements that maintains the system's performance and reliability. Otherwise, increased failures of deteriorated equipment will lead to higher customer impacts from delivery point interruptions, escalated operational constraints/risk from the loss of supply paths, safety hazards for the public and employees, and/or potentially costly and protracted reactive repairs and replacements.

With asset condition serving as a primary basis for identifying investment needs, the overall year-over-year pacing of investments is also informed by other aspects of asset risk assessment including: criticality, performance, and obsolescence; feedback from a comprehensive two-phase customer engagement process; mandatory compliance and customer service obligations; as well as other relevant considerations and studies such as asset and system needs identified through regional planning and Hydro One's ability to execute the proposed System Renewal plan.

It is noteworthy that the proposed TSP does not address all known poor condition assets (and the associated risk) over the 5-year test period, nor does it seek to address new discoveries of poor condition assets from ongoing condition assessments over the test period. Through Hydro One's asset management and investment planning process, System Renewal investments have been selected and prioritized to target the work that most efficiently mitigates the most risk and yields the highest value for customers.

Notwithstanding that a period over period comparison is not appropriate as discussed above, the 2018 to 2022 period posed by the interrogatory is not the appropriate baseline to assess Hydro One's 2023-2027 System Renewal capital plan. As discussed below, the 2020-2022 period provides a more appropriate reference point, as it reflects the most recent OEB-approved System Renewal plan underpinned by asset and system needs/conditions that in large part continue to be relevant in this Application.

Hydro One's 2018 and 2019 System Renewal capital plan reflected planning considerations from 2016 (EB-2016-0160) that differed from the system needs that Hydro One considered in the 2020-2022 period or for the proposed 2023-2027 plan. Notably, certain critical investments in the 2020-2022 TSP (and continuing in the current plan) had not yet risen to a critical level of planning priority or matured into full execution in 2018 and 2019. This included investments to replace Air Blast Circuit Breakers and poor condition conductors, which were materially higher in the 2020-2022 plan than in the 2018 and 2019 plans and are continuing into the 2023-2027 period. Further, stations investments proposed and initiated as part of the 2020-2022 TSP are now in execution and remain ongoing during the 2023-2027 period, in addition to new renewal work that must be undertaken in 2023-2027 to address identified system and asset needs. Moreover, due to materially higher than expected System Access and System Service investments that are required in 2021 and 2022, Hydro One had to defer $200M in System Renewal investment to the 2023-2027 period (see C-VECC-018). These System Access and System Service investments were not a factor in the 2018 and 2019 time period.

Consequently, the 2020-2022 OEB-approved System Renewal expenditures (EB-2019-0082) provide a more appropriate reference point. The 2020-2022 OEB-approved System Renewal expenditures (along with 2023-2027 forecast for the current Application) are shown in the table below.

($Millions)	EB-2019-0082 (OEB Approved)[1]				EB-2021-0110 (Forecast Period)[2]					
	2020	2021	2022	**Avg.**	2023	2024	2025	2026	2027	**Avg.**
System Renewal	810.1	982.8	958.2	**917.0**	1,178.0	1,228.3	1,251.6	1,277.3	1,264.0	**1239.8**

The proposed average annual System Renewal expenditure for 2023-2027 is 35.2% higher over the average annual approved System Renewal funding for 2020-2022. When normalizing for inflation (indexing back to 2020), this percent difference is approximately 25%.

[1] TSP Section 2.9, Table 3
[2] TSP Section 2.9, Table 7

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B2 - OEB STAFF INTERROGATORY - 067

Reference:

Exhibit B-2-1, TSP Section 2.9, Page 15
Exhibit B-2-1, TSP Section 2.11, T-SS-03

Preamble:

At the second reference above, Hydro One states that "On December 2, 2020, Hydro One applied for "Leave to Construct" approval under Section 92 of the Ontario Energy Board Act (EB-2020-0265)." The same reference goes on to say that "On April 22, 2021 Hydro One received OEB-approval for its "Leave to Construct" application to replace the conductors on the 230kV circuits M30A and M31A."

Interrogatory:

a) Please add the Merivale Ts To Hawthorne Ts: 230kv Conductor Upgrade project (T-SS-03) to Section 2.9.4 (first reference), Table 9.

b) Please confirm that with the addition of investment T-SS-03, Section 2.9.4 is complete.

Response:

a) Please see below for the revised Table 9 to include the Merivale TS to Hawthorne TS: 230kV Conductor Upgrade project.

S92 OEB Case	ISD Ref.	Project	S92 Project Total ($M)	S92 Filed In-Service Date	TSP Forecast Total ($M)	TSP Forecast In-Service Date
EB-2020-0188	T-SR-18	Power Downtown Toronto (C5E/C7E)	$107.8	Q4 2024	$108.8	Q1 2025
EB-2018-0257	T-SA-02 (T2R/Timmins TS)	Côté Lake Mine Connection Project (IAMGOLD)	$71.8	T2R/Timmins TS: Q3 2020	$65.1	T2R/Timmins TS: Q3 2023
EB-2021-0136*	T-SS-04	Richview x Trafalgar Reconductoring Project	$59.0	Q2 2026	$53.2	Q1 2026
EB-2020-0265	T-SS-03	Merivale TS to Hawthorne TS: 230kV Conductor Upgrade	$21.3	Q4 2023	$21.3	Q4 2023

**This S92 proceeding is ongoing and final approval is pending.*

b) Yes. Exhibit B-2-1, TSP Section 2.9.4 includes all projects that Hydro One has received and/or applied for Leave to Construct where capital expenditures are forecast during the test period.

Witness: REINMULLER Robert

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B2 - OEB STAFF INTERROGATORY - 068

Reference:

Exhibit B-2-1, TSP Section 2.9, Attachment 2, Pages 9-10, 13

Preamble:

On page 13, Hydro One states that:

The Lennox TS Bulk: ABCB Component Replacement Project is forecasting to exceed its total budget by $33.9M as a result of work definition issues that resulted in scope evolution and additions subsequent to the project's funding approval, as well as, a reprioritization of resources for customer driven work. Finally, the Cherrywood TS 230 kV Bulk: ABCB and Component Replacement project is forecasting to exceed its total budget by $21.3M due to multiple execution factors including complexity of replacing the station service systems, setup of site facilities, overruns on two buildings, relocation of fiber cables, and scope additions.

Interrogatory:

a) Please state why the Bruce B ABCB replacement project (T-SR-02.03) is not included in Table 2 of Attachment 2.

b) Please state the ongoing risks that have been identified for each of the following projects and how they are being mitigated?

   i. Beck 2 TS, ABCB Replacement & Yard Upgrade

   ii. Cherrywood TS 230kV BULK; ABCB &Component Replacement

   iii. Lennox TS BULK: ABCB Component Replacement

   iv. Middleport TS ABCB Replacement

   v. Nanticoke TS ABCB Replacement

   vi. Bruce B ABCB Replacement

Response:

a) The Bruce B ABCB project was not included, as it did not meet the inclusion criteria, being a project or program with planned or actual in-service additions in 2020 of $3M or more.

b) All projects can encounter cost and schedule risks resulting from outage constraints, delays in external approvals, material delivery delays, site conditions, customer needs, priorities and emergent investments. ABCB replacement projects in particular are more complicated due to their multi-phased implementation and coordination of work affecting these critical network stations, which leads to more complex outage staging plans. Below are several risks and mitigating measures that Hydro One has in place to ensure successful delivery of these ABCB replacement projects.

Risk: Adherence to complex outage plans associated with ABCB projects
Mitigation: To reduce the risk associated with complex outage plans the following mitigating measures are in place:

- Outage staging plans and construction execution plans are reviewed with impacted customers on a regular basis to provide them with upfront visibility to the required outages and ensure coordination between Hydro One and customers plans
- Engage the IESO on potential outage contingency plans
- Ongoing, regular coordination with internal outage planning and OGCC teams to help reduce any delays

Risk: Discovery of unexpected underground facilities and contaminated soils
Mitigation: To reduce the risk associated with underground facilities and contaminated soils the following mitigating measures are in place:

- Prudent upfront sub-surface investigation/studies during project definition phases
- Allocation of sufficient contingency to absorb any incremental cost increase should the risk materialize

Risk: Delays due to competing projects at same site or surrounding infrastructure (i.e. emergency transformer replacements, customer connections, etc.)
Mitigation: To reduce the risk associated with competing projects at the same site the following mitigating measures are in place:

- Maintain close coordination between the different project teams to minimize and avoid potential issues
- If necessary, place project on hold to develop a new work plan that accommodates new requirements due to the emergency or customer work

Risk: Increased reliance on existing poor condition infrastructure, especially during abnormal configurations throughout project execution, and the resultant cost/schedule impacts that arise.

Mitigation: To reduce the risk associated with the unexpected failure of existing poor condition infrastructure, the following mitigating measures are in place:

- Perform more upfront engineering and procurement work to help mitigate the impact of unexpected equipment failures and to allow the project schedule to be quickly shifted to focus on the assets should any fail before project execution
- Utilize a greenfield approach where possible instead of in-situ replacement
- Incorporation of bridging and hardening tactics as part of project planning and execution

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B2 - OEB STAFF INTERROGATORY - 069

Reference:

TSP Section 2.11, T-SA-03, Page 1
Transmission System Code, Section 6.3.10

Preamble:

The application notes this investment in Halton TS is required to facilitate a request from Milton Hydro to increase transformation capacity to accommodate forecasted customer load growth and the required in-service date identified by Milton Hydro is Q2 2027.

The proposed project involves the construction of a new 230/27.6kV DESN station at the existing Halton TS site. Table 2 indicates the Gross Investment Cost is $34.9 million and the Capital Contributions amount to $26.9 million. Table 2 also indicates Capital Contributions begin in installments three years *before* the station goes into service with $24.2 million recovered from Milton Hydro before 2027. The application notes "capital contributions will be determined as per Hydro One's Transmission Customer Contribution Policy".

OEB staff notes that section 6.3.10 of the Transmission System Code (TSC) states:

Where the security deposit is in a form other than cash, the transmitter shall return the security deposit to the customer once the customer's facilities are connected to the transmitter's transmission facilities and any capital contribution has been paid.

In other words, a security deposit can be required before an asset is connected to the system, which does not need to be a cash payment (e.g., can be a letter of credit under s.6.3.11), and any capital contribution payment is required when the asset goes into service.

OEB staff also notes that section 6.3.19 was added to the TSC in December 2018 to allow for the capital contribution to be paid by LDCs in installments over five years (rather than through a single payment) starting at the time the asset goes into service.

Section 6.3.19 of the TSC states "the interest charges shall accrue monthly commencing on the date the connection asset goes into service … as part of each installment payment."

OEB staff further notes that this is one example where the application shows capital contributions being required before the in-service date. Another example is T-SA-09 (New Transformer Station in Northern York Region).

Interrogatory:

a) Please explain why Hydro One is requiring virtually all the capital contribution amounts to be paid before the in-service date.

b) Please provide the document setting out Hydro One's "Transmission Customer Contribution Policy".

c) Please confirm that Hydro One expects to recover only $8 million (of the $34.9 million) in rates over the next 25 years (i.e., "low risk" economic evaluation period) from Milton Hydro.

d) Please clarify the amount of excess capacity on the new DESN station and please also identify whether or not the station could be sized to better meet the customer's capacity needs.

Response:

a) The project costs and capital contributions are still preliminary, as noted in Exhibit B-2-1, TSP Section 2.11, ISD T-SA-03 and the exact details will be established in consultation with the customer. At this time, Hydro One has assumed that the capital payments will be made in advance as the work proceeds to reduce the amount of interest charges incurred during construction and therefore reduce the project cost.

b) Please see Attachment 1 for Section 2.5 of the Hydro One Transmission Connection Procedures; which details the Economic Evaluation Procedure used by Hydro One for determining the capital contribution in accordance with the Transmission System Code.

c) Confirmed, as noted in ISD T-SA-03 in Exhibit B-2-1, TSP Section 2.11, Hydro One forecasts to recover $8 million through connection rate revenues over 25 years to fully recover the cost of the project. However, as indicated in Exhibit B-2-1, TSP Section 2.11, ISD T-SA-03 the project costs and capital contributions are considered preliminary and will be finalized once the project is placed into service.

d) Hydro One utilizes standard station designs to design and build the appropriately sized station to meet the customer's load growth requirements. At the time of filing, the proposed project was for the installation of a DESN with two 75/125 MVA transformers, as the load forecast would result in exceeding the capacity of the smaller standard DESN design before the 25-year period was over. This design is not only more cost effective, but the larger transformers allow more flexibility to back up other neighboring stations in the event of outages as well as accommodate unforeseen load growth.

Following the submission of this Application, the customer has revised their 25-year load forecast. With the increased load forecast, the station is now expected to only have 0-15MW of available capacity remaining by the end of the 25-year period.

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Section 2.5

ECONOMIC EVALUATION PROCEDURE

INTRODUCTION

Hydro One's Economic Evaluation Procedure was developed to meet the requirements of section 6.5.2 of the Transmission System Code (the Code). This procedure involves performing a financial evaluation of the relevant costs and revenues for new or modified load connections. The financial evaluation is carried out according to the methodology and inputs prescribed in the Code. To perform the evaluation, Hydro One uses a discounted cash flow model. The model and its assumptions are described below.

HYDRO ONE'S DISCOUNTED CASH FLOW MODEL

Overview

Hydro One uses its discounted cash flow (DCF) model to assess project economic feasibility and determine any contribution-in-aid-of-construction required for new or modified transmission load connections. The model assesses financial impacts of new connection projects on the basis of the relevant revenues and costs. The following revenue and cost elements are included:

- the up-front capital costs for new or modified connection facilities
- on an exception basis, capital costs for new or modified network facilities required to serve the connection as per section 6.3.5 of the Code
- fully allocated overheads on capital and interest during construction (AFUDC) for work performed by Hydro One
- advancement costs only, where Hydro One has planned a new or modified connection facility and moves the planned date forward to accommodate a customer as per section 6.5.2(d) of the Code
- for connection facilities built by a 3rd party and transferred to Hydro One, the transfer price including applicable Hydro One costs and charges
- an estimate of working capital requirements associated with the new or modified connection

Over the economic evaluation period:

- relevant transmission line and/or transformation connection and/or network (on an exception basis per section 6.3.5 of the Code) tariff revenue generated by the new or modified connection
- estimated OM&A costs to operate, maintain and administer the new connection, including property and capital taxes and excluding interest, which is accounted for in the discount rate
- applicable income taxes and income tax shields

A capital contribution will be required from the customer to make up any shortfall between the present value of the costs of the connection facility and the present value of revenues, as indicated by the DCF analysis.

The methodology and assumptions of the DCF model are consistent with the Transmission System Code and specifically the requirements outlined in section 6.5.2 and Appendix 4 –

Customer Financial Risk Classification, and Appendix 5 – Methodology and Assumptions for Economic Evaluations.

Key Assumptions Used in the Model

Economic Evaluation Periods

The economic evaluation periods that are defined in section 6.5.2 (b) and Appendix 4 of the Code are as follows:

- 5 years for high-risk connections
- 10 years for medium-high-risk connections
- 15 years for medium-low-risk connections
- 25 years for low-risk connections

More information about the methodology used to determine the appropriate economic evaluation period is provided below.

Actual or Estimated Capital Costs

The economic evaluation may be calculated initially using estimated costs, provided that subsequently the evaluation is re-calculated based on actual costs. Ordinarily this recalculation will occur within 180 days after the in-service date.

Connection Revenue

Revenue for transmission related connection projects is based on project load information and OEB-approved Line Connection and Transformation Connection tariffs. Revenue is derived from that part of the load customer's new load that exceeds the normal supply capacity of any connection facility already serving that customer, and which will be served by a new or modified connection facility. Any customer's assigned capacity transferred from an existing connection facility already serving the customer will not be credited to the customer's new connection facility revenues. Line connection and transformation connection facilities are subject to separate economic evaluations. Historic revenues and sunk costs are excluded.

Operating, Maintenance and Administrative Costs

OM&A costs are system average estimates for transformation connection and/or line connection facilities as determined and updated by Hydro One.

Incremental Working Cash Requirements

Forecast incremental working cash requirements are estimated based on Hydro One's transmission lead-lag study results applied to project OM&A costs, consistent with an OEB approved working cash methodology.

Allowance for Funds Using During Construction (AFUDC)

Project capital costs include interest during construction (AFUDC) up to the in-service date. The AFUDC rate is the standard interest capitalization rate used for all Hydro One capital projects.

Income Taxes and Net Large Corporation Tax (LCT)

Income taxes, including large corporation tax and applicable surtaxes, and Ontario capital tax, are based on current or future enacted tax rates. Property taxes are based on a transmission system average rate.

After-tax Discount Rate Used for NPV Calculations

The project discount rate is based on Hydro One's prospective capital mix, debt and preference share cost rates, income taxes, and the most recent OEB approved rate of return on common equity.

Timing of Expenditures

Project cash flows are present-valued to the in-service date (time zero). Up-front capital expenditures are treated as occurring at the beginning of the period for discounting purposes. Future capital expenditures, annual connection rate revenues and annual operating and maintenance costs are treated as occurring at the mid-point of the year in which they occur.

Customer Risk Classification

The information below is consistent with Appendix 4 of the Code and is applicable to load connections.

New or Modified Connections that are not Project Financed

For a new or modified connection that is not being financed by the load customer on a "project financing" basis, Hydro One will use a bond rating provided by the customer from a known bond rating agency to determine the risk classification.

Where no bond ratings are available for the customer, Hydro One will use the appropriate Altman Z model (for public industrial companies, private industrial companies, or non-industrial companies), as the case may be, if the necessary information to complete the analysis is available. Hydro One will normally require the customer to provide a copy of its most recent 3 years of audited financial statements in order to do the Altman Z analysis. Where audited financial statements are not available, Hydro One may, at its discretion, use un-audited financial statements or other similar information. If the results of the Altman Z model appear anomalous, Hydro One will use the Kaplan-Urwitz model as a secondary methodology. See below for details on the Altman Z model and the Kaplan-Urwitz model. Also see Appendix 1 at the end of this Procedure for further information.

Where Hydro One considers that the risk classification that results from the application of the above methods produces an anomalous result, Hydro One may, with the customer's consent, assign a different risk classification to the new or proposed connection. Where the customer does not consent, Hydro One may apply to the OEB for approval to determine the customer's risk classification using an alternate methodology.

Where a load customer has not provided Hydro One with some or all of the information necessary to determine the customer's Altman-Z or Kaplan-Urwitz score, Hydro One may use estimates based on comparable information provided by similar customers. Where no such comparable information is available or where Hydro One considers that the customer's circumstances are such as to render comparisons with similar customers inappropriate, Hydro One may classify the risk associated with the proposed new or modified connection as high risk.

Where the new connection is for a project having a finite life (e.g., a new mine with 10 years of proven reserves), the economic evaluation period will be based on the life of the project or the risk rating of the customer, whichever is less.

New or Modified Connections that are Project Financed

For a new or modified connection that is being financed by the load customer on a "project financing" basis, the customer's risk classification will be determined by the type and amount of security provided. Ordinarily a parental guarantee from an entity with an acceptable credit rating will be required. With an acceptable parental guarantee, the risk classification of the project will be based on the risk of the parent, subject to the exception noted above for finite-life projects.

Where acceptable security is not provided, the project will be assigned a high-risk classification.

Risk Horizon Table

Bond ratings or Altman Z scores or Kaplan-Urwitz scores will determine the customer's risk classification according to the tables below.

Risk Horizon Table
Bond Rating and Altman Z Score

Bond Rating*	Altman Z – Score**			Risk Profile	Risk Horizon
	Public Industrial	Private Industrial	Private Non-Industrial		
CCC and below	<1.81	<1.23	<1.10	High Risk	5 Years
B – BB	1.81 – 2.67	1.23 – 2.59	1.10 – 2.32	Medium High Risk	10 Years
Industrial BBB – AAA Non-industrial BBB	2.68 – 2.99	2.60 – 2.90	2.33 – 2.60	Medium Low Risk	15 Years
Non-industrial A - AAA	>2.99	>2.90	>2.60	Low Risk	25 Years

* Based on DBRS rating scale. Investment grade credits qualify for risk ratings of 15 years and above. Non-investment grade credits qualify for risk ratings of less than 15 years. Equivalent ratings from other rating agencies would apply if deemed suitable by Hydro One.

** Public non-industrial companies or other entities that do not fall within the compass of one of the 3 Altman Z models will be assessed using an appropriate methodology, at Hydro One's discretion

Altman Z Public Industrial Model

The Altman Z Score is calculated as:

$$Z = 1.2 * X_1 + 1.4 * X_2 + 3.3 * X_3 + 0.6* X_4 + 1.0* X_5$$

Where,

X_1=net working capital/total assets
X_2=retained earning/total assets
X_3=earning before interest and taxes (EBIT)/total assets
X_4=market value of equity/ total liabilities
X_5=sales/total assets

Altman Z Private Industrial Model

The Altman Z Score is calculated as:

$$Z' = 0.717* X_1 + 0.847* X_2 + 3.107* X_3 + 0.420* X_4 + 0.998* X_5$$

Where,

X_1=net working capital/total assets
X_2=retained earning/total assets
X_3=earning before interest and taxes (EBIT)/total assets
X_4=book value of shareholders' equity/total liabilities
X_5=sales/total assets

Altman Z Private Non-Industrial Model

The Altman Z Score is calculated as:

$$Z'' = 6.56 * X_1 + 3.26 * X_2 + 6.72 * X_3 + 1.05 * X_4$$

Where,

X_1=net working capital/total assets
X_2=retained earning/total assets
X_3=earning before interest and taxes (EBIT)/total assets
X_4=book value of shareholders' equity/total liabilities

Risk Horizon Table
Bond Rating and Kaplan-Urwitz Score

Bond Rating*	Kaplan-Urwitz Score	Risk Profile	Risk Horizon
CCC and below	<0**	High Risk	5 Years
B – BB	<0**	Medium High Risk	10 Years
Industrial BBB – AAA Non-industrial BBB	> 1.57 1.57 – 3.28	Medium Low Risk	15 Years
Non-industrial A – AAA	> 3.28	Low Risk	25 Years

* Based on DBRS rating scale. Investment grade credits qualify for risk ratings of 15 years and above. Non-investment grade credits qualify for risk ratings of less than 15 years. Equivalent ratings from other rating agencies would apply if deemed suitable by Hydro One.
** Kaplan-Urwitz bond rating-equivalency scores are not provided for non-investment grade entities (below BBB). Kaplan-Urwitz scores less than zero accordingly will be classified as either high-risk or medium-high risk based on a combination of Kaplan-Urwitz scores, Altman Z scores and other factors such as traditional credit analysis.

Kaplan-Urwitz Model

The Kaplan-Urwitz score is calculated as:

$$KU = 4.41 + 0.0012 * X_1 – 2.56 * X_2 - 2.72 * X_3 + 6.40 * X_4 - 0.53 * X_5 + 0.006 * X6$$

Where,

X_1=total assets ($000)
X_2=subordinated debt (dummy variable, 1 or 0)
X_3=long-term debt/total assets
X_4=net income/total assets
X_5=co-efficient of variation in net income over 5 years*
X_6=interest coverage (EBIT/interest expense)

* Less than 5 years' of financial statement information will be used when the information is not available.

True-Up Procedure for Load Customers

For new or modified load connection facilities, Hydro One will carry out a true-up calculation, based on actual customer load, at the following true-up points as per sections 6.5.3 to 6.5.11 of the Code:

(a) for high risk connections, at the end of each year of operation, for five years;
(b) for medium-high risk and medium-low risk connections, at the end of each of the third, fifth and tenth year of operation; and
(c) for low risk connections, at the end of each of the fifth and tenth year of operation, and at the end of the fifteenth year of operation if actual load is 20% higher or lower than the initial load forecast at the end of the tenth year of operation.

For the true-up calculation, Hydro One shall use the same methodology used to carry out the initial economic evaluation, and the same inputs except for load, which will be based on the

actual load up to the true-up point and an updated load forecast for the remainder of the economic evaluation period used.

Before carrying out a true-up calculation for a load customer who did not make an initial capital contribution, Hydro One shall adjust the initial load forecast used in the initial economic evaluation to the point where the present value of connection rate revenues equals the present value of costs as per section 6.5.5 of the Code.

Where a true-up calculation shows that a load customer's actual load and updated load forecast is lower than the load in the initial load forecast, and does not generate the initial forecast connection rate revenues, Hydro One shall require the load customer to make a payment to make up the shortfall, adjusted appropriately to reflect the time value of money and net of any previous true-up payments made.

Where analysis shows that the customer has transferred assigned capacity from an existing Hydro One owned connection facility already serving the customer to the new connection facility, which is the subject of the economic evaluation, the customer's actual load for true-up purposes will be reduced in proportion to the amount transferred. The updated load forecast will also be reduced to eliminate any transferred load. If there is a shortfall, Hydro One will then require the customer to remit a payment to make up the shortfall, adjusted appropriately to reflect the time value of money and net of any previous true-up payments made.

Where a true-up calculation shows that a load customer's actual load and updated load forecast is higher than the load in the initial load forecast, and generates more than the initial forecast connection rate revenues, Hydro One will post the excess revenue as a credit to the customer in a notional account, net of any previous true-up credits. Hydro One will apply the net credit against any shortfall in subsequent true-up calculations. Hydro One will rebate to the load customer any credit balance that remains when the last true-up calculation is carried out, adjusted appropriately to reflect the time value of money and applicable income and other tax impacts. The rebate shall not exceed any capital contribution, adjusted to reflect the time value of money, previously paid by the load customer.

When carrying out a true-up calculation for a distributor, Hydro One:

(a) shall add to the actual load the amount of any embedded generation (determined in accordance with section 11.1 of the Code) that was installed during the true-up period; and
(b) shall not reduce the updated load forecast as a result of any embedded generation (determined in accordance with section 11.1 of the Code) that was installed during the true-up period.

When carrying out a true-up calculation for a load customer other than a distributor, Hydro One:

(c) shall add to the actual load the amount of any embedded generation (determined in accordance with section 11.1 of the Code) of 1 MW or less per unit, or any embedded renewable generation of 2 MW or less per unit, that was installed during the true-up period; and

(d) shall not reduce the updated load forecast as a result of any embedded generation (determined in accordance with section 11.1 of the Code) of 1 MW or less per unit, or any embedded renewable generation of 2 MW or less per unit, that was installed during the true-up period.

When carrying out a true-up calculation for any load customer, Hydro One:

(e) shall add to the actual load the amount of any reduction in the customer's load that the customer has demonstrated to the reasonable satisfaction of Hydro One (such as by means of an energy study or audit or annual or quarterly reports from an OEB approved CDM program) has resulted from energy conservation, energy efficiency, load management or renewable energy activities that occurred during the true-up period; and
(f) shall not reduce the updated load forecast as a result of any reduction in the customer's load that the customer has demonstrated to the reasonable satisfaction of Hydro One (such as by means of an energy study or audit or annual or quarterly reports from an OEB approved CDM program) has resulted from energy conservation, energy efficiency, load management or renewable energy activities that occurred during the true-up period.

Where a load customer voluntarily and permanently disconnects its facilities from a transmitter's facilities prior to the last true-up point, Hydro One shall, at the time of disconnection, carry out a final true-up calculation in accordance with the rules set out above. Where the true-up calculation shows that the load customer's load to the date of disconnection has not generated the initial forecast connection rate revenues, the transmitter shall require the load customer to make a payment to make up the shortfall, adjusted appropriately to reflect the time value of money and net of any previous true-up payments. Where a true-up calculation shows that the load customer's load to the date of disconnection has generated more than the initial forecast connection rate revenues, Hydro One shall rebate to the load customer any excess, adjusted appropriately to reflect the time value of money and applicable income and other tax impacts.

Transfer Price

Where Hydro One pays a transfer price for a connection facility constructed by a load customer, Hydro One will reflect the transfer price plus applicable charges and costs in the capital contribution that is to be paid by the customer. The amount to be reflected in the capital contribution is determined as follows:

Capital cost* = Transfer price + Hydro One project-specific costs +

(a) make-ready costs on transferred assets including inspection, testing, commissioning and any other costs of incorporation +
(b) capital costs of any Hydro One Uncontestable Work +
(c) full direct and indirect capitalized overheads on capital costs in (a)+(b).

** The above is a general definition only. Capital and operating costs for individual projects will be based on the estimated costs of those projects. Some of the cost elements listed above could be capital or operating costs, and not all cost elements may be applicable for each project.*

APPENDIX I

Further information regarding the Altman Z and Kaplan-Urwitz models, per Hydro One's response to OEB Staff Interrogatory #20 in EB-2006-0189

Ontario Energy Board (Board Staff) INTERROGATORY #20

Interrogatory

Ref.(a) H1N-CCP/ Section 2.5 Economic Evaluation/ Load Connection Applicant Without Bond Rating/ pp.33 – 35
Ref.(b) SC/Appendix 4
Ref.(c) TSC/Appendix 4/ "Report" to the Board dated March 30, 2000 referenced in Appendix 4, authored by PHB Hagler Bailly and entitled "Risk Assessment Methodology Options". The report is available from the Board's website at www.oeb.gov.on.ca.

Preamble

- The directions to the transmitter are spelled out in In Ref. (b)- Appendix 4 of the TSC, as well as in Ref.(c), covering various aspects including use of two financial Models (the Altman Z-score Model and the Kaplan-Urwitz Model) for evaluating financial risks of companies, where no bond ratings are available. The use of the two models requires certain information be available to the transmitter.

- In Ref. (b) the Board indicated that a revision to the transmitter's economic evaluation procedure to update a Model shall not constitute a material amendment to the transmitter's connection procedures for the purposes of section 6.1.5 and therefore does not require the approval of the Board.

- However, this is the first opportunity for the Board to review and compare the details of the two models (Altman Z-score and the Kaplan-Urwitz Model) outlined in Ref. (a) with the corresponding Models in the original Report [Ref.(c)]. Therefore responses to various clarifications and questions listed below are needed.

Questions/Clarification

In Ref. (a), page 34, Hydro One added two new Altman Z –score Models in addition to the Model listed in the "Report" [Ref.(c)]; the first new Model is for "Public Industrial Companies" and the second new Model is for "Private Non-Industrial Companies".

Re: Altman Z-score Model

(i) Please provide the name of the entity that publishes the Altman Z-score Models, its address and a contact person's telephone and e-mail address;

(ii) when were the two new Models developed? and how often the three Models are updated [the original listed in Ref.(C) and the two new ones in Ref. (a)]?

(iii) The two bullets below compare the two tables in the two indicated references:
- In page 4 of Ref.(c), the table depicts three levels of "Projected Credit Risk", and the corresponding Altman Z-score which corresponds to the "Private Industrial" Model as follows:

If Altman Z-Score is:	Projected Credit Risk is
< 1.2	High
1.2-1.9	Meduim
>2.9	Low

- In page 33 of Ref. (a), The corresponding Table for the Altman Z-score covering three types of industrial companies as follows:

Bond Rating*	**Altman Z – Score****			**Risk Profile**	**Risk Horizon**
	Public Industrial	**Private Industrial**	**Private Non-Industrial**		
CCC and below	<1.81	<1.23	<1.10	High Risk	5 Years
B – BB	1.81 – 2.67	1.23 – 2.59	1.10 – 2.32	Medium High Risk	10 Years
Industrial BBB – AAA Non-industrial BBB	2.68 – 2.99	2.60 – 2.90	2.33 – 2.60	Medium Low Risk	15 Years
Non-industrial A – AAA	>2.99	>2.90	>2.60	Low Risk	25 Years

With regard to the two above tables:

(a) Please provide full explanation and justification on how the score range of (1.2 – 2.9) of the Altman Z-score corresponding to "Medium Risk" of Ref. (c), was apportioned in Ref.(a) between "Medium High Risk" with Z-score range =1.23 – 2.59, and "Medium Low Risk" with Z-score range= 2.6 – 2.9.

Note: that the mid point on linear basis between the two ranges, would lead to a range in the Z-score of 1.23 – 2.1 for "Medium High Risk" and 2.2 – 2.59, for "Medium Low Risk"

(b) Please provide details and justification for selection of the ranges depicted for the Altman Z-score vis a vis the four risk categories (High, Medium High, Medium Low, and Low) for the two new Models corresponding to the Models for Public Industrial Companies and for the Private Non-industrial companies.

Re: Kaplan-Urwitz Model

(iv) The Model proposed for the Kaplan-Urwitz model in page 35 of Ref.(a), is identical to the Kaplan-Urwitz Model shown in page 6 of Ref.(c) except for the use of an additional term (- 2.56 * X_2) where X_2 is a "dummy" or "categorization" variable which is assigned a value $X_2 = 1$ if the debt is subordinated, and a value of $X_2 = 0$ if the debt is not subordinated.

(a) Please indicate whether this term (– 2.56 * X_2) is the original term in the Model which according to Ref. (c)/ page 6/ foot note 3, was published in April, 1979;

(b) Please indicate whether this Model is revised by the authors, or by any other entity in the financial industry? if so, please indicate by who and when was the last time it was revised;

(c) Please provide explanation and justification for the range chosen for the Kaplan-Urwitz score for the "Industrial" class where it appears that regardless of how high a company can score, it cannot exceed "Meduim Low Risk".

Response

(i,ii) Hydro One is not aware of an official entity that publishes the Altman Z models. The financial literature contains numerous references to versions of the Altman Z model. The 3 versions that were included in the company's filed procedures were obtained from a 1995 CPA Journal extract found on the web, "Z scores – a guide to failure prediction" by Gregory J. Eidleman. The CPA Journal is a refereed publication published by

the New York State CPA Society. This article appeared to be the most concise source of information regarding the 3 Altman Z models.

Hydro One also reviewed other sources including an article by Prof. Edward Altman, the Z-model's developer ("Predicting the Financial Distress of Companies: Revisiting the Z-score and Zeta models", July 2000) also found on the web. This article provided background on the development of the 3 models and their strengths and weaknesses. As the article discusses, the first Altman Z model was developed in the late 1960's based on a sample of public manufacturing company data (the "public industrial" model included in Hydro One's filing). That model was later adapted by Altman (the article does not indicate when) for private manufacturing companies (the "private industrial" model included in Hydro One's filing). This is the model that was included in the PHB Hagler Bailly report (reference (C) of Staff's interrogatory). The final adaptation by Altman was to extend the model for use with respect to non-manufacturing companies (the "private non-industrial" model included in Hydro One's filing). This latter model is also cited occasionally in the literature as the "generalized" model and appears to be considered by some as applicable across industry-types.

Hydro One is not aware how often (if at all) the various versions of the Altman Z model are updated. Hydro One included all of the models in its connection procedure in order to provide as wide a basis as possible for assessing new connections and allow for a matching of the appropriate model with a given set of circumstances.

(iii)

(a) The PHB Hagler-Bailly report (ref. C) provided a breakdown of Altman Z-scores into 3 categories (High, Medium, Low). In order to provide a 4-category breakdown consistent with the risk-classifications established by the Board (High, Medium-high, Medium-low, Low), transmitters were required to split PHB's "medium" category into 2 sub-categories. As noted above, the version of the Altman Z model provided in the PHB report was the private manufacturing model (using Prof. Altman's terminology), and this is the version referenced in Staff's Interrogatory above. Intermediate cut-off points between the high and low values that allowed for splitting the "medium" risk category into 2 sub-categories were not available in the literature for this model, nor for the private non-industrial model. Intermediate cut-offs were, however, provided by Prof. Altman in the article referenced above for the public industrial model. The splitting of the medium category for the private industrial and private non-industrial models in Hydro One's filing was accordingly based on scaling their intermediate cut-off points using the corresponding scale from the public industrial model. The formula for the private industrial model intermediate cut-off point is as follows:

2.59 = 2.90 x 2.67 / 2.99

The formula for the private non-industrial intermediate cut-off point is:

2.32 = 2.6 x 2.67 / 2.99

(b) The high and low values for the two "new" Altman-Z models (Public Industrial and Private Non-industrial) included in Hydro One's connection procedure were taken from the CPA Journal article referenced above. See part (a) above for an explanation of the derivation of their intermediate cut-off points.

(iv)

(a) Hydro One is not aware whether the subordinated-debt term referenced in footnote 3 of the PHB report was included in the original Kaplan-Urwitz model; the footnote in the PHB report indicates that it was included in the "formal" model. Hydro One included the subordinated-debt term in the model filed in its connection procedure in order to provide a version of the model able to accommodate situations in which subordinated debt was present.

(b) Hydro One is not aware whether the Kaplan-Urwitz model is or has been revised by the authors or by any other entity. A web search did not provide any information in this regard.

(c) The industrial category in the Kaplan-Urwitz model is treated in a manner consistent with the methodology used for industrials in the Altman Z model and bond ratings (i.e., industrial customers are eligible for a maximum 15-year risk horizon under all approaches). This is due to the inherent riskiness of industrial companies. The 15-year maximum reflects 2 key concerns:

- Intense competition in industrial markets due to the impact of globalization, currency swings and commodity price fluctuations, among other factors. These factors expose industrial companies in particular to quickening rates of change and hence higher risk.

- The lack of liquidity in a transmission investment compared with a financial instrument such as a bond. Bond ratings are based partly on the liquidity of the instrument being rated. Accordingly, a bond rating is not a perfect tool to use in measuring the long-term risks to the transmission pool arising from an illiquid new connection. This suggests that some element of judgment is in order when using bond ratings for risk assessment purposes with respect to transmission investments.

Recognizing these concerns (increasing rates of change affecting industrial companies in particular, and the imprecise nature of bond ratings as a risk assessment tool), a 15-year maximum risk horizon for industrial companies is considered prudent in managing the risks to the transmission pool.

B2 - OEB STAFF INTERROGATORY - 070

Reference:

TSP Section 2.11, T-SA-05, Page 1
Transmission System Code, Section 6.3.1
OEB Notice of Revised Proposal to Amend a Code, Regional Planning and Cost Allocation Review (EB-2016-0003), Page 17

Preamble:

Hydro One states that it is requesting $38.5M over the five-year test period

> …to accommodate future requests from load customers to connect to Hydro One's transmission system where the need and scope have yet to be determined. This investment anticipates load customer requests that are expected to arise during the test period but are currently unknown.

OEB staff notes that, under the TSC, the full cost of a new or modified facility is intended to be recovered from the requesting load customer. For example, section 6.3.1 states:

Where a load customer elects to be served by transmitter-owned connection facilities, a transmitter shall require a capital contribution from the load customer to cover the cost of a connection facility required to meet the load customer's needs...

At the third reference above, the OEB proposed "Advanced Funding Options" that

…would provide distributors with a pool of funds before the new or upgraded connection investment goes into service to reduce the capital contribution when it is due to be paid in relation to distributors.

The OEB decided not to proceed with those advanced funding options at the time due, in part, to stakeholder concerns as described in the OEB's Notice of Revised Proposal to Amend a Code.

Interrogatory:

a) Please clarify how requesting recovery of those costs in rates from all ratepayers and then also requiring the load customers to pay the full cost when they connect to the system will not result in Hydro One recovering costs twice for the same project.

b) Please also clarify how recovery of those costs in rates from all ratepayers aligns with the beneficiary pays principle.

c) Please explain how Hydro One's above-noted request for $38.5 million differs from the type of advanced funding options that the OEB decided not to proceed with, as also discussed above.

Response:

a) Hydro One adheres to Section 6.3 'Cost Responsibility for New and Modified Connections' and Section 6.5 'Economic Evaluation of New and Modified Connections' of the Transmission System Code (TSC) when evaluating the capital contribution from the load customer and amount recoverable in connection rates revenue.

To clarify the reference in above Preamble, Section 6.3.1 of the TSC states:

> Where a load customer elects to be served by transmitter-owned connection facilities, a transmitter shall require a capital contribution from the load customer to cover the cost of a connection facility required to meet the load customer's needs. **A capital contribution may only be required to the extent that the cost of the connection facility is not recoverable in connection rate revenues**…. [emphasis added]

The request to allocate $38.5 million to address future connection requests is intended to account for the capital spend investment cost required by Hydro One to facilitate these connections that would then be recovered through connection rate revenues. The remaining project cost will be recovered as a capital contribution from the customer. There is no recovery of costs twice for the same project.

b) As detailed in response to part (a) above, any connection costs that are not recovered through the rate revenue are recoverable as a capital contribution from the customer. These capital contributions are defined in Table 2 of ISD T-SA-05. Thus, the beneficiary pays the entire cost in line with the beneficiary pay principle.

c) Hydro One's approach is materially different from the type of advanced funding options that were proposed in the OEB Notice[1]. Those two advanced funding options, Upstream Capacity Payment and the Upstream Capacity adder, would be separate charges that the distributor would recover from all customers and include in the capital contribution to the transmitter.

[1] Notice_proposal_Amend_TSCDSC_Regional_Planning_Sept 21_2017, p19

In both cases some of the cost is being shifted to the customers of the distributor who are paying in advance of the date of the capital contribution due to the transmitter.

Hydro One is not proposing a new methodology. Hydro One has set forth in its Application its estimated project costs, capital contributions and the rates revenue requirement over the test-year period. Just like other System Access projects, the beneficiary would pay through the rates revenue and capital contribution as highlighted in response to parts (a) and (b) above.

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B2 - OEB STAFF INTERROGATORY - 071

Reference:

TSP Section 2.11, T-SA-10

Interrogatory:

a) Please provide a copy of the document *Need for Bulk Transmission Reinforcement in the Windsor-Essex Region, IESO, Published June 13, 2019* that is referenced in footnote 1 on p. 2 at the above reference.

b) Please provide a copy of the document *2019 Windsor-Essex Integrated Regional Resource Plan (IRRP), IESO, Published September 3, 2019* that is referenced in footnote 2 on p. 2 at the above reference.

c) Please provide the addendum to the Windsor-Essex IRRP that was expected to be published in Q3, 2021, that is referenced on p. 2 at the above reference.

d) Please provide the forecast, including information on the location, size, and timing of new connection customers, that supports the need for T-SA-10 consisting of three new DESN stations in the Kingsville-Leamington area.

e) Please provide the status of the environmental assessment process for each of the three new station sites.

f) Please provide the breakdown of costs for each of the three stations that make up T-SA-10 on an annual basis, including for years before and after the plan years, where applicable, such that the total cost for each station is reflected.

g) Please describe the flexibility of the plan for this investment, if, for example, demand for new customer connections increases, or decreases, or is advanced or delayed. In addition, please explain how changes in the geographic distribution of the new customer connections would be accommodated.

Response:

a) Please see link to report below:
https://ieso.ca/-/media/Files/IESO/Document-Library/regional-planning/Windsor-Essex/Need-for-Bulk-Transmission-Reinforcement-in-Windsor-Essex-Region-June2019.ashx

b) Please see link to report below:
https://ieso.ca/-/media/Files/IESO/Document-Library/regional-planning/Windsor-Essex/Windsor_Essex_IRRP_Report_20190903.ashx

c) The IRRP addendum for Windsor-Essex has been delayed and has not been published by the IESO. The addendum is expected to be published in Q4 2021.

d) As noted in response to part (c) above, the addendum for the Windsor-Essex has not yet been published by the IESO. However, the load forecast supporting the need for the additional Leamington Area Stations #4, #5, and #6 identified in ISD T-SA-10 is included in Tables 13 and Table 14 of the "*Need for Bulk System Reinforcements West of London*" report[1] published by the IESO.

Leamington Area Station #4 (also known as South Middle Road TS DESN#2) is to be located near Lakeshore TS and planned to be completed in Q3 2025. The distribution customers enabled by Leamington Area Station #4 are located within the Kingsville-Leamington area. These customers range in size from residential customers to industrial customers between ~2MW to ~30MW. Customers in Kingsville-Leamington area are connected in order of application received. Most of these customers applied for capacity in 2019 and early 2020 with a requested connection date in 2021/2022.

Leamington Area Station #5 is expected to be located about 2.5 km northeast of the existing Kingsville TS, and planned to be complete in Q4 2026 subject to area load growth and upstream transmission constraints. Leamington Area Station #6 is anticipated to be located approximately 4 km northeast of Leamington Area Station #5, with planned completion in 2028 subject to area load growth and upstream transmission constraints. Both these tentative locations are based on the expected loads forecasted in the area and are subject to the environmental assessment process to determine their final locations. The distribution customers enabled by Leamington Area Stations #5 and #6 are located within the Kingsville-Leamington area. The customers planned for these stations range in size from residential customers to industrial customers between ~1MW to ~40MW. Customers in Kingsville-Leamington area are connected in order of application received. Most of these customers applied for capacity between Spring of 2020 and Spring of 2021 with a requested connection date in 2022/2023.

[1] https://www.ieso.ca/-/media/Files/IESO/Document-Library/regional-planning/southwest-ontario/WOL_Bulk_Report_Final_20210923.ashx

e) The Environmental Assessment for Leamington Area Station #4 (also known as South Middle Road TS DESN#2), was done as part of the Lakeshore Transmission Station Project Class Environmental Assessment. The final Environmental Study Report was filed with the Ministry of the Environment, Conservation and Parks on January 8, 2020.

The preparation of the Environmental Assessment for Leamington Area Station #5 and Leamington Area Station #6 has been initiated and is expected to be filed in 2022.

f) Please see the table below:

Project	Net Investment Costs ($ Millions)							Project Total
	2022	2023	2024	2025	2026	2027	2028	
Stage 1: Leamington Area Station #4	-	6.6	30.7	5.4	-	-	-	42.7
Stage 2: Leamington Area Station #5	1.0	1.0	10.2	28.1	8.5	-	-	48.8
Stage 3: Leamington Area Station #6	-	-	-	-	6.0	32.6	5.7	44.3
Total	**1.0**	**7.6**	**40.9**	**33.5**	**14.5**	**32.6**	**5.7**	**135.9**

g) The Leamington Area Station #4 (also known as South Middle Road TS DESN#2) is planned to be placed in-service Q3 2025. The flexibility of the plan to advance the in-service date will be limited by upstream transmission constraints as identified by the IESO in the West of Chatham and West of London Bulk Planning reports; however there is flexibility in the plan to delay the in-service date depending on customer connection timelines.

The Leamington Area Station #5 and Leamington Area Station #6 are at the initial stages of the project, there is flexibility in advancing/delaying the in-service date depending on the customer connection timelines. However, the ability to advance the projects will be limited by the timeline required to complete an environmental assessment, as well as the completion of critical transmission reinforcements supplying the region, namely the new double circuit 230kV transmission lines from Chatham SS to Lakeshore TS and from Lambton TS to Chatham SS, as identified by the IESO in the West of Chatham and West of London Bulk Planning reports.

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B2 - OEB STAFF INTERROGATORY - 072

Reference:

Exhibit B-2-1, TSP Section 2.11, T-SR-01 through ISD T-SR-18

Preamble:

OEB staff has prepared a table summarizing Hydro One's investment plans T-SR-01 through ISD T-SR-18 which is attached. The following questions relate to these investment plans.

Interrogatory:

a) Please describe how Hydro One formulates the different alternatives it examines in the business plans.

    i. How does Hydro One economically optimize the pacing that is implicitly embedded in the selected alternatives, such as alternative 2 in ISD T-SR-04, ISD T-SR-11 or ISD T-SR-16?

b) Please state how Hydro One represents alternatives that are not like for like replacements, but rather incorporate larger projects such as rebuilding one larger transmission station as a replacement for two older stations?

c) OEB staff notes that the decision to maintain assets occurs at the individual asset level, and not the fleet level. Please state why the listed implementation alternatives (e.g., reactive, programmatic, bundled) are applied at a program level, instead of at an individual asset level (for example in ISD T-SR-01 and ISD T-SR-03)?

    i. Please identify any individual projects within each Investment program that depart from the selected program-level implementation alternative.

d) Please provide quantified evidence to demonstrate that the capital spending solutions proposed by Hydro One in the alternatives describes as "Planned Replacement" (which generally appear as Alternative 2 in the above table) are the optimal solutions?

    i. What is the increase in risk that would be created by a decrease in capital expenditures by 10% for each of the listed programs?

ii. What is the decrease in risk that would be created by an increase in capital expenditures by 10% for each of the listed programs?

iii. How has Hydro One determined that the planned expenditures are the most cost-effective way to reduce the risks that are intended to be addressed by each program?
    (a) Please show quantified calculations.

iv. Please provide specific project examples where risk will be mitigated to an acceptable level by reducing the probability of asset failure without significantly changing the consequence of failure.
    (a) Please explain why the selected approach to failure probability reduction is the economically preferred risk mitigation choice.

v. Provide specific project examples where risk will be mitigated to an acceptable level by reducing the consequence of failure without significantly changing the probability of individual asset failure.

vi. For each example, explain why the selected approach to failure consequence reduction is the economically preferred risk mitigation choice.

Response:

a) Following the identification and assessment of a given risk exposure based on condition assessment, a decision is made to either accept or mitigate the risk. For risks that warrant mitigation, risk treatment options, in the form of investment proposals, may be developed to address the risk. Risk mitigation occurs following investment implementation through reduction in the impact of the consequence and/or the probability of a risk materializing. When developing candidate investments, multiple options may be considered which reflect alternative levels of funding, effort and outcomes to address the identified risk and investment need.

    i. As discussed in TSP Section 2.2, the primary driver for asset replacement is condition. Hydro One carries out an Investment Planning Process (detailed in TSP Section 2.7) to identify, prioritize and optimize investments to manage asset and system operational risks. As part of this process, Hydro One performs a continuous asset risk assessment (ARA) to determine individual asset needs. The pacing of investments identified in this plan reflects the overall prioritization and optimization resulting from the Investment Planning Process.

b) For clarity, the individual projects identified in ISD T-SR-01, T-SR-02, T-SR-03 represent an integrated investment at a specified site. The development of alternatives for a specific station, including whether the investment is functionally like-for-like or a right-sizing opportunity, is carried out as part of the Asset Management process (described in TSP Section 2.7). It is through this process that the preferred option is put forth as an integrated investment for consideration in the Investment Planning process (also described in TSP Section 2.7).

c) Asset needs are identified at the individual asset level as detailed in TSP Section 2.2. For transmission stations, individual equipment replacements have been bundled into integrated, larger scale station and line investments in order to address multiple assets and system needs at a specific station or circuit within a single investment. This integrated approach enables efficient project delivery by optimizing project planning and execution, minimizes outage requirements and customer impacts, and achieves outcomes valued by customers (as further discussed in SPF Section 1.6). The alternatives identified within ISDs T-SR-01 and T-SR-03 reflect the alternatives considered for execution of the established asset needs.

   i. All projects detailed within ISDs T-SR-01 and T-SR-03 reflect the preferred alternative of a bundled integrated replacement of components.

d)

   i. Please refer to Interrogatory B2-Staff-65

   ii. Please refer to Interrogatory B2-Staff-65

   iii. Please refer to Interrogatory B2-Staff-63

   iv. Please refer to Interrogatory B2-Staff-46

   v. The two example investments listed below reduce the consequence of failure. Please note that in the context of system renewal investments, replacing poor condition assets with new assets translates into a reduced probability of failure. As a result, reduction of consequence of failure is accompanied by a reduction in the probability of failure.

			Baseline		Residual	
ISD	**Project**	**Risk**	**Likelihood**	**Consequence**	**Likelihood**	**Consequence**
T-SR-18	C5E/C7E Replacement	Environment	P4	C6	P1	C1
T-SR-03.99	Lake TS Metalclad Replacement	Safety	P3	C2	P1	C1

vi. C5E/C7E replacement

This project covers the replacement of the C5E and C7E circuits between Esplanade TS and Terauley TS and involves construction of an underground tunnel to house the replacement cables. Currently these circuits are 115 kV low-pressure oil-filled underground cables in poor condition. From an environmental perspective, approximately 2.6 circuit km of cable is directly buried under Queens Quay along Lake Ontario. If a leak occurs along Queens Quay, it would likely be confined to the surrounding soil. However, if the leak is significant enough to contaminate ground and/or surface water (Lake Ontario), the remediation will be very challenging and costly, requiring equipment such as booms and wells.

The project will replace the oil-filled cables with an XLPE cable system. This cable substitution and reconfiguration will eliminate the environmental risk associated with operating oil-filled cables. The newer cables are less prone to failure so both the consequence of failure and the probability of failure are greatly reduced.

Lake TS Metalclad Replacement

The project involves the replacement of legacy metalclad circuit breakers at Lake TS. Currently these metalclad breakers have the potential to expose staff to arc flashes during switching operations, presenting a risk to employee safety and lost time injuries. The replacement of these legacy breakers, with modern equipment which include arc-proof designs, will reduce the safety risk associated with arc flashes.

Again, the newer equipment will have a better performance and the investment reduces the consequence of failure along with the probability of failure.

B - OEB STAFF INTERROGATORY - 073

Reference:

TSP Section 2.11, T-SR-01, Pages 17-18
TSP Section 2.11, T-SR-03, Pages 16-18
TSP Section 2.11, T-SR-13, Pages 12-14

Preamble (T-SR-01):

Alternative 1: Reactive Component Replacement
Alternative 2: Planned Programmatic Replacement of Components (Unbundled)
Alternative 3: Bundled Integrated Replacement of Components

Preamble (T-SR-03):

Alternative 1: Reactive Component Replacement
Alternative 2: Planned Programmatic Replacement of Components (Unbundled)
Alternative 3: Bundled Integrated Replacement of Components

Preamble (T-SR-13):

Alternative 1: Reactive Component Sustainment
Alternative 2: Programmatic Sustainment of Components (Unbundled)
Alternative 3: Comprehensive Line Section Refurbishment (Bundled)

Interrogatory:

a) Please provide the five (5) largest individual projects (or sub-projects) from each of the referenced programs (T-SR-01, T-SR-03 and T-SR-13) over the past five (5) years for which Hydro One selected Alternative 3 - Bundled Integrated Replacement of Components. Please also provide the following information for each of these projects (preferably in tabular format):

   i. The year the project was completed;

   ii. The name of the associated substation or line (as applicable);

   iii. The actual total project expenditure;

   iv. What would have been spent on the project if Hydro One had only replaced the components identified as being at End of Life;

v. The incremental "bundling" expenditure (i.e., the difference between amounts c. and d.);

vi. A quantified explanation of the value delivered to ratepayers by the incremental amount of spending.

Response:

a) Please see the tables below for part (i) – (iii) related to the five largest completed projects that would be included, according to the current Application's ISD framework, in the above-referenced ISDs:

Table 1 - ISD T-SR-01 – Transmission Station Renewal – Network Stations

Project (ii)	Year Completed (i)	Total Cost ($M NET) (iii)
Beach TS	2019	74.9
Birch TS	2020	35.2
Buchanan TS	2017	28.1
Detweiler TS	2021	22.6
Sidney TS	2018	9.8

Table 2 - ISD T-SR-03 – Transmission Station Renewal – Connection Stations

Project (ii)	Year Completed (i)	Total Cost ($M NET) (iii)
Allanburg TS	2020	52.1
Horning TS	2018	45.2
Chenaux TS	2020	42.9
Sheppard TS	2021	41.8
NRC TS	2019	36.5

Table 3- ISD T-SR-13 – Transmission Line Complete Refurbishment

Project (ii)	Year Completed (i)	Total Cost ($M NET) (iii)
N21W/N22W, between Sarnia Scott TS & Buchanan TS	2021*	37.4
D2L, between Upper Notch JCT & Martin River JCT	2019	34.6
D2L, between Dymond TS & Upper Notch JCT + Martin River JCT x Cystal Falls SS	2019	33.0
C22J/C24Z/C21J/C23Z, between Chatham SS and Keith TS and Lauzon TS	2017	34.4
H24C, between Marine JCT & Oshawa North JCT	2017	24.8

**Forecasted*

iv. The costs provided in the tables above reflect the total integrated cost to address assets that were identified in poor condition, as detailed in TSP Section 2.7. The project cost reflects unique scheduling and outage requirements and may include varying non-equipment costs of a civil nature and supporting effort to facilitate construction within the respective station or transmission line. In Hydro One's view, assets within the scope of an integrated project (transformers, breakers, and protection systems, lines components) cannot be evaluated on a unitized basis since the costs are captured from projects of varying scope and complexity.

v. As noted in part iv, the incremental "bundling" expenditures for the projects identified above cannot be provided.

vi. Hydro One, as part of its Asset Management and Asset Risk Assessment processes, detailed in TSP Section 2.2 and Section 2.7, identifies assets that are in poor condition and require replacement. Individual equipment replacements are bundled into integrated, larger scale station and line projects in order to address multiple assets and system needs at a specific station or circuit within a single investment. In terms of value to ratepayers and customer, this integrated approach enables efficient project delivery by optimizing project planning and execution, minimizes outage requirements and customer impacts, and achieves outcomes valued by customers (as further discussed in SPF Section 1.6). Hydro One's planning philosophy seeks to maximize asset life by balancing prudent replacement before failure and increased failure risk with potentially higher cost and consequence of system and customer impact. This planning and execution methodology, is consistent with the approach detailed within Hydro One's previous applications, proceedings EB-2016-0160 and EB-2019-0082 with regards to the integrated investment model.

B2 - OEB STAFF INTERROGATORY - 074

Reference:

Exhibit B-3-1, DSP Section 3.3, Pages 9-10

Preamble:

At the above reference, it is stated:

Finding 5: Focused more on component-centric projects
Under its current approach for managing the distribution station transformer fleet, Hydro One releases projects that focus on planned transformer replacements and other station component replacements as required to accommodate the transformer replacement. If there are other station assets that are in poor condition and in need of replacement, they are bundled with the transformer replacement project, however other component assets in good or fair condition are not [be] replaced. Through this approach, Hydro One aims to more effectively target the high risk components in Hydro One's distribution stations. Programs for the replacement of individual stations components including reclosers and MUS connection structures, will continue. Hydro One's planned approach is in line with the finding that most comparator utilities also focus more on component-centric projects.

Interrogatory:

a) Please reconcile the referenced component centric replacement philosophy being followed in the Distribution System Plan with the bundled replacement philosophy being applied in T-SR-01, T-SR-03 and T-SR-13.

Response:

a) For transmission stations, individual equipment replacements have been bundled into integrated, larger scale station and line projects in order to address multiple assets and system needs at a specific station or circuit within a single investment as detailed in T-SR-01, T-SR-03, and T-SR-13. This integrated approach enables efficient project delivery by optimizing project planning and execution, minimizes outage requirements and customer impacts, and achieves outcomes valued by customers (as further discussed in SPF Section 1.7).

   For distribution stations, transformers in poor condition are planned for replacement, and other assets at the station that are in poor condition are bundled with the transformer into a single investment (ISD D-SR-04). This approach enables efficient project delivery and achieves outcomes valued by customers, similar to integrated transmission investments. Components

that are not in poor condition are excluded from the bundled investment unless necessitated by the upgrades being considered for the poor condition assets. MUS structures and oil hydraulic reclosers in distribution stations are typically replaced on a component centric basis due to the criticality of MUS structures and the need for frequent maintenance for oil hydraulic reclosers (see ISD D-SR-03).

B2 - OEB STAFF INTERROGATORY - 075

Reference:

Exhibit B-2-1, TSP Section 2.11, T-SR-01, Pages 9-11
Exhibit B-2-1, TSP Section 2.11, T-SR-03, Pages 8-11

Preamble:

At Lines 1 to 4 of page 9 of 32, it is stated that:

A large number of the breakers in Hydro One's fleet contain PCBs. As of December 2020, 420 breakers that were manufactured pre-1985 require PCB remediation work including bushing retro-filling (i.e., putting in new PCB free oil to lower the PCB ppm concentration) or replacements to meet the PCB Regulation requirements.

At Lines 11 to 16 of page 11 of 32, it is stated that:

Bushings from oil circuit breakers need to undergo oil retro-fill or replacement in order to satisfy federal PCB regulatory requirements[1] to remove equipment containing concentrations of PCB greater than 50 ppm from service by 2025. All transmission station oil-filled equipment manufactured prior to 1985 are expected to be sampled by the end of 2022, so that the PCB contained in such equipment can be removed or retro-filled to less than 50 ppm by the end of 2025.

At Lines 10 to 13 of page 8 of 46, it is stated that:

A large number of the breakers in Hydro One's fleet contain PCBs. As of December 2020, 420 breakers that were manufactured pre-1985 require PCB remediation work including bushing retro-filling (i.e., putting in new PCB free oil to lower the PCB ppm concentration) or replacements to meet the PCB Regulation requirements.

At Lines 11 to 16 of page 11 of 46, it is stated that:

Bushings from oil circuit breakers need to undergo oil retro-fill or replacement in order to satisfy federal PCB regulatory requirements1 to remove equipment containing concentrations of PCB greater than 50 ppm from service by 2025. All transmission station oil-filled equipment manufactured prior to 1985 are expected to be sampled by the end of 2022, so that the PCB

contained in such equipment can be removed or retro-filled to less than 50 ppm by the end of 2025.

Interrogatory:

a) Please explain why PCB remediation work has not been completed prior to now considering the legislative deadlines that have been known for many years?
    i. Was spending on this matter deferred in prior years?

b) Please explain Hydro One's risk analysis regarding keeping equipment with PCBs in operation.

c) Please explain why Hydro One did not begin surveying the PCB concentration in its distribution equipment at an earlier date.

d) Please state if all assets with excessive PCB levels are to be taken out of service by 2025 and given that the program budget ends in 2025, whether or not there will be any disposal costs associated with this program extending into 2026 or beyond?

Response:

a) As further explained in Exhibit E-02-02, Hydro One, through the PCB Retirement and Waste Management program remediates the PCB-contaminated inventory to comply with the PCB Regulations and the associated deadline. Hydro One identified more than 25,000 components of its transmission equipment that require sampling, and where required, either retro-filling or replacement. Many of these assets are located at critical customer stations such as nuclear generators and manufacturing plants that require extensive outage and resource planning in order to execute the required work. Hydro One developed the PCB remediation plan taking into account various priorities and resource availability as well as ensuring that it meets the legislated deadline to comply with the PCB Regulations.
    i. Please refer to E-Staff-208 for details.

b) Hydro One manages the risk associated with in-service PCB equipment by scheduling monthly inspections on equipment with high PCB levels to ensure that no leaks have occurred and to readily address any issues if they arise. The risk associated with this equipment is low as only 2% of high PCB contained equipment remain in service. Equipment containing a PCB concentration greater than 50 ppm are recorded in the system and replacement or retro-filling is planned by year-end 2025.

c) Hydro One assumes that this question is related to transmission equipment. Hydro One started assessing its oil-filled population as soon as the amendment was released.

d) All equipment containing a PCB concentration greater than 50 ppm will either be replaced or retro-filled by year-end 2025. The disposal cost is incorporated with their removal within the 2025 timeframe.

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B2 - OEB STAFF INTERROGATORY - 076

Reference:

Exhibit B-2-1, TSP Section 2.11, T-SR-01, Pages 21-29
Exhibit B-2-1, TSP Section 2.11, T-SR-03, Pages 20-38

Preamble:

The following questions relate to Appendix A – Description of Investments.

Interrogatory:

a) Please provide further details on the stations identified in ISD T-SR-01 *"Transmission Station Renewal – Network Stations"* and ISD T-SR-03 *"Transmission Station Renewal – Connection Stations"* identified in Appendix A to justify investments. For example, applicable documents such as:
   - Inspection reports;
   - Description of any specific problems or concerns with equipment;
   - Annual maintenance reports for the past 5 years;
   - Photos;
   - Descriptions of alternative mitigation options considered;
   - An economic analysis of repair/refurbishment vs. replacement options, including cost benefit assessment (NPV);
   - Any other quantified information used to select the proposed alternative.

Response:

There are 137 (35 + 102) station investments proposed in T-SR-01 and T-SR-03. Because the requested information is extensive, Hydro One cannot provide it for every investment as requested. As an example, Hydro One provides the relevant information for the following two station investments that are contained in the proposed investment plan: Charles TS (T-SR-03.37) and Wilson TS (T-SR-03.04). The provided information is analogous to the information pertaining to other station investments.

Charles TS (T-SR-03.37)

- Attachment 1: Transformer Assessment – Charles TS – T3
- Attachment 2: Transformer Assessment – Charles TS – T3 & T4
- Attachment 3: Breaker Assessment – Charles TS
- Attachment 4: Protection System Assessment – Charles TS
- Attachment 5: Transformer Oil Data – Charles TS and Wilson TS

Witness: JABLONSKY Donna

Wilson TS (T-SR-03.04)

- Attachment 6: Transformer Detailed Assessment - Wilson TS - T1
- Attachment 7: Transformer Assessment - Wilson TS - T1 & T2
- Attachment 8: Breaker Assessment – Wilson TS
- Attachment 9: Protection System Assessment – Wilson TS
- Attachment 5: Transformer Oil Data – Charles TS and Wilson TS
- Attachment 10: Maintenance Report - Transformer & Breaker - Charles TS & Wilson TS

Milton TS (T-SR-01.06)

- Attachment 11: Breaker Assessment – Milton SS
- Attachment 12: Protection System Assessment – Milton SS
- Attachment 13: Maintenance Report - Transformer & Breaker – Milton SS

Charles T3

Transformer Assessment

Keywords: Charles, T3, Transformer, Transmission, Station, Assessment

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APPROVAL SIGNATURES

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1. EXECUTIVE SUMMARY

- Built in in 1966 and in-serviced 1967, Charles T3 is a 45/60/75MVA, 110-14.2-14.2kV, 3 phase step down transformer with two on load tap changers.
- T3 Transformer at Charles TS has been reviewed and assessed based on: 1) Demographics, 2) Equipment condition, 3) Potential or existing environmental/HSE hazards, 4) Loading and 5) Economics.
- The assessment concluded that T3 has shown deterioration.
- Faulty gases were detected in the transformer.
- Multiple oil leaks were reported over the years.
- T3 has experienced consistent heavy loading between year 2015 to 2016.
- NPV analysis indicated it is economical to keep unit in-service where possible until its replacement
- Recommend replacement within the next 5 years to mitigate reliability risk, environmental risk and reduce future lifecycle cost.

2. Equipment Summary

Built in 1966 by Canadian General Electric (CGE) and in-service in 1967, Charles T3 is a 45/60/75MVA, 110-14.2-14.2kV, 3 phase step down transformer with two on load tap changers (Model DIII) built in 1966 by Maschinenfabrik Reinhausen (MR) in Germany.

3. Demographics

T3 was in-serviced 1967 (50 years old). A total of 105 similar units are currently in service as of Dec 2016.

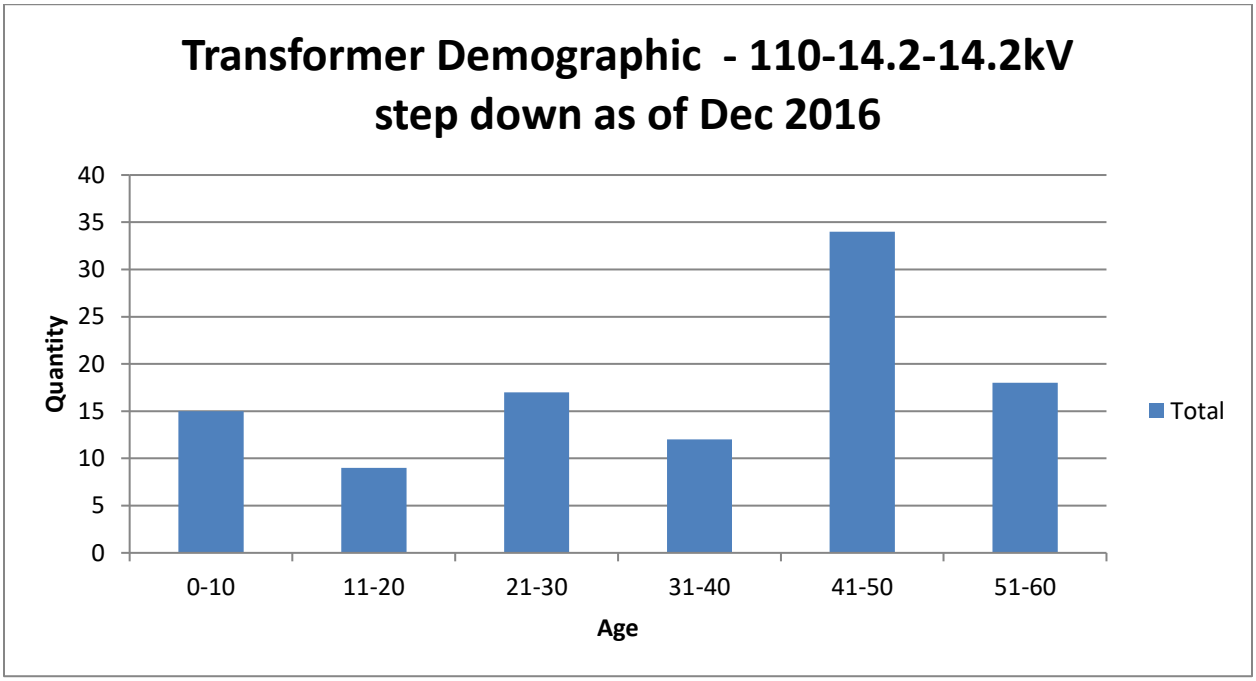


Chart 1: Transformer Demographic - 110-14.2-14.2kV step down as of Dec 2016

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4. Equipment Condition

Equipment condition is examined based on: 1) Dissolved Gas Analysis (DGA) and 2) Preventive Maintenance Result, Trouble Calls and Deficiency Report;

4.1 Oil analysis Data

DGA results show that T3 has high concentration of Carbon Dioxide (CO2) and Acetylene (C2H2), resulted from insulation aging, and electrical activities. Acidity, Interfacial tension measurements, and dielectric break down (ASTM1816) are within limits. Oil quality is acceptable in marginal.

Date	C2H2	C2H4	C2H6	CH4	CO	CO2	H2	N2	O2	Tot Vol of Gas (%)
Limit	3	50	50	100	650	2000	80	-	-	-
01/26/2011	18	17	0	0	243	1220	20	67500	23400	9.22
08/09/2012	13	11	0	0	231	1760	10	63300	24800	8.98
09/12/2012	13	12	0	0	287	2080	15	71500	25900	9.93
11/17/2012	13	15	0	0	255	2070	20	65900	24700	9.26
12/28/2012	13	14	0	0	264	2240	10	67400	25700	9.53
02/07/2014	16	12	0	0	343	2670	20	65800	22400	9.09
01/07/2015	16	20	0	0	304	2220	15	62500	21300	8.60
02/20/2016	12	18	0	0	369	2540	20	62900	19100	8.45
11/05/2017	0	6	31	41	762	2070	0	65400	3940	7.2
12/18/2018	18	24	0.73	4	493	2820	20	71598	22277	9.73
03/22/2019	17	23	0.76	4	408	2444	19	87508	28157	11.86

Table 1: DGA results for T3 from previous years. Quantities that are beyond warning limits are underlined and highlighted in red.

Date	Acidity	Colour	Furan	IFT	kV (ASTM D1816)	kV (ASTM D877)	Moisture	pf @ 25 °C
Limit	0.15	2	200	24	45	30	20	0.5
01/26/2011	0	2	97	25	45	46	5	0
08/09/2012	0.04	2	101	24.9	17	23	22	0.09
09/12/2012	0.04	3	96	25	39	46	18	0.04
11/17/2012	0.04	2	93	n/a	38	52	10	0.07
12/28/2012	0.04	3	n/a	n/a	35	48	17	0.07
02/07/2014	0.04	3	79	25.3	58	49	6	0.07
01/07/2015	0.04	3	70	25.2	63	48	5	0.06

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02/20/2016	0.05	3	84	25.7	57	45	15	0.07
12/28/2012	0.03	3	5	26.1	66	56	3	0.43
02/07/2014	0.05	2	87	25.1	41	46	8	0.06
01/07/2015	0.04	3	82	25.4	63	50	7	0.06

Table 2: Charles T3 Oil quality from previous years. Quantities that are beyond warning limits are underlined and highlighted in red.

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4.2 Maintenance History, Trouble Calls and Deficiency Report

Standard power transformer maintenance packages are applied on Charles T3 per Hydro One Work Standard Document SM-54-007 (main tank) and SM-54-037 (ULTC) respectively.

Preventive Maintenance schedule and results are summarized in Table below.

Maintenance Item	2012	2013	2014	2015	2016	2017	2018	2019
TF-GENERAL-DBT (8 year interval)			CR01					
TF-GENERAL-D1 (4 year interval)			CR01				CR01	
TF-GENERAL-D2 (8 year interval)							CR01	
TF-GENERAL-GOT (Annual)	CR01	CR01	CR01	CR01	CR01	CR01	CR02	CR02
UT-CWC-UT/UTR-SI(X) (4 year interval) (Y)			CR01					
UT-CWC-UT/UTR-SI(Y) (4 year interval)			CR01					
UT-CWC-UT/UTR-UTOA(X) (2 year interval)	CR01	CR01	CR01	CR01	CR01	CR01	CR01	CR02
UT-CWC-UT/UTR-UTOA(Y) (2 year interval)	CR01	CR01	CR01	CR01	CR01	CR01	CR01	CR02

Table 3: Preventive maintenance summary of T3

A list of all Preventive maintenance results is attached in Appendix I.

Equipment Obsolescence

T3 is a Canadian General Electric (CGE) transformer and uses a MR DIII tap changer. The original manufacturer still provides parts and services to this type of tap changer. Some parts are no longer available of-the-shelf. Depending on parts required, it will require originally manufacturer (MR) to fabricate on demand, with 8-10 weeks to deliver.

Trouble calls/deficiency report/Potential Need Notification

Lists of trouble calls/deficiency report have been reviewed and appended in Appendix II. It is concluded that defects found are concentrated around oil leaks in T3's subcomponents. Highlights include:

1. This unit has recorded repeated oil leaks, including from the gas relay piping in the past which needed regular clean ups. [Ref. notifications:10480489, 10496589, 10531506, 10533513, 11270696, 12867881]
2. Cooling defects observed due to faulty fans and replacements/repairs were made for the defective fans. [Ref. notifications: [10325589, 10370028, 10754593, 12786363, 13808043, 13831873, 15009597]

Year	Vol. of Oil Added	Cost
2010	4500 L	$6011.00

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5 Potential Environmental Risk/HSE

5.1 Spill Risk Assessment

Charles TS is ranked as low moderate-risk for spill containment (71 of 256) stations based on existing risk score from a 2011 spill risk report by Conestoga-Rogers & Associates [2]. Charles T3 is not equipped with spill containment that meets Hydro One's standards.

5.2 PCB content

Table below summarized the latest PCB contents detected in various part of the equipment. Hydro One is obligated to remove or retrofit equipment with 50ppm or higher PCB contamination by 2025 per Environment Canada's regulation.

Equipment	Description	Date	PCB (ppm)	Lab Reference
1178289	TF: Stepdn - 75MVA 110-14.2-14.2kV	October 17, 1982	10	CO82-2356-K
1227390	(X0) - BUSHING: 15 kV	n/a	n/a	
1227392	(X2) - BUSHING: 15 kV	n/a	n/a	
1227394	(X3) - BUSHING: 15 kV	n/a	n/a	
1227396	(Y1) - BUSHING: 15 kV	n/a	n/a	
1227398	(Y2) - BUSHING: 15 kV	n/a	n/a	
1227400	(Y3) - BUSHING: 15 kV	n/a	n/a	
1227402	(Y0) - BUSHING: 15 kV	n/a	n/a	
1227404	(H3) - BUSHING: 115 kV	December 29, 2015	290	B5Q4467
1227406	(H1) - BUSHING: 115 kV	December 29, 2015	280	B5Q4467
1227408	(H2) - BUSHING: 115 kV	December 29, 2015	300	B5Q4467
1227410	(X1) - BUSHING: 15 kV	n/a	n/a	
1222382	(X) TF: ULTC - 13 kV Div	June 8, 2010	13	10-HT3481
1222384	(Y) TF: ULTC - 13 kV Div	June 8, 2010	13	10-HT3480

Table 4: Confirmed PCB Content for various sub-component of T3.

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6 Equipment Loading

Charles T3 is 45/60/75 MVA unit with summer and winter Limited Time Rating (LTR) stated below:

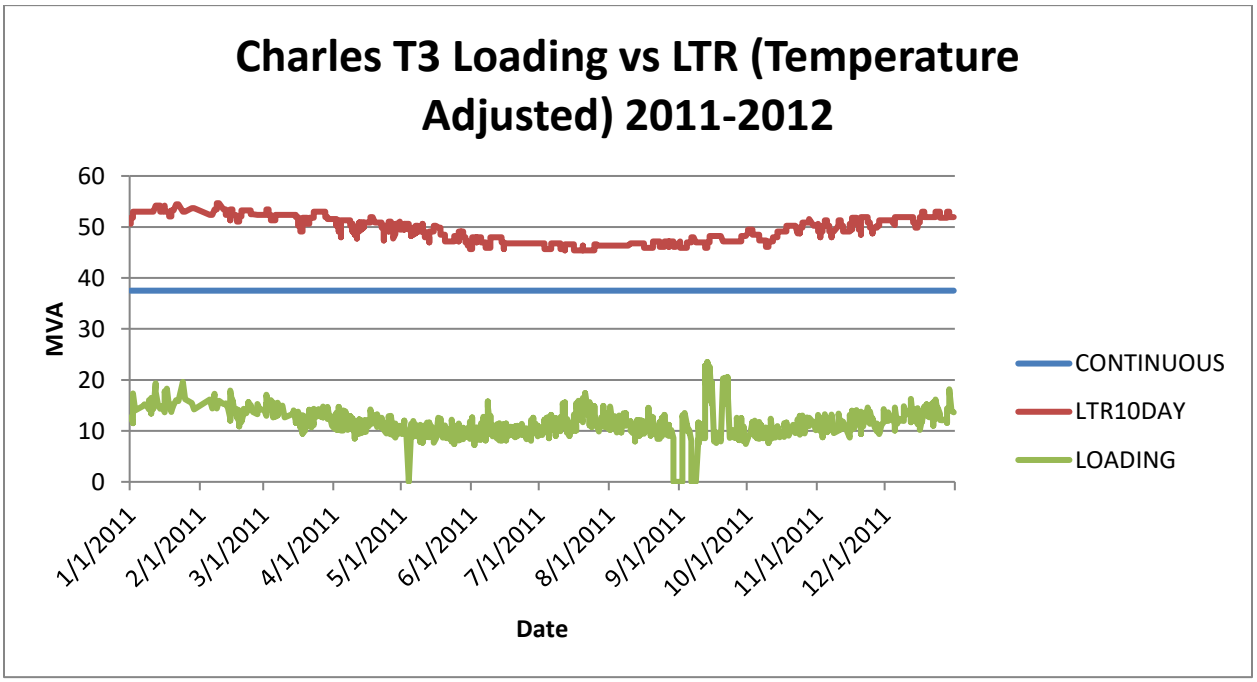
T3:

Summer 10d LTR (31 ºC)	Winter 10d LTR (5ºC)
45MVA	52MVA

Charles T3's loading was reviewed with respect to its temperature adjusted LTR from 2012-2016. It is observed T3 experienced higher loading from 2012 to 2016.

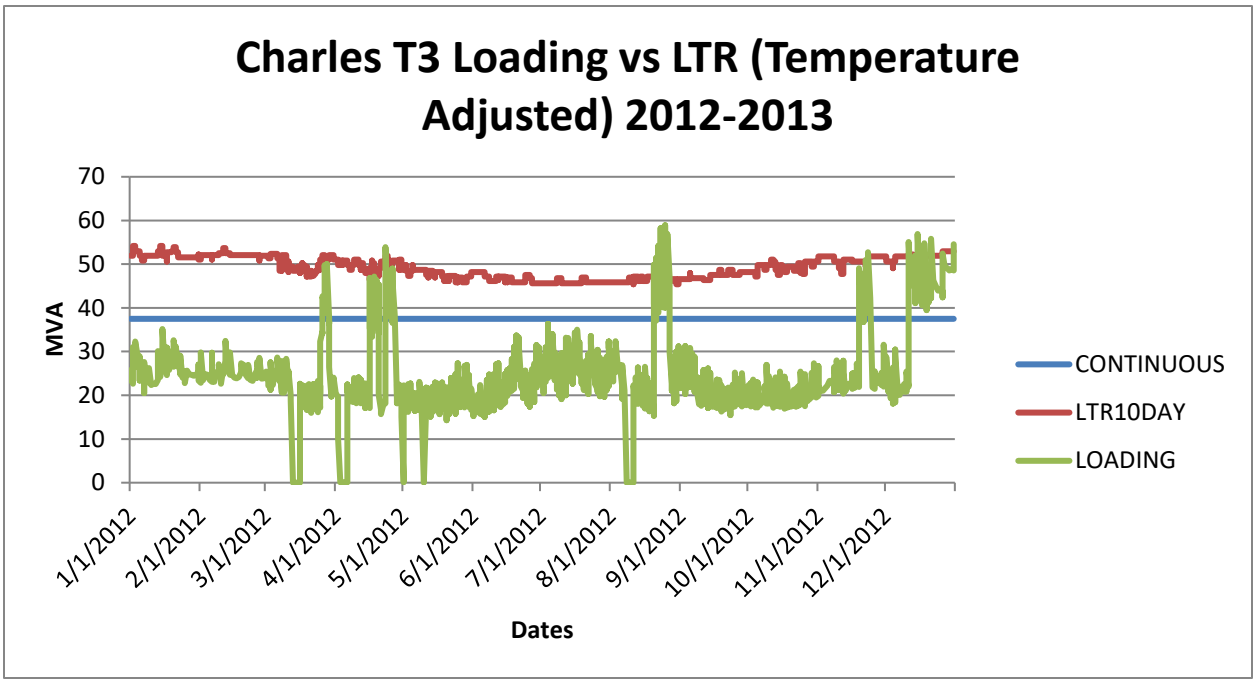
Annual Average Load factor for T3:

Year	Load Factor
2011	0.31
2012	0.67
2013	0.68
2014	0.60
2015	0.63
2016	0.85

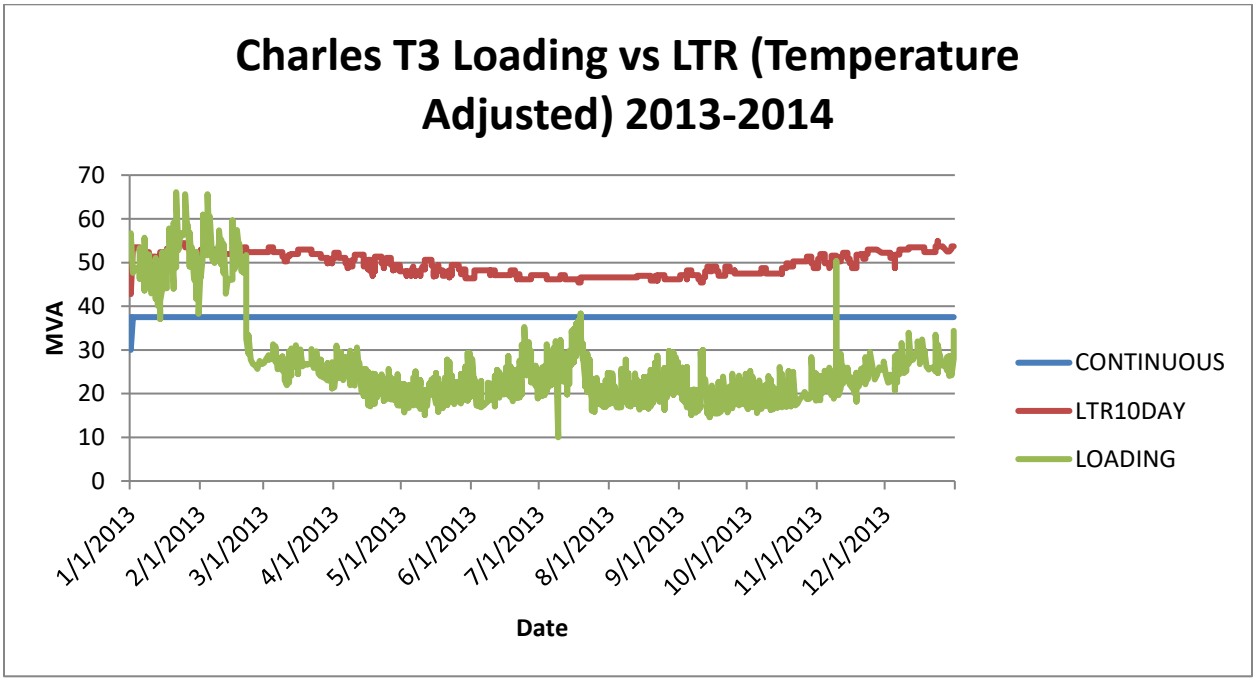


Graph 5: Charles T3 Loading vs LTR (Temperature Adjusted) 2011 -2012

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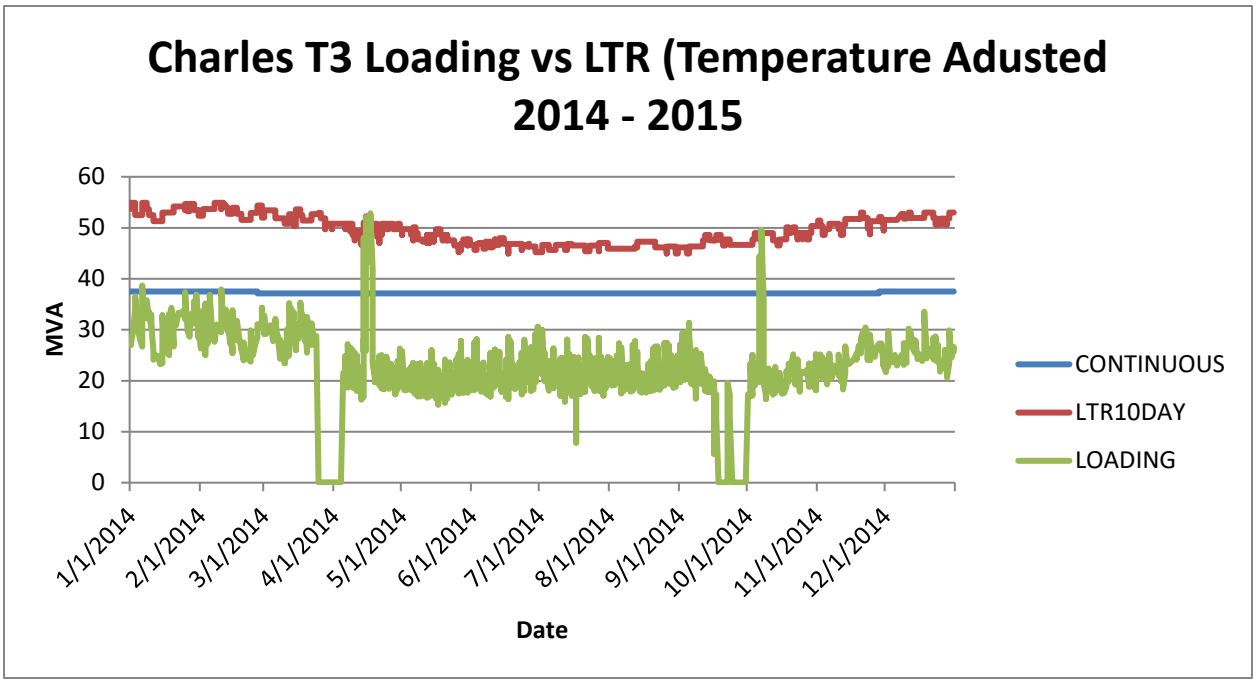


Graph 2: Charles T3 Loading vs LTR (Temperature Adjusted) 2012-2013

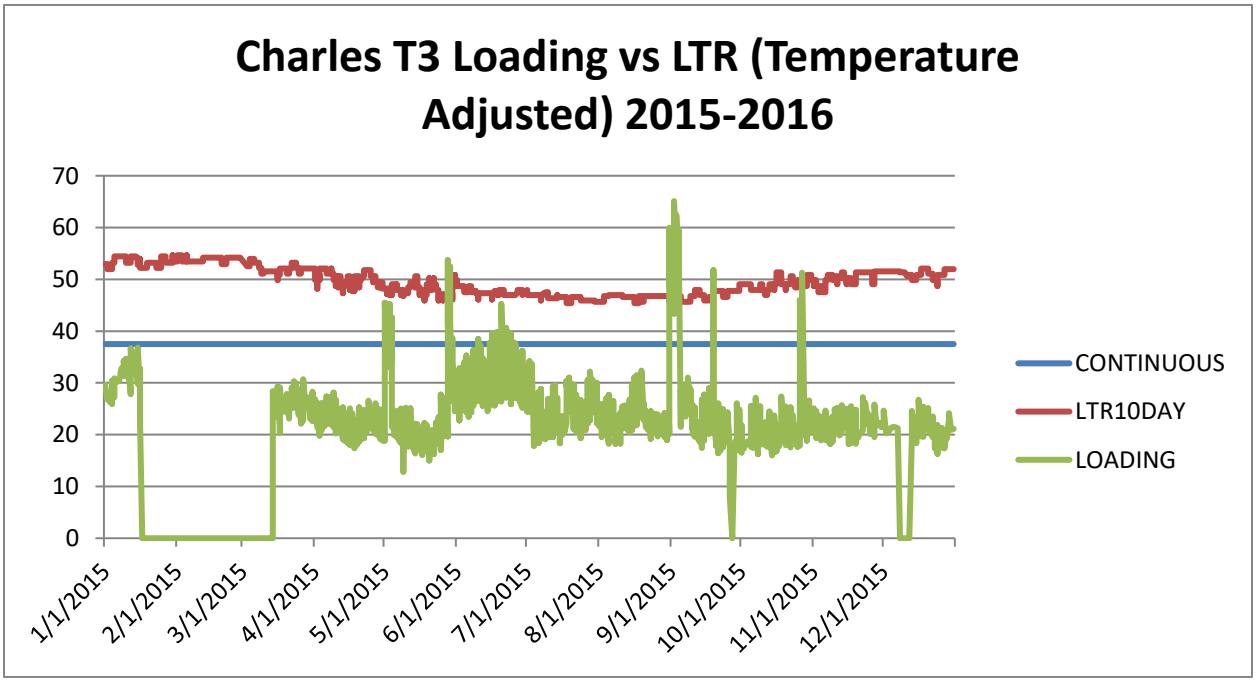


Graph 3: Charles T3 Loading vs LTR (Temperature Adjusted) 2013-2014

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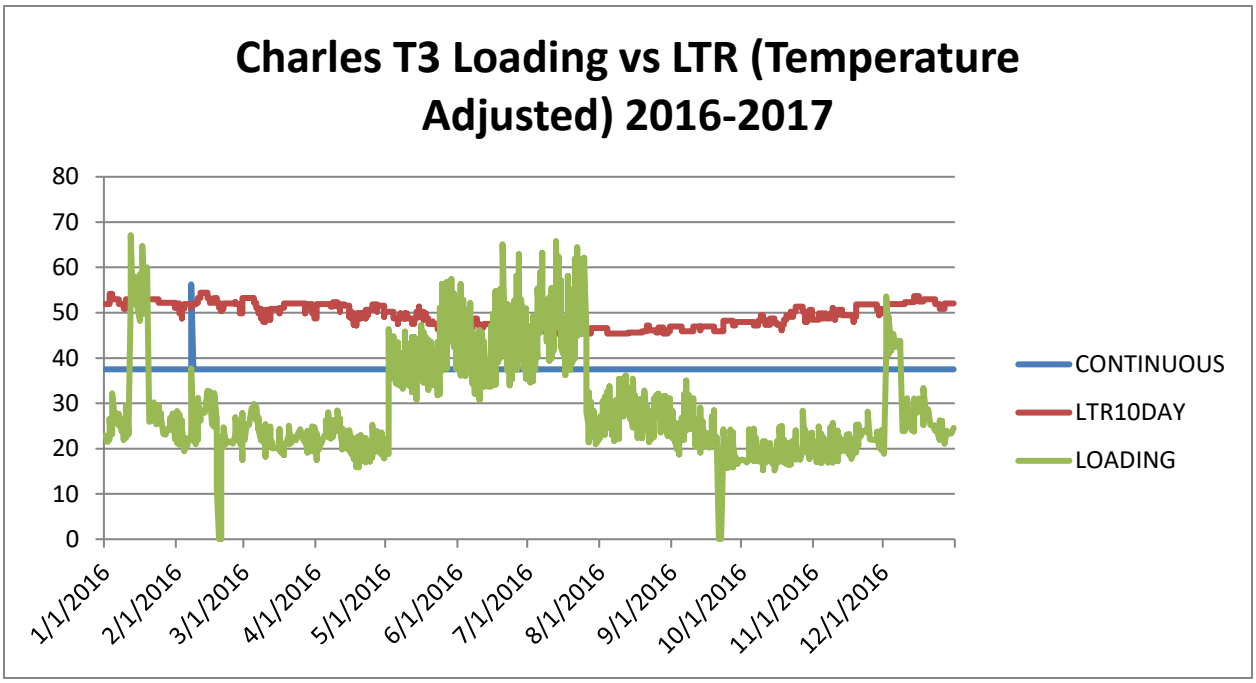


Graph 4: Charles T3 Loading vs LTR (Temperature Adjusted) 2014-2015



Graph 5: Charles T3 Loading vs LTR (Temperature Adjusted) 2015-2016

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Graph 6: Charles T3 Loading vs LTR (Temperature Adjusted) 2016 -2017

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7 Economics

7.1 Recorded OM&A Spending.

Table 4 summarized OM&A spending incurred on Charles T3 since SAP inception in 2008. It is concluded that Preventive maintenance spending went as planned.

T3 incurred higher corrective costs in 2010 and 2012 due to leak repairs, replacement of faulty components such as cooling fans, ventilation repairs, and winding tap position indicator repairs. [Ref. Notifications: 10496589, 10531506, 11270696,]

Year	CORR	EMER	OPER	PREV	UPGR	Grand Total
2009	$1,574.40	$6,072.00		$1,872.00		$9,518.40
2010	$34,933.53	$759.95	$5,857.69	$536.46	$148.73	$42,236.36
2011			$1,117.30	$2,209.15		$3,326.45
2012	$19,216.17	$0.00	$774.37	$3,155.89		$23,146.43
2013	$4,368.94	$0.00		$292.00		$4,660.94
2014	$1,328.33			$18,195.63		$19,523.96
2015		$0.00	$0.00	$4,165.54		$4,165.54
2016	$4,656.64			$1,693.97		$6,350.61
2017				$4,469.03		$4,469.03
Grand Total	**$66,078**	**$6,832**	**$7,749**	**$36,590**	**$149**	**$117,398**

Table 5: Historical OM&A spending on T3

PREV Maintenance Activity	Average Actual Cost (2013 - 2016)	Applicable to unit under assessment
TAP CHANGER OIL FILTER CHANGES	$ 1145.30	
TAP CHANGER OIL SAMPLES	$ 378.78	✓
TAP CHANGER SI	$ 7,217.88	✓
TRANSFORMER DBT --General	$ 5,656.15	✓
TRANSFORMER D1 --General	$ 3,919.07	✓
TRANSFORMER D2 --General	$ 3,523.62	✓
TRANSFORMER OIL SAMPLES --General	$ 304.02	✓

Table 6: Unit cost of various Preventative Maintenance Activities. Based on actual unit cost from 2013-2015

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7.2 Net Present Value Analysis

This session evaluates the cost benefit for various asset management options (Status Quo Maintain, repair, replacement) of T3 with Net Present Value Analysis (NPV), where:

- Status Quo Maintain: Perform routine maintenance to keep the unit in service. Replace at economic end of life (2022). Continue to maintain to end of study period (2075).
- Repair/Refurbish: Perform major repair/refurbishment in the year of interest (2017), then maintain as normal and replace the unit at economic end of life (2022). Continue to maintain to end of study period (2072).
- Replace: Advance the replacement to the year of interest (2018) instead of performing a refurbishment. Continue to maintain to end of study period (2072).

The study makes the following assumptions:

- Study period : 55 years[1]
- T3 will undergo refurbishment/ repair at 51 year old (2018), at approx. CAD$583.8k[2].
- Replacement cost is assumed to be CAD$5.8M[3] for a unit that matches purchasing standard S115-101
- New unit will benefit from lower maintenance cost due to longer tap changer internal inspection interval. New unit utilizes Buchholz relay and eliminate D2 maintenance task.
- Inflation: 2%. [3]
- Cost of Capital: 5.78% [3]
- Corporate Tax rate : 26.5% [3]
- CCA rate for Transmission Asset : 8% [3]
- Disposal Value : $0
- Average corrective cost of CAD 6.0K per year for T3 is minimal and hence not factored into NPV analysis

NPV of 3 options (Status Quo Maintain, Repair and Replace) were evaluated under the aforementioned assumptions. In general, NPV calculation has preferred the option to maintain status quo and wait for replacement.

Should a repair becomes necessary, the maximum budget that would keep a major refurbishment economical when compared to an advance replacement is CAD $583K + CAD $135.39K = CAD $709.57 K., the budget margin will continue to diminish as the unit approaches projected end of life.

Result Summary	Status Quo Maintain	Major Investment Maintain/Repair	Replace	Preferred Option
With CCA tax savings				
PV of Options, $k, with terminal value	5139.73	5699.94	5826.51	
PV of Options, $k, terminal value = 0	5358.15	5918.36	6190.53	
Investment Decision		NPV, $k		
Status Quo Maintain - Refurbish		-560.21		Maintain
Major Investment (Repair/Refurbish) - Replace		-126.57		Repair/Refurbish
Repair - Replace boundary			709.57	
Repair - Replace boundary, upper bound			780.53	
Repair - Replace boundary, lower bound			638.62	

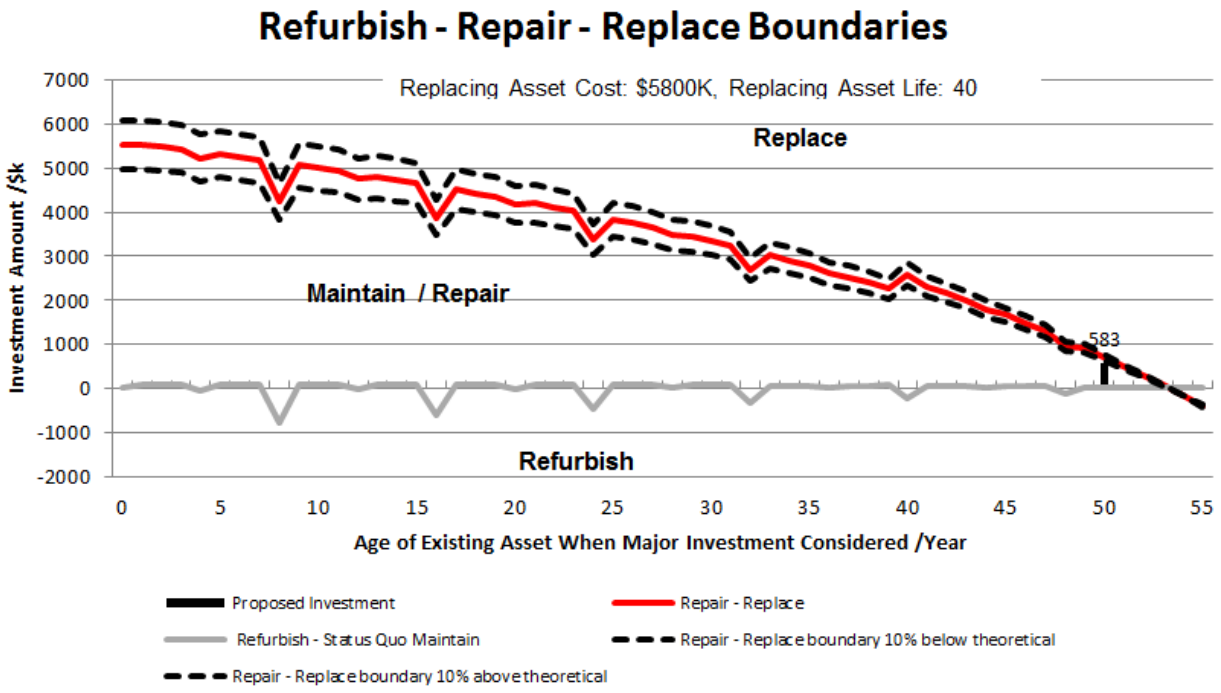
[1] Study period lengthen to 55 to accommodate the fact that the unit is already 50 years old. Normal study period is 40 years.

[2] $583.8 K is the 2010 – 2015 recorded average cost to refurbish transformer under AR 18335 (Transformer Oil Leak Reduction)

[3] Based on 2015 March, Average I/S Cost for Power Transformers in 115kV class.

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Table 7: Present Value comparison for different sustainment options



Graph 6: Visual Representation of NPV analysis

8 Conclusion

The demographics data, condition data, environmental/HSE hazards, equipment loading and economics related to Charles T3 have been reviewed. T3's oil data shows signs of insulation aging and degradation of cellulose material. T3's overall maintenance history indicated that T3 observed repeated oil leaks at the gas relay piping and from other compartments which was repaired. A review of T3's loading has revealed that T3 was heavily loaded with respect to its various loading limits from 2012-2016. During this time, T3 experienced consistent load spikes. NPV analysis suggests that it is economical to keep the unit in service when possible until its replacement. In conclusion, a replacement of the unit within 5 years would be considered prudent and economical in order to reduce reliability risk, environmental risk, and OM&A spending.

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Reference

[1] EPRI Power Transformer Guidebook: The Copper Book, 1st ed., Electric Power Research Institute (EPRI), Palo Alto, CA: 2016. pp. 119-125.

[2] Conestoga-Rogers & Associates. (2011). Hydro One Station Spill Risk Model. SIP-EnvMgmt-0100, Mississauga.

[3] Department of Economics and Load Forecasting, Hydro One Networks Inc. (2015), Hydro One Financial Evaluation Model, Toronto.

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APPENDIX 1 – PREVENTIVE MAINTENANCE RESULT

Notification	Notification type	Coding	Notif.date	Functional Loc.	Description
10658876	PR		02/12/2011	N-TS-CHARLESTS -TF-T3	20216 2011Tx PCB Reduction Oil Sample
12888822	PR	CR01	03/22/2014	N-TS-CHARLESTS -TF-T3	Tx PCB Reduction Oil Sample
11973741	PR		11/27/2012	N-TS-CHARLESTS -TF-T3	20216TxPCBsample2013
10542253	PR	CR01	09/22/2010	N-TS-CHARLESTS -TF-T3	STN 'A' PWR EQ INSP-SVI FALL
10561053	PR	CR01	10/04/2010	N-TS-CHARLESTS -TF-T3	TF-GENERAL-GOT
14899749	PR	CR01	07/16/2016	N-TS-CHARLESTS -TF-T3	TF-GENERAL-GOT
10754537	PR	CR03	10/05/2011	N-TS-CHARLESTS -TF-T3	STN 'A' PWR EQ INSP-SVI FALL 2011
14616464	PR		04/28/2016	N-TS-CHARLESTS -TF-T3	PREOUTAGE INSPECTION- CAT 2 - ELEC
14041971	PR	CR01	07/24/2015	N-TS-CHARLESTS -TF-T3	TF-GENERAL-GOT
10237677	PR	CR02	12/22/2008	N-TS-CHARLESTS -TF-T3	STN 'A' PWR EQ INSP-SVI
10314407	PR	CR01	06/15/2009	N-TS-CHARLESTS -TF-T3	STN 'A' PWR EQ INSP-SVI
13369082	PR	CR01	09/26/2014	N-TS-CHARLESTS -TF-T3	TF-GENERAL-GOT
10023179	PR		07/04/2008	N-TS-CHARLESTS -TF-T3	TF-GENERAL-M1
12659706	PR	CR01	09/27/2013	N-TS-CHARLESTS -TF-T3	TF-GENERAL-DBT
12643559	PR	CR01	09/26/2013	N-TS-CHARLESTS -TF-T3	TF-GENERAL-GOT
10592036	PR	CR01	10/15/2010	N-TS-CHARLESTS -TF-T3	TF-GENERAL-D1
12659705	PR	CR01	09/27/2013	N-TS-CHARLESTS -TF-T3	TF-GENERAL-D1
10663014	PR	CR01	03/02/2011	N-TS-CHARLESTS -TF-T3	STN 'A' PWR EQ INSP-SVI SPRING 2011
10268734	PR	CR01	03/02/2009	N-TS-CHARLESTS -TF-T3	TF-GENERAL-GOT
10390669	PR	CR01	11/09/2009	N-TS-CHARLESTS -TF-T3	STN 'A' PWR EQ INSP-SVI
10432281	PR	CR01	01/08/2010	N-TS-CHARLESTS -TF-T3	TF-GENERAL-GOT
10268733	PR	CR01	03/02/2009	N-TS-CHARLESTS -TF-T3	TF-GENERAL-M1
10497183	PR		04/29/2010	N-TS-CHARLESTS -TF-T3	TF-GENERAL-M1
11824677	PR	CR01	10/13/2012	N-TS-CHARLESTS -TF-T3	TF-GENERAL-GOT
11805278	PR	CR03	10/04/2012	N-TS-CHARLESTS -TF-T3	STN 'A' PWR EQ INSP-SVI AUT 2012

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15130490	PR	CR01	09/29/2016	N-TS-CHARLESTS -TF-T3	STN 'A' PWR EQ INSP-SVI FALL 2016
12148210	PR	CR03	04/16/2013	N-TS-CHARLESTS -TF-T3	STN 'A' PWR EQ INSP-SVI SPR 2013
10498265	PR	CR03	04/30/2010	N-TS-CHARLESTS -TF-T3	STN 'A' PWR EQ INSP-SVI SPRING
15821381	PR	CR01	06/27/2017	N-TS-CHARLESTS -TF-T3	STN 'A' PWR EQ INSP-SVI Spr 2017
13807532	PR	CR03	05/26/2015	N-TS-CHARLESTS -TF-T3	STN 'A' PWR INSP-SVI SPRING 2015 Pan Am
15876169	PR		07/21/2017	N-TS-CHARLESTS -TF-T3	TF-GENERAL-D2
15872653	PR		07/21/2017	N-TS-CHARLESTS -TF-T3	TF-GENERAL-GOT
10771631	PR	CR01	10/21/2011	N-TS-CHARLESTS -TF-T3	TF-GENERAL-GOT
15846552	PR	CR01	07/07/2017	N-TS-CHARLESTS -TF-T3	PREOUTAGE INSPECTION- CAT 1 - ELEC
15846553	PR	CR01	07/07/2017	N-TS-CHARLESTS -TF-T3	PREOUTAGE INSPECTION- CAT 1 - G&S
12968805	PR	CR03	05/13/2014	N-TS-CHARLESTS -TF-T3	STN 'A' PWREQ INSP-SVI SPRIG 2014 Pan Am
15872652	PR		07/21/2017	N-TS-CHARLESTS -TF-T3	TF-GENERAL-D1
11153221	PR	CR03	05/03/2012	N-TS-CHARLESTS -TF-T3	STN 'A' PWR EQ INSP-SVI SPR 2012
12786487	PR	CR03	11/19/2013	N-TS-CHARLESTS -TF-T3	STN 'A' PWR EQ INSP-SVI FALL 2013
12786501	PR	CR01	11/19/2013	N-TS-CHARLESTS -TF-T3	STN 'A' PWR EQ INSP-SVI FALL 2013
14048513	PR	CR01	07/25/2015	N-TS-CHARLESTS -TF-T3	UT-MR-DIII-UTOA
12643077	PR	CR01	09/26/2013	N-TS-CHARLESTS -TF-T3	UT-MR-DIII-UTOA
12660376	PR	CR01	09/27/2013	N-TS-CHARLESTS -TF-T3	UT-MR-DIII-SI
11153223	PR	CR01	05/03/2012	N-TS-CHARLESTS -TF-T3	STN 'A' PWR EQ INSP-SVI SPR 2012
10663048	PR	CR01	03/02/2011	N-TS-CHARLESTS -TF-T3	STN 'A' PWR EQ INSP-SVI SPRING 2011
15130577	PR	CR01	09/29/2016	N-TS-CHARLESTS -TF-T3	STN 'A' PWR EQ INSP-SVI FALL 2016
10777437	PR	CR01	10/21/2011	N-TS-CHARLESTS -TF-T3	UT-MR-DIII-UTOA
10408253	PR	CR01	12/09/2009	N-TS-CHARLESTS -TF-T3	UT-MR/DFM-3/2-800A/F-UTOA
10264159	PR	CR01	02/16/2009	N-TS-CHARLESTS -TF-T3	UT-MR/DFM-3/2-800A/F-UTOA
10498299	PR	CR01	04/30/2010	N-TS-CHARLESTS -TF-T3	STN 'A' PWR EQ INSP-SVI SPRING
15821460	PR	CR01	06/27/2017	N-TS-CHARLESTS -TF-T3	STN 'A' PWR EQ INSP-SVI Spr 2017
11836478	PR	CR01	10/14/2012	N-TS-CHARLESTS -TF-T3	UT-MR-DIII-UTOA
10542287	PR	CR01	09/22/2010	N-TS-CHARLESTS -TF-T3	STN 'A' PWR EQ INSP-SVI FALL

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10564297	PR	CR01	10/04/2010	N-TS-CHARLESTS -TF-T3	UT-MR/DFM-3/2-800A/F-UTOA
11805276	PR	CR01	10/04/2012	N-TS-CHARLESTS -TF-T3	STN 'A' PWR EQ INSP-SVI AUT 2012
14922847	PR	CR01	07/16/2016	N-TS-CHARLESTS -TF-T3	UT-MR-DIII-UTOA
10754572	PR	CR01	10/05/2011	N-TS-CHARLESTS -TF-T3	STN 'A' PWR EQ INSP-SVI FALL 2011
15875753	PR		07/21/2017	N-TS-CHARLESTS -TF-T3	UT-MR-DIII-UTOA
13807543	PR	CR01	05/26/2015	N-TS-CHARLESTS -TF-T3	STN 'A' PWR INSP-SVI SPRING 2015 Pan Am
10031105	PR		07/22/2008	N-TS-CHARLESTS -TF-T3	UT-MR/DFM-3/2-800A-SI
12148181	PR	CR01	04/16/2013	N-TS-CHARLESTS -TF-T3	STN 'A' PWR EQ INSP-SVI SPR 2013
13424468	PR	CR01	10/31/2014	N-TS-CHARLESTS -TF-T3	UT-MR-DIII-(SPECIAL)MCT -XLTC-DIV
13376706	PR	CR01	09/26/2014	N-TS-CHARLESTS -TF-T3	UT-MR-DIII-UTOA
12968800	PR	CR01	05/13/2014	N-TS-CHARLESTS -TF-T3	STN 'A' PWREQ INSP-SVI SPRIG 2014 Pan Am
12660394	PR	CR01	09/27/2013	N-TS-CHARLESTS -TF-T3	UT-MR-DIII-SI
13807544	PR	CR01	05/26/2015	N-TS-CHARLESTS -TF-T3	STN 'A' PWR INSP-SVI SPRING 2015 Pan Am
11153226	PR	CR01	05/03/2012	N-TS-CHARLESTS -TF-T3	STN 'A' PWR EQ INSP-SVI SPR 2012
10663049	PR	CR01	03/02/2011	N-TS-CHARLESTS -TF-T3	STN 'A' PWR EQ INSP-SVI SPRING 2011
14048514	PR	CR01	07/25/2015	N-TS-CHARLESTS -TF-T3	UT-MR-DIII-UTOA
13376707	PR	CR01	09/26/2014	N-TS-CHARLESTS -TF-T3	UT-MR-DIII-UTOA
12643079	PR	CR01	09/26/2013	N-TS-CHARLESTS -TF-T3	UT-MR-DIII-UTOA
10268719	PR	CR01	03/02/2009	N-TS-CHARLESTS -TF-T3	UT-MR/DFM-3/2-800A/F-UTOA
14922848	PR	CR01	07/16/2016	N-TS-CHARLESTS -TF-T3	UT-MR-DIII-UTOA
15130578	PR	CR01	09/29/2016	N-TS-CHARLESTS -TF-T3	STN 'A' PWR EQ INSP-SVI FALL 2016
15821464	PR	CR01	06/27/2017	N-TS-CHARLESTS -TF-T3	STN 'A' PWR EQ INSP-SVI Spr 2017
12968801	PR	CR01	05/13/2014	N-TS-CHARLESTS -TF-T3	STN 'A' PWREQ INSP-SVI SPRIG 2014 Pan Am
12786502	PR	CR01	11/19/2013	N-TS-CHARLESTS -TF-T3	STN 'A' PWR EQ INSP-SVI FALL 2013
10498300	PR	CR01	04/30/2010	N-TS-CHARLESTS -TF-T3	STN 'A' PWR EQ INSP-SVI SPRING
10754573	PR	CR01	10/05/2011	N-TS-CHARLESTS -TF-T3	STN 'A' PWR EQ INSP-SVI FALL 2011
10564298	PR	CR01	10/04/2010	N-TS-CHARLESTS -TF-T3	UT-MR/DFM-3/2-800A/F-UTOA
10542288	PR	CR01	09/22/2010	N-TS-CHARLESTS -TF-T3	STN 'A' PWR EQ INSP-SVI FALL

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10408620	PR	CR01	12/09/2009	N-TS-CHARLESTS -TF-T3	UT-MR/DFM-3/2-800A/F-UTOA
11805283	PR	CR01	10/04/2012	N-TS-CHARLESTS -TF-T3	STN 'A' PWR EQ INSP-SVI AUT 2012
11836479	PR	CR01	10/14/2012	N-TS-CHARLESTS -TF-T3	UT-MR-DIII-UTOA
15875754	PR		07/21/2017	N-TS-CHARLESTS -TF-T3	UT-MR-DIII-UTOA
12148193	PR	CR01	04/16/2013	N-TS-CHARLESTS -TF-T3	STN 'A' PWR EQ INSP-SVI SPR 2013
10777438	PR	CR01	10/21/2011	N-TS-CHARLESTS -TF-T3	UT-MR-DIII-UTOA
14463852	PR	CR01	12/14/2015	N-TS-CHARLESTS -TF-T3	Tx PCB Reduction Oil Sample
10237665	PR	CR01	12/22/2008	N-TS-CHARLESTS -TF-T3	STN 'A' PWR EQ INSP-SVI
13807440	PR	CR01	05/26/2015	N-TS-CHARLESTS -TF-T3	STN 'A' PWR INSP-SVI SPRING 2015 Pan Am
10314395	PR	CR01	06/15/2009	N-TS-CHARLESTS -TF-T3	STN 'A' PWR EQ INSP-SVI
15130673	PR	CR01	09/29/2016	N-TS-CHARLESTS -TF-T3	STN 'A' PWR EQ INSP-SVI FALL 2016
10390657	PR	CR01	11/09/2009	N-TS-CHARLESTS -TF-T3	STN 'A' PWR EQ INSP-SVI
10390658	PR	CR01	11/09/2009	N-TS-CHARLESTS -TF-T3	STN 'A' PWR EQ INSP-SVI
10237666	PR	CR01	12/22/2008	N-TS-CHARLESTS -TF-T3	STN 'A' PWR EQ INSP-SVI
15130674	PR	CR01	09/29/2016	N-TS-CHARLESTS -TF-T3	STN 'A' PWR EQ INSP-SVI FALL 2016
14463853	PR	CR01	12/14/2015	N-TS-CHARLESTS -TF-T3	Tx PCB Reduction Oil Sample
10314396	PR	CR01	06/15/2009	N-TS-CHARLESTS -TF-T3	STN 'A' PWR EQ INSP-SVI
13807441	PR	CR01	05/26/2015	N-TS-CHARLESTS -TF-T3	STN 'A' PWR INSP-SVI SPRING 2015 Pan Am
10390659	PR	CR01	11/09/2009	N-TS-CHARLESTS -TF-T3	STN 'A' PWR EQ INSP-SVI
14463851	PR	CR01	12/14/2015	N-TS-CHARLESTS -TF-T3	Tx PCB Reduction Oil Sample
10314397	PR	CR01	06/15/2009	N-TS-CHARLESTS -TF-T3	STN 'A' PWR EQ INSP-SVI
10237667	PR	CR01	12/22/2008	N-TS-CHARLESTS -TF-T3	STN 'A' PWR EQ INSP-SVI
15130675	PR	CR01	09/29/2016	N-TS-CHARLESTS -TF-T3	STN 'A' PWR EQ INSP-SVI FALL 2016
13807442	PR	CR01	05/26/2015	N-TS-CHARLESTS -TF-T3	STN 'A' PWR INSP-SVI SPRING 2015 Pan Am
10314356	PR	CR01	06/15/2009	N-TS-CHARLESTS -TF-T3	STN 'A' PWR EQ INSP-SVI
14463854	PR	CR01	12/14/2015	N-TS-CHARLESTS -TF-T3	Tx PCB Reduction Oil Sample
10237626	PR	CR01	12/22/2008	N-TS-CHARLESTS -TF-T3	STN 'A' PWR EQ INSP-SVI
10390618	PR	CR01	11/09/2009	N-TS-CHARLESTS -TF-T3	STN 'A' PWR EQ INSP-SVI

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13807443	PR	CR01	05/26/2015	N-TS-CHARLESTS -TF-T3	STN 'A' PWR INSP-SVI SPRING 2015 Pan Am
15130676	PR	CR01	09/29/2016	N-TS-CHARLESTS -TF-T3	STN 'A' PWR EQ INSP-SVI FALL 2016
10390619	PR	CR01	11/09/2009	N-TS-CHARLESTS -TF-T3	STN 'A' PWR EQ INSP-SVI
10237627	PR	CR01	12/22/2008	N-TS-CHARLESTS -TF-T3	STN 'A' PWR EQ INSP-SVI
15130680	PR	CR01	09/29/2016	N-TS-CHARLESTS -TF-T3	STN 'A' PWR EQ INSP-SVI FALL 2016
13807444	PR	CR01	05/26/2015	N-TS-CHARLESTS -TF-T3	STN 'A' PWR INSP-SVI SPRING 2015 Pan Am
10314357	PR	CR01	06/15/2009	N-TS-CHARLESTS -TF-T3	STN 'A' PWR EQ INSP-SVI
14463855	PR	CR01	12/14/2015	N-TS-CHARLESTS -TF-T3	Tx PCB Reduction Oil Sample
15130681	PR	CR01	09/29/2016	N-TS-CHARLESTS -TF-T3	STN 'A' PWR EQ INSP-SVI FALL 2016
13807445	PR	CR01	05/26/2015	N-TS-CHARLESTS -TF-T3	STN 'A' PWR INSP-SVI SPRING 2015 Pan Am
10314358	PR	CR01	06/15/2009	N-TS-CHARLESTS -TF-T3	STN 'A' PWR EQ INSP-SVI
10237628	PR	CR01	12/22/2008	N-TS-CHARLESTS -TF-T3	STN 'A' PWR EQ INSP-SVI
14463856	PR	CR01	12/14/2015	N-TS-CHARLESTS -TF-T3	Tx PCB Reduction Oil Sample
10390620	PR	CR01	11/09/2009	N-TS-CHARLESTS -TF-T3	STN 'A' PWR EQ INSP-SVI
15130682	PR	CR01	09/29/2016	N-TS-CHARLESTS -TF-T3	STN 'A' PWR EQ INSP-SVI FALL 2016
13807446	PR	CR01	05/26/2015	N-TS-CHARLESTS -TF-T3	STN 'A' PWR INSP-SVI SPRING 2015 Pan Am
10314458	PR	CR01	06/15/2009	N-TS-CHARLESTS -TF-T3	STN 'A' PWR EQ INSP-SVI
10390720	PR	CR01	11/09/2009	N-TS-CHARLESTS -TF-T3	STN 'A' PWR EQ INSP-SVI
14463857	PR	CR01	12/14/2015	N-TS-CHARLESTS -TF-T3	Tx PCB Reduction Oil Sample
10237728	PR	CR01	12/22/2008	N-TS-CHARLESTS -TF-T3	STN 'A' PWR EQ INSP-SVI
14463858	PR	CR01	12/14/2015	N-TS-CHARLESTS -TF-T3	Tx PCB Reduction Oil Sample
15130683	PR	CR01	09/29/2016	N-TS-CHARLESTS -TF-T3	STN 'A' PWR EQ INSP-SVI FALL 2016
13807447	PR	CR01	05/26/2015	N-TS-CHARLESTS -TF-T3	STN 'A' PWR INSP-SVI SPRING 2015 Pan Am
10237729	PR	CR01	12/22/2008	N-TS-CHARLESTS -TF-T3	STN 'A' PWR EQ INSP-SVI
10390721	PR	CR01	11/09/2009	N-TS-CHARLESTS -TF-T3	STN 'A' PWR EQ INSP-SVI
10314459	PR	CR01	06/15/2009	N-TS-CHARLESTS -TF-T3	STN 'A' PWR EQ INSP-SVI
13807448	PR	CR01	05/26/2015	N-TS-CHARLESTS -TF-T3	STN 'A' PWR INSP-SVI SPRING 2015 Pan Am
10314460	PR	CR01	06/15/2009	N-TS-CHARLESTS -TF-T3	STN 'A' PWR EQ INSP-SVI

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14463859	PR	CR01	12/14/2015	N-TS-CHARLESTS -TF-T3	Tx PCB Reduction Oil Sample
15130686	PR	CR01	09/29/2016	N-TS-CHARLESTS -TF-T3	STN 'A' PWR EQ INSP-SVI FALL 2016
10237730	PR	CR01	12/22/2008	N-TS-CHARLESTS -TF-T3	STN 'A' PWR EQ INSP-SVI
10390722	PR	CR01	11/09/2009	N-TS-CHARLESTS -TF-T3	STN 'A' PWR EQ INSP-SVI
13807449	PR	CR01	05/26/2015	N-TS-CHARLESTS -TF-T3	STN 'A' PWR INSP-SVI SPRING 2015 Pan Am
14463880	PR	CR01	12/14/2015	N-TS-CHARLESTS -TF-T3	Tx PCB Reduction Oil Sample
10237731	PR	CR01	12/22/2008	N-TS-CHARLESTS -TF-T3	STN 'A' PWR EQ INSP-SVI
10314461	PR	CR01	06/15/2009	N-TS-CHARLESTS -TF-T3	STN 'A' PWR EQ INSP-SVI
15130687	PR	CR01	09/29/2016	N-TS-CHARLESTS -TF-T3	STN 'A' PWR EQ INSP-SVI FALL 2016
10390723	PR	CR01	11/09/2009	N-TS-CHARLESTS -TF-T3	STN 'A' PWR EQ INSP-SVI
10314359	PR	CR01	06/15/2009	N-TS-CHARLESTS -TF-T3	STN 'A' PWR EQ INSP-SVI
10390621	PR	CR01	11/09/2009	N-TS-CHARLESTS -TF-T3	STN 'A' PWR EQ INSP-SVI
10237629	PR	CR01	12/22/2008	N-TS-CHARLESTS -TF-T3	STN 'A' PWR EQ INSP-SVI
15130493	PR	CR01	09/29/2016	N-TS-CHARLESTS -TF-T3	STN 'A' PWR EQ INSP-SVI FALL 2016
13807450	PR	CR01	05/26/2015	N-TS-CHARLESTS -TF-T3	STN 'A' PWR INSP-SVI SPRING 2015 Pan Am
14463881	PR	CR01	12/14/2015	N-TS-CHARLESTS -TF-T3	Tx PCB Reduction Oil Sample

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APPENDIX 2 – LIST OF DR AND TC NOTIFICATION

Notification	Notification type	Priority	Notif.date	Functional Loc.	Description
13808043	DR	High (7-30 Days)	05/26/2015	N-TS-CHARLESTS -TF-T3	T3 Y winding tap position indicator
15009597	DR	Medium (30-90 Days)	08/17/2016	N-TS-CHARLESTS -TF-T3	Charles T3 ventilation repair
10496589	DR	High (7-30 Days)	04/28/2010	N-TS-CHARLESTS -TF-T3	Charles TS T3 Oil leak
13831873	TC	Emergent (< 7 Days)	06/01/2015	N-TS-CHARLESTS -TF-T3	S3-EMD - T3 COOLING BACK TO NORMAL
12867881	DR	By a Fixed Date	02/13/2014	N-TS-CHARLESTS -TF-T3	NT45 Inspect transfrmer for oil leaks
12786363	DR	High (7-30 Days)	11/19/2013	N-TS-CHARLESTS -TF-T3	Charles TS T3 Cooling Fans
10754593	DR	Medium (30-90 Days)	10/05/2011	N-TS-CHARLESTS -TF-T3	Charles TS T3 Cooling Fan Not Working
11358589	TC	Emergent (< 7 Days)	07/11/2012	N-TS-CHARLESTS -TF-T3	S3 RE: TORONTO HYDRO REPORTING OIL AROUN
11206493	TC	Emergent (< 7 Days)	06/11/2012	N-TS-CHARLESTS -TF-T3	S3 REPORT OF OIL LEAKING FROM UNKNOWN TR
10531506	DR	High (7-30 Days)	08/03/2010	N-TS-CHARLESTS -TF-T3	Repair oil leak on relay piping
10533324	TC	Emergent (< 7 Days)	08/15/2010	N-TS-CHARLESTS -TF-T3	S3-CHARLES TS-T3 OIL LEAK
10480489	DR	High (7-30 Days)	03/25/2010	N-TS-CHARLESTS -TF-T3	Oil on floor inside Charles T3 bay
10370028	TC	Emergent (< 7 Days)	10/07/2009	N-TS-CHARLESTS -TF-T3	s3 charles emd switching t3
10325589	TC	Emergent (< 7 Days)	07/07/2009	N-TS-CHARLESTS -TF-T3	S3 Charles T3 Tap Changers
10252268	DR	Emergent (< 7 Days)	01/14/2009	N-TS-CHARLESTS -TF-T3	Charles T3 low oil
10252189	TC	Emergent (< 7 Days)	01/14/2009	N-TS-CHARLESTS -TF-T3	Sec 3 Charles TS low oil T3
10533513	DR	Emergent (< 7 Days)	08/15/2010	N-TS-CHARLESTS -TF-T3	S3-CHARLES TS-T3 OIL LEAK
11270696	DR	High (7-30 Days)	07/05/2012	N-TS-CHARLESTS -TF-T3	Charles T3 oil leak

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Health Assessments for T3 and T4 Transformers at Charles TS

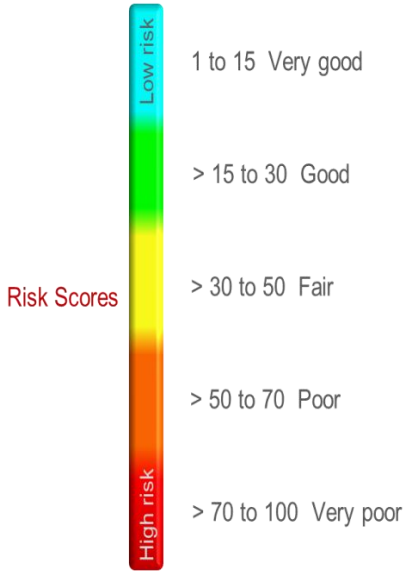
Prepared by: Peter Zhao

Approved by: Behdad Biglar

Date: August 11, 2021

Rev.#: 00

APPENDIX – Health Index Summary



The asset risk assessment process relies on the Asset Analytics system to provide initial asset screening and quantitative analysis of the following six risk factors:

- Condition – Asset Health Index or condition risk related to the increased probability of failure that assets experience when their condition degrades over time.
- Demographics - Risk related to the increased probability of failure exhibited by assets of a particular make, manufacturer, and/or vintage.
- Criticality - Represents the impact that the failure of a specific asset would have on the transmission system
- Performance - Risk that reflects the historical performance of an asset, derived from the frequency and duration of outages
- Utilization - Risk that reflects the increased rate of deterioration exhibited by an asset that is highly utilized
- Economics - Risk based on the economic evaluation of the ongoing costs associated with the operation of an asset
- Composite - Calculated as a weighted average of the other 6 primary Risk Factors.

The Asset Analytics system enables Hydro One planners to review aggregated information from various enterprise reporting systems to provide a common understanding of asset health and asset risks. This drives efficient and effective planning decisions by ensuring a consistent view of asset information for all planners. The information contained within the asset analytics system includes condition information driven by deficiency and preventative maintenance reports, demographic information (including make, model, type and criticality to the transmission system), performance data based on equipment outages, utilization information, and economics.

Hydro One's planners also take into account additional factors such as load forecasts, equipment ratings, operating restrictions, security incidents, environmental risks and requirements, compliance obligations, equipment defects, obsolescence, and health and safety considerations to ensure capital expenditures target the most appropriate mix of assets.

Table 1 Health Assessment for Power Transformers at Charles TS

Asset	Age	Final review		Conditi	Demog.	Econ.	Perform.	Utiliz.	Critic.	Compo.	Obsole.	HS&E	PCB
		Risk	Technical Assessments and Recommendations										
T3	55	very high	• The assessment concluded that T3 has shown deterioration of the structural integrity, in a very high-risk category. • Faulty gasses were detected in main tank. • *Multiple/severe oil leaks were reported over the years. • ** High PCB contamination on bushings, which is required for mititaigation by 2025. • Tap changers require frequent manual interventions and repairs. • Recommend to replace the unit within next 5 years to mitigate reliability risk, environmental risk, and lower lifecycle cost.	36	100	48	2	4	21	30	N/A	Y*	Y**
T4	55	high	• The assessment concluded that T4 has shown deterioration of the structural integrity, in a high-risk category. • Faulty gasses were detected in main tank. • *Multiple/severe oil leaks were reported over the years • Recommend to replace the unit within next 5 years to mitigate reliability risk, environmental risk, and lower lifecycle cost.	29	100	13	2	4	29	24	N/A	Y*	N/A

Health assessment for MV Breakers at Charles TS

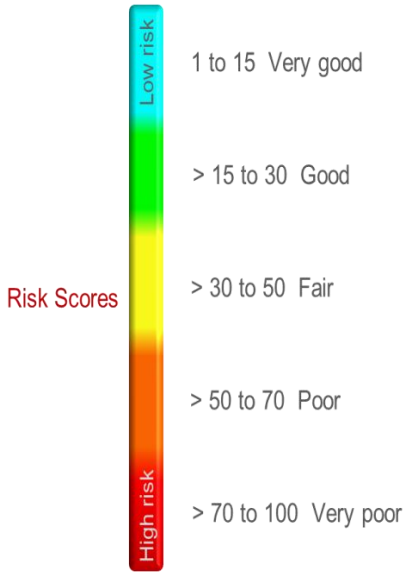
Prepared by: Harshal Bhatt

Approved by: Behdad Biglar

Date: 12th August 2021

Rev.#: 1

APPENDIX – Health Index Summary



The asset risk assessment process relies on the Asset Analytics system to provide initial asset screening and quantitative analysis of the following six risk factors:

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Hydro One's planners also take into account additional factors such as load forecasts, equipment ratings, operating restrictions, security incidents, environmental risks and requirements, compliance obligations, equipment defects, obsolescence, and health and safety considerations to ensure capital expenditures target the most appropriate mix of assets.

Station	Asset	Type	Age	Final review		Cond. RF	Demo. RF	Perform. RF	Econ. RF	Utiliz. RF	Critic. RF	Obsoclec.	HS&E
				Asset Risk Assessment (ARA)	Comments								
Charles TS	T1A5A6	MV-M/C SF6	29	High - Long Term	Asset is in GOOD condition, Parts availability is limited with the old technology. Arc Flash concerns with this model.	16	40	1	72	35	29	Y	Y
	T1A7A8	MV-M/C Amag	46	High - Short Term	Asset is in FAIR condition, Parts availability is extremely scarce with the old technology. High repair costs associated if any repairs are required in future. Arc Flash concerns with this model.	1	100	1	89	24	29	Y	Y
	T2A5A6	MV-M/C SF6	29	High - Long Term	Asset is in GOOD condition, Parts availability is limited with the old technology. Arc Flash concerns with this model.	1	40	1	1	26	29	Y	Y
	T2A7A8	MV-M/C Amag	46	High - Short Term	Asset is in FAIR condition, Parts availability is extremely scarce with the old technology. High repair costs associated if any repairs are required in future. Arc Flash concerns with this model.	1	100	1	1	31	29	Y	Y
	T3A1A2	MV-M/C Amag	54	High - Short Term	Asset is in FAIR condition, Parts availability is extremely scarce with the old technology. High repair costs associated if any repairs are required in future. Arc Flash concerns with this model.	1	100	1	1	37	29	Y	Y

	T3A3A4	MV-M/C Amag	51	High - Short Term	Asset is in FAIR condition, Parts availability is limited with the old technology. High economic and utlization which is prone to overspending and wear and tear.	1	100	1	1	39	29	Y	Y
	T4A1A2	MV-M/C Amag	54	High - Short Term	Asset is in FAIR condition, Parts availability is limited with the old technology. High utlization which is prone to wear and tear.	1	100	1	1	42	29	Y	Y
	T4A3A4	MV-M/C Amag	51	High - Short Term	Asset is in FAIR condition, Parts availability is limited with the old technology.	1	100	1	29	38	29	Y	Y

Station	Asset	Type	Age(2021)	Asset Risk Assessment (ARA)	Comments	Condition RF	Demographics RF	Economics RF	Performance RF	Utilization RF	Criticality	Obsolescence	HS&E
Charles TS (Protections)	N-TS-CHARLESTS -PR-FTR UFLS	Microprocessor Relays	15	High	The UFLS will be removed with functions incorpoated into the Bus Protection and will be removed.	1	24	1	1	0	35	Y	N
	N-TS-CHARLESTS -PR-T3A1A2 BF	Solid-state Relays	54	Very High	Solid-state relays are obsolete. It is currently being maintained with spare parts when it fails.	1	100	1	1	0	10	Y	Y
	N-TS-CHARLESTS -PR-T4A1A2 BF		54	Very High		1	100	9	89	0	10	Y	Y
	N-TS-CHARLESTS -PR-A1/A2 BU1	Electromechanical Relays	54	High	Electromechanical relays are obsolete and no longer supported. It is currently being maintained with spare parts at the Meter-shop when it fails.	1	65	1	6	0	10	Y	Y
	N-TS-CHARLESTS -PR-A1/A2 BU2		54	High		1	65	1	1	0	10	Y	Y
	N-TS-CHARLESTS -PR-A3/A4 BU1		54	High		1	65	1	1	0	10	Y	Y
	N-TS-CHARLESTS -PR-A3/A4 BU2		54	High		1	65	4	6	0	10	Y	Y
	N-TS-CHARLESTS -PR-A5/A6 BU1		54	High		1	65	1	1	0	10	Y	Y
	N-TS-CHARLESTS -PR-A5/A6 BU2		54	High		1	65	1	1	0	10	Y	Y
	N-TS-CHARLESTS -PR-A7/A8 BU1		54	High		1	65	1	1	0	10	Y	Y
	N-TS-CHARLESTS -PR-A7/A8 BU2		54	High		1	65	1	1	0	10	Y	Y
	N-TS-CHARLESTS -PR-L12C BU		54	High		1	65	1	1	0	1	Y	Y
	N-TS-CHARLESTS -PR-L4C BU-T1		54	High		1	65	1	1	0	1	Y	Y
	N-TS-CHARLESTS -PR-L4C BU-T4		54	High		1	65	1	1	0	1	Y	Y
	N-TS-CHARLESTS -PR-L9C BU		54	High		1	65	8	64	0	1	Y	Y
	N-TS-CHARLESTS -PR-T1 A		54	High		1	65	19	100	0	1	Y	Y
	N-TS-CHARLESTS -PR-T1A5A6 BF		54	High		1	65	1	1	0	10	Y	Y
	N-TS-CHARLESTS -PR-T1A7A8 BF		54	High		1	65	31	26	0	10	Y	Y
	N-TS-CHARLESTS -PR-T1 B		54	High		1	65	1	1	0	1	Y	Y
	N-TS-CHARLESTS -PR-T2 A		54	High		1	65	1	1	0	1	Y	Y
	N-TS-CHARLESTS -PR-T2A5A6 BF		54	High		1	65	1	1	0	10	Y	Y
	N-TS-CHARLESTS -PR-T2A7A8 BF		54	High		1	65	1	1	0	10	Y	Y
	N-TS-CHARLESTS -PR-T2 B		54	High		1	65	1	1	0	1	Y	Y
	N-TS-CHARLESTS -PR-T3 A		54	High		1	65	100	100	0	1	Y	Y
	N-TS-CHARLESTS -PR-T3A3A4 BF		54	High		1	65	1	1	0	10	Y	Y
	N-TS-CHARLESTS -PR-T3 B		54	High		1	65	1	19	0	1	Y	Y

N-TS-CHARLESTS -PR-T4 A	54	High	1	65	40	13	0	1	Y	Y
N-TS-CHARLESTS -PR-T4A3A4 BF	54	High	1	65	1	1	0	10	Y	Y
N-TS-CHARLESTS -PR-T4 B	54	High	1	65	1	1	0	1	Y	Y

Floc	Description	Equipmen	Make	Year Built	In-service	Samples	LAB TEST DATE (YYYYMMDD)	DISSOLVED HYDROGEN IN OIL	DISSOLVED OXYGEN IN OIL
N-TS-CHARLESTS -TF-T3	TF: Stepdn - 75MVA 110-14.2-14.2kV	1178289	CGE	1967	1967	2020	20201106	24	22421
N-TS-CHARLESTS -TF-T3		1178289	CGE	1967	1967	2019	20190322	19	28157
N-TS-CHARLESTS -TF-T3		1178289	CGE	1967	1967	2018	20181218	20	22277
N-TS-CHARLESTS -TF-T3		1178289	CGE	1967	1967	2017	20171105	0	3940
N-TS-CHARLESTS -TF-T3		1178289	CGE	1967	1967	2016	20160301	20	19100
N-TS-CHARLESTS -TF-T3		1178289	CGE	1967	1967	2015	20150115	15	21300
N-TS-CHARLESTS -TF-T3		1178289	CGE	1967	1967	2014	20140221	20	22400
N-TS-CHARLESTS -TF-T3		1178289	CGE	1967	1967	2012	20120830	10	24800
N-TS-CHARLESTS -TF-T3		1178289	CGE	1967	1967	2011	20110223	20	23400
N-TS-CHARLESTS -TF-T4	TF: Stepdn - 75MVA 110-14.2-14.2kV	1183465	CGE	1967	1967	2020	20201016	39	9185
N-TS-CHARLESTS -TF-T4		1183465	CGE	1967	1967	2019	20190322	44	8799
N-TS-CHARLESTS -TF-T4		1183465	CGE	1967	1967	2018	20180831	49	1119
N-TS-CHARLESTS -TF-T4		1183465	CGE	1967	1967	2017	20170314	0	7690
N-TS-CHARLESTS -TF-T4		1183465	CGE	1967	1967	2016	20160808	0	18500
N-TS-CHARLESTS -TF-T4		1183465	CGE	1967	1967	2015	20150115	35	14700
N-TS-CHARLESTS -TF-T4		1183465	CGE	1967	1967	2014	20140429	30	16100
N-TS-CHARLESTS -TF-T4		1183465	CGE	1967	1967	2012	20120924	25	16500
N-TS-CHARLESTS -TF-T4		1183465	CGE	1967	1967	2011	20110224	40	16600
N-TS-WILSONTS -TF-T1	TF: Stepdn - 125MVA 220-44kV	1183712	WESTINGH	1968	1968	2020	20200326	14	27227
N-TS-WILSONTS -TF-T1		1183712	WESTINGH	1968	1968	2019	20190607	29	39332
N-TS-WILSONTS -TF-T1		1183712	WESTINGH	1968	1968	2018	20181109	26	22918
N-TS-WILSONTS -TF-T1		1183712	WESTINGH	1968	1968	2017	20170511	25	30000
N-TS-WILSONTS -TF-T1		1183712	WESTINGH	1968	1968	2016	20160229	25	28400
N-TS-WILSONTS -TF-T1		1183712	WESTINGH	1968	1968	2015	20150225	25	27900
N-TS-WILSONTS -TF-T1		1183712	WESTINGH	1968	1968	2014	20140227	20	29000
N-TS-WILSONTS -TF-T1		1183712	WESTINGH	1968	1968	2013	20130207	15	26200
N-TS-WILSONTS -TF-T1		1183712	WESTINGH	1968	1968	2012	201268	10	26500
N-TS-WILSONTS -TF-T1		1183712	WESTINGH	1968	1968	2011	20110819	0	26300
N-TS-WILSONTS -TF-T2	TF: Stepdn - 125MVA 215.5-44-13kV	1175751	PION	1970	1970	2020	20200212	29	28799
N-TS-WILSONTS -TF-T2		1175751	PION	1970	1970	2019	20190809	23	27279
N-TS-WILSONTS -TF-T2		1175751	PION	1970	1970	2018	20181109	14	15981
N-TS-WILSONTS -TF-T2		1175751	PION	1970	1970	2017	20171123	0	4860
N-TS-WILSONTS -TF-T2		1175751	PION	1970	1970	2016	20160229	30	20500
N-TS-WILSONTS -TF-T2		1175751	PION	1970	1970	2015	20150225	30	19200
N-TS-WILSONTS -TF-T2		1175751	PION	1970	1970	2014	20140226	30	18700
N-TS-WILSONTS -TF-T2		1175751	PION	1970	1970	2012	2012319	20	18900
N-TS-WILSONTS -TF-T2		1175751	PION	1970	1970	2011	20110822	30	13600

DISSOLVED NITROGEN IN OIL	DISSOLVED (CO) IN OIL	DISSOLVED (CO2) IN OIL	DISSOLVED METHANE IN OIL	DISSOLVED ETHANE IN OIL	DISSOLVED ETHYLENE IN OIL
71485	355	2587	4	0	21
87508	408	2444	4	0.76	23
71598	493	2820	4	0.73	24
65400	762	2070	41	31	6
62900	369	2540	0	0	18
62500	304	2220	0	0	20
65800	343	2670	0	0	12
63300	231	1760	0	0	11
67500	243	1220	0	0	17
76941	573	2276	17	2	16
69231	652	1624	17	3	15
58749	695	1269	21	3	17
26600	172	611	6	0	8
63600	13	302	0	0	0
62900	569	2640	9	0	20
61500	540	3000	0	0	9
64400	450	2370	6	0	11
61000	432	2160	6	0	19
61969	455	2590	8	2	21
88110	575	3016	13	2	27
69022	529	3186	11	0	22
64500	420	2220	9	0	17
62000	382	1970	9	0	14
61500	465	2060	0	0	9
62800	393	1670	6	0	9
57000	385	1780	5	0	5
57000	288	1930	0	0	3
59500	164	1220	0	0	3
83378	351	1627	13	4	24
75479	324	1300	14	4	23
68239	239	1083	3	0	5
11200	30	212	0	0	0
62000	347	1900	6	4	20
63100	378	1860	7	5	26
64100	392	1840	9	7	28
80000	504	2240	6	5	26
68100	659	2570	8	7	25

DISSOLVED ACETYLENE IN OIL	TOTAL VOL OF DISSOLVED GAS	MOISTURE IN OIL	BREAKDOWN VOLTAGE (ASTM D1816)	BREAKDOWN VOLTAGE (ASTM D877)
16	9.69	16	64	46
17	11.86	7	63	50
18	9.73	8	41	46
0	7.2	3	66	56
12	8.45	15	57	45
16	8.6	5	63	48
16	9.09	6	58	49
13	8.98	22	17	23
18	9.2	5	45	46
30	8.91	14	59	47
25	8.04	8	51	44
23	6.19	20	26	49
7	3.5	5	66	56
3	8.21	6	65	46
45	8.06	5	30	52
43	8.08	6	71	58
32	8.34	17	46	48
39	8	8	69	54
37	9.23	2	N/A	48
55	13.12	3	N/A	51
48	9.58	7	68	48
32	9.68	5	65	53
26	9.24	2	70	58
20	9.16	1	56	52
14	9.35	2	44	35
11	8.5	1	63	52
16	8.53	4	60	52
10	8.69	5	23	41
9	11.42	4	N/A	55
8	10.45	8	N/A	51
3	8.56	7	58	55
0	1.63	5	47	46
3	8.44	4	57	48
5	8.43	2	52	50
2	8.48	2	48	58
0	10.13	7	57	56
5	8.46	9	46	39

OIL CONTAMINATION MEASUREMENT	ACIDITY MEASUREMNT (KOH reqd)	OIL POWER FACTOR AT 25 °C	FURAN IN OIL	COLOUR OF INSULATING OIL	SAMPLE OIL TEMPERATURE
25.2	0.05	0.08	78	3	35
25.4	0.04	0.06	82	3	25
25.1	0.05	0.06	87	2	25
26.1	0.03	0.43	5	3	40
25.7	0.05	0.07	84	3	12
25.2	0.04	0.06	70	3	25
25.3	0.04	0.07	79	3	20
24.9	0.04	0.09	101	2	30
25.2	0.04	0.06	97	2	15
22.6	0.09	0.21	54	4	30
23.2	0.08	0.12	42	4	25
23.4	0.07	0.22	49	3	45
23.3	0.07	0.13	50	4	21
23.4	0.07	0.13	52	4	25
22.9	0.07	0.1	44	4	25
23.3	0.06	0.14	48	4	20
23	0.05	0.13	42	3	55
23.2	0.07	0.12	26	3	15
42.2	N/A	0.01	8	1	22
43.8	N/A	0.01	7	1	25
42.4	0.01	0.02	7	1	40
42.4	0	0.01	7	1	15
43	0	0.01	6	1	25
41.9	0	0.01	7	2	16
48	0	0.01	6	1	53
40.5	0	0.01	6	1	15
42	0	0.02	6	N/A	35
41.6	0.01	0.02	0	1	45
25.3	N/A	0.21	20	3	0
24.5	N/A	0.18	24	3	20
25.1	0.05	0.14	22	3	40
24.9	0.05	0.1	27	3	20
25.6	0.04	0.09	32	3	20
25	0.05	0.11	28	3	20
25.4	0.05	0.08	30	3	55
25.6	0.04	0.12	27	N/A	40
25.6	0.04	0.22	27	3	40

Wilson T1

Transformer Assessment

Keywords: Wilson, T1, Transformer, Transmission, Station, Assessment

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1. Executive Summary

- Built in 1967 and in-serviced in 1968, Wilson T1 is a 75/100/125MVA, 220 /44kV, 3 phase transformer with on load tap changer.
- The T1 Transformer at Wilson TS has been reviewed and assessed based on: 1) Demographics, 2) Equipment condition, 3) Potential or existing environmental/HSE hazards, 4) Loading and 5) Economics.
- DGA analysis concluded insulation system deteriorated.
- T1 tap changer is MR type FIII, and its maintenance requires specialist from OEM to perform work and the parts are available from MR in Germany only.
- Multiple cooling failures have been reported on T1.
- T1 has been loaded within nameplate and LTR limits in general.
- Oil spill containment for T1 does not meet current Hydro One's standards.
- Complaints about transformer noise at Wilson TS were filed by the local.
- NPV analysis suggests the advanced replacement option over major Refurbishment
- Recommend replacement within 5 years to mitigate reliability risk, environmental risk, and lower life-cycle cost.

2. Equipment Summary

Built in 1967 by Canadian Westinghouse (CW) and in-serviced in 1968, Wilson T1 is a 75/100/125MVA, 220-44kV, 3 phase transformers with on load tap changer (model # FIII) by Maschinenfabrik Reinhausen (MR) in Germany. This transformer was designed for 55/65 Celsius average winding temperature rise.

3. Demographics

Wilson T1 is 53 years old. A total of 26 similar units are currently in service as of Dec 2016.

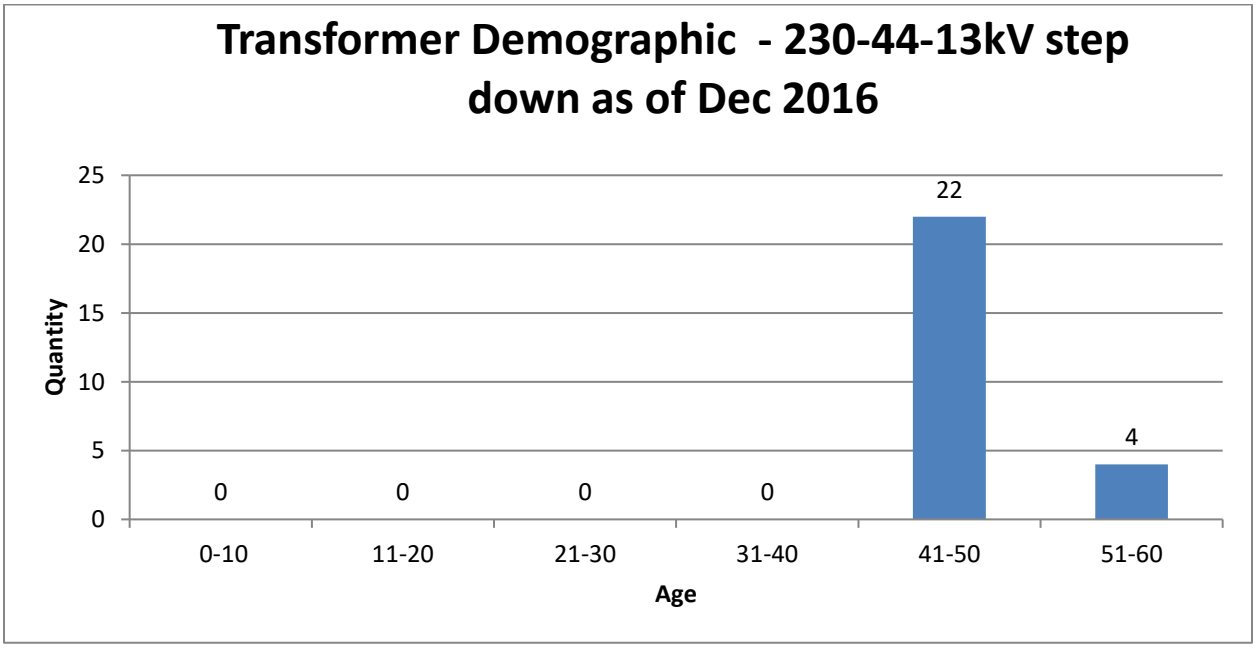


Chart 1: Transformer Demographic – 220-44-13kV Step down Transformer as of Dec 2016

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4. Equipment Condition

Equipment condition is examined based on: 1) Dissolved Gas Analysis (DGA) and 2) Moisture Analysis, and 3) Preventive Maintenance Result, Trouble Calls and Deficiency Report;

4.1. Oil analysis Data

DGA results from T1 presented in Table 1 indicate high contents of Acetylene (C2H2) and Carbon Dioxide (CO_2). The high concentration of Acetylene (C2H2) is the gas resulted from electrical arcing, and Carbon Dioxide (CO_2) results from aging of solid insulation. Meanwhile, traceable Hydrogen (H2) and Ethylene (C2H4) are detected as well.

T1's oil quality is satisfactory. Oil acidity, Inter-facial Tension (IFT), Power factor, dielectric strengths (ASTM D1816, ASTM D877), and moisture content values are acceptable [1].

Date	C2H2	C2H4	C2H6	CH4	CO	CO2	H2	N2	O2	Tot Vol of Gas (%)
Limit	≤3	≤30	≤30	≤60	≤500	≤1500	≤50	-	-	-
03/14/2012	12	6	0	0	317	1520	10	59100	27100	8.77
06/08/2012	16	3	0	0	288	1930	10	57000	26500	8.53
02/01/2013	11	5	0	5	385	1780	15	57000	26200	8.5
02/19/2014	14	9	0	6	393	1670	20	62800	29000	9.35
02/03/2015	20	9	0	0	465	2060	25	61500	27900	9.16
02/18/2016	26	14	0	9	382	1970	25	62000	28400	9.24
04/07/2017	32	17	0	9	420	2220	25	64500	30000	9.68
11/09/2018	48	22	0	11	529	3186	26	69022	22918	9.58
06/07/2019	55	27	2	13	575	3016	29	88110	39332	13.12
03/26/2020	37	21	2	8	455	2590	14	61969	27227	9.23

Table 1: DGA results for T1 from previous years. Quantities that are beyond warning limits are underlined and highlighted in red.

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Date	Acidity	Color	Furan	IFT	kV (ASTM D1816)	kV (ASTM D877)	Moisture	pf @ 25 °C
03/14/2012	0.01		0	43.1	61	57	39	0.02
06/08/2012	0		6	42	60	52	4	0.02
02/01/2013	0	1	6	40.5	63	52	1	0.01
02/19/2014	0	1	6	48	44	35	2	0.01
02/03/2015	0	2	7	41.9	56	52	1	0.01
02/18/2016	0	1	6	43	70	58	2	0.01
04/07/2017	0	1	7	42.4	65	53	5	0.01
11/09/2018	0	1	7	42.4	68	48	7	0.02
06/07/2019	n/a	1	7	43.8	n/a	51	3	0.01
03/26/2020	n/a	1	8	42.2	n/a	48	2	0.01

Table 2: Oil quality results for T1 from previous years. Quantities that are beyond warning limits are underlined and highlighted in red

4.2. Maintenance History, Trouble Calls and Deficiency Report

Standard power transformer maintenance packages are applied on Wilson T1 per Hydro One Work Standard Document SM-54-004 (main tank) and SM-54-036 (ULTC) respectively.

Preventive Maintenance schedule and results are summarized in Table below.

Maintenance Item	2012	2013	2014	2015	2016	2017	2018	2019
TF-GENERAL-D1 (4 year interval)				CR02				CR03
TF-GENERAL-D2 (8 year interval)				CR02				
TF-GENERAL-DBT (8 year interval)				CR01				
TF-GENERAL-GOT (Annual)	CR01	CR01	CR01	CR02	CR01	CR01	CR03	CR03
UT-MR-FIII-SI (8 Years interval)								CR01
UT-MR-FIII-UTOA (1 years interval)	CR01	CR01	CR01	CR01	CR01	CR01	CR03	CR03

Table 3: Preventive maintenance summary of T1

Table 3 summarizes Preventive maintenance history of T1 from 2012 – 2019. A list of Preventive maintenance results is attached in Appendix I.

Equipment Obsolescence

This transformer is Canadian Westinghouse (CW) with MR FIII type tap changer. The original manufacturer still provides parts and services to this type of tap changer. Some parts are no longer available of-the-shelf. Depending on parts required, it will require original manufacturer (MR) to fabricate on demand, which will take 8-10 weeks to deliver.

Trouble calls/deficiency report/Potential Need

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Trouble calls/deficiency reports have been reviewed as listed in Appendix II. It is concluded that the transformer had multiple operational issues from cooling failures:

1. T1 conservative tank is top up with oil. Oil leak inspection was performed in 2014 and no oil leak was reported. [Ref. notifications: 12868441, 13610890]
2. T1 has reported multiple cooling failures. Faulty Agastat TDR, AC circuit breaker, and burnt wires were replaced. A defective fan was repaired. Due to heating issues, most wire were burnt and loosened. Corrective measures were taken to replaced wire and assure proper operation. [Ref. notifications: 10383950, 16125633, 13470337, 10877481, 13288203, 10357256, 12817617, 10536152, 14147032, 15674642, 10357136]
3. Grounding studs are installed on T1 to provide grounding when working on the High Voltage side of the transformer [Ref. notification 10382347]
4. Tap changer filter was replaced because it stood in alarm mode all the time and it was reported that tap changer requires modification in 2009. [Ref. notification 10279310, 13199674]
5. Gas accumulation was reported and it was found that the gas is air and got sucked in during the diverter maintenance. [Ref. notification 10874350, 10875039]
6. T1 heater wire was found faulty and repairs were done to fix the wire and the heater is operating properly. [Ref. notification 10217605, 15465254]
7. Ladder was built to provide permanent access to transformer plates. [Ref. notification 10382347]
8. It was reported that thermo state is not operating properly. [Ref. notification 10620036]

5. Potential Environmental Risk/HSE

5.1 Spill Risk Assessment

Wilson TS was ranked as low moderate-risk for spill containment (66 of 256) stations based on existing risk score from a 2011 spill risk report by Conestoga-Rogers & Associates [3]. According to [3], T1 is not equipped with spill containment structure that meets current Hydro one's standards.

5.2 PCB content

Table below summarized the latest PCB content detected in various part of the equipment. Hydro One is obligated to remove or retrofit equipment with PCB contamination >50ppm per Environment Canada regulation by 2025. Table 5 includes PCB content of all the equipment that is tested for PCB content.

Equipment	Description	Date	PCB (ppm)	Lab Reference
1183712	TF: Stepdn - 125MVA 220-44kV	2/18/2016	1	M305591a
1223907	TF: ULTC - 230 kV Div	2/18/2016	1	M304593A
1183712	TF: Stepdn - 125MVA 220-44kV	2/18/2016	1	M305591a
1223467	(X3) - BUSHING: 45 kV	3/20/2012	2	June 2010 Report
1223469	(X2) - BUSHING: 45 kV	3/20/2012	2	June 2010 Report
1223471	(X1) - BUSHING: 45 kV	3/20/2012	2	June 2010 Report
1223473	(X0) - BUSHING: 35 kV	3/20/2012	2	June 2010 Report
1223478	(H3) - BUSHING: 196 kV	3/20/2012	2	June 2010 Report
1223476	(H2) - BUSHING: 196 kV	3/20/2012	2	June 2010 Report

Table 4: Wilson T1 equipment PCB contents

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6. Equipment Loading

Wilson T1 is a 75/100/125MVA unit with summer and winter Limited Time Rating (LTR) stated below:

T1:

Summer 10d LTR (31 ºC)	Winter 10d LTR (5ºC)
173MVA	196MVA

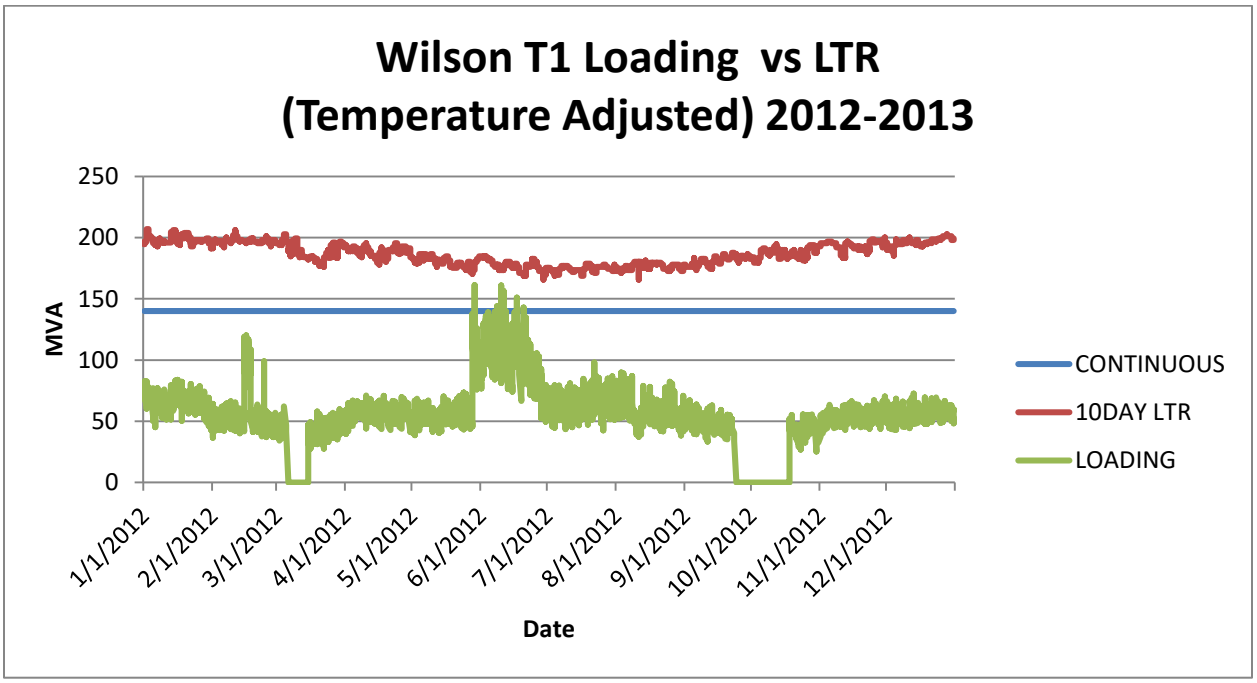
Table 5: Wilson T1 summer and winter LTR values

T1's loading was reviewed with respect to its temperature adjusted LTR from January 2012 to December 2017. It is observed that T1 has been loaded within nameplate and LTR limits in general; however, T1 has had multiple load surges activities.

T1's annual load factor:

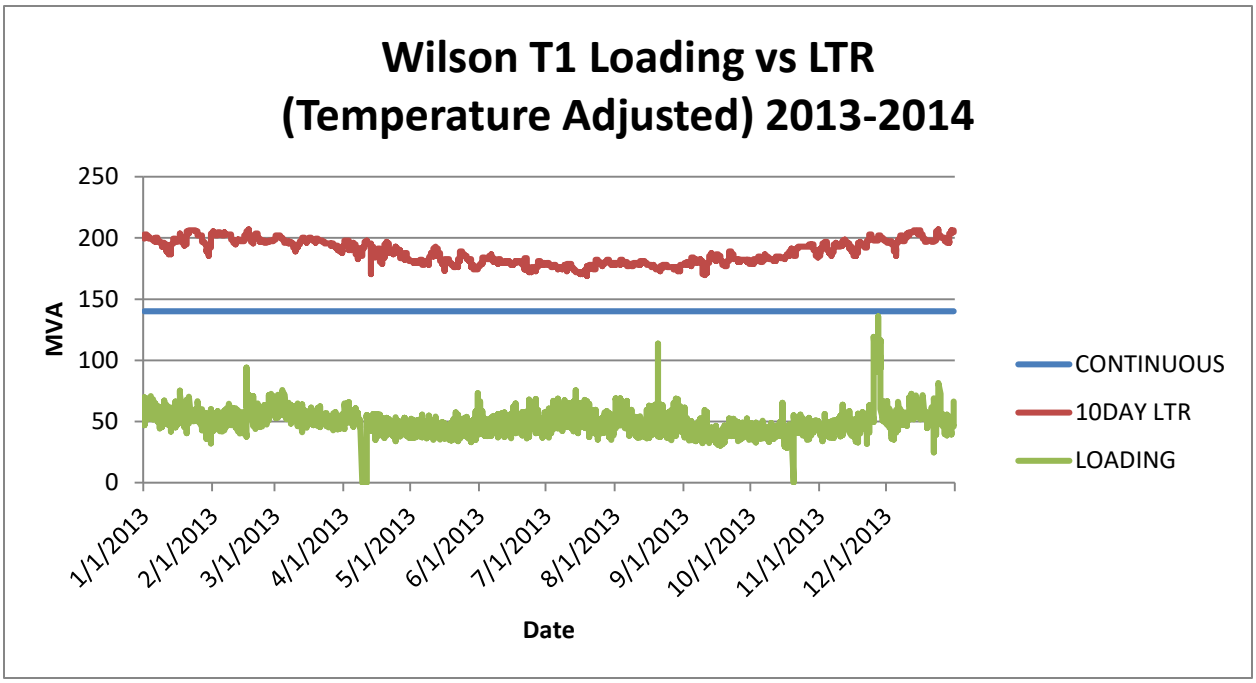
Year	Load factor
2012-2013	0.44
2013-2014	0.36
2014-2015	0.43
2015-2016	0.41
2016-2017	0.36
2017-2018	0.37

Table 6: Wilson T1 Annual Load Factor

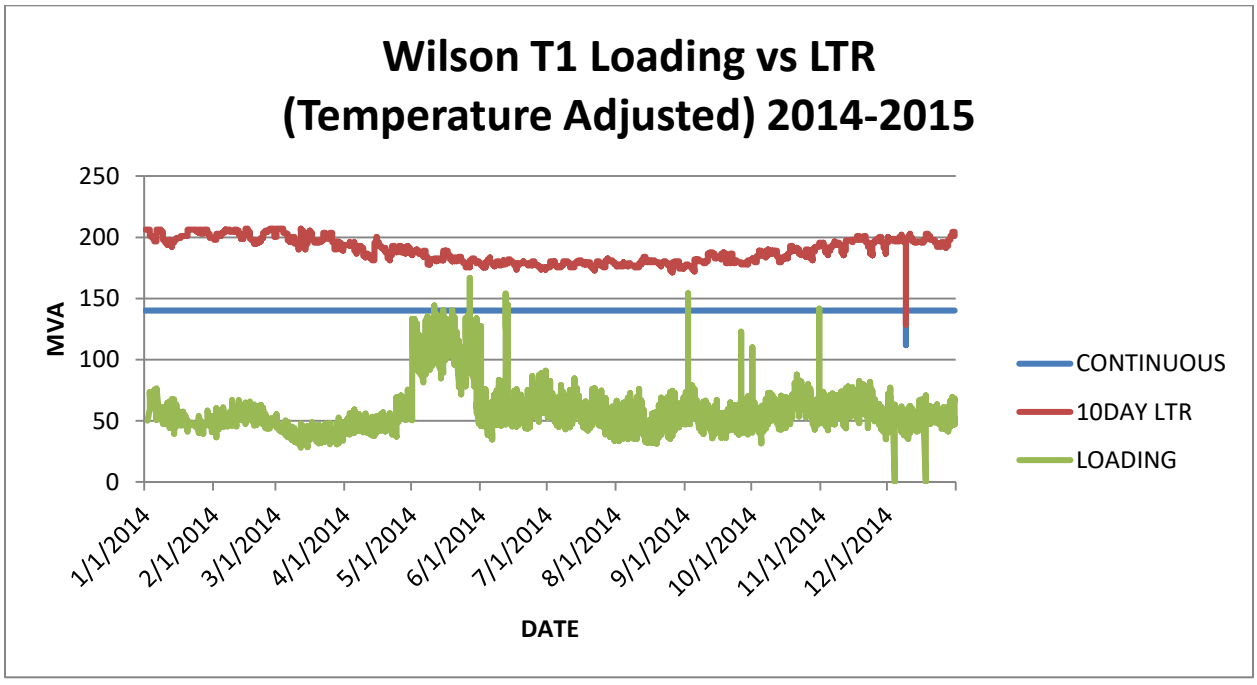


Graph 1: Wilson T1 Loading vs LTR (Temperature Adjusted) 2012-2013

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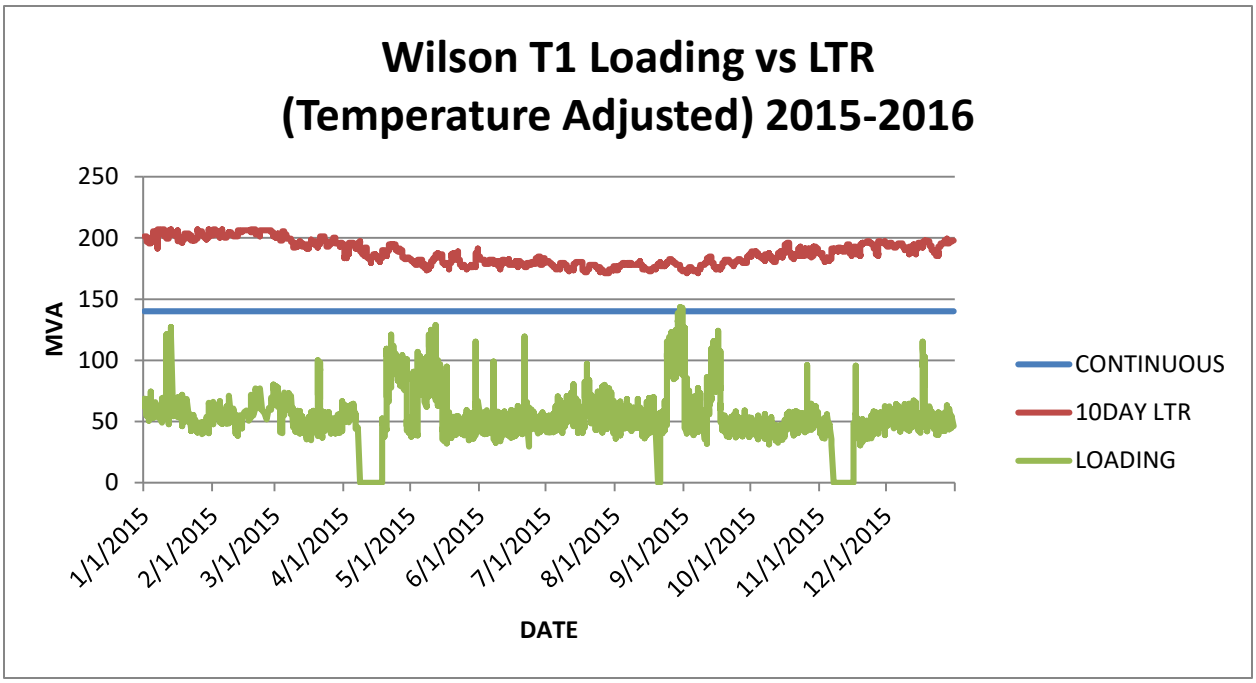


Graph 2: Wilson T1 Loading vs LTR (Temperature Adjusted) 2013-2014

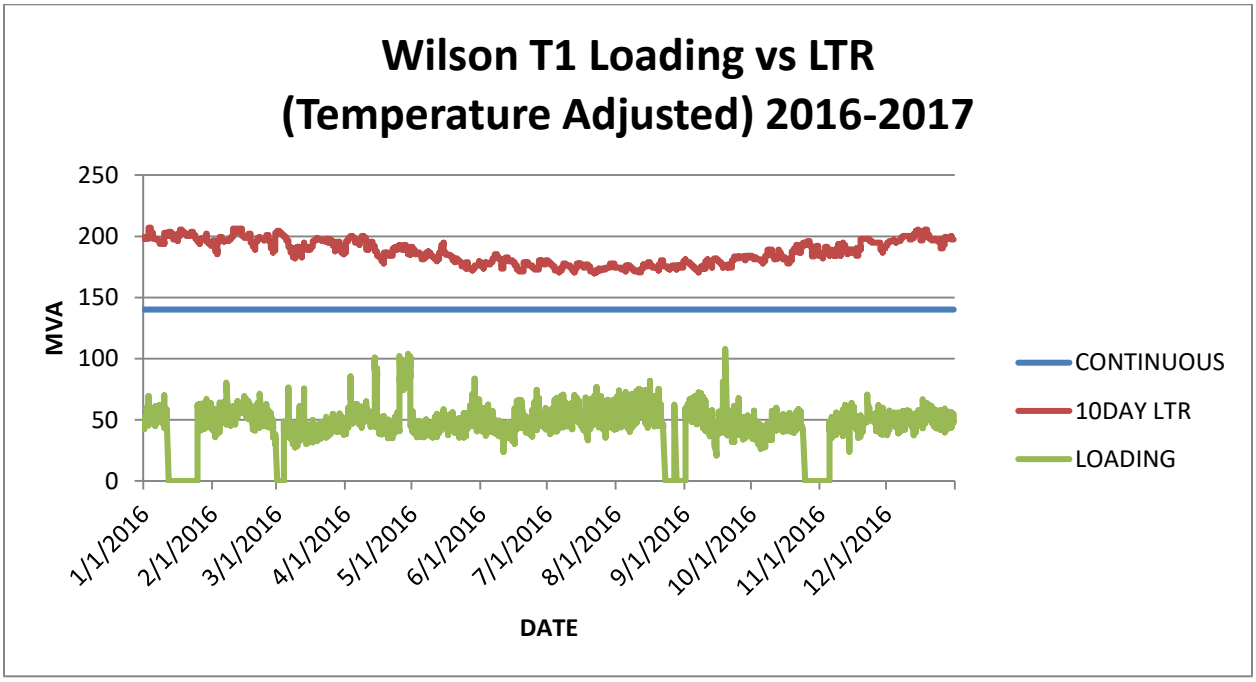


Graph 3: Wilson T1 Loading vs LTR (Temperature Adjusted) 2014-2015

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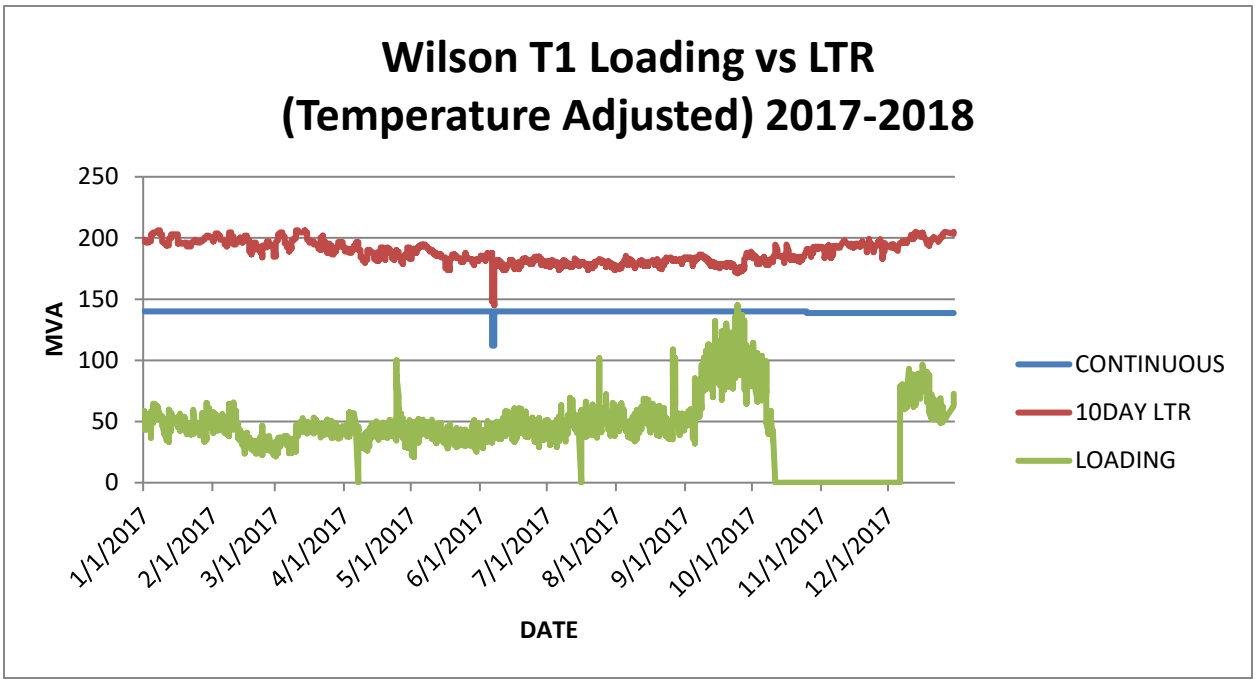


Graph 4: Wilson T1 Loading vs LTR (Temperature Adjusted) 2015-2016



Graph 5: Wilson T1 Loading vs LTR (Temperature Adjusted) 2016 -2017

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Graph 6: Wilson T1 Loading vs LTR (Temperature Adjusted) 2017 -2018

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7 Economics

7.1 Recorded OM&A Spending

Table 7 summarized OM&A spending incurred on Wilson T1 since SAP inception in 2008. It is concluded that Preventive maintenance spending is as planned. Higher than expected costs occurred in 2010 during tap changer maintenance from oil replacement.

Over all, T1 has high corrective cost caused by repairs or replacement done on the defective components. Majority of corrective costs were associated with cooling failures. Refer to section 4.3 for more details regarding the cost in the table below.

Year	CORR	EMER	PREV	UPGR	Grand Total
2009	$1,858.00	$520.00	$10,450.00	$8,735.84	$21,563.84
2010	$247,641.90	$634.12	$12,677.33	$528,621.05	$789,574.40
2011			$424.91	$0.00	$424.91
2012	$1,122.29	$1,716.71	$1,735.94	$37,702.02	$42,276.96
2013		$0.00	$454.01		$454.01
2014	$72.73	$372.30	$727.31		$1,172.34
2015	$15,597.27	$1,457.93	$17,582.53		$40,095.76
2016	$0.00		$592.22		$123,481.89
2017	$8,597.39	$1,103.87	$3,977.74		$13,679.00
Grand Total	**$274,889.58**	**$5,804.93**	**$53,106.99**	**$575,058.91**	**$1,037,208.11**

Table 7: Historical OM&A spending on T1

Unit cost of various Preventative Maintenance Activities based on the actual unit cost from 2013-2016

PREV Maintenance Activity	Average Actual Cost (2013 - 2016)
TAP CHANGER OIL SAMPLES	$ 378.78
TAP CHANGER SI	$ 7217.88
TRANSFORMER DBT --General	$ 5656.15
TRANSFORMER D1 --General	$ 3919.07
TRANSFORMER D2 --General	$ 3536.93
TRANSFORMER OIL SAMPLES --General	$ 304.02
TAP CHANGER OIL FILTER CHANGES	$ 1145.30

Table 8: T1's preventative maintenance cost

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7.2 Net Present Value Analysis

This section evaluates the cost benefit for various asset management options (Status Quo Maintain, repair, replacement) of T1 with Net Present Value Analysis (NPV), where:

- Status Quo Maintain: Perform routine maintenance to keep the unit in service. Replace at economic end of life (2023). Continue to maintain new unit to end of study period (2073).
- Repair/Refurbish: Perform major repair/refurbishment in the year of interest (2019), then maintain as normal and replace the unit at economic end of life (2023). Continue to maintain new unit to end of study period (2073).
- Replace: Advance the replacement to the year of interest (2019) instead of performing a refurbishment. Continue to maintain new unit to end of study period (2073).

The study makes the following assumptions:

- Study period :55 years[1]
- T1 will undergo major refurbishment at 51 year old (2019), for approx. CAD $ 583.8K[2].
- Replacement cost is assumed to be CAD$3.878M[3] for a unit that matches purchases standards S230-101
- New unit will benefit from lower maintenance cost due to extended tap changer inspection intervals. New unit utilizes Buchholz relay and eliminate D2 maintenance task.
- Inflation: 2%. [4]
- Cost of Capital: 5.59% [4]
- Corporate Tax rate : 26.5% [4]
- CCA rate for Transmission Asset : 8% [4]
- Disposal Value : $0
- Average corrective cost of CAD 12.75K per year and it is factored, in the NPV calculations.

The summary of NPV options for status quo, repair, and replace are evaluated under the aforementioned assumptions are summarized in Table 10 below. The analyses have suggested that maintaining status quo will result in lowest cost in terms of present value, with the advancing replacement option being more economical than major Refurbishment. The NPV calculation has indicated that the maximum economically viable budget to perform such major refurbishment is CAD $371.67K[4].

Result Summary	Status Quo Maintain	Major Investment Maintain/Repair	Replace	Preferred Option
With CCA tax savings				
PV of Options, $k, with terminal value	3024.98	3573.01	3360.88	
PV of Options, $k, terminal value = 0	3044.52	3592.55	3360.88	
Investment Decision		NPV, $k		
Status Quo Maintain - Refurbish		-548.03		Maintain
Major Investment (Repair/Refurbish) - Replace		212.13		Replace
Repair - Replace boundary			371.67	
Repair - Replace boundary, upper bound			408.84	
Repair - Replace boundary, lower bound			334.51	

Table 9: Present Value comparison for different sustainment options

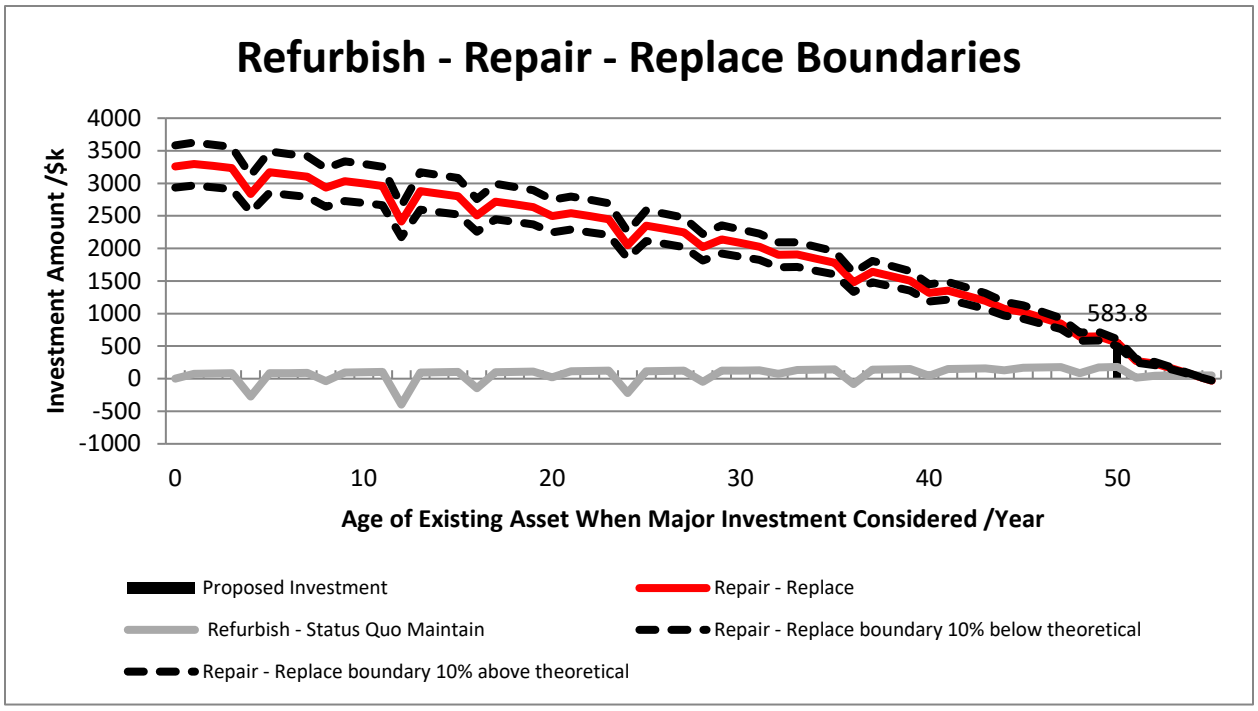
[1] Study period is 55 to accommodate the fact that the unit is already 50 years old. Normal study period is lengthened to 55 years.

[2] $583.8K is the 2010 – 2015 recorded average cost to refurbish transformer under AR 18335 (Transformer Oil Leak Reduction)

[3] Based on 2015 March, Co-st information Catalog, 125 MVA, 215.5 – 44kV class Power Transformer. Cost only included material, engineering, and installation cost and excludes new foundation, spill containment, protection upgrades and other auxiliary equipment upgrade as a result of the replacement.

[4] CAD $ 583.8K - CAD $212.13K = $371.67K

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Graph 7: Visual Representation of NPV analysis

8. Conclusion

The demographics data, condition data, environmental/HSE hazards, equipment loading and economics related to T1 have been reviewed. Dissolved Gas Analysis (DGA) analysis indicates signs of insulation system deterioration. Corrective maintenance history indicates higher costs from repairs and upgrades on multiple malfunctioning components of the transformer such as tap changer, fans, radiator, heaters, and AC/DC wiring. Loading profiles have revealed that there has had multiple load surge activities in T2. NPV analysis has concluded that remaining status quo yields the lowest cost, however replacement option is more economical than major refurbishment. In conclusion, a replacement of the unit within 5 years would be considered prudent and economical in order to reduce reliability risk, environmental risk, and OM&A spending.

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[3] Conestoga-Rogers & Associates. (2011). Hydro One Station Spill Risk Model. SIP-EnvMgmt-0100, Mississauga.

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10. Appendix 1: T1 Preventive maintenance result

Notifictn type	Notification	Notif.date	Equipment	Coding	Functional Loc.	Description
PR	10002082	05/31/2008	1223907	CR01	N-TS-WILSONTS -TF-T1	UT-MR/DFM-3/2-800A-D1
PR	10002083	05/31/2008	1223907		N-TS-WILSONTS -TF-T1	UT-MR/DFM-3/2-800A-SI
PR	10036590	08/07/2008	1183712		N-TS-WILSONTS -TF-T1	TF-GENERAL-M1
PR	10188340	10/26/2008	1223907	CR01	N-TS-WILSONTS -TF-T1	UT-MR/DFM-3/2-800A-UTOA
PR	10273251	03/15/2009	1183712	CR01	N-TS-WILSONTS -TF-T1	TF-GENERAL-D1
PR	10282797	04/03/2009	1183712	CR01	N-TS-WILSONTS -TF-T1	TF-GENERAL-DBT
PR	10367984	10/05/2009	1183712	CR01	N-TS-WILSONTS -TF-T1	STN 'B' PWR EQ INSP-SVI
PR	10381022	10/25/2009	1223907	CR01	N-TS-WILSONTS -TF-T1	UT-MR/DFM-3/2-800A-UTOA
PR	10386084	11/03/2009	1183712	CR01	N-TS-WILSONTS -TF-T1	TF-GENERAL-GOT
PR	10406075	12/03/2009	1183712	CR01	N-TS-WILSONTS -TF-T1	STN 'B' PWR EQ INSP-SVI
PR	10406118	12/03/2009	1223467	CR01	N-TS-WILSONTS -TF-T1	STN 'B' PWR EQ INSP-SVI
PR	10406119	12/03/2009	1223469	CR01	N-TS-WILSONTS -TF-T1	STN 'B' PWR EQ INSP-SVI
PR	10406120	12/03/2009	1223471	CR01	N-TS-WILSONTS -TF-T1	STN 'B' PWR EQ INSP-SVI
PR	10406121	12/03/2009	1223473	CR01	N-TS-WILSONTS -TF-T1	STN 'B' PWR EQ INSP-SVI
PR	10406122	12/03/2009	1223475	CR01	N-TS-WILSONTS -TF-T1	STN 'B' PWR EQ INSP-SVI
PR	10406123	12/03/2009	1223476	CR01	N-TS-WILSONTS -TF-T1	STN 'B' PWR EQ INSP-SVI
PR	10406124	12/03/2009	1223478	CR01	N-TS-WILSONTS -TF-T1	STN 'B' PWR EQ INSP-SVI
PR	10436039	01/15/2010	1183712	CR01	N-TS-WILSONTS -TF-T1	TF-GENERAL-M1
PR	10537165	09/02/2010	1183712	CR01	N-TS-WILSONTS -TF-T1	STN 'B' PWR EQ INSP-SVI SPRING
PR	10537271	09/02/2010	1223907	CR01	N-TS-WILSONTS -TF-T1	STN 'B' PWR EQ INSP-SVI SPRING
PR	10558335	09/30/2010	1223907	CR01	N-TS-WILSONTS -TF-T1	UT-MR/DFM-3/2-800A-UTOA
PR	10567732	10/06/2010	1183712	CR02	N-TS-WILSONTS -TF-T1	TF-GENERAL-GOT
PR	10614123	11/16/2010	1183712	CR01	N-TS-WILSONTS -TF-T1	STN 'B' PWR EQ INSP-SVI FALL
PR	10614229	11/16/2010	1223907	CR01	N-TS-WILSONTS -TF-T1	STN 'B' PWR EQ INSP-SVI FALL
PR	10657090	02/09/2011	1183712	CR01	N-TS-WILSONTS -TF-T1	STN 'B' PWR EQ INSP-SVI SPRING 2011
PR	10657126	02/09/2011	1223907	CR01	N-TS-WILSONTS -TF-T1	STN 'B' PWR EQ INSP-SVI SPRING 2011
PR	10687625	05/06/2011		CR01	N-TS-WILSONTS -TF-T1	20216 2011 TX PCB Reduction Oil Sample

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PR	10774820	10/21/2011	1183712	CR01	N-TS-WILSONTS -TF-T1	TF-GENERAL-GOT
PR	10776759	10/21/2011	1223907	CR01	N-TS-WILSONTS -TF-T1	UT-MR-FIII-UTOA
PR	10868580	02/23/2012	1183712	CR01	N-TS-WILSONTS -TF-T1	STN 'B' PWR EQ INSP-SVI SPR 2012
PR	10868656	02/23/2012	1223907	CR01	N-TS-WILSONTS -TF-T1	STN 'B' PWR EQ INSP-SVI SPR 2012
PR	10875500	03/20/2012	1223467	CR01	N-TS-WILSONTS -TF-T1	20216 2011 TX PCB Reduction Oil Sample
PR	10875501	03/20/2012	1223469	CR01	N-TS-WILSONTS -TF-T1	20216 2011 TX PCB Reduction Oil Sample
PR	10875502	03/20/2012	1223471	CR01	N-TS-WILSONTS -TF-T1	20216 2011 TX PCB Reduction Oil Sample
PR	10875503	03/20/2012	1223473	CR01	N-TS-WILSONTS -TF-T1	20216 2011 TX PCB Reduction Oil Sample
PR	10875504	03/20/2012	1223475	CR01	N-TS-WILSONTS -TF-T1	20216 2011 TX PCB Reduction Oil Sample
PR	10875505	03/20/2012	1223476	CR01	N-TS-WILSONTS -TF-T1	20216 2011 TX PCB Reduction Oil Sample
PR	10875506	03/20/2012	1223478	CR01	N-TS-WILSONTS -TF-T1	20216 2011 TX PCB Reduction Oil Sample
PR	11157231	05/10/2012	1183712	CR01	N-TS-WILSONTS -TF-T1	TF-GENERAL-(SPECIAL) MCT
PR	11828760	10/13/2012	1183712	CR01	N-TS-WILSONTS -TF-T1	TF-GENERAL-GOT
PR	11831077	10/13/2012	1223907	CR01	N-TS-WILSONTS -TF-T1	UT-MR-FIII-UTOA
PR	12033443	12/12/2012	1183712	CR01	N-TS-WILSONTS -TF-T1	STN 'B' PWR EQ INSP-SVI AUT 2012
PR	12033366	12/12/2012	1223907	CR01	N-TS-WILSONTS -TF-T1	STN 'B' PWR EQ INSP-SVI AUT 2012
PR	12167489	04/25/2013	1183712	CR01	N-TS-WILSONTS -TF-T1	STN 'B' PWR EQ INSP-SVI SPR 2013
PR	12167610	04/25/2013	1223907	CR01	N-TS-WILSONTS -TF-T1	STN 'B' PWR EQ INSP-SVI SPR 2013
PR	12650739	09/26/2013	1183712	CR01	N-TS-WILSONTS -TF-T1	TF-GENERAL-GOT
PR	12652415	09/26/2013	1223907	CR01	N-TS-WILSONTS -TF-T1	UT-MR-FIII-UTOA
PR	12766240	11/11/2013	1183712	CR01	N-TS-WILSONTS -TF-T1	STN 'B' PWR EQ INSP-SVI FALL 2013
PR	12766350	11/11/2013	1223907	CR01	N-TS-WILSONTS -TF-T1	STN 'B' PWR EQ INSP-SVI FALL 2013
PR	12894775	04/02/2014	1183712	CR01	N-TS-WILSONTS -TF-T1	STN 'B' PWR EQ INSP-SVI SPRING 2014
PR	12894766	04/02/2014	1223907	CR01	N-TS-WILSONTS -TF-T1	STN 'B' PWR EQ INSP-SVI SPRING 2014
PR	13347005	09/16/2014	1183712	CR01	N-TS-WILSONTS -TF-T1	STN 'B' PWR EQ INSP-SVI FALL 2014
PR	13347101	09/16/2014	1223907	CR01	N-TS-WILSONTS -TF-T1	STN 'B' PWR EQ INSP-SVI FALL 2014
PR	13372728	09/26/2014	1183712	CR01	N-TS-WILSONTS -TF-T1	TF-GENERAL-GOT
PR	13375485	09/26/2014	1223907	CR01	N-TS-WILSONTS -TF-T1	UT-MR-FIII-UTOA
PR	13382799	09/27/2014	1183712	CR01	N-TS-WILSONTS -TF-T1	TF-GENERAL-DBT
PR	13384595	09/27/2014	1183712	CR02	N-TS-WILSONTS -TF-T1	TF-GENERAL-D2

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PR	13382798	09/27/2014	1183712	CR02	N-TS-WILSONTS -TF-T1	TF-GENERAL-D1
PR	13500355	01/09/2015	1183712	CR01	N-TS-WILSONTS -TF-T1	PREOUTAGE INSPECTION- CAT 1 - G&S
PR	13500354	01/09/2015	1183712	CR01	N-TS-WILSONTS -TF-T1	PREOUTAGE INSPECTION- CAT 1 - G&S
PR	13531206	02/12/2015	1183712	CR01	N-TS-WILSONTS -TF-T1	STN 'B' PWR EQ INSP-SVI SPRING 2015
PR	13531222	02/12/2015	1223907	CR01	N-TS-WILSONTS -TF-T1	STN 'B' PWR EQ INSP-SVI SPRING 2015
PR	14044587	07/24/2015	1183712	CR01	N-TS-WILSONTS -TF-T1	TF-GENERAL-GOT
PR	14047463	07/25/2015	1223907	CR01	N-TS-WILSONTS -TF-T1	UT-MR-FIII-UTOA
PR	14449803	12/07/2015	1183712	CR01	N-TS-WILSONTS -TF-T1	STN 'B' PWR EQ INSP-SVI FALL 2015
PR	14449825	12/07/2015	1223907	CR01	N-TS-WILSONTS -TF-T1	STN 'B' PWR EQ INSP-SVI FALL 2015
PR	14517735	02/17/2016	1183712	CR01	N-TS-WILSONTS -TF-T1	STN 'B' PWR EQ INSP-SVI SPRING 2016
PR	14517771	02/17/2016	1223907	CR01	N-TS-WILSONTS -TF-T1	STN 'B' PWR EQ INSP-SVI SPRING 2016
PR	14920213	07/16/2016	1183712	CR01	N-TS-WILSONTS -TF-T1	TF-GENERAL-GOT
PR	14922590	07/16/2016	1223907	CR01	N-TS-WILSONTS -TF-T1	UT-MR-FIII-UTOA
PR	15199444	10/26/2016	1183712	CR01	N-TS-WILSONTS -TF-T1	STN 'B' PWR EQ INSP-SVI FALL 2016
PR	15199803	10/26/2016	1223907	CR01	N-TS-WILSONTS -TF-T1	STN 'B' PWR EQ INSP-SVI FALL 2016
PR	15479673	04/20/2017	1183712	CR01	N-TS-WILSONTS -TF-T1	STN 'B' PWR EQ INSP-SVI Spr 2017
PR	15479893	04/20/2017	1223907	CR02	N-TS-WILSONTS -TF-T1	STN 'B' PWR EQ INSP-SVI Spr 2017
PR	15889756	07/22/2017	1183712		N-TS-WILSONTS -TF-T1	TF-GENERAL-GOT
PR	15890118	07/22/2017	1223907		N-TS-WILSONTS -TF-T1	UT-MR-FIII-UTOA
PR	16109000	09/27/2017	1183712	CR01	N-TS-WILSONTS -TF-T1	STN 'B' PWR EQ INSP-SVI Fall 2017
PR	16109711	09/27/2017	1223907	CR01	N-TS-WILSONTS -TF-T1	STN 'B' PWR EQ INSP-SVI Fall 2017

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11. Appendix 2: T1 list of DR and TC notification

Notifictn type	Notification	Notif.date	Priority	Equipment	Functional Loc.	Description
DR	10217605	11/11/2008	Medium (30-90 Days)	1183712	N-TS-WILSONTS -TF-T1	T1 transformer heater not working
DR	10249477	01/06/2009	Medium (30-90 Days)		N-TS-WILSONTS -TF-T1	Wilson TS T1 UCL install
DR	10279310	03/27/2009	Medium (30-90 Days)		N-TS-WILSONTS -TF-T1	Tap changer modifications
TC	10357256	09/16/2009	Emergent (< 7 Days)		N-TS-WILSONTS -TF-T1	S3- T1 T3 COOLING
TC	10357136	09/16/2009	Emergent (< 7 Days)	1183712	N-TS-WILSONTS -TF-T1	Sec 3 Wilson TS T1 cooling fail
DR	10382347	10/27/2009	Low (> 90 Days)		N-TS-WILSONTS -TF-T1	No grounding point on T1 HV @ Wilson TS
DR	10383950	10/28/2009	Emergent (< 7 Days)		N-TS-WILSONTS -TF-T1	Replace TDR relay for T1 pumps @ Wilson
DR	10532787	08/10/2010	Medium (30-90 Days)		N-TS-WILSONTS -TF-T1	Wilson TS T1 Ladder
TC	10536152	08/30/2010	Emergent (< 7 Days)	1183712	N-TS-WILSONTS -TF-T1	S3-EMD-WILSON TS-T1 COOLING
DR	10620036	11/27/2010	Medium (30-90 Days)		N-TS-WILSONTS -TF-T1	T1 T/C thermostat not working
DR	10620037	11/27/2010	Medium (30-90 Days)		N-TS-WILSONTS -TF-T1	T1 grounds missing
DR	10657822	02/09/2011	On a Fixed Date		N-TS-WILSONTS -TF-T1	20216 2010 Tx PCB Reduction Oil Sample
DR	10875039	03/16/2012	Emergent (< 7 Days)	1183712	N-TS-WILSONTS -TF-T1	S3 RE: T1 GAS ACCUMULATION
TC	10874350	03/16/2012	Emergent (< 7 Days)	1183712	N-TS-WILSONTS -TF-T1	S3 RE: T1 GAS ACCUMULATION
TC	10874201	03/16/2012	Emergent (< 7 Days)	1183712	N-TS-WILSONTS -TF-T1	S3 RE:T1 TAP CHANGER WONT RAISE

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TC	10877481	03/25/2012	Emergent (< 7 Days)		N-TS-WILSONTS -TF-T1	S3 PD EMD RE: T1 AND T2-PLACE COOLING ON
TC	12817617	11/28/2013	Emergent (< 7 Days)	1183712	N-TS-WILSONTS -TF-T1	S3 - T1 COOLING FAIL
DR	12868441	02/13/2014	By a Fixed Date		N-TS-WILSONTS -TF-T1	NA54 Inspect transfrmer for oil leaks
DR	13199674	08/01/2014	High (7-30 Days)	1183712	N-TS-WILSONTS -TF-T1	Wilson T1 T/C in alarm mode,needs filter
TC	13288203	09/01/2014	Emergent (< 7 Days)		N-TS-WILSONTS -TF-T1	S3 - EMD - T1 T3 ON MANUAL COOLING
DR	13470337	12/10/2014	Emergent (< 7 Days)	1183712	N-TS-WILSONTS -TF-T1	wilson t1 cooling fail
DR	13610890	04/13/2015	Medium (30-90 Days)	1183712	N-TS-WILSONTS -TF-T1	Wilson TS T1 low oil
TC	13624403	04/16/2015	Emergent (< 7 Days)	1183712	N-TS-WILSONTS -TF-T1	S3 - EMD WILSON TS RE: ISOLATING T1 TRAN
TC	13632282	04/18/2015	Emergent (< 7 Days)		N-TS-WILSONTS -TF-T1	S3 P&C SWITCH T1 BACK IN SERVICE
DR	14147035	09/01/2015	Emergent (< 7 Days)	1183712	N-TS-WILSONTS -TF-T1	Wilson TS T1 Lower Fan guards
DR	14147032	09/01/2015	Emergent (< 7 Days)	1183712	N-TS-WILSONTS -TF-T1	Wilson TS T1 Replace Burnt Wiring
DR	15465254	04/07/2017	Emergent (< 7 Days)	1183712	N-TS-WILSONTS -TF-T1	Wilson TS - T1 cab heat repairs
TC	15674642	05/31/2017	Emergent (< 7 Days)	1183712	N-TS-WILSONTS -TF-T1	s2: EMD for t1 cooling fail
DR	15929950	08/08/2017	Medium (30-90 Days)	1183712	N-TS-WILSONTS -TF-T1	T1 Containment ground missing
DR	16125633	10/04/2017	Medium (30-90 Days)	1183712	N-TS-WILSONTS -TF-T1	WILSON T1 FAN

12.

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Health Assessment for Transformer at Wilson TS

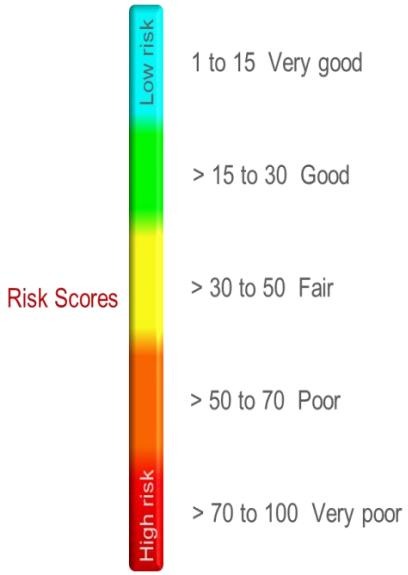
Prepared by: Peter Zhao

Approved by: Behdad Biglar

Date: Oct 16, 2020

Rev.#: 0

APPENDIX – Health Index Summary



The asset risk assessment process relies on the Asset Analytics system to provide initial asset screening and quantitative analysis of the following six risk factors:

- Condition – Asset Health Index or condition risk related to the increased probability of failure that assets experience when their condition degrades over time.
- Demographics - Risk related to the increased probability of failure exhibited by assets of a particular make, manufacturer, and/or vintage.
- Criticality - Represents the impact that the failure of a specific asset would have on the transmission system
- Performance - Risk that reflects the historical performance of an asset, derived from the frequency and duration of outages
- Utilization - Risk that reflects the increased rate of deterioration exhibited by an asset that is highly utilized
- Economics - Risk based on the economic evaluation of the ongoing costs associated with the operation of an asset
- Composite - Calculated as a weighted average of the other 6 primary Risk Factors.

The Asset Analytics system enables Hydro One planners to review aggregated information from various enterprise reporting systems to provide a common understanding of asset health and asset risks. This drives efficient and effective planning decisions by ensuring a consistent view of asset information for all planners. The information contained within the asset analytics system includes condition information driven by deficiency and preventative maintenance reports, demographic information (including make, model, type and criticality to the transmission system), performance data based on equipment outages, utilization information, and economics.

Hydro One's planners also take into account additional factors such as load forecasts, equipment ratings, operating restrictions, security incidents, environmental risks and requirements, compliance obligations, equipment defects, obsolescence, and health and safety considerations to ensure capital expenditures target the most appropriate mix of assets.

Table 1 Health Assessment for Power Transformers at Wilson TS

Asset	Age	Condition	Demog.	Econ.	Perform.	Utiliz.	Critic.	Composite	Obsole	HS&E	PCB	Asset Risk	Comments
T1	53	48	100	12	1	11	32	32	N	Y	N	Very High	• The assessment concluded that T1 has shown deterioration of the structural integrity, in a very high risk category. • Oil top-up was required due to oil leaks • Insulation system is deteriorating. • Noise complaints to transformers at Wislosn TS were filed by the local. • Corrective actions were required more frequently than normal on cooling systems and fans. • Oil spill containment at the site is out of date. • Recommended for replacement of the T1 within next 5 years in order to mitigate reliability risk, safety and environmental hazards, and to lower overall future OM&A cost.
T2	50	75	100	100	1	5	32	48	N	Y	N	Very High	• The assessment concluded that T2 has shown deterioration of the structural integrity, in a very high risk category. • Insulation system is deteriorating. • Abnormal resistance readings were measured on winding transformer, raised a concen on winding operating integrity. • ULTC malfunctioned and repaired, • Noise complaints to transformers at Wislosn TS were filed by the local. • Corrective actions were required more frequently than normal on cooling systems and fans. • Oil spill containment at the site is out of date. • Recommended for replacement of the T2 within next 5 years in order to mitigate reliability risk, safety and environmental hazards, and to lower overall future OM&A cost.

Health assessment for Transformer and Breakers at Wilson TS

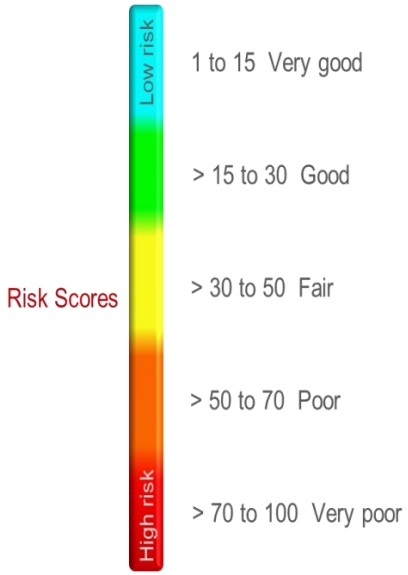
Prepared by: Harshal Bhatt

Approved by: Behdad Biglar

Date: 27th May 2021

Rev.#: 1

APPENDIX – Health Index Summary



The asset risk assessment process relies on the Asset Analytics system to provide initial asset screening and quantitative analysis of the following six risk factors:

- Condition – Asset Health Index or condition risk related to the increased probability of failure that assets experience when their condition degrades over time.
- Demographics - Risk related to the increased probability of failure exhibited by assets of a particular make, manufacturer, and/or vintage.
- Criticality - Represents the impact that the failure of a specific asset would have on the transmission system
- Performance - Risk that reflects the historical performance of an asset, derived from the frequency and duration of outages
- Utilization - Risk that reflects the increased rate of deterioration exhibited by an asset that is highly utilized
- Economics - Risk based on the economic evaluation of the ongoing costs associated with the operation of an asset
- Composite - Calculated as a weighted average of the other 6 primary Risk Factors.

The Asset Analytics system enables Hydro One planners to review aggregated information from various enterprise reporting systems to provide a common understanding of asset health and asset risks. This drives efficient and effective planning decisions by ensuring a consistent view of asset information for all planners. The information contained within the asset analytics system includes condition information driven by deficiency and preventative maintenance reports, demographic information (including make, model, type and criticality to the transmission system), performance data based on equipment outages, utilization information, and economics.

Hydro One's planners also take into account additional factors such as load forecasts, equipment ratings, operating restrictions, security incidents, environmental risks and requirements, compliance obligations, equipment defects, obsolescence, and health and safety considerations to ensure capital expenditures target the most appropriate mix of assets.

Station	Asset	Type	Age	Condition RF	Demographic RF	Performance RF	Economics RF	Utilization RF	Criticality RF	Obsoclec.	HS&E	PCB	Final Review	
													Asset Risk Assessment (ARA)	Technical assessment and recommendations
Wilson TS	BY	MV-Oil	53	18	93	1	51	100	29	Y	N	Yes	High- Short term	Asset is in fair condition, Parts availability is very limited with the old technology. High PCB content. High utilization and maintenance cost. Recommended to replace it.
	JQ	MV-Oil	44	18	60	1	15	100	29	Y	N	No	High- Short term	Asset is in fair condition, Parts availability is very limited with the old technology. High PCB content. Recommended to replace it.
	M1	MV-Oil	53	32	93	34	9	50	23	Y	N	No	High- Short term	Asset is in fair condition, Parts availability is very limited with the old technology. High PCB content. Recommended to replace it.
	M11	MV-Oil	44	14	60	28	1	88	23	Y	N	No	High- Short term	Asset is in good condition, Parts availability is very limited with the old technology. Recommended to replace it.
	M12	MV-Oil	44	27	60	11	18	86	23	Y	N	No	High- Short term	Asset is in good condition, Parts availability is very limited with the old technology. Recommended to replace it.
	M13	MV-Oil	44	27	60	11	1	84	23	Y	N	No	High- Short term	Asset is in good condition, Parts availability is very limited with the old technology. Recommended to replace it.

	M14	MV-Oil	44	18	60	11	61	86	23	Y	N	No	High- Short term	Asset is in good condition, Parts availability is very limited with the old technology. Recommended to replace it.
	M15	MV-Oil	44	14	60	1	24	83	23	Y	N	No	High- Short term	Asset is in good condition, Parts availability is very limited with the old technology. Recommended to replace it.
	M16	MV-Oil	44	18	60	11	1	85	23	Y	N	No	High- Short term	Asset is in good condition, Parts availability is very limited with the old technology. Recommended to replace it.
	M17	MV-SF6	31	1	55	1	53	28	23	N	N	No	Low- long term	New technology breakers - no concerns
	M18	MV-SF6	31	41	55	1	100	50	23	N	N	No	Low- long term	New technology breakers - no concerns
	M2	MV-Oil	53	18	93	1	1	45	23	Y	N	Yes	High- Short term	Asset is in fair condition, Parts availability is very limited with the old technology. High PCB content. Recommended to replace it.
	M3	MV-Oil	53	41	93	66	100	46	23	Y	N	No	High- Short term	Asset is in fair condition, Parts availability is very limited with the old technology. High utilization and maintenance cost. Recommended to replace it.
	M4	MV-Oil	53	32	93	1	2	44	23	Y	N	No	High- Short term	Asset is in fair condition, Parts availability is very limited with the old technology. Recommended to replace it.
	M5	MV-Oil	53	18	93	1	11	44	23	Y	N	Yes	High- Short term	Asset is in fair condition, Parts availability is very limited with the old technology. High PCB content. High utilization and

														maintenance cost. Recommended to replace it.
	M6	MV-Oil	53	32	93	1	1	44	23	Y	N	Yes	High- Short term	Asset is in fair condition, Parts availability is very limited with the old technology. High PCB content. High utilization and maintenance cost. Recommended to replace it.
	M7	MV-Oil	53	18	93	1	98	46	23	Y	N	No	High- Short term	Asset is in fair condition, Parts availability is very limited with the old technology. High utilization and maintenance cost. Recommended to replace it.
	M8	MV-Oil	53	54	93	11	4	45	23	Y	N	No	High- Short term	Asset is in fair condition, Parts availability is very limited with the old technology. Recommended to replace it.
	SC1B	MV-SF6	27	27	35	1	19	48	27	N	N	No	Low- long term	New technology breakers - no concerns
	SC2Y	MV-SF6	27	41	35	1	10	50	27	N	N	No	Low- long term	New technology breakers - no concerns
	SC3J	MV-SF6	27	12	35	1	100	50	27	N	N	No	Low- long term	New technology breakers - no concerns
	SC4Q	MV-SF6	27	54	35	1	35	47	27	N	N	No	Low- long term	New technology breakers - no concerns
	T1B	MV-Oil	53	14	93	1	32	88	31	Y	N	Yes	High- Short term	Asset is in fair condition, Parts availability is very limited with the old technology. High PCB content. High utilization and maintenance cost. Recommended to replace it.

	T2Y	MV-Oil	53	27	93	1	100	86	31	Y	N	No	High- Short term	Asset is in fair condition, Parts availability is very limited with the old technology. High PCB content. High maintenance cost. Recommended to replace it.
	T3J	MV-Oil	44	45	60	1	26	100	31	Y	N	No	High- Short term	Asset is in fair condition, Parts availability is very limited with the old technology. High Utilization. Recommended to replace it.
	T4Q	MV-Oil	44	20	60	1	16	100	31	Y	N	No	High- Short term	Asset is in fair condition, Parts availability is very limited with the old technology. High Utilization. Recommended to replace it.

NOTE- This DESN yard is 47A, so if replacement is carried it would be advisable to change the station structure as well and not one of the breakers.

Station	Asset	Type	Age(2021)	Asset Risk Assessment (ARA)	Comments	Condition RF	Demographics RF	Economics RF	Performance RF	Utilization RF	Criticality	Obsolescence	HS&E
Wilson TS (Protections)	N-TS-WILSONTS -PR-FTR UFLS	Microprocessor Relays	6	Very Low	The UFLS will be removed with functions incorpoated into the Bus Protection and will be removed.	1	9	1	1	0	25	N	N
	N-TS-WILSONTS -PR-B BU	Solid-state Relays	55	Very High	Solid-state relays are obsolete. It is currently being maintained with spare parts when it fails.	1	100	1	1	0	1	Y	Y
	N-TS-WILSONTS -PR-B MAIN		55	Very High		1	100	1	1	0	1	Y	Y
	N-TS-WILSONTS -PR-BY BF		49	Very High		1	100	1	1	0	1	Y	Y
	N-TS-WILSONTS -PR-SC1 MAIN		29	High		1	57	1	1	0	1	Y	Y
	N-TS-WILSONTS -PR-SC2 MAIN		29	High		1	57	1	1	0	1	Y	Y
	N-TS-WILSONTS -PR-T1B BF		49	Very High		1	100	1	1	0	1	Y	Y
	N-TS-WILSONTS -PR-T2Y BF		49	Very High		1	100	58	93	0	1	Y	Y
	N-TS-WILSONTS -PR-Y BU		55	Very High		1	100	1	1	0	1	Y	Y
	N-TS-WILSONTS -PR-Y MAIN		55	Very High		1	100	9	47	0	1	Y	Y
	N-TS-WILSONTS -PR-54M16 MAIN	Electromechanical Relays	31	Very High	Electromechanical relays are obsolete and no longer supported. It is currently being maintained with spare parts at the Meter-shop when it fails. M16, M17, M18 and M8 are PALC relays, which have a high failure rate.	1	24	1	1	0	1	Y	Y
	N-TS-WILSONTS -PR-54M17 MAIN		31	Very High		1	24	1	1	0	1	Y	Y
	N-TS-WILSONTS -PR-54M18 MAIN		31	Very High		1	24	1	1	0	10	Y	Y
	N-TS-WILSONTS -PR-54M1 MAIN		55	High		1	66	94	100	0	10	Y	Y
	N-TS-WILSONTS -PR-54M2 MAIN		55	High		1	66	1	1	0	10	Y	Y
	N-TS-WILSONTS -PR-54M3 MAIN		55	High		1	66	1	1	0	10	Y	Y
	N-TS-WILSONTS -PR-54M4 MAIN		55	High		1	66	1	1	0	10	Y	Y
	N-TS-WILSONTS -PR-54M5 MAIN		55	High		1	66	1	1	0	10	Y	Y
	N-TS-WILSONTS -PR-54M6 MAIN		55	High		1	66	24	64	0	10	Y	Y
	N-TS-WILSONTS -PR-54M7 MAIN		55	High		1	66	86	100	0	10	Y	Y
	N-TS-WILSONTS -PR-54M8 MAIN		55	Very High		1	24	1	6	0	1	Y	Y
	N-TS-WILSONTS -PR-MG MAIN1		49	High		1	60	1	1	0	1	Y	Y
	N-TS-WILSONTS -PR-T1 A		49	High		1	60	1	1	0	17	Y	Y
	N-TS-WILSONTS -PR-T1 B		49	High		1	60	1	1	0	17	Y	Y
	N-TS-WILSONTS -PR-T23C BU		41	Fair		1	52	1	1	0	33	Y	Y

N-TS-WILSONTS -PR-T29C BU	41	Fair	0	52	1	64	0	33	Y	Y
N-TS-WILSONTS -PR-T2 A	49	High	1	60	28	100	0	17	Y	Y
N-TS-WILSONTS -PR-T2 B	49	High	1	60	100	100	0	17	Y	Y

Quantity of Defect Reports and Trouble Calls					
	Year				
Station - Asset	2016	2017	2018	2019	2020
Charles TS - All TFs	5	9	13	7	13
Charles TS - All BRs	0	0	3	0	3
Wilson TS - All TFs	9	10	10	18	13
Wilson TS - All BRs	20	32	11	12	15

Quantity of Preventative Maintenance Reports					
	Year				
Station - Asset	2016	2017	2018	2019	2020
Charles TS - All TFs	56	43	47	43	93
Charles TS - All BRs	9	16	16	8	24
Wilson TS - All TFs	23	27	34	50	77
Wilson TS - All BRs	105	119	121	99	207

Preventative Maintenance Report Condition Ratings

	2016			2017			2018			2019			2020			
Station - Asset	**CR01**	**CR02**	**CR03**	**CR01**	**CR02**	**CR03**	**CR01**	**CR02**	**CR03**	**CR01**	**CR02**	**CR03**	**CR01**	**CR02**	**CR03**	**CR04**
Charles - All TFs	45	1	10	39	4		36	5	6	25	15	3	42	47	4	
Charles - All BRs	9			16			16			8			8	16		
Wilson - All TFs	23			21	5	1	31	3		26	13	11	62	12	2	
Wilson - All BRs	101			84	32	1	119	1	1	63	36		204	2		1

Completion Year	Notification	Notifictn type	Order	System status	Coding	Functional Loc.	Description	Equipment	Station	Asset
2016	15130494	PR	61169688	NOCO ORAS	CR01	N-TS-CHARLESTS -BR-T1A7A8	STN 'A' PWR EQ INSP-SVI FALL 2016	1094301	Charles	BR
2016	15130574	PR	61169688	NOCO ORAS	CR01	N-TS-CHARLESTS -BR-T2A7A8	STN 'A' PWR EQ INSP-SVI FALL 2016	1094324	Charles	BR
2016	15130575	PR	61169688	NOCO ORAS	CR01	N-TS-CHARLESTS -BR-T1A5A6	STN 'A' PWR EQ INSP-SVI FALL 2016	1098469	Charles	BR
2016	15130576	PR	61169688	NOCO ORAS	CR01	N-TS-CHARLESTS -BR-T3A1A2	STN 'A' PWR EQ INSP-SVI FALL 2016	1114751	Charles	BR
2016	15130709	PR	61169688	NOCO ORAS	CR01	N-TS-CHARLESTS -BR-T3A3A4	STN 'A' PWR EQ INSP-SVI FALL 2016	1207364	Charles	BR
2016	14515532	PR	61262373	NOCO NOPT ORAS	CR01	N-TS-CHARLESTS -BR-T3A3A4	BR-M/C-AMAG/<30-Strategy	1207364	Charles	BR
2016	15130724	PR	61169688	NOCO ORAS	CR01	N-TS-CHARLESTS -BR-T4A3A4	STN 'A' PWR EQ INSP-SVI FALL 2016	1207379	Charles	BR
2016	15130725	PR	61169688	NOCO ORAS	CR01	N-TS-CHARLESTS -BR-T4A1A2	STN 'A' PWR EQ INSP-SVI FALL 2016	1213796	Charles	BR
2016	15130726	PR	61169688	NOCO ORAS	CR01	N-TS-CHARLESTS -BR-T2A5A6	STN 'A' PWR EQ INSP-SVI FALL 2016	1216275	Charles	BR
2016	15086325	SW	61369773	NOCO ORAS		N-TS-CHARLESTS -BR	16-17464/Charles TS/T3		Charles	BR
2016	14981023	SW	61356869	NOCO ORAS		N-TS-CHARLESTS -BR	16-21397/Charles TS/T2/T2APT		Charles	BR
2016	14489829	SW	61251562	NOCO ORAS		N-TS-CHARLESTS -BR	16-04214/Charles TS/T4		Charles	BR
2016	15033403	DR	61361527	NOCO ORAS	9900	N-TS-CHARLESTS -TF-T1	Charles T1 oil clean up		Charles	TF
2016	15009597	DR	61358817	NOCO ORAS	3600	N-TS-CHARLESTS -TF-T3	Charles T3 ventilation repair		Charles	TF
2016	14820819	DR	61300028	NOCO ORAS	9900	N-TS-CHARLESTS -TF-T4	T4 LV bushing CT failure - investagation	1183465	Charles	TF
2016	14610296	DR	61277597	NOCO ORAS		N-TS-CHARLESTS -TF-T4	CHARLES T4 REPL HI PCB BUSH CMS 2016-BU	1183465	Charles	TF
2016	14501803	DR	61259702	NOCO ORAS	0700	N-TS-CHARLESTS -TF-T1	Oil clean up T1	1183475	Charles	TF
2016	15130490	PR	61169688	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T3	STN 'A' PWR EQ INSP-SVI FALL 2016	1178289	Charles	TF
2016	15130679	PR	61169688	NOCO ORAS	CR03	N-TS-CHARLESTS -TF-T4	STN 'A' PWR EQ INSP-SVI FALL 2016	1183465	Charles	TF
2016	15130600	PR	61169688	NOCO ORAS	CR03	N-TS-CHARLESTS -TF-T1	STN 'A' PWR EQ INSP-SVI FALL 2016	1183475	Charles	TF
2016	15130601	PR	61169688	NOCO ORAS	CR02	N-TS-CHARLESTS -TF-T2	STN 'A' PWR EQ INSP-SVI FALL 2016	1191105	Charles	TF
2016	15130523	PR	61169688	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T1	STN 'A' PWR EQ INSP-SVI FALL 2016	1222229	Charles	TF
2016	15130524	PR	61169688	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T1	STN 'A' PWR EQ INSP-SVI FALL 2016	1222230	Charles	TF
2016	15130525	PR	61169688	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T1	STN 'A' PWR EQ INSP-SVI FALL 2016	1222232	Charles	TF
2016	15130526	PR	61169688	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T1	STN 'A' PWR EQ INSP-SVI FALL 2016	1222234	Charles	TF
2016	15130529	PR	61169688	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T1	STN 'A' PWR EQ INSP-SVI FALL 2016	1222236	Charles	TF
2016	15130540	PR	61169688	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T1	STN 'A' PWR EQ INSP-SVI FALL 2016	1222238	Charles	TF
2016	15130541	PR	61169688	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T1	STN 'A' PWR EQ INSP-SVI FALL 2016	1222239	Charles	TF
2016	15130542	PR	61169688	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T1	STN 'A' PWR EQ INSP-SVI FALL 2016	1222241	Charles	TF
2016	15130545	PR	61169688	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T1	STN 'A' PWR EQ INSP-SVI FALL 2016	1222243	Charles	TF
2016	15130546	PR	61169688	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T1	STN 'A' PWR EQ INSP-SVI FALL 2016	1222245	Charles	TF
2016	15130547	PR	61169688	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T1	STN 'A' PWR EQ INSP-SVI FALL 2016	1222247	Charles	TF
2016	15130548	PR	61169688	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T1	STN 'A' PWR EQ INSP-SVI FALL 2016	1222374	Charles	TF
2016	15130571	PR	61169688	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T1	STN 'A' PWR EQ INSP-SVI FALL 2016	1222376	Charles	TF
2016	15130572	PR	61169688	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T2	STN 'A' PWR EQ INSP-SVI FALL 2016	1222378	Charles	TF
2016	15130573	PR	61169688	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T2	STN 'A' PWR EQ INSP-SVI FALL 2016	1222380	Charles	TF
2016	15130577	PR	61169688	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T3	STN 'A' PWR EQ INSP-SVI FALL 2016	1222382	Charles	TF
2016	15130578	PR	61169688	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T3	STN 'A' PWR EQ INSP-SVI FALL 2016	1222384	Charles	TF
2016	15130579	PR	61169688	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T4	STN 'A' PWR EQ INSP-SVI FALL 2016	1222387	Charles	TF
2016	15130607	PR	61169688	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T4	STN 'A' PWR EQ INSP-SVI FALL 2016	1222389	Charles	TF
2016	14495582	PR	60978344	NOCO ORAS	CR03	N-TS-CHARLESTS -TF-T4	Tx PCB Reduction Oil Sample	1227369	Charles	TF
2016	14495583	PR	60978344	NOCO ORAS	CR03	N-TS-CHARLESTS -TF-T4	Tx PCB Reduction Oil Sample	1227371	Charles	TF
2016	14495548	PR	60978344	NOCO ORAS	CR03	N-TS-CHARLESTS -TF-T4	Tx PCB Reduction Oil Sample	1227373	Charles	TF
2016	14495546	PR	60978344	NOCO ORAS	CR03	N-TS-CHARLESTS -TF-T4	Tx PCB Reduction Oil Sample	1227375	Charles	TF
2016	14495547	PR	60978344	NOCO ORAS	CR03	N-TS-CHARLESTS -TF-T4	Tx PCB Reduction Oil Sample	1227376	Charles	TF
2016	14495545	PR	60978344	NOCO ORAS	CR03	N-TS-CHARLESTS -TF-T4	Tx PCB Reduction Oil Sample	1227378	Charles	TF
2016	14495580	PR	60978344	NOCO ORAS	CR03	N-TS-CHARLESTS -TF-T4	Tx PCB Reduction Oil Sample	1227380	Charles	TF
2016	14495581	PR	60978344	NOCO ORAS	CR03	N-TS-CHARLESTS -TF-T4	Tx PCB Reduction Oil Sample	1227382	Charles	TF

2016	14495584	PR	60978344	ATCO NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T4	Tx PCB Reduction Oil Sample	1227384	Charles	TF
2016	14495585	PR	60978344	ATCO NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T4	Tx PCB Reduction Oil Sample	1227386	Charles	TF
2016	14495549	PR	60978344	ATCO NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T4	Tx PCB Reduction Oil Sample	1227388	Charles	TF
2016	15130673	PR	61169688	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T3	STN 'A' PWR EQ INSP-SVI FALL 2016	1227390	Charles	TF
2016	15130674	PR	61169688	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T3	STN 'A' PWR EQ INSP-SVI FALL 2016	1227392	Charles	TF
2016	15130675	PR	61169688	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T3	STN 'A' PWR EQ INSP-SVI FALL 2016	1227394	Charles	TF
2016	15130676	PR	61169688	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T3	STN 'A' PWR EQ INSP-SVI FALL 2016	1227396	Charles	TF
2016	15130680	PR	61169688	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T3	STN 'A' PWR EQ INSP-SVI FALL 2016	1227398	Charles	TF
2016	15130681	PR	61169688	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T3	STN 'A' PWR EQ INSP-SVI FALL 2016	1227400	Charles	TF
2016	15130682	PR	61169688	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T3	STN 'A' PWR EQ INSP-SVI FALL 2016	1227402	Charles	TF
2016	15130683	PR	61169688	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T3	STN 'A' PWR EQ INSP-SVI FALL 2016	1227404	Charles	TF
2016	15130686	PR	61169688	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T3	STN 'A' PWR EQ INSP-SVI FALL 2016	1227406	Charles	TF
2016	15130687	PR	61169688	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T3	STN 'A' PWR EQ INSP-SVI FALL 2016	1227408	Charles	TF
2016	15130493	PR	61169688	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T3	STN 'A' PWR EQ INSP-SVI FALL 2016	1227410	Charles	TF
2016	15130688	PR	61169688	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T2	STN 'A' PWR EQ INSP-SVI FALL 2016	1231283	Charles	TF
2016	15130689	PR	61169688	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T2	STN 'A' PWR EQ INSP-SVI FALL 2016	1231285	Charles	TF
2016	15130694	PR	61169688	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T2	STN 'A' PWR EQ INSP-SVI FALL 2016	1231287	Charles	TF
2016	15130695	PR	61169688	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T2	STN 'A' PWR EQ INSP-SVI FALL 2016	1231289	Charles	TF
2016	15130696	PR	61169688	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T2	STN 'A' PWR EQ INSP-SVI FALL 2016	1231291	Charles	TF
2016	15130697	PR	61169688	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T2	STN 'A' PWR EQ INSP-SVI FALL 2016	1231293	Charles	TF
2016	15130703	PR	61169688	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T2	STN 'A' PWR EQ INSP-SVI FALL 2016	1231295	Charles	TF
2016	15130704	PR	61169688	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T2	STN 'A' PWR EQ INSP-SVI FALL 2016	1231297	Charles	TF
2016	15130705	PR	61169688	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T2	STN 'A' PWR EQ INSP-SVI FALL 2016	1231315	Charles	TF
2016	15130706	PR	61169688	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T2	STN 'A' PWR EQ INSP-SVI FALL 2016	1231317	Charles	TF
2016	15130720	PR	61169688	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T2	STN 'A' PWR EQ INSP-SVI FALL 2016	1231319	Charles	TF
2016	15192180	DR	61387665	NOCO ORAS	1400	N-TS-WILSONTS -BR-M17	Wilson TS - M17 comp blow down tube	1093814	Wilson	BR
2016	14495897	DR	61254919	NOCO ORAS	0700	N-TS-WILSONTS -BR-M18	WILSON M18 LOW GAS INVESTIGATE/REPAIR	1093835	Wilson	BR
2016	15280537	DR	61399140	NOCO ORAS	1400	N-TS-WILSONTS -BR-M18	Wilson M18 Low Air	1093835	Wilson	BR
2016	14533571	DR	61269944	NOCO ORAS	0100	N-TS-WILSONTS -BR-M18	WILSON M18 POLE HTR MODIFICATION	1093835	Wilson	BR
2016	14519075	DR	61264453	NOCO ORAS	0700	N-TS-WILSONTS -BR-M18	WILSON M18 WHITE PHASE FAILURE	1093835	Wilson	BR
2016	15252987	DR	61396097	NOCO ORAS	0312	N-TS-WILSONTS -BR-M7	rebuild interrupters Wilson M7	1101252	Wilson	BR
2016	15213696	DR	61390672	NOCO ORAS	0100	N-TS-WILSONTS -BR-T1B	Wilson T1B replace buffer stops/washers	1101264	Wilson	BR
2016	15210405	DR	61392716	NOCO ORAS	0312	N-TS-WILSONTS -BR-T1B	wilson T1B rebuild interrupters	1101264	Wilson	BR
2016	14972886	DR	61356259	NOCO ORAS	0700	N-TS-WILSONTS -BR-SC3J	WILSON SC3J SF6 LOW GAS INVEST/REPAIR	1211024	Wilson	BR
2016	14996976	DR	61358432	NOCO NOPT ORAS	0312	N-TS-WILSONTS -BR-SC4Q	SC4Q has a blown fuse (Wilson TS)	1211036	Wilson	BR
2016	14521088	DR	61265009	NOCO ORAS	0100	N-TS-WILSONTS -BR-BY	WILSON BY BRKR LOW OIL	1213529	Wilson	BR
2016	14519718	DR	61265010	NOCO ORAS	0100	N-TS-WILSONTS -BR-BY	WILSON BY BRKR LOW WIPE	1213529	Wilson	BR
2016	14543704	PR	61273342	NOCO ORAS	CR01	N-TS-WILSONTS -BR	STN BREAKER BLOWDOWN		Wilson	BR
2016	14543703	PR	61273341	NOCO ORAS	CR01	N-TS-WILSONTS -BR	STN BREAKER BLOWDOWN		Wilson	BR
2016	14543702	PR	61273340	NOCO ORAS	CR01	N-TS-WILSONTS -BR	STN BREAKER BLOWDOWN		Wilson	BR
2016	14517758	PR	61170803	NOCO ORAS	CR01	N-TS-WILSONTS -BR-M17	STN 'B' PWR EQ INSP-SVI SPRING 2016	1093814	Wilson	BR
2016	15199807	PR	61170804	NOCO ORAS	CR01	N-TS-WILSONTS -BR-M17	STN 'B' PWR EQ INSP-SVI FALL 2016	1093814	Wilson	BR
2016	15206242	PR	61273340	NOCO ORAS	CR01	N-TS-WILSONTS -BR-M17	STN BREAKER BLOWDOWN 2of4 2016	1093814	Wilson	BR
2016	15206267	PR	61273341	NOCO ORAS	CR01	N-TS-WILSONTS -BR-M17	STN BREAKER BLOWDOWN 3of4 2016	1093814	Wilson	BR
2016	15206280	PR	61273342	NOCO ORAS	CR01	N-TS-WILSONTS -BR-M17	STN BREAKER BLOWDOWN 4of4 2016	1093814	Wilson	BR
2016	15199843	PR	61170804	NOCO ORAS	CR01	N-TS-WILSONTS -BR-M18	STN 'B' PWR EQ INSP-SVI FALL 2016	1093835	Wilson	BR
2016	15206282	PR	61273342	NOCO ORAS	CR01	N-TS-WILSONTS -BR-M18	STN BREAKER BLOWDOWN 4of4 2016	1093835	Wilson	BR
2016	15206269	PR	61273341	NOCO ORAS	CR01	N-TS-WILSONTS -BR-M18	STN BREAKER BLOWDOWN 3of4 2016	1093835	Wilson	BR
2016	15206244	PR	61273340	NOCO ORAS	CR01	N-TS-WILSONTS -BR-M18	STN BREAKER BLOWDOWN 2of4 2016	1093835	Wilson	BR

2016	14517759	PR	61170803	NOCO ORAS	CR01	N-TS-WILSONTS -BR-M18	STN 'B' PWR EQ INSP-SVI SPRING 2016	1093835	Wilson	BR
2016	14517760	PR	61170803	NOCO ORAS	CR01	N-TS-WILSONTS -BR-M16	STN 'B' PWR EQ INSP-SVI SPRING 2016	1101236	Wilson	BR
2016	15199808	PR	61170804	NOCO ORAS	CR01	N-TS-WILSONTS -BR-M16	STN 'B' PWR EQ INSP-SVI FALL 2016	1101236	Wilson	BR
2016	14517761	PR	61170803	NOCO ORAS	CR01	N-TS-WILSONTS -BR-M7	STN 'B' PWR EQ INSP-SVI SPRING 2016	1101252	Wilson	BR
2016	15199809	PR	61170804	NOCO ORAS	CR01	N-TS-WILSONTS -BR-M7	STN 'B' PWR EQ INSP-SVI FALL 2016	1101252	Wilson	BR
2016	14862632	PR	61304972	NOCO ORAS	CR01	N-TS-WILSONTS -BR-T1B	Replace oil based on BOA	1101264	Wilson	BR
2016	14517762	PR	61170803	NOCO ORAS	CR01	N-TS-WILSONTS -BR-T1B	STN 'B' PWR EQ INSP-SVI SPRING 2016	1101264	Wilson	BR
2016	15199840	PR	61170804	NOCO ORAS	CR01	N-TS-WILSONTS -BR-T1B	STN 'B' PWR EQ INSP-SVI FALL 2016	1101264	Wilson	BR
2016	14861048	PR	61304790	NOCO ORAS	CR01	N-TS-WILSONTS -BR-T1B	BR-OIL-KSO-LV- Strategy BOA SI	1101264	Wilson	BR
2016	14517763	PR	61170803	NOCO ORAS	CR01	N-TS-WILSONTS -BR-JQ	STN 'B' PWR EQ INSP-SVI SPRING 2016	1206693	Wilson	BR
2016	15199724	PR	61170804	NOCO ORAS	CR01	N-TS-WILSONTS -BR-JQ	STN 'B' PWR EQ INSP-SVI FALL 2016	1206693	Wilson	BR
2016	15199726	PR	61170804	NOCO ORAS	CR01	N-TS-WILSONTS -BR-T4Q	STN 'B' PWR EQ INSP-SVI FALL 2016	1206763	Wilson	BR
2016	14517765	PR	61170803	NOCO ORAS	CR01	N-TS-WILSONTS -BR-T4Q	STN 'B' PWR EQ INSP-SVI SPRING 2016	1206763	Wilson	BR
2016	15199727	PR	61170804	NOCO ORAS	CR01	N-TS-WILSONTS -BR-T3J	STN 'B' PWR EQ INSP-SVI FALL 2016	1206776	Wilson	BR
2016	14517766	PR	61170803	NOCO ORAS	CR01	N-TS-WILSONTS -BR-T3J	STN 'B' PWR EQ INSP-SVI SPRING 2016	1206776	Wilson	BR
2016	15199728	PR	61170804	NOCO ORAS	CR01	N-TS-WILSONTS -BR-M12	STN 'B' PWR EQ INSP-SVI FALL 2016	1207581	Wilson	BR
2016	14517767	PR	61170803	NOCO ORAS	CR01	N-TS-WILSONTS -BR-M12	STN 'B' PWR EQ INSP-SVI SPRING 2016	1207581	Wilson	BR
2016	14517764	PR	61170803	NOCO ORAS	CR01	N-TS-WILSONTS -BR-M13	STN 'B' PWR EQ INSP-SVI SPRING 2016	1207593	Wilson	BR
2016	15199725	PR	61170804	NOCO ORAS	CR01	N-TS-WILSONTS -BR-M13	STN 'B' PWR EQ INSP-SVI FALL 2016	1207593	Wilson	BR
2016	14517768	PR	61170803	NOCO ORAS	CR01	N-TS-WILSONTS -BR-M11	STN 'B' PWR EQ INSP-SVI SPRING 2016	1207604	Wilson	BR
2016	15199729	PR	61170804	NOCO ORAS	CR01	N-TS-WILSONTS -BR-M11	STN 'B' PWR EQ INSP-SVI FALL 2016	1207604	Wilson	BR
2016	14517769	PR	61170803	NOCO ORAS	CR01	N-TS-WILSONTS -BR-SC1B	STN 'B' PWR EQ INSP-SVI SPRING 2016	1211004	Wilson	BR
2016	15206284	PR	61273342	NOCO ORAS	CR01	N-TS-WILSONTS -BR-SC1B	STN BREAKER BLOWDOWN 4of4 2016	1211004	Wilson	BR
2016	15206246	PR	61273340	NOCO ORAS	CR01	N-TS-WILSONTS -BR-SC1B	STN BREAKER BLOWDOWN 2of4 2016	1211004	Wilson	BR
2016	15199760	PR	61170804	NOCO ORAS	CR01	N-TS-WILSONTS -BR-SC1B	STN 'B' PWR EQ INSP-SVI FALL 2016	1211004	Wilson	BR
2016	15206281	PR	61273341	NOCO ORAS	CR01	N-TS-WILSONTS -BR-SC1B	STN BREAKER BLOWDOWN 3of4 2016	1211004	Wilson	BR
2016	15199761	PR	61170804	NOCO ORAS	CR01	N-TS-WILSONTS -BR-SC2Y	STN 'B' PWR EQ INSP-SVI FALL 2016	1211011	Wilson	BR
2016	14517770	PR	61170803	NOCO ORAS	CR01	N-TS-WILSONTS -BR-SC2Y	STN 'B' PWR EQ INSP-SVI SPRING 2016	1211011	Wilson	BR
2016	15206286	PR	61273342	NOCO ORAS	CR01	N-TS-WILSONTS -BR-SC2Y	STN BREAKER BLOWDOWN 4of4 2016	1211011	Wilson	BR
2016	15206283	PR	61273341	NOCO ORAS	CR01	N-TS-WILSONTS -BR-SC2Y	STN BREAKER BLOWDOWN 3of4 2016	1211011	Wilson	BR
2016	15206248	PR	61273340	NOCO ORAS	CR01	N-TS-WILSONTS -BR-SC2Y	STN BREAKER BLOWDOWN 2of4 2016	1211011	Wilson	BR
2016	15206288	PR	61273342	NOCO ORAS	CR01	N-TS-WILSONTS -BR-SC3J	STN BREAKER BLOWDOWN 4of4 2016	1211024	Wilson	BR
2016	15206260	PR	61273340	NOCO ORAS	CR01	N-TS-WILSONTS -BR-SC3J	STN BREAKER BLOWDOWN 2of4 2016	1211024	Wilson	BR
2016	15199762	PR	61170804	NOCO ORAS	CR01	N-TS-WILSONTS -BR-SC3J	STN 'B' PWR EQ INSP-SVI FALL 2016	1211024	Wilson	BR
2016	14517750	PR	61170803	NOCO ORAS	CR01	N-TS-WILSONTS -BR-SC3J	STN 'B' PWR EQ INSP-SVI SPRING 2016	1211024	Wilson	BR
2016	15206285	PR	61273341	NOCO ORAS	CR01	N-TS-WILSONTS -BR-SC3J	STN BREAKER BLOWDOWN 3of4 2016	1211024	Wilson	BR
2016	14517748	PR	61170803	NOCO ORAS	CR01	N-TS-WILSONTS -BR-SC4Q	STN 'B' PWR EQ INSP-SVI SPRING 2016	1211036	Wilson	BR
2016	15206262	PR	61273340	NOCO ORAS	CR01	N-TS-WILSONTS -BR-SC4Q	STN BREAKER BLOWDOWN 2of4 2016	1211036	Wilson	BR
2016	15206287	PR	61273341	NOCO ORAS	CR01	N-TS-WILSONTS -BR-SC4Q	STN BREAKER BLOWDOWN 3of4 2016	1211036	Wilson	BR
2016	15206268	PR	61273342	NOCO ORAS	CR01	N-TS-WILSONTS -BR-SC4Q	STN BREAKER BLOWDOWN 4of4 2016	1211036	Wilson	BR
2016	15199763	PR	61170804	NOCO ORAS	CR01	N-TS-WILSONTS -BR-SC4Q	STN 'B' PWR EQ INSP-SVI FALL 2016	1211036	Wilson	BR
2016	14517747	PR	61170803	NOCO ORAS	CR01	N-TS-WILSONTS -BR-T2Y	STN 'B' PWR EQ INSP-SVI SPRING 2016	1213509	Wilson	BR
2016	15199764	PR	61170804	NOCO ORAS	CR01	N-TS-WILSONTS -BR-T2Y	STN 'B' PWR EQ INSP-SVI FALL 2016	1213509	Wilson	BR
2016	15199765	PR	61170804	NOCO ORAS	CR01	N-TS-WILSONTS -BR-BY	STN 'B' PWR EQ INSP-SVI FALL 2016	1213529	Wilson	BR
2016	14517774	PR	61170803	NOCO ORAS	CR01	N-TS-WILSONTS -BR-BY	STN 'B' PWR EQ INSP-SVI SPRING 2016	1213529	Wilson	BR
2016	14517775	PR	61170803	NOCO ORAS	CR01	N-TS-WILSONTS -BR-M5	STN 'B' PWR EQ INSP-SVI SPRING 2016	1213614	Wilson	BR
2016	15199766	PR	61170804	NOCO ORAS	CR01	N-TS-WILSONTS -BR-M5	STN 'B' PWR EQ INSP-SVI FALL 2016	1213614	Wilson	BR
2016	14517776	PR	61170803	NOCO ORAS	CR01	N-TS-WILSONTS -BR-M1	STN 'B' PWR EQ INSP-SVI SPRING 2016	1213628	Wilson	BR
2016	15199722	PR	61170804	NOCO ORAS	CR01	N-TS-WILSONTS -BR-M1	STN 'B' PWR EQ INSP-SVI FALL 2016	1213628	Wilson	BR

2016	14517751	PR	61170803	NOCO ORAS	CR01	N-TS-WILSONTS -BR-M3	STN 'B' PWR EQ INSP-SVI SPRING 2016	1213636	Wilson	BR
2016	15199767	PR	61170804	NOCO ORAS	CR01	N-TS-WILSONTS -BR-M3	STN 'B' PWR EQ INSP-SVI FALL 2016	1213636	Wilson	BR
2016	14517752	PR	61170803	NOCO ORAS	CR01	N-TS-WILSONTS -BR-M6	STN 'B' PWR EQ INSP-SVI SPRING 2016	1213645	Wilson	BR
2016	15199769	PR	61170804	NOCO ORAS	CR01	N-TS-WILSONTS -BR-M6	STN 'B' PWR EQ INSP-SVI FALL 2016	1213645	Wilson	BR
2016	15199723	PR	61170804	NOCO ORAS	CR01	N-TS-WILSONTS -BR-M4	STN 'B' PWR EQ INSP-SVI FALL 2016	1213655	Wilson	BR
2016	14517753	PR	61170803	NOCO ORAS	CR01	N-TS-WILSONTS -BR-M4	STN 'B' PWR EQ INSP-SVI SPRING 2016	1213655	Wilson	BR
2016	15199800	PR	61170804	NOCO ORAS	CR01	N-TS-WILSONTS -BR-M2	STN 'B' PWR EQ INSP-SVI FALL 2016	1213666	Wilson	BR
2016	14517754	PR	61170803	NOCO ORAS	CR01	N-TS-WILSONTS -BR-M2	STN 'B' PWR EQ INSP-SVI SPRING 2016	1213666	Wilson	BR
2016	14517755	PR	61170803	NOCO ORAS	CR01	N-TS-WILSONTS -BR-M8	STN 'B' PWR EQ INSP-SVI SPRING 2016	1213676	Wilson	BR
2016	15199768	PR	61170804	NOCO ORAS	CR01	N-TS-WILSONTS -BR-M8	STN 'B' PWR EQ INSP-SVI FALL 2016	1213676	Wilson	BR
2016	15199801	PR	61170804	NOCO ORAS	CR01	N-TS-WILSONTS -BR-M14	STN 'B' PWR EQ INSP-SVI FALL 2016	1215063	Wilson	BR
2016	14517756	PR	61170803	NOCO ORAS	CR01	N-TS-WILSONTS -BR-M14	STN 'B' PWR EQ INSP-SVI SPRING 2016	1215063	Wilson	BR
2016	15199802	PR	61170804	NOCO ORAS	CR01	N-TS-WILSONTS -BR-M15	STN 'B' PWR EQ INSP-SVI FALL 2016	1215072	Wilson	BR
2016	14517757	PR	61170803	NOCO ORAS	CR01	N-TS-WILSONTS -BR-M15	STN 'B' PWR EQ INSP-SVI SPRING 2016	1215072	Wilson	BR
2016	15252787	PR	60978094	NOCO ORAS	CR01	N-TS-WILSONTS -BR-T1B	Tx PCB Reduction Oil Sample	1358699	Wilson	BR
2016	15003402	PR	60979046	NOCO ORAS	CR01	N-TS-WILSONTS -BR-T3J	Tx PCB Reduction Oil Sample	1359281	Wilson	BR
2016	14523340	PR	60978678	NOCO ORAS	CR01	N-TS-WILSONTS -BR-BY	Tx PCB Reduction Oil Sample	1359445	Wilson	BR
2016	14535999	PR	60977731	NOCO ORAS	CR01	N-TS-WILSONTS -BR-M2	Tx PCB Reduction Oil Sample	1359458	Wilson	BR
2016	14536027	PR	60977732	NOCO ORAS	CR01	N-TS-WILSONTS -BR-M8	Tx PCB Reduction Oil Sample	1359459	Wilson	BR
2016	15003403	PR	60979046	NOCO ORAS	CR01	N-TS-WILSONTS -BR-T3J	Tx PCB Reduction Oil Sample	1360774	Wilson	BR
2016	14523341	PR	60978678	NOCO ORAS	CR01	N-TS-WILSONTS -BR-BY	Tx PCB Reduction Oil Sample	1360938	Wilson	BR
2016	14536020	PR	60977731	NOCO ORAS	CR01	N-TS-WILSONTS -BR-M2	Tx PCB Reduction Oil Sample	1360951	Wilson	BR
2016	14536028	PR	60977732	NOCO ORAS	CR01	N-TS-WILSONTS -BR-M8	Tx PCB Reduction Oil Sample	1360952	Wilson	BR
2016	15252788	PR	60978094	NOCO ORAS	CR01	N-TS-WILSONTS -BR-T1B	Tx PCB Reduction Oil Sample	1361685	Wilson	BR
2016	15003404	PR	60979046	NOCO ORAS	CR01	N-TS-WILSONTS -BR-T3J	Tx PCB Reduction Oil Sample	1362267	Wilson	BR
2016	14523342	PR	60978678	NOCO ORAS	CR01	N-TS-WILSONTS -BR-BY	Tx PCB Reduction Oil Sample	1362431	Wilson	BR
2016	14536021	PR	60977731	NOCO ORAS	CR01	N-TS-WILSONTS -BR-M2	Tx PCB Reduction Oil Sample	1362444	Wilson	BR
2016	14536029	PR	60977732	NOCO ORAS	CR01	N-TS-WILSONTS -BR-M8	Tx PCB Reduction Oil Sample	1362445	Wilson	BR
2016	15252789	PR	60978094	NOCO ORAS	CR01	N-TS-WILSONTS -BR-T1B	Tx PCB Reduction Oil Sample	1363178	Wilson	BR
2016	15003405	PR	60979046	NOCO ORAS	CR01	N-TS-WILSONTS -BR-T3J	Tx PCB Reduction Oil Sample	1363760	Wilson	BR
2016	14523343	PR	60978678	NOCO ORAS	CR01	N-TS-WILSONTS -BR-BY	Tx PCB Reduction Oil Sample	1363924	Wilson	BR
2016	14536022	PR	60977731	NOCO ORAS	CR01	N-TS-WILSONTS -BR-M2	Tx PCB Reduction Oil Sample	1363937	Wilson	BR
2016	14536030	PR	60977732	NOCO ORAS	CR01	N-TS-WILSONTS -BR-M8	Tx PCB Reduction Oil Sample	1363938	Wilson	BR
2016	15252850	PR	60978094	NOCO ORAS	CR01	N-TS-WILSONTS -BR-T1B	Tx PCB Reduction Oil Sample	1364671	Wilson	BR
2016	15003406	PR	60979046	NOCO ORAS	CR01	N-TS-WILSONTS -BR-T3J	Tx PCB Reduction Oil Sample	1365253	Wilson	BR
2016	14523344	PR	60978678	NOCO ORAS	CR01	N-TS-WILSONTS -BR-BY	Tx PCB Reduction Oil Sample	1365417	Wilson	BR
2016	14536023	PR	60977731	NOCO ORAS	CR01	N-TS-WILSONTS -BR-M2	Tx PCB Reduction Oil Sample	1365430	Wilson	BR
2016	14536031	PR	60977732	NOCO ORAS	CR01	N-TS-WILSONTS -BR-M8	Tx PCB Reduction Oil Sample	1365431	Wilson	BR
2016	15252851	PR	60978094	NOCO ORAS	CR01	N-TS-WILSONTS -BR-T1B	Tx PCB Reduction Oil Sample	1366164	Wilson	BR
2016	15003407	PR	60979046	NOCO ORAS	CR01	N-TS-WILSONTS -BR-T3J	Tx PCB Reduction Oil Sample	1366746	Wilson	BR
2016	14523345	PR	60978678	NOCO ORAS	CR01	N-TS-WILSONTS -BR-BY	Tx PCB Reduction Oil Sample	1366910	Wilson	BR
2016	14536024	PR	60977731	NOCO ORAS	CR01	N-TS-WILSONTS -BR-M2	Tx PCB Reduction Oil Sample	1366923	Wilson	BR
2016	14536032	PR	60977732	NOCO ORAS	CR01	N-TS-WILSONTS -BR-M8	Tx PCB Reduction Oil Sample	1366924	Wilson	BR
2016	15252852	PR	60978094	NOCO ORAS	CR01	N-TS-WILSONTS -BR-T1B	Tx PCB Reduction Oil Sample	2387220	Wilson	BR
2016	15208317	SW	61397882	NOCO ORAS		N-TS-WILSONTS -BR-M14	16-25427 - Wilson M13-M14 Tie		Wilson	BR
2016	14656361	TC	61286743	NOCO ORAS		N-TS-WILSONTS -BR	s3: EMD for low sf6 density		Wilson	BR
2016	14541714	TC	61272255	NOCO ORAS		N-TS-WILSONTS -BR-JQ	s3 (EMD) RE: JQYard Low Air Pressure		Wilson	BR
2016	15269190	TC	61399473	NOCO ORAS		N-TS-WILSONTS -BR-JQ	S3^ EMD^ WILSON TS^ RE: J Q YARD BREAKER		Wilson	BR
2016	14516676	TC	61264155	NOCO ORAS		N-TS-WILSONTS -BR-M14	S3 - M14 TRANSFER TRIP BLOCKED TO EPSON		Wilson	BR

2016	14537320	TC	61271126	NOCO ORAS		N-TS-WILSONTS	-BR-M15	S3 RE: ISOLATION ON THE M15		Wilson	BR
2016	15249191	TC	61395974	NOCO ORAS		N-TS-WILSONTS	-BR-M3	S3 EMD RE: SWITCHING ON M3		Wilson	BR
2016	15093326	TC	61369661	NOCO ORAS		N-TS-WILSONTS	-BR-M8	s2 imd emd re: m8 trip		Wilson	BR
2016	15093416	TC	61368772	NOCO ORAS		N-TS-WILSONTS	-BR-M8	S3 EMD PD NEED GROUNDING OFF WILSON M8 A	1213676	Wilson	BR
2016	14536010	DR	61270570	NOCO ORAS	0100	N-TS-WILSONTS	-TF-SS2	SS2 Low Oil		Wilson	TF
2016	15199417	PR	61170804	NOCO ORAS	CR01	N-TS-WILSONTS	-TF-SS2	STN 'B' PWR EQ INSP-SVI FALL 2016	1173234	Wilson	TF
2016	14517728	PR	61170803	NOCO ORAS	CR01	N-TS-WILSONTS	-TF-SS2	STN 'B' PWR EQ INSP-SVI SPRING 2016	1173234	Wilson	TF
2016	14517729	PR	61170803	NOCO ORAS	CR01	N-TS-WILSONTS	-TF-T3	STN 'B' PWR EQ INSP-SVI SPRING 2016	1173245	Wilson	TF
2016	15199418	PR	61170804	NOCO ORAS	CR01	N-TS-WILSONTS	-TF-T3	STN 'B' PWR EQ INSP-SVI FALL 2016	1173245	Wilson	TF
2016	15199440	PR	61170804	NOCO ORAS	CR01	N-TS-WILSONTS	-TF-T2	STN 'B' PWR EQ INSP-SVI FALL 2016	1175751	Wilson	TF
2016	14517731	PR	61170803	NOCO ORAS	CR01	N-TS-WILSONTS	-TF-T2	STN 'B' PWR EQ INSP-SVI SPRING 2016	1175751	Wilson	TF
2016	14517734	PR	61170803	NOCO ORAS	CR01	N-TS-WILSONTS	-TF-SS1	STN 'B' PWR EQ INSP-SVI SPRING 2016	1183701	Wilson	TF
2016	15199443	PR	61170804	NOCO ORAS	CR01	N-TS-WILSONTS	-TF-SS1	STN 'B' PWR EQ INSP-SVI FALL 2016	1183701	Wilson	TF
2016	15199444	PR	61170804	NOCO ORAS	CR01	N-TS-WILSONTS	-TF-T1	STN 'B' PWR EQ INSP-SVI FALL 2016	1183712	Wilson	TF
2016	14517735	PR	61170803	NOCO ORAS	CR01	N-TS-WILSONTS	-TF-T1	STN 'B' PWR EQ INSP-SVI SPRING 2016	1183712	Wilson	TF
2016	14517736	PR	61170803	NOCO ORAS	CR01	N-TS-WILSONTS	-TF-T4	STN 'B' PWR EQ INSP-SVI SPRING 2016	1188773	Wilson	TF
2016	15199445	PR	61170804	NOCO ORAS	CR01	N-TS-WILSONTS	-TF-T4	STN 'B' PWR EQ INSP-SVI FALL 2016	1188773	Wilson	TF
2016	15199803	PR	61170804	NOCO ORAS	CR01	N-TS-WILSONTS	-TF-T1	STN 'B' PWR EQ INSP-SVI FALL 2016	1223907	Wilson	TF
2016	14517771	PR	61170803	NOCO ORAS	CR01	N-TS-WILSONTS	-TF-T1	STN 'B' PWR EQ INSP-SVI SPRING 2016	1223907	Wilson	TF
2016	14517772	PR	61170803	NOCO ORAS	CR01	N-TS-WILSONTS	-TF-T2	STN 'B' PWR EQ INSP-SVI SPRING 2016	1223909	Wilson	TF
2016	15199804	PR	61170804	NOCO ORAS	CR01	N-TS-WILSONTS	-TF-T2	STN 'B' PWR EQ INSP-SVI FALL 2016	1223909	Wilson	TF
2016	15199805	PR	61170804	NOCO ORAS	CR01	N-TS-WILSONTS	-TF-T3	STN 'B' PWR EQ INSP-SVI FALL 2016	1223911	Wilson	TF
2016	14517773	PR	61170803	NOCO ORAS	CR01	N-TS-WILSONTS	-TF-T3	STN 'B' PWR EQ INSP-SVI SPRING 2016	1223911	Wilson	TF
2016	15199806	PR	61170804	NOCO ORAS	CR01	N-TS-WILSONTS	-TF-T4	STN 'B' PWR EQ INSP-SVI FALL 2016	1223913	Wilson	TF
2016	14517749	PR	61170803	NOCO ORAS	CR01	N-TS-WILSONTS	-TF-T4	STN 'B' PWR EQ INSP-SVI SPRING 2016	1223913	Wilson	TF
2016	14536013	PR	60977900	NOCO ORAS	CR01	N-TS-WILSONTS	-TF-SS2	Tx PCB Reduction Oil Sample	1356867	Wilson	TF
2016	14536014	PR	60977900	NOCO ORAS	CR01	N-TS-WILSONTS	-TF-SS2	Tx PCB Reduction Oil Sample	1357319	Wilson	TF
2016	14536015	PR	60977900	NOCO ORAS	CR01	N-TS-WILSONTS	-TF-SS2	Tx PCB Reduction Oil Sample	1357771	Wilson	TF
2016	14643504	TC	61285865	NOCO ORAS		N-TS-WILSONTS	-TF	S3 - EMD - GATE OPEN AT WILSON TS - REPO		Wilson	TF
2016	15041343	TC	61362797	NOCO ORAS		N-TS-WILSONTS	-TF-T4	S3 RE: T4 OIL TEMP ALARM		Wilson	TF
2016	14870454	TC	61307127	NOCO ORAS		N-TS-WILSONTS	-TF-T3	S3 - EMD WILSON TS RE: T3 COOLING FAIL	1173245	Wilson	TF
2016	14954511	TC	61354514	NOCO ORAS		N-TS-WILSONTS	-TF-T3	S3 - EMD WILSON TS T3 COOLING FAILURE	1173245	Wilson	TF
2016	14999239	TC	61359278	NOCO ORAS		N-TS-WILSONTS	-TF-T3	S3 EMD RE: SWITCHING ON T3	1173245	Wilson	TF
2016	14962298	TC	61356257	NOCO ORAS		N-TS-WILSONTS	-TF-T3	S3 EMD RE: T3 COOLING FAILURE AT WILSON	1173245	Wilson	TF
2016	15048893	TC	61364415	NOCO ORAS		N-TS-WILSONTS	-TF-T4	S3 - EMD WILSON TS T4 OIL TEMPERATURE AL	1188773	Wilson	TF
2016	15039482	TC	61362906	NOCO ORAS		N-TS-WILSONTS	-TF-T4	S3 EMD IMM RE T4 OIL TEMP ALARM	1188773	Wilson	TF
2017	15821510	PR	61322825	NOCO ORAS	CR01	N-TS-CHARLESTS	-BR-T1A7A8	STN 'A' PWR EQ INSP-SVI Spr 2017	1094301	Charles	BR
2017	16195269	PR	61322826	NOCO ORAS	CR01	N-TS-CHARLESTS	-BR-T1A7A8	STN 'A' PWR EQ INSP-SVI Fall 2017	1094301	Charles	BR
2017	16195271	PR	61322826	NOCO ORAS	CR01	N-TS-CHARLESTS	-BR-T2A7A8	STN 'A' PWR EQ INSP-SVI Fall 2017	1094324	Charles	BR
2017	15821511	PR	61322825	NOCO ORAS	CR01	N-TS-CHARLESTS	-BR-T2A7A8	STN 'A' PWR EQ INSP-SVI Spr 2017	1094324	Charles	BR
2017	16195273	PR	61322826	NOCO ORAS	CR01	N-TS-CHARLESTS	-BR-T1A5A6	STN 'A' PWR EQ INSP-SVI Fall 2017	1098469	Charles	BR
2017	15821466	PR	61322825	NOCO ORAS	CR01	N-TS-CHARLESTS	-BR-T1A5A6	STN 'A' PWR EQ INSP-SVI Spr 2017	1098469	Charles	BR
2017	15821488	PR	61322825	NOCO ORAS	CR01	N-TS-CHARLESTS	-BR-T3A1A2	STN 'A' PWR EQ INSP-SVI Spr 2017	1114751	Charles	BR
2017	16195228	PR	61322826	NOCO ORAS	CR01	N-TS-CHARLESTS	-BR-T3A1A2	STN 'A' PWR EQ INSP-SVI Fall 2017	1114751	Charles	BR
2017	16195243	PR	61322826	NOCO ORAS	CR01	N-TS-CHARLESTS	-BR-T3A3A4	STN 'A' PWR EQ INSP-SVI Fall 2017	1207364	Charles	BR
2017	15821521	PR	61322825	NOCO ORAS	CR01	N-TS-CHARLESTS	-BR-T3A3A4	STN 'A' PWR EQ INSP-SVI Spr 2017	1207364	Charles	BR
2017	15821446	PR	61322825	NOCO ORAS	CR01	N-TS-CHARLESTS	-BR-T4A3A4	STN 'A' PWR EQ INSP-SVI Spr 2017	1207379	Charles	BR
2017	16195245	PR	61322826	NOCO ORAS	CR01	N-TS-CHARLESTS	-BR-T4A3A4	STN 'A' PWR EQ INSP-SVI Fall 2017	1207379	Charles	BR
2017	15821447	PR	61322825	NOCO ORAS	CR01	N-TS-CHARLESTS	-BR-T4A1A2	STN 'A' PWR EQ INSP-SVI Spr 2017	1213796	Charles	BR

2017	16195247	PR	61322826	NOCO ORAS	CR01	N-TS-CHARLESTS -BR-T4A1A2	STN 'A' PWR EQ INSP-SVI Fall 2017	1213796	Charles	BR
2017	15821448	PR	61322825	NOCO ORAS	CR01	N-TS-CHARLESTS -BR-T2A5A6	STN 'A' PWR EQ INSP-SVI Spr 2017	1216275	Charles	BR
2017	16195249	PR	61322826	NOCO ORAS	CR01	N-TS-CHARLESTS -BR-T2A5A6	STN 'A' PWR EQ INSP-SVI Fall 2017	1216275	Charles	BR
2017	15350589	SW	61421581	NOCO ORAS		N-TS-CHARLESTS -BR	17-07429/Charles TS/T4		Charles	BR
2017	15278861	DR	61403621	NOCO ORAS	9900	N-TS-CHARLESTS -TF-T1	oil in transformer bay		Charles	TF
2017	15347415	DR	61400511	NOCO ORAS		N-TS-CHARLESTS -TF-T4	Ex-Charles T4 O/H PCB Bush. CMS 2016 BU	1183465	Charles	TF
2017	15049937	DR	61364181	NOCO NOPT ORAS	0700	N-TS-CHARLESTS -TF-T4	Charles T4 cooler pipe oil leak	1183465	Charles	TF
2017	15130444	DR	61381219	NOCO NOPT ORAS	0700	N-TS-CHARLESTS -TF-T4	Leaking Victalic 8" Charles T4	1183465	Charles	TF
2017	15393250	DR	61424687	NOCO NOPT ORAS	0700	N-TS-CHARLESTS -TF-T4	Charles T4 rad pipe victaulic leaking	1183465	Charles	TF
2017	15913921	DR	61597131	NOCO NOPT ORAS	0100	N-TS-CHARLESTS -TF-T1	T1 Oil Leak inspection and clean up	1183475	Charles	TF
2017	15130488	DR	61381218	NOCO ORAS	0700	N-TS-CHARLESTS -TF-T1	leaking oil Charles T1	1183475	Charles	TF
2017	15049936	DR	61364182	NOCO ORAS	0700	N-TS-CHARLESTS -TF-T1	Charles T1 oil leak investigation	1183475	Charles	TF
2017	15342865	PR	61413437	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T4	AR20237 NT45 T4Y Sample BSH PCBs EMD		Charles	TF
2017	14899749	PR	61322868	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T3	TF-GENERAL-GOT	1178289	Charles	TF
2017	15846553	PR	61531961	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T3	PREOUTAGE INSPECTION- CAT 1 - G&S	1178289	Charles	TF
2017	16195125	PR	61322826	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T3	STN 'A' PWR EQ INSP-SVI Fall 2017	1178289	Charles	TF
2017	15821381	PR	61322825	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T3	STN 'A' PWR EQ INSP-SVI Spr 2017	1178289	Charles	TF
2017	14899779	PR	61322878	ATCO NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T4	TF-GENERAL-GOT	1183465	Charles	TF
2017	16195127	PR	61322826	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T4	STN 'A' PWR EQ INSP-SVI Fall 2017	1183465	Charles	TF
2017	15821382	PR	61322825	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T4	STN 'A' PWR EQ INSP-SVI Spr 2017	1183465	Charles	TF
2017	16195129	PR	61322826	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T1	STN 'A' PWR EQ INSP-SVI Fall 2017	1183475	Charles	TF
2017	15821383	PR	61322825	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T1	STN 'A' PWR EQ INSP-SVI Spr 2017	1183475	Charles	TF
2017	14899740	PR	61322839	ATCO NOCO ORAS	CR02	N-TS-CHARLESTS -TF-T1	TF-GENERAL-GOT	1183475	Charles	TF
2017	14899747	PR	61322866	ATCO NOCO ORAS	CR02	N-TS-CHARLESTS -TF-T2	TF-GENERAL-GOT	1191105	Charles	TF
2017	15821384	PR	61322825	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T2	STN 'A' PWR EQ INSP-SVI Spr 2017	1191105	Charles	TF
2017	16195131	PR	61322826	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T2	STN 'A' PWR EQ INSP-SVI Fall 2017	1191105	Charles	TF
2017	15821449	PR	61322825	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T1	STN 'A' PWR EQ INSP-SVI Spr 2017	1222374	Charles	TF
2017	16195251	PR	61322826	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T1	STN 'A' PWR EQ INSP-SVI Fall 2017	1222374	Charles	TF
2017	14904252	PR	61327381	ATCO NOCO ORAS	CR02	N-TS-CHARLESTS -TF-T1	UT-CWC/MR/UVT-UTOA	1222374	Charles	TF
2017	14904251	PR	61327380	ATCO NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T1	UT-CWC/MR/UVT-UTOA	1222374	Charles	TF
2017	14904253	PR	61327382	ATCO NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T1	UT-CWC/MR/UVT-UTOA	1222376	Charles	TF
2017	14904254	PR	61327383	ATCO NOCO ORAS	CR02	N-TS-CHARLESTS -TF-T1	UT-CWC/MR/UVT-UTOA	1222376	Charles	TF
2017	15821461	PR	61322825	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T1	STN 'A' PWR EQ INSP-SVI Spr 2017	1222376	Charles	TF
2017	16195253	PR	61322826	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T1	STN 'A' PWR EQ INSP-SVI Fall 2017	1222376	Charles	TF
2017	14904255	PR	61327384	ATCO NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T2	UT-CWC/MR/UVT-UTOA	1222378	Charles	TF
2017	15821462	PR	61322825	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T2	STN 'A' PWR EQ INSP-SVI Spr 2017	1222378	Charles	TF
2017	16195255	PR	61322826	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T2	STN 'A' PWR EQ INSP-SVI Fall 2017	1222378	Charles	TF
2017	14904256	PR	61327385	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T2	UT-CWC/MR/UVT-UTOA	1222378	Charles	TF
2017	15821463	PR	61322825	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T2	STN 'A' PWR EQ INSP-SVI Spr 2017	1222380	Charles	TF
2017	14904294	PR	61327393	ATCO NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T2	UT-CWC/MR/UVT-UTOA	1222380	Charles	TF
2017	16195257	PR	61322826	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T2	STN 'A' PWR EQ INSP-SVI Fall 2017	1222380	Charles	TF
2017	15821460	PR	61322825	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T3	STN 'A' PWR EQ INSP-SVI Spr 2017	1222382	Charles	TF
2017	16195259	PR	61322826	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T3	STN 'A' PWR EQ INSP-SVI Fall 2017	1222382	Charles	TF
2017	14922847	PR	61345986	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T3	UT-MR-DIII-UTOA	1222382	Charles	TF
2017	16195261	PR	61322826	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T3	STN 'A' PWR EQ INSP-SVI Fall 2017	1222384	Charles	TF
2017	14922848	PR	61345987	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T3	UT-MR-DIII-UTOA	1222384	Charles	TF
2017	15821464	PR	61322825	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T3	STN 'A' PWR EQ INSP-SVI Spr 2017	1222384	Charles	TF
2017	14922160	PR	61345269	ATCO NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T4	UT-MR-DIII-UTOA	1222387	Charles	TF
2017	15821489	PR	61322825	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T4	STN 'A' PWR EQ INSP-SVI Spr 2017	1222387	Charles	TF

2017	16195263	PR	61322826	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T4	STN 'A' PWR EQ INSP-SVI Fall 2017	1222387	Charles	TF
2017	15821500	PR	61322825	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T4	STN 'A' PWR EQ INSP-SVI Spr 2017	1222389	Charles	TF
2017	16195265	PR	61322826	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T4	STN 'A' PWR EQ INSP-SVI Fall 2017	1222389	Charles	TF
2017	14922161	PR	61345270	ATCO NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T4	UT-MR-DIII-UTOA	1222389	Charles	TF
2017	15821503	PR	61322825	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T4	STN 'A' PWR EQ INSP-SVI Spr 2017	1227373	Charles	TF
2017	15821504	PR	61322825	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T4	STN 'A' PWR EQ INSP-SVI Spr 2017	1227375	Charles	TF
2017	15486457	SW	61468546	NOCO ORAS		N-TS-CHARLESTS -TF-T2	17-01151/Charles TS/T2-H	1191105	Charles	TF
2017	16236238	TC	61728559	NOCO ORAS		N-TS-CHARLESTS -TF	S3- PD - OIL DETECTED/ WATER SEPERATOR		Charles	TF
2017	16163404	DR	61698830	NOCO ORAS	0100	N-TS-WILSONTS -BR-M18	M18 Pilot Valve leaking		Wilson	BR
2017	15978610	DR	61620839	NOCO ORAS	0100	N-TS-WILSONTS -BR-SC3J	Wilson SF6 phase stabilizer brackets		Wilson	BR
2017	14541704	DR	61272383	NOCO ORAS	0100	N-TS-WILSONTS -BR-M18	Wilson M18 investigate low air	1093835	Wilson	BR
2017	16162359	DR	61696128	NOCO ORAS	0100	N-TS-WILSONTS -BR-M18	Wilson TS - M18 stabilizer bracket	1093835	Wilson	BR
2017	16144600	DR	61678174	NOCO ORAS	0100	N-TS-WILSONTS -BR-T4Q	Wilson ts - T4Q heater wire	1206763	Wilson	BR
2017	16144601	DR	61678175	NOCO ORAS	0100	N-TS-WILSONTS -BR-T3J	Wilson ts - T3J heater wire	1206776	Wilson	BR
2017	16162561	DR	61696129	NOCO ORAS	0100	N-TS-WILSONTS -BR-SC1B	Wilson TS - SC1B stabilizer bracket	1211004	Wilson	BR
2017	16094849	DR	61656615	NOCO ORAS	0100	N-TS-WILSONTS -BR-SC2Y	Wilson SF6 phase stabilizer brackets	1211011	Wilson	BR
2017	16159641	DR	61692746	NOCO ORAS	0100	N-TS-WILSONTS -BR-SC2Y	Wilson SF6 phase stabilizer brackets	1211011	Wilson	BR
2017	15345166	DR	61415891	NOCO ORAS	0700	N-TS-WILSONTS -BR-SC3J	Wilson TS SC3J SF6 invest/repair	1211024	Wilson	BR
2017	15345991	DR	61416422	NOCO ORAS	0700	N-TS-WILSONTS -BR-SC3J	Wilson TS SC3J bkr SF6 invest/repair	1211024	Wilson	BR
2017	15473234	DR	61460879	NOCO NOPT ORAS	0700	N-TS-WILSONTS -BR-SC3J	Wilson TS - SC3J SF6 invest-repair	1211024	Wilson	BR
2017	16094751	DR	61656494	NOCO ORAS	0100	N-TS-WILSONTS -BR-SC4Q	Wilson SF6 phase stabilizer brackets	1211036	Wilson	BR
2017	16246052	DR	61734348	NOCO ORAS	0312	N-TS-WILSONTS -BR-M3	Wilson TS - M3 replace contacts	1213636	Wilson	BR
2017	16166310	DR	61699354	NOCO ORAS		N-TS-WILSONTS -BR-M3	AR21060 NA54 M3 Replace bushing 1 - EMD	1359455	Wilson	BR
2017	16166311	DR	61699355	NOCO ORAS		N-TS-WILSONTS -BR-M3	AR21060 NA54 M3 Replace bushing 2 - EMD	1360948	Wilson	BR
2017	16166312	DR	61699356	NOCO ORAS		N-TS-WILSONTS -BR-M3	AR21060 NA54 M3 Replace bushing 3 - EMD	1362441	Wilson	BR
2017	16166313	DR	61699357	NOCO ORAS		N-TS-WILSONTS -BR-M3	AR21060 NA54 M3 Replace bushing 4 - EMD	1363934	Wilson	BR
2017	16166314	DR	61699358	NOCO ORAS		N-TS-WILSONTS -BR-M3	AR21060 NA54 M3 Replace bushing 5 - EMD	1365427	Wilson	BR
2017	16166316	DR	61699360	NOCO ORAS		N-TS-WILSONTS -BR-M3	AR21060 NA54 M3 Replace bushing 6 - EMD	1366920	Wilson	BR
2017	14925508	PR	61348645	NOCO ORAS	CR01	N-TS-WILSONTS -BR	STN BREAKER BLOWDOWN		Wilson	BR
2017	14925509	PR	61348646	NOCO ORAS	CR01	N-TS-WILSONTS -BR	STN BREAKER BLOWDOWN		Wilson	BR
2017	14925507	PR	61348644	NOCO ORAS	CR01	N-TS-WILSONTS -BR	STN BREAKER BLOWDOWN		Wilson	BR
2017	14925506	PR	61348643	NOCO ORAS	CR01	N-TS-WILSONTS -BR	STN BREAKER BLOWDOWN		Wilson	BR
2017	15342839	PR	61413421	NOCO ORAS	CR01	N-TS-WILSONTS -BR-M7	AR20221 NA54 M7 Sample bushing PCB EMD		Wilson	BR
2017	16109400	PR	61325366	NOCO ORAS	CR01	N-TS-WILSONTS -BR-M17	STN 'B' PWR EQ INSP-SVI Fall 2017	1093814	Wilson	BR
2017	16201239	PR	61348646	NOCO ORAS	CR01	N-TS-WILSONTS -BR-M17	STN BREAKER BLOWDOWN 4of4 2017	1093814	Wilson	BR
2017	15649677	PR	61348643	NOCO ORAS	CR01	N-TS-WILSONTS -BR-M17	STN BREAKER BLOWDOWN 1of4 2017	1093814	Wilson	BR
2017	15650335	PR	61348644	NOCO ORAS	CR01	N-TS-WILSONTS -BR-M17	STN BREAKER BLOWDOWN 2of4 2017	1093814	Wilson	BR
2017	14920098	PR	61343175	NOCO ORAS	CR02	N-TS-WILSONTS -BR-M17	BR-SF6-SP-M1	1093814	Wilson	BR
2017	15479869	PR	61325365	NOCO ORAS	CR02	N-TS-WILSONTS -BR-M17	STN 'B' PWR EQ INSP-SVI Spr 2017	1093814	Wilson	BR
2017	16092343	PR	61348645	NOCO ORAS	CR01	N-TS-WILSONTS -BR-M17	STN BREAKER BLOWDOWN 3of4 2017	1093814	Wilson	BR
2017	15479868	PR	61325365	NOCO ORAS	CR02	N-TS-WILSONTS -BR-M18	STN 'B' PWR EQ INSP-SVI Spr 2017	1093835	Wilson	BR
2017	16201241	PR	61348646	NOCO ORAS	CR01	N-TS-WILSONTS -BR-M18	STN BREAKER BLOWDOWN 4of4 2017	1093835	Wilson	BR
2017	14920099	PR	61343176	NOCO ORAS	CR01	N-TS-WILSONTS -BR-M18	BR-SF6-SP-M1	1093835	Wilson	BR
2017	15649678	PR	61348643	NOCO ORAS	CR01	N-TS-WILSONTS -BR-M18	STN BREAKER BLOWDOWN 1of4 2017	1093835	Wilson	BR
2017	16109403	PR	61325366	NOCO ORAS	CR01	N-TS-WILSONTS -BR-M18	STN 'B' PWR EQ INSP-SVI Fall 2017	1093835	Wilson	BR
2017	15650336	PR	61348644	NOCO ORAS	CR01	N-TS-WILSONTS -BR-M18	STN BREAKER BLOWDOWN 2of4 2017	1093835	Wilson	BR
2017	16092344	PR	61348645	NOCO ORAS	CR01	N-TS-WILSONTS -BR-M18	STN BREAKER BLOWDOWN 3of4 2017	1093835	Wilson	BR
2017	16109406	PR	61325366	NOCO ORAS	CR01	N-TS-WILSONTS -BR-M16	STN 'B' PWR EQ INSP-SVI Fall 2017	1101236	Wilson	BR
2017	14920097	PR	61343174	NOCO ORAS	CR02	N-TS-WILSONTS -BR-M16	BR-OIL-KSO-LV- BOA	1101236	Wilson	BR

2017	15479865	PR	61325365	NOCO ORAS	CR02	N-TS-WILSONTS	-BR-M16	STN 'B' PWR EQ INSP-SVI Spr 2017	1101236	Wilson	BR
2017	15479860	PR	61325365	NOCO ORAS	CR02	N-TS-WILSONTS	-BR-M7	STN 'B' PWR EQ INSP-SVI Spr 2017	1101252	Wilson	BR
2017	16109408	PR	61325366	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M7	STN 'B' PWR EQ INSP-SVI Fall 2017	1101252	Wilson	BR
2017	15479895	PR	61325365	NOCO ORAS	CR02	N-TS-WILSONTS	-BR-T1B	STN 'B' PWR EQ INSP-SVI Spr 2017	1101264	Wilson	BR
2017	16109357	PR	61325366	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-T1B	STN 'B' PWR EQ INSP-SVI Fall 2017	1101264	Wilson	BR
2017	14920155	PR	61343302	NOCO ORAS	CR02	N-TS-WILSONTS	-BR-JQ	BR-OIL-KSO-LV- BOA	1206693	Wilson	BR
2017	15479886	PR	61325365	NOCO ORAS	CR02	N-TS-WILSONTS	-BR-JQ	STN 'B' PWR EQ INSP-SVI Spr 2017	1206693	Wilson	BR
2017	16109441	PR	61325366	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-JQ	STN 'B' PWR EQ INSP-SVI Fall 2017	1206693	Wilson	BR
2017	16109444	PR	61325366	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-T4Q	STN 'B' PWR EQ INSP-SVI Fall 2017	1206763	Wilson	BR
2017	15479887	PR	61325365	NOCO ORAS	CR02	N-TS-WILSONTS	-BR-T4Q	STN 'B' PWR EQ INSP-SVI Spr 2017	1206763	Wilson	BR
2017	15479888	PR	61325365	NOCO ORAS	CR02	N-TS-WILSONTS	-BR-T3J	STN 'B' PWR EQ INSP-SVI Spr 2017	1206776	Wilson	BR
2017	14920150	PR	61343177	NOCO ORAS	CR02	N-TS-WILSONTS	-BR-T3J	BR-OIL-KSO-LV- BOA	1206776	Wilson	BR
2017	16109447	PR	61325366	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-T3J	STN 'B' PWR EQ INSP-SVI Fall 2017	1206776	Wilson	BR
2017	16109500	PR	61325366	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M12	STN 'B' PWR EQ INSP-SVI Fall 2017	1207581	Wilson	BR
2017	15479889	PR	61325365	NOCO ORAS	CR02	N-TS-WILSONTS	-BR-M12	STN 'B' PWR EQ INSP-SVI Spr 2017	1207581	Wilson	BR
2017	14920096	PR	61343173	NOCO ORAS	CR02	N-TS-WILSONTS	-BR-M13	BR-OIL-KSO-LV- BOA	1207593	Wilson	BR
2017	16109503	PR	61325366	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M13	STN 'B' PWR EQ INSP-SVI Fall 2017	1207593	Wilson	BR
2017	15479890	PR	61325365	NOCO ORAS	CR02	N-TS-WILSONTS	-BR-M13	STN 'B' PWR EQ INSP-SVI Spr 2017	1207593	Wilson	BR
2017	16109506	PR	61325366	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M11	STN 'B' PWR EQ INSP-SVI Fall 2017	1207604	Wilson	BR
2017	15479891	PR	61325365	NOCO ORAS	CR02	N-TS-WILSONTS	-BR-M11	STN 'B' PWR EQ INSP-SVI Spr 2017	1207604	Wilson	BR
2017	14920095	PR	61343172	NOCO ORAS	CR02	N-TS-WILSONTS	-BR-M11	BR-OIL-KSO-LV- BOA	1207604	Wilson	BR
2017	16109509	PR	61325366	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-SC1B	STN 'B' PWR EQ INSP-SVI Fall 2017	1211004	Wilson	BR
2017	15479880	PR	61325365	NOCO ORAS	CR02	N-TS-WILSONTS	-BR-SC1B	STN 'B' PWR EQ INSP-SVI Spr 2017	1211004	Wilson	BR
2017	16092345	PR	61348645	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-SC1B	STN BREAKER BLOWDOWN 3of4 2017	1211004	Wilson	BR
2017	15649679	PR	61348643	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-SC1B	STN BREAKER BLOWDOWN 1of4 2017	1211004	Wilson	BR
2017	15650337	PR	61348644	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-SC1B	STN BREAKER BLOWDOWN 2of4 2017	1211004	Wilson	BR
2017	16201243	PR	61348646	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-SC1B	STN BREAKER BLOWDOWN 4of4 2017	1211004	Wilson	BR
2017	16109542	PR	61325366	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-SC2Y	STN 'B' PWR EQ INSP-SVI Fall 2017	1211011	Wilson	BR
2017	15650338	PR	61348644	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-SC2Y	STN BREAKER BLOWDOWN 2of4 2017	1211011	Wilson	BR
2017	15479863	PR	61325365	NOCO ORAS	CR02	N-TS-WILSONTS	-BR-SC2Y	STN 'B' PWR EQ INSP-SVI Spr 2017	1211011	Wilson	BR
2017	16201245	PR	61348646	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-SC2Y	STN BREAKER BLOWDOWN 4of4 2017	1211011	Wilson	BR
2017	15650040	PR	61348643	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-SC2Y	STN BREAKER BLOWDOWN 1of4 2017	1211011	Wilson	BR
2017	16092346	PR	61348645	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-SC2Y	STN BREAKER BLOWDOWN 3of4 2017	1211011	Wilson	BR
2017	15479892	PR	61325365	NOCO ORAS	CR02	N-TS-WILSONTS	-BR-SC3J	STN 'B' PWR EQ INSP-SVI Spr 2017	1211024	Wilson	BR
2017	16092347	PR	61348645	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-SC3J	STN BREAKER BLOWDOWN 3of4 2017	1211024	Wilson	BR
2017	16201247	PR	61348646	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-SC3J	STN BREAKER BLOWDOWN 4of4 2017	1211024	Wilson	BR
2017	15650339	PR	61348644	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-SC3J	STN BREAKER BLOWDOWN 2of4 2017	1211024	Wilson	BR
2017	15650041	PR	61348643	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-SC3J	STN BREAKER BLOWDOWN 1of4 2017	1211024	Wilson	BR
2017	16109545	PR	61325366	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-SC3J	STN 'B' PWR EQ INSP-SVI Fall 2017	1211024	Wilson	BR
2017	16109548	PR	61325366	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-SC4Q	STN 'B' PWR EQ INSP-SVI Fall 2017	1211036	Wilson	BR
2017	16201249	PR	61348646	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-SC4Q	STN BREAKER BLOWDOWN 4of4 2017	1211036	Wilson	BR
2017	15650540	PR	61348644	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-SC4Q	STN BREAKER BLOWDOWN 2of4 2017	1211036	Wilson	BR
2017	15479881	PR	61325365	NOCO ORAS	CR02	N-TS-WILSONTS	-BR-SC4Q	STN 'B' PWR EQ INSP-SVI Spr 2017	1211036	Wilson	BR
2017	16092348	PR	61348645	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-SC4Q	STN BREAKER BLOWDOWN 3of4 2017	1211036	Wilson	BR
2017	15650042	PR	61348643	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-SC4Q	STN BREAKER BLOWDOWN 1of4 2017	1211036	Wilson	BR
2017	15479882	PR	61325365	NOCO ORAS	CR02	N-TS-WILSONTS	-BR-T2Y	STN 'B' PWR EQ INSP-SVI Spr 2017	1213509	Wilson	BR
2017	16109571	PR	61325366	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-T2Y	STN 'B' PWR EQ INSP-SVI Fall 2017	1213509	Wilson	BR
2017	16109574	PR	61325366	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-BY	STN 'B' PWR EQ INSP-SVI Fall 2017	1213529	Wilson	BR
2017	15479883	PR	61325365	NOCO ORAS	CR02	N-TS-WILSONTS	-BR-BY	STN 'B' PWR EQ INSP-SVI Spr 2017	1213529	Wilson	BR

2017	16109630	PR	61325366	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M5	STN 'B' PWR EQ INSP-SVI Fall 2017	1213614	Wilson	BR
2017	15479884	PR	61325365	NOCO ORAS	CR02	N-TS-WILSONTS	-BR-M5	STN 'B' PWR EQ INSP-SVI Spr 2017	1213614	Wilson	BR
2017	16109633	PR	61325366	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M1	STN 'B' PWR EQ INSP-SVI Fall 2017	1213628	Wilson	BR
2017	15479897	PR	61325365	NOCO ORAS	CR02	N-TS-WILSONTS	-BR-M1	STN 'B' PWR EQ INSP-SVI Spr 2017	1213628	Wilson	BR
2017	15479898	PR	61325365	NOCO ORAS	CR02	N-TS-WILSONTS	-BR-M3	STN 'B' PWR EQ INSP-SVI Spr 2017	1213636	Wilson	BR
2017	16158196	PR	61691311	NOCO ORAS	CR03	N-TS-WILSONTS	-BR-M3	BR-OIL-KSO-LV- Strategy	1213636	Wilson	BR
2017	16109351	PR	61325366	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M3	STN 'B' PWR EQ INSP-SVI Fall 2017	1213636	Wilson	BR
2017	15479862	PR	61325365	NOCO ORAS	CR02	N-TS-WILSONTS	-BR-M6	STN 'B' PWR EQ INSP-SVI Spr 2017	1213645	Wilson	BR
2017	16109577	PR	61325366	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M6	STN 'B' PWR EQ INSP-SVI Fall 2017	1213645	Wilson	BR
2017	15479864	PR	61325365	NOCO ORAS	CR02	N-TS-WILSONTS	-BR-M4	STN 'B' PWR EQ INSP-SVI Spr 2017	1213655	Wilson	BR
2017	16109636	PR	61325366	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M4	STN 'B' PWR EQ INSP-SVI Fall 2017	1213655	Wilson	BR
2017	15479885	PR	61325365	NOCO ORAS	CR02	N-TS-WILSONTS	-BR-M2	STN 'B' PWR EQ INSP-SVI Spr 2017	1213666	Wilson	BR
2017	16109672	PR	61325366	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M2	STN 'B' PWR EQ INSP-SVI Fall 2017	1213666	Wilson	BR
2017	16109675	PR	61325366	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M8	STN 'B' PWR EQ INSP-SVI Fall 2017	1213676	Wilson	BR
2017	15479861	PR	61325365	NOCO ORAS	CR02	N-TS-WILSONTS	-BR-M8	STN 'B' PWR EQ INSP-SVI Spr 2017	1213676	Wilson	BR
2017	15479899	PR	61325365	NOCO ORAS	CR02	N-TS-WILSONTS	-BR-M14	STN 'B' PWR EQ INSP-SVI Spr 2017	1215063	Wilson	BR
2017	16109678	PR	61325366	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M14	STN 'B' PWR EQ INSP-SVI Fall 2017	1215063	Wilson	BR
2017	16109639	PR	61325366	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M15	STN 'B' PWR EQ INSP-SVI Fall 2017	1215072	Wilson	BR
2017	15479896	PR	61325365	NOCO ORAS	CR02	N-TS-WILSONTS	-BR-M15	STN 'B' PWR EQ INSP-SVI Spr 2017	1215072	Wilson	BR
2017	15923150	PR	60979045	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-T4Q	Tx PCB Reduction Oil Sample	1359280	Wilson	BR
2017	15814665	PR	60978188	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M12	Tx PCB Reduction Oil Sample	1359300	Wilson	BR
2017	15918689	PR	61413421	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M7	AR20221 NA54 M7 Bushings were replaced,	1359414	Wilson	BR
2017	15816852	PR	60978676	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-T2Y	Tx PCB Reduction Oil Sample	1359443	Wilson	BR
2017	16094337	PR	60978711	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M14	Tx PCB Reduction Oil Sample	1359549	Wilson	BR
2017	15923153	PR	60979045	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-T4Q	Tx PCB Reduction Oil Sample	1360773	Wilson	BR
2017	15814666	PR	60978188	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M12	Tx PCB Reduction Oil Sample	1360793	Wilson	BR
2017	15918810	PR	61413421	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M7	AR20221 NA54 M7 Bushings were replaced,	1360907	Wilson	BR
2017	15816854	PR	60978676	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-T2Y	Tx PCB Reduction Oil Sample	1360936	Wilson	BR
2017	16094338	PR	60978711	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M14	Tx PCB Reduction Oil Sample	1361042	Wilson	BR
2017	15923154	PR	60979045	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-T4Q	Tx PCB Reduction Oil Sample	1362266	Wilson	BR
2017	15814667	PR	60978188	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M12	Tx PCB Reduction Oil Sample	1362286	Wilson	BR
2017	15918811	PR	61413421	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M7	AR20221 NA54 M7 Bushings were replaced,	1362400	Wilson	BR
2017	15816855	PR	60978676	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-T2Y	Tx PCB Reduction Oil Sample	1362429	Wilson	BR
2017	16094339	PR	60978711	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M14	Tx PCB Reduction Oil Sample	1362535	Wilson	BR
2017	15923156	PR	60979045	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-T4Q	Tx PCB Reduction Oil Sample	1363759	Wilson	BR
2017	15814668	PR	60978188	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M12	Tx PCB Reduction Oil Sample	1363779	Wilson	BR
2017	15918812	PR	61413421	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M7	AR20221 NA54 M7 Bushings were replaced,	1363893	Wilson	BR
2017	15816856	PR	60978676	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-T2Y	Tx PCB Reduction Oil Sample	1363922	Wilson	BR
2017	16094350	PR	60978711	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M14	Tx PCB Reduction Oil Sample	1364028	Wilson	BR
2017	15923158	PR	60979045	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-T4Q	Tx PCB Reduction Oil Sample	1365252	Wilson	BR
2017	15814669	PR	60978188	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M12	Tx PCB Reduction Oil Sample	1365272	Wilson	BR
2017	15918813	PR	61413421	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M7	AR20221 NA54 M7 Bushings were replaced,	1365386	Wilson	BR
2017	15816857	PR	60978676	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-T2Y	Tx PCB Reduction Oil Sample	1365415	Wilson	BR
2017	16094351	PR	60978711	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M14	Tx PCB Reduction Oil Sample	1365521	Wilson	BR
2017	15923160	PR	60979045	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-T4Q	Tx PCB Reduction Oil Sample	1366745	Wilson	BR
2017	15814750	PR	60978188	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M12	Tx PCB Reduction Oil Sample	1366765	Wilson	BR
2017	15918814	PR	61413421	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M7	AR20221 NA54 M7 Bushings were replaced,	1366879	Wilson	BR
2017	15816858	PR	60978676	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-T2Y	Tx PCB Reduction Oil Sample	1366908	Wilson	BR
2017	16094352	PR	60978711	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M14	Tx PCB Reduction Oil Sample	1367014	Wilson	BR

2017	15473134	TC	61459551	NOCO ORAS		N-TS-WILSONTS	-BR	S3 EMD PD JQ YARD SF6 LOW DENSITY		Wilson	BR
2017	15345350	TC	61415589	NOCO ORAS		N-TS-WILSONTS	-BR-JQ	WILSON TS		Wilson	BR
2017	15820962	TC	61520172	NOCO ORAS		N-TS-WILSONTS	-BR-M12	S3^ EMD^ WILSON TS^ RE: INSPECT M12 BREA		Wilson	BR
2017	16213309	TC	61718947	NOCO ORAS		N-TS-WILSONTS	-BR-M12	S3 REQ PC IMM REG: DISTANCE TO FAULT TO		Wilson	BR
2017	15814305	TC	61515722	NOCO ORAS		N-TS-WILSONTS	-BR-M12	S3 IMD P&C RE: BLOCK TRANSFER TRIP M12 W		Wilson	BR
2017	15821021	TC	61521608	NOCO ORAS		N-TS-WILSONTS	-BR-M12	S3 PC RE M12		Wilson	BR
2017	15342716	TC	61413367	NOCO ORAS		N-TS-WILSONTS	-BR-M14	S3 RE: TEST CONNECTION TO EPSON SOLAR M1		Wilson	BR
2017	15821734	TC	61522970	NOCO ORAS		N-TS-WILSONTS	-BR-M14	s3 P&C wilson ts M14 feeder protection		Wilson	BR
2017	16149732	TC	61683993	NOCO ORAS		N-TS-WILSONTS	-BR-M14	S3 EMD RE: SWITCHING ON M14		Wilson	BR
2017	15661059	TC	61488039	NOCO ORAS		N-TS-WILSONTS	-BR-T2Y	S2 EMD T2 COOLING FAILURE		Wilson	BR
2017	15821012	TC	61521602	NOCO ORAS		N-TS-WILSONTS	-BR-M12	S3 - EMD - INSPECT M12 BRKR.	1207581	Wilson	BR
2017	15915898	TC	61598567	NOCO ORAS		N-TS-WILSONTS	-BR-M5	S3 EMD RE M5 BREAKER INSPECTION	1213614	Wilson	BR
2017	15999092	DR	61627580	NOCO ORAS	9900	N-TS-WILSONTS	-TF-T3	Wilson TS - T3 silica gel replacement	1173245	Wilson	TF
2017	15922799	DR	61604273	NOCO ORAS	3300	N-TS-WILSONTS	-TF-T2	wilson ts - t2 fan	1175751	Wilson	TF
2017	16082883	DR	61647454	NOCO ORAS	9900	N-TS-WILSONTS	-TF-T2	WILSON TS T2 GROUND FAULT HADS	1175751	Wilson	TF
2017	15859655	DR	61542242	NOCO ORAS	9900	N-TS-WILSONTS	-TF-T2	AR18335 NA54 T2 Leak Red & Breather P&C	1175751	Wilson	TF
2017	16125633	DR	61670899	NOCO ORAS	3300	N-TS-WILSONTS	-TF-T1	WILSON T1 FAN	1183712	Wilson	TF
2017	15929950	DR	61606347	NOCO ORAS	9900	N-TS-WILSONTS	-TF-T1	T1 Containment ground missing	1183712	Wilson	TF
2017	15465254	DR	61456458	NOCO ORAS	9900	N-TS-WILSONTS	-TF-T1	Wilson TS - T1 cab heat repairs	1183712	Wilson	TF
2017	15398882	DR	61429186	NOCO ORAS		N-TS-WILSONTS	-TF-T4	Wilson T4 Leak Reduction CMS Bush 2017	1188773	Wilson	TF
2017	14517096	DR	61267792	NOCO ORAS	0700	N-TS-WILSONTS	-TF-T2	T2 T/C low gear oil	1223909	Wilson	TF
2017	16108799	PR	61325366	NOCO ORAS	CR01	N-TS-WILSONTS	-TF-SS2	STN 'B' PWR EQ INSP-SVI Fall 2017	1173234	Wilson	TF
2017	15479843	PR	61325365	NOCO ORAS	CR01	N-TS-WILSONTS	-TF-SS2	STN 'B' PWR EQ INSP-SVI Spr 2017	1173234	Wilson	TF
2017	15479844	PR	61325365	NOCO ORAS	CR01	N-TS-WILSONTS	-TF-T3	STN 'B' PWR EQ INSP-SVI Spr 2017	1173245	Wilson	TF
2017	16108910	PR	61325366	NOCO ORAS	CR01	N-TS-WILSONTS	-TF-T3	STN 'B' PWR EQ INSP-SVI Fall 2017	1173245	Wilson	TF
2017	16108912	PR	61325366	NOCO ORAS	CR01	N-TS-WILSONTS	-TF-T2	STN 'B' PWR EQ INSP-SVI Fall 2017	1175751	Wilson	TF
2017	15479846	PR	61325365	NOCO ORAS	CR01	N-TS-WILSONTS	-TF-T2	STN 'B' PWR EQ INSP-SVI Spr 2017	1175751	Wilson	TF
2017	16108918	PR	61325366	NOCO ORAS	CR01	N-TS-WILSONTS	-TF-SS1	STN 'B' PWR EQ INSP-SVI Fall 2017	1183701	Wilson	TF
2017	15479849	PR	61325365	NOCO ORAS	CR01	N-TS-WILSONTS	-TF-SS1	STN 'B' PWR EQ INSP-SVI Spr 2017	1183701	Wilson	TF
2017	14920213	PR	61343310	ATCO NOCO ORAS	CR01	N-TS-WILSONTS	-TF-T1	TF-GENERAL-GOT	1183712	Wilson	TF
2017	15479673	PR	61325365	NOCO ORAS	CR01	N-TS-WILSONTS	-TF-T1	STN 'B' PWR EQ INSP-SVI Spr 2017	1183712	Wilson	TF
2017	16109000	PR	61325366	NOCO ORAS	CR01	N-TS-WILSONTS	-TF-T1	STN 'B' PWR EQ INSP-SVI Fall 2017	1183712	Wilson	TF
2017	15479674	PR	61325365	NOCO ORAS	CR01	N-TS-WILSONTS	-TF-T4	STN 'B' PWR EQ INSP-SVI Spr 2017	1188773	Wilson	TF
2017	16109002	PR	61325366	NOCO ORAS	CR01	N-TS-WILSONTS	-TF-T4	STN 'B' PWR EQ INSP-SVI Fall 2017	1188773	Wilson	TF
2017	16109711	PR	61325366	NOCO ORAS	CR01	N-TS-WILSONTS	-TF-T1	STN 'B' PWR EQ INSP-SVI Fall 2017	1223907	Wilson	TF
2017	14922590	PR	61345689	ATCO NOCO ORAS	CR01	N-TS-WILSONTS	-TF-T1	UT-MR-FIII-UTOA	1223907	Wilson	TF
2017	15479893	PR	61325365	NOCO ORAS	CR02	N-TS-WILSONTS	-TF-T1	STN 'B' PWR EQ INSP-SVI Spr 2017	1223907	Wilson	TF
2017	14922591	PR	61345690	NOCO ORAS	CR01	N-TS-WILSONTS	-TF-T2	UT-MR-DIII-UTOA	1223909	Wilson	TF
2017	16109715	PR	61325366	NOCO ORAS	CR01	N-TS-WILSONTS	-TF-T2	STN 'B' PWR EQ INSP-SVI Fall 2017	1223909	Wilson	TF
2017	15479894	PR	61325365	NOCO ORAS	CR02	N-TS-WILSONTS	-TF-T2	STN 'B' PWR EQ INSP-SVI Spr 2017	1223909	Wilson	TF
2017	14922245	PR	61345334	NOCO ORAS	CR02	N-TS-WILSONTS	-TF-T3	UT-ABB-UCBRN/GRN/LRN-UTOA	1223911	Wilson	TF
2017	15479866	PR	61325365	NOCO ORAS	CR02	N-TS-WILSONTS	-TF-T3	STN 'B' PWR EQ INSP-SVI Spr 2017	1223911	Wilson	TF
2017	16109353	PR	61325366	NOCO ORAS	CR01	N-TS-WILSONTS	-TF-T3	STN 'B' PWR EQ INSP-SVI Fall 2017	1223911	Wilson	TF
2017	15479867	PR	61325365	NOCO ORAS	CR02	N-TS-WILSONTS	-TF-T4	STN 'B' PWR EQ INSP-SVI Spr 2017	1223913	Wilson	TF
2017	16109355	PR	61325366	NOCO ORAS	CR01	N-TS-WILSONTS	-TF-T4	STN 'B' PWR EQ INSP-SVI Fall 2017	1223913	Wilson	TF
2017	14922246	PR	61345335	NOCO ORAS	CR03	N-TS-WILSONTS	-TF-T4	UT-ABB-UCBRN/GRN/LRN-UTOA	1223913	Wilson	TF
2017	16085560	PR	61648307	NOCO ORAS	CR01	N-TS-WILSONTS	-TF-T4	UT-ABB-UCBRN/GRN/LRN-(SPECIAL)MCT-ULTC	1223913	Wilson	TF
2017	15913972	PR	61596559	ATCO NOCO ORAS	CR01	N-TS-WILSONTS	-TF-T4	UT-ABB-(SPECIAL)RUSH-MCT-DIV	1223913	Wilson	TF
2017	15674642	TC	61496317	NOCO ORAS		N-TS-WILSONTS	-TF-T1	s2: EMD for t1 cooling fail	1183712	Wilson	TF

2018	17048793	DR	62042730	NOCO ORAS	1611	N-TS-CHARLESTS -BR-T1A7A8	Charles T1A7A8 will not open	1094301	Charles	BR
2018	17048553	DR	62047144	NOCO ORAS	1400	N-TS-CHARLESTS -BR-T1A7A8	Breaker will not function	1094301	Charles	BR
2018	17038614	PR	61554233	NOCO ORAS	CR01	N-TS-CHARLESTS -BR-T1A7A8	STN 'A' PWR EQ INSP-SVI Fall 2018	1094301	Charles	BR
2018	16513684	PR	61554232	NOCO ORAS	CR01	N-TS-CHARLESTS -BR-T1A7A8	STN 'A' PWR EQ INSP-SVI Spr 2018	1094301	Charles	BR
2018	16513683	PR	61554232	NOCO ORAS	CR01	N-TS-CHARLESTS -BR-T2A7A8	STN 'A' PWR EQ INSP-SVI Spr 2018	1094324	Charles	BR
2018	17038575	PR	61554233	NOCO ORAS	CR01	N-TS-CHARLESTS -BR-T2A7A8	STN 'A' PWR EQ INSP-SVI Fall 2018	1094324	Charles	BR
2018	17038576	PR	61554233	NOCO ORAS	CR01	N-TS-CHARLESTS -BR-T1A5A6	STN 'A' PWR EQ INSP-SVI Fall 2018	1098469	Charles	BR
2018	16513664	PR	61554232	NOCO ORAS	CR01	N-TS-CHARLESTS -BR-T1A5A6	STN 'A' PWR EQ INSP-SVI Spr 2018	1098469	Charles	BR
2018	17038615	PR	61554233	NOCO ORAS	CR01	N-TS-CHARLESTS -BR-T3A1A2	STN 'A' PWR EQ INSP-SVI Fall 2018	1114751	Charles	BR
2018	16513682	PR	61554232	NOCO ORAS	CR01	N-TS-CHARLESTS -BR-T3A1A2	STN 'A' PWR EQ INSP-SVI Spr 2018	1114751	Charles	BR
2018	17038599	PR	61554233	NOCO ORAS	CR01	N-TS-CHARLESTS -BR-T3A3A4	STN 'A' PWR EQ INSP-SVI Fall 2018	1207364	Charles	BR
2018	16513681	PR	61554232	NOCO ORAS	CR01	N-TS-CHARLESTS -BR-T3A3A4	STN 'A' PWR EQ INSP-SVI Spr 2018	1207364	Charles	BR
2018	17038610	PR	61554233	NOCO ORAS	CR01	N-TS-CHARLESTS -BR-T4A3A4	STN 'A' PWR EQ INSP-SVI Fall 2018	1207379	Charles	BR
2018	16513679	PR	61554232	NOCO ORAS	CR01	N-TS-CHARLESTS -BR-T4A3A4	STN 'A' PWR EQ INSP-SVI Spr 2018	1207379	Charles	BR
2018	16513680	PR	61554232	NOCO ORAS	CR01	N-TS-CHARLESTS -BR-T4A1A2	STN 'A' PWR EQ INSP-SVI Spr 2018	1213796	Charles	BR
2018	17038611	PR	61554233	NOCO ORAS	CR01	N-TS-CHARLESTS -BR-T4A1A2	STN 'A' PWR EQ INSP-SVI Fall 2018	1213796	Charles	BR
2018	17038612	PR	61554233	NOCO ORAS	CR01	N-TS-CHARLESTS -BR-T2A5A6	STN 'A' PWR EQ INSP-SVI Fall 2018	1216275	Charles	BR
2018	16513666	PR	61554232	NOCO ORAS	CR01	N-TS-CHARLESTS -BR-T2A5A6	STN 'A' PWR EQ INSP-SVI Spr 2018	1216275	Charles	BR
2018	16974633	SW	61992806	NOCO ORAS		N-TS-CHARLESTS -BR	18-24076/Charles TS/T1		Charles	BR
2018	17012383	SW	62022202	NOCO ORAS		N-TS-CHARLESTS -BR	18-26427/Charles TS/T2		Charles	BR
2018	17012381	SW	62022203	NOCO ORAS		N-TS-CHARLESTS -BR	18-26426/Charles TS/T1		Charles	BR
2018	17012714	SW	62025186	NOCO ORAS		N-TS-CHARLESTS -BR	18-26429/Charles TS/T4		Charles	BR
2018	17012713	SW	62025187	NOCO ORAS		N-TS-CHARLESTS -BR	18-26428/Charles TS/T3		Charles	BR
2018	17043130	SW	62043150	NOCO ORAS		N-TS-CHARLESTS -BR	18-24088/Charles TS/T3		Charles	BR
2018	17047356	SW	62048132	NOCO ORAS		N-TS-CHARLESTS -BR	18-24086/Charles TS/T1		Charles	BR
2018	16749677	SW	61846100	NOCO ORAS		N-TS-CHARLESTS -BR	18-01667/Charles TS/T3		Charles	BR
2018	16653888	SW	61822278	NOCO ORAS		N-TS-CHARLESTS -BR	18-03133/Charles TS/L4C-34		Charles	BR
2018	16379328	SW	61784655	NOCO ORAS		N-TS-CHARLESTS -BR	18-09605/Charles TS/L9C		Charles	BR
2018	16379372	SW	61784540	NOCO ORAS		N-TS-CHARLESTS -BR	18-01696/Charles TS/L9C		Charles	BR
2018	17039788	TC	62039388	NOCO ORAS		N-TS-CHARLESTS -BR-T1A7A8	S3-EMD-T1A7A8 CONTROL FAIL	1094301	Charles	BR
2018	16959565	DR	61978804	NOCO ORAS	0100	N-TS-CHARLESTS -TF-T3	Charles T3/T4 t/c out of step	1178289	Charles	TF
2018	16752850	DR	61845254	NOCO ORAS	0700	N-TS-CHARLESTS -TF-T1	Clean Oil on Floor	1183475	Charles	TF
2018	16752851	DR	61845255	NOCO ORAS	0700	N-TS-CHARLESTS -TF-T1	Install Drian Hoses and Barell	1183475	Charles	TF
2018	16742086	DR		DLFL NOCO	0700	N-TS-CHARLESTS -TF-T1	BGIS-Charles TS-Oil LeaK	1183475	Charles	TF
2018	16270413	DR	61759395	NOCO ORAS	0700	N-TS-CHARLESTS -TF-T1	Gas relay piping leaking	1183475	Charles	TF
2018	16657305	DR	61822274	NOCO ORAS	0700	N-TS-CHARLESTS -TF-T1	Charles T1 oil leak clean up.	1183475	Charles	TF
2018	16681045	DR	61825202	NOCO ORAS	0100	N-TS-CHARLESTS -TF-T3	T3 and T4 Tap Changers out of step	1222382	Charles	TF
2018	16681046	DR	61825205	NOCO ORAS	0100	N-TS-CHARLESTS -TF-T3	T3 and T4 Tap Changers out of step	1222384	Charles	TF
2018	17038541	PR	61554233	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T3	STN 'A' PWR EQ INSP-SVI Fall 2018	1178289	Charles	TF
2018	16960749	PR	61980012	ATCO NOCO ORAS	CR03	N-TS-CHARLESTS -TF-T3	PREOUTAGE INSPECTION- CAT 1 - ELEC	1178289	Charles	TF
2018	15876169	PR	61557731	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T3	TF-GENERAL-D2	1178289	Charles	TF
2018	15872652	PR	61554237	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T3	TF-GENERAL-D1	1178289	Charles	TF
2018	16513687	PR	61554232	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T3	STN 'A' PWR EQ INSP-SVI Spr 2018	1178289	Charles	TF
2018	16189640	PR	61707750	ATCO NOCO ORAS	CR02	N-TS-CHARLESTS -TF-T3	TF-GENERAL-(SPECIAL) GOT	1178289	Charles	TF
2018	15846552	PR	61531960	NOCO ORAS	CR03	N-TS-CHARLESTS -TF-T3	PREOUTAGE INSPECTION- CAT 1 - ELEC	1178289	Charles	TF
2018	15872653	PR	61554238	ATCO NOCO ORAS	CR02	N-TS-CHARLESTS -TF-T3	TF-GENERAL-GOT	1178289	Charles	TF
2018	16513625	PR	61554232	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T4	STN 'A' PWR EQ INSP-SVI Spr 2018	1183465	Charles	TF
2018	15872654	PR	61554239	ATCO NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T4	TF-GENERAL-GOT	1183465	Charles	TF
2018	17038542	PR	61554233	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T4	STN 'A' PWR EQ INSP-SVI Fall 2018	1183465	Charles	TF

2018	16960800	PR	61980013	ATCO NOCO ORAS	CR03	N-TS-CHARLESTS -TF-T4	PREOUTAGE INSPECTION- CAT 1 - ELEC	1183465	Charles	TF
2018	17038543	PR	61554233	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T1	STN 'A' PWR EQ INSP-SVI Fall 2018	1183475	Charles	TF
2018	16513685	PR	61554232	NOCO ORAS	CR02	N-TS-CHARLESTS -TF-T1	STN 'A' PWR EQ INSP-SVI Spr 2018	1183475	Charles	TF
2018	16960801	PR	61980014	ATCO NOCO ORAS	CR03	N-TS-CHARLESTS -TF-T1	CORREC	1183475	Charles	TF
2018	16513686	PR	61554232	NOCO ORAS	CR02	N-TS-CHARLESTS -TF-T2	STN 'A' PWR EQ INSP-SVI Spr 2018	1191105	Charles	TF
2018	15872651	PR	61554236	ATCO NOCO ORAS	CR02	N-TS-CHARLESTS -TF-T2	TF-GENERAL-GOT	1191105	Charles	TF
2018	16960748	PR	61980007	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T2	PREOUTAGE INSPECTION- CAT 1 - G&S	1191105	Charles	TF
2018	17038545	PR	61554233	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T2	STN 'A' PWR EQ INSP-SVI Fall 2018	1191105	Charles	TF
2018	16960747	PR	61980006	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T2	PREOUTAGE INSPECTION- CAT 1 - ELEC	1191105	Charles	TF
2018	17038613	PR	61554233	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T1	STN 'A' PWR EQ INSP-SVI Fall 2018	1222374	Charles	TF
2018	16996964	PR	62006487	ATCO NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T1	UT-CWC/MR/UVT-(SPECIAL)MCT-X	1222374	Charles	TF
2018	16513688	PR	61554232	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T1	STN 'A' PWR EQ INSP-SVI Spr 2018	1222374	Charles	TF
2018	15873145	PR	61554739	ATCO NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T1	UT-CWC/MR/UVT-UTOA	1222374	Charles	TF
2018	16513663	PR	61554232	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T1	STN 'A' PWR EQ INSP-SVI Spr 2018	1222376	Charles	TF
2018	17038577	PR	61554233	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T1	STN 'A' PWR EQ INSP-SVI Fall 2018	1222376	Charles	TF
2018	15873147	PR	61554741	ATCO NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T1	UT-CWC/MR/UVT-UTOA	1222376	Charles	TF
2018	16513669	PR	61554232	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T2	STN 'A' PWR EQ INSP-SVI Spr 2018	1222378	Charles	TF
2018	15873149	PR	61554743	ATCO NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T2	UT-CWC/MR/UVT-UTOA	1222378	Charles	TF
2018	15873160	PR	61554744	ATCO NOCO ORAS	CR03	N-TS-CHARLESTS -TF-T2	UT-CWC/MR/UVT-UTOA	1222378	Charles	TF
2018	17038616	PR	61554233	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T2	STN 'A' PWR EQ INSP-SVI Fall 2018	1222378	Charles	TF
2018	15873162	PR	61554746	ATCO NOCO ORAS	CR03	N-TS-CHARLESTS -TF-T2	UT-CWC/MR/UVT-UTOA	1222380	Charles	TF
2018	17038578	PR	61554233	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T2	STN 'A' PWR EQ INSP-SVI Fall 2018	1222380	Charles	TF
2018	16513668	PR	61554232	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T2	STN 'A' PWR EQ INSP-SVI Spr 2018	1222380	Charles	TF
2018	15873161	PR	61554745	ATCO NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T2	UT-CWC/MR/UVT-UTOA	1222380	Charles	TF
2018	17038579	PR	61554233	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T3	STN 'A' PWR EQ INSP-SVI Fall 2018	1222382	Charles	TF
2018	16513671	PR	61554232	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T3	STN 'A' PWR EQ INSP-SVI Spr 2018	1222382	Charles	TF
2018	17038590	PR	61554233	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T3	STN 'A' PWR EQ INSP-SVI Fall 2018	1222384	Charles	TF
2018	16513672	PR	61554232	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T3	STN 'A' PWR EQ INSP-SVI Spr 2018	1222384	Charles	TF
2018	17038591	PR	61554233	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T4	STN 'A' PWR EQ INSP-SVI Fall 2018	1222387	Charles	TF
2018	16513676	PR	61554232	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T4	STN 'A' PWR EQ INSP-SVI Spr 2018	1222387	Charles	TF
2018	16996877	PR	62006480	ATCO NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T4	UT-MR-DIII-(SPECIAL)MCT-X	1222387	Charles	TF
2018	15875623	PR	61557177	ATCO NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T4	UT-MR-DIII-UTOA	1222387	Charles	TF
2018	17038592	PR	61554233	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T4	STN 'A' PWR EQ INSP-SVI Fall 2018	1222389	Charles	TF
2018	15875624	PR	61557178	ATCO NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T4	UT-MR-DIII-UTOA	1222389	Charles	TF
2018	16996878	PR	62006483	ATCO NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T4	UT-MR-DIII-(SPECIAL)MCT-Y	1222389	Charles	TF
2018	16513675	PR	61554232	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T4	STN 'A' PWR EQ INSP-SVI Spr 2018	1222389	Charles	TF
2018	16731087	SW	61840622	NOCO ORAS		N-TS-CHARLESTS -TF-T1	18-15728/Charles TS/T1		Charles	TF
2018	16853337	TC	61884726	NOCO ORAS		N-TS-CHARLESTS -TF	S3 - EMD - RE: OIL DETECTED IN OIL/WATER		Charles	TF
2018	16381898	TC	61794749	NOCO ORAS		N-TS-CHARLESTS -TF-T3	S3/ PD/ EMD/ CHARLES TS/ RE: T3-T4 OUT O		Charles	TF
2018	16760370	TC	61851815	NOCO ORAS		N-TS-CHARLESTS -TF-T3	SEC-EMD-T3 SYSTEM ALARM		Charles	TF
2018	16760409	TC	61851818	NOCO ORAS		N-TS-CHARLESTS -TF-T3	SEC3-EMD-VARIFY T3 PRIMARY	1178289	Charles	TF
2018	17029420	TC	62030079	NOCO ORAS		N-TS-CHARLESTS -TF-T2	S3 IMM EMD CHARLES TS RESTORE T2	1191105	Charles	TF
2018	17109692	DR	62062847	NOCO ORAS		N-TS-WILSONTS -BR-M13	AR22760 NA54 CDMA REPLCMT J1305196 - P&C		Wilson	BR
2018	16126711	DR	61670901	NOCO ORAS	0100	N-TS-WILSONTS -BR-M14	Wilson M14 broken spacer		Wilson	BR
2018	17109693	DR	62062848	NOCO ORAS		N-TS-WILSONTS -BR-M17	AR22760 NA54 CDMA REPLCMT J1305132 - P&C		Wilson	BR
2018	14516088	DR	61222829	NOCO ORAS		N-TS-WILSONTS -BR-M7	WILSON M7 HIGH PCB BUSH REPLACE CMS 2015	1101252	Wilson	BR
2018	15891370	PR	61572881	NOCO ORAS	CR01	N-TS-WILSONTS -BR	STN BREAKER BLOWDOWN		Wilson	BR
2018	15891367	PR	61572878	NOCO ORAS	CR01	N-TS-WILSONTS -BR	STN BREAKER BLOWDOWN		Wilson	BR
2018	15891368	PR	61572879	NOCO ORAS	CR01	N-TS-WILSONTS -BR	STN BREAKER BLOWDOWN		Wilson	BR

2018	15891369	PR	61572880	NOCO ORAS	CR01	N-TS-WILSONTS	-BR	STN BREAKER BLOWDOWN		Wilson	BR
2018	16374337	PR	61779298	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M3	AR20126 NA54 PCB Resampling - EMD		Wilson	BR
2018	17113155	PR	61570344	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M17	STN 'B' PWR EQ INSP-SVI Fall 2018	1093814	Wilson	BR
2018	17112493	PR	61572879	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M17	STN BREAKER BLOWDOWN 2of4 2018	1093814	Wilson	BR
2018	16682938	PR	61572878	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M17	STN BREAKER BLOWDOWN 1of4 2018	1093814	Wilson	BR
2018	17031481	PR	61572880	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M17	STN BREAKER BLOWDOWN 3of4 2018	1093814	Wilson	BR
2018	17142244	PR	61572881	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M17	STN BREAKER BLOWDOWN 4of4 2018	1093814	Wilson	BR
2018	16814034	PR	61570343	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M17	STN 'B' PWR EQ INSP-SVI Spr 2018	1093814	Wilson	BR
2018	17113026	PR	61570344	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M17	STN 'B' PWR EQ INSP-SVI Fall 2018	1093814	Wilson	BR
2018	17031466	PR	61572880	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M18	STN BREAKER BLOWDOWN 3of4 2018	1093835	Wilson	BR
2018	16814012	PR	61570343	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M18	STN 'B' PWR EQ INSP-SVI Spr 2018	1093835	Wilson	BR
2018	16682931	PR	61572878	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M18	STN BREAKER BLOWDOWN 1of4 2018	1093835	Wilson	BR
2018	17113079	PR	61570344	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M18	STN 'B' PWR EQ INSP-SVI Fall 2018	1093835	Wilson	BR
2018	17142229	PR	61572881	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M18	STN BREAKER BLOWDOWN 4of4 2018	1093835	Wilson	BR
2018	17112913	PR	61570344	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M18	STN 'B' PWR EQ INSP-SVI Fall 2018	1093835	Wilson	BR
2018	17112495	PR	61572879	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M18	STN BREAKER BLOWDOWN 2of4 2018	1093835	Wilson	BR
2018	17113100	PR	61570344	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M16	STN 'B' PWR EQ INSP-SVI Fall 2018	1101236	Wilson	BR
2018	16814032	PR	61570343	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M16	STN 'B' PWR EQ INSP-SVI Spr 2018	1101236	Wilson	BR
2018	15889386	PR	61570897	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M16	BR-OIL-KSO-LV- Strategy	1101236	Wilson	BR
2018	17112915	PR	61570344	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M16	STN 'B' PWR EQ INSP-SVI Fall 2018	1101236	Wilson	BR
2018	16814013	PR	61570343	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M7	STN 'B' PWR EQ INSP-SVI Spr 2018	1101252	Wilson	BR
2018	17112917	PR	61570344	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M7	STN 'B' PWR EQ INSP-SVI Fall 2018	1101252	Wilson	BR
2018	17113101	PR	61570344	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M7	STN 'B' PWR EQ INSP-SVI Fall 2018	1101252	Wilson	BR
2018	16814014	PR	61570343	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-T1B	STN 'B' PWR EQ INSP-SVI Spr 2018	1101264	Wilson	BR
2018	17112919	PR	61570344	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-T1B	STN 'B' PWR EQ INSP-SVI Fall 2018	1101264	Wilson	BR
2018	17113102	PR	61570344	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-T1B	STN 'B' PWR EQ INSP-SVI Fall 2018	1101264	Wilson	BR
2018	17113103	PR	61570344	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-JQ	STN 'B' PWR EQ INSP-SVI Fall 2018	1206693	Wilson	BR
2018	16814015	PR	61570343	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-JQ	STN 'B' PWR EQ INSP-SVI Spr 2018	1206693	Wilson	BR
2018	17112931	PR	61570344	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-JQ	STN 'B' PWR EQ INSP-SVI Fall 2018	1206693	Wilson	BR
2018	15889388	PR	61570899	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-T4Q	BR-OIL-KSO-LV- Strategy	1206763	Wilson	BR
2018	16814011	PR	61570343	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-T4Q	STN 'B' PWR EQ INSP-SVI Spr 2018	1206763	Wilson	BR
2018	17113104	PR	61570344	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-T4Q	STN 'B' PWR EQ INSP-SVI Fall 2018	1206763	Wilson	BR
2018	17112933	PR	61570344	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-T4Q	STN 'B' PWR EQ INSP-SVI Fall 2018	1206763	Wilson	BR
2018	15889387	PR	61570898	NOCO ORAS	CR03	N-TS-WILSONTS	-BR-T3J	BR-OIL-KSO-LV- Strategy	1206776	Wilson	BR
2018	17113105	PR	61570344	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-T3J	STN 'B' PWR EQ INSP-SVI Fall 2018	1206776	Wilson	BR
2018	17112935	PR	61570344	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-T3J	STN 'B' PWR EQ INSP-SVI Fall 2018	1206776	Wilson	BR
2018	16814016	PR	61570343	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-T3J	STN 'B' PWR EQ INSP-SVI Spr 2018	1206776	Wilson	BR
2018	15889726	PR	61571237	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M12	BR-OIL-KSO-LV- BOA	1207581	Wilson	BR
2018	16814017	PR	61570343	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M12	STN 'B' PWR EQ INSP-SVI Spr 2018	1207581	Wilson	BR
2018	17112937	PR	61570344	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M12	STN 'B' PWR EQ INSP-SVI Fall 2018	1207581	Wilson	BR
2018	17113106	PR	61570344	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M12	STN 'B' PWR EQ INSP-SVI Fall 2018	1207581	Wilson	BR
2018	17113107	PR	61570344	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M13	STN 'B' PWR EQ INSP-SVI Fall 2018	1207593	Wilson	BR
2018	17112939	PR	61570344	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M13	STN 'B' PWR EQ INSP-SVI Fall 2018	1207593	Wilson	BR
2018	16814018	PR	61570343	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M13	STN 'B' PWR EQ INSP-SVI Spr 2018	1207593	Wilson	BR
2018	17112951	PR	61570344	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M11	STN 'B' PWR EQ INSP-SVI Fall 2018	1207604	Wilson	BR
2018	17113108	PR	61570344	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M11	STN 'B' PWR EQ INSP-SVI Fall 2018	1207604	Wilson	BR
2018	16380169	PR	61781628	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M11	BR-OIL-KSO-LV- BOA Resample	1207604	Wilson	BR
2018	16814019	PR	61570343	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M11	STN 'B' PWR EQ INSP-SVI Spr 2018	1207604	Wilson	BR
2018	16814020	PR	61570343	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-SC1B	STN 'B' PWR EQ INSP-SVI Spr 2018	1211004	Wilson	BR

2018	17031467	PR	61572880	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-SC1B	STN BREAKER BLOWDOWN 3of4 2018	1211004	Wilson	BR
2018	17142240	PR	61572881	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-SC1B	STN BREAKER BLOWDOWN 4of4 2018	1211004	Wilson	BR
2018	16682932	PR	61572878	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-SC1B	STN BREAKER BLOWDOWN 1of4 2018	1211004	Wilson	BR
2018	17112957	PR	61570344	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-SC1B	STN 'B' PWR EQ INSP-SVI Fall 2018	1211004	Wilson	BR
2018	17112497	PR	61572879	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-SC1B	STN BREAKER BLOWDOWN 2of4 2018	1211004	Wilson	BR
2018	17113131	PR	61570344	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-SC1B	STN 'B' PWR EQ INSP-SVI Fall 2018	1211004	Wilson	BR
2018	16814021	PR	61570343	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-SC2Y	STN 'B' PWR EQ INSP-SVI Spr 2018	1211011	Wilson	BR
2018	17142241	PR	61572881	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-SC2Y	STN BREAKER BLOWDOWN 4of4 2018	1211011	Wilson	BR
2018	17031480	PR	61572880	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-SC2Y	STN BREAKER BLOWDOWN 3of4 2018	1211011	Wilson	BR
2018	16682933	PR	61572878	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-SC2Y	STN BREAKER BLOWDOWN 1of4 2018	1211011	Wilson	BR
2018	17112499	PR	61572879	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-SC2Y	STN BREAKER BLOWDOWN 2of4 2018	1211011	Wilson	BR
2018	17113132	PR	61570344	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-SC2Y	STN 'B' PWR EQ INSP-SVI Fall 2018	1211011	Wilson	BR
2018	17112959	PR	61570344	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-SC2Y	STN 'B' PWR EQ INSP-SVI Fall 2018	1211011	Wilson	BR
2018	17112501	PR	61572879	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-SC3J	STN BREAKER BLOWDOWN 2of4 2018	1211024	Wilson	BR
2018	17112978	PR	61570344	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-SC3J	STN 'B' PWR EQ INSP-SVI Fall 2018	1211024	Wilson	BR
2018	15889732	PR	61571243	NOCO ORAS	CR02	N-TS-WILSONTS	-BR-SC3J	BR-SF6-SP-M1	1211024	Wilson	BR
2018	16814022	PR	61570343	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-SC3J	STN 'B' PWR EQ INSP-SVI Spr 2018	1211024	Wilson	BR
2018	17142242	PR	61572881	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-SC3J	STN BREAKER BLOWDOWN 4of4 2018	1211024	Wilson	BR
2018	16682934	PR	61572878	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-SC3J	STN BREAKER BLOWDOWN 1of4 2018	1211024	Wilson	BR
2018	17031468	PR	61572880	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-SC3J	STN BREAKER BLOWDOWN 3of4 2018	1211024	Wilson	BR
2018	17113136	PR	61570344	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-SC3J	STN 'B' PWR EQ INSP-SVI Fall 2018	1211024	Wilson	BR
2018	17112503	PR	61572879	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-SC4Q	STN BREAKER BLOWDOWN 2of4 2018	1211036	Wilson	BR
2018	17112990	PR	61570344	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-SC4Q	STN 'B' PWR EQ INSP-SVI Fall 2018	1211036	Wilson	BR
2018	16814023	PR	61570343	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-SC4Q	STN 'B' PWR EQ INSP-SVI Spr 2018	1211036	Wilson	BR
2018	16682936	PR	61572878	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-SC4Q	STN BREAKER BLOWDOWN 1of4 2018	1211036	Wilson	BR
2018	17113137	PR	61570344	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-SC4Q	STN 'B' PWR EQ INSP-SVI Fall 2018	1211036	Wilson	BR
2018	17031469	PR	61572880	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-SC4Q	STN BREAKER BLOWDOWN 3of4 2018	1211036	Wilson	BR
2018	17142243	PR	61572881	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-SC4Q	STN BREAKER BLOWDOWN 4of4 2018	1211036	Wilson	BR
2018	17113151	PR	61570344	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-T2Y	STN 'B' PWR EQ INSP-SVI Fall 2018	1213509	Wilson	BR
2018	17112998	PR	61570344	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-T2Y	STN 'B' PWR EQ INSP-SVI Fall 2018	1213509	Wilson	BR
2018	16814033	PR	61570343	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-T2Y	STN 'B' PWR EQ INSP-SVI Spr 2018	1213509	Wilson	BR
2018	16814024	PR	61570343	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-BY	STN 'B' PWR EQ INSP-SVI Spr 2018	1213529	Wilson	BR
2018	17113020	PR	61570344	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-BY	STN 'B' PWR EQ INSP-SVI Fall 2018	1213529	Wilson	BR
2018	17113152	PR	61570344	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-BY	STN 'B' PWR EQ INSP-SVI Fall 2018	1213529	Wilson	BR
2018	16814025	PR	61570343	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M5	STN 'B' PWR EQ INSP-SVI Spr 2018	1213614	Wilson	BR
2018	17113153	PR	61570344	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M5	STN 'B' PWR EQ INSP-SVI Fall 2018	1213614	Wilson	BR
2018	17113022	PR	61570344	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M5	STN 'B' PWR EQ INSP-SVI Fall 2018	1213614	Wilson	BR
2018	17113028	PR	61570344	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M1	STN 'B' PWR EQ INSP-SVI Fall 2018	1213628	Wilson	BR
2018	16814027	PR	61570343	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M1	STN 'B' PWR EQ INSP-SVI Spr 2018	1213628	Wilson	BR
2018	17113156	PR	61570344	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M1	STN 'B' PWR EQ INSP-SVI Fall 2018	1213628	Wilson	BR
2018	16814028	PR	61570343	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M3	STN 'B' PWR EQ INSP-SVI Spr 2018	1213636	Wilson	BR
2018	17113157	PR	61570344	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M3	STN 'B' PWR EQ INSP-SVI Fall 2018	1213636	Wilson	BR
2018	17113030	PR	61570344	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M3	STN 'B' PWR EQ INSP-SVI Fall 2018	1213636	Wilson	BR
2018	16814029	PR	61570343	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M6	STN 'B' PWR EQ INSP-SVI Spr 2018	1213645	Wilson	BR
2018	17113158	PR	61570344	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M6	STN 'B' PWR EQ INSP-SVI Fall 2018	1213645	Wilson	BR
2018	17113032	PR	61570344	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M6	STN 'B' PWR EQ INSP-SVI Fall 2018	1213645	Wilson	BR
2018	17113109	PR	61570344	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M4	STN 'B' PWR EQ INSP-SVI Fall 2018	1213655	Wilson	BR
2018	17112953	PR	61570344	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M4	STN 'B' PWR EQ INSP-SVI Fall 2018	1213655	Wilson	BR
2018	16814026	PR	61570343	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M4	STN 'B' PWR EQ INSP-SVI Spr 2018	1213655	Wilson	BR

2018	16814030	PR	61570343	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M2	STN 'B' PWR EQ INSP-SVI Spr 2018	1213666	Wilson	BR
2018	17113130	PR	61570344	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M2	STN 'B' PWR EQ INSP-SVI Fall 2018	1213666	Wilson	BR
2018	17112955	PR	61570344	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M2	STN 'B' PWR EQ INSP-SVI Fall 2018	1213666	Wilson	BR
2018	16814031	PR	61570343	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M8	STN 'B' PWR EQ INSP-SVI Spr 2018	1213676	Wilson	BR
2018	17112972	PR	61570344	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M8	STN 'B' PWR EQ INSP-SVI Fall 2018	1213676	Wilson	BR
2018	17113133	PR	61570344	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M8	STN 'B' PWR EQ INSP-SVI Fall 2018	1213676	Wilson	BR
2018	15889753	PR	61571264	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M8	BR-OIL-KSO-LV- BOA	1213676	Wilson	BR
2018	17112974	PR	61570344	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M14	STN 'B' PWR EQ INSP-SVI Fall 2018	1215063	Wilson	BR
2018	17113134	PR	61570344	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M14	STN 'B' PWR EQ INSP-SVI Fall 2018	1215063	Wilson	BR
2018	15889385	PR	61570896	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M14	BR-OIL-KSO-LV- Strategy	1215063	Wilson	BR
2018	16814005	PR	61570343	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M14	STN 'B' PWR EQ INSP-SVI Spr 2018	1215063	Wilson	BR
2018	17112976	PR	61570344	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M15	STN 'B' PWR EQ INSP-SVI Fall 2018	1215072	Wilson	BR
2018	17113135	PR	61570344	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M15	STN 'B' PWR EQ INSP-SVI Fall 2018	1215072	Wilson	BR
2018	16814006	PR	61570343	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M15	STN 'B' PWR EQ INSP-SVI Spr 2018	1215072	Wilson	BR
2018	16924562	PR	61779298	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M3	AR20126 NA54 PCB Resampling - EMD	1358609	Wilson	BR
2018	16924564	PR	61779298	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M3	AR20126 NA54 PCB Resampling - EMD	1359452	Wilson	BR
2018	16924566	PR	61779298	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M3	AR20126 NA54 PCB Resampling - EMD	1360102	Wilson	BR
2018	16924567	PR	61779298	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M3	AR20126 NA54 PCB Resampling - EMD	1361141	Wilson	BR
2018	16924568	PR	61779298	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M3	AR20126 NA54 PCB Resampling - EMD	1361595	Wilson	BR
2018	16924569	PR	61779298	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M3	AR20126 NA54 PCB Resampling - EMD	1363088	Wilson	BR
2018	16907169	TC	61942632	NOCO ORAS		N-TS-WILSONTS	-BR	s3 wilson sc2 emd		Wilson	BR
2018	16798945	TC	61858903	NOCO ORAS		N-TS-WILSONTS	-BR-M12	S3: PENDING - PC - M12 FEEDER RECLOSER M		Wilson	BR
2018	16818353	TC	61866003	NOCO ORAS		N-TS-WILSONTS	-BR-M12	S3 REQ PC REG: TRANSFER TRIP COMM CHANNE		Wilson	BR
2018	16855377	TC	61886401	NOCO ORAS		N-TS-WILSONTS	-BR-M14	s3 tx lines wilson m14		Wilson	BR
2018	16834208	TC	61872714	NOCO ORAS		N-TS-WILSONTS	-BR-SC1B	S3, EMD PEND, RE: SC1 TRIP ON NEUTRAL OV		Wilson	BR
2018	16855969	TC	61942920	NOCO ORAS		N-TS-WILSONTS	-BR-SC4Q	S3 RE SC4 NEUTRAL OVERCURRENT		Wilson	BR
2018	17045268	TC	62044429	NOCO ORAS		N-TS-WILSONTS	-BR-M15	S3 - EMD WILSON TS BROKEN M15-M16 TIE SW	1215072	Wilson	BR
2018	16989747	DR	62002893	NOCO ORAS	9900	N-TS-WILSONTS	-TF-T3	Wilson T3 - Fan Brackets Required	1173245	Wilson	TF
2018	16151185	DR	61458546	NOCO NOPT ORAS	0700	N-TS-WILSONTS	-TF-T2	WILSON T2 - EMD Leak Reduction	1175751	Wilson	TF
2018	16989793	DR	62002895	NOCO ORAS	9900	N-TS-WILSONTS	-TF-T4	Wilson Ts - T4 Fan Brackets Required	1188773	Wilson	TF
2018	16082884	DR	61647456	NOCO ORAS	9900	N-TS-WILSONTS	-TF-T4	WILSON TS T4 dc ground	1188773	Wilson	TF
2018	17113050	PR	61570344	NOCO ORAS	CR01	N-TS-WILSONTS	-TF-SS2	STN 'B' PWR EQ INSP-SVI Fall 2018	1173234	Wilson	TF
2018	17112844	PR	61570344	NOCO ORAS	CR01	N-TS-WILSONTS	-TF-SS2	STN 'B' PWR EQ INSP-SVI Fall 2018	1173234	Wilson	TF
2018	16813969	PR	61570343	NOCO ORAS	CR01	N-TS-WILSONTS	-TF-SS2	STN 'B' PWR EQ INSP-SVI Spr 2018	1173234	Wilson	TF
2018	17112846	PR	61570344	NOCO ORAS	CR01	N-TS-WILSONTS	-TF-T3	STN 'B' PWR EQ INSP-SVI Fall 2018	1173245	Wilson	TF
2018	17113051	PR	61570344	NOCO ORAS	CR01	N-TS-WILSONTS	-TF-T3	STN 'B' PWR EQ INSP-SVI Fall 2018	1173245	Wilson	TF
2018	16813971	PR	61570343	NOCO ORAS	CR01	N-TS-WILSONTS	-TF-T3	STN 'B' PWR EQ INSP-SVI Spr 2018	1173245	Wilson	TF
2018	17112861	PR	61570344	NOCO ORAS	CR01	N-TS-WILSONTS	-TF-T2	STN 'B' PWR EQ INSP-SVI Fall 2018	1175751	Wilson	TF
2018	16813974	PR	61570343	NOCO ORAS	CR01	N-TS-WILSONTS	-TF-T2	STN 'B' PWR EQ INSP-SVI Spr 2018	1175751	Wilson	TF
2018	17113053	PR	61570344	NOCO ORAS	CR01	N-TS-WILSONTS	-TF-T2	STN 'B' PWR EQ INSP-SVI Fall 2018	1175751	Wilson	TF
2018	14920214	PR	61343311	ATCO NOCO ORAS	CR02	N-TS-WILSONTS	-TF-T2	TF-GENERAL-GOT	1175751	Wilson	TF
2018	17112867	PR	61570344	NOCO ORAS	CR01	N-TS-WILSONTS	-TF-SS1	STN 'B' PWR EQ INSP-SVI Fall 2018	1183701	Wilson	TF
2018	16813977	PR	61570343	NOCO ORAS	CR01	N-TS-WILSONTS	-TF-SS1	STN 'B' PWR EQ INSP-SVI Spr 2018	1183701	Wilson	TF
2018	17113056	PR	61570344	NOCO ORAS	CR01	N-TS-WILSONTS	-TF-SS1	STN 'B' PWR EQ INSP-SVI Fall 2018	1183701	Wilson	TF
2018	17112869	PR	61570344	NOCO ORAS	CR01	N-TS-WILSONTS	-TF-T1	STN 'B' PWR EQ INSP-SVI Fall 2018	1183712	Wilson	TF
2018	17113057	PR	61570344	NOCO ORAS	CR01	N-TS-WILSONTS	-TF-T1	STN 'B' PWR EQ INSP-SVI Fall 2018	1183712	Wilson	TF
2018	16813978	PR	61570343	NOCO ORAS	CR01	N-TS-WILSONTS	-TF-T1	STN 'B' PWR EQ INSP-SVI Spr 2018	1183712	Wilson	TF
2018	16813979	PR	61570343	NOCO ORAS	CR01	N-TS-WILSONTS	-TF-T4	STN 'B' PWR EQ INSP-SVI Spr 2018	1188773	Wilson	TF
2018	15889747	PR	61571258	ATCO NOCO ORAS	CR02	N-TS-WILSONTS	-TF-T4	TF-GENERAL-GOT	1188773	Wilson	TF

2018	15889742	PR	61571253	NOCO ORAS	CR01	N-TS-WILSONTS -TF-T4	TF-GENERAL-D1	1188773	Wilson	TF
2018	17113058	PR	61570344	NOCO ORAS	CR01	N-TS-WILSONTS -TF-T4	STN 'B' PWR EQ INSP-SVI Fall 2018	1188773	Wilson	TF
2018	17112881	PR	61570344	NOCO ORAS	CR01	N-TS-WILSONTS -TF-T4	STN 'B' PWR EQ INSP-SVI Fall 2018	1188773	Wilson	TF
2018	16814007	PR	61570343	NOCO ORAS	CR01	N-TS-WILSONTS -TF-T1	STN 'B' PWR EQ INSP-SVI Spr 2018	1223907	Wilson	TF
2018	17113138	PR	61570344	NOCO ORAS	CR01	N-TS-WILSONTS -TF-T1	STN 'B' PWR EQ INSP-SVI Fall 2018	1223907	Wilson	TF
2018	17112992	PR	61570344	NOCO ORAS	CR01	N-TS-WILSONTS -TF-T1	STN 'B' PWR EQ INSP-SVI Fall 2018	1223907	Wilson	TF
2018	17112994	PR	61570344	NOCO ORAS	CR01	N-TS-WILSONTS -TF-T2	STN 'B' PWR EQ INSP-SVI Fall 2018	1223909	Wilson	TF
2018	17113139	PR	61570344	NOCO ORAS	CR01	N-TS-WILSONTS -TF-T2	STN 'B' PWR EQ INSP-SVI Fall 2018	1223909	Wilson	TF
2018	16814008	PR	61570343	NOCO ORAS	CR01	N-TS-WILSONTS -TF-T2	STN 'B' PWR EQ INSP-SVI Spr 2018	1223909	Wilson	TF
2018	17113150	PR	61570344	NOCO ORAS	CR01	N-TS-WILSONTS -TF-T3	STN 'B' PWR EQ INSP-SVI Fall 2018	1223911	Wilson	TF
2018	16814009	PR	61570343	NOCO ORAS	CR01	N-TS-WILSONTS -TF-T3	STN 'B' PWR EQ INSP-SVI Spr 2018	1223911	Wilson	TF
2018	17112996	PR	61570344	NOCO ORAS	CR01	N-TS-WILSONTS -TF-T3	STN 'B' PWR EQ INSP-SVI Fall 2018	1223911	Wilson	TF
2018	16814010	PR	61570343	NOCO ORAS	CR01	N-TS-WILSONTS -TF-T4	STN 'B' PWR EQ INSP-SVI Spr 2018	1223913	Wilson	TF
2018	17113154	PR	61570344	NOCO ORAS	CR01	N-TS-WILSONTS -TF-T4	STN 'B' PWR EQ INSP-SVI Fall 2018	1223913	Wilson	TF
2018	17113024	PR	61570344	NOCO ORAS	CR01	N-TS-WILSONTS -TF-T4	STN 'B' PWR EQ INSP-SVI Fall 2018	1223913	Wilson	TF
2018	15890037	PR	61571548	ATCO NOCO ORAS	CR02	N-TS-WILSONTS -TF-T4	UT-ABB-UCBRN/GRN/LRN-UTOA	1223913	Wilson	TF
2018	16846608	TC	61878487	NOCO ORAS		N-TS-WILSONTS -TF-T3	S3 EMD RE: T3 COOLING FAIL		Wilson	TF
2018	16846790	TC	61942819	NOCO ORAS		N-TS-WILSONTS -TF-T3	S3 EMD RE: T3 COOLING FAIL		Wilson	TF
2018	17027182	TC	62032066	NOCO ORAS		N-TS-WILSONTS -TF-T4	S3/ PD/ EMD/ WILSON TS/ RE: T4 TAP CHANG		Wilson	TF
2018	16990028	TC	62004428	NOCO ORAS		N-TS-WILSONTS -TF-T3	S3 EMD IMD RE: T3 LOW TEMP ALARM	1173245	Wilson	TF
2018	16778376	TC	61855488	NOCO ORAS		N-TS-WILSONTS -TF-T3	S3/ EMD/ WILSON TS/ RE: T3 COOLING FAIL/	1173245	Wilson	TF
2018	16263851	TC	61752410	NOCO ORAS		N-TS-WILSONTS -TF-T2	S3 IMM EMD RE: INSPECT T2 NECK BOX	1175751	Wilson	TF
2019	17469007	PR	61908456	NOCO ORAS	CR01	N-TS-CHARLESTS -BR-T1A7A8	STN 'A' PWR EQ INSP-SVI Spr 2019	1094301	Charles	BR
2019	17469008	PR	61908456	NOCO ORAS	CR01	N-TS-CHARLESTS -BR-T2A7A8	STN 'A' PWR EQ INSP-SVI Spr 2019	1094324	Charles	BR
2019	17469009	PR	61908456	NOCO ORAS	CR01	N-TS-CHARLESTS -BR-T1A5A6	STN 'A' PWR EQ INSP-SVI Spr 2019	1098469	Charles	BR
2019	17469060	PR	61908456	NOCO ORAS	CR01	N-TS-CHARLESTS -BR-T3A1A2	STN 'A' PWR EQ INSP-SVI Spr 2019	1114751	Charles	BR
2019	17469065	PR	61908456	NOCO ORAS	CR01	N-TS-CHARLESTS -BR-T3A3A4	STN 'A' PWR EQ INSP-SVI Spr 2019	1207364	Charles	BR
2019	17469069	PR	61908456	NOCO ORAS	CR01	N-TS-CHARLESTS -BR-T4A3A4	STN 'A' PWR EQ INSP-SVI Spr 2019	1207379	Charles	BR
2019	17469066	PR	61908456	NOCO ORAS	CR01	N-TS-CHARLESTS -BR-T4A1A2	STN 'A' PWR EQ INSP-SVI Spr 2019	1213796	Charles	BR
2019	17468998	PR	61908456	NOCO ORAS	CR01	N-TS-CHARLESTS -BR-T2A5A6	STN 'A' PWR EQ INSP-SVI Spr 2019	1216275	Charles	BR
2019	16941462	SW	61963259	NOCO ORAS		N-TS-CHARLESTS -BR	18-01695/Charles TS/L12C		Charles	BR
2019	16974635	SW	61992807	NOCO ORAS		N-TS-CHARLESTS -BR	18-24078/Charles TS/T3		Charles	BR
2019	18017143	SW	62385472	NOCO NOPT ORAS		N-TS-CHARLESTS -BR	19-22474/Charles TS/T1		Charles	BR
2019	18017144	SW	62385473	NOCO NOPT ORAS		N-TS-CHARLESTS -BR	19-22474/Charles TS/T1		Charles	BR
2019	16774515	DR	61855946	NOCO ORAS	0100	N-TS-CHARLESTS -TF-T3	The oil temp gauge is sticky		Charles	TF
2019	18384010	DR		NOCO		N-TS-CHARLESTS -TF-T4	Charles T4 transformer bay		Charles	TF
2019	16967215	DR	62018480	NOCO ORAS	0100	N-TS-CHARLESTS -TF-T4	T3 and T4 out of step alarm.	1183465	Charles	TF
2019	17213185	DR	62110362	NOCO ORAS	0700	N-TS-CHARLESTS -TF-T1	CHARLESTS T1 Leak Reduc ROAD CMS 2019	1183475	Charles	TF
2019	16681047	DR	61825209	NOCO ORAS	0100	N-TS-CHARLESTS -TF-T4	T3 and T4 Tap Changers out of step	1222387	Charles	TF
2019	16681048	DR	61825210	NOCO ORAS	0100	N-TS-CHARLESTS -TF-T4	T3 and T4 Tap Changers out of step	1222389	Charles	TF
2019	17468965	PR	61908456	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T3	STN 'A' PWR EQ INSP-SVI Spr 2019	1178289	Charles	TF
2019	17046363	PR	62045073	ATCO NOCO ORAS	CR02	N-TS-CHARLESTS -TF-T3	TF-GENERAL-(SPECIAL)GOT	1178289	Charles	TF
2019	16877131	PR	61908821	ATCO NOCO ORAS	CR02	N-TS-CHARLESTS -TF-T3	TF-GENERAL-GOT	1178289	Charles	TF
2019	16996876	PR	62006398	ATCO NOCO ORAS	CR02	N-TS-CHARLESTS -TF-T4	TF-GENERAL-(SPECIAL)DGA-MAIN TANK	1183465	Charles	TF
2019	16877132	PR	61908822	ATCO NOCO ORAS	CR02	N-TS-CHARLESTS -TF-T4	TF-GENERAL-GOT	1183465	Charles	TF
2019	17468966	PR	61908456	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T4	STN 'A' PWR EQ INSP-SVI Spr 2019	1183465	Charles	TF
2019	15872650	PR	61554235	ATCO NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T1	TF-GENERAL-GOT	1183475	Charles	TF
2019	16876948	PR	61908458	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T1	TF-GENERAL-D1	1183475	Charles	TF
2019	17468968	PR	61908456	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T1	STN 'A' PWR EQ INSP-SVI Spr 2019	1183475	Charles	TF

2019	16876949	PR	61908459	NOCO ORAS	CR02	N-TS-CHARLESTS -TF-T1	TF-GENERAL-GOT	1183475	Charles	TF
2019	16877130	PR	61908820	ATCO NOCO ORAS	CR02	N-TS-CHARLESTS -TF-T2	TF-GENERAL-GOT	1191105	Charles	TF
2019	17468971	PR	61908456	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T2	STN 'A' PWR EQ INSP-SVI Spr 2019	1191105	Charles	TF
2019	16880399	PR	61912089	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T1	UT-CWC/MR/UVT-UTOA	1222374	Charles	TF
2019	17468999	PR	61908456	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T1	STN 'A' PWR EQ INSP-SVI Spr 2019	1222374	Charles	TF
2019	15873146	PR	61554740	ATCO NOCO ORAS	CR02	N-TS-CHARLESTS -TF-T1	UT-CWC/MR/UVT-UTOA	1222374	Charles	TF
2019	17469000	PR	61908456	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T1	STN 'A' PWR EQ INSP-SVI Spr 2019	1222376	Charles	TF
2019	15873148	PR	61554742	ATCO NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T1	UT-CWC/MR/UVT-UTOA	1222376	Charles	TF
2019	16880573	PR	61912093	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T1	UT-CWC/MR/UVT-UTOA	1222376	Charles	TF
2019	16996987	PR	62006490	ATCO NOCO ORAS	CR02	N-TS-CHARLESTS -TF-T1	UT-CWC/MR/UVT-(SPECIAL)MCT-Y	1222376	Charles	TF
2019	16880574	PR	61912094	NOCO ORAS	CR03	N-TS-CHARLESTS -TF-T1	UT-CWC/MR/UVT-UTOA	1222376	Charles	TF
2019	18206807	PR	62421926	NOCO ORAS	CR02	N-TS-CHARLESTS -TF-T2	UT-CWC/MR/UVT-(SPECIAL)UTOA-X	1222378	Charles	TF
2019	16995794	PR	62004958	ATCO NOCO ORAS	CR02	N-TS-CHARLESTS -TF-T2	UT-CWC/MR/UVT-(SPECIAL)MCT-X	1222378	Charles	TF
2019	16880575	PR	61912095	ATCO NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T2	UT-CWC/MR/UVT-UTOA	1222378	Charles	TF
2019	16880576	PR	61912096	NOCO ORAS	CR03	N-TS-CHARLESTS -TF-T2	UT-CWC/MR/UVT-UTOA	1222378	Charles	TF
2019	17469001	PR	61908456	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T2	STN 'A' PWR EQ INSP-SVI Spr 2019	1222378	Charles	TF
2019	16880578	PR	61912098	NOCO ORAS	CR03	N-TS-CHARLESTS -TF-T2	UT-CWC/MR/UVT-UTOA	1222380	Charles	TF
2019	16995805	PR	62005080	ATCO NOCO ORAS	CR02	N-TS-CHARLESTS -TF-T2	UT-CWC/MR/UVT-(SPECIAL)MCT-Y	1222380	Charles	TF
2019	18206965	PR	62421933	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T2	UT-CWC/MR/UVT-(SPECIAL)UTOA-Y	1222380	Charles	TF
2019	14904295	PR	61327394	ATCO NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T2	UT-CWC/MR/UVT-UTOA	1222380	Charles	TF
2019	17469067	PR	61908456	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T2	STN 'A' PWR EQ INSP-SVI Spr 2019	1222380	Charles	TF
2019	16880577	PR	61912097	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T2	UT-CWC/MR/UVT-UTOA	1222380	Charles	TF
2019	17469002	PR	61908456	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T3	STN 'A' PWR EQ INSP-SVI Spr 2019	1222382	Charles	TF
2019	15875753	PR	61557297	ATCO NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T3	UT-MR-DIII-UTOA	1222382	Charles	TF
2019	17046365	PR	62045074	ATCO NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T3	UT-MR-DIII-(SPECIAL)MCT-X	1222382	Charles	TF
2019	16892582	PR	61924243	ATCO NOCO ORAS	CR02	N-TS-CHARLESTS -TF-T3	UT-MR-DIII-UTOA	1222382	Charles	TF
2019	15875754	PR	61557298	ATCO NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T3	UT-MR-DIII-UTOA	1222384	Charles	TF
2019	17468997	PR	61908456	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T3	STN 'A' PWR EQ INSP-SVI Spr 2019	1222384	Charles	TF
2019	16892583	PR	61924244	NOCO ORAS	CR02	N-TS-CHARLESTS -TF-T3	UT-MR-DIII-UTOA	1222384	Charles	TF
2019	17045211	PR	62043982	ATCO NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T3	UT-MR-DIII-(SPECIAL)MCT-Y-DIV	1222384	Charles	TF
2019	17469004	PR	61908456	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T4	STN 'A' PWR EQ INSP-SVI Spr 2019	1222387	Charles	TF
2019	16891728	PR	61923359	ATCO NOCO ORAS	CR02	N-TS-CHARLESTS -TF-T4	UT-MR-DIII-UTOA	1222387	Charles	TF
2019	16891729	PR	61923440	ATCO NOCO ORAS	CR02	N-TS-CHARLESTS -TF-T4	UT-MR-DIII-UTOA	1222389	Charles	TF
2019	17469005	PR	61908456	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T4	STN 'A' PWR EQ INSP-SVI Spr 2019	1222389	Charles	TF
2019	18074910	SW	62409398	NOCO NOPT ORAS		N-TS-CHARLESTS -TF-T1	19-28152/Charles TS/T1		Charles	TF
2019	18074609	SW	62406783	NOCO NOPT ORAS		N-TS-CHARLESTS -TF-T1	19-28152/Charles TS/T1		Charles	TF
2019	17203175	TC	62111138	NOCO ORAS		N-TS-CHARLESTS -TF	SEC3-EMD IMMEDIATE-CHARLES TS-TORONTO HY		Charles	TF
2019	17895379	DR	62160044	NOCO ORAS		N-TS-WILSONTS -BR-T2Y	WILSON T2Y 4 REQ'D BUSH PCB RETRO	1213509	Wilson	BR
2019	17736302	DR	62241842	NOCO ORAS	1614	N-TS-WILSONTS -BR-T2Y	WILSON T2Y CONTROL SELECTOR SWITCH-P&C	1213509	Wilson	BR
2019	17731500	DR	62241840	NOCO ORAS	1614	N-TS-WILSONTS -BR-T2Y	WILSON T2Y CONTROL SELECTOR SWITCH	1213509	Wilson	BR
2019	17731975	DR	62241441	NOCO ORAS	1614	N-TS-WILSONTS -BR-T2Y	T2Y Fail to Trip	1213509	Wilson	BR
2019	17712183	DR	62232871	NOCO ORAS	0312	N-TS-WILSONTS -BR-T2Y	Wilson T2Y Rebuild interrupters	1213509	Wilson	BR
2019	17712295	DR	62234088	NOCO ORAS	1614	N-TS-WILSONTS -BR-T2Y	Wilson TS T2Y Interupter repair	1213509	Wilson	BR
2019	17037534	DR	62020196	NOCO ORAS		N-TS-WILSONTS -BR-M3	EX-WILSON M3 PCB O/H rtro cms18	1213636	Wilson	BR
2019	17291305	DR	62092474	NOCO ORAS		N-TS-WILSONTS -BR-M4	EX-WILSON M4 PCB O/H rtro cms18	1213655	Wilson	BR
2019	16895279	PR	61926949	NOCO ORAS	CR01	N-TS-WILSONTS -BR	STN BREAKER BLOWDOWN		Wilson	BR
2019	16895290	PR	61926950	NOCO ORAS	CR01	N-TS-WILSONTS -BR	STN BREAKER BLOWDOWN		Wilson	BR
2019	16895277	PR	61926947	NOCO ORAS	CR01	N-TS-WILSONTS -BR	STN BREAKER BLOWDOWN		Wilson	BR
2019	16938441	PR	61959015	NOCO ORAS	CR01	N-TS-WILSONTS -BR-T2Y	AR21060 NA54 CT CHECKS P&C		Wilson	BR

2019	17646109	PR	61923630	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M17	STN 'B' PWR EQ INSP-SVI Spr 2019	1093814	Wilson	BR
2019	17648943	PR	61926947	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M17	STN BREAKER BLOWDOWN 1of4 2019	1093814	Wilson	BR
2019	18387087	PR	61926950	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M17	STN BREAKER BLOWDOWN 4of4 2019	1093814	Wilson	BR
2019	18055548	PR	61923631	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M17	STN 'B' PWR EQ INSP-SVI Fall 2019	1093814	Wilson	BR
2019	18073965	PR	61926949	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M17	STN BREAKER BLOWDOWN 3of4 2019	1093814	Wilson	BR
2019	18387088	PR	61926950	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M18	STN BREAKER BLOWDOWN 4of4 2019	1093835	Wilson	BR
2019	18073967	PR	61926949	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M18	STN BREAKER BLOWDOWN 3of4 2019	1093835	Wilson	BR
2019	18055549	PR	61923631	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M18	STN 'B' PWR EQ INSP-SVI Fall 2019	1093835	Wilson	BR
2019	17646174	PR	61923630	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M18	STN 'B' PWR EQ INSP-SVI Spr 2019	1093835	Wilson	BR
2019	17648933	PR	61926947	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M18	STN BREAKER BLOWDOWN 1of4 2019	1093835	Wilson	BR
2019	18055550	PR	61923631	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M16	STN 'B' PWR EQ INSP-SVI Fall 2019	1101236	Wilson	BR
2019	17646178	PR	61923630	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M16	STN 'B' PWR EQ INSP-SVI Spr 2019	1101236	Wilson	BR
2019	14920211	PR	61343308	ATCO NOCO ORAS	CR02	N-TS-WILSONTS	-BR-M7	BR-OIL-KSO-LV- BOA	1101252	Wilson	BR
2019	18055551	PR	61923631	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M7	STN 'B' PWR EQ INSP-SVI Fall 2019	1101252	Wilson	BR
2019	17646179	PR	61923630	NOCO ORAS	CR02	N-TS-WILSONTS	-BR-M7	STN 'B' PWR EQ INSP-SVI Spr 2019	1101252	Wilson	BR
2019	14861171	PR	61304893	ATCO NOCO ORAS	CR02	N-TS-WILSONTS	-BR-T1B	BR-OIL-KSO-LV- BOA 90 day after SI	1101264	Wilson	BR
2019	16893974	PR	61925634	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-T1B	BR-OIL-KSO-LV- BOA	1101264	Wilson	BR
2019	17646230	PR	61923630	NOCO ORAS	CR02	N-TS-WILSONTS	-BR-T1B	STN 'B' PWR EQ INSP-SVI Spr 2019	1101264	Wilson	BR
2019	18055552	PR	61923631	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-T1B	STN 'B' PWR EQ INSP-SVI Fall 2019	1101264	Wilson	BR
2019	17646126	PR	61923630	NOCO ORAS	CR02	N-TS-WILSONTS	-BR-JQ	STN 'B' PWR EQ INSP-SVI Spr 2019	1206693	Wilson	BR
2019	18055553	PR	61923631	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-JQ	STN 'B' PWR EQ INSP-SVI Fall 2019	1206693	Wilson	BR
2019	14920151	PR	61343178	ATCO NOCO ORAS	CR02	N-TS-WILSONTS	-BR-T4Q	BR-OIL-KSO-LV- BOA	1206763	Wilson	BR
2019	18055554	PR	61923631	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-T4Q	STN 'B' PWR EQ INSP-SVI Fall 2019	1206763	Wilson	BR
2019	17646127	PR	61923630	NOCO ORAS	CR02	N-TS-WILSONTS	-BR-T4Q	STN 'B' PWR EQ INSP-SVI Spr 2019	1206763	Wilson	BR
2019	18055543	PR	61923631	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-T3J	STN 'B' PWR EQ INSP-SVI Fall 2019	1206776	Wilson	BR
2019	17646172	PR	61923630	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-T3J	STN 'B' PWR EQ INSP-SVI Spr 2019	1206776	Wilson	BR
2019	18055555	PR	61923631	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M12	STN 'B' PWR EQ INSP-SVI Fall 2019	1207581	Wilson	BR
2019	17646173	PR	61923630	NOCO ORAS	CR02	N-TS-WILSONTS	-BR-M12	STN 'B' PWR EQ INSP-SVI Spr 2019	1207581	Wilson	BR
2019	17646250	PR	61923630	NOCO ORAS	CR02	N-TS-WILSONTS	-BR-M13	STN 'B' PWR EQ INSP-SVI Spr 2019	1207593	Wilson	BR
2019	18055556	PR	61923631	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M13	STN 'B' PWR EQ INSP-SVI Fall 2019	1207593	Wilson	BR
2019	18055557	PR	61923631	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M11	STN 'B' PWR EQ INSP-SVI Fall 2019	1207604	Wilson	BR
2019	17646177	PR	61923630	NOCO ORAS	CR02	N-TS-WILSONTS	-BR-M11	STN 'B' PWR EQ INSP-SVI Spr 2019	1207604	Wilson	BR
2019	18387089	PR	61926950	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-SC1B	STN BREAKER BLOWDOWN 4of4 2019	1211004	Wilson	BR
2019	16893972	PR	61925632	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-SC1B	BR-SF6-SP-M1	1211004	Wilson	BR
2019	18055558	PR	61923631	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-SC1B	STN 'B' PWR EQ INSP-SVI Fall 2019	1211004	Wilson	BR
2019	18073969	PR	61926949	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-SC1B	STN BREAKER BLOWDOWN 3of4 2019	1211004	Wilson	BR
2019	17648935	PR	61926947	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-SC1B	STN BREAKER BLOWDOWN 1of4 2019	1211004	Wilson	BR
2019	17646231	PR	61923630	NOCO ORAS	CR02	N-TS-WILSONTS	-BR-SC1B	STN 'B' PWR EQ INSP-SVI Spr 2019	1211004	Wilson	BR
2019	18074021	PR	61926949	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-SC2Y	STN BREAKER BLOWDOWN 3of4 2019	1211011	Wilson	BR
2019	16893973	PR	61925633	NOCO ORAS	CR02	N-TS-WILSONTS	-BR-SC2Y	BR-SF6-SP-M1	1211011	Wilson	BR
2019	18055559	PR	61923631	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-SC2Y	STN 'B' PWR EQ INSP-SVI Fall 2019	1211011	Wilson	BR
2019	17648937	PR	61926947	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-SC2Y	STN BREAKER BLOWDOWN 1of4 2019	1211011	Wilson	BR
2019	17646232	PR	61923630	NOCO ORAS	CR02	N-TS-WILSONTS	-BR-SC2Y	STN 'B' PWR EQ INSP-SVI Spr 2019	1211011	Wilson	BR
2019	18387110	PR	61926950	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-SC2Y	STN BREAKER BLOWDOWN 4of4 2019	1211011	Wilson	BR
2019	17646234	PR	61923630	NOCO ORAS	CR02	N-TS-WILSONTS	-BR-SC3J	STN 'B' PWR EQ INSP-SVI Spr 2019	1211024	Wilson	BR
2019	17648939	PR	61926947	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-SC3J	STN BREAKER BLOWDOWN 1of4 2019	1211024	Wilson	BR
2019	18055570	PR	61923631	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-SC3J	STN 'B' PWR EQ INSP-SVI Fall 2019	1211024	Wilson	BR
2019	18387111	PR	61926950	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-SC3J	STN BREAKER BLOWDOWN 4of4 2019	1211024	Wilson	BR
2019	18074023	PR	61926949	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-SC3J	STN BREAKER BLOWDOWN 3of4 2019	1211024	Wilson	BR

2019	17648941	PR	61926947	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-SC4Q	STN BREAKER BLOWDOWN 1of4 2019	1211036	Wilson	BR
2019	18387112	PR	61926950	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-SC4Q	STN BREAKER BLOWDOWN 4of4 2019	1211036	Wilson	BR
2019	16893938	PR	61925628	NOCO ORAS	CR02	N-TS-WILSONTS	-BR-SC4Q	BR-SF6-SP-M1	1211036	Wilson	BR
2019	17646121	PR	61923630	NOCO ORAS	CR02	N-TS-WILSONTS	-BR-SC4Q	STN 'B' PWR EQ INSP-SVI Spr 2019	1211036	Wilson	BR
2019	18074026	PR	61926949	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-SC4Q	STN BREAKER BLOWDOWN 3of4 2019	1211036	Wilson	BR
2019	18055571	PR	61923631	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-SC4Q	STN 'B' PWR EQ INSP-SVI Fall 2019	1211036	Wilson	BR
2019	18055572	PR	61923631	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-T2Y	STN 'B' PWR EQ INSP-SVI Fall 2019	1213509	Wilson	BR
2019	17646122	PR	61923630	NOCO ORAS	CR02	N-TS-WILSONTS	-BR-T2Y	STN 'B' PWR EQ INSP-SVI Spr 2019	1213509	Wilson	BR
2019	16913958	PR	61945665	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-T2Y	BR-OIL-KSO-LV- Strategy	1213509	Wilson	BR
2019	14920212	PR	61343309	ATCO NOCO ORAS	CR01	N-TS-WILSONTS	-BR-T2Y	BR-OIL-KSO-LV- BOA	1213509	Wilson	BR
2019	16380168	PR	61781627	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-T2Y	BR-OIL-KSO-LV- BOA Resample	1213509	Wilson	BR
2019	17646120	PR	61923630	NOCO ORAS	CR02	N-TS-WILSONTS	-BR-BY	STN 'B' PWR EQ INSP-SVI Spr 2019	1213529	Wilson	BR
2019	18055573	PR	61923631	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-BY	STN 'B' PWR EQ INSP-SVI Fall 2019	1213529	Wilson	BR
2019	14920154	PR	61343301	ATCO NOCO ORAS	CR02	N-TS-WILSONTS	-BR-BY	BR-OIL-KSO-LV- BOA	1213529	Wilson	BR
2019	18055575	PR	61923631	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M5	STN 'B' PWR EQ INSP-SVI Fall 2019	1213614	Wilson	BR
2019	14920159	PR	61343306	ATCO NOCO ORAS	CR02	N-TS-WILSONTS	-BR-M5	BR-OIL-KSO-LV- BOA	1213614	Wilson	BR
2019	17646123	PR	61923630	NOCO ORAS	CR02	N-TS-WILSONTS	-BR-M5	STN 'B' PWR EQ INSP-SVI Spr 2019	1213614	Wilson	BR
2019	15942793	PR	61612914	ATCO NOCO ORAS	CR02	N-TS-WILSONTS	-BR-M5	BR-OIL-KSO-LV- BOA(Resample)	1213614	Wilson	BR
2019	17646124	PR	61923630	NOCO ORAS	CR02	N-TS-WILSONTS	-BR-M1	STN 'B' PWR EQ INSP-SVI Spr 2019	1213628	Wilson	BR
2019	18055578	PR	61923631	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M1	STN 'B' PWR EQ INSP-SVI Fall 2019	1213628	Wilson	BR
2019	14920156	PR	61343303	ATCO NOCO ORAS	CR02	N-TS-WILSONTS	-BR-M1	BR-OIL-KSO-LV- BOA	1213628	Wilson	BR
2019	17646125	PR	61923630	NOCO ORAS	CR02	N-TS-WILSONTS	-BR-M3	STN 'B' PWR EQ INSP-SVI Spr 2019	1213636	Wilson	BR
2019	18055544	PR	61923631	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M3	STN 'B' PWR EQ INSP-SVI Fall 2019	1213636	Wilson	BR
2019	16893971	PR	61925631	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M3	BR-OIL-KSO-LV- BOA	1213636	Wilson	BR
2019	17646175	PR	61923630	NOCO ORAS	CR02	N-TS-WILSONTS	-BR-M6	STN 'B' PWR EQ INSP-SVI Spr 2019	1213645	Wilson	BR
2019	14920210	PR	61343307	ATCO NOCO ORAS	CR02	N-TS-WILSONTS	-BR-M6	BR-OIL-KSO-LV- BOA	1213645	Wilson	BR
2019	18055574	PR	61923631	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M6	STN 'B' PWR EQ INSP-SVI Fall 2019	1213645	Wilson	BR
2019	16158198	PR	61691312	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M4	BR-OIL-KSO-LV- Strategy	1213655	Wilson	BR
2019	18055584	PR	61923631	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M4	STN 'B' PWR EQ INSP-SVI Fall 2019	1213655	Wilson	BR
2019	14920158	PR	61343305	ATCO NOCO ORAS	CR02	N-TS-WILSONTS	-BR-M4	BR-OIL-KSO-LV- BOA	1213655	Wilson	BR
2019	17646252	PR	61923630	NOCO ORAS	CR02	N-TS-WILSONTS	-BR-M4	STN 'B' PWR EQ INSP-SVI Spr 2019	1213655	Wilson	BR
2019	15942794	PR	61612915	ATCO NOCO ORAS	CR02	N-TS-WILSONTS	-BR-M2	BR-OIL-KSO-LV- BOA(Resample)	1213666	Wilson	BR
2019	14920157	PR	61343304	ATCO NOCO ORAS	CR02	N-TS-WILSONTS	-BR-M2	BR-OIL-KSO-LV- BOA	1213666	Wilson	BR
2019	17646236	PR	61923630	NOCO ORAS	CR02	N-TS-WILSONTS	-BR-M2	STN 'B' PWR EQ INSP-SVI Spr 2019	1213666	Wilson	BR
2019	18055589	PR	61923631	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M2	STN 'B' PWR EQ INSP-SVI Fall 2019	1213666	Wilson	BR
2019	18055591	PR	61923631	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M8	STN 'B' PWR EQ INSP-SVI Fall 2019	1213676	Wilson	BR
2019	17646239	PR	61923630	NOCO ORAS	CR02	N-TS-WILSONTS	-BR-M8	STN 'B' PWR EQ INSP-SVI Spr 2019	1213676	Wilson	BR
2019	17646251	PR	61923630	NOCO ORAS	CR02	N-TS-WILSONTS	-BR-M14	STN 'B' PWR EQ INSP-SVI Spr 2019	1215063	Wilson	BR
2019	15889729	PR	61571240	ATCO NOCO ORAS	CR02	N-TS-WILSONTS	-BR-M14	BR-OIL-KSO-LV- BOA	1215063	Wilson	BR
2019	18055592	PR	61923631	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M14	STN 'B' PWR EQ INSP-SVI Fall 2019	1215063	Wilson	BR
2019	18055586	PR	61923631	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M15	STN 'B' PWR EQ INSP-SVI Fall 2019	1215072	Wilson	BR
2019	17646235	PR	61923630	NOCO ORAS	CR02	N-TS-WILSONTS	-BR-M15	STN 'B' PWR EQ INSP-SVI Spr 2019	1215072	Wilson	BR
2019	16938715	PR	61959335	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-T2Y	AR21060 NA54 LV Bush 1 PCB Replace EMD	1359443	Wilson	BR
2019	16938716	PR	61959336	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-T2Y	AR21060 NA54 LV Bush 2 PCB Replace EMD	1360936	Wilson	BR
2019	16938717	PR	61959337	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-T2Y	AR21060 NA54 LV Bush 4 PCB Replace EMD	1363922	Wilson	BR
2019	16938718	PR	61959338	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-T2Y	AR21060 NA54 LV Bush 6 PCB Replace EMD	1366908	Wilson	BR
2019	17237858	SW	62132122	NOCO ORAS		N-TS-WILSONTS	-BR-M1	19-10040/Wilson TS/M1 isolated for SG		Wilson	BR
2019	17237892	SW	62132121	NOCO ORAS		N-TS-WILSONTS	-BR-M1	19-10040/Wilson TS/M1 isolated for SG		Wilson	BR
2019	17370624	SW	62158871	NOCO ORAS		N-TS-WILSONTS	-BR-M14	19-12536/Wilson M14 prepare for service		Wilson	BR

2019	17370586	SW	62158872	NOCO ORAS		N-TS-WILSONTS	-BR-M14	19-12536/Wilson TS M14 isolated for SG		Wilson	BR
2019	17319440	SW	62155712	NOCO ORAS		N-TS-WILSONTS	-BR-M8	19-12639/Wilson TS/M8 feeder		Wilson	BR
2019	17589537	TC	62200785	NOCO ORAS		N-TS-WILSONTS	-BR-M7	S3/ P&C/ WILSON TS/ RE: M7 TEMP. SETTING		Wilson	BR
2019	17328032	TC	62153042	NOCO ORAS		N-TS-WILSONTS	-BR-SC4Q	S3 PD EMD SC4Q SC4 TRIP	1211036	Wilson	BR
2019	17270094	TC		NOCO		N-TS-WILSONTS	-BR-M1	S3 IMD EMD RE: SW ON M1 FOR AROUND NOON	1213628	Wilson	BR
2019	17271709	TC	62134951	NOCO ORAS		N-TS-WILSONTS	-BR-M1	S3 IMD P&C RE: RESTORE TRANSFER TRIP ON	1213628	Wilson	BR
2019	17013619	DR	62061419	NOCO ORAS	0100	N-TS-WILSONTS	-TF-T1	DC Ground Wilson T1 HADS		Wilson	TF
2019	17214362	DR	62117514	NOCO ORAS	9800	N-TS-WILSONTS	-TF-T3	Wilson T3 Add oil to conservator	1173245	Wilson	TF
2019	14956250	DR	61354561	NOCO ORAS	9900	N-TS-WILSONTS	-TF-T3	Wilson TS T3 - Fan 6 motor control	1173245	Wilson	TF
2019	16132387	DR	61669601	ATCO NOCO ORAS	9900	N-TS-WILSONTS	-TF-T2	WILSON T2 RUSH OIL SAMPLE	1175751	Wilson	TF
2019	17237895	DR	62133794	NOCO ORAS	3300	N-TS-WILSONTS	-TF-T2	Investigate noise/vibration	1175751	Wilson	TF
2019	17996783	DR	62118706	NOCO ORAS		N-TS-WILSONTS	-TF-T2	EX - WILSON T2 H.V PCB retro @ cms 19	1175751	Wilson	TF
2019	17835068	DR	62303760	NOCO ORAS	9900	N-TS-WILSONTS	-TF-T1	Fans need guards fabricated/installed	1183712	Wilson	TF
2019	17131783	DR	62107746	NOCO ORAS	9900	N-TS-WILSONTS	-TF-T1	Wilson T1 HADS	1183712	Wilson	TF
2019	17513660	DR	62189471	NOCO ORAS	9900	N-TS-WILSONTS	-TF-T1	Wilson TS T1 fans to manual	1183712	Wilson	TF
2019	17513663	DR	62189465	NOCO ORAS	9900	N-TS-WILSONTS	-TF-T4	Wilson TS T4 place fans in manual	1188773	Wilson	TF
2019	17487358	DR	62209586	NOCO ORAS	0100	N-TS-WILSONTS	-TF-T1	Fluidix filter change T1	1223907	Wilson	TF
2019	17841830	DR	62306103	NOCO ORAS	1710	N-TS-WILSONTS	-TF-T1	Wilson T1 - ULTC Sample Line Install	1223907	Wilson	TF
2019	17645962	PR	61923630	NOCO ORAS	CR01	N-TS-WILSONTS	-TF-SS2	STN 'B' PWR EQ INSP-SVI Spr 2019	1173234	Wilson	TF
2019	18055514	PR	61923631	NOCO ORAS	CR01	N-TS-WILSONTS	-TF-SS2	STN 'B' PWR EQ INSP-SVI Fall 2019	1173234	Wilson	TF
2019	18055515	PR	61923631	NOCO ORAS	CR01	N-TS-WILSONTS	-TF-T3	STN 'B' PWR EQ INSP-SVI Fall 2019	1173245	Wilson	TF
2019	17210578	PR	62115705	ATCO NOCO ORAS	CR03	N-TS-WILSONTS	-TF-T3	TF-GENERAL-(SPECIAL)DGA-MAIN TANK	1173245	Wilson	TF
2019	15889739	PR	61571250	NOCO ORAS	CR03	N-TS-WILSONTS	-TF-T3	TF-GENERAL-GOT	1173245	Wilson	TF
2019	16893939	PR	61925629	NOCO ORAS	CR03	N-TS-WILSONTS	-TF-T3	TF-GENERAL-GOT	1173245	Wilson	TF
2019	17645963	PR	61923630	NOCO ORAS	CR01	N-TS-WILSONTS	-TF-T3	STN 'B' PWR EQ INSP-SVI Spr 2019	1173245	Wilson	TF
2019	17726952	PR	62237448	NOCO ORAS	CR01	N-TS-WILSONTS	-TF-T3	TF-GENERAL-D1	1173245	Wilson	TF
2019	15889735	PR	61571246	NOCO ORAS	CR01	N-TS-WILSONTS	-TF-T3	TF-GENERAL-D1	1173245	Wilson	TF
2019	17408782	PR	62161694	NOCO ORAS	CR02	N-TS-WILSONTS	-TF-T3	TF-GENERAL-(SPECIAL)DGA-MAIN TANK	1173245	Wilson	TF
2019	14920152	PR	61343179	ATCO NOCO ORAS	CR01	N-TS-WILSONTS	-TF-T3	TF-GENERAL-GOT	1173245	Wilson	TF
2019	17645966	PR	61923630	NOCO ORAS	CR01	N-TS-WILSONTS	-TF-T2	STN 'B' PWR EQ INSP-SVI Spr 2019	1175751	Wilson	TF
2019	16893977	PR	61925637	NOCO ORAS	CR01	N-TS-WILSONTS	-TF-T2	TF-GENERAL-D1	1175751	Wilson	TF
2019	16893979	PR	61925639	NOCO ORAS	CR01	N-TS-WILSONTS	-TF-T2	TF-GENERAL-DBT	1175751	Wilson	TF
2019	15889760	PR	61571271	ATCO NOCO ORAS	CR03	N-TS-WILSONTS	-TF-T2	TF-GENERAL-GOT	1175751	Wilson	TF
2019	18055517	PR	61923631	NOCO ORAS	CR01	N-TS-WILSONTS	-TF-T2	STN 'B' PWR EQ INSP-SVI Fall 2019	1175751	Wilson	TF
2019	17210577	PR	62115703	NOCO ORAS	CR01	N-TS-WILSONTS	-TF-T2	TF-GENERAL-(SEPCIAL)DGA-MAIN TANK	1175751	Wilson	TF
2019	16893978	PR	61925638	NOCO ORAS	CR02	N-TS-WILSONTS	-TF-T2	TF-GENERAL-GOT	1175751	Wilson	TF
2019	18055530	PR	61923631	NOCO ORAS	CR01	N-TS-WILSONTS	-TF-SS1	STN 'B' PWR EQ INSP-SVI Fall 2019	1183701	Wilson	TF
2019	17646014	PR	61923630	NOCO ORAS	CR01	N-TS-WILSONTS	-TF-SS1	STN 'B' PWR EQ INSP-SVI Spr 2019	1183701	Wilson	TF
2019	17210576	PR	62115702	ATCO NOCO ORAS	CR03	N-TS-WILSONTS	-TF-T1	TF-GENERAL-(SEPCIAL)DGA-MAIN TANK	1183712	Wilson	TF
2019	18055531	PR	61923631	NOCO ORAS	CR01	N-TS-WILSONTS	-TF-T1	STN 'B' PWR EQ INSP-SVI Fall 2019	1183712	Wilson	TF
2019	15889756	PR	61571267	NOCO ORAS	CR03	N-TS-WILSONTS	-TF-T1	TF-GENERAL-GOT	1183712	Wilson	TF
2019	16893975	PR	61925635	NOCO ORAS	CR03	N-TS-WILSONTS	-TF-T1	TF-GENERAL-D1	1183712	Wilson	TF
2019	16893976	PR	61925636	NOCO ORAS	CR03	N-TS-WILSONTS	-TF-T1	TF-GENERAL-GOT	1183712	Wilson	TF
2019	17678672	PR	62222182	NOCO ORAS	CR01	N-TS-WILSONTS	-TF-T1	PREOUTAGE INSPECTION- CAT 1 - G&S	1183712	Wilson	TF
2019	17408783	PR	62161696	NOCO ORAS	CR02	N-TS-WILSONTS	-TF-T1	TF-GENERAL-(SPECIAL)DGA-MAIN TANK	1183712	Wilson	TF
2019	17678670	PR	62222181	NOCO ORAS	CR01	N-TS-WILSONTS	-TF-T1	PREOUTAGE INSPECTION- CAT 1 - ELEC	1183712	Wilson	TF
2019	17646015	PR	61923630	NOCO ORAS	CR01	N-TS-WILSONTS	-TF-T1	STN 'B' PWR EQ INSP-SVI Spr 2019	1183712	Wilson	TF
2019	17646016	PR	61923630	NOCO ORAS	CR01	N-TS-WILSONTS	-TF-T4	STN 'B' PWR EQ INSP-SVI Spr 2019	1188773	Wilson	TF
2019	14920153	PR	61343300	ATCO NOCO ORAS	CR01	N-TS-WILSONTS	-TF-T4	TF-GENERAL-GOT	1188773	Wilson	TF

2019	18055532	PR	61923631	NOCO ORAS	CR01	N-TS-WILSONTS	-TF-T4	STN 'B' PWR EQ INSP-SVI Fall 2019	1188773	Wilson	TF
2019	16893970	PR	61925630	NOCO ORAS	CR03	N-TS-WILSONTS	-TF-T4	TF-GENERAL-GOT	1188773	Wilson	TF
2019	17646106	PR	61923630	NOCO ORAS	CR02	N-TS-WILSONTS	-TF-T1	STN 'B' PWR EQ INSP-SVI Spr 2019	1223907	Wilson	TF
2019	16893111	PR	61924781	NOCO ORAS	CR01	N-TS-WILSONTS	-TF-T1	UT-MR-FIII-SI	1223907	Wilson	TF
2019	17210579	PR	62115707	ATCO NOCO ORAS	CR02	N-TS-WILSONTS	-TF-T1	UT-MR-FIII-(SPECIAL)DGA-ULTC	1223907	Wilson	TF
2019	15890118	PR	61571629	NOCO ORAS	CR03	N-TS-WILSONTS	-TF-T1	UT-MR-FIII-UTOA	1223907	Wilson	TF
2019	18055593	PR	61923631	NOCO ORAS	CR01	N-TS-WILSONTS	-TF-T1	STN 'B' PWR EQ INSP-SVI Fall 2019	1223907	Wilson	TF
2019	16894254	PR	61925924	NOCO ORAS	CR03	N-TS-WILSONTS	-TF-T1	UT-MR-FIII-UTOA	1223907	Wilson	TF
2019	15890122	PR	61571633	NOCO ORAS	CR02	N-TS-WILSONTS	-TF-T2	UT-MR-DIII-UTOA	1223909	Wilson	TF
2019	18055545	PR	61923631	NOCO ORAS	CR01	N-TS-WILSONTS	-TF-T2	STN 'B' PWR EQ INSP-SVI Fall 2019	1223909	Wilson	TF
2019	16894255	PR	61925925	NOCO ORAS	CR02	N-TS-WILSONTS	-TF-T2	UT-MR-DIII-UTOA	1223909	Wilson	TF
2019	17646107	PR	61923630	NOCO ORAS	CR02	N-TS-WILSONTS	-TF-T2	STN 'B' PWR EQ INSP-SVI Spr 2019	1223909	Wilson	TF
2019	18055546	PR	61923631	NOCO ORAS	CR01	N-TS-WILSONTS	-TF-T3	STN 'B' PWR EQ INSP-SVI Fall 2019	1223911	Wilson	TF
2019	16894194	PR	61925864	NOCO ORAS	CR02	N-TS-WILSONTS	-TF-T3	UT-ABB-UCBRN/GRN/LRN-UTOA	1223911	Wilson	TF
2019	15890033	PR	61571544	NOCO ORAS	CR02	N-TS-WILSONTS	-TF-T3	UT-ABB-UCBRN/GRN/LRN-UTOA	1223911	Wilson	TF
2019	17646108	PR	61923630	NOCO ORAS	CR02	N-TS-WILSONTS	-TF-T3	STN 'B' PWR EQ INSP-SVI Spr 2019	1223911	Wilson	TF
2019	16894195	PR	61925865	NOCO ORAS	CR02	N-TS-WILSONTS	-TF-T4	UT-ABB-UCBRN/GRN/LRN-UTOA	1223913	Wilson	TF
2019	18055547	PR	61923631	NOCO ORAS	CR01	N-TS-WILSONTS	-TF-T4	STN 'B' PWR EQ INSP-SVI Fall 2019	1223913	Wilson	TF
2019	17646253	PR	61923630	NOCO ORAS	CR02	N-TS-WILSONTS	-TF-T4	STN 'B' PWR EQ INSP-SVI Spr 2019	1223913	Wilson	TF
2019	17852686	TC	62311720	NOCO ORAS		N-TS-WILSONTS	-TF	S3 IMM EMD WILSON TS SWITCHING RE BROKEN		Wilson	TF
2019	17851404	TC	62311655	NOCO ORAS		N-TS-WILSONTS	-TF-T3	S3 T3 OIL TEMP ALARM		Wilson	TF
2019	17214150	TC	62118461	NOCO ORAS		N-TS-WILSONTS	-TF-T3	S3 EMD IMM RE: T3 OIL LEVEL ALARM		Wilson	TF
2019	17852608	TC	62311657	NOCO ORAS		N-TS-WILSONTS	-TF-T4	SEC3-EMD-T4 OIL TEMP ALARM		Wilson	TF
2019	17485939	TC	62178069	NOCO ORAS		N-TS-WILSONTS	-TF-T2	S3-EMD-T2-TAPCHANGER FILTER TROUBLE	1175751	Wilson	TF
2019	17486757	TC		NOCO		N-TS-WILSONTS	-TF-T1	S3 - EMD WILSON TS DC GROUND ON T1	1183712	Wilson	TF
2020	19514862	DR	62823304	NOCO ORAS	0100	N-TS-CHARLESTS	-BR-T2A7A8	Faulty Capacitor Light Indication	1094324	Charles	BR
2020	18364211	DR	62468750	NOCO ORAS	1614	N-TS-CHARLESTS	-BR-T1A5A6	Repair breaker racking mechanism	1098469	Charles	BR
2020	19482283	PR	62283319	NOCO ORAS	CR01	N-TS-CHARLESTS	-BR-T1A7A8	STN 'A' PWR EQ INSP-SVI Fall 2020	1094301	Charles	BR
2020	18942462	PR	62283318	NOCO ORAS	CR02	N-TS-CHARLESTS	-BR-T1A7A8	STN 'A' PWR EQ INSP-SVI Spr 2020	1094301	Charles	BR
2020	18845819	PR	61908457	NOCO ORAS	CR02	N-TS-CHARLESTS	-BR-T1A7A8	STN 'A' PWR EQ INSP-SVI Fall 2019	1094301	Charles	BR
2020	18845838	PR	61908457	NOCO ORAS	CR02	N-TS-CHARLESTS	-BR-T2A7A8	STN 'A' PWR EQ INSP-SVI Fall 2019	1094324	Charles	BR
2020	18942463	PR	62283318	NOCO ORAS	CR02	N-TS-CHARLESTS	-BR-T2A7A8	STN 'A' PWR EQ INSP-SVI Spr 2020	1094324	Charles	BR
2020	19482284	PR	62283319	NOCO ORAS	CR01	N-TS-CHARLESTS	-BR-T2A7A8	STN 'A' PWR EQ INSP-SVI Fall 2020	1094324	Charles	BR
2020	18942466	PR	62283318	NOCO ORAS	CR02	N-TS-CHARLESTS	-BR-T1A5A6	STN 'A' PWR EQ INSP-SVI Spr 2020	1098469	Charles	BR
2020	18845839	PR	61908457	NOCO ORAS	CR02	N-TS-CHARLESTS	-BR-T1A5A6	STN 'A' PWR EQ INSP-SVI Fall 2019	1098469	Charles	BR
2020	19482285	PR	62283319	NOCO ORAS	CR01	N-TS-CHARLESTS	-BR-T1A5A6	STN 'A' PWR EQ INSP-SVI Fall 2020	1098469	Charles	BR
2020	18942467	PR	62283318	NOCO ORAS	CR02	N-TS-CHARLESTS	-BR-T3A1A2	STN 'A' PWR EQ INSP-SVI Spr 2020	1114751	Charles	BR
2020	18845852	PR	61908457	NOCO ORAS	CR02	N-TS-CHARLESTS	-BR-T3A1A2	STN 'A' PWR EQ INSP-SVI Fall 2019	1114751	Charles	BR
2020	19482286	PR	62283319	NOCO ORAS	CR01	N-TS-CHARLESTS	-BR-T3A1A2	STN 'A' PWR EQ INSP-SVI Fall 2020	1114751	Charles	BR
2020	18846105	PR	61908457	NOCO ORAS	CR02	N-TS-CHARLESTS	-BR-T3A3A4	STN 'A' PWR EQ INSP-SVI Fall 2019	1207364	Charles	BR
2020	18942450	PR	62283318	NOCO ORAS	CR02	N-TS-CHARLESTS	-BR-T3A3A4	STN 'A' PWR EQ INSP-SVI Spr 2020	1207364	Charles	BR
2020	19482312	PR	62283319	NOCO ORAS	CR01	N-TS-CHARLESTS	-BR-T3A3A4	STN 'A' PWR EQ INSP-SVI Fall 2020	1207364	Charles	BR
2020	19482313	PR	62283319	NOCO ORAS	CR01	N-TS-CHARLESTS	-BR-T4A3A4	STN 'A' PWR EQ INSP-SVI Fall 2020	1207379	Charles	BR
2020	18846133	PR	61908457	NOCO ORAS	CR02	N-TS-CHARLESTS	-BR-T4A3A4	STN 'A' PWR EQ INSP-SVI Fall 2019	1207379	Charles	BR
2020	18942460	PR	62283318	NOCO ORAS	CR02	N-TS-CHARLESTS	-BR-T4A3A4	STN 'A' PWR EQ INSP-SVI Spr 2020	1207379	Charles	BR
2020	18846135	PR	61908457	NOCO ORAS	CR02	N-TS-CHARLESTS	-BR-T4A1A2	STN 'A' PWR EQ INSP-SVI Fall 2019	1213796	Charles	BR
2020	19482314	PR	62283319	NOCO ORAS	CR01	N-TS-CHARLESTS	-BR-T4A1A2	STN 'A' PWR EQ INSP-SVI Fall 2020	1213796	Charles	BR
2020	18942452	PR	62283318	NOCO ORAS	CR02	N-TS-CHARLESTS	-BR-T4A1A2	STN 'A' PWR EQ INSP-SVI Spr 2020	1213796	Charles	BR
2020	19482315	PR	62283319	NOCO ORAS	CR01	N-TS-CHARLESTS	-BR-T2A5A6	STN 'A' PWR EQ INSP-SVI Fall 2020	1216275	Charles	BR

2020	18846136	PR	61908457	NOCO ORAS	CR02	N-TS-CHARLESTS -BR-T2A5A6	STN 'A' PWR EQ INSP-SVI Fall 2019	1216275	Charles	BR
2020	18942453	PR	62283318	NOCO ORAS	CR02	N-TS-CHARLESTS -BR-T2A5A6	STN 'A' PWR EQ INSP-SVI Spr 2020	1216275	Charles	BR
2020	19536803	TC	62823949	NOCO ORAS		N-TS-CHARLESTS -BR-T2A7A8	S3 PD EMD T2A7A8 BREAKER CONTROL FAIL AL		Charles	BR
2020	18779873	DR		NOCO	1710	N-TS-CHARLESTS -TF-T3	Charles T3/T4 out of step	1178289	Charles	TF
2020	18668719	DR	62547797	NOCO ORAS	9900	N-TS-CHARLESTS -TF-T3	Investigate Differential	1178289	Charles	TF
2020	16967214	DR	61994076	NOCO ORAS	0100	N-TS-CHARLESTS -TF-T3	Replace temperature gauge	1178289	Charles	TF
2020	16513493	DR	61830208	NOCO ORAS	9900	N-TS-CHARLESTS -TF-T3	Charles T3 oil leak on rad piping	1178289	Charles	TF
2020	18500259	DR		NOCO		N-TS-CHARLESTS -TF-T1	Charles T1 - Tapchanger sample valves	1183475	Charles	TF
2020	18335510	DR	62461634	NOCO ORAS	9900	N-TS-CHARLESTS -TF-T1	CHARLESTS T1 paint valves CMS 2019	1183475	Charles	TF
2020	18429371	DR	62502260	NOCO ORAS	0700	N-TS-CHARLESTS -TF-T1	Charles T1 Tapchanger low oil	1183475	Charles	TF
2020	18456069	DR	62507898	NOCO ORAS	3600	N-TS-CHARLESTS -TF-T1	Charles T1 tapchager buring	1183475	Charles	TF
2020	18497459	DR	62517783	NOCO ORAS	9900	N-TS-CHARLESTS -TF-T1	CHARLESTS T1 confined space @ site 20	1183475	Charles	TF
2020	18420946	DR	62499733	NOCO ORAS	0100	N-TS-CHARLESTS -TF-T3	Charles TS T3 tapchanger B out of step	1222384	Charles	TF
2020	18746521	PN	62550791	NOCO ORAS		N-TS-CHARLESTS -TF	AR18443 NT45 Trans Fan Control EMD		Charles	TF
2020	18746476	PN	62550685	NOCO ORAS		N-TS-CHARLESTS -TF	AR18443 NT45 Trans Fan Control EMD		Charles	TF
2020	18428783	PR	62501662	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T3	Main TS - T4/Oil Samples req'd SITE		Charles	TF
2020	18205716	PR	62420936	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T3	Tx PCB Reduction Oil Sample		Charles	TF
2020	18845853	PR	61908457	NOCO ORAS	CR02	N-TS-CHARLESTS -TF-T3	STN 'A' PWR EQ INSP-SVI Fall 2019	1178289	Charles	TF
2020	18412242	PR	62493310	NOCO ORAS	CR02	N-TS-CHARLESTS -TF-T3	PREOUTAGE INSPECTION- CAT 2 - ELEC	1178289	Charles	TF
2020	19127613	PR	62632238	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T3	PREOUTAGE INSPECTION- CAT 2 - ELEC	1178289	Charles	TF
2020	18920457	PR	62585655	NOCO ORAS	CR02	N-TS-CHARLESTS -TF-T3	PREOUTAGE INSPECTION- CAT 1 - ELEC	1178289	Charles	TF
2020	18942428	PR	62283318	NOCO ORAS	CR02	N-TS-CHARLESTS -TF-T3	STN 'A' PWR EQ INSP-SVI Spr 2020	1178289	Charles	TF
2020	18414245	PR	62493310	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T3	PREOUTAGE INSPECTION- CAT 2 - ELEC	1178289	Charles	TF
2020	17802549	PR	62283449	NOCO ORAS	CR02	N-TS-CHARLESTS -TF-T3	TF-GENERAL-(SPECIAL)GOT	1178289	Charles	TF
2020	19482136	PR	62283319	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T3	STN 'A' PWR EQ INSP-SVI Fall 2020	1178289	Charles	TF
2020	18845974	PR	61908457	NOCO ORAS	CR02	N-TS-CHARLESTS -TF-T4	STN 'A' PWR EQ INSP-SVI Fall 2019	1183465	Charles	TF
2020	17802601	PR	62283451	NOCO ORAS	CR02	N-TS-CHARLESTS -TF-T4	TF-GENERAL-GOT	1183465	Charles	TF
2020	18942429	PR	62283318	NOCO ORAS	CR02	N-TS-CHARLESTS -TF-T4	STN 'A' PWR EQ INSP-SVI Spr 2020	1183465	Charles	TF
2020	17802600	PR	62283450	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T4	TF-GENERAL-D1	1183465	Charles	TF
2020	19383839	PR	62775614	NOCO ORAS	CR02	N-TS-CHARLESTS -TF-T4	PREOUTAGE INSPECTION- CAT 1 - ELEC	1183465	Charles	TF
2020	18412243	PR	62493348	NOCO ORAS	CR02	N-TS-CHARLESTS -TF-T4	PREOUTAGE INSPECTION- CAT 2 - ELEC	1183465	Charles	TF
2020	18414281	PR	62493348	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T4	PREOUTAGE INSPECTION- CAT 2 - ELEC	1183465	Charles	TF
2020	19482137	PR	62283319	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T4	STN 'A' PWR EQ INSP-SVI Fall 2020	1183465	Charles	TF
2020	18942433	PR	62283318	NOCO ORAS	CR02	N-TS-CHARLESTS -TF-T1	STN 'A' PWR EQ INSP-SVI Spr 2020	1183475	Charles	TF
2020	19218738	PR	62701209	NOCO ORAS	CR02	N-TS-CHARLESTS -TF-T1	PREOUTAGE INSPECTION- CAT 1 - ELEC	1183475	Charles	TF
2020	17802545	PR	62283445	NOCO ORAS	CR02	N-TS-CHARLESTS -TF-T1	TF-GENERAL-GOT	1183475	Charles	TF
2020	18631482	PR	62542221	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T1	TF-GENERAL-(SPECIAL)RUSH-DGA-7 DAYS	1183475	Charles	TF
2020	18631481	PR	62542220	NOCO ORAS	CR02	N-TS-CHARLESTS -TF-T1	TF-GENERAL-(SPECIAL)RUSH-DGA-72 HRS	1183475	Charles	TF
2020	19482138	PR	62283319	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T1	STN 'A' PWR EQ INSP-SVI Fall 2020	1183475	Charles	TF
2020	18845975	PR	61908457	NOCO ORAS	CR02	N-TS-CHARLESTS -TF-T1	STN 'A' PWR EQ INSP-SVI Fall 2019	1183475	Charles	TF
2020	18631480	PR	62542119	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T1	TF-GENERAL-(SPECIAL)RUSH-DGA-24HRS	1183475	Charles	TF
2020	19452106	PR	62801975	NOCO ORAS	CR02	N-TS-CHARLESTS -TF-T1	PREOUTAGE INSPECTION- CAT 1 - ELEC	1183475	Charles	TF
2020	18631483	PR	62542223	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T1	TF-GENERAL-(SPECIAL)RUSH-DGA-1 MONTH	1183475	Charles	TF
2020	18845976	PR	61908457	NOCO ORAS	CR02	N-TS-CHARLESTS -TF-T2	STN 'A' PWR EQ INSP-SVI Fall 2019	1191105	Charles	TF
2020	19127596	PR	62632237	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T2	PREOUTAGE INSPECTION- CAT 2 - ELEC	1191105	Charles	TF
2020	19482139	PR	62283319	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T2	STN 'A' PWR EQ INSP-SVI Fall 2020	1191105	Charles	TF
2020	18357221	PR	62466249	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T2	PREOUTAGE INSPECTION- CAT 1 - G&S	1191105	Charles	TF
2020	18357145	PR	62466243	NOCO ORAS	CR02	N-TS-CHARLESTS -TF-T2	PREOUTAGE INSPECTION- CAT 2 - ELEC	1191105	Charles	TF
2020	17802547	PR	62283447	NOCO ORAS	CR02	N-TS-CHARLESTS -TF-T2	TF-GENERAL-GOT	1191105	Charles	TF

2020	18920456	PR	62585654	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T2	PREOUTAGE INSPECTION- CAT 1 - ELEC	1191105	Charles	TF
2020	18942434	PR	62283318	NOCO ORAS	CR02	N-TS-CHARLESTS -TF-T2	STN 'A' PWR EQ INSP-SVI Spr 2020	1191105	Charles	TF
2020	19482316	PR	62283319	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T1	STN 'A' PWR EQ INSP-SVI Fall 2020	1222374	Charles	TF
2020	17803459	PR	62284279	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T1	UT-CWC/MR/UVT-UTOA	1222374	Charles	TF
2020	18364142	PR	62468657	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T1	UT-CWC/MR/UVT-(SPECIAL)MCT-X	1222374	Charles	TF
2020	17803490	PR	62284400	NOCO ORAS	CR02	N-TS-CHARLESTS -TF-T1	UT-CWC/MR/UVT-UTOA	1222374	Charles	TF
2020	18942458	PR	62283318	NOCO ORAS	CR02	N-TS-CHARLESTS -TF-T1	STN 'A' PWR EQ INSP-SVI Spr 2020	1222374	Charles	TF
2020	18846151	PR	61908457	NOCO ORAS	CR02	N-TS-CHARLESTS -TF-T1	STN 'A' PWR EQ INSP-SVI Fall 2019	1222374	Charles	TF
2020	17803495	PR	62284405	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T1	UT-CWC/MR/UVT-UTOA	1222376	Charles	TF
2020	18942459	PR	62283318	NOCO ORAS	CR02	N-TS-CHARLESTS -TF-T1	STN 'A' PWR EQ INSP-SVI Spr 2020	1222376	Charles	TF
2020	18845836	PR	61908457	NOCO ORAS	CR02	N-TS-CHARLESTS -TF-T1	STN 'A' PWR EQ INSP-SVI Fall 2019	1222376	Charles	TF
2020	19482317	PR	62283319	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T1	STN 'A' PWR EQ INSP-SVI Fall 2020	1222376	Charles	TF
2020	17803494	PR	62284404	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T1	UT-CWC/MR/UVT-UTOA	1222376	Charles	TF
2020	18364143	PR	62468659	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T1	UT-CWC/MR/UVT-(SPECIAL)MCT-Y	1222376	Charles	TF
2020	19269623	PR	62732420	NOCO ORAS	CR02	N-TS-CHARLESTS -TF-T1	UT-CWC/MR/UVT-(SPECIAL)MCT-Y	1222376	Charles	TF
2020	18845837	PR	61908457	NOCO ORAS	CR02	N-TS-CHARLESTS -TF-T2	STN 'A' PWR EQ INSP-SVI Fall 2019	1222378	Charles	TF
2020	18942461	PR	62283318	NOCO ORAS	CR02	N-TS-CHARLESTS -TF-T2	STN 'A' PWR EQ INSP-SVI Spr 2020	1222378	Charles	TF
2020	17803497	PR	62284407	NOCO ORAS	CR03	N-TS-CHARLESTS -TF-T2	UT-CWC/MR/UVT-(SPECIAL)UTOA 2/2 2020	1222378	Charles	TF
2020	19142275	PR	62637906	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T2	UT-CWC/MR/UVT-(SPECIAL)RUSH-MCT-X	1222378	Charles	TF
2020	19127711	PR	62632237	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T2	PREOUTAGE INSPECTION- CAT 2 - ELEC	1222378	Charles	TF
2020	19482318	PR	62283319	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T2	STN 'A' PWR EQ INSP-SVI Fall 2020	1222378	Charles	TF
2020	17803496	PR	62284406	NOCO ORAS	CR02	N-TS-CHARLESTS -TF-T2	UT-CWC/MR/UVT-UTOA	1222378	Charles	TF
2020	19365709	PR	62767313	NOCO ORAS	CR02	N-TS-CHARLESTS -TF-T2	UT-CWC/MR/UVT-(SPECIAL)MCT-X	1222378	Charles	TF
2020	19366060	PR	62767314	NOCO ORAS	CR02	N-TS-CHARLESTS -TF-T2	UT-CWC/MR/UVT-(SPECIAL)DGA-Y	1222380	Charles	TF
2020	18942464	PR	62283318	NOCO ORAS	CR02	N-TS-CHARLESTS -TF-T2	STN 'A' PWR EQ INSP-SVI Spr 2020	1222380	Charles	TF
2020	17803498	PR	62284408	NOCO ORAS	CR02	N-TS-CHARLESTS -TF-T2	UT-CWC/MR/UVT-UTOA	1222380	Charles	TF
2020	17803499	PR	62284409	NOCO ORAS	CR03	N-TS-CHARLESTS -TF-T2	UT-CWC/MR/UVT-UTOA	1222380	Charles	TF
2020	19482319	PR	62283319	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T2	STN 'A' PWR EQ INSP-SVI Fall 2020	1222380	Charles	TF
2020	18845850	PR	61908457	NOCO ORAS	CR02	N-TS-CHARLESTS -TF-T2	STN 'A' PWR EQ INSP-SVI Fall 2019	1222380	Charles	TF
2020	19127712	PR	62632237	NOCO ORAS	CR02	N-TS-CHARLESTS -TF-T2	PREOUTAGE INSPECTION- CAT 2 - ELEC	1222380	Charles	TF
2020	19142276	PR	62637908	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T2	UT-CWC/MR/UVT-(SPECIAL)RUSH-MCT-Y	1222380	Charles	TF
2020	19482340	PR	62283319	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T3	STN 'A' PWR EQ INSP-SVI Fall 2020	1222382	Charles	TF
2020	18942465	PR	62283318	NOCO ORAS	CR02	N-TS-CHARLESTS -TF-T3	STN 'A' PWR EQ INSP-SVI Spr 2020	1222382	Charles	TF
2020	17811719	PR	62292621	NOCO ORAS	CR02	N-TS-CHARLESTS -TF-T3	UT-MR-DIII-UTOA	1222382	Charles	TF
2020	19127701	PR	62632238	NOCO ORAS	CR03	N-TS-CHARLESTS -TF-T3	PREOUTAGE INSPECTION- CAT 2 - ELEC	1222382	Charles	TF
2020	18845851	PR	61908457	NOCO ORAS	CR02	N-TS-CHARLESTS -TF-T3	STN 'A' PWR EQ INSP-SVI Fall 2019	1222382	Charles	TF
2020	19144080	PR	62639264	NOCO ORAS	CR02	N-TS-CHARLESTS -TF-T3	UT-MR-DIII-(SPECIAL)MCT-X	1222382	Charles	TF
2020	19127702	PR	62632238	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T3	PREOUTAGE INSPECTION- CAT 2 - ELEC	1222384	Charles	TF
2020	18942469	PR	62283318	NOCO ORAS	CR02	N-TS-CHARLESTS -TF-T3	STN 'A' PWR EQ INSP-SVI Spr 2020	1222384	Charles	TF
2020	19144069	PR	62639263	NOCO ORAS	CR03	N-TS-CHARLESTS -TF-T3	UT-MR-DIII-(SPECIAL)MCT-Y	1222384	Charles	TF
2020	17811760	PR	62292622	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T3	UT-MR-DIII-UTOA	1222384	Charles	TF
2020	19482280	PR	62283319	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T3	STN 'A' PWR EQ INSP-SVI Fall 2020	1222384	Charles	TF
2020	18845855	PR	61908457	NOCO ORAS	CR02	N-TS-CHARLESTS -TF-T3	STN 'A' PWR EQ INSP-SVI Fall 2019	1222384	Charles	TF
2020	19482281	PR	62283319	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T4	STN 'A' PWR EQ INSP-SVI Fall 2020	1222387	Charles	TF
2020	18845895	PR	61908457	NOCO ORAS	CR02	N-TS-CHARLESTS -TF-T4	STN 'A' PWR EQ INSP-SVI Fall 2019	1222387	Charles	TF
2020	18942470	PR	62283318	NOCO ORAS	CR02	N-TS-CHARLESTS -TF-T4	STN 'A' PWR EQ INSP-SVI Spr 2020	1222387	Charles	TF
2020	17811508	PR	62292370	NOCO ORAS	CR02	N-TS-CHARLESTS -TF-T4	UT-MR-DIII-UTOA	1222387	Charles	TF
2020	18845896	PR	61908457	NOCO ORAS	CR02	N-TS-CHARLESTS -TF-T4	STN 'A' PWR EQ INSP-SVI Fall 2019	1222389	Charles	TF
2020	18942474	PR	62283318	NOCO ORAS	CR02	N-TS-CHARLESTS -TF-T4	STN 'A' PWR EQ INSP-SVI Spr 2020	1222389	Charles	TF

2020	19482282	PR	62283319	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T4	STN 'A' PWR EQ INSP-SVI Fall 2020	1222389	Charles	TF
2020	17811509	PR	62292371	NOCO ORAS	CR02	N-TS-CHARLESTS -TF-T4	UT-MR-DIII-UTOA	1222389	Charles	TF
2020	18683411	PR	62420936	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T3	Tx PCB Reduction Oil Sample	1227390	Charles	TF
2020	18683412	PR	62420936	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T3	Tx PCB Reduction Oil Sample	1227392	Charles	TF
2020	18683413	PR	62420936	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T3	Tx PCB Reduction Oil Sample	1227394	Charles	TF
2020	18683414	PR	62420936	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T3	Tx PCB Reduction Oil Sample	1227396	Charles	TF
2020	18683415	PR	62420936	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T3	Tx PCB Reduction Oil Sample	1227398	Charles	TF
2020	18683416	PR	62420936	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T3	Tx PCB Reduction Oil Sample	1227400	Charles	TF
2020	18683417	PR	62420936	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T3	Tx PCB Reduction Oil Sample	1227402	Charles	TF
2020	18683418	PR	62420936	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T3	Tx PCB Reduction Oil Sample	1227410	Charles	TF
2020	18422346	TC		NOCO		N-TS-CHARLESTS -TF	S3 - WATER SEPARATOR HIGH LEVEL - 9AM		Charles	TF
2020	18683900	TC	62550848	NOCO ORAS		N-TS-CHARLESTS -TF-T3	S3 - IMMD - EMD - RE: RESTORING T3	1178289	Charles	TF
2020	18663803	TC	62547013	NOCO ORAS		N-TS-CHARLESTS -TF-T3	S2 EMD A2L37 LOW AIR	1178289	Charles	TF
2020	14517097	DR	61267787	NOCO ORAS	0100	N-TS-WILSONTS -BR-JQ	Low oil JQ breaker		Wilson	BR
2020	17112542	DR	62107742	NOCO ORAS	0700	N-TS-WILSONTS -BR-M12	low oil		Wilson	BR
2020	16162420	DR	61696126	NOCO ORAS	5710	N-TS-WILSONTS -BR-M17	Wilson TS - M17 stabilizer bracket	1093814	Wilson	BR
2020	19351075	DR	62768607	NOCO ORAS	1400	N-TS-WILSONTS -BR-M17	Wilson TS M17 air control valve	1093814	Wilson	BR
2020	16813863	DR	61872717	NOCO ORAS	5710	N-TS-WILSONTS -BR-M12	open holes in mech box	1207581	Wilson	BR
2020	19246400	DR	62726461	NOCO ORAS	0100	N-TS-WILSONTS -BR-SC2Y	WILSON SC2Y CLOSE TIME	1211011	Wilson	BR
2020	19236019	DR	62715986	NOCO ORAS	5710	N-TS-WILSONTS -BR-SC2Y	WILSON SC2Y SF6 GAS INVEST/REPAIR	1211011	Wilson	BR
2020	19226883	DR	62706275	NOCO ORAS	0100	N-TS-WILSONTS -BR-SC2Y	Wilson SC2Y Slow to close	1211011	Wilson	BR
2020	18477922	DR	62514170	NOCO NOPT ORAS	5710	N-TS-WILSONTS -BR-M8	Replace 3 LA's M8 Wilson feeder	1213676	Wilson	BR
2020	18477938	DR	62514168	NOCO ORAS	0700	N-TS-WILSONTS -BR-M8	investigate Wilson M8 feeder fail	1213676	Wilson	BR
2020	18772348	PN	62142841	NOCO ORAS		N-TS-WILSONTS -BR-M2	Wilson M2 NEW inspection CMS pcb 20	1213666	Wilson	BR
2020	17814851	PR	62295704	NOCO ORAS	CR01	N-TS-WILSONTS -BR	STN BREAKER BLOWDOWN		Wilson	BR
2020	17814850	PR	62295703	NOCO ORAS	CR01	N-TS-WILSONTS -BR	STN BREAKER BLOWDOWN		Wilson	BR
2020	17814849	PR	62295702	NOCO ORAS	CR01	N-TS-WILSONTS -BR	STN BREAKER BLOWDOWN		Wilson	BR
2020	17814848	PR	62295701	NOCO ORAS	CR01	N-TS-WILSONTS -BR	STN BREAKER BLOWDOWN		Wilson	BR
2020	18773081	PR	62562605	NOCO ORAS	CR01	N-TS-WILSONTS -BR-M17	STN 'B' PWR EQ INSP-SVI April wk2	1093814	Wilson	BR
2020	18644375	PR	62291354	NOCO ORAS	CR01	N-TS-WILSONTS -BR-M17	STN 'B' PWR EQ INSP-SVI Spr 2020	1093814	Wilson	BR
2020	17812149	PR	62293022	NOCO ORAS	CR02	N-TS-WILSONTS -BR-M17	BR-SF6-SP-M1	1093814	Wilson	BR
2020	19333208	PR	62291355	NOCO ORAS	CR01	N-TS-WILSONTS -BR-M17	STN 'B' PWR EQ INSP-SVI Fall 2020	1093814	Wilson	BR
2020	19124307	PR	62295702	NOCO ORAS	CR01	N-TS-WILSONTS -BR-M17	STN BREAKER BLOWDOWN 2of4 2020	1093814	Wilson	BR
2020	18543815	PR	62295701	NOCO ORAS	CR01	N-TS-WILSONTS -BR-M17	STN BREAKER BLOWDOWN 1of4 2020	1093814	Wilson	BR
2020	18892975	PR	62562608	NOCO ORAS	CR01	N-TS-WILSONTS -BR-M17	STN 'B' PWR EQ INSP-SVI May wk1	1093814	Wilson	BR
2020	18805020	PR	62562606	NOCO ORAS	CR01	N-TS-WILSONTS -BR-M17	STN 'B' PWR EQ INSP-SVI April wk3	1093814	Wilson	BR
2020	19015328	PR	62562612	NOCO ORAS	CR01	N-TS-WILSONTS -BR-M17	STN 'B' PWR EQ INSP-SVI June wk1	1093814	Wilson	BR
2020	19685393	PR	62295704	NOCO ORAS	CR01	N-TS-WILSONTS -BR-M17	STN BREAKER BLOWDOWN 4of4 2020	1093814	Wilson	BR
2020	19685408	PR	62295703	NOCO ORAS	CR01	N-TS-WILSONTS -BR-M17	STN BREAKER BLOWDOWN 3of4 2020	1093814	Wilson	BR
2020	18543816	PR	62295701	NOCO ORAS	CR01	N-TS-WILSONTS -BR-M18	STN BREAKER BLOWDOWN 1of4 2020	1093835	Wilson	BR
2020	18644207	PR	62291354	NOCO ORAS	CR01	N-TS-WILSONTS -BR-M18	STN 'B' PWR EQ INSP-SVI Spr 2020	1093835	Wilson	BR
2020	17812172	PR	62293025	NOCO ORAS	CR01	N-TS-WILSONTS -BR-M18	BR-SF6-SP-M1	1093835	Wilson	BR
2020	18773076	PR	62562605	NOCO ORAS	CR01	N-TS-WILSONTS -BR-M18	STN 'B' PWR EQ INSP-SVI April wk2	1093835	Wilson	BR
2020	19124308	PR	62295702	NOCO ORAS	CR01	N-TS-WILSONTS -BR-M18	STN BREAKER BLOWDOWN 2of4 2020	1093835	Wilson	BR
2020	19015357	PR	62562612	NOCO ORAS	CR01	N-TS-WILSONTS -BR-M18	STN 'B' PWR EQ INSP-SVI June wk1	1093835	Wilson	BR
2020	18892974	PR	62562608	NOCO ORAS	CR01	N-TS-WILSONTS -BR-M18	STN 'B' PWR EQ INSP-SVI May wk1	1093835	Wilson	BR
2020	18805071	PR	62562606	NOCO ORAS	CR01	N-TS-WILSONTS -BR-M18	STN 'B' PWR EQ INSP-SVI April wk3	1093835	Wilson	BR
2020	19685394	PR	62295704	NOCO ORAS	CR01	N-TS-WILSONTS -BR-M18	STN BREAKER BLOWDOWN 4of4 2020	1093835	Wilson	BR
2020	19685410	PR	62295703	NOCO ORAS	CR01	N-TS-WILSONTS -BR-M18	STN BREAKER BLOWDOWN 3of4 2020	1093835	Wilson	BR

2020	19333119	PR	62291355	NOCO ORAS	CR01	N-TS-WILSONTS -BR-M18	STN 'B' PWR EQ INSP-SVI Fall 2020	1093835	Wilson	BR
2020	19015400	PR	62562612	NOCO ORAS	CR01	N-TS-WILSONTS -BR-M16	STN 'B' PWR EQ INSP-SVI June wk1	1101236	Wilson	BR
2020	18805083	PR	62562606	NOCO ORAS	CR01	N-TS-WILSONTS -BR-M16	STN 'B' PWR EQ INSP-SVI April wk3	1101236	Wilson	BR
2020	18892976	PR	62562608	NOCO ORAS	CR01	N-TS-WILSONTS -BR-M16	STN 'B' PWR EQ INSP-SVI May wk1	1101236	Wilson	BR
2020	19333209	PR	62291355	NOCO ORAS	CR01	N-TS-WILSONTS -BR-M16	STN 'B' PWR EQ INSP-SVI Fall 2020	1101236	Wilson	BR
2020	18644208	PR	62291354	NOCO ORAS	CR01	N-TS-WILSONTS -BR-M16	STN 'B' PWR EQ INSP-SVI Spr 2020	1101236	Wilson	BR
2020	18773025	PR	62562605	NOCO ORAS	CR01	N-TS-WILSONTS -BR-M16	STN 'B' PWR EQ INSP-SVI April wk2	1101236	Wilson	BR
2020	17812146	PR	62293019	NOCO ORAS	CR01	N-TS-WILSONTS -BR-M16	BR-OIL-KSO-LV- BOA	1101236	Wilson	BR
2020	18892977	PR	62562608	NOCO ORAS	CR01	N-TS-WILSONTS -BR-M7	STN 'B' PWR EQ INSP-SVI May wk1	1101252	Wilson	BR
2020	18644209	PR	62291354	NOCO ORAS	CR01	N-TS-WILSONTS -BR-M7	STN 'B' PWR EQ INSP-SVI Spr 2020	1101252	Wilson	BR
2020	17812225	PR	62293088	NOCO ORAS	CR01	N-TS-WILSONTS -BR-M7	BR-OIL-KSO-LV- BOA	1101252	Wilson	BR
2020	19333210	PR	62291355	NOCO ORAS	CR01	N-TS-WILSONTS -BR-M7	STN 'B' PWR EQ INSP-SVI Fall 2020	1101252	Wilson	BR
2020	18773027	PR	62562605	NOCO ORAS	CR01	N-TS-WILSONTS -BR-M7	STN 'B' PWR EQ INSP-SVI April wk2	1101252	Wilson	BR
2020	19015358	PR	62562612	NOCO ORAS	CR01	N-TS-WILSONTS -BR-M7	STN 'B' PWR EQ INSP-SVI June wk1	1101252	Wilson	BR
2020	18805137	PR	62562606	NOCO ORAS	CR01	N-TS-WILSONTS -BR-M7	STN 'B' PWR EQ INSP-SVI April wk3	1101252	Wilson	BR
2020	18644230	PR	62291354	NOCO ORAS	CR01	N-TS-WILSONTS -BR-T1B	STN 'B' PWR EQ INSP-SVI Spr 2020	1101264	Wilson	BR
2020	19333211	PR	62291355	NOCO ORAS	CR01	N-TS-WILSONTS -BR-T1B	STN 'B' PWR EQ INSP-SVI Fall 2020	1101264	Wilson	BR
2020	19015359	PR	62562612	NOCO ORAS	CR01	N-TS-WILSONTS -BR-T1B	STN 'B' PWR EQ INSP-SVI June wk1	1101264	Wilson	BR
2020	18805138	PR	62562606	NOCO ORAS	CR01	N-TS-WILSONTS -BR-T1B	STN 'B' PWR EQ INSP-SVI April wk3	1101264	Wilson	BR
2020	18892978	PR	62562608	NOCO ORAS	CR01	N-TS-WILSONTS -BR-T1B	STN 'B' PWR EQ INSP-SVI May wk1	1101264	Wilson	BR
2020	18773029	PR	62562605	NOCO ORAS	CR01	N-TS-WILSONTS -BR-T1B	STN 'B' PWR EQ INSP-SVI April wk2	1101264	Wilson	BR
2020	18644232	PR	62291354	NOCO ORAS	CR01	N-TS-WILSONTS -BR-JQ	STN 'B' PWR EQ INSP-SVI Spr 2020	1206693	Wilson	BR
2020	19015379	PR	62562612	NOCO ORAS	CR01	N-TS-WILSONTS -BR-JQ	STN 'B' PWR EQ INSP-SVI June wk1	1206693	Wilson	BR
2020	18893000	PR	62562608	NOCO ORAS	CR01	N-TS-WILSONTS -BR-JQ	STN 'B' PWR EQ INSP-SVI May wk1	1206693	Wilson	BR
2020	19333116	PR	62291355	NOCO ORAS	CR01	N-TS-WILSONTS -BR-JQ	STN 'B' PWR EQ INSP-SVI Fall 2020	1206693	Wilson	BR
2020	17812195	PR	62293068	NOCO ORAS	CR01	N-TS-WILSONTS -BR-JQ	BR-OIL-KSO-LV- BOA	1206693	Wilson	BR
2020	18805139	PR	62562606	NOCO ORAS	CR01	N-TS-WILSONTS -BR-JQ	STN 'B' PWR EQ INSP-SVI April wk3	1206693	Wilson	BR
2020	18773042	PR	62562605	NOCO ORAS	CR01	N-TS-WILSONTS -BR-JQ	STN 'B' PWR EQ INSP-SVI April wk2	1206693	Wilson	BR
2020	17811699	PR	62292572	NOCO ORAS	CR01	N-TS-WILSONTS -BR-JQ	BR-OIL-KSO-LV- Strategy	1206693	Wilson	BR
2020	17812179	PR	62293032	NOCO ORAS	CR01	N-TS-WILSONTS -BR-T4Q	BR-OIL-KSO-LV- BOA	1206763	Wilson	BR
2020	18773044	PR	62562605	NOCO ORAS	CR01	N-TS-WILSONTS -BR-T4Q	STN 'B' PWR EQ INSP-SVI April wk2	1206763	Wilson	BR
2020	19015320	PR	62562612	NOCO ORAS	CR01	N-TS-WILSONTS -BR-T4Q	STN 'B' PWR EQ INSP-SVI June wk1	1206763	Wilson	BR
2020	18805171	PR	62562606	NOCO ORAS	CR01	N-TS-WILSONTS -BR-T4Q	STN 'B' PWR EQ INSP-SVI April wk3	1206763	Wilson	BR
2020	18644233	PR	62291354	NOCO ORAS	CR01	N-TS-WILSONTS -BR-T4Q	STN 'B' PWR EQ INSP-SVI Spr 2020	1206763	Wilson	BR
2020	19333212	PR	62291355	NOCO ORAS	CR01	N-TS-WILSONTS -BR-T4Q	STN 'B' PWR EQ INSP-SVI Fall 2020	1206763	Wilson	BR
2020	18893003	PR	62562608	NOCO ORAS	CR01	N-TS-WILSONTS -BR-T4Q	STN 'B' PWR EQ INSP-SVI May wk1	1206763	Wilson	BR
2020	19015321	PR	62562612	NOCO ORAS	CR01	N-TS-WILSONTS -BR-T3J	STN 'B' PWR EQ INSP-SVI June wk1	1206776	Wilson	BR
2020	18773041	PR	62562605	NOCO ORAS	CR01	N-TS-WILSONTS -BR-T3J	STN 'B' PWR EQ INSP-SVI April wk2	1206776	Wilson	BR
2020	18805172	PR	62562606	NOCO ORAS	CR01	N-TS-WILSONTS -BR-T3J	STN 'B' PWR EQ INSP-SVI April wk3	1206776	Wilson	BR
2020	19333213	PR	62291355	NOCO ORAS	CR01	N-TS-WILSONTS -BR-T3J	STN 'B' PWR EQ INSP-SVI Fall 2020	1206776	Wilson	BR
2020	18893005	PR	62562608	NOCO ORAS	CR01	N-TS-WILSONTS -BR-T3J	STN 'B' PWR EQ INSP-SVI May wk1	1206776	Wilson	BR
2020	17812175	PR	62293028	NOCO ORAS	CR01	N-TS-WILSONTS -BR-T3J	BR-OIL-KSO-LV- BOA	1206776	Wilson	BR
2020	18644234	PR	62291354	NOCO ORAS	CR01	N-TS-WILSONTS -BR-T3J	STN 'B' PWR EQ INSP-SVI Spr 2020	1206776	Wilson	BR
2020	19333214	PR	62291355	NOCO ORAS	CR01	N-TS-WILSONTS -BR-M12	STN 'B' PWR EQ INSP-SVI Fall 2020	1207581	Wilson	BR
2020	16893365	PR	61925025	NOCO ORAS	CR01	N-TS-WILSONTS -BR-M12	BR-OIL-KSO-LV- Strategy	1207581	Wilson	BR
2020	18893008	PR	62562608	NOCO ORAS	CR01	N-TS-WILSONTS -BR-M12	STN 'B' PWR EQ INSP-SVI May wk1	1207581	Wilson	BR
2020	18773046	PR	62562605	NOCO ORAS	CR01	N-TS-WILSONTS -BR-M12	STN 'B' PWR EQ INSP-SVI April wk2	1207581	Wilson	BR
2020	19015322	PR	62562612	NOCO ORAS	CR01	N-TS-WILSONTS -BR-M12	STN 'B' PWR EQ INSP-SVI June wk1	1207581	Wilson	BR
2020	18644236	PR	62291354	NOCO ORAS	CR01	N-TS-WILSONTS -BR-M12	STN 'B' PWR EQ INSP-SVI Spr 2020	1207581	Wilson	BR

2020	18805173	PR	62562606	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M12	STN 'B' PWR EQ INSP-SVI April wk3	1207581	Wilson	BR
2020	18893040	PR	62562608	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M13	STN 'B' PWR EQ INSP-SVI May wk1	1207593	Wilson	BR
2020	19015329	PR	62562612	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M13	STN 'B' PWR EQ INSP-SVI June wk1	1207593	Wilson	BR
2020	18644231	PR	62291354	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M13	STN 'B' PWR EQ INSP-SVI Spr 2020	1207593	Wilson	BR
2020	18773048	PR	62562605	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M13	STN 'B' PWR EQ INSP-SVI April wk2	1207593	Wilson	BR
2020	17812142	PR	62293015	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M13	BR-OIL-KSO-LV- BOA	1207593	Wilson	BR
2020	19333215	PR	62291355	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M13	STN 'B' PWR EQ INSP-SVI Fall 2020	1207593	Wilson	BR
2020	18805170	PR	62562606	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M13	STN 'B' PWR EQ INSP-SVI April wk3	1207593	Wilson	BR
2020	18893042	PR	62562608	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M11	STN 'B' PWR EQ INSP-SVI May wk1	1207604	Wilson	BR
2020	19015350	PR	62562612	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M11	STN 'B' PWR EQ INSP-SVI June wk1	1207604	Wilson	BR
2020	18805242	PR	62562606	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M11	STN 'B' PWR EQ INSP-SVI April wk3	1207604	Wilson	BR
2020	17812138	PR	62293011	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M11	BR-OIL-KSO-LV- BOA	1207604	Wilson	BR
2020	19333216	PR	62291355	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M11	STN 'B' PWR EQ INSP-SVI Fall 2020	1207604	Wilson	BR
2020	18773053	PR	62562605	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M11	STN 'B' PWR EQ INSP-SVI April wk2	1207604	Wilson	BR
2020	18644237	PR	62291354	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M11	STN 'B' PWR EQ INSP-SVI Spr 2020	1207604	Wilson	BR
2020	18773050	PR	62562605	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-SC1B	STN 'B' PWR EQ INSP-SVI April wk2	1211004	Wilson	BR
2020	18893045	PR	62562608	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-SC1B	STN 'B' PWR EQ INSP-SVI May wk1	1211004	Wilson	BR
2020	19685381	PR	62295703	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-SC1B	STN BREAKER BLOWDOWN 3of4 2020	1211004	Wilson	BR
2020	18543817	PR	62295701	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-SC1B	STN BREAKER BLOWDOWN 1of4 2020	1211004	Wilson	BR
2020	19685395	PR	62295704	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-SC1B	STN BREAKER BLOWDOWN 4of4 2020	1211004	Wilson	BR
2020	18805175	PR	62562606	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-SC1B	STN 'B' PWR EQ INSP-SVI April wk3	1211004	Wilson	BR
2020	19015351	PR	62562612	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-SC1B	STN 'B' PWR EQ INSP-SVI June wk1	1211004	Wilson	BR
2020	18644238	PR	62291354	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-SC1B	STN 'B' PWR EQ INSP-SVI Spr 2020	1211004	Wilson	BR
2020	19124309	PR	62295702	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-SC1B	STN BREAKER BLOWDOWN 2of4 2020	1211004	Wilson	BR
2020	19333130	PR	62291355	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-SC1B	STN 'B' PWR EQ INSP-SVI Fall 2020	1211004	Wilson	BR
2020	18805247	PR	62562606	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-SC2Y	STN 'B' PWR EQ INSP-SVI April wk3	1211011	Wilson	BR
2020	18644239	PR	62291354	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-SC2Y	STN 'B' PWR EQ INSP-SVI Spr 2020	1211011	Wilson	BR
2020	18543818	PR	62295701	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-SC2Y	STN BREAKER BLOWDOWN 1of4 2020	1211011	Wilson	BR
2020	19227705	PR	62707804	NOCO ORAS	CR04	N-TS-WILSONTS	-BR-SC2Y	BR-SF6-SP-Strategy	1211011	Wilson	BR
2020	18903192	PR	62583246	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-SC2Y	BR-SF6-SP-Strategy	1211011	Wilson	BR
2020	19333131	PR	62291355	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-SC2Y	STN 'B' PWR EQ INSP-SVI Fall 2020	1211011	Wilson	BR
2020	19015370	PR	62562612	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-SC2Y	STN 'B' PWR EQ INSP-SVI June wk1	1211011	Wilson	BR
2020	19124320	PR	62295702	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-SC2Y	STN BREAKER BLOWDOWN 2of4 2020	1211011	Wilson	BR
2020	19685396	PR	62295704	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-SC2Y	STN BREAKER BLOWDOWN 4of4 2020	1211011	Wilson	BR
2020	18893048	PR	62562608	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-SC2Y	STN 'B' PWR EQ INSP-SVI May wk1	1211011	Wilson	BR
2020	19685386	PR	62295703	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-SC2Y	STN BREAKER BLOWDOWN 3of4 2020	1211011	Wilson	BR
2020	18773051	PR	62562605	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-SC2Y	STN 'B' PWR EQ INSP-SVI April wk2	1211011	Wilson	BR
2020	19685401	PR	62295703	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-SC3J	STN BREAKER BLOWDOWN 3of4 2020	1211024	Wilson	BR
2020	19124321	PR	62295702	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-SC3J	STN BREAKER BLOWDOWN 2of4 2020	1211024	Wilson	BR
2020	18644290	PR	62291354	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-SC3J	STN 'B' PWR EQ INSP-SVI Spr 2020	1211024	Wilson	BR
2020	19333132	PR	62291355	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-SC3J	STN 'B' PWR EQ INSP-SVI Fall 2020	1211024	Wilson	BR
2020	19015371	PR	62562612	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-SC3J	STN 'B' PWR EQ INSP-SVI June wk1	1211024	Wilson	BR
2020	18543819	PR	62295701	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-SC3J	STN BREAKER BLOWDOWN 1of4 2020	1211024	Wilson	BR
2020	19685397	PR	62295704	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-SC3J	STN BREAKER BLOWDOWN 4of4 2020	1211024	Wilson	BR
2020	18805176	PR	62562606	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-SC3J	STN 'B' PWR EQ INSP-SVI April wk3	1211024	Wilson	BR
2020	18893061	PR	62562608	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-SC3J	STN 'B' PWR EQ INSP-SVI May wk1	1211024	Wilson	BR
2020	18773059	PR	62562605	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-SC3J	STN 'B' PWR EQ INSP-SVI April wk2	1211024	Wilson	BR
2020	18805177	PR	62562606	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-SC4Q	STN 'B' PWR EQ INSP-SVI April wk3	1211036	Wilson	BR
2020	19015372	PR	62562612	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-SC4Q	STN 'B' PWR EQ INSP-SVI June wk1	1211036	Wilson	BR

2020	19685407	PR	62295703	NOCO ORAS	CR01	N-TS-WILSONTS -BR-SC4Q	STN BREAKER BLOWDOWN 3of4 2020	1211036	Wilson	BR
2020	18773065	PR	62562605	NOCO ORAS	CR01	N-TS-WILSONTS -BR-SC4Q	STN 'B' PWR EQ INSP-SVI April wk2	1211036	Wilson	BR
2020	19685398	PR	62295704	NOCO ORAS	CR01	N-TS-WILSONTS -BR-SC4Q	STN BREAKER BLOWDOWN 4of4 2020	1211036	Wilson	BR
2020	18892919	PR	62562608	NOCO ORAS	CR01	N-TS-WILSONTS -BR-SC4Q	STN 'B' PWR EQ INSP-SVI May wk1	1211036	Wilson	BR
2020	19333133	PR	62291355	NOCO ORAS	CR01	N-TS-WILSONTS -BR-SC4Q	STN 'B' PWR EQ INSP-SVI Fall 2020	1211036	Wilson	BR
2020	19124322	PR	62295702	NOCO ORAS	CR01	N-TS-WILSONTS -BR-SC4Q	STN BREAKER BLOWDOWN 2of4 2020	1211036	Wilson	BR
2020	18543820	PR	62295701	NOCO ORAS	CR01	N-TS-WILSONTS -BR-SC4Q	STN BREAKER BLOWDOWN 1of4 2020	1211036	Wilson	BR
2020	18644291	PR	62291354	NOCO ORAS	CR01	N-TS-WILSONTS -BR-SC4Q	STN 'B' PWR EQ INSP-SVI Spr 2020	1211036	Wilson	BR
2020	19015373	PR	62562612	NOCO ORAS	CR01	N-TS-WILSONTS -BR-T2Y	STN 'B' PWR EQ INSP-SVI June wk1	1213509	Wilson	BR
2020	18892930	PR	62562608	NOCO ORAS	CR01	N-TS-WILSONTS -BR-T2Y	STN 'B' PWR EQ INSP-SVI May wk1	1213509	Wilson	BR
2020	19333134	PR	62291355	NOCO ORAS	CR01	N-TS-WILSONTS -BR-T2Y	STN 'B' PWR EQ INSP-SVI Fall 2020	1213509	Wilson	BR
2020	18773066	PR	62562605	NOCO ORAS	CR01	N-TS-WILSONTS -BR-T2Y	STN 'B' PWR EQ INSP-SVI April wk2	1213509	Wilson	BR
2020	18805030	PR	62562606	NOCO ORAS	CR01	N-TS-WILSONTS -BR-T2Y	STN 'B' PWR EQ INSP-SVI April wk3	1213509	Wilson	BR
2020	18644292	PR	62291354	NOCO ORAS	CR01	N-TS-WILSONTS -BR-T2Y	STN 'B' PWR EQ INSP-SVI Spr 2020	1213509	Wilson	BR
2020	18773075	PR	62562605	NOCO ORAS	CR01	N-TS-WILSONTS -BR-BY	STN 'B' PWR EQ INSP-SVI April wk2	1213529	Wilson	BR
2020	19015374	PR	62562612	NOCO ORAS	CR01	N-TS-WILSONTS -BR-BY	STN 'B' PWR EQ INSP-SVI June wk1	1213529	Wilson	BR
2020	18892931	PR	62562608	NOCO ORAS	CR01	N-TS-WILSONTS -BR-BY	STN 'B' PWR EQ INSP-SVI May wk1	1213529	Wilson	BR
2020	17812192	PR	62293065	NOCO ORAS	CR01	N-TS-WILSONTS -BR-BY	BR-OIL-KSO-LV- BOA	1213529	Wilson	BR
2020	18805040	PR	62562606	NOCO ORAS	CR01	N-TS-WILSONTS -BR-BY	STN 'B' PWR EQ INSP-SVI April wk3	1213529	Wilson	BR
2020	18644293	PR	62291354	NOCO ORAS	CR01	N-TS-WILSONTS -BR-BY	STN 'B' PWR EQ INSP-SVI Spr 2020	1213529	Wilson	BR
2020	19333135	PR	62291355	NOCO ORAS	CR01	N-TS-WILSONTS -BR-BY	STN 'B' PWR EQ INSP-SVI Fall 2020	1213529	Wilson	BR
2020	18644294	PR	62291354	NOCO ORAS	CR01	N-TS-WILSONTS -BR-M5	STN 'B' PWR EQ INSP-SVI Spr 2020	1213614	Wilson	BR
2020	19333136	PR	62291355	NOCO ORAS	CR01	N-TS-WILSONTS -BR-M5	STN 'B' PWR EQ INSP-SVI Fall 2020	1213614	Wilson	BR
2020	17812218	PR	62293081	NOCO ORAS	CR01	N-TS-WILSONTS -BR-M5	BR-OIL-KSO-LV- BOA	1213614	Wilson	BR
2020	18773077	PR	62562605	NOCO ORAS	CR01	N-TS-WILSONTS -BR-M5	STN 'B' PWR EQ INSP-SVI April wk2	1213614	Wilson	BR
2020	18825394	PR	62573268	NOCO ORAS	CR01	N-TS-WILSONTS -BR-M5	BR-OIL-KSO-LV- BOA(BOA)	1213614	Wilson	BR
2020	18805061	PR	62562606	NOCO ORAS	CR01	N-TS-WILSONTS -BR-M5	STN 'B' PWR EQ INSP-SVI April wk3	1213614	Wilson	BR
2020	18892932	PR	62562608	NOCO ORAS	CR01	N-TS-WILSONTS -BR-M5	STN 'B' PWR EQ INSP-SVI May wk1	1213614	Wilson	BR
2020	19015319	PR	62562612	NOCO ORAS	CR01	N-TS-WILSONTS -BR-M5	STN 'B' PWR EQ INSP-SVI June wk1	1213614	Wilson	BR
2020	18773054	PR	62562605	NOCO ORAS	CR01	N-TS-WILSONTS -BR-M1	STN 'B' PWR EQ INSP-SVI April wk2	1213628	Wilson	BR
2020	16893366	PR	61925026	NOCO ORAS	CR01	N-TS-WILSONTS -BR-M1	BR-OIL-KSO-LV- Strategy	1213628	Wilson	BR
2020	18644295	PR	62291354	NOCO ORAS	CR01	N-TS-WILSONTS -BR-M1	STN 'B' PWR EQ INSP-SVI Spr 2020	1213628	Wilson	BR
2020	19333137	PR	62291355	NOCO ORAS	CR01	N-TS-WILSONTS -BR-M1	STN 'B' PWR EQ INSP-SVI Fall 2020	1213628	Wilson	BR
2020	19015376	PR	62562612	NOCO ORAS	CR01	N-TS-WILSONTS -BR-M1	STN 'B' PWR EQ INSP-SVI June wk1	1213628	Wilson	BR
2020	18805106	PR	62562606	NOCO ORAS	CR01	N-TS-WILSONTS -BR-M1	STN 'B' PWR EQ INSP-SVI April wk3	1213628	Wilson	BR
2020	18892933	PR	62562608	NOCO ORAS	CR01	N-TS-WILSONTS -BR-M1	STN 'B' PWR EQ INSP-SVI May wk1	1213628	Wilson	BR
2020	17812199	PR	62293072	NOCO ORAS	CR01	N-TS-WILSONTS -BR-M1	BR-OIL-KSO-LV- BOA	1213628	Wilson	BR
2020	18644297	PR	62291354	NOCO ORAS	CR01	N-TS-WILSONTS -BR-M3	STN 'B' PWR EQ INSP-SVI Spr 2020	1213636	Wilson	BR
2020	18773006	PR	62562605	NOCO ORAS	CR01	N-TS-WILSONTS -BR-M3	STN 'B' PWR EQ INSP-SVI April wk2	1213636	Wilson	BR
2020	18892935	PR	62562608	NOCO ORAS	CR01	N-TS-WILSONTS -BR-M3	STN 'B' PWR EQ INSP-SVI May wk1	1213636	Wilson	BR
2020	19015377	PR	62562612	NOCO ORAS	CR01	N-TS-WILSONTS -BR-M3	STN 'B' PWR EQ INSP-SVI June wk1	1213636	Wilson	BR
2020	19333138	PR	62291355	NOCO ORAS	CR01	N-TS-WILSONTS -BR-M3	STN 'B' PWR EQ INSP-SVI Fall 2020	1213636	Wilson	BR
2020	18805248	PR	62562606	NOCO ORAS	CR01	N-TS-WILSONTS -BR-M3	STN 'B' PWR EQ INSP-SVI April wk3	1213636	Wilson	BR
2020	19333139	PR	62291355	NOCO ORAS	CR01	N-TS-WILSONTS -BR-M6	STN 'B' PWR EQ INSP-SVI Fall 2020	1213645	Wilson	BR
2020	18644205	PR	62291354	NOCO ORAS	CR01	N-TS-WILSONTS -BR-M6	STN 'B' PWR EQ INSP-SVI Spr 2020	1213645	Wilson	BR
2020	19015378	PR	62562612	NOCO ORAS	CR01	N-TS-WILSONTS -BR-M6	STN 'B' PWR EQ INSP-SVI June wk1	1213645	Wilson	BR
2020	18892936	PR	62562608	NOCO ORAS	CR01	N-TS-WILSONTS -BR-M6	STN 'B' PWR EQ INSP-SVI May wk1	1213645	Wilson	BR
2020	17812222	PR	62293085	NOCO ORAS	CR01	N-TS-WILSONTS -BR-M6	BR-OIL-KSO-LV- BOA	1213645	Wilson	BR
2020	18773078	PR	62562605	NOCO ORAS	CR01	N-TS-WILSONTS -BR-M6	STN 'B' PWR EQ INSP-SVI April wk2	1213645	Wilson	BR

2020	18805249	PR	62562606	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M6	STN 'B' PWR EQ INSP-SVI April wk3	1213645	Wilson	BR
2020	18892937	PR	62562608	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M4	STN 'B' PWR EQ INSP-SVI May wk1	1213655	Wilson	BR
2020	18805260	PR	62562606	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M4	STN 'B' PWR EQ INSP-SVI April wk3	1213655	Wilson	BR
2020	19015375	PR	62562612	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M4	STN 'B' PWR EQ INSP-SVI June wk1	1213655	Wilson	BR
2020	19333117	PR	62291355	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M4	STN 'B' PWR EQ INSP-SVI Fall 2020	1213655	Wilson	BR
2020	18773007	PR	62562605	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M4	STN 'B' PWR EQ INSP-SVI April wk2	1213655	Wilson	BR
2020	17812215	PR	62293078	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M4	BR-OIL-KSO-LV- BOA	1213655	Wilson	BR
2020	18644298	PR	62291354	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M4	STN 'B' PWR EQ INSP-SVI Spr 2020	1213655	Wilson	BR
2020	19015324	PR	62562612	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M2	STN 'B' PWR EQ INSP-SVI June wk1	1213666	Wilson	BR
2020	18805130	PR	62562606	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M2	STN 'B' PWR EQ INSP-SVI April wk3	1213666	Wilson	BR
2020	18892934	PR	62562608	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M2	STN 'B' PWR EQ INSP-SVI May wk1	1213666	Wilson	BR
2020	17812211	PR	62293074	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M2	BR-OIL-KSO-LV- BOA	1213666	Wilson	BR
2020	18773058	PR	62562605	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M2	STN 'B' PWR EQ INSP-SVI April wk2	1213666	Wilson	BR
2020	18644296	PR	62291354	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M2	STN 'B' PWR EQ INSP-SVI Spr 2020	1213666	Wilson	BR
2020	19292166	PR	62743949	NOCO ORAS	CR02	N-TS-WILSONTS	-BR-M2	BR-OIL-KSO-LV- BOA(BOA)	1213666	Wilson	BR
2020	19333200	PR	62291355	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M2	STN 'B' PWR EQ INSP-SVI Fall 2020	1213666	Wilson	BR
2020	19333201	PR	62291355	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M8	STN 'B' PWR EQ INSP-SVI Fall 2020	1213676	Wilson	BR
2020	18805108	PR	62562606	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M8	STN 'B' PWR EQ INSP-SVI April wk3	1213676	Wilson	BR
2020	18773009	PR	62562605	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M8	STN 'B' PWR EQ INSP-SVI April wk2	1213676	Wilson	BR
2020	18644299	PR	62291354	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M8	STN 'B' PWR EQ INSP-SVI Spr 2020	1213676	Wilson	BR
2020	18892938	PR	62562608	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M8	STN 'B' PWR EQ INSP-SVI May wk1	1213676	Wilson	BR
2020	19015325	PR	62562612	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M8	STN 'B' PWR EQ INSP-SVI June wk1	1213676	Wilson	BR
2020	18892970	PR	62562608	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M14	STN 'B' PWR EQ INSP-SVI May wk1	1215063	Wilson	BR
2020	18644371	PR	62291354	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M14	STN 'B' PWR EQ INSP-SVI Spr 2020	1215063	Wilson	BR
2020	19015326	PR	62562612	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M14	STN 'B' PWR EQ INSP-SVI June wk1	1215063	Wilson	BR
2020	18805134	PR	62562606	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M14	STN 'B' PWR EQ INSP-SVI April wk3	1215063	Wilson	BR
2020	19333203	PR	62291355	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M14	STN 'B' PWR EQ INSP-SVI Fall 2020	1215063	Wilson	BR
2020	18773023	PR	62562605	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M14	STN 'B' PWR EQ INSP-SVI April wk2	1215063	Wilson	BR
2020	18773008	PR	62562605	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M15	STN 'B' PWR EQ INSP-SVI April wk2	1215072	Wilson	BR
2020	16893937	PR	61925627	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M15	BR-OIL-KSO-LV- BOA	1215072	Wilson	BR
2020	18805103	PR	62562606	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M15	STN 'B' PWR EQ INSP-SVI April wk3	1215072	Wilson	BR
2020	19015323	PR	62562612	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M15	STN 'B' PWR EQ INSP-SVI June wk1	1215072	Wilson	BR
2020	18644372	PR	62291354	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M15	STN 'B' PWR EQ INSP-SVI Spr 2020	1215072	Wilson	BR
2020	19333204	PR	62291355	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M15	STN 'B' PWR EQ INSP-SVI Fall 2020	1215072	Wilson	BR
2020	18892971	PR	62562608	NOCO ORAS	CR01	N-TS-WILSONTS	-BR-M15	STN 'B' PWR EQ INSP-SVI May wk1	1215072	Wilson	BR
2020	19590908	TC	62836918	NOCO ORAS		N-TS-WILSONTS	-BR-M1	S3 - M1 AUTO RECLOSE		Wilson	BR
2020	19579069	TC	62833325	NOCO ORAS		N-TS-WILSONTS	-BR-M14	S3 P&C IMM REG: M14 TRANSFER TRIP COMMN		Wilson	BR
2020	19456507	TC	62803024	NOCO ORAS		N-TS-WILSONTS	-BR-SC3J	S3-EMD-GAS TOP UP ON SC3J	1211024	Wilson	BR
2020	19384201	TC	62780345	NOCO ORAS		N-TS-WILSONTS	-BR-SC4Q	S3 EMD SC4 TRIP	1211036	Wilson	BR
2020	18477782	TC	62514171	NOCO ORAS		N-TS-WILSONTS	-BR-M8	S3 - IMMD - EMD - RE: M8 FAULTED CONDUCT	1213676	Wilson	BR
2020	17238018	DR	62133793	NOCO ORAS	9900	N-TS-WILSONTS	-TF-T3	Wilson TS T3 Fans	1173245	Wilson	TF
2020	18493174	DR	62517603	NOCO ORAS	9900	N-TS-WILSONTS	-TF-T3	Wilson TS Repair acoustic doors	1173245	Wilson	TF
2020	17631176	DR	62221849	NOCO ORAS	0100	N-TS-WILSONTS	-TF-T3	Wilson T3,T4 cooling fail with fans	1173245	Wilson	TF
2020	15943741	DR	61614285	NOCO ORAS	4700	N-TS-WILSONTS	-TF-T2	wilson T2 LV bushing connectors	1175751	Wilson	TF
2020	18422345	DR	62500601	NOCO ORAS	9900	N-TS-WILSONTS	-TF-T2	Wilson T2 Differential Trip	1175751	Wilson	TF
2020	19116742	DR	62635767	NOCO ORAS	9900	N-TS-WILSONTS	-TF-T1	Portable animal fence	1183712	Wilson	TF
2020	17238112	DR	62133795	NOCO ORAS	9900	N-TS-WILSONTS	-TF-T4	Wilson T4 Fan motor	1188773	Wilson	TF
2020	18744366	DR	62561667	NOCO ORAS	3300	N-TS-WILSONTS	-TF-T4	Wilson TS Noise issues	1188773	Wilson	TF
2020	18745105	DR	62562828	NOCO ORAS	3300	N-TS-WILSONTS	-TF-T4	Wilson T4 replace noisy fans	1188773	Wilson	TF

2020	19029719	DR	62603510	NOCO ORAS	9900	N-TS-WILSONTS	-TF-T4	Remove /Reinstall Wilson T4 fans	1188773	Wilson	TF
2020	18384831	PR	62477744	NOCO ORAS	CR01	N-TS-WILSONTS	-TF-T2	Tx PCB Reduction Oil Sample		Wilson	TF
2020	18892913	PR	62562608	NOCO ORAS	CR01	N-TS-WILSONTS	-TF-SS2	STN 'B' PWR EQ INSP-SVI May wk1	1173234	Wilson	TF
2020	18804869	PR	62562606	NOCO ORAS	CR01	N-TS-WILSONTS	-TF-SS2	STN 'B' PWR EQ INSP-SVI April wk3	1173234	Wilson	TF
2020	18772997	PR	62562605	NOCO ORAS	CR01	N-TS-WILSONTS	-TF-SS2	STN 'B' PWR EQ INSP-SVI April wk2	1173234	Wilson	TF
2020	18644058	PR	62291354	NOCO ORAS	CR01	N-TS-WILSONTS	-TF-SS2	STN 'B' PWR EQ INSP-SVI Spr 2020	1173234	Wilson	TF
2020	19015214	PR	62562612	NOCO ORAS	CR01	N-TS-WILSONTS	-TF-SS2	STN 'B' PWR EQ INSP-SVI June wk1	1173234	Wilson	TF
2020	19333115	PR	62291355	NOCO ORAS	CR01	N-TS-WILSONTS	-TF-SS2	STN 'B' PWR EQ INSP-SVI Fall 2020	1173234	Wilson	TF
2020	18804880	PR	62562606	NOCO ORAS	CR01	N-TS-WILSONTS	-TF-T3	STN 'B' PWR EQ INSP-SVI April wk3	1173245	Wilson	TF
2020	19015217	PR	62562612	NOCO ORAS	CR01	N-TS-WILSONTS	-TF-T3	STN 'B' PWR EQ INSP-SVI June wk1	1173245	Wilson	TF
2020	18389431	PR	62480268	NOCO ORAS	CR02	N-TS-WILSONTS	-TF-T3	TF-GENERAL-(SPECIAL)DGA	1173245	Wilson	TF
2020	17812183	PR	62293036	NOCO ORAS	CR02	N-TS-WILSONTS	-TF-T3	TF-GENERAL-GOT	1173245	Wilson	TF
2020	19332818	PR	62291355	NOCO ORAS	CR01	N-TS-WILSONTS	-TF-T3	STN 'B' PWR EQ INSP-SVI Fall 2020	1173245	Wilson	TF
2020	18644059	PR	62291354	NOCO ORAS	CR01	N-TS-WILSONTS	-TF-T3	STN 'B' PWR EQ INSP-SVI Spr 2020	1173245	Wilson	TF
2020	18892914	PR	62562608	NOCO ORAS	CR01	N-TS-WILSONTS	-TF-T3	STN 'B' PWR EQ INSP-SVI May wk1	1173245	Wilson	TF
2020	18772998	PR	62562605	NOCO ORAS	CR01	N-TS-WILSONTS	-TF-T3	STN 'B' PWR EQ INSP-SVI April wk2	1173245	Wilson	TF
2020	19015231	PR	62562612	NOCO ORAS	CR01	N-TS-WILSONTS	-TF-T2	STN 'B' PWR EQ INSP-SVI June wk1	1175751	Wilson	TF
2020	18892916	PR	62562608	NOCO ORAS	CR01	N-TS-WILSONTS	-TF-T2	STN 'B' PWR EQ INSP-SVI May wk1	1175751	Wilson	TF
2020	18644111	PR	62291354	NOCO ORAS	CR01	N-TS-WILSONTS	-TF-T2	STN 'B' PWR EQ INSP-SVI Spr 2020	1175751	Wilson	TF
2020	19332900	PR	62291355	NOCO ORAS	CR01	N-TS-WILSONTS	-TF-T2	STN 'B' PWR EQ INSP-SVI Fall 2020	1175751	Wilson	TF
2020	17812243	PR	62293096	NOCO ORAS	CR02	N-TS-WILSONTS	-TF-T2	TF-GENERAL-GOT	1175751	Wilson	TF
2020	18804883	PR	62562606	NOCO ORAS	CR01	N-TS-WILSONTS	-TF-T2	STN 'B' PWR EQ INSP-SVI April wk3	1175751	Wilson	TF
2020	19407970	PR	62786302	NOCO ORAS	CR02	N-TS-WILSONTS	-TF-T2	PREOUTAGE INSPECTION- CAT 1 - ELEC	1175751	Wilson	TF
2020	18773000	PR	62562605	NOCO ORAS	CR01	N-TS-WILSONTS	-TF-T2	STN 'B' PWR EQ INSP-SVI April wk2	1175751	Wilson	TF
2020	18773004	PR	62562605	NOCO ORAS	CR01	N-TS-WILSONTS	-TF-SS1	STN 'B' PWR EQ INSP-SVI April wk2	1183701	Wilson	TF
2020	19332903	PR	62291355	NOCO ORAS	CR01	N-TS-WILSONTS	-TF-SS1	STN 'B' PWR EQ INSP-SVI Fall 2020	1183701	Wilson	TF
2020	18644114	PR	62291354	NOCO ORAS	CR01	N-TS-WILSONTS	-TF-SS1	STN 'B' PWR EQ INSP-SVI Spr 2020	1183701	Wilson	TF
2020	18804886	PR	62562606	NOCO ORAS	CR01	N-TS-WILSONTS	-TF-SS1	STN 'B' PWR EQ INSP-SVI April wk3	1183701	Wilson	TF
2020	19015273	PR	62562612	NOCO ORAS	CR01	N-TS-WILSONTS	-TF-SS1	STN 'B' PWR EQ INSP-SVI June wk1	1183701	Wilson	TF
2020	18892538	PR	62562608	NOCO ORAS	CR01	N-TS-WILSONTS	-TF-SS1	STN 'B' PWR EQ INSP-SVI May wk1	1183701	Wilson	TF
2020	19015274	PR	62562612	NOCO ORAS	CR01	N-TS-WILSONTS	-TF-T1	STN 'B' PWR EQ INSP-SVI June wk1	1183712	Wilson	TF
2020	18773005	PR	62562605	NOCO ORAS	CR01	N-TS-WILSONTS	-TF-T1	STN 'B' PWR EQ INSP-SVI April wk2	1183712	Wilson	TF
2020	18892550	PR	62562608	NOCO ORAS	CR01	N-TS-WILSONTS	-TF-T1	STN 'B' PWR EQ INSP-SVI May wk1	1183712	Wilson	TF
2020	18709341	PR	62554053	NOCO ORAS	CR02	N-TS-WILSONTS	-TF-T1	TF-GENERAL-(SPECIAL)DGA-MAIN TANK SEP 18	1183712	Wilson	TF
2020	19332904	PR	62291355	NOCO ORAS	CR01	N-TS-WILSONTS	-TF-T1	STN 'B' PWR EQ INSP-SVI Fall 2020	1183712	Wilson	TF
2020	18644115	PR	62291354	NOCO ORAS	CR01	N-TS-WILSONTS	-TF-T1	STN 'B' PWR EQ INSP-SVI Spr 2020	1183712	Wilson	TF
2020	17812240	PR	62293093	NOCO ORAS	CR03	N-TS-WILSONTS	-TF-T1	TF-GENERAL-GOT	1183712	Wilson	TF
2020	18804887	PR	62562606	NOCO ORAS	CR01	N-TS-WILSONTS	-TF-T1	STN 'B' PWR EQ INSP-SVI April wk3	1183712	Wilson	TF
2020	18804888	PR	62562606	NOCO ORAS	CR01	N-TS-WILSONTS	-TF-T4	STN 'B' PWR EQ INSP-SVI April wk3	1188773	Wilson	TF
2020	19015117	PR	62562612	NOCO ORAS	CR01	N-TS-WILSONTS	-TF-T4	STN 'B' PWR EQ INSP-SVI June wk1	1188773	Wilson	TF
2020	18389432	PR	62480271	NOCO ORAS	CR02	N-TS-WILSONTS	-TF-T4	TF-GENERAL-(SPECIAL)DGA	1188773	Wilson	TF
2020	18644116	PR	62291354	NOCO ORAS	CR01	N-TS-WILSONTS	-TF-T4	STN 'B' PWR EQ INSP-SVI Spr 2020	1188773	Wilson	TF
2020	19332905	PR	62291355	NOCO ORAS	CR01	N-TS-WILSONTS	-TF-T4	STN 'B' PWR EQ INSP-SVI Fall 2020	1188773	Wilson	TF
2020	17812188	PR	62293061	NOCO ORAS	CR02	N-TS-WILSONTS	-TF-T4	TF-GENERAL-GOT	1188773	Wilson	TF
2020	19407972	PR	62786304	NOCO ORAS	CR02	N-TS-WILSONTS	-TF-T4	PREOUTAGE INSPECTION- CAT 1 - ELEC	1188773	Wilson	TF
2020	18772692	PR	62562605	NOCO ORAS	CR01	N-TS-WILSONTS	-TF-T4	STN 'B' PWR EQ INSP-SVI April wk2	1188773	Wilson	TF
2020	18892552	PR	62562608	NOCO ORAS	CR01	N-TS-WILSONTS	-TF-T4	STN 'B' PWR EQ INSP-SVI May wk1	1188773	Wilson	TF
2020	19333205	PR	62291355	NOCO ORAS	CR01	N-TS-WILSONTS	-TF-T1	STN 'B' PWR EQ INSP-SVI Fall 2020	1223907	Wilson	TF
2020	18644206	PR	62291354	NOCO ORAS	CR01	N-TS-WILSONTS	-TF-T1	STN 'B' PWR EQ INSP-SVI Spr 2020	1223907	Wilson	TF

2020	18773061	PR	62562605	NOCO ORAS	CR01	N-TS-WILSONTS -TF-T1	STN 'B' PWR EQ INSP-SVI April wk2	1223907	Wilson	TF
2020	17812622	PR	62293485	NOCO ORAS	CR02	N-TS-WILSONTS -TF-T1	UT-MR-FIII-UTOA	1223907	Wilson	TF
2020	18805132	PR	62562606	NOCO ORAS	CR01	N-TS-WILSONTS -TF-T1	STN 'B' PWR EQ INSP-SVI April wk3	1223907	Wilson	TF
2020	18892972	PR	62562608	NOCO ORAS	CR01	N-TS-WILSONTS -TF-T1	STN 'B' PWR EQ INSP-SVI May wk1	1223907	Wilson	TF
2020	18310036	PR	62455935	NOCO ORAS	CR02	N-TS-WILSONTS -TF-T1	UT-MR-FIII-(SPECIAL)MCT-DIV	1223907	Wilson	TF
2020	19015327	PR	62562612	NOCO ORAS	CR01	N-TS-WILSONTS -TF-T1	STN 'B' PWR EQ INSP-SVI June wk1	1223907	Wilson	TF
2020	19333118	PR	62291355	NOCO ORAS	CR01	N-TS-WILSONTS -TF-T2	STN 'B' PWR EQ INSP-SVI Fall 2020	1223909	Wilson	TF
2020	18773063	PR	62562605	NOCO ORAS	CR01	N-TS-WILSONTS -TF-T2	STN 'B' PWR EQ INSP-SVI April wk2	1223909	Wilson	TF
2020	17812624	PR	62293487	NOCO ORAS	CR03	N-TS-WILSONTS -TF-T2	UT-MR-DIII-UTOA	1223909	Wilson	TF
2020	18644370	PR	62291354	NOCO ORAS	CR01	N-TS-WILSONTS -TF-T2	STN 'B' PWR EQ INSP-SVI Spr 2020	1223909	Wilson	TF
2020	19015352	PR	62562612	NOCO ORAS	CR01	N-TS-WILSONTS -TF-T2	STN 'B' PWR EQ INSP-SVI June wk1	1223909	Wilson	TF
2020	18892939	PR	62562608	NOCO ORAS	CR01	N-TS-WILSONTS -TF-T2	STN 'B' PWR EQ INSP-SVI May wk1	1223909	Wilson	TF
2020	18537248	PR	62525898	NOCO ORAS	CR01	N-TS-WILSONTS -TF-T2	UT-MR-DIII-(SPECIAL)DGA-ULTC	1223909	Wilson	TF
2020	18805001	PR	62562606	NOCO ORAS	CR01	N-TS-WILSONTS -TF-T2	STN 'B' PWR EQ INSP-SVI April wk3	1223909	Wilson	TF
2020	18644373	PR	62291354	NOCO ORAS	CR01	N-TS-WILSONTS -TF-T3	STN 'B' PWR EQ INSP-SVI Spr 2020	1223911	Wilson	TF
2020	19015355	PR	62562612	NOCO ORAS	CR01	N-TS-WILSONTS -TF-T3	STN 'B' PWR EQ INSP-SVI June wk1	1223911	Wilson	TF
2020	19333206	PR	62291355	NOCO ORAS	CR01	N-TS-WILSONTS -TF-T3	STN 'B' PWR EQ INSP-SVI Fall 2020	1223911	Wilson	TF
2020	18892918	PR	62562608	NOCO ORAS	CR01	N-TS-WILSONTS -TF-T3	STN 'B' PWR EQ INSP-SVI May wk1	1223911	Wilson	TF
2020	17812533	PR	62293396	NOCO ORAS	CR02	N-TS-WILSONTS -TF-T3	UT-ABB-UCBRN/GRN/LRN-UTOA	1223911	Wilson	TF
2020	18805133	PR	62562606	NOCO ORAS	CR01	N-TS-WILSONTS -TF-T3	STN 'B' PWR EQ INSP-SVI April wk3	1223911	Wilson	TF
2020	18773070	PR	62562605	NOCO ORAS	CR01	N-TS-WILSONTS -TF-T3	STN 'B' PWR EQ INSP-SVI April wk2	1223911	Wilson	TF
2020	19015356	PR	62562612	NOCO ORAS	CR01	N-TS-WILSONTS -TF-T4	STN 'B' PWR EQ INSP-SVI June wk1	1223913	Wilson	TF
2020	18644374	PR	62291354	NOCO ORAS	CR01	N-TS-WILSONTS -TF-T4	STN 'B' PWR EQ INSP-SVI Spr 2020	1223913	Wilson	TF
2020	18805245	PR	62562606	NOCO ORAS	CR01	N-TS-WILSONTS -TF-T4	STN 'B' PWR EQ INSP-SVI April wk3	1223913	Wilson	TF
2020	18773074	PR	62562605	NOCO ORAS	CR01	N-TS-WILSONTS -TF-T4	STN 'B' PWR EQ INSP-SVI April wk2	1223913	Wilson	TF
2020	19333207	PR	62291355	NOCO ORAS	CR01	N-TS-WILSONTS -TF-T4	STN 'B' PWR EQ INSP-SVI Fall 2020	1223913	Wilson	TF
2020	17812536	PR	62293399	NOCO ORAS	CR02	N-TS-WILSONTS -TF-T4	UT-ABB-UCBRN/GRN/LRN-UTOA	1223913	Wilson	TF
2020	18892973	PR	62562608	NOCO ORAS	CR01	N-TS-WILSONTS -TF-T4	STN 'B' PWR EQ INSP-SVI May wk1	1223913	Wilson	TF
2020	18460582	PR	62477744	NOCO ORAS	CR01	N-TS-WILSONTS -TF-T2	Tx PCB Reduction Oil Sample 2020	3022567	Wilson	TF
2020	18981308	TC	62596381	NOCO ORAS		N-TS-WILSONTS -TF	S3-EMD-T7 COOLING FAIL		Wilson	TF
2020	18623405	TC	62541178	NOCO ORAS	0100	N-TS-WILSONTS -TF-T2	S3: EMD RE: T2 COOLING FAIL	1175751	Wilson	TF
2020	18421763	TC	62500603	NOCO ORAS	9900	N-TS-WILSONTS -TF-T2	S3 EMD T2 DIFFERENTIAL	1175751	Wilson	TF
2021	19190375	PR	62678273	NOCO ORAS	CR01	N-TS-CHARLESTS -BR-T1A7A8	BR-M/C-AMAG/<30-Strategy	1094301	Charles	BR
2021	19590693	PR	62834220	NOCO ORAS	CR01	N-TS-CHARLESTS -BR-T3A1A2	BR-M/C-AMAG/<30-Strategy	1114751	Charles	BR
2021	19190378	PR	62678276	NOCO ORAS	CR02	N-TS-CHARLESTS -BR-T4A3A4	BR-M/C-AMAG/<30-Strategy	1207379	Charles	BR
2021	19190377	PR	62678275	NOCO ORAS	CR02	N-TS-CHARLESTS -BR-T4A1A2	BR-M/C-AMAG/<30-Strategy	1213796	Charles	BR
2021	19067155	DR	62611170	NOCO ORAS	0700	N-TS-CHARLESTS -TF-T3	Charles T3 Oil leak repair	1178289	Charles	TF
2021	18677364	DR	62548804	NOCO ORAS	0700	N-TS-CHARLESTS -TF-T3	Oil Leak by Y ULTC Lid	1222384	Charles	TF
2021	19190061	PR	62677969	NOCO ORAS	CR03	N-TS-CHARLESTS -TF-T3	TF-GENERAL-GOT	1178289	Charles	TF
2021	19190062	PR	62677970	NOCO ORAS	CR03	N-TS-CHARLESTS -TF-T4	TF-GENERAL-GOT	1183465	Charles	TF
2021	19190029	PR	62677967	NOCO ORAS	CR02	N-TS-CHARLESTS -TF-T1	TF-GENERAL-GOT	1183475	Charles	TF
2021	19190060	PR	62677968	NOCO ORAS	CR02	N-TS-CHARLESTS -TF-T2	TF-GENERAL-GOT	1191105	Charles	TF
2021	19190751	PR	62678659	NOCO ORAS	CR02	N-TS-CHARLESTS -TF-T1	UT-CWC/MR/UVT-UTOA	1222374	Charles	TF
2021	16880570	PR	61912090	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T1	UT-CWC/MR/UVT-UTOA	1222374	Charles	TF
2021	19190750	PR	62678658	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T1	UT-CWC/MR/UVT-UTOA	1222374	Charles	TF
2021	19384320	PR	62776215	NOCO ORAS	CR02	N-TS-CHARLESTS -TF-T1	UT-CWC/MR/UVT-(SPECIAL)MCT-Y	1222376	Charles	TF
2021	19190753	PR	62678701	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T1	UT-CWC/MR/UVT-UTOA	1222376	Charles	TF
2021	19190754	PR	62678702	NOCO ORAS	CR02	N-TS-CHARLESTS -TF-T1	UT-CWC/MR/UVT-UTOA	1222376	Charles	TF
2021	19190757	PR	62678705	NOCO ORAS	CR02	N-TS-CHARLESTS -TF-T2	UT-CWC/MR/UVT-UTOA	1222378	Charles	TF

2021	19190756	PR	62678704	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T2	UT-CWC/MR/UVT-UTOA	1222378	Charles	TF
2021	19190770	PR	62678708	NOCO ORAS	CR02	N-TS-CHARLESTS -TF-T2	UT-CWC/MR/UVT-UTOA	1222380	Charles	TF
2021	19190759	PR	62678707	NOCO ORAS	CR01	N-TS-CHARLESTS -TF-T2	UT-CWC/MR/UVT-UTOA	1222380	Charles	TF
2021	19192458	PR	62680386	NOCO ORAS	CR02	N-TS-CHARLESTS -TF-T3	UT-MR-DIII-UTOA	1222382	Charles	TF
2021	19192459	PR	62680387	NOCO ORAS	CR02	N-TS-CHARLESTS -TF-T3	UT-MR-DIII-UTOA	1222384	Charles	TF
2021	19365707	PR	62767306	NOCO ORAS	CR02	N-TS-CHARLESTS -TF-T3	UT-MR-DIII-(SPECIAL)MCT-Y	1222384	Charles	TF
2021	19192247	PR	62680205	NOCO ORAS	CR02	N-TS-CHARLESTS -TF-T4	UT-MR-DIII-UTOA	1222387	Charles	TF
2021	19192248	PR	62680206	NOCO ORAS	CR02	N-TS-CHARLESTS -TF-T4	UT-MR-DIII-UTOA	1222389	Charles	TF
2021	19268070	DR	62734044	NOCO ORAS	9900	N-TS-WILSONTS -BR	ADIT ACTION ITEM:COMPRESSOR INVENTORY		Wilson	BR
2021	14517098	DR	61267788	NOCO ORAS	0100	N-TS-WILSONTS -BR-M15	No oil in sight glass		Wilson	BR
2021	18055670	DR	62401032	NOCO ORAS	0700	N-TS-WILSONTS -BR-M6	Wilson M6 oil sight glass uncleare	1213645	Wilson	BR
2021	17112532	DR	62107743	NOCO ORAS	0100	N-TS-WILSONTS -BR-M6	low oil	1213645	Wilson	BR
2021	16813842	DR	61872718	NOCO ORAS	0100	N-TS-WILSONTS -BR-M6	oil sight glass too dirty to see oil	1213645	Wilson	BR
2021	19196645	PR	62684573	NOCO ORAS	CR01	N-TS-WILSONTS -BR	STN BREAKER BLOWDOWN		Wilson	BR
2021	19196647	PR	62684575	NOCO ORAS	CR01	N-TS-WILSONTS -BR	STN BREAKER BLOWDOWN		Wilson	BR
2021	18205620	PR	62420840	NOCO ORAS	CR01	N-TS-WILSONTS -BR-T1B	Tx PCB Reduction Oil Sample		Wilson	BR
2021	19195813	PR	62683751	NOCO ORAS	CR01	N-TS-WILSONTS -BR-M12	BR-OIL-KSO-LV- BOA	1207581	Wilson	BR
2021	19204825	PR	62693352	NOCO ORAS	CR01	N-TS-WILSONTS -BR-T2Y	BR-OIL-KSO-LV- BOA	1213509	Wilson	BR
2021	19195814	PR	62683752	NOCO ORAS	CR01	N-TS-WILSONTS -BR-M14	BR-OIL-KSO-LV- BOA	1215063	Wilson	BR
2021	19078511	DR	62777282	NOCO ORAS	9900	N-TS-WILSONTS -TF-T1	T1 HADS circuit DC ground	1183712	Wilson	TF
2021	19180016	PR	62668765	NOCO ORAS	CR01	N-TS-WILSONTS -TF	TF-TS-GENERAL-FANS ON		Wilson	TF
2021	18384832	PR	62477745	NOCO ORAS	CR01	N-TS-WILSONTS -TF-T4	Tx PCB Reduction Oil Sample		Wilson	TF
2021	19195816	PR	62683754	NOCO ORAS	CR03	N-TS-WILSONTS -TF-T3	TF-GENERAL-GOT	1173245	Wilson	TF
2021	19195820	PR	62683758	NOCO ORAS	CR01	N-TS-WILSONTS -TF-T2	TF-GENERAL-GOT	1175751	Wilson	TF
2021	19195819	PR	62683757	NOCO ORAS	CR03	N-TS-WILSONTS -TF-T1	TF-GENERAL-GOT	1183712	Wilson	TF
2021	19195817	PR	62683755	NOCO ORAS	CR02	N-TS-WILSONTS -TF-T4	TF-GENERAL-GOT	1188773	Wilson	TF
2021	19195949	PR	62683877	NOCO ORAS	CR02	N-TS-WILSONTS -TF-T1	UT-MR-FIII-UTOA	1223907	Wilson	TF
2021	19195970	PR	62683878	NOCO ORAS	CR03	N-TS-WILSONTS -TF-T2	UT-MR-DIII-UTOA	1223909	Wilson	TF
2021	19195909	PR	62683837	NOCO ORAS	CR02	N-TS-WILSONTS -TF-T3	UT-ABB-UCBRN/GRN/LRN-UTOA	1223911	Wilson	TF
2021	19195920	PR	62683838	NOCO ORAS	CR02	N-TS-WILSONTS -TF-T4	UT-ABB-UCBRN/GRN/LRN-UTOA	1223913	Wilson	TF

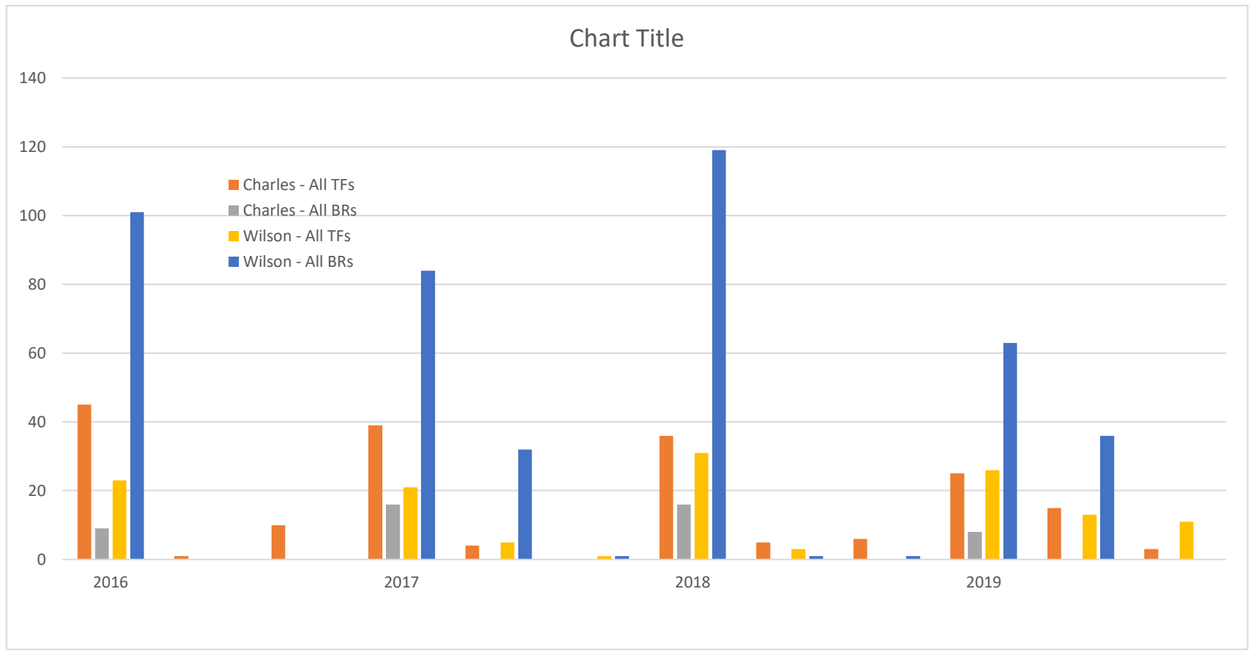
Completion Year	Notification	Priority	Priority	Notifictn type	Order	System status	User status	Coding	Cond.after task	Req. start	Notif.date	Completn date	Functional Loc.	Description	Equipment	Station	Asset
2017	15278861	3	Medium (30-90 Days)	DR	61403621	NOCO ORAS	VALD	9900	1	12/25/2016	11/25/2016	01/11/2017	N-TS-CHARLESTS -TF-T1	oil in transformer bay		Charles	TF
2016	15033403	2	High (7-30 Days)	DR	61361527	NOCO ORAS	VALD	9900	1	08/24/2016	08/24/2016	11/25/2016	N-TS-CHARLESTS -TF-T1	Charles T1 oil clean up		Charles	TF
2019	16774515	3	Medium (30-90 Days)	DR	61855946	NOCO ORAS	VALD	0100	2	06/01/2018	05/25/2018	03/21/2019	N-TS-CHARLESTS -TF-T3	The oil temp gauge is sticky		Charles	TF
2016	15009597	3	Medium (30-90 Days)	DR	61358817	NOCO ORAS	VALD	3600	1	08/17/2016	08/17/2016	09/08/2016	N-TS-CHARLESTS -TF-T3	Charles T3 ventilation repair		Charles	TF
2019	18384010	2	High (7-30 Days)	DR		NOCO	VALD JHSC			12/06/2019	12/06/2019	12/16/2019	N-TS-CHARLESTS -TF-T4	Charles T4 transformer bay		Charles	TF
2021	19268070	3	Medium (30-90 Days)	DR	62734044	NOCO ORAS	VALD	9900	1	08/21/2020	08/21/2020	05/28/2021	N-TS-WILSONTS -BR	ADIT ACTION ITEM:COMPRESSOR INVENTORY		Wilson	BR
2020	14517097	4	Low (> 90 Days)	DR	61267787	NOCO ORAS	VALD	0100	1	02/16/2016	02/16/2016	06/19/2020	N-TS-WILSONTS -BR-JQ	Low oil JQ breaker		Wilson	BR
2020	17112542	3	Medium (30-90 Days)	DR	62107742	NOCO ORAS	RECD	0700	1	12/11/2018	11/11/2018	02/21/2020	N-TS-WILSONTS -BR-M12	low oil		Wilson	BR
2018	17109692	6	By a Fixed Date	DR	62062847	NOCO ORAS	INIT			11/08/2018	11/08/2018	11/12/2018	N-TS-WILSONTS -BR-M13	AR22760 NA54 CDMA REPLCMT J1305196 - P&C		Wilson	BR
2018	16126711	3	Medium (30-90 Days)	DR	61670901	NOCO ORAS	VALD	0100	1	10/05/2017	10/05/2017	02/13/2018	N-TS-WILSONTS -BR-M14	Wilson M14 broken spacer		Wilson	BR
2021	14517098	4	Low (> 90 Days)	DR	61267788	NOCO ORAS	VALD	0100	1	02/16/2016	02/16/2016	03/25/2021	N-TS-WILSONTS -BR-M15	No oil in sight glass		Wilson	BR
2018	17109693	6	By a Fixed Date	DR	62062848	NOCO ORAS	INIT			11/08/2018	11/08/2018	11/12/2018	N-TS-WILSONTS -BR-M17	AR22760 NA54 CDMA REPLCMT J1305132 - P&C		Wilson	BR
2017	16163404	1	Emergent (< 7 Days)	DR	61698830	NOCO ORAS	VALD	0100	1	10/31/2017	10/31/2017	11/15/2017	N-TS-WILSONTS -BR-M18	M18 Pilot Valve leaking		Wilson	BR
2017	15978610	2	High (7-30 Days)	DR	61620839	NOCO ORAS	VALD	0100	1	08/23/2017	08/23/2017	11/17/2017	N-TS-WILSONTS -BR-SC3J	Wilson SF6 phase stabilizer brackets		Wilson	BR
2016	14536010	1	Emergent (< 7 Days)	DR	61270570	NOCO ORAS	VALD	0100	1	03/14/2016	03/14/2016	03/23/2016	N-TS-WILSONTS -TF-SS2	SS2 Low Oil		Wilson	TF
2019	17013619	3	Medium (30-90 Days)	DR	62061419	NOCO ORAS	VALD	0100	1	11/02/2018	10/03/2018	08/15/2019	N-TS-WILSONTS -TF-T1	DC Ground Wilson T1 HADS		Wilson	TF
2020	16162420	3	Medium (30-90 Days)	DR	61696126	NOCO ORAS	VALD	5710	1	12/07/2017	10/30/2017	03/11/2020	N-TS-WILSONTS -BR-M17	Wilson TS - M17 stabilizer bracket	1093814	Wilson	BR
2016	15192180	1	Emergent (< 7 Days)	DR	61387665	NOCO ORAS	VALD	1400	1	10/25/2016	10/25/2016	10/28/2016	N-TS-WILSONTS -BR-M17	Wilson TS - M17 comp blow down tube	1093814	Wilson	BR
2020	19351075	1	Emergent (< 7 Days)	DR	62768607	NOCO ORAS	VALD	1400	1	09/18/2020	09/18/2020	09/24/2020	N-TS-WILSONTS -BR-M17	Wilson TS M17 air control valve	1093814	Wilson	BR
2017	14541704	2	High (7-30 Days)	DR	61272383	NOCO ORAS	VALD	0100	1	03/21/2016	03/21/2016	10/13/2017	N-TS-WILSONTS -BR-M18	Wilson M18 investigate low air	1093835	Wilson	BR
2017	16162359	3	Medium (30-90 Days)	DR	61696128	NOCO ORAS	VALD	0100	1	10/30/2017	10/30/2017	10/31/2017	N-TS-WILSONTS -BR-M18	Wilson TS - M18 stabilizer bracket	1093835	Wilson	BR
2016	14495897	1	Emergent (< 7 Days)	DR	61254919	NOCO ORAS	VALD	0700	1	01/17/2016	01/17/2016	01/19/2016	N-TS-WILSONTS -BR-M18	WILSON M18 LOW GAS INVESTIGATE/REPAIR	1093835	Wilson	BR
2016	15280537	1	Emergent (< 7 Days)	DR	61399140	NOCO ORAS	VALD	1400	1	11/28/2016	11/28/2016	12/22/2016	N-TS-WILSONTS -BR-M18	Wilson M18 Low Air	1093835	Wilson	BR
2016	14533571	2	High (7-30 Days)	DR	61269944	NOCO ORAS	VALD	0100	1	03/10/2016	03/10/2016	03/24/2016	N-TS-WILSONTS -BR-M18	WILSON M18 POLE HTR MODIFICATION	1093835	Wilson	BR
2016	14519075	2	High (7-30 Days)	DR	61264453	NOCO ORAS	VALD	0700	1	02/19/2016	02/19/2016	03/24/2016	N-TS-WILSONTS -BR-M18	WILSON M18 WHITE PHASE FAILURE	1093835	Wilson	BR
2018	17048793	1	Emergent (< 7 Days)	DR	62042730	NOCO ORAS	VALD	1611	1	10/25/2018	10/25/2018	11/19/2018	N-TS-CHARLESTS -BR-T1A7A8	Charles T1A7A8 will not open	1094301	Charles	BR
2018	17048553	2	High (7-30 Days)	DR	62047144	NOCO ORAS	VALD	1400	1	10/25/2018	10/25/2018	11/06/2018	N-TS-CHARLESTS -BR-T1A7A8	Breaker will not function	1094301	Charles	BR
2020	19514862	2	High (7-30 Days)	DR	62823304	NOCO ORAS	VALD	0100	1	11/11/2020	11/04/2020	11/13/2020	N-TS-CHARLESTS -BR-T2A7A8	Faulty Capacitor Light Indication	1094324	Charles	BR
2020	18364211	6	By a Fixed Date	DR	62468750	NOCO ORAS	VALD	1614	1	02/15/2020	11/27/2019	01/17/2020	N-TS-CHARLESTS -BR-T1A5A6	Repair breaker racking mechanism	1098469	Charles	BR
2018	14516088	2	High (7-30 Days)	DR	61222829	NOCO ORAS	INIT			02/19/2016	02/12/2016	12/14/2018	N-TS-WILSONTS -BR-M7	WILSON M7 HIGH PCB BUSH REPLACE CMS 2015	1101252	Wilson	BR
2016	15252987	1	Emergent (< 7 Days)	DR	61396097	NOCO ORAS	VALD	0312	1	11/16/2016	11/16/2016	11/23/2016	N-TS-WILSONTS -BR-M7	rebuild interrupters Wilson M7	1101252	Wilson	BR
2016	15213696	1	Emergent (< 7 Days)	DR	61390672	NOCO ORAS	VALD	0100	1	11/02/2016	11/02/2016	11/16/2016	N-TS-WILSONTS -BR-T1B	Wilson T1B replace buffer stops/washers	1101264	Wilson	BR
2016	15210405	1	Emergent (< 7 Days)	DR	61392716	NOCO ORAS	VALD	0312	1	11/01/2016	11/01/2016	11/16/2016	N-TS-WILSONTS -BR-T1B	wilson T1B rebuild interrupters	1101264	Wilson	BR
2020	17238018	3	Medium (30-90 Days)	DR	62133793	NOCO ORAS	VALD	9900	1	04/11/2019	01/30/2019	05/27/2020	N-TS-WILSONTS -TF-T3	Wilson TS T3 Fans	1173245	Wilson	TF
2020	18493174	5	On a Fixed Date	DR	62517603	NOCO ORAS	VALD	9900	1	06/22/2020	10/01/2019	05/06/2020	N-TS-WILSONTS -TF-T3	Wilson TS Repair acoustic doors	1173245	Wilson	TF
2020	17631176	4	Low (> 90 Days)	DR	62221849	NOCO ORAS	VALD	0100	1	10/16/2019	05/21/2019	03/23/2020	N-TS-WILSONTS -TF-T3	Wilson T3,T4 cooling fail with fans	1173245	Wilson	TF
2018	16989747	2	High (7-30 Days)	DR	62002893	NOCO ORAS	VALD	9900	1	09/21/2018	09/14/2018	09/18/2018	N-TS-WILSONTS -TF-T3	Wilson T3 - Fan Brackets Required	1173245	Wilson	TF
2019	17214362	2	High (7-30 Days)	DR	62117514	NOCO ORAS	VALD	9800	1	01/21/2019	01/21/2019	01/25/2019	N-TS-WILSONTS -TF-T3	Wilson T3 Add oil to conservator	1173245	Wilson	TF
2019	14956250	4	Low (> 90 Days)	DR	61354561	NOCO ORAS	VALD	9900	1	01/10/2019	07/28/2016	02/04/2019	N-TS-WILSONTS -TF-T3	Wilson TS T3 - Fan 6 motor control	1173245	Wilson	TF
2017	15999092	3	Medium (30-90 Days)	DR	61627580	NOCO ORAS	VALD	9900	1	08/29/2017	08/29/2017	10/18/2017	N-TS-WILSONTS -TF-T3	Wilson TS - T3 silica gel replacement	1173245	Wilson	TF
2017	15922799	3	Medium (30-90 Days)	DR	61604273	NOCO ORAS	VALD	3300	5	08/03/2017	08/03/2017	08/22/2017	N-TS-WILSONTS -TF-T2	wilson ts - t2 fan	1175751	Wilson	TF
2020	15943741	3	Medium (30-90 Days)	DR	61614285	NOCO ORAS	VALD	4700	1	08/17/2017	08/17/2017	01/23/2020	N-TS-WILSONTS -TF-T2	wilson T2 LV bushing connectors	1175751	Wilson	TF
2018	16151185	4	Low (> 90 Days)	DR	61458546	NOCO NOPT ORAS	VALD	0700	1	01/17/2018	10/19/2017	04/11/2018	N-TS-WILSONTS -TF-T2	WILSON T2 - EMD Leak Reduction	1175751	Wilson	TF
2017	16082883	2	High (7-30 Days)	DR	61647454	NOCO ORAS	VALD	9900	1	09/15/2017	09/15/2017	10/12/2017	N-TS-WILSONTS -TF-T2	WILSON TS T2 GROUND FAULT HADS	1175751	Wilson	TF
2019	16132387	6	By a Fixed Date	DR	61669601	ATCO NOCO ORAS	VALD	9900	1	10/06/2017	10/06/2017	04/12/2019	N-TS-WILSONTS -TF-T2	WILSON T2 RUSH OIL SAMPLE	1175751	Wilson	TF
2020	18422345	5	On a Fixed Date	DR	62500601	NOCO ORAS	VALD	9900	4	01/11/2020	01/11/2020	01/21/2020	N-TS-WILSONTS -TF-T2	Wilson T2 Differential Trip	1175751	Wilson	TF
2019	17237895	4	Low (> 90 Days)	DR	62133794	NOCO ORAS	VALD	3300	1	08/28/2019	01/30/2019	06/20/2019	N-TS-WILSONTS -TF-T2	Investigate noise/vibration	1175751	Wilson	TF
2019	17996783	3	Medium (30-90 Days)	DR	62118706	NOCO ORAS	VALD			10/09/2019	09/09/2019	10/17/2019	N-TS-WILSONTS -TF-T2	EX - WILSON T2 H.V PCB retro @ cms 19	1175751	Wilson	TF
2017	15859655	6	By a Fixed Date	DR	61542242	NOCO ORAS	VALD	9900	1	12/05/2017	07/18/2017	11/02/2017	N-TS-WILSONTS -TF-T2	AR18335 NA54 T2 Leak Red & Breather P&C	1175751	Wilson	TF
2020	18779873	3	Medium (30-90 Days)	DR		NOCO	VALD	1710		04/17/2020	04/17/2020	04/21/2020	N-TS-CHARLESTS -TF-T3	Charles T3/T4 out of step	1178289	Charles	TF
2020	18668719	2	High (7-30 Days)	DR	62547797	NOCO ORAS	VALD	9900	1	03/24/2020	03/17/2020	03/31/2020	N-TS-CHARLESTS -TF-T3	Investigate Differential	1178289	Charles	TF
2021	19067155	3	Medium (30-90 Days)	DR	62611170	NOCO ORAS	VALD	0700	1	06/15/2020	06/15/2020	07/19/2021	N-TS-CHARLESTS -TF-T3	Charles T3 Oil leak repair	1178289	Charles	TF
2020	16967214	3	Medium (30-90 Days)	DR	61994076	NOCO ORAS	VALD	0100	1	08/28/2018	08/28/2018	11/13/2020	N-TS-CHARLESTS -TF-T3	Replace temperature gauge	1178289	Charles	TF
2020	16513493	4	Low (> 90 Days)	DR	61830208	NOCO ORAS	VALD	9900	1	11/12/2018	03/15/2018	11/13/2020	N-TS-CHARLESTS -TF-T3	Charles T3 oil leak on rad piping	1178289	Charles	TF
2018	16959565	3	Medium (30-90 Days)	DR	61978804	NOCO ORAS	VALD	0100	1	09/22/2018	08/23/2018	10/02/2018	N-TS-CHARLESTS -TF-T3	Charles T3/T4 t/c out of step	1178289	Charles	TF
2016	14820819	2	High (7-30 Days)	DR	61300028	NOCO ORAS	VALD	9900	1	07/01/2016	06/24/2016	09/26/2016	N-TS-CHARLESTS -TF-T4	T4 LV bushing CT failure - investagation	1183465	Charles	TF
2016	14610296	2	High (7-30 Days)	DR	61277597	NOCO ORAS	INIT			05/04/2016	04/27/2016	11/30/2016	N-TS-CHARLESTS -TF-T4	CHARLES T4 REPL HI PCB BUSH CMS 2016-BU	1183465	Charles	TF
2019	16967215	4	Low (> 90 Days)	DR	62018480	NOCO ORAS	VALD	0100	1	08/28/2018	08/28/2018	08/02/2019	N-TS-CHARLESTS -TF-T4	T3 and T4 out of step alarm.	1183465	Charles	TF
2017	15347415	3	Medium (30-90 Days)	DR	61400511	NOCO ORAS	INIT			02/18/2017	01/19/2017	06/30/2017	N-TS-CHARLESTS -TF-T4	Ex-Charles T4 O/H PCB Bush. CMS 2016 BU	1183465	Charles	TF
2017	15049937	3	Medium (30-90 Days)	DR	61364181	NOCO NOPT ORAS	VALD	0700	1	08/31/2016	08/31/2016	08/01/2017	N-TS-CHARLESTS -TF-T4	Charles T4 cooler pipe oil leak	1183465	Charles	TF
2017	15130444	3	Medium (30-90 Days)	DR	61381219	NOCO NOPT ORAS	VALD	0700	1	10/29/2016	09/29/2016	08/01/2017	N-TS-CHARLESTS -TF-T4	Leaking Victalic 8" Charles T4	1183465	Charles	TF
2017	15393250	3	Medium (30-90 Days)	DR	61424687	NOCO NOPT ORAS	VALD	0700	1	02/16/2017	02/16/2017	08/01/2017	N-TS-CHARLESTS -TF-T4	Charles T4 rad pipe victaulic leaking	1183465	Charles	TF
2017	15913921	1	Emergent (< 7 Days)	DR	61597131	NOCO NOPT ORAS	VALD	0100	1	07/31/2017	07/31/2017	09/20/2017	N-TS-CHARLESTS -TF-T1	T1 Oil Leak inspection and clean up	1183475	Charles	TF
2020	18500259	3	Medium (30-90 Days)	DR		NOCO	VALD			02/10/2020	02/03/2020	02/12/2020	N-TS-CHARLESTS -TF-T1	Charles T1 - Tapchanger sample valves	1183475	Charles	TF
2018	16752850	4	Low (> 90 Days)	DR	61845254	NOCO ORAS	VALD	0700	1	08/15/2018	05/17/2018	06/05/2018	N-TS-CHARLESTS -TF-T1	Clean Oil on Floor	1183475	Charles	TF
2018	16752851	4	Low (> 90 Days)	DR	61845255	NOCO ORAS	VALD	0700	1	08/15/2018	05/17/2018	06/05/2018	N-TS-CHARLESTS -TF-T1	Install Drian Hoses and Barell	1183475	Charles	TF
2020	18335510	3	Medium (30-90 Days)	DR	62461634	NOCO ORAS	VALD	9900	3	11/19/2019	11/19/2019	02/27/2020	N-TS-CHARLESTS -TF-T1	CHARLESTS T1 paint valves CMS 2019	1183475	Charles	TF
2018	16742086	2	High (7-30 Days)	DR		DLFL NOCO	VALD	0700		05/11/2018	05/11/2018	05/30/2018	N-TS-CHARLESTS -TF-T1	BGIS-Charles TS-Oil LeaK	1183475	Charles	TF
2018	16270413	2	High (7-30 Days)	DR	61759395	NOCO ORAS	VALD	0700	1	01/18/2018	01/18/2018	05/18/2018	N-TS-CHARLESTS -TF-T1	Gas relay piping leaking	1183475	Charles	TF
2020	18429371	2	High (7-30 Days)	DR	62502260	NOCO ORAS	VALD	0700	1	01/14/2020	01/14/2020	01/28/2020	N-TS-CHARLESTS -TF-T1	Charles T1 Tapchanger low oil	1183475	Charles	TF
2017	15130488	3	Medium (30-90 Days)	DR	61381218	NOCO ORAS	VALD	0700	1	10/29/2016	09/29/2016	03/31/2017	N-TS-CHARLESTS -TF-T1	leaking oil Charles T1	1183475	Charles	TF
2017	15049936	2	High (7-30 Days)	DR	61364182	NOCO ORAS	VALD	0700	1	08/31/2016	08/31/2016	03/31/2017	N-TS-CHARLESTS -TF-T1	Charles T1 oil leak investigation	1183475	Charles	TF
2018	16657305	1	Emergent (< 7 Days)	DR	61822274	NOCO ORAS	VALD	0700	1	04/17/2018	04/17/2018	04/19/2018	N-TS-CHARLESTS -TF-T1	Charles T1 oil leak clean up.	1183475	Charles	TF
2020	18456069	2	High (7-30 Days)	DR	62507898	NOCO ORAS	VALD	3600	1	01/20/2020	01/20/2020	02/27/2020	N-TS-CHARLESTS -TF-T1	Charles T1 tapchager buring	1183475	Charles	TF
2019	17213185	3	Medium (30-90 Days)	DR	62110362	NOCO ORAS	INIT	0700	2	08/12/2019	01/18/2019	09/18/2019	N-TS-CHARLESTS -TF-T1	CHARLESTS T1 Leak Reduc ROAD CMS 2019	1183475	Charles	TF
2020	18497459	3	Medium (30-90 Days)	DR	62517783	NOCO ORAS	VALD	9900	3	01/31/2020	01/31/2020	02/27/2020	N-TS-CHARLESTS -TF-T1	CHARLESTS T1 confined space @ site 20	1183475	Charles	TF

2016	14501803	2	High (7-30 Days)	DR	61259702	NOCO ORAS	VALD	0700	1	02/01/2016	02/01/2016	03/03/2016	N-TS-CHARLESTS	-TF-T1	Oil clean up T1	1183475	Charles	TF
2017	16125633	3	Medium (30-90 Days)	DR	61670899	NOCO ORAS	VALD	3300	1	10/04/2017	10/04/2017	11/01/2017	N-TS-WILSONTS	-TF-T1	WILSON T1 FAN	1183712	Wilson	TF
2019	17835068	2	High (7-30 Days)	DR	62303760	NOCO ORAS	VALD	9900	1	07/22/2019	07/15/2019	07/18/2019	N-TS-WILSONTS	-TF-T1	Fans need guards fabricated/installed	1183712	Wilson	TF
2019	17131783	4	Low (> 90 Days)	DR	62107746	NOCO ORAS	RECD	9900		02/28/2019	11/30/2018	10/02/2019	N-TS-WILSONTS	-TF-T1	Wilson T1 HADS	1183712	Wilson	TF
2017	15929950	3	Medium (30-90 Days)	DR	61606347	NOCO ORAS	VALD	9900	1	08/08/2017	08/08/2017	10/18/2017	N-TS-WILSONTS	-TF-T1	T1 Containment ground missing	1183712	Wilson	TF
2021	19078511	4	Low (> 90 Days)	DR	62777282	NOCO ORAS	VALD	9900	1	09/15/2020	06/17/2020	04/20/2021	N-TS-WILSONTS	-TF-T1	T1 HADS circuit DC ground	1183712	Wilson	TF
2020	19116742	3	Medium (30-90 Days)	DR	62635767	NOCO ORAS	VALD	9900	1	06/29/2020	06/29/2020	07/28/2020	N-TS-WILSONTS	-TF-T1	Portable animal fence	1183712	Wilson	TF
2019	17513660	2	High (7-30 Days)	DR	62189471	NOCO ORAS	VALD	9900	1	04/17/2019	04/17/2019	05/14/2019	N-TS-WILSONTS	-TF-T1	Wilson TS T1 fans to manual	1183712	Wilson	TF
2017	15465254	1	Emergent (< 7 Days)	DR	61456458	NOCO ORAS	VALD	9900	1	04/07/2017	04/07/2017	04/20/2017	N-TS-WILSONTS	-TF-T1	Wilson TS - T1 cab heat repairs	1183712	Wilson	TF
2020	17238112	3	Medium (30-90 Days)	DR	62133795	NOCO ORAS	VALD	9900	1	04/11/2019	01/30/2019	04/14/2020	N-TS-WILSONTS	-TF-T4	Wilson T4 Fan motor	1188773	Wilson	TF
2020	18744366	1	Emergent (< 7 Days)	DR	62561667	NOCO ORAS	VALD	3300	2	04/08/2020	04/08/2020	04/08/2020	N-TS-WILSONTS	-TF-T4	Wilson TS Noise issues	1188773	Wilson	TF
2020	18745105	2	High (7-30 Days)	DR	62562828	NOCO ORAS	VALD	3300	1	04/16/2020	04/08/2020	05/26/2020	N-TS-WILSONTS	-TF-T4	Wilson T4 replace noisy fans	1188773	Wilson	TF
2020	19029719	5	On a Fixed Date	DR	62603510	NOCO ORAS	VALD	9900	1	06/04/2020	06/04/2020	06/24/2020	N-TS-WILSONTS	-TF-T4	Remove /Reinstall Wilson T4 fans	1188773	Wilson	TF
2017	15398882	2	High (7-30 Days)	DR	61429186	NOCO ORAS	INIT			03/03/2017	02/24/2017	10/06/2017	N-TS-WILSONTS	-TF-T4	Wilson T4 Leak Reduction CMS Bush 2017	1188773	Wilson	TF
2019	17513663	2	High (7-30 Days)	DR	62189465	NOCO ORAS	VALD	9900	1	04/17/2019	04/17/2019	05/14/2019	N-TS-WILSONTS	-TF-T4	Wilson TS T4 place fans in manual	1188773	Wilson	TF
2018	16989793	2	High (7-30 Days)	DR	62002895	NOCO ORAS	VALD	9900	1	09/21/2018	09/14/2018	09/18/2018	N-TS-WILSONTS	-TF-T4	Wilson Ts - T4 Fan Brackets Required	1188773	Wilson	TF
2018	16082884	3	Medium (30-90 Days)	DR	61647456	NOCO ORAS	VALD	9900	1	09/15/2017	09/15/2017	01/22/2018	N-TS-WILSONTS	-TF-T4	WILSON TS T4 dc ground	1188773	Wilson	TF
2017	16144600	3	Medium (30-90 Days)	DR	61678174	NOCO ORAS	VALD	0100	1	10/15/2017	10/15/2017	10/17/2017	N-TS-WILSONTS	-BR-T4Q	Wilson ts - T4Q heater wire	1206763	Wilson	BR
2017	16144601	3	Medium (30-90 Days)	DR	61678175	NOCO ORAS	VALD	0100	1	10/15/2017	10/15/2017	10/17/2017	N-TS-WILSONTS	-BR-T3J	Wilson ts - T3J heater wire	1206776	Wilson	BR
2020	16813863	4	Low (> 90 Days)	DR	61872717	NOCO ORAS	VALD	5710	1	09/05/2018	06/07/2018	06/09/2020	N-TS-WILSONTS	-BR-M12	open holes in mech box	1207581	Wilson	BR
2017	16162561	3	Medium (30-90 Days)	DR	61696129	NOCO ORAS	VALD	0100	1	10/30/2017	10/30/2017	11/01/2017	N-TS-WILSONTS	-BR-SC1B	Wilson TS - SC1B stabilizer bracket	1211004	Wilson	BR
2020	19246400	5	On a Fixed Date	DR	62726461	NOCO ORAS	VALD	0100	1	08/13/2020	08/13/2020	09/10/2020	N-TS-WILSONTS	-BR-SC2Y	WILSON SC2Y CLOSE TIME	1211011	Wilson	BR
2020	19236019	5	On a Fixed Date	DR	62715986	NOCO ORAS	VALD	5710	5	08/10/2020	08/10/2020	08/13/2020	N-TS-WILSONTS	-BR-SC2Y	WILSON SC2Y SF6 GAS INVEST/REPAIR	1211011	Wilson	BR
2020	19226883	3	Medium (30-90 Days)	DR	62706275	NOCO ORAS	VALD	0100	5	07/31/2020	07/31/2020	08/13/2020	N-TS-WILSONTS	-BR-SC2Y	Wilson SC2Y Slow to close	1211011	Wilson	BR
2017	16094849	2	High (7-30 Days)	DR	61656615	NOCO ORAS	VALD	0100	1	10/02/2017	08/23/2017	10/17/2017	N-TS-WILSONTS	-BR-SC2Y	Wilson SF6 phase stabilizer brackets	1211011	Wilson	BR
2017	16159641	2	High (7-30 Days)	DR	61692746	NOCO ORAS	INIT	0100		11/02/2017	08/23/2017	11/23/2017	N-TS-WILSONTS	-BR-SC2Y	Wilson SF6 phase stabilizer brackets	1211011	Wilson	BR
2016	14972886	2	High (7-30 Days)	DR	61356259	NOCO ORAS	VALD	0700	1	08/05/2016	08/05/2016	08/31/2016	N-TS-WILSONTS	-BR-SC3J	WILSON SC3J SF6 LOW GAS INVEST/REPAIR	1211024	Wilson	BR
2017	15345166	1	Emergent (< 7 Days)	DR	61415891	NOCO ORAS	VALD	0700	1	01/11/2017	01/11/2017	01/13/2017	N-TS-WILSONTS	-BR-SC3J	Wilson TS SC3J SF6 invest/repair	1211024	Wilson	BR
2017	15345991	3	Medium (30-90 Days)	DR	61416422	NOCO ORAS	VALD	0700	1	01/13/2017	01/13/2017	04/18/2017	N-TS-WILSONTS	-BR-SC3J	Wilson TS SC3J bkr SF6 invest/repair	1211024	Wilson	BR
2017	15473234	1	Emergent (< 7 Days)	DR	61460879	NOCO NOPT ORAS	VALD	0700	1	04/13/2017	04/13/2017	08/28/2017	N-TS-WILSONTS	-BR-SC3J	Wilson TS - SC3J SF6 invest-repair	1211024	Wilson	BR
2016	14996976	3	Medium (30-90 Days)	DR	61358432	NOCO NOPT ORAS	VALD	0312	1	09/14/2016	08/15/2016	09/14/2016	N-TS-WILSONTS	-BR-SC4Q	SC4Q has a blown fuse (Wilson TS)	1211036	Wilson	BR
2017	16094751	2	High (7-30 Days)	DR	61656494	NOCO ORAS	VALD	0100	1	10/02/2017	08/23/2017	10/17/2017	N-TS-WILSONTS	-BR-SC4Q	Wilson SF6 phase stabilizer brackets	1211036	Wilson	BR
2019	17895379	2	High (7-30 Days)	DR	62160044	NOCO ORAS	INIT			08/13/2019	08/06/2019	08/12/2019	N-TS-WILSONTS	-BR-T2Y	WILSON T2Y 4 REQ'D BUSH PCB RETRO	1213509	Wilson	BR
2019	17736302	2	High (7-30 Days)	DR	62241842	NOCO ORAS	VALD	1614	1	07/02/2019	06/21/2019	07/19/2019	N-TS-WILSONTS	-BR-T2Y	WILSON T2Y CONTROL SELECTOR SWITCH-P&C	1213509	Wilson	BR
2019	17731500	2	High (7-30 Days)	DR	62241840	NOCO ORAS	VALD	1614	1	06/21/2019	06/21/2019	07/16/2019	N-TS-WILSONTS	-BR-T2Y	WILSON T2Y CONTROL SELECTOR SWITCH	1213509	Wilson	BR
2019	17731975	2	High (7-30 Days)	DR	62241441	NOCO ORAS	VALD	1614	2	07/01/2019	06/24/2019	07/09/2019	N-TS-WILSONTS	-BR-T2Y	T2Y Fail to Trip	1213509	Wilson	BR
2019	17712183	1	Emergent (< 7 Days)	DR	62232871	NOCO ORAS	VALD	0312	1	06/16/2019	06/16/2019	06/20/2019	N-TS-WILSONTS	-BR-T2Y	Wilson T2Y Rebuild interrupters	1213509	Wilson	BR
2019	17712295	2	High (7-30 Days)	DR	62234088	NOCO ORAS	VALD	1614	1	06/17/2019	06/17/2019	06/19/2019	N-TS-WILSONTS	-BR-T2Y	Wilson TS T2Y Interupter repair	1213509	Wilson	BR
2016	14521088	1	Emergent (< 7 Days)	DR	61265009	NOCO ORAS	VALD	0100	1	02/22/2016	02/22/2016	02/23/2016	N-TS-WILSONTS	-BR-BY	WILSON BY BRKR LOW OIL	1213529	Wilson	BR
2016	14519718	1	Emergent (< 7 Days)	DR	61265010	NOCO ORAS	VALD	0100	1	02/22/2016	02/22/2016	02/23/2016	N-TS-WILSONTS	-BR-BY	WILSON BY BRKR LOW WIPE	1213529	Wilson	BR
2019	17037534	2	High (7-30 Days)	DR	62020196	NOCO ORAS	INIT			10/23/2018	10/16/2018	07/24/2019	N-TS-WILSONTS	-BR-M3	EX-WILSON M3 PCB O/H rtro cms18	1213636	Wilson	BR
2017	16246052	2	High (7-30 Days)	DR	61734348	NOCO ORAS	VALD	0312	1	12/11/2017	12/11/2017	12/18/2017	N-TS-WILSONTS	-BR-M3	Wilson TS - M3 replace contacts	1213636	Wilson	BR
2021	18055670	4	Low (> 90 Days)	DR	62401032	NOCO ORAS	VALD	0700	1	09/25/2019	09/25/2019	03/25/2021	N-TS-WILSONTS	-BR-M6	Wilson M6 oil sight glass uncleare	1213645	Wilson	BR
2021	17112532	3	Medium (30-90 Days)	DR	62107743	NOCO ORAS	RECD	0100	1	12/11/2018	11/11/2018	03/25/2021	N-TS-WILSONTS	-BR-M6	low oil	1213645	Wilson	BR
2021	16813842	3	Medium (30-90 Days)	DR	61872718	NOCO ORAS	VALD	0100	1	07/07/2018	06/07/2018	03/25/2021	N-TS-WILSONTS	-BR-M6	oil sight glass too dirty to see oil	1213645	Wilson	BR
2019	17291305	2	High (7-30 Days)	DR	62092474	NOCO ORAS	INIT			02/20/2019	02/13/2019	04/01/2019	N-TS-WILSONTS	-BR-M4	EX-WILSON M4 PCB O/H rtro cms18	1213655	Wilson	BR
2020	18477922	3	Medium (30-90 Days)	DR	62514170	NOCO NOPT ORAS	VALD	5710	1	02/26/2020	01/27/2020	04/01/2020	N-TS-WILSONTS	-BR-M8	Replace 3 LA's M8 Wilson feeder	1213676	Wilson	BR
2020	18477938	1	Emergent (< 7 Days)	DR	62514168	NOCO ORAS	VALD	0700	1	01/27/2020	01/27/2020	01/27/2020	N-TS-WILSONTS	-BR-M8	investigate Wilson M8 feeder fail	1213676	Wilson	BR
2018	16681045	2	High (7-30 Days)	DR	61825202	NOCO ORAS	VALD	0100	1	04/19/2018	04/19/2018	06/05/2018	N-TS-CHARLESTS	-TF-T3	T3 and T4 Tap Changers out of step	1222382	Charles	TF
2021	18677364	3	Medium (30-90 Days)	DR	62548804	NOCO ORAS	VALD	0700	1	05/06/2020	03/19/2020	07/19/2021	N-TS-CHARLESTS	-TF-T3	Oil Leak by Y ULTC Lid	1222384	Charles	TF
2020	18420946	3	Medium (30-90 Days)	DR	62499733	NOCO ORAS	VALD	0100	1	01/10/2020	01/10/2020	11/13/2020	N-TS-CHARLESTS	-TF-T3	Charles TS T3 tapchanger B out of step	1222384	Charles	TF
2018	16681046	2	High (7-30 Days)	DR	61825205	NOCO ORAS	VALD	0100	1	04/19/2018	04/19/2018	06/08/2018	N-TS-CHARLESTS	-TF-T3	T3 and T4 Tap Changers out of step	1222384	Charles	TF
2019	16681047	3	Medium (30-90 Days)	DR	61825209	NOCO ORAS	VALD	0100	1	04/19/2018	04/19/2018	01/07/2019	N-TS-CHARLESTS	-TF-T4	T3 and T4 Tap Changers out of step	1222387	Charles	TF
2019	16681048	3	Medium (30-90 Days)	DR	61825210	NOCO ORAS	VALD	0100	1	04/19/2018	04/19/2018	01/08/2019	N-TS-CHARLESTS	-TF-T4	T3 and T4 Tap Changers out of step	1222389	Charles	TF
2019	17487358	4	Low (> 90 Days)	DR	62209586	NOCO ORAS	VALD	0100	1	10/16/2019	04/08/2019	08/15/2019	N-TS-WILSONTS	-TF-T1	Fluidix filter change T1	1223907	Wilson	TF
2019	17841830	2	High (7-30 Days)	DR	62306103	NOCO ORAS	VALD	1710	1	07/24/2019	07/17/2019	07/18/2019	N-TS-WILSONTS	-TF-T1	Wilson T1 - ULTC Sample Line Install	1223907	Wilson	TF
2017	14517096	4	Low (> 90 Days)	DR	61267792	NOCO ORAS	VALD	0700	1	02/16/2016	02/16/2016	10/13/2017	N-TS-WILSONTS	-TF-T2	T2 T/C low gear oil	1223909	Wilson	TF
2017	16166310	6	By a Fixed Date	DR	61699354	NOCO ORAS	INIT			12/28/2017	11/01/2017	12/21/2017	N-TS-WILSONTS	-BR-M3	AR21060 NA54 M3 Replace bushing 1 - EMD	1359455	Wilson	BR
2017	16166311	6	By a Fixed Date	DR	61699355	NOCO ORAS	INIT			12/28/2017	11/01/2017	12/21/2017	N-TS-WILSONTS	-BR-M3	AR21060 NA54 M3 Replace bushing 2 - EMD	1360948	Wilson	BR
2017	16166312	6	By a Fixed Date	DR	61699356	NOCO ORAS	INIT			12/28/2017	11/01/2017	12/21/2017	N-TS-WILSONTS	-BR-M3	AR21060 NA54 M3 Replace bushing 3 - EMD	1362441	Wilson	BR
2017	16166313	6	By a Fixed Date	DR	61699357	NOCO ORAS	INIT			12/28/2017	11/01/2017	12/21/2017	N-TS-WILSONTS	-BR-M3	AR21060 NA54 M3 Replace bushing 4 - EMD	1363934	Wilson	BR
2017	16166314	6	By a Fixed Date	DR	61699358	NOCO ORAS	INIT			12/28/2017	11/01/2017	12/21/2017	N-TS-WILSONTS	-BR-M3	AR21060 NA54 M3 Replace bushing 5 - EMD	1365427	Wilson	BR
2017	16166316	6	By a Fixed Date	DR	61699360	NOCO ORAS	INIT			12/28/2017	11/01/2017	12/21/2017	N-TS-WILSONTS	-BR-M3	AR21060 NA54 M3 Replace bushing 6 - EMD	1366920	Wilson	BR
2020	19536803	1	Emergent (< 7 Days)	TC	62823949	NOCO ORAS	RECD			11/07/2020	11/07/2020	11/16/2020	N-TS-CHARLESTS	-BR-T2A7A8	S3 PD EMD T2A7A8 BREAKER CONTROL FAIL AL		Charles	BR
2017	16236238	1	Emergent (< 7 Days)	TC	61728559	NOCO ORAS	RECD			12/01/2017	12/01/2017	12/08/2017	N-TS-CHARLESTS	-TF	S3- PD - OIL DETECTED/ WATER SEPERATOR		Charles	TF
2020	18422346	1	Emergent (< 7 Days)	TC		NOCO	RECD			01/11/2020	01/11/2020	01/13/2020	N-TS-CHARLESTS	-TF	S3 - WATER SEPARATOR HIGH LEVEL - 9AM		Charles	TF
2019	17203175	1	Emergent (< 7 Days)	TC	62111138	NOCO ORAS	RECD			01/10/2019	01/10/2019	01/21/2019	N-TS-CHARLESTS	-TF	SEC3-EMD IMMEDIATE-CHARLES TS-TORONTO HY		Charles	TF
2018	16853337	1	Emergent (< 7 Days)	TC	61884726	NOCO ORAS	RECD			07/02/2018	07/02/2018	07/06/2018	N-TS-CHARLESTS	-TF	S3 - EMD - RE: OIL DETECTED IN OIL/WATER		Charles	TF
2018	16381898	1	Emergent (< 7 Days)	TC	61794749	NOCO ORAS	RECD			02/17/2018	02/17/2018	03/12/2018	N-TS-CHARLESTS	-TF-T3	S3/ PD/ EMD/ CHARLES TS/ RE: T3-T4 OUT O		Charles	TF
2018	16760370	1	Emergent (< 7 Days)	TC	61851815	NOCO ORAS	RECD			05/23/2018	05/23/2018	06/01/2018	N-TS-CHARLESTS	-TF-T3	SEC-EMD-T3 SYSTEM ALARM		Charles	TF
2016	14656361	1	Emergent (< 7 Days)	TC	61286743	NOCO ORAS	RECD			05/11/2016	05/11/2016	05/27/2016	N-TS-WILSONTS	-BR	s3: EMD for low sf6 density		Wilson	BR
2018	16907169	1	Emergent (< 7 Days)	TC	61942632	NOCO ORAS	RECD			07/16/2018	07/16/2018	07/30/2018	N-TS-WILSONTS	-BR	s3 wilson sc2 emd		Wilson	BR
2017	15473134	1	Emergent (< 7 Days)	TC	61459551	NOCO ORAS	RECD			04/13/2017	04/13/2017	04/28/2017	N-TS-WILSONTS	-BR	S3 EMD PD JQ YARD SF6 LOW DENSITY		Wilson	BR
2016	14541714	1	Emergent (< 7 Days)	TC	61272255	NOCO ORAS	RECD			03/21/2016	03/21/2016	04/15/2016	N-TS-WILSONTS	-BR-JQ	s3 (EMD) RE: JQYard Low Air Pressure		Wilson	BR
2016	15269190	1	Emergent (< 7 Days)	TC	61399473	NOCO ORAS	RECD			11/23/2016	11/23/2016	12/14/2016	N-TS-WILSONTS	-BR-JQ	S3^ EMD^ WILSON TS^ RE: J Q YARD BREAKER		Wilson	BR
2017	15345350	1	Emergent (< 7 Days)	TC	61415589	NOCO ORAS	RECD			01/11/2017	01/11/2017	01/27/2017	N-TS-WILSONTS	-BR-JQ	WILSON TS		Wilson	BR
2020	19590908	1	Emergent (< 7 Days)	TC	62836918	NOCO ORAS	RECD			11/19/2020	11/19/2020	12/04/2020	N-TS-WILSONTS	-BR-M1	S3 - M1 AUTO RECLOSE		Wilson	BR

2017	15820962	1	Emergent (< 7 Days)	TC	61520172	NOCO ORAS	RECD			06/26/2017	06/26/2017	07/21/2017	N-TS-WILSONTS	-BR-M12	S3^ EMD^ WILSON TS^ RE: INSPECT M12 BREA		Wilson	BR
2017	16213309	1	Emergent (< 7 Days)	TC	61718947	NOCO ORAS	RECD			11/20/2017	11/20/2017	12/05/2017	N-TS-WILSONTS	-BR-M12	S3 REQ PC IMM REG: DISTANCE TO FAULT TO		Wilson	BR
2017	15814305	1	Emergent (< 7 Days)	TC	61515722	NOCO ORAS	RECD			06/22/2017	06/22/2017	07/10/2017	N-TS-WILSONTS	-BR-M12	S3 IMD P&C RE: BLOCK TRANSFER TRIP M12 W		Wilson	BR
2017	15821021	1	Emergent (< 7 Days)	TC	61521608	NOCO ORAS	RECD		5	06/27/2017	06/27/2017	06/28/2017	N-TS-WILSONTS	-BR-M12	S3 PC RE M12		Wilson	BR
2018	16798945	1	Emergent (< 7 Days)	TC	61858903	NOCO ORAS	RECD			05/31/2018	05/31/2018	06/11/2018	N-TS-WILSONTS	-BR-M12	S3: PENDING - PC - M12 FEEDER RECLOSER M		Wilson	BR
2018	16818353	1	Emergent (< 7 Days)	TC	61866003	NOCO ORAS	RECD			06/09/2018	06/09/2018	06/22/2018	N-TS-WILSONTS	-BR-M12	S3 REQ PC REG: TRANSFER TRIP COMM CHANNE		Wilson	BR
2017	15342716	1	Emergent (< 7 Days)	TC	61413367	NOCO ORAS	RECD			01/06/2017	01/06/2017	03/22/2017	N-TS-WILSONTS	-BR-M14	S3 RE: TEST CONNECTION TO EPSON SOLAR M1		Wilson	BR
2017	15821734	1	Emergent (< 7 Days)	TC	61522970	NOCO ORAS	RECD		1	06/27/2017	06/27/2017	07/04/2017	N-TS-WILSONTS	-BR-M14	s3 P&C wilson ts M14 feeder protection		Wilson	BR
2018	16855377	1	Emergent (< 7 Days)	TC	61886401	NOCO ORAS	RECD			07/04/2018	07/04/2018	09/12/2018	N-TS-WILSONTS	-BR-M14	s3 tx lines wilson m14		Wilson	BR
2020	19579069	1	Emergent (< 7 Days)	TC	62833325	NOCO ORAS	RECD			11/16/2020	11/16/2020	12/04/2020	N-TS-WILSONTS	-BR-M14	S3 P&C IMM REG: M14 TRANSFER TRIP COMMN		Wilson	BR
2016	14516676	1	Emergent (< 7 Days)	TC	61264155	NOCO ORAS	RECD			02/15/2016	02/15/2016	02/18/2016	N-TS-WILSONTS	-BR-M14	S3 - M14 TRANSFER TRIP BLOCKED TO EPSON		Wilson	BR
2017	16149732	1	Emergent (< 7 Days)	TC	61683993	NOCO ORAS	RECD			10/18/2017	10/18/2017	11/03/2017	N-TS-WILSONTS	-BR-M14	S3 EMD RE: SWITCHING ON M14		Wilson	BR
2016	14537320	1	Emergent (< 7 Days)	TC	61271126	NOCO ORAS	RECD			03/14/2016	03/14/2016	03/30/2016	N-TS-WILSONTS	-BR-M15	S3 RE: ISOLATION ON THE M15		Wilson	BR
2016	15249191	1	Emergent (< 7 Days)	TC	61395974	NOCO ORAS	RECD			11/15/2016	11/15/2016	12/02/2016	N-TS-WILSONTS	-BR-M3	S3 EMD RE: SWITCHING ON M3		Wilson	BR
2019	17589537	1	Emergent (< 7 Days)	TC	62200785	NOCO ORAS	RECD			05/08/2019	05/08/2019	05/17/2019	N-TS-WILSONTS	-BR-M7	S3/ P&C/ WILSON TS/ RE: M7 TEMP. SETTING		Wilson	BR
2016	15093326	1	Emergent (< 7 Days)	TC	61369661	NOCO ORAS	RECD			09/14/2016	09/14/2016	09/23/2016	N-TS-WILSONTS	-BR-M8	s2 imd emd re: m8 trip		Wilson	BR
2018	16834208	1	Emergent (< 7 Days)	TC	61872714	NOCO ORAS	RECD			06/17/2018	06/17/2018	06/27/2018	N-TS-WILSONTS	-BR-SC1B	S3, EMD PEND, RE: SC1 TRIP ON NEUTRAL OV		Wilson	BR
2018	16855969	1	Emergent (< 7 Days)	TC	61942920	NOCO ORAS	RECD			07/05/2018	07/05/2018	08/02/2018	N-TS-WILSONTS	-BR-SC4Q	S3 RE SC4 NEUTRAL OVERCURRENT		Wilson	BR
2017	15661059	1	Emergent (< 7 Days)	TC	61488039	NOCO ORAS	RECD			05/18/2017	05/18/2017	05/25/2017	N-TS-WILSONTS	-BR-T2Y	S2 EMD T2 COOLING FAILURE		Wilson	BR
2016	14643504	1	Emergent (< 7 Days)	TC	61285865	NOCO ORAS	RECD			05/07/2016	05/07/2016	05/13/2016	N-TS-WILSONTS	-TF	S3 - EMD - GATE OPEN AT WILSON TS - REPO		Wilson	TF
2020	18981308	1	Emergent (< 7 Days)	TC	62596381	NOCO ORAS	RECD			05/26/2020	05/26/2020	06/05/2020	N-TS-WILSONTS	-TF	S3-EMD-T7 COOLING FAIL		Wilson	TF
2019	17852686	1	Emergent (< 7 Days)	TC	62311720	NOCO ORAS	RECD			07/21/2019	07/21/2019	07/26/2019	N-TS-WILSONTS	-TF	S3 IMM EMD WILSON TS SWITCHING RE BROKEN		Wilson	TF
2019	17851404	1	Emergent (< 7 Days)	TC	62311655	NOCO ORAS	RECD			07/19/2019	07/19/2019	07/26/2019	N-TS-WILSONTS	-TF-T3	S3 T3 OIL TEMP ALARM		Wilson	TF
2019	17214150	1	Emergent (< 7 Days)	TC	62118461	NOCO ORAS	RECD			01/20/2019	01/20/2019	02/04/2019	N-TS-WILSONTS	-TF-T3	S3 EMD IMM RE: T3 OIL LEVEL ALARM		Wilson	TF
2018	16846608	1	Emergent (< 7 Days)	TC	61878487	NOCO ORAS	RECD			06/25/2018	06/25/2018	07/12/2018	N-TS-WILSONTS	-TF-T3	S3 EMD RE: T3 COOLING FAIL		Wilson	TF
2018	16846790	1	Emergent (< 7 Days)	TC	61942819	NOCO ORAS	RECD			06/25/2018	06/25/2018	08/02/2018	N-TS-WILSONTS	-TF-T3	S3 EMD RE: T3 COOLING FAIL		Wilson	TF
2019	17852608	1	Emergent (< 7 Days)	TC	62311657	NOCO ORAS	RECD			07/20/2019	07/20/2019	08/19/2019	N-TS-WILSONTS	-TF-T4	SEC3-EMD-T4 OIL TEMP ALARM		Wilson	TF
2016	15041343	1	Emergent (< 7 Days)	TC	61362797	NOCO ORAS	RECD			08/28/2016	08/28/2016	09/02/2016	N-TS-WILSONTS	-TF-T4	S3 RE: T4 OIL TEMP ALARM		Wilson	TF
2018	17027182	1	Emergent (< 7 Days)	TC	62032066	NOCO ORAS	RECD			10/08/2018	10/08/2018	10/24/2018	N-TS-WILSONTS	-TF-T4	S3/ PD/ EMD/ WILSON TS/ RE: T4 TAP CHANG		Wilson	TF
2018	17039788	1	Emergent (< 7 Days)	TC	62039388	NOCO ORAS	RECD			10/17/2018	10/17/2018	10/19/2018	N-TS-CHARLESTS	-BR-T1A7A8	S3-EMD-T1A7A8 CONTROL FAIL	1094301	Charles	BR
2016	14870454	1	Emergent (< 7 Days)	TC	61307127	NOCO ORAS	RECD			07/11/2016	07/11/2016	07/27/2016	N-TS-WILSONTS	-TF-T3	S3 - EMD WILSON TS RE: T3 COOLING FAIL	1173245	Wilson	TF
2018	16990028	1	Emergent (< 7 Days)	TC	62004428	NOCO ORAS	RECD			09/14/2018	09/14/2018	09/21/2018	N-TS-WILSONTS	-TF-T3	S3 EMD IMD RE: T3 LOW TEMP ALARM	1173245	Wilson	TF
2016	14954511	1	Emergent (< 7 Days)	TC	61354514	NOCO ORAS	RECD			07/28/2016	07/28/2016	08/12/2016	N-TS-WILSONTS	-TF-T3	S3 - EMD WILSON TS T3 COOLING FAILURE	1173245	Wilson	TF
2018	16778376	1	Emergent (< 7 Days)	TC	61855488	NOCO ORAS	RECD			05/28/2018	05/28/2018	06/04/2018	N-TS-WILSONTS	-TF-T3	S3/ EMD/ WILSON TS/ RE: T3 COOLING FAIL/	1173245	Wilson	TF
2016	14999239	1	Emergent (< 7 Days)	TC	61359278	NOCO ORAS	RECD			08/15/2016	08/15/2016	08/22/2016	N-TS-WILSONTS	-TF-T3	S3 EMD RE: SWITCHING ON T3	1173245	Wilson	TF
2016	14962298	1	Emergent (< 7 Days)	TC	61356257	NOCO ORAS	RECD			08/03/2016	08/03/2016	08/22/2016	N-TS-WILSONTS	-TF-T3	S3 EMD RE: T3 COOLING FAILURE AT WILSON	1173245	Wilson	TF
2018	16263851	1	Emergent (< 7 Days)	TC	61752410	NOCO ORAS	RECD			01/05/2018	01/05/2018	03/07/2018	N-TS-WILSONTS	-TF-T2	S3 IMM EMD RE: INSPECT T2 NECK BOX	1175751	Wilson	TF
2020	18623405	1	Emergent (< 7 Days)	TC	62541178	NOCO ORAS	RECD	0100		03/05/2020	03/05/2020	03/13/2020	N-TS-WILSONTS	-TF-T2	S3: EMD RE: T2 COOLING FAIL	1175751	Wilson	TF
2020	18421763	1	Emergent (< 7 Days)	TC	62500603	NOCO ORAS	RECD	9900		01/11/2020	01/11/2020	01/17/2020	N-TS-WILSONTS	-TF-T2	S3 EMD T2 DIFFERENTIAL	1175751	Wilson	TF
2019	17485939	1	Emergent (< 7 Days)	TC	62178069	NOCO ORAS	RECD			04/08/2019	04/08/2019	04/23/2019	N-TS-WILSONTS	-TF-T2	S3-EMD-T2-TAPCHANGER FILTER TROUBLE	1175751	Wilson	TF
2020	18683900	1	Emergent (< 7 Days)	TC	62550848	NOCO ORAS	RECD			03/20/2020	03/20/2020	04/09/2020	N-TS-CHARLESTS	-TF-T3	S3 - IMMD - EMD - RE: RESTORING T3	1178289	Charles	TF
2020	18663803	1	Emergent (< 7 Days)	TC	62547013	NOCO ORAS	RECD			03/17/2020	03/17/2020	04/09/2020	N-TS-CHARLESTS	-TF-T3	S2 EMD A2L37 LOW AIR	1178289	Charles	TF
2018	16760409	1	Emergent (< 7 Days)	TC	61851818	NOCO ORAS	RECD			05/23/2018	05/23/2018	06/01/2018	N-TS-CHARLESTS	-TF-T3	SEC3-EMD-VARIFY T3 PRIMARY	1178289	Charles	TF
2017	15674642	1	Emergent (< 7 Days)	TC	61496317	NOCO ORAS	RECD			05/31/2017	05/31/2017	06/05/2017	N-TS-WILSONTS	-TF-T1	s2: EMD for t1 cooling fail	1183712	Wilson	TF
2019	17486757	1	Emergent (< 7 Days)	TC		NOCO	INIT			04/08/2019	04/08/2019	07/12/2019	N-TS-WILSONTS	-TF-T1	S3 - EMD WILSON TS DC GROUND ON T1	1183712	Wilson	TF
2016	15048893	1	Emergent (< 7 Days)	TC	61364415	NOCO ORAS	RECD			08/30/2016	08/30/2016	09/22/2016	N-TS-WILSONTS	-TF-T4	S3 - EMD WILSON TS T4 OIL TEMPERATURE AL	1188773	Wilson	TF
2016	15039482	1	Emergent (< 7 Days)	TC	61362906	NOCO ORAS	RECD			08/25/2016	08/25/2016	09/20/2016	N-TS-WILSONTS	-TF-T4	S3 EMD IMM RE T4 OIL TEMP ALARM	1188773	Wilson	TF
2018	17029420	1	Emergent (< 7 Days)	TC	62030079	NOCO ORAS	RECD			10/09/2018	10/09/2018	10/26/2018	N-TS-CHARLESTS	-TF-T2	S3 IMM EMD CHARLES TS RESTORE T2	1191105	Charles	TF
2017	15821012	1	Emergent (< 7 Days)	TC	61521602	NOCO ORAS	RECD			06/27/2017	06/27/2017	07/11/2017	N-TS-WILSONTS	-BR-M12	S3 - EMD - INSPECT M12 BRKR.	1207581	Wilson	BR
2020	19456507	1	Emergent (< 7 Days)	TC	62803024	NOCO ORAS	RECD			10/21/2020	10/21/2020	10/23/2020	N-TS-WILSONTS	-BR-SC3J	S3-EMD-GAS TOP UP ON SC3J	1211024	Wilson	BR
2019	17328032	1	Emergent (< 7 Days)	TC	62153042	NOCO ORAS	RECD			03/03/2019	03/03/2019	03/08/2019	N-TS-WILSONTS	-BR-SC4Q	S3 PD EMD SC4Q SC4 TRIP	1211036	Wilson	BR
2020	19384201	1	Emergent (< 7 Days)	TC	62780345	NOCO ORAS	RECD			09/27/2020	09/27/2020	10/02/2020	N-TS-WILSONTS	-BR-SC4Q	S3 EMD SC4 TRIP	1211036	Wilson	BR
2017	15915898	1	Emergent (< 7 Days)	TC	61598567	NOCO ORAS	RECD			07/31/2017	07/31/2017	08/04/2017	N-TS-WILSONTS	-BR-M5	S3 EMD RE M5 BREAKER INSPECTION	1213614	Wilson	BR
2019	17270094	1	Emergent (< 7 Days)	TC		NOCO	INIT			02/07/2019	02/07/2019	07/12/2019	N-TS-WILSONTS	-BR-M1	S3 IMD EMD RE: SW ON M1 FOR AROUND NOON	1213628	Wilson	BR
2019	17271709	1	Emergent (< 7 Days)	TC	62134951	NOCO ORAS	RECD			02/07/2019	02/07/2019	02/19/2019	N-TS-WILSONTS	-BR-M1	S3 IMD P&C RE: RESTORE TRANSFER TRIP ON	1213628	Wilson	BR
2020	18477782	1	Emergent (< 7 Days)	TC	62514171	NOCO ORAS	RECD			01/25/2020	01/25/2020	01/31/2020	N-TS-WILSONTS	-BR-M8	S3 - IMMD - EMD - RE: M8 FAULTED CONDUCT	1213676	Wilson	BR
2016	15093416	1	Emergent (< 7 Days)	TC	61368772	NOCO ORAS	RECD			09/15/2016	09/15/2016	09/22/2016	N-TS-WILSONTS	-BR-M8	S3 EMD PD NEED GROUNDING OFF WILSON M8 A	1213676	Wilson	BR
2018	17045268	1	Emergent (< 7 Days)	TC	62044429	NOCO ORAS	RECD			10/23/2018	10/23/2018	11/09/2018	N-TS-WILSONTS	-BR-M15	S3 - EMD WILSON TS BROKEN M15-M16 TIE SW	1215072	Wilson	BR

	2016			2016 Total	2017			2017 Total	2018			2018 Total	2019			2019 Total	2020				2020 Total	2021			2021 Total	Grand Total
Row Labels	**CR01**	**CR02**	**CR03**		**CR01**	**CR02**	**CR03**		**CR01**	**CR02**	**CR03**		**CR01**	**CR02**	**CR03**		**CR01**	**CR02**	**CR03**	**CR04**		**CR01**	**CR02**	**CR03**		
Charles - BR	9			9	16			16	16			16	8			8	8	16			24	2	2		4	77
Charles - TF	45	1	10	56	39	4		43	36	5	6	47	25	15	3	43	42	47	4		93	5	12	2	19	301
Wilson - BR	101			101	84	32	1	117	119	1	1	121	63	36		99	204	2		1	207	6			6	651
Wilson - TF	23			23	21	5	1	27	31	3		34	26	13	11	50	62	12	2		76	3	4	3	10	220
Grand Total	**178**	**1**	**10**	**189**	**160**	**41**	**2**	**203**	**202**	**9**	**7**	**218**	**122**	**64**	**14**	**200**	**316**	**77**	**6**	**1**	**400**	**16**	**18**	**5**	**39**	**1249**

	2016			2017			2018			2019			2020			
Station - Asset	**CR01**	**CR02**	**CR03**	**CR01**	**CR02**	**CR03**	**CR01**	**CR02**	**CR03**	**CR01**	**CR02**	**CR03**	**CR01**	**CR02**	**CR03**	**CR04**
Charles - All TFs	45	1	10	39	4		36	5	6	25	15	3	42	47	4	
Charles - All BRs	9			16			16			8			8	16		
Wilson - All TFs	23			21	5	1	31	3		26	13	11	62	12	2	
Wilson - All BRs	101			84	32	1	119	1	1	63	36		204	2		1



Completio	Notification	Priority	Priority	Notifictn type	Order	System status	User status	Coding	Cond.after task	Req. start	Notif.date	Completn date	Functional Loc.	Description	Equipment	Station	Asset
2020	18428783	3	Medium (30-90 Days)	PR	62501662	NOCO ORAS	INIT	CR01	3	07/20/2020	01/14/2020	09/25/2020	N-TS-CHARLESTS -TF-T3	Main TS - T4/Oil Samples req'd SITE		Charles	TF
2020	18205716	6	By a Fixed Date	PR	62420936	NOCO ORAS	INIT	CR01		10/15/2019	10/12/2019	03/20/2020	N-TS-CHARLESTS -TF-T3	Tx PCB Reduction Oil Sample		Charles	TF
2017	15342865	4	Low (> 90 Days)	PR	61413437	NOCO ORAS	INIT	CR01	1	12/05/2017	01/09/2017	03/13/2017	N-TS-CHARLESTS -TF-T4	AR20237 NT45 T4Y Sample BSH PCBs EMD		Charles	TF
2016	14543704	6	By a Fixed Date	PR	61273342	NOCO ORAS	INIT	CR01		03/23/2016	03/23/2016	10/28/2016	N-TS-WILSONTS -BR	STN BREAKER BLOWDOWN		Wilson	BR
2016	14543703	6	By a Fixed Date	PR	61273341	NOCO ORAS	INIT	CR01		03/23/2016	03/23/2016	10/28/2016	N-TS-WILSONTS -BR	STN BREAKER BLOWDOWN		Wilson	BR
2016	14543702	6	By a Fixed Date	PR	61273340	NOCO ORAS	INIT	CR01		03/23/2016	03/23/2016	10/28/2016	N-TS-WILSONTS -BR	STN BREAKER BLOWDOWN		Wilson	BR
2017	14925508	6	By a Fixed Date	PR	61348645	NOCO ORAS	INIT	CR01		07/16/2016	07/16/2016	09/22/2017	N-TS-WILSONTS -BR	STN BREAKER BLOWDOWN		Wilson	BR
2018	15891370	6	By a Fixed Date	PR	61572881	NOCO ORAS	INIT	CR01		07/22/2017	07/22/2017	12/12/2018	N-TS-WILSONTS -BR	STN BREAKER BLOWDOWN		Wilson	BR
2019	16895279	6	By a Fixed Date	PR	61926949	NOCO ORAS	INIT	CR01		07/07/2018	07/07/2018	10/01/2019	N-TS-WILSONTS -BR	STN BREAKER BLOWDOWN		Wilson	BR
2020	17814851	6	By a Fixed Date	PR	62295704	NOCO ORAS	INIT	CR01		11/16/2020	07/06/2019	12/09/2020	N-TS-WILSONTS -BR	STN BREAKER BLOWDOWN		Wilson	BR
2020	17814850	6	By a Fixed Date	PR	62295703	NOCO ORAS	INIT	CR01		08/17/2020	07/06/2019	12/09/2020	N-TS-WILSONTS -BR	STN BREAKER BLOWDOWN		Wilson	BR
2019	16895290	6	By a Fixed Date	PR	61926950	NOCO ORAS	INIT	CR01		07/07/2018	07/07/2018	12/09/2019	N-TS-WILSONTS -BR	STN BREAKER BLOWDOWN		Wilson	BR
2017	14925509	6	By a Fixed Date	PR	61348646	NOCO ORAS	INIT	CR01		07/16/2016	07/16/2016	11/15/2017	N-TS-WILSONTS -BR	STN BREAKER BLOWDOWN		Wilson	BR
2021	19196645	6	By a Fixed Date	PR	62684573	NOCO ORAS	INIT	CR01		02/16/2021	07/18/2020	04/20/2021	N-TS-WILSONTS -BR	STN BREAKER BLOWDOWN		Wilson	BR
2020	17814849	6	By a Fixed Date	PR	62295702	NOCO ORAS	INIT	CR01		05/15/2020	07/06/2019	07/03/2020	N-TS-WILSONTS -BR	STN BREAKER BLOWDOWN		Wilson	BR
2018	15891367	6	By a Fixed Date	PR	61572878	NOCO ORAS	INIT	CR01		07/22/2017	07/22/2017	04/20/2018	N-TS-WILSONTS -BR	STN BREAKER BLOWDOWN		Wilson	BR
2018	15891368	6	By a Fixed Date	PR	61572879	NOCO ORAS	INIT	CR01		07/22/2017	07/22/2017	11/10/2018	N-TS-WILSONTS -BR	STN BREAKER BLOWDOWN		Wilson	BR
2017	14925507	6	By a Fixed Date	PR	61348644	NOCO ORAS	INIT	CR01		07/16/2016	07/16/2016	05/11/2017	N-TS-WILSONTS -BR	STN BREAKER BLOWDOWN		Wilson	BR
2017	14925506	6	By a Fixed Date	PR	61348643	NOCO ORAS	INIT	CR01		07/16/2016	07/16/2016	05/11/2017	N-TS-WILSONTS -BR	STN BREAKER BLOWDOWN		Wilson	BR
2021	19196647	6	By a Fixed Date	PR	62684575	NOCO ORAS	INIT	CR01		08/16/2021	07/18/2020	09/16/2021	N-TS-WILSONTS -BR	STN BREAKER BLOWDOWN		Wilson	BR
2019	16895277	6	By a Fixed Date	PR	61926947	NOCO ORAS	INIT	CR01		07/07/2018	07/07/2018	05/27/2019	N-TS-WILSONTS -BR	STN BREAKER BLOWDOWN		Wilson	BR
2020	17814848	6	By a Fixed Date	PR	62295701	NOCO ORAS	INIT	CR01		02/18/2020	07/06/2019	02/13/2020	N-TS-WILSONTS -BR	STN BREAKER BLOWDOWN		Wilson	BR
2018	15891369	6	By a Fixed Date	PR	61572880	NOCO ORAS	INIT	CR01		07/22/2017	07/22/2017	10/10/2018	N-TS-WILSONTS -BR	STN BREAKER BLOWDOWN		Wilson	BR
2018	16374337	6	By a Fixed Date	PR	61779298	NOCO ORAS	INIT	CR01		02/09/2018	02/09/2018	07/31/2018	N-TS-WILSONTS -BR-M3	AR20126 NA54 PCB Resampling - EMD		Wilson	BR
2017	15342839	4	Low (> 90 Days)	PR	61413421	NOCO ORAS	INIT	CR01		12/05/2017	01/09/2017	08/02/2017	N-TS-WILSONTS -BR-M7	AR20221 NA54 M7 Sample bushing PCB EMD		Wilson	BR
2021	18205620	6	By a Fixed Date	PR	62420840	NOCO ORAS	INIT	CR01		10/15/2019	10/12/2019	04/16/2021	N-TS-WILSONTS -BR-T1B	Tx PCB Reduction Oil Sample		Wilson	BR
2019	16938441	6	By a Fixed Date	PR	61959015	NOCO ORAS	INIT	CR01	1	08/03/2018	08/03/2018	06/24/2019	N-TS-WILSONTS -BR-T2Y	AR21060 NA54 CT CHECKS P&C		Wilson	BR
2021	19180016	6	By a Fixed Date	PR	62668765	NOCO ORAS	INIT	CR01	1	04/01/2021	07/17/2020	03/18/2021	N-TS-WILSONTS -TF	TF-TS-GENERAL-FANS ON		Wilson	TF
2020	18384831	6	By a Fixed Date	PR	62477744	NOCO ORAS	INIT	CR01		04/01/2020	12/06/2019	01/21/2020	N-TS-WILSONTS -TF-T2	Tx PCB Reduction Oil Sample		Wilson	TF
2021	18384832	6	By a Fixed Date	PR	62477745	NOCO ORAS	INIT	CR01		04/01/2020	12/06/2019	05/05/2021	N-TS-WILSONTS -TF-T4	Tx PCB Reduction Oil Sample		Wilson	TF
2016	14517758	5	On a Fixed Date	PR	61170803	NOCO ORAS	INIT	CR01		02/17/2016	02/17/2016	02/17/2016	N-TS-WILSONTS -BR-M17	STN 'B' PWR EQ INSP-SVI SPRING 2016	1093814	Wilson	BR
2020	18773081	5	On a Fixed Date	PR	62562605	NOCO ORAS	INIT	CR01		04/16/2020	04/16/2020	04/16/2020	N-TS-WILSONTS -BR-M17	STN 'B' PWR EQ INSP-SVI April wk2	1093814	Wilson	BR
2018	17113155	5	On a Fixed Date	PR	61570344	NOCO ORAS	INIT	CR01		11/12/2018	11/12/2018	11/12/2018	N-TS-WILSONTS -BR-M17	STN 'B' PWR EQ INSP-SVI Fall 2018	1093814	Wilson	BR
2017	16109400	5	On a Fixed Date	PR	61325366	NOCO ORAS	INIT	CR01		09/27/2017	09/27/2017	09/27/2017	N-TS-WILSONTS -BR-M17	STN 'B' PWR EQ INSP-SVI Fall 2017	1093814	Wilson	BR
2016	15199807	5	On a Fixed Date	PR	61170804	NOCO ORAS	INIT	CR01		10/26/2016	10/26/2016	10/26/2016	N-TS-WILSONTS -BR-M17	STN 'B' PWR EQ INSP-SVI FALL 2016	1093814	Wilson	BR
2020	18644375	5	On a Fixed Date	PR	62291354	NOCO ORAS	INIT	CR01		03/11/2020	03/11/2020	03/11/2020	N-TS-WILSONTS -BR-M17	STN 'B' PWR EQ INSP-SVI Spr 2020	1093814	Wilson	BR
2020	17812149	6	By a Fixed Date	PR	62293022	NOCO ORAS	INIT	CR02	1	08/21/2020	07/06/2019	09/21/2020	N-TS-WILSONTS -BR-M17	BR-SF6-SP-M1	1093814	Wilson	BR
2019	17646109	5	On a Fixed Date	PR	61923630	NOCO ORAS	INIT	CR01		05/24/2019	05/24/2019	05/24/2019	N-TS-WILSONTS -BR-M17	STN 'B' PWR EQ INSP-SVI Spr 2019	1093814	Wilson	BR
2017	16201239	5	On a Fixed Date	PR	61348646	NOCO ORAS	INIT	CR01		11/15/2017	11/15/2017	11/15/2017	N-TS-WILSONTS -BR-M17	STN BREAKER BLOWDOWN 4of4 2017	1093814	Wilson	BR
2020	19333208	5	On a Fixed Date	PR	62291355	NOCO ORAS	INIT	CR01		09/16/2020	09/16/2020	09/16/2020	N-TS-WILSONTS -BR-M17	STN 'B' PWR EQ INSP-SVI Fall 2020	1093814	Wilson	BR
2019	17648943	5	On a Fixed Date	PR	61926947	NOCO ORAS	INIT	CR01		05/27/2019	05/27/2019	05/27/2019	N-TS-WILSONTS -BR-M17	STN BREAKER BLOWDOWN 1of4 2019	1093814	Wilson	BR
2020	19124307	5	On a Fixed Date	PR	62295702	NOCO ORAS	INIT	CR01		07/03/2020	07/03/2020	07/03/2020	N-TS-WILSONTS -BR-M17	STN BREAKER BLOWDOWN 2of4 2020	1093814	Wilson	BR
2018	17112493	5	On a Fixed Date	PR	61572879	NOCO ORAS	INIT	CR01		11/10/2018	11/10/2018	11/10/2018	N-TS-WILSONTS -BR-M17	STN BREAKER BLOWDOWN 2of4 2018	1093814	Wilson	BR
2017	15649677	5	On a Fixed Date	PR	61348643	NOCO ORAS	INIT	CR01		05/11/2017	05/11/2017	05/11/2017	N-TS-WILSONTS -BR-M17	STN BREAKER BLOWDOWN 1of4 2017	1093814	Wilson	BR
2019	18387087	5	On a Fixed Date	PR	61926950	NOCO ORAS	INIT	CR01		12/09/2019	12/09/2019	12/09/2019	N-TS-WILSONTS -BR-M17	STN BREAKER BLOWDOWN 4of4 2019	1093814	Wilson	BR
2017	15650335	5	On a Fixed Date	PR	61348644	NOCO ORAS	INIT	CR01		05/11/2017	05/11/2017	05/11/2017	N-TS-WILSONTS -BR-M17	STN BREAKER BLOWDOWN 2of4 2017	1093814	Wilson	BR
2018	16682938	5	On a Fixed Date	PR	61572878	NOCO ORAS	INIT	CR01		04/20/2018	04/20/2018	04/20/2018	N-TS-WILSONTS -BR-M17	STN BREAKER BLOWDOWN 1of4 2018	1093814	Wilson	BR
2018	17031481	5	On a Fixed Date	PR	61572880	NOCO ORAS	INIT	CR01		10/10/2018	10/10/2018	10/10/2018	N-TS-WILSONTS -BR-M17	STN BREAKER BLOWDOWN 3of4 2018	1093814	Wilson	BR
2016	15206242	5	On a Fixed Date	PR	61273340	NOCO ORAS	INIT	CR01		10/28/2016	10/28/2016	10/28/2016	N-TS-WILSONTS -BR-M17	STN BREAKER BLOWDOWN 2of4 2016	1093814	Wilson	BR
2016	15206267	5	On a Fixed Date	PR	61273341	NOCO ORAS	INIT	CR01		10/28/2016	10/28/2016	10/28/2016	N-TS-WILSONTS -BR-M17	STN BREAKER BLOWDOWN 3of4 2016	1093814	Wilson	BR
2016	15206280	5	On a Fixed Date	PR	61273342	NOCO ORAS	INIT	CR01		10/28/2016	10/28/2016	10/28/2016	N-TS-WILSONTS -BR-M17	STN BREAKER BLOWDOWN 4of4 2016	1093814	Wilson	BR
2019	18055548	5	On a Fixed Date	PR	61923631	NOCO ORAS	INIT	CR01		09/25/2019	09/25/2019	09/25/2019	N-TS-WILSONTS -BR-M17	STN 'B' PWR EQ INSP-SVI Fall 2019	1093814	Wilson	BR
2020	18543815	5	On a Fixed Date	PR	62295701	NOCO ORAS	INIT	CR01		02/13/2020	02/13/2020	02/13/2020	N-TS-WILSONTS -BR-M17	STN BREAKER BLOWDOWN 1of4 2020	1093814	Wilson	BR
2020	18892975	5	On a Fixed Date	PR	62562608	NOCO ORAS	INIT	CR01		05/07/2020	05/07/2020	05/07/2020	N-TS-WILSONTS -BR-M17	STN 'B' PWR EQ INSP-SVI May wk1	1093814	Wilson	BR
2017	14920098	6	By a Fixed Date	PR	61343175	NOCO ORAS	INIT	CR02	1	07/16/2016	07/16/2016	08/18/2017	N-TS-WILSONTS -BR-M17	BR-SF6-SP-M1	1093814	Wilson	BR
2020	18805020	5	On a Fixed Date	PR	62562606	NOCO ORAS	INIT	CR01		04/22/2020	04/22/2020	04/22/2020	N-TS-WILSONTS -BR-M17	STN 'B' PWR EQ INSP-SVI April wk3	1093814	Wilson	BR
2017	15479869	5	On a Fixed Date	PR	61325365	NOCO ORAS	INIT	CR02		04/20/2017	04/20/2017	04/20/2017	N-TS-WILSONTS -BR-M17	STN 'B' PWR EQ INSP-SVI Spr 2017	1093814	Wilson	BR
2018	17142244	5	On a Fixed Date	PR	61572881	NOCO ORAS	INIT	CR01		12/12/2018	12/12/2018	12/12/2018	N-TS-WILSONTS -BR-M17	STN BREAKER BLOWDOWN 4of4 2018	1093814	Wilson	BR
2020	19015328	5	On a Fixed Date	PR	62562612	NOCO ORAS	INIT	CR01		06/02/2020	06/02/2020	06/02/2020	N-TS-WILSONTS -BR-M17	STN 'B' PWR EQ INSP-SVI June wk1	1093814	Wilson	BR
2017	16092343	5	On a Fixed Date	PR	61348645	NOCO ORAS	INIT	CR01		09/22/2017	09/22/2017	09/22/2017	N-TS-WILSONTS -BR-M17	STN BREAKER BLOWDOWN 3of4 2017	1093814	Wilson	BR
2020	19685393	5	On a Fixed Date	PR	62295704	NOCO ORAS	INIT	CR01		12/09/2020	12/09/2020	12/09/2020	N-TS-WILSONTS -BR-M17	STN BREAKER BLOWDOWN 4of4 2020	1093814	Wilson	BR
2018	16814034	5	On a Fixed Date	PR	61570343	NOCO ORAS	INIT	CR01		06/07/2018	06/07/2018	06/07/2018	N-TS-WILSONTS -BR-M17	STN 'B' PWR EQ INSP-SVI Spr 2018	1093814	Wilson	BR
2020	19685408	5	On a Fixed Date	PR	62295703	NOCO ORAS	INIT	CR01		12/09/2020	12/09/2020	12/09/2020	N-TS-WILSONTS -BR-M17	STN BREAKER BLOWDOWN 3of4 2020	1093814	Wilson	BR
2018	17113026	5	On a Fixed Date	PR	61570344	NOCO ORAS	INIT	CR01		11/12/2018	11/12/2018	11/12/2018	N-TS-WILSONTS -BR-M17	STN 'B' PWR EQ INSP-SVI Fall 2018	1093814	Wilson	BR
2019	18073965	5	On a Fixed Date	PR	61926949	NOCO ORAS	INIT	CR01		10/01/2019	10/01/2019	10/01/2019	N-TS-WILSONTS -BR-M17	STN BREAKER BLOWDOWN 3of4 2019	1093814	Wilson	BR
2020	18543816	5	On a Fixed Date	PR	62295701	NOCO ORAS	INIT	CR01		02/13/2020	02/13/2020	02/13/2020	N-TS-WILSONTS -BR-M18	STN BREAKER BLOWDOWN 1of4 2020	1093835	Wilson	BR
2017	15479868	5	On a Fixed Date	PR	61325365	NOCO ORAS	INIT	CR02		04/20/2017	04/20/2017	04/20/2017	N-TS-WILSONTS -BR-M18	STN 'B' PWR EQ INSP-SVI Spr 2017	1093835	Wilson	BR
2018	17031466	5	On a Fixed Date	PR	61572880	NOCO ORAS	INIT	CR01		10/10/2018	10/10/2018	10/10/2018	N-TS-WILSONTS -BR-M18	STN BREAKER BLOWDOWN 3of4 2018	1093835	Wilson	BR
2018	16814012	5	On a Fixed Date	PR	61570343	NOCO ORAS	INIT	CR01		06/07/2018	06/07/2018	06/07/2018	N-TS-WILSONTS -BR-M18	STN 'B' PWR EQ INSP-SVI Spr 2018	1093835	Wilson	BR
2018	16682931	5	On a Fixed Date	PR	61572878	NOCO ORAS	INIT	CR01		04/20/2018	04/20/2018	04/20/2018	N-TS-WILSONTS -BR-M18	STN BREAKER BLOWDOWN 1of4 2018	1093835	Wilson	BR
2020	18644207	5	On a Fixed Date	PR	62291354	NOCO ORAS	INIT	CR01		03/11/2020	03/11/2020	03/11/2020	N-TS-WILSONTS -BR-M18	STN 'B' PWR EQ INSP-SVI Spr 2020	1093835	Wilson	BR
2020	17812172	6	By a Fixed Date	PR	62293025	NOCO ORAS	INIT	CR01	1	11/03/2020	07/06/2019	03/27/2020	N-TS-WILSONTS -BR-M18	BR-SF6-SP-M1	1093835	Wilson	BR
2020	18773076	5	On a Fixed Date	PR	62562605	NOCO ORAS	INIT	CR01		04/16/2020	04/16/2020	04/16/2020	N-TS-WILSONTS -BR-M18	STN 'B' PWR EQ INSP-SVI April wk2	1093835	Wilson	BR
2020	19124308	5	On a Fixed Date	PR	62295702	NOCO ORAS	INIT	CR01		07/03/2020	07/03/2020	07/03/2020	N-TS-WILSONTS -BR-M18	STN BREAKER BLOWDOWN 2of4 2020	1093835	Wilson	BR
2017	16201241	5	On a Fixed Date	PR	61348646	NOCO ORAS	INIT	CR01		11/15/2017	11/15/2017	11/15/2017	N-TS-WILSONTS -BR-M18	STN BREAKER BLOWDOWN 4of4 2017	1093835	Wilson	BR
2017	14920099	6	By a Fixed Date	PR	61343176	NOCO ORAS	INIT	CR01	1	07/16/2016	07/16/2016	10/31/2017	N-TS-WILSONTS -BR-M18	BR-SF6-SP-M1	1093835	Wilson	BR
2020	19015357	5	On a Fixed Date	PR	62562612	NOCO ORAS	INIT	CR01		06/02/2020	06/02/2020	06/02/2020	N-TS-WILSONTS -BR-M18	STN 'B' PWR EQ INSP-SVI June wk1	1093835	Wilson	BR
2017	15649678	5	On a Fixed Date	PR	61348643	NOCO ORAS	INIT	CR01		05/11/2017	05/11/2017	05/11/2017	N-TS-WILSONTS -BR-M18	STN BREAKER BLOWDOWN 1of4 2017	1093835	Wilson	BR
2016	15199843	5	On a Fixed Date	PR	61170804	NOCO ORAS	INIT	CR01		10/26/2016	10/26/2016	10/26/2016	N-TS-WILSONTS -BR-M18	STN 'B' PWR EQ INSP-SVI FALL 2016	1093835	Wilson	BR
2017	16109403	5	On a Fixed Date	PR	61325366	NOCO ORAS	INIT	CR01		09/27/2017	09/27/2017	09/27/2017	N-TS-WILSONTS -BR-M18	STN 'B' PWR EQ INSP-SVI Fall 2017	1093835	Wilson	BR
2017	15650336	5	On a Fixed Date	PR	61348644	NOCO ORAS	INIT	CR01		05/11/2017	05/11/2017	05/11/2017	N-TS-WILSONTS -BR-M18	STN BREAKER BLOWDOWN 2of4 2017	1093835	Wilson	BR
2017	16092344	5	On a Fixed Date	PR	61348645	NOCO ORAS	INIT	CR01		09/22/2017	09/22/2017	09/22/2017	N-TS-WILSONTS -BR-M18	STN BREAKER BLOWDOWN 3of4 2017	1093835	Wilson	BR
2020	18892974	5	On a Fixed Date	PR	62562608	NOCO ORAS	INIT	CR01		05/07/2020	05/07/2020	05/07/2020	N-TS-WILSONTS -BR-M18	STN 'B' PWR EQ INSP-SVI May wk1	1093835	Wilson	BR
2020	18805071	5	On a Fixed Date	PR	62562606	NOCO ORAS	INIT	CR01		04/22/2020	04/22/2020	04/22/2020	N-TS-WILSONTS -BR-M18	STN 'B' PWR EQ INSP-SVI April wk3	1093835	Wilson	BR
2016	15206282	5	On a Fixed Date	PR	61273342	NOCO ORAS	INIT	CR01		10/28/2016	10/28/2016	10/28/2016	N-TS-WILSONTS -BR-M18	STN BREAKER BLOWDOWN 4of4 2016	1093835	Wilson	BR
2016	15206269	5	On a Fixed Date	PR	61273341	NOCO ORAS	INIT	CR01		10/28/2016	10/28/2016	10/28/2016	N-TS-WILSONTS -BR-M18	STN BREAKER BLOWDOWN 3of4 2016	1093835	Wilson	BR
2016	15206244	5	On a Fixed Date	PR	61273340	NOCO ORAS	INIT	CR01		10/28/2016	10/28/2016	10/28/2016	N-TS-WILSONTS -BR-M18	STN BREAKER BLOWDOWN 2of4 2016	1093835	Wilson	BR
2020	19685394	5	On a Fixed Date	PR	62295704	NOCO ORAS	INIT	CR01		12/09/2020	12/09/2020	12/09/2020	N-TS-WILSONTS -BR-M18	STN BREAKER BLOWDOWN 4of4 2020	1093835	Wilson	BR
2018	17113079	5	On a Fixed Date	PR	61570344	NOCO ORAS	INIT	CR01		11/12/2018	11/12/2018	11/12/2018	N-TS-WILSONTS -BR-M18	STN 'B' PWR EQ INSP-SVI Fall 2018	1093835	Wilson	BR
2020	19685410	5	On a Fixed Date	PR	62295703	NOCO ORAS	INIT	CR01		12/09/2020	12/09/2020	12/09/2020	N-TS-WILSONTS -BR-M18	STN BREAKER BLOWDOWN 3of4 2020	1093835	Wilson	BR

Completio	Coding	Station	Asset	Station-Asset
2020	CR01	Charles	TF	Charles - TF
2020	CR01	Charles	TF	Charles - TF
2017	CR01	Charles	TF	Charles - TF
2016	CR01	Wilson	BR	Wilson - BR
2016	CR01	Wilson	BR	Wilson - BR
2016	CR01	Wilson	BR	Wilson - BR
2017	CR01	Wilson	BR	Wilson - BR
2018	CR01	Wilson	BR	Wilson - BR
2019	CR01	Wilson	BR	Wilson - BR
2020	CR01	Wilson	BR	Wilson - BR
2020	CR01	Wilson	BR	Wilson - BR
2019	CR01	Wilson	BR	Wilson - BR
2017	CR01	Wilson	BR	Wilson - BR
2021	CR01	Wilson	BR	Wilson - BR
2020	CR01	Wilson	BR	Wilson - BR
2018	CR01	Wilson	BR	Wilson - BR
2018	CR01	Wilson	BR	Wilson - BR
2017	CR01	Wilson	BR	Wilson - BR
2017	CR01	Wilson	BR	Wilson - BR
2021	CR01	Wilson	BR	Wilson - BR
2019	CR01	Wilson	BR	Wilson - BR
2020	CR01	Wilson	BR	Wilson - BR
2018	CR01	Wilson	BR	Wilson - BR
2018	CR01	Wilson	BR	Wilson - BR
2017	CR01	Wilson	BR	Wilson - BR
2021	CR01	Wilson	BR	Wilson - BR
2020	CR01	Wilson	TF	Wilson - TF
2021	CR01	Wilson	TF	Wilson - TF
2016	CR01	Wilson	BR	Wilson - BR
2020	CR01	Wilson	BR	Wilson - BR
2018	CR01	Wilson	BR	Wilson - BR
2017	CR01	Wilson	BR	Wilson - BR
2016	CR01	Wilson	BR	Wilson - BR
2020	CR01	Wilson	BR	Wilson - BR
2020	CR02	Wilson	BR	Wilson - BR
2019	CR01	Wilson	BR	Wilson - BR
2017	CR01	Wilson	BR	Wilson - BR
2017	CR01	Wilson	BR	Wilson - BR
2017	CR01	Wilson	BR	Wilson - BR
2020	CR01	Wilson	BR	Wilson - BR
2020	CR01	Wilson	BR	Wilson - BR
2018	CR01	Wilson	BR	Wilson - BR
2020	CR01	Wilson	BR	Wilson - BR
2018	CR01	Wilson	BR	Wilson - BR
2019	CR01	Wilson	BR	Wilson - BR
2020	CR01	Wilson	BR	Wilson - BR
2017	CR02	Wilson	BR	Wilson - BR
2018	CR01	Wilson	BR	Wilson - BR
2018	CR01	Wilson	BR	Wilson - BR
2020	CR01	Wilson	BR	Wilson - BR
2020	CR01	Wilson	BR	Wilson - BR
2017	CR01	Wilson	BR	Wilson - BR
2020	CR01	Wilson	BR	Wilson - BR
2018	CR01	Wilson	BR	Wilson - BR
2020	CR01	Wilson	BR	Wilson - BR
2018	CR01	Wilson	BR	Wilson - BR
2019	CR01	Wilson	BR	Wilson - BR
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2017	CR02	Wilson	BR	Wilson - BR
2018	CR01	Wilson	BR	Wilson - BR
2018	CR01	Wilson	BR	Wilson - BR
2018	CR01	Wilson	BR	Wilson - BR
2020	CR01	Wilson	BR	Wilson - BR
2018	CR01	Wilson	BR	Wilson - BR
2020	CR01	Wilson	BR	Wilson - BR
2020	CR01	Wilson	BR	Wilson - BR
2018	CR01	Wilson	BR	Wilson - BR
2020	CR01	Wilson	BR	Wilson - BR

2019	18387088	5	On a Fixed Date	PR	61926950	NOCO ORAS	INIT	CR01		12/09/2019	12/09/2019	12/09/2019	N-TS-WILSONTS	-BR-M18	STN BREAKER BLOWDOWN 4of4 2019	1093835	Wilson	BR	2019	CR01	Wilson	BR	Wilson - BR
2019	18073967	5	On a Fixed Date	PR	61926949	NOCO ORAS	INIT	CR01		10/01/2019	10/01/2019	10/01/2019	N-TS-WILSONTS	-BR-M18	STN BREAKER BLOWDOWN 3of4 2019	1093835	Wilson	BR	2019	CR01	Wilson	BR	Wilson - BR
2018	17142229	5	On a Fixed Date	PR	61572881	NOCO ORAS	INIT	CR01		12/12/2018	12/12/2018	12/12/2018	N-TS-WILSONTS	-BR-M18	STN BREAKER BLOWDOWN 4of4 2018	1093835	Wilson	BR	2018	CR01	Wilson	BR	Wilson - BR
2019	18055549	5	On a Fixed Date	PR	61923631	NOCO ORAS	INIT	CR01		09/25/2019	09/25/2019	09/25/2019	N-TS-WILSONTS	-BR-M18	STN 'B' PWR EQ INSP-SVI Fall 2019	1093835	Wilson	BR	2019	CR01	Wilson	BR	Wilson - BR
2016	14517759	5	On a Fixed Date	PR	61170803	NOCO ORAS	INIT	CR01		02/17/2016	02/17/2016	02/17/2016	N-TS-WILSONTS	-BR-M18	STN 'B' PWR EQ INSP-SVI SPRING 2016	1093835	Wilson	BR	2016	CR01	Wilson	BR	Wilson - BR
2018	17112913	5	On a Fixed Date	PR	61570344	NOCO ORAS	INIT	CR01		11/12/2018	11/12/2018	11/12/2018	N-TS-WILSONTS	-BR-M18	STN 'B' PWR EQ INSP-SVI Fall 2018	1093835	Wilson	BR	2018	CR01	Wilson	BR	Wilson - BR
2018	17112495	5	On a Fixed Date	PR	61572879	NOCO ORAS	INIT	CR01		11/10/2018	11/10/2018	11/10/2018	N-TS-WILSONTS	-BR-M18	STN BREAKER BLOWDOWN 2of4 2018	1093835	Wilson	BR	2018	CR01	Wilson	BR	Wilson - BR
2020	19333119	5	On a Fixed Date	PR	62291355	NOCO ORAS	INIT	CR01		09/16/2020	09/16/2020	09/16/2020	N-TS-WILSONTS	-BR-M18	STN 'B' PWR EQ INSP-SVI Fall 2020	1093835	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2019	17646174	5	On a Fixed Date	PR	61923630	NOCO ORAS	INIT	CR01		05/24/2019	05/24/2019	05/24/2019	N-TS-WILSONTS	-BR-M18	STN 'B' PWR EQ INSP-SVI Spr 2019	1093835	Wilson	BR	2019	CR01	Wilson	BR	Wilson - BR
2019	17648933	5	On a Fixed Date	PR	61926947	NOCO ORAS	INIT	CR01		05/27/2019	05/27/2019	05/27/2019	N-TS-WILSONTS	-BR-M18	STN BREAKER BLOWDOWN 1of4 2019	1093835	Wilson	BR	2019	CR01	Wilson	BR	Wilson - BR
2020	19482283	5	On a Fixed Date	PR	62283319	NOCO ORAS	INIT	CR01		10/27/2020	10/27/2020	10/27/2020	N-TS-CHARLESTS	-BR-T1A7A8	STN 'A' PWR EQ INSP-SVI Fall 2020	1094301	Charles	BR	2020	CR01	Charles	BR	Charles - BR
2020	18942462	5	On a Fixed Date	PR	62283318	NOCO ORAS	INIT	CR02		05/18/2020	05/18/2020	05/18/2020	N-TS-CHARLESTS	-BR-T1A7A8	STN 'A' PWR EQ INSP-SVI Spr 2020	1094301	Charles	BR	2020	CR02	Charles	BR	Charles - BR
2018	17038614	5	On a Fixed Date	PR	61554233	NOCO ORAS	INIT	CR01		10/17/2018	10/17/2018	10/17/2018	N-TS-CHARLESTS	-BR-T1A7A8	STN 'A' PWR EQ INSP-SVI Fall 2018	1094301	Charles	BR	2018	CR01	Charles	BR	Charles - BR
2021	19190375	6	By a Fixed Date	PR	62678273	NOCO ORAS	INIT	CR01	1	04/01/2021	07/17/2020	07/12/2021	N-TS-CHARLESTS	-BR-T1A7A8	BR-M/C-AMAG/<30-Strategy	1094301	Charles	BR	2021	CR01	Charles	BR	Charles - BR
2017	15821510	5	On a Fixed Date	PR	61322825	NOCO ORAS	INIT	CR01		06/27/2017	06/27/2017	06/27/2017	N-TS-CHARLESTS	-BR-T1A7A8	STN 'A' PWR EQ INSP-SVI Spr 2017	1094301	Charles	BR	2017	CR01	Charles	BR	Charles - BR
2019	17469007	5	On a Fixed Date	PR	61908456	NOCO ORAS	INIT	CR01		04/02/2019	04/02/2019	04/02/2019	N-TS-CHARLESTS	-BR-T1A7A8	STN 'A' PWR EQ INSP-SVI Spr 2019	1094301	Charles	BR	2019	CR01	Charles	BR	Charles - BR
2020	18845819	5	On a Fixed Date	PR	61908457	NOCO ORAS	INIT	CR02		04/29/2020	04/29/2020	04/29/2020	N-TS-CHARLESTS	-BR-T1A7A8	STN 'A' PWR EQ INSP-SVI Fall 2019	1094301	Charles	BR	2020	CR02	Charles	BR	Charles - BR
2017	16195269	5	On a Fixed Date	PR	61322826	NOCO ORAS	INIT	CR01		11/13/2017	11/13/2017	11/13/2017	N-TS-CHARLESTS	-BR-T1A7A8	STN 'A' PWR EQ INSP-SVI Fall 2017	1094301	Charles	BR	2017	CR01	Charles	BR	Charles - BR
2018	16513684	5	On a Fixed Date	PR	61554232	NOCO ORAS	INIT	CR01		03/15/2018	03/15/2018	03/15/2018	N-TS-CHARLESTS	-BR-T1A7A8	STN 'A' PWR EQ INSP-SVI Spr 2018	1094301	Charles	BR	2018	CR01	Charles	BR	Charles - BR
2016	15130494	5	On a Fixed Date	PR	61169688	NOCO ORAS	INIT	CR01		09/29/2016	09/29/2016	09/29/2016	N-TS-CHARLESTS	-BR-T1A7A8	STN 'A' PWR EQ INSP-SVI FALL 2016	1094301	Charles	BR	2016	CR01	Charles	BR	Charles - BR
2020	18845838	5	On a Fixed Date	PR	61908457	NOCO ORAS	INIT	CR02		04/29/2020	04/29/2020	04/29/2020	N-TS-CHARLESTS	-BR-T2A7A8	STN 'A' PWR EQ INSP-SVI Fall 2019	1094324	Charles	BR	2020	CR02	Charles	BR	Charles - BR
2017	16195271	5	On a Fixed Date	PR	61322826	NOCO ORAS	INIT	CR01		11/13/2017	11/13/2017	11/13/2017	N-TS-CHARLESTS	-BR-T2A7A8	STN 'A' PWR EQ INSP-SVI Fall 2017	1094324	Charles	BR	2017	CR01	Charles	BR	Charles - BR
2020	18942463	5	On a Fixed Date	PR	62283318	NOCO ORAS	INIT	CR02		05/18/2020	05/18/2020	05/18/2020	N-TS-CHARLESTS	-BR-T2A7A8	STN 'A' PWR EQ INSP-SVI Spr 2020	1094324	Charles	BR	2020	CR02	Charles	BR	Charles - BR
2018	16513683	5	On a Fixed Date	PR	61554232	NOCO ORAS	INIT	CR01		03/15/2018	03/15/2018	03/15/2018	N-TS-CHARLESTS	-BR-T2A7A8	STN 'A' PWR EQ INSP-SVI Spr 2018	1094324	Charles	BR	2018	CR01	Charles	BR	Charles - BR
2019	17469008	5	On a Fixed Date	PR	61908456	NOCO ORAS	INIT	CR01		04/02/2019	04/02/2019	04/02/2019	N-TS-CHARLESTS	-BR-T2A7A8	STN 'A' PWR EQ INSP-SVI Spr 2019	1094324	Charles	BR	2019	CR01	Charles	BR	Charles - BR
2016	15130574	5	On a Fixed Date	PR	61169688	NOCO ORAS	INIT	CR01		09/29/2016	09/29/2016	09/29/2016	N-TS-CHARLESTS	-BR-T2A7A8	STN 'A' PWR EQ INSP-SVI FALL 2016	1094324	Charles	BR	2016	CR01	Charles	BR	Charles - BR
2020	19482284	5	On a Fixed Date	PR	62283319	NOCO ORAS	INIT	CR01		10/27/2020	10/27/2020	10/27/2020	N-TS-CHARLESTS	-BR-T2A7A8	STN 'A' PWR EQ INSP-SVI Fall 2020	1094324	Charles	BR	2020	CR01	Charles	BR	Charles - BR
2017	15821511	5	On a Fixed Date	PR	61322825	NOCO ORAS	INIT	CR01		06/27/2017	06/27/2017	06/27/2017	N-TS-CHARLESTS	-BR-T2A7A8	STN 'A' PWR EQ INSP-SVI Spr 2017	1094324	Charles	BR	2017	CR01	Charles	BR	Charles - BR
2018	17038575	5	On a Fixed Date	PR	61554233	NOCO ORAS	INIT	CR01		10/17/2018	10/17/2018	10/17/2018	N-TS-CHARLESTS	-BR-T2A7A8	STN 'A' PWR EQ INSP-SVI Fall 2018	1094324	Charles	BR	2018	CR01	Charles	BR	Charles - BR
2017	16195273	5	On a Fixed Date	PR	61322826	NOCO ORAS	INIT	CR01		11/13/2017	11/13/2017	11/13/2017	N-TS-CHARLESTS	-BR-T1A5A6	STN 'A' PWR EQ INSP-SVI Fall 2017	1098469	Charles	BR	2017	CR01	Charles	BR	Charles - BR
2020	18942466	5	On a Fixed Date	PR	62283318	NOCO ORAS	INIT	CR02		05/18/2020	05/18/2020	05/18/2020	N-TS-CHARLESTS	-BR-T1A5A6	STN 'A' PWR EQ INSP-SVI Spr 2020	1098469	Charles	BR	2020	CR02	Charles	BR	Charles - BR
2018	17038576	5	On a Fixed Date	PR	61554233	NOCO ORAS	INIT	CR01		10/17/2018	10/17/2018	10/17/2018	N-TS-CHARLESTS	-BR-T1A5A6	STN 'A' PWR EQ INSP-SVI Fall 2018	1098469	Charles	BR	2018	CR01	Charles	BR	Charles - BR
2020	18845839	5	On a Fixed Date	PR	61908457	NOCO ORAS	INIT	CR02		04/29/2020	04/29/2020	04/29/2020	N-TS-CHARLESTS	-BR-T1A5A6	STN 'A' PWR EQ INSP-SVI Fall 2019	1098469	Charles	BR	2020	CR02	Charles	BR	Charles - BR
2020	19482285	5	On a Fixed Date	PR	62283319	NOCO ORAS	INIT	CR01		10/27/2020	10/27/2020	10/27/2020	N-TS-CHARLESTS	-BR-T1A5A6	STN 'A' PWR EQ INSP-SVI Fall 2020	1098469	Charles	BR	2020	CR01	Charles	BR	Charles - BR
2019	17469009	5	On a Fixed Date	PR	61908456	NOCO ORAS	INIT	CR01		04/02/2019	04/02/2019	04/02/2019	N-TS-CHARLESTS	-BR-T1A5A6	STN 'A' PWR EQ INSP-SVI Spr 2019	1098469	Charles	BR	2019	CR01	Charles	BR	Charles - BR
2018	16513664	5	On a Fixed Date	PR	61554232	NOCO ORAS	INIT	CR01		03/15/2018	03/15/2018	03/15/2018	N-TS-CHARLESTS	-BR-T1A5A6	STN 'A' PWR EQ INSP-SVI Spr 2018	1098469	Charles	BR	2018	CR01	Charles	BR	Charles - BR
2017	15821466	5	On a Fixed Date	PR	61322825	NOCO ORAS	INIT	CR01		06/27/2017	06/27/2017	06/27/2017	N-TS-CHARLESTS	-BR-T1A5A6	STN 'A' PWR EQ INSP-SVI Spr 2017	1098469	Charles	BR	2017	CR01	Charles	BR	Charles - BR
2016	15130575	5	On a Fixed Date	PR	61169688	NOCO ORAS	INIT	CR01		09/29/2016	09/29/2016	09/29/2016	N-TS-CHARLESTS	-BR-T1A5A6	STN 'A' PWR EQ INSP-SVI FALL 2016	1098469	Charles	BR	2016	CR01	Charles	BR	Charles - BR
2020	19015400	5	On a Fixed Date	PR	62562612	NOCO ORAS	INIT	CR01		06/02/2020	06/02/2020	06/02/2020	N-TS-WILSONTS	-BR-M16	STN 'B' PWR EQ INSP-SVI June wk1	1101236	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2019	18055550	5	On a Fixed Date	PR	61923631	NOCO ORAS	INIT	CR01		09/25/2019	09/25/2019	09/25/2019	N-TS-WILSONTS	-BR-M16	STN 'B' PWR EQ INSP-SVI Fall 2019	1101236	Wilson	BR	2019	CR01	Wilson	BR	Wilson - BR
2020	18805083	5	On a Fixed Date	PR	62562606	NOCO ORAS	INIT	CR01		04/22/2020	04/22/2020	04/22/2020	N-TS-WILSONTS	-BR-M16	STN 'B' PWR EQ INSP-SVI April wk3	1101236	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2016	14517760	5	On a Fixed Date	PR	61170803	NOCO ORAS	INIT	CR01		02/17/2016	02/17/2016	02/17/2016	N-TS-WILSONTS	-BR-M16	STN 'B' PWR EQ INSP-SVI SPRING 2016	1101236	Wilson	BR	2016	CR01	Wilson	BR	Wilson - BR
2017	16109406	5	On a Fixed Date	PR	61325366	NOCO ORAS	INIT	CR01		09/27/2017	09/27/2017	09/27/2017	N-TS-WILSONTS	-BR-M16	STN 'B' PWR EQ INSP-SVI Fall 2017	1101236	Wilson	BR	2017	CR01	Wilson	BR	Wilson - BR
2017	14920097	6	By a Fixed Date	PR	61343174	NOCO ORAS	INIT	CR02	1	07/16/2016	07/16/2016	07/21/2017	N-TS-WILSONTS	-BR-M16	BR-OIL-KSO-LV- BOA	1101236	Wilson	BR	2017	CR02	Wilson	BR	Wilson - BR
2020	18892976	5	On a Fixed Date	PR	62562608	NOCO ORAS	INIT	CR01		05/07/2020	05/07/2020	05/07/2020	N-TS-WILSONTS	-BR-M16	STN 'B' PWR EQ INSP-SVI May wk1	1101236	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2019	17646178	5	On a Fixed Date	PR	61923630	NOCO ORAS	INIT	CR01		05/24/2019	05/24/2019	05/24/2019	N-TS-WILSONTS	-BR-M16	STN 'B' PWR EQ INSP-SVI Spr 2019	1101236	Wilson	BR	2019	CR01	Wilson	BR	Wilson - BR
2018	17113100	5	On a Fixed Date	PR	61570344	NOCO ORAS	INIT	CR01		11/12/2018	11/12/2018	11/12/2018	N-TS-WILSONTS	-BR-M16	STN 'B' PWR EQ INSP-SVI Fall 2018	1101236	Wilson	BR	2018	CR01	Wilson	BR	Wilson - BR
2016	15199808	5	On a Fixed Date	PR	61170804	NOCO ORAS	INIT	CR01		10/26/2016	10/26/2016	10/26/2016	N-TS-WILSONTS	-BR-M16	STN 'B' PWR EQ INSP-SVI FALL 2016	1101236	Wilson	BR	2016	CR01	Wilson	BR	Wilson - BR
2020	19333209	5	On a Fixed Date	PR	62291355	NOCO ORAS	INIT	CR01		09/16/2020	09/16/2020	09/16/2020	N-TS-WILSONTS	-BR-M16	STN 'B' PWR EQ INSP-SVI Fall 2020	1101236	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2018	16814032	5	On a Fixed Date	PR	61570343	NOCO ORAS	INIT	CR01		06/07/2018	06/07/2018	06/07/2018	N-TS-WILSONTS	-BR-M16	STN 'B' PWR EQ INSP-SVI Spr 2018	1101236	Wilson	BR	2018	CR01	Wilson	BR	Wilson - BR
2017	15479865	5	On a Fixed Date	PR	61325365	NOCO ORAS	INIT	CR02		04/20/2017	04/20/2017	04/20/2017	N-TS-WILSONTS	-BR-M16	STN 'B' PWR EQ INSP-SVI Spr 2017	1101236	Wilson	BR	2017	CR02	Wilson	BR	Wilson - BR
2020	18644208	5	On a Fixed Date	PR	62291354	NOCO ORAS	INIT	CR01		03/11/2020	03/11/2020	03/11/2020	N-TS-WILSONTS	-BR-M16	STN 'B' PWR EQ INSP-SVI Spr 2020	1101236	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2020	18773025	5	On a Fixed Date	PR	62562605	NOCO ORAS	INIT	CR01		04/16/2020	04/16/2020	04/16/2020	N-TS-WILSONTS	-BR-M16	STN 'B' PWR EQ INSP-SVI April wk2	1101236	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2018	15889386	6	By a Fixed Date	PR	61570897	NOCO ORAS	INIT	CR01	5	07/22/2017	07/22/2017	02/16/2018	N-TS-WILSONTS	-BR-M16	BR-OIL-KSO-LV- Strategy	1101236	Wilson	BR	2018	CR01	Wilson	BR	Wilson - BR
2018	17112915	5	On a Fixed Date	PR	61570344	NOCO ORAS	INIT	CR01		11/12/2018	11/12/2018	11/12/2018	N-TS-WILSONTS	-BR-M16	STN 'B' PWR EQ INSP-SVI Fall 2018	1101236	Wilson	BR	2018	CR01	Wilson	BR	Wilson - BR
2020	17812146	6	By a Fixed Date	PR	62293019	NOCO ORAS	INIT	CR01	1	07/27/2020	07/06/2019	03/31/2020	N-TS-WILSONTS	-BR-M16	BR-OIL-KSO-LV- BOA	1101236	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2020	18892977	5	On a Fixed Date	PR	62562608	NOCO ORAS	INIT	CR01		05/07/2020	05/07/2020	05/07/2020	N-TS-WILSONTS	-BR-M7	STN 'B' PWR EQ INSP-SVI May wk1	1101252	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2019	14920211	6	By a Fixed Date	PR	61343308	ATCO NOCO ORAS	INIT	CR02	1	07/16/2016	07/16/2016	04/09/2019	N-TS-WILSONTS	-BR-M7	BR-OIL-KSO-LV- BOA	1101252	Wilson	BR	2019	CR02	Wilson	BR	Wilson - BR
2016	14517761	5	On a Fixed Date	PR	61170803	NOCO ORAS	INIT	CR01		02/17/2016	02/17/2016	02/17/2016	N-TS-WILSONTS	-BR-M7	STN 'B' PWR EQ INSP-SVI SPRING 2016	1101252	Wilson	BR	2016	CR01	Wilson	BR	Wilson - BR
2018	16814013	5	On a Fixed Date	PR	61570343	NOCO ORAS	INIT	CR01		06/07/2018	06/07/2018	06/07/2018	N-TS-WILSONTS	-BR-M7	STN 'B' PWR EQ INSP-SVI Spr 2018	1101252	Wilson	BR	2018	CR01	Wilson	BR	Wilson - BR
2020	18644209	5	On a Fixed Date	PR	62291354	NOCO ORAS	INIT	CR01		03/11/2020	03/11/2020	03/11/2020	N-TS-WILSONTS	-BR-M7	STN 'B' PWR EQ INSP-SVI Spr 2020	1101252	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2020	17812225	6	By a Fixed Date	PR	62293088	NOCO ORAS	INIT	CR01	1	07/21/2020	07/06/2019	03/19/2020	N-TS-WILSONTS	-BR-M7	BR-OIL-KSO-LV- BOA	1101252	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2020	19333210	5	On a Fixed Date	PR	62291355	NOCO ORAS	INIT	CR01		09/16/2020	09/16/2020	09/16/2020	N-TS-WILSONTS	-BR-M7	STN 'B' PWR EQ INSP-SVI Fall 2020	1101252	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2018	17112917	5	On a Fixed Date	PR	61570344	NOCO ORAS	INIT	CR01		11/12/2018	11/12/2018	11/12/2018	N-TS-WILSONTS	-BR-M7	STN 'B' PWR EQ INSP-SVI Fall 2018	1101252	Wilson	BR	2018	CR01	Wilson	BR	Wilson - BR
2016	15199809	5	On a Fixed Date	PR	61170804	NOCO ORAS	INIT	CR01		10/26/2016	10/26/2016	10/26/2016	N-TS-WILSONTS	-BR-M7	STN 'B' PWR EQ INSP-SVI FALL 2016	1101252	Wilson	BR	2016	CR01	Wilson	BR	Wilson - BR
2017	15479860	5	On a Fixed Date	PR	61325365	NOCO ORAS	INIT	CR02		04/20/2017	04/20/2017	04/20/2017	N-TS-WILSONTS	-BR-M7	STN 'B' PWR EQ INSP-SVI Spr 2017	1101252	Wilson	BR	2017	CR02	Wilson	BR	Wilson - BR
2020	18773027	5	On a Fixed Date	PR	62562605	NOCO ORAS	INIT	CR01		04/16/2020	04/16/2020	04/16/2020	N-TS-WILSONTS	-BR-M7	STN 'B' PWR EQ INSP-SVI April wk2	1101252	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2019	18055551	5	On a Fixed Date	PR	61923631	NOCO ORAS	INIT	CR01		09/25/2019	09/25/2019	09/25/2019	N-TS-WILSONTS	-BR-M7	STN 'B' PWR EQ INSP-SVI Fall 2019	1101252	Wilson	BR	2019	CR01	Wilson	BR	Wilson - BR
2018	17113101	5	On a Fixed Date	PR	61570344	NOCO ORAS	INIT	CR01		11/12/2018	11/12/2018	11/12/2018	N-TS-WILSONTS	-BR-M7	STN 'B' PWR EQ INSP-SVI Fall 2018	1101252	Wilson	BR	2018	CR01	Wilson	BR	Wilson - BR
2019	17646179	5	On a Fixed Date	PR	61923630	NOCO ORAS	INIT	CR02		05/24/2019	05/24/2019	05/24/2019	N-TS-WILSONTS	-BR-M7	STN 'B' PWR EQ INSP-SVI Spr 2019	1101252	Wilson	BR	2019	CR02	Wilson	BR	Wilson - BR
2020	19015358	5	On a Fixed Date	PR	62562612	NOCO ORAS	INIT	CR01		06/02/2020	06/02/2020	06/02/2020	N-TS-WILSONTS	-BR-M7	STN 'B' PWR EQ INSP-SVI June wk1	1101252	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2017	16109408	5	On a Fixed Date	PR	61325366	NOCO ORAS	INIT	CR01		09/27/2017	09/27/2017	09/27/2017	N-TS-WILSONTS	-BR-M7	STN 'B' PWR EQ INSP-SVI Fall 2017	1101252	Wilson	BR	2017	CR01	Wilson	BR	Wilson - BR
2020	18805137	5	On a Fixed Date	PR	62562606	NOCO ORAS	INIT	CR01		04/22/2020	04/22/2020	04/22/2020	N-TS-WILSONTS	-BR-M7	STN 'B' PWR EQ INSP-SVI April wk3	1101252	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2016	14862632	3	Medium (30-90 Days)	PR	61304972	NOCO ORAS	INIT	CR01	1	07/07/2016	07/07/2016	11/16/2016	N-TS-WILSONTS	-BR-T1B	Replace oil based on BOA	1101264	Wilson	BR	2016	CR01	Wilson	BR	Wilson - BR
2019	14861171	3	Medium (30-90 Days)	PR	61304893	ATCO NOCO ORAS	INIT	CR02	1	08/06/2016	07/07/2016	04/09/2019	N-TS-WILSONTS	-BR-T1B	BR-OIL-KSO-LV- BOA 90 day after SI	1101264	Wilson	BR	2019	CR02	Wilson	BR	Wilson - BR
2020	18644230	5	On a Fixed Date	PR	62291354	NOCO ORAS	INIT	CR01		03/11/2020	03/11/2020	03/11/2020	N-TS-WILSONTS	-BR-T1B	STN 'B' PWR EQ INSP-SVI Spr 2020	1101264	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2019	16893974	6	By a Fixed Date	PR	61925634	NOCO ORAS	INIT	CR01	1	07/07/2018	07/07/2018	09/24/2019	N-TS-WILSONTS	-BR-T1B	BR-OIL-KSO-LV- BOA	1101264	Wilson	BR	2019	CR01	Wilson	BR	Wilson - BR
2020	19333211	5	On a Fixed Date	PR	62291355	NOCO ORAS	INIT	CR01		09/16/2020	09/16/2020	09/16/2020	N-TS-WILSONTS	-BR-T1B	STN 'B' PWR EQ INSP-SVI Fall 2020	1101264	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2020	19015359	5	On a Fixed Date	PR	62562612	NOCO ORAS	INIT	CR01		06/02/2020	06/02/2020	06/02/2020	N-TS-WILSONTS	-BR-T1B	STN 'B' PWR EQ INSP-SVI June wk1	1101264	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2019	17646230	5	On a Fixed Date	PR	61923630	NOCO ORAS	INIT	CR02		05/24/2019	05/24/2019	05/24/2019	N-TS-WILSONTS	-BR-T1B	STN 'B' PWR EQ INSP-SVI Spr 2019	1101264	Wilson	BR	2019	CR02	Wilson	BR	Wilson - BR
2016	14517762	5	On a Fixed Date	PR	61170803	NOCO ORAS	INIT	CR01		02/17/2016	02/17/2016	02/17/2016	N-TS-WILSONTS	-BR-T1B	STN 'B' PWR EQ INSP-SVI SPRING 2016	1101264	Wilson	BR	2016	CR01	Wilson	BR	Wilson - BR
2017	15479895	5	On a Fixed Date	PR	61325365	NOCO ORAS	INIT	CR02		04/20/2017	04/20/2017	04/20/2017	N-TS-WILSONTS	-BR-T1B	STN 'B' PWR EQ INSP-SVI Spr 2017	1101264	Wilson	BR	2017	CR02	Wilson	BR	Wilson - BR
2018	16814014	5	On a Fixed Date	PR	61570343	NOCO ORAS	INIT	CR01		06/07/2018	06/07/2018	06/07/2018	N-TS-WILSONTS	-BR-T1B	STN 'B' PWR EQ INSP-SVI Spr 2018	1101264	Wilson	BR	2018	CR01	Wilson	BR	Wilson - BR
2020	18805138	5	On a Fixed Date	PR	62562606	NOCO ORAS	INIT	CR01		04/22/2020	04/22/2020	04/22/2020	N-TS-WILSONTS	-BR-T1B	STN 'B' PWR EQ INSP-SVI April wk3	1101264	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2020	18892978	5	On a Fixed Date	PR	62562608	NOCO ORAS	INIT	CR01		05/07/2020	05/07/2020	05/07/2020	N-TS-WILSONTS	-BR-T1B	STN 'B' PWR EQ INSP-SVI May wk1	1101264	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2016	15199840	5	On a Fixed Date	PR	61170804	NOCO ORAS	INIT	CR01		10/26/2016	10/26/2016	10/26/2016	N-TS-WILSONTS	-BR-T1B	STN 'B' PWR EQ INSP-SVI FALL 2016	1101264	Wilson	BR	2016	CR01	Wilson	BR	Wilson - BR
2020	18773029	5	On a Fixed Date	PR	62562605	NOCO ORAS	INIT	CR01		04/16/2020	04/16/2020	04/16/2020	N-TS-WILSONTS	-BR-T1B	STN 'B' PWR EQ INSP-SVI April wk2	1101264	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2016	14861048	3	Medium (30-90 Days)	PR	61304790	NOCO ORAS	INIT	CR01	1	08/06/2016	07/07/2016	11/17/2016	N-TS-WILSONTS	-BR-T1B	BR-OIL-KSO-LV- Strategy BOA SI	1101264	Wilson	BR	2016	CR01	Wilson	BR	Wilson - BR
2017	16109357	5	On a Fixed Date	PR	61325366	NOCO ORAS	INIT	CR01		09/27/2017	09/27/2017	09/27/2017	N-TS-WILSONTS	-BR-T1B	STN 'B' PWR EQ INSP-SVI Fall 2017	1101264	Wilson	BR	2017	CR01	Wilson	BR	Wilson - BR
2018	17112919	5	On a Fixed Date	PR	61570344	NOCO ORAS	INIT	CR01		11/12/2018	11/12/2018	11/12/2018	N-TS-WILSONTS	-BR-T1B	STN 'B' PWR EQ INSP-SVI Fall 2018	1101264	Wilson	BR	2018	CR01	Wilson	BR	Wilson - BR
2018	17113102	5	On a Fixed Date	PR	61570344	NOCO ORAS	INIT	CR01		11/12/2018	11/12/2018	11/12/2018	N-TS-WILSONTS	-BR-T1B	STN 'B' PWR EQ INSP-SVI Fall 2018	1101264	Wilson	BR	2018	CR01	Wilson	BR	Wilson - BR

2019	18055552	5	On a Fixed Date	PR	61923631	NOCO ORAS	INIT	CR01		09/25/2019	09/25/2019	09/25/2019	N-TS-WILSONTS -BR-T1B	STN 'B' PWR EQ INSP-SVI Fall 2019	1101264	Wilson	BR	2019	CR01	Wilson	BR	Wilson - BR
2018	17038615	5	On a Fixed Date	PR	61554233	NOCO ORAS	INIT	CR01		10/17/2018	10/17/2018	10/17/2018	N-TS-CHARLESTS -BR-T3A1A2	STN 'A' PWR EQ INSP-SVI Fall 2018	1114751	Charles	BR	2018	CR01	Charles	BR	Charles - BR
2021	19590693	6	By a Fixed Date	PR	62834220	NOCO ORAS	INIT	CR01	1	04/01/2021	11/19/2020	07/22/2021	N-TS-CHARLESTS -BR-T3A1A2	BR-M/C-AMAG/<30-Strategy	1114751	Charles	BR	2021	CR01	Charles	BR	Charles - BR
2019	17469060	5	On a Fixed Date	PR	61908456	NOCO ORAS	INIT	CR01		04/02/2019	04/02/2019	04/02/2019	N-TS-CHARLESTS -BR-T3A1A2	STN 'A' PWR EQ INSP-SVI Spr 2019	1114751	Charles	BR	2019	CR01	Charles	BR	Charles - BR
2017	15821488	5	On a Fixed Date	PR	61322825	NOCO ORAS	INIT	CR01		06/27/2017	06/27/2017	06/27/2017	N-TS-CHARLESTS -BR-T3A1A2	STN 'A' PWR EQ INSP-SVI Spr 2017	1114751	Charles	BR	2017	CR01	Charles	BR	Charles - BR
2016	15130576	5	On a Fixed Date	PR	61169688	NOCO ORAS	INIT	CR01		09/29/2016	09/29/2016	09/29/2016	N-TS-CHARLESTS -BR-T3A1A2	STN 'A' PWR EQ INSP-SVI FALL 2016	1114751	Charles	BR	2016	CR01	Charles	BR	Charles - BR
2020	18942467	5	On a Fixed Date	PR	62283318	NOCO ORAS	INIT	CR02		05/18/2020	05/18/2020	05/18/2020	N-TS-CHARLESTS -BR-T3A1A2	STN 'A' PWR EQ INSP-SVI Spr 2020	1114751	Charles	BR	2020	CR02	Charles	BR	Charles - BR
2018	16513682	5	On a Fixed Date	PR	61554232	NOCO ORAS	INIT	CR01		03/15/2018	03/15/2018	03/15/2018	N-TS-CHARLESTS -BR-T3A1A2	STN 'A' PWR EQ INSP-SVI Spr 2018	1114751	Charles	BR	2018	CR01	Charles	BR	Charles - BR
2020	18845852	5	On a Fixed Date	PR	61908457	NOCO ORAS	INIT	CR02		04/29/2020	04/29/2020	04/29/2020	N-TS-CHARLESTS -BR-T3A1A2	STN 'A' PWR EQ INSP-SVI Fall 2019	1114751	Charles	BR	2020	CR02	Charles	BR	Charles - BR
2020	19482286	5	On a Fixed Date	PR	62283319	NOCO ORAS	INIT	CR01		10/27/2020	10/27/2020	10/27/2020	N-TS-CHARLESTS -BR-T3A1A2	STN 'A' PWR EQ INSP-SVI Fall 2020	1114751	Charles	BR	2020	CR01	Charles	BR	Charles - BR
2017	16195228	5	On a Fixed Date	PR	61322826	NOCO ORAS	INIT	CR01		11/13/2017	11/13/2017	11/13/2017	N-TS-CHARLESTS -BR-T3A1A2	STN 'A' PWR EQ INSP-SVI Fall 2017	1114751	Charles	BR	2017	CR01	Charles	BR	Charles - BR
2019	17645962	5	On a Fixed Date	PR	61923630	NOCO ORAS	INIT	CR01		05/24/2019	05/24/2019	05/24/2019	N-TS-WILSONTS -TF-SS2	STN 'B' PWR EQ INSP-SVI Spr 2019	1173234	Wilson	TF	2019	CR01	Wilson	TF	Wilson - TF
2020	18892913	5	On a Fixed Date	PR	62562608	NOCO ORAS	INIT	CR01		05/07/2020	05/07/2020	05/07/2020	N-TS-WILSONTS -TF-SS2	STN 'B' PWR EQ INSP-SVI May wk1	1173234	Wilson	TF	2020	CR01	Wilson	TF	Wilson - TF
2019	18055514	5	On a Fixed Date	PR	61923631	NOCO ORAS	INIT	CR01		09/25/2019	09/25/2019	09/25/2019	N-TS-WILSONTS -TF-SS2	STN 'B' PWR EQ INSP-SVI Fall 2019	1173234	Wilson	TF	2019	CR01	Wilson	TF	Wilson - TF
2020	18804869	5	On a Fixed Date	PR	62562606	NOCO ORAS	INIT	CR01		04/22/2020	04/22/2020	04/22/2020	N-TS-WILSONTS -TF-SS2	STN 'B' PWR EQ INSP-SVI April wk3	1173234	Wilson	TF	2020	CR01	Wilson	TF	Wilson - TF
2017	16108799	5	On a Fixed Date	PR	61325366	NOCO ORAS	INIT	CR01		09/27/2017	09/27/2017	09/27/2017	N-TS-WILSONTS -TF-SS2	STN 'B' PWR EQ INSP-SVI Fall 2017	1173234	Wilson	TF	2017	CR01	Wilson	TF	Wilson - TF
2020	18772997	5	On a Fixed Date	PR	62562605	NOCO ORAS	INIT	CR01		04/16/2020	04/16/2020	04/16/2020	N-TS-WILSONTS -TF-SS2	STN 'B' PWR EQ INSP-SVI April wk2	1173234	Wilson	TF	2020	CR01	Wilson	TF	Wilson - TF
2018	17113050	5	On a Fixed Date	PR	61570344	NOCO ORAS	INIT	CR01		11/12/2018	11/12/2018	11/12/2018	N-TS-WILSONTS -TF-SS2	STN 'B' PWR EQ INSP-SVI Fall 2018	1173234	Wilson	TF	2018	CR01	Wilson	TF	Wilson - TF
2018	17112844	5	On a Fixed Date	PR	61570344	NOCO ORAS	INIT	CR01		11/12/2018	11/12/2018	11/12/2018	N-TS-WILSONTS -TF-SS2	STN 'B' PWR EQ INSP-SVI Fall 2018	1173234	Wilson	TF	2018	CR01	Wilson	TF	Wilson - TF
2018	16813969	5	On a Fixed Date	PR	61570343	NOCO ORAS	INIT	CR01		06/07/2018	06/07/2018	06/07/2018	N-TS-WILSONTS -TF-SS2	STN 'B' PWR EQ INSP-SVI Spr 2018	1173234	Wilson	TF	2018	CR01	Wilson	TF	Wilson - TF
2020	18644058	5	On a Fixed Date	PR	62291354	NOCO ORAS	INIT	CR01		03/11/2020	03/11/2020	03/11/2020	N-TS-WILSONTS -TF-SS2	STN 'B' PWR EQ INSP-SVI Spr 2020	1173234	Wilson	TF	2020	CR01	Wilson	TF	Wilson - TF
2016	15199417	5	On a Fixed Date	PR	61170804	NOCO ORAS	INIT	CR01		10/26/2016	10/26/2016	10/26/2016	N-TS-WILSONTS -TF-SS2	STN 'B' PWR EQ INSP-SVI FALL 2016	1173234	Wilson	TF	2016	CR01	Wilson	TF	Wilson - TF
2020	19015214	5	On a Fixed Date	PR	62562612	NOCO ORAS	INIT	CR01		06/02/2020	06/02/2020	06/02/2020	N-TS-WILSONTS -TF-SS2	STN 'B' PWR EQ INSP-SVI June wk1	1173234	Wilson	TF	2020	CR01	Wilson	TF	Wilson - TF
2016	14517728	5	On a Fixed Date	PR	61170803	NOCO ORAS	INIT	CR01		02/17/2016	02/17/2016	02/17/2016	N-TS-WILSONTS -TF-SS2	STN 'B' PWR EQ INSP-SVI SPRING 2016	1173234	Wilson	TF	2016	CR01	Wilson	TF	Wilson - TF
2020	19333115	5	On a Fixed Date	PR	62291355	NOCO ORAS	INIT	CR01		09/16/2020	09/16/2020	09/16/2020	N-TS-WILSONTS -TF-SS2	STN 'B' PWR EQ INSP-SVI Fall 2020	1173234	Wilson	TF	2020	CR01	Wilson	TF	Wilson - TF
2017	15479843	5	On a Fixed Date	PR	61325365	NOCO ORAS	INIT	CR01		04/20/2017	04/20/2017	04/20/2017	N-TS-WILSONTS -TF-SS2	STN 'B' PWR EQ INSP-SVI Spr 2017	1173234	Wilson	TF	2017	CR01	Wilson	TF	Wilson - TF
2021	19195816	6	By a Fixed Date	PR	62683754	NOCO ORAS	INIT	CR03	1	04/01/2021	07/18/2020	03/15/2021	N-TS-WILSONTS -TF-T3	TF-GENERAL-GOT	1173245	Wilson	TF	2021	CR03	Wilson	TF	Wilson - TF
2020	18804880	5	On a Fixed Date	PR	62562606	NOCO ORAS	INIT	CR01		04/22/2020	04/22/2020	04/22/2020	N-TS-WILSONTS -TF-T3	STN 'B' PWR EQ INSP-SVI April wk3	1173245	Wilson	TF	2020	CR01	Wilson	TF	Wilson - TF
2016	14517729	5	On a Fixed Date	PR	61170803	NOCO ORAS	INIT	CR01		02/17/2016	02/17/2016	02/17/2016	N-TS-WILSONTS -TF-T3	STN 'B' PWR EQ INSP-SVI SPRING 2016	1173245	Wilson	TF	2016	CR01	Wilson	TF	Wilson - TF
2019	18055515	5	On a Fixed Date	PR	61923631	NOCO ORAS	INIT	CR01		09/25/2019	09/25/2019	09/25/2019	N-TS-WILSONTS -TF-T3	STN 'B' PWR EQ INSP-SVI Fall 2019	1173245	Wilson	TF	2019	CR01	Wilson	TF	Wilson - TF
2019	17210578	6	By a Fixed Date	PR	62115705	ATCO NOCO ORAS	INIT	CR03	1	02/04/2019	01/17/2019	03/20/2019	N-TS-WILSONTS -TF-T3	TF-GENERAL-(SPECIAL)DGA-MAIN TANK	1173245	Wilson	TF	2019	CR03	Wilson	TF	Wilson - TF
2020	19015217	5	On a Fixed Date	PR	62562612	NOCO ORAS	INIT	CR01		06/02/2020	06/02/2020	06/02/2020	N-TS-WILSONTS -TF-T3	STN 'B' PWR EQ INSP-SVI June wk1	1173245	Wilson	TF	2020	CR01	Wilson	TF	Wilson - TF
2020	18389431	6	By a Fixed Date	PR	62480268	NOCO ORAS	INIT	CR02	1	04/24/2020	12/10/2019	04/29/2020	N-TS-WILSONTS -TF-T3	TF-GENERAL-(SPECIAL)DGA	1173245	Wilson	TF	2020	CR02	Wilson	TF	Wilson - TF
2019	15889739	6	By a Fixed Date	PR	61571250	NOCO ORAS	INIT	CR03	1	07/22/2017	07/22/2017	01/17/2019	N-TS-WILSONTS -TF-T3	TF-GENERAL-GOT	1173245	Wilson	TF	2019	CR03	Wilson	TF	Wilson - TF
2020	17812183	6	By a Fixed Date	PR	62293036	NOCO ORAS	INIT	CR02	1	04/01/2020	07/06/2019	08/03/2020	N-TS-WILSONTS -TF-T3	TF-GENERAL-GOT	1173245	Wilson	TF	2020	CR02	Wilson	TF	Wilson - TF
2020	19332818	5	On a Fixed Date	PR	62291355	NOCO ORAS	INIT	CR01		09/16/2020	09/16/2020	09/16/2020	N-TS-WILSONTS -TF-T3	STN 'B' PWR EQ INSP-SVI Fall 2020	1173245	Wilson	TF	2020	CR01	Wilson	TF	Wilson - TF
2018	17112846	5	On a Fixed Date	PR	61570344	NOCO ORAS	INIT	CR01		11/12/2018	11/12/2018	11/12/2018	N-TS-WILSONTS -TF-T3	STN 'B' PWR EQ INSP-SVI Fall 2018	1173245	Wilson	TF	2018	CR01	Wilson	TF	Wilson - TF
2019	16893939	6	By a Fixed Date	PR	61925629	NOCO ORAS	INIT	CR03	1	07/07/2018	07/07/2018	10/24/2019	N-TS-WILSONTS -TF-T3	TF-GENERAL-GOT	1173245	Wilson	TF	2019	CR03	Wilson	TF	Wilson - TF
2020	18644059	5	On a Fixed Date	PR	62291354	NOCO ORAS	INIT	CR01		03/11/2020	03/11/2020	03/11/2020	N-TS-WILSONTS -TF-T3	STN 'B' PWR EQ INSP-SVI Spr 2020	1173245	Wilson	TF	2020	CR01	Wilson	TF	Wilson - TF
2018	17113051	5	On a Fixed Date	PR	61570344	NOCO ORAS	INIT	CR01		11/12/2018	11/12/2018	11/12/2018	N-TS-WILSONTS -TF-T3	STN 'B' PWR EQ INSP-SVI Fall 2018	1173245	Wilson	TF	2018	CR01	Wilson	TF	Wilson - TF
2020	18892914	5	On a Fixed Date	PR	62562608	NOCO ORAS	INIT	CR01		05/07/2020	05/07/2020	05/07/2020	N-TS-WILSONTS -TF-T3	STN 'B' PWR EQ INSP-SVI May wk1	1173245	Wilson	TF	2020	CR01	Wilson	TF	Wilson - TF
2018	16813971	5	On a Fixed Date	PR	61570343	NOCO ORAS	INIT	CR01		06/07/2018	06/07/2018	06/07/2018	N-TS-WILSONTS -TF-T3	STN 'B' PWR EQ INSP-SVI Spr 2018	1173245	Wilson	TF	2018	CR01	Wilson	TF	Wilson - TF
2019	17645963	5	On a Fixed Date	PR	61923630	NOCO ORAS	INIT	CR01		05/24/2019	05/24/2019	05/24/2019	N-TS-WILSONTS -TF-T3	STN 'B' PWR EQ INSP-SVI Spr 2019	1173245	Wilson	TF	2019	CR01	Wilson	TF	Wilson - TF
2019	17726952	6	By a Fixed Date	PR	62237448	NOCO ORAS	INIT	CR01	1	06/20/2019	06/20/2019	08/15/2019	N-TS-WILSONTS -TF-T3	TF-GENERAL-D1	1173245	Wilson	TF	2019	CR01	Wilson	TF	Wilson - TF
2016	15199418	5	On a Fixed Date	PR	61170804	NOCO ORAS	INIT	CR01		10/26/2016	10/26/2016	10/26/2016	N-TS-WILSONTS -TF-T3	STN 'B' PWR EQ INSP-SVI FALL 2016	1173245	Wilson	TF	2016	CR01	Wilson	TF	Wilson - TF
2020	18772998	5	On a Fixed Date	PR	62562605	NOCO ORAS	INIT	CR01		04/16/2020	04/16/2020	04/16/2020	N-TS-WILSONTS -TF-T3	STN 'B' PWR EQ INSP-SVI April wk2	1173245	Wilson	TF	2020	CR01	Wilson	TF	Wilson - TF
2017	15479844	5	On a Fixed Date	PR	61325365	NOCO ORAS	INIT	CR01		04/20/2017	04/20/2017	04/20/2017	N-TS-WILSONTS -TF-T3	STN 'B' PWR EQ INSP-SVI Spr 2017	1173245	Wilson	TF	2017	CR01	Wilson	TF	Wilson - TF
2017	16108910	5	On a Fixed Date	PR	61325366	NOCO ORAS	INIT	CR01		09/27/2017	09/27/2017	09/27/2017	N-TS-WILSONTS -TF-T3	STN 'B' PWR EQ INSP-SVI Fall 2017	1173245	Wilson	TF	2017	CR01	Wilson	TF	Wilson - TF
2019	15889735	6	By a Fixed Date	PR	61571246	NOCO ORAS	INIT	CR01	1	07/22/2017	07/22/2017	06/20/2019	N-TS-WILSONTS -TF-T3	TF-GENERAL-D1	1173245	Wilson	TF	2019	CR01	Wilson	TF	Wilson - TF
2019	17408782	6	By a Fixed Date	PR	62161694	NOCO ORAS	INIT	CR02	2	06/20/2019	03/20/2019	07/16/2019	N-TS-WILSONTS -TF-T3	TF-GENERAL-(SPECIAL)DGA-MAIN TANK	1173245	Wilson	TF	2019	CR02	Wilson	TF	Wilson - TF
2019	14920152	6	By a Fixed Date	PR	61343179	ATCO NOCO ORAS	INIT	CR01	1	07/16/2016	07/16/2016	04/09/2019	N-TS-WILSONTS -TF-T3	TF-GENERAL-GOT	1173245	Wilson	TF	2019	CR01	Wilson	TF	Wilson - TF
2019	17645966	5	On a Fixed Date	PR	61923630	NOCO ORAS	INIT	CR01		05/24/2019	05/24/2019	05/24/2019	N-TS-WILSONTS -TF-T2	STN 'B' PWR EQ INSP-SVI Spr 2019	1175751	Wilson	TF	2019	CR01	Wilson	TF	Wilson - TF
2020	19015231	5	On a Fixed Date	PR	62562612	NOCO ORAS	INIT	CR01		06/02/2020	06/02/2020	06/02/2020	N-TS-WILSONTS -TF-T2	STN 'B' PWR EQ INSP-SVI June wk1	1175751	Wilson	TF	2020	CR01	Wilson	TF	Wilson - TF
2018	17112861	5	On a Fixed Date	PR	61570344	NOCO ORAS	INIT	CR01		11/12/2018	11/12/2018	11/12/2018	N-TS-WILSONTS -TF-T2	STN 'B' PWR EQ INSP-SVI Fall 2018	1175751	Wilson	TF	2018	CR01	Wilson	TF	Wilson - TF
2020	18892916	5	On a Fixed Date	PR	62562608	NOCO ORAS	INIT	CR01		05/07/2020	05/07/2020	05/07/2020	N-TS-WILSONTS -TF-T2	STN 'B' PWR EQ INSP-SVI May wk1	1175751	Wilson	TF	2020	CR01	Wilson	TF	Wilson - TF
2020	18644111	5	On a Fixed Date	PR	62291354	NOCO ORAS	INIT	CR01		03/11/2020	03/11/2020	03/11/2020	N-TS-WILSONTS -TF-T2	STN 'B' PWR EQ INSP-SVI Spr 2020	1175751	Wilson	TF	2020	CR01	Wilson	TF	Wilson - TF
2017	16108912	5	On a Fixed Date	PR	61325366	NOCO ORAS	INIT	CR01		09/27/2017	09/27/2017	09/27/2017	N-TS-WILSONTS -TF-T2	STN 'B' PWR EQ INSP-SVI Fall 2017	1175751	Wilson	TF	2017	CR01	Wilson	TF	Wilson - TF
2016	15199440	5	On a Fixed Date	PR	61170804	NOCO ORAS	INIT	CR01		10/26/2016	10/26/2016	10/26/2016	N-TS-WILSONTS -TF-T2	STN 'B' PWR EQ INSP-SVI FALL 2016	1175751	Wilson	TF	2016	CR01	Wilson	TF	Wilson - TF
2018	16813974	5	On a Fixed Date	PR	61570343	NOCO ORAS	INIT	CR01		06/07/2018	06/07/2018	06/07/2018	N-TS-WILSONTS -TF-T2	STN 'B' PWR EQ INSP-SVI Spr 2018	1175751	Wilson	TF	2018	CR01	Wilson	TF	Wilson - TF
2018	17113053	5	On a Fixed Date	PR	61570344	NOCO ORAS	INIT	CR01		11/12/2018	11/12/2018	11/12/2018	N-TS-WILSONTS -TF-T2	STN 'B' PWR EQ INSP-SVI Fall 2018	1175751	Wilson	TF	2018	CR01	Wilson	TF	Wilson - TF
2019	16893977	6	By a Fixed Date	PR	61925637	NOCO ORAS	INIT	CR01	1	07/07/2018	07/07/2018	06/20/2019	N-TS-WILSONTS -TF-T2	TF-GENERAL-D1	1175751	Wilson	TF	2019	CR01	Wilson	TF	Wilson - TF
2019	16893979	6	By a Fixed Date	PR	61925639	NOCO ORAS	INIT	CR01	1	07/07/2018	07/07/2018	06/20/2019	N-TS-WILSONTS -TF-T2	TF-GENERAL-DBT	1175751	Wilson	TF	2019	CR01	Wilson	TF	Wilson - TF
2019	15889760	6	By a Fixed Date	PR	61571271	ATCO NOCO ORAS	INIT	CR03	1	07/22/2017	07/22/2017	01/17/2019	N-TS-WILSONTS -TF-T2	TF-GENERAL-GOT	1175751	Wilson	TF	2019	CR03	Wilson	TF	Wilson - TF
2019	18055517	5	On a Fixed Date	PR	61923631	NOCO ORAS	INIT	CR01		09/25/2019	09/25/2019	09/25/2019	N-TS-WILSONTS -TF-T2	STN 'B' PWR EQ INSP-SVI Fall 2019	1175751	Wilson	TF	2019	CR01	Wilson	TF	Wilson - TF
2021	19195820	6	By a Fixed Date	PR	62683758	NOCO ORAS	INIT	CR01	1	04/01/2021	07/18/2020	02/18/2021	N-TS-WILSONTS -TF-T2	TF-GENERAL-GOT	1175751	Wilson	TF	2021	CR01	Wilson	TF	Wilson - TF
2020	19332900	5	On a Fixed Date	PR	62291355	NOCO ORAS	INIT	CR01		09/16/2020	09/16/2020	09/16/2020	N-TS-WILSONTS -TF-T2	STN 'B' PWR EQ INSP-SVI Fall 2020	1175751	Wilson	TF	2020	CR01	Wilson	TF	Wilson - TF
2020	17812243	6	By a Fixed Date	PR	62293096	NOCO ORAS	INIT	CR02	5	04/01/2020	07/06/2019	02/13/2020	N-TS-WILSONTS -TF-T2	TF-GENERAL-GOT	1175751	Wilson	TF	2020	CR02	Wilson	TF	Wilson - TF
2019	17210577	6	By a Fixed Date	PR	62115703	NOCO ORAS	INIT	CR01	1	02/04/2019	01/17/2019	02/22/2019	N-TS-WILSONTS -TF-T2	TF-GENERAL-(SEPCIAL)DGA-MAIN TANK	1175751	Wilson	TF	2019	CR01	Wilson	TF	Wilson - TF
2020	18804883	5	On a Fixed Date	PR	62562606	NOCO ORAS	INIT	CR01		04/22/2020	04/22/2020	04/22/2020	N-TS-WILSONTS -TF-T2	STN 'B' PWR EQ INSP-SVI April wk3	1175751	Wilson	TF	2020	CR01	Wilson	TF	Wilson - TF
2017	15479846	5	On a Fixed Date	PR	61325365	NOCO ORAS	INIT	CR01		04/20/2017	04/20/2017	04/20/2017	N-TS-WILSONTS -TF-T2	STN 'B' PWR EQ INSP-SVI Spr 2017	1175751	Wilson	TF	2017	CR01	Wilson	TF	Wilson - TF
2018	14920214	6	By a Fixed Date	PR	61343311	ATCO NOCO ORAS	INIT	CR02	1	07/16/2016	07/16/2016	01/04/2018	N-TS-WILSONTS -TF-T2	TF-GENERAL-GOT	1175751	Wilson	TF	2018	CR02	Wilson	TF	Wilson - TF
2020	19407970	6	By a Fixed Date	PR	62786302	NOCO ORAS	INIT	CR02	1	10/05/2020	10/05/2020	10/15/2020	N-TS-WILSONTS -TF-T2	PREOUTAGE INSPECTION- CAT 1 - ELEC	1175751	Wilson	TF	2020	CR02	Wilson	TF	Wilson - TF
2020	18773000	5	On a Fixed Date	PR	62562605	NOCO ORAS	INIT	CR01		04/16/2020	04/16/2020	04/16/2020	N-TS-WILSONTS -TF-T2	STN 'B' PWR EQ INSP-SVI April wk2	1175751	Wilson	TF	2020	CR01	Wilson	TF	Wilson - TF
2019	16893978	6	By a Fixed Date	PR	61925638	NOCO ORAS	INIT	CR02	1	07/07/2018	07/07/2018	09/16/2019	N-TS-WILSONTS -TF-T2	TF-GENERAL-GOT	1175751	Wilson	TF	2019	CR02	Wilson	TF	Wilson - TF
2016	14517731	5	On a Fixed Date	PR	61170803	NOCO ORAS	INIT	CR01		02/17/2016	02/17/2016	02/17/2016	N-TS-WILSONTS -TF-T2	STN 'B' PWR EQ INSP-SVI SPRING 2016	1175751	Wilson	TF	2016	CR01	Wilson	TF	Wilson - TF
2020	18845853	5	On a Fixed Date	PR	61908457	NOCO ORAS	INIT	CR02		04/29/2020	04/29/2020	04/29/2020	N-TS-CHARLESTS -TF-T3	STN 'A' PWR EQ INSP-SVI Fall 2019	1178289	Charles	TF	2020	CR02	Charles	TF	Charles - TF
2017	14899749	6	By a Fixed Date	PR	61322868	NOCO ORAS	INIT	CR01	1	07/16/2016	07/16/2016	06/30/2017	N-TS-CHARLESTS -TF-T3	TF-GENERAL-GOT	1178289	Charles	TF	2017	CR01	Charles	TF	Charles - TF
2018	17038541	5	On a Fixed Date	PR	61554233	NOCO ORAS	INIT	CR01		10/17/2018	10/17/2018	10/17/2018	N-TS-CHARLESTS -TF-T3	STN 'A' PWR EQ INSP-SVI Fall 2018	1178289	Charles	TF	2018	CR01	Charles	TF	Charles - TF
2020	18412242	6	By a Fixed Date	PR	62493310	NOCO ORAS	INIT	CR02		01/02/2020	01/02/2020	01/20/2020	N-TS-CHARLESTS -TF-T3	PREOUTAGE INSPECTION- CAT 2 - ELEC	1178289	Charles	TF	2020	CR02	Charles	TF	Charles - TF
2018	16960749	6	By a Fixed Date	PR	61980012	ATCO NOCO ORAS	INIT	CR03	1	08/24/2018	08/24/2018	11/06/2018	N-TS-CHARLESTS -TF-T3	PREOUTAGE INSPECTION- CAT 1 - ELEC	1178289	Charles	TF	2018	CR03	Charles	TF	Charles - TF
2017	15846553	6	By a Fixed Date	PR	61531961	NOCO ORAS	INIT	CR01	1	07/07/2017	07/07/2017	07/12/2017	N-TS-CHARLESTS -TF-T3	PREOUTAGE INSPECTION- CAT 1 - G&S	1178289	Charles	TF	2017	CR01	Charles	TF	Charles - TF
2018	15876169	6	By a Fixed Date	PR	61557731	NOCO ORAS	INIT	CR01	1	07/21/2017	07/21/2017	05/25/2018	N-TS-CHARLESTS -TF-T3	TF-GENERAL-D2	1178289	Charles	TF	2018	CR01	Charles	TF	Charles - TF
2018	15872652	6	By a Fixed Date	PR	61554237	NOCO ORAS	INIT	CR01	1	07/21/2017	07/21/2017	05/25/2018	N-TS-CHARLESTS -TF-T3	TF-GENERAL-D1	1178289	Charles	TF	2018	CR01	Charles	TF	Charles - TF
2018	16513687	5	On a Fixed Date	PR	61554232	NOCO ORAS	INIT	CR01		03/15/2018	03/15/2018	03/15/2018	N-TS-CHARLESTS -TF-T3	STN 'A' PWR EQ INSP-SVI Spr 2018	1178289	Charles	TF	2018	CR01	Charles	TF	Charles - TF
2016	15130490	5	On a Fixed Date	PR	61169688	NOCO ORAS	INIT	CR01		09/29/2016	09/29/2016	09/29/2016	N-TS-CHARLESTS -TF-T3	STN 'A' PWR EQ INSP-SVI FALL 2016	1178289	Charles	TF	2016	CR01	Charles	TF	Charles - TF
2020	19127613	6	By a Fixed Date	PR	62632238	NOCO ORAS	INIT	CR01		07/06/2020	07/06/2020	07/06/2020	N-TS-CHARLESTS -TF-T3	PREOUTAGE INSPECTION- CAT 2 - ELEC	1178289	Charles	TF	2020	CR01	Charles	TF	Charles - TF
2018	16189640	6	By a Fixed Date	PR	61707750	ATCO NOCO ORAS	INIT	CR02	1	01/03/2018	11/09/2017	02/07/2018	N-TS-CHARLESTS -TF-T3	TF-GENERAL-(SPECIAL) GOT	1178289	Charles	TF	2018	CR02	Charles	TF	Charles - TF
2018	15846552	6	By a Fixed Date	PR	61531960	NOCO ORAS	INIT	CR03	1	07/07/2017	07/07/2017	01/03/2018	N-TS-CHARLESTS -TF-T3	PREOUTAGE INSPECTION- CAT 1 - ELEC	1178289	Charles	TF	2018	CR03	Charles	TF	Charles - TF
2017	16195125	5	On a Fixed Date	PR	61322826	NOCO ORAS	INIT	CR01		11/13/2017	11/13/2017	11/13/2017	N-TS-CHARLESTS -TF-T3	STN 'A' PWR EQ INSP-SVI Fall 2017	1178289	Charles	TF	2017	CR01	Charles	TF	Charles - TF
2021	19190061	6	By a Fixed Date	PR	62677969	NOCO ORAS	INIT	CR03	1	04/01/2021	07/17/2020	08/23/2021	N-TS-CHARLESTS -TF-T3	TF-GENERAL-GOT	1178289	Charles	TF	2021	CR03	Charles	TF	Charles - TF
2017	15821381	5	On a Fixed Date	PR	61322825	NOCO ORAS	INIT	CR01		06/27/2017	06/27/2017	06/27/2017	N-TS-CHARLESTS -TF-T3	STN 'A' PWR EQ INSP-SVI Spr 2017	1178289	Charles	TF	2017	CR01	Charles	TF	Charles - TF

2018	15872653	6	By a Fixed Date	PR	61554238	ATCO NOCO ORAS	INIT	CR02	1	07/21/2017	07/21/2017	11/28/2018	N-TS-CHARLESTS -TF-T3	TF-GENERAL-GOT	1178289	Charles	TF	2018	CR02	Charles	TF	Charles - TF
2020	18920457	6	By a Fixed Date	PR	62585655	NOCO ORAS	INIT	CR02	1	05/13/2020	05/13/2020	05/25/2020	N-TS-CHARLESTS -TF-T3	PREOUTAGE INSPECTION- CAT 1 - ELEC	1178289	Charles	TF	2020	CR02	Charles	TF	Charles - TF
2020	18942428	5	On a Fixed Date	PR	62283318	NOCO ORAS	INIT	CR02		05/18/2020	05/18/2020	05/18/2020	N-TS-CHARLESTS -TF-T3	STN 'A' PWR EQ INSP-SVI Spr 2020	1178289	Charles	TF	2020	CR02	Charles	TF	Charles - TF
2020	18414245	5	On a Fixed Date	PR	62493310	NOCO ORAS	INIT	CR01		01/06/2020	01/06/2020	01/06/2020	N-TS-CHARLESTS -TF-T3	PREOUTAGE INSPECTION- CAT 2 - ELEC	1178289	Charles	TF	2020	CR01	Charles	TF	Charles - TF
2019	17468965	5	On a Fixed Date	PR	61908456	NOCO ORAS	INIT	CR01		04/02/2019	04/02/2019	04/02/2019	N-TS-CHARLESTS -TF-T3	STN 'A' PWR EQ INSP-SVI Spr 2019	1178289	Charles	TF	2019	CR01	Charles	TF	Charles - TF
2019	17046363	6	By a Fixed Date	PR	62045073	ATCO NOCO ORAS	INIT	CR02	1	12/14/2018	10/24/2018	02/06/2019	N-TS-CHARLESTS -TF-T3	TF-GENERAL-(SPECIAL)GOT	1178289	Charles	TF	2019	CR02	Charles	TF	Charles - TF
2020	17802549	6	By a Fixed Date	PR	62283449	NOCO ORAS	INIT	CR02	1	10/09/2020	07/06/2019	11/08/2020	N-TS-CHARLESTS -TF-T3	TF-GENERAL-(SPECIAL)GOT	1178289	Charles	TF	2020	CR02	Charles	TF	Charles - TF
2020	19482136	5	On a Fixed Date	PR	62283319	NOCO ORAS	INIT	CR01		10/27/2020	10/27/2020	10/27/2020	N-TS-CHARLESTS -TF-T3	STN 'A' PWR EQ INSP-SVI Fall 2020	1178289	Charles	TF	2020	CR01	Charles	TF	Charles - TF
2019	16877131	6	By a Fixed Date	PR	61908821	ATCO NOCO ORAS	INIT	CR02	1	07/07/2018	07/07/2018	03/26/2019	N-TS-CHARLESTS -TF-T3	TF-GENERAL-GOT	1178289	Charles	TF	2019	CR02	Charles	TF	Charles - TF
2020	18845974	5	On a Fixed Date	PR	61908457	NOCO ORAS	INIT	CR02		04/29/2020	04/29/2020	04/29/2020	N-TS-CHARLESTS -TF-T4	STN 'A' PWR EQ INSP-SVI Fall 2019	1183465	Charles	TF	2020	CR02	Charles	TF	Charles - TF
2021	19190062	6	By a Fixed Date	PR	62677970	NOCO ORAS	INIT	CR03	1	04/01/2021	07/17/2020	02/03/2021	N-TS-CHARLESTS -TF-T4	TF-GENERAL-GOT	1183465	Charles	TF	2021	CR03	Charles	TF	Charles - TF
2019	16996876	6	By a Fixed Date	PR	62006398	ATCO NOCO ORAS	INIT	CR02	1	12/13/2018	09/19/2018	02/06/2019	N-TS-CHARLESTS -TF-T4	TF-GENERAL-(SPECIAL)DGA-MAIN TANK	1183465	Charles	TF	2019	CR02	Charles	TF	Charles - TF
2020	17802601	6	By a Fixed Date	PR	62283451	NOCO ORAS	INIT	CR02	1	04/01/2020	07/06/2019	08/03/2020	N-TS-CHARLESTS -TF-T4	TF-GENERAL-GOT	1183465	Charles	TF	2020	CR02	Charles	TF	Charles - TF
2018	16513625	5	On a Fixed Date	PR	61554232	NOCO ORAS	INIT	CR01		03/15/2018	03/15/2018	03/15/2018	N-TS-CHARLESTS -TF-T4	STN 'A' PWR EQ INSP-SVI Spr 2018	1183465	Charles	TF	2018	CR01	Charles	TF	Charles - TF
2019	16877132	6	By a Fixed Date	PR	61908822	ATCO NOCO ORAS	INIT	CR02	1	07/07/2018	07/07/2018	03/26/2019	N-TS-CHARLESTS -TF-T4	TF-GENERAL-GOT	1183465	Charles	TF	2019	CR02	Charles	TF	Charles - TF
2017	14899779	6	By a Fixed Date	PR	61322878	ATCO NOCO ORAS	INIT	CR01	1	07/16/2016	07/16/2016	04/03/2017	N-TS-CHARLESTS -TF-T4	TF-GENERAL-GOT	1183465	Charles	TF	2017	CR01	Charles	TF	Charles - TF
2018	15872654	6	By a Fixed Date	PR	61554239	ATCO NOCO ORAS	INIT	CR01	1	07/21/2017	07/21/2017	02/07/2018	N-TS-CHARLESTS -TF-T4	TF-GENERAL-GOT	1183465	Charles	TF	2018	CR01	Charles	TF	Charles - TF
2019	17468966	5	On a Fixed Date	PR	61908456	NOCO ORAS	INIT	CR01		04/02/2019	04/02/2019	04/02/2019	N-TS-CHARLESTS -TF-T4	STN 'A' PWR EQ INSP-SVI Spr 2019	1183465	Charles	TF	2019	CR01	Charles	TF	Charles - TF
2016	15130679	5	On a Fixed Date	PR	61169688	NOCO ORAS	INIT	CR03		09/29/2016	09/29/2016	10/04/2016	N-TS-CHARLESTS -TF-T4	STN 'A' PWR EQ INSP-SVI FALL 2016	1183465	Charles	TF	2016	CR03	Charles	TF	Charles - TF
2020	18942429	5	On a Fixed Date	PR	62283318	NOCO ORAS	INIT	CR02		05/18/2020	05/18/2020	05/18/2020	N-TS-CHARLESTS -TF-T4	STN 'A' PWR EQ INSP-SVI Spr 2020	1183465	Charles	TF	2020	CR02	Charles	TF	Charles - TF
2017	16195127	5	On a Fixed Date	PR	61322826	NOCO ORAS	INIT	CR01		11/13/2017	11/13/2017	11/13/2017	N-TS-CHARLESTS -TF-T4	STN 'A' PWR EQ INSP-SVI Fall 2017	1183465	Charles	TF	2017	CR01	Charles	TF	Charles - TF
2020	17802600	6	By a Fixed Date	PR	62283450	NOCO ORAS	INIT	CR01	1	04/01/2020	07/06/2019	06/04/2020	N-TS-CHARLESTS -TF-T4	TF-GENERAL-D1	1183465	Charles	TF	2020	CR01	Charles	TF	Charles - TF
2017	15821382	5	On a Fixed Date	PR	61322825	NOCO ORAS	INIT	CR01		06/27/2017	06/27/2017	06/27/2017	N-TS-CHARLESTS -TF-T4	STN 'A' PWR EQ INSP-SVI Spr 2017	1183465	Charles	TF	2017	CR01	Charles	TF	Charles - TF
2018	17038542	5	On a Fixed Date	PR	61554233	NOCO ORAS	INIT	CR01		10/17/2018	10/17/2018	10/17/2018	N-TS-CHARLESTS -TF-T4	STN 'A' PWR EQ INSP-SVI Fall 2018	1183465	Charles	TF	2018	CR01	Charles	TF	Charles - TF
2020	19383839	6	By a Fixed Date	PR	62775614	NOCO ORAS	INIT	CR02	1	09/25/2020	09/25/2020	10/16/2020	N-TS-CHARLESTS -TF-T4	PREOUTAGE INSPECTION- CAT 1 - ELEC	1183465	Charles	TF	2020	CR02	Charles	TF	Charles - TF
2020	18412243	6	By a Fixed Date	PR	62493348	NOCO ORAS	INIT	CR02		01/02/2020	01/02/2020	01/10/2020	N-TS-CHARLESTS -TF-T4	PREOUTAGE INSPECTION- CAT 2 - ELEC	1183465	Charles	TF	2020	CR02	Charles	TF	Charles - TF
2018	16960800	6	By a Fixed Date	PR	61980013	ATCO NOCO ORAS	INIT	CR03	1	08/24/2018	08/24/2018	09/19/2018	N-TS-CHARLESTS -TF-T4	PREOUTAGE INSPECTION- CAT 1 - ELEC	1183465	Charles	TF	2018	CR03	Charles	TF	Charles - TF
2020	18414281	5	On a Fixed Date	PR	62493348	NOCO ORAS	INIT	CR01		01/06/2020	01/06/2020	01/06/2020	N-TS-CHARLESTS -TF-T4	PREOUTAGE INSPECTION- CAT 2 - ELEC	1183465	Charles	TF	2020	CR01	Charles	TF	Charles - TF
2020	19482137	5	On a Fixed Date	PR	62283319	NOCO ORAS	INIT	CR01		10/27/2020	10/27/2020	10/27/2020	N-TS-CHARLESTS -TF-T4	STN 'A' PWR EQ INSP-SVI Fall 2020	1183465	Charles	TF	2020	CR01	Charles	TF	Charles - TF
2018	17038543	5	On a Fixed Date	PR	61554233	NOCO ORAS	INIT	CR01		10/17/2018	10/17/2018	10/17/2018	N-TS-CHARLESTS -TF-T1	STN 'A' PWR EQ INSP-SVI Fall 2018	1183475	Charles	TF	2018	CR01	Charles	TF	Charles - TF
2019	15872650	6	By a Fixed Date	PR	61554235	ATCO NOCO ORAS	INIT	CR01	1	07/21/2017	07/21/2017	04/11/2019	N-TS-CHARLESTS -TF-T1	TF-GENERAL-GOT	1183475	Charles	TF	2019	CR01	Charles	TF	Charles - TF
2021	19190029	6	By a Fixed Date	PR	62677967	NOCO ORAS	INIT	CR02	1	04/01/2021	07/17/2020	02/02/2021	N-TS-CHARLESTS -TF-T1	TF-GENERAL-GOT	1183475	Charles	TF	2021	CR02	Charles	TF	Charles - TF
2020	18942433	5	On a Fixed Date	PR	62283318	NOCO ORAS	INIT	CR02		05/18/2020	05/18/2020	05/18/2020	N-TS-CHARLESTS -TF-T1	STN 'A' PWR EQ INSP-SVI Spr 2020	1183475	Charles	TF	2020	CR02	Charles	TF	Charles - TF
2019	16876948	6	By a Fixed Date	PR	61908458	NOCO ORAS	INIT	CR01	1	07/07/2018	07/07/2018	09/25/2019	N-TS-CHARLESTS -TF-T1	TF-GENERAL-D1	1183475	Charles	TF	2019	CR01	Charles	TF	Charles - TF
2020	19218738	6	By a Fixed Date	PR	62701209	NOCO ORAS	INIT	CR02	1	07/27/2020	07/27/2020	08/21/2020	N-TS-CHARLESTS -TF-T1	PREOUTAGE INSPECTION- CAT 1 - ELEC	1183475	Charles	TF	2020	CR02	Charles	TF	Charles - TF
2017	16195129	5	On a Fixed Date	PR	61322826	NOCO ORAS	INIT	CR01		11/13/2017	11/13/2017	11/13/2017	N-TS-CHARLESTS -TF-T1	STN 'A' PWR EQ INSP-SVI Fall 2017	1183475	Charles	TF	2017	CR01	Charles	TF	Charles - TF
2016	15130600	5	On a Fixed Date	PR	61169688	NOCO ORAS	INIT	CR03		09/29/2016	09/29/2016	10/04/2016	N-TS-CHARLESTS -TF-T1	STN 'A' PWR EQ INSP-SVI FALL 2016	1183475	Charles	TF	2016	CR03	Charles	TF	Charles - TF
2017	15821383	5	On a Fixed Date	PR	61322825	NOCO ORAS	INIT	CR01		06/27/2017	06/27/2017	06/27/2017	N-TS-CHARLESTS -TF-T1	STN 'A' PWR EQ INSP-SVI Spr 2017	1183475	Charles	TF	2017	CR01	Charles	TF	Charles - TF
2018	16513685	5	On a Fixed Date	PR	61554232	NOCO ORAS	INIT	CR02		03/15/2018	03/15/2018	03/15/2018	N-TS-CHARLESTS -TF-T1	STN 'A' PWR EQ INSP-SVI Spr 2018	1183475	Charles	TF	2018	CR02	Charles	TF	Charles - TF
2020	17802545	6	By a Fixed Date	PR	62283445	NOCO ORAS	INIT	CR02	1	04/01/2020	07/06/2019	02/13/2020	N-TS-CHARLESTS -TF-T1	TF-GENERAL-GOT	1183475	Charles	TF	2020	CR02	Charles	TF	Charles - TF
2019	17468968	5	On a Fixed Date	PR	61908456	NOCO ORAS	INIT	CR01		04/02/2019	04/02/2019	04/02/2019	N-TS-CHARLESTS -TF-T1	STN 'A' PWR EQ INSP-SVI Spr 2019	1183475	Charles	TF	2019	CR01	Charles	TF	Charles - TF
2018	16960801	6	By a Fixed Date	PR	61980014	ATCO NOCO ORAS	INIT	CR03	1	08/24/2018	08/24/2018	09/19/2018	N-TS-CHARLESTS -TF-T1	CORREC	1183475	Charles	TF	2018	CR03	Charles	TF	Charles - TF
2017	14899740	6	By a Fixed Date	PR	61322839	ATCO NOCO ORAS	INIT	CR02	1	07/16/2016	07/16/2016	05/29/2017	N-TS-CHARLESTS -TF-T1	TF-GENERAL-GOT	1183475	Charles	TF	2017	CR02	Charles	TF	Charles - TF
2020	18631482	6	By a Fixed Date	PR	62542221	NOCO ORAS	INIT	CR01	1	03/17/2020	03/09/2020	03/31/2020	N-TS-CHARLESTS -TF-T1	TF-GENERAL-(SPECIAL)RUSH-DGA-7 DAYS	1183475	Charles	TF	2020	CR01	Charles	TF	Charles - TF
2020	18631481	6	By a Fixed Date	PR	62542220	NOCO ORAS	INIT	CR02	1	03/13/2020	03/09/2020	03/25/2020	N-TS-CHARLESTS -TF-T1	TF-GENERAL-(SPECIAL)RUSH-DGA-72 HRS	1183475	Charles	TF	2020	CR02	Charles	TF	Charles - TF
2020	19482138	5	On a Fixed Date	PR	62283319	NOCO ORAS	INIT	CR01		10/27/2020	10/27/2020	10/27/2020	N-TS-CHARLESTS -TF-T1	STN 'A' PWR EQ INSP-SVI Fall 2020	1183475	Charles	TF	2020	CR01	Charles	TF	Charles - TF
2020	18845975	5	On a Fixed Date	PR	61908457	NOCO ORAS	INIT	CR02		04/29/2020	04/29/2020	04/29/2020	N-TS-CHARLESTS -TF-T1	STN 'A' PWR EQ INSP-SVI Fall 2019	1183475	Charles	TF	2020	CR02	Charles	TF	Charles - TF
2020	18631480	6	By a Fixed Date	PR	62542119	NOCO ORAS	INIT	CR01	1	03/10/2020	03/09/2020	03/13/2020	N-TS-CHARLESTS -TF-T1	TF-GENERAL-(SPECIAL)RUSH-DGA-24HRS	1183475	Charles	TF	2020	CR01	Charles	TF	Charles - TF
2020	19452106	6	By a Fixed Date	PR	62801975	NOCO ORAS	INIT	CR02	1	10/20/2020	10/20/2020	11/19/2020	N-TS-CHARLESTS -TF-T1	PREOUTAGE INSPECTION- CAT 1 - ELEC	1183475	Charles	TF	2020	CR02	Charles	TF	Charles - TF
2020	18631483	6	By a Fixed Date	PR	62542223	NOCO ORAS	INIT	CR01	1	04/09/2020	03/09/2020	04/28/2020	N-TS-CHARLESTS -TF-T1	TF-GENERAL-(SPECIAL)RUSH-DGA-1 MONTH	1183475	Charles	TF	2020	CR01	Charles	TF	Charles - TF
2019	16876949	6	By a Fixed Date	PR	61908459	NOCO ORAS	INIT	CR02	1	07/07/2018	07/07/2018	10/24/2019	N-TS-CHARLESTS -TF-T1	TF-GENERAL-GOT	1183475	Charles	TF	2019	CR02	Charles	TF	Charles - TF
2019	18055530	5	On a Fixed Date	PR	61923631	NOCO ORAS	INIT	CR01		09/25/2019	09/25/2019	09/25/2019	N-TS-WILSONTS -TF-SS1	STN 'B' PWR EQ INSP-SVI Fall 2019	1183701	Wilson	TF	2019	CR01	Wilson	TF	Wilson - TF
2018	17112867	5	On a Fixed Date	PR	61570344	NOCO ORAS	INIT	CR01		11/12/2018	11/12/2018	11/12/2018	N-TS-WILSONTS -TF-SS1	STN 'B' PWR EQ INSP-SVI Fall 2018	1183701	Wilson	TF	2018	CR01	Wilson	TF	Wilson - TF
2020	18773004	5	On a Fixed Date	PR	62562605	NOCO ORAS	INIT	CR01		04/16/2020	04/16/2020	04/16/2020	N-TS-WILSONTS -TF-SS1	STN 'B' PWR EQ INSP-SVI April wk2	1183701	Wilson	TF	2020	CR01	Wilson	TF	Wilson - TF
2020	19332903	5	On a Fixed Date	PR	62291355	NOCO ORAS	INIT	CR01		09/16/2020	09/16/2020	09/16/2020	N-TS-WILSONTS -TF-SS1	STN 'B' PWR EQ INSP-SVI Fall 2020	1183701	Wilson	TF	2020	CR01	Wilson	TF	Wilson - TF
2018	16813977	5	On a Fixed Date	PR	61570343	NOCO ORAS	INIT	CR01		06/07/2018	06/07/2018	06/07/2018	N-TS-WILSONTS -TF-SS1	STN 'B' PWR EQ INSP-SVI Spr 2018	1183701	Wilson	TF	2018	CR01	Wilson	TF	Wilson - TF
2020	18644114	5	On a Fixed Date	PR	62291354	NOCO ORAS	INIT	CR01		03/11/2020	03/11/2020	03/11/2020	N-TS-WILSONTS -TF-SS1	STN 'B' PWR EQ INSP-SVI Spr 2020	1183701	Wilson	TF	2020	CR01	Wilson	TF	Wilson - TF
2016	14517734	5	On a Fixed Date	PR	61170803	NOCO ORAS	INIT	CR01		02/17/2016	02/17/2016	02/17/2016	N-TS-WILSONTS -TF-SS1	STN 'B' PWR EQ INSP-SVI SPRING 2016	1183701	Wilson	TF	2016	CR01	Wilson	TF	Wilson - TF
2019	17646014	5	On a Fixed Date	PR	61923630	NOCO ORAS	INIT	CR01		05/24/2019	05/24/2019	05/24/2019	N-TS-WILSONTS -TF-SS1	STN 'B' PWR EQ INSP-SVI Spr 2019	1183701	Wilson	TF	2019	CR01	Wilson	TF	Wilson - TF
2016	15199443	5	On a Fixed Date	PR	61170804	NOCO ORAS	INIT	CR01		10/26/2016	10/26/2016	10/26/2016	N-TS-WILSONTS -TF-SS1	STN 'B' PWR EQ INSP-SVI FALL 2016	1183701	Wilson	TF	2016	CR01	Wilson	TF	Wilson - TF
2020	18804886	5	On a Fixed Date	PR	62562606	NOCO ORAS	INIT	CR01		04/22/2020	04/22/2020	04/22/2020	N-TS-WILSONTS -TF-SS1	STN 'B' PWR EQ INSP-SVI April wk3	1183701	Wilson	TF	2020	CR01	Wilson	TF	Wilson - TF
2018	17113056	5	On a Fixed Date	PR	61570344	NOCO ORAS	INIT	CR01		11/12/2018	11/12/2018	11/12/2018	N-TS-WILSONTS -TF-SS1	STN 'B' PWR EQ INSP-SVI Fall 2018	1183701	Wilson	TF	2018	CR01	Wilson	TF	Wilson - TF
2017	16108918	5	On a Fixed Date	PR	61325366	NOCO ORAS	INIT	CR01		09/27/2017	09/27/2017	09/27/2017	N-TS-WILSONTS -TF-SS1	STN 'B' PWR EQ INSP-SVI Fall 2017	1183701	Wilson	TF	2017	CR01	Wilson	TF	Wilson - TF
2017	15479849	5	On a Fixed Date	PR	61325365	NOCO ORAS	INIT	CR01		04/20/2017	04/20/2017	04/20/2017	N-TS-WILSONTS -TF-SS1	STN 'B' PWR EQ INSP-SVI Spr 2017	1183701	Wilson	TF	2017	CR01	Wilson	TF	Wilson - TF
2020	19015273	5	On a Fixed Date	PR	62562612	NOCO ORAS	INIT	CR01		06/02/2020	06/02/2020	06/02/2020	N-TS-WILSONTS -TF-SS1	STN 'B' PWR EQ INSP-SVI June wk1	1183701	Wilson	TF	2020	CR01	Wilson	TF	Wilson - TF
2020	18892538	5	On a Fixed Date	PR	62562608	NOCO ORAS	INIT	CR01		05/07/2020	05/07/2020	05/07/2020	N-TS-WILSONTS -TF-SS1	STN 'B' PWR EQ INSP-SVI May wk1	1183701	Wilson	TF	2020	CR01	Wilson	TF	Wilson - TF
2020	19015274	5	On a Fixed Date	PR	62562612	NOCO ORAS	INIT	CR01		06/02/2020	06/02/2020	06/02/2020	N-TS-WILSONTS -TF-T1	STN 'B' PWR EQ INSP-SVI June wk1	1183712	Wilson	TF	2020	CR01	Wilson	TF	Wilson - TF
2020	18773005	5	On a Fixed Date	PR	62562605	NOCO ORAS	INIT	CR01		04/16/2020	04/16/2020	04/16/2020	N-TS-WILSONTS -TF-T1	STN 'B' PWR EQ INSP-SVI April wk2	1183712	Wilson	TF	2020	CR01	Wilson	TF	Wilson - TF
2019	17210576	6	By a Fixed Date	PR	62115702	ATCO NOCO ORAS	INIT	CR03	1	02/04/2019	01/17/2019	03/20/2019	N-TS-WILSONTS -TF-T1	TF-GENERAL-(SEPCIAL)DGA-MAIN TANK	1183712	Wilson	TF	2019	CR03	Wilson	TF	Wilson - TF
2019	18055531	5	On a Fixed Date	PR	61923631	NOCO ORAS	INIT	CR01		09/25/2019	09/25/2019	09/25/2019	N-TS-WILSONTS -TF-T1	STN 'B' PWR EQ INSP-SVI Fall 2019	1183712	Wilson	TF	2019	CR01	Wilson	TF	Wilson - TF
2019	15889756	6	By a Fixed Date	PR	61571267	NOCO ORAS	INIT	CR03	1	07/22/2017	07/22/2017	01/17/2019	N-TS-WILSONTS -TF-T1	TF-GENERAL-GOT	1183712	Wilson	TF	2019	CR03	Wilson	TF	Wilson - TF
2018	17112869	5	On a Fixed Date	PR	61570344	NOCO ORAS	INIT	CR01		11/12/2018	11/12/2018	11/12/2018	N-TS-WILSONTS -TF-T1	STN 'B' PWR EQ INSP-SVI Fall 2018	1183712	Wilson	TF	2018	CR01	Wilson	TF	Wilson - TF
2019	16893975	6	By a Fixed Date	PR	61925635	NOCO ORAS	INIT	CR03	1	07/07/2018	07/07/2018	11/14/2019	N-TS-WILSONTS -TF-T1	TF-GENERAL-D1	1183712	Wilson	TF	2019	CR03	Wilson	TF	Wilson - TF
2019	16893976	6	By a Fixed Date	PR	61925636	NOCO ORAS	INIT	CR03	1	07/07/2018	07/07/2018	11/14/2019	N-TS-WILSONTS -TF-T1	TF-GENERAL-GOT	1183712	Wilson	TF	2019	CR03	Wilson	TF	Wilson - TF
2018	17113057	5	On a Fixed Date	PR	61570344	NOCO ORAS	INIT	CR01		11/12/2018	11/12/2018	11/12/2018	N-TS-WILSONTS -TF-T1	STN 'B' PWR EQ INSP-SVI Fall 2018	1183712	Wilson	TF	2018	CR01	Wilson	TF	Wilson - TF
2020	18892550	5	On a Fixed Date	PR	62562608	NOCO ORAS	INIT	CR01		05/07/2020	05/07/2020	05/07/2020	N-TS-WILSONTS -TF-T1	STN 'B' PWR EQ INSP-SVI May wk1	1183712	Wilson	TF	2020	CR01	Wilson	TF	Wilson - TF
2020	18709341	6	By a Fixed Date	PR	62554053	NOCO ORAS	INIT	CR02	1	03/27/2020	03/27/2020	09/18/2020	N-TS-WILSONTS -TF-T1	TF-GENERAL-(SPECIAL)DGA-MAIN TANK SEP 18	1183712	Wilson	TF	2020	CR02	Wilson	TF	Wilson - TF
2020	19332904	5	On a Fixed Date	PR	62291355	NOCO ORAS	INIT	CR01		09/16/2020	09/16/2020	09/16/2020	N-TS-WILSONTS -TF-T1	STN 'B' PWR EQ INSP-SVI Fall 2020	1183712	Wilson	TF	2020	CR01	Wilson	TF	Wilson - TF
2020	18644115	5	On a Fixed Date	PR	62291354	NOCO ORAS	INIT	CR01		03/11/2020	03/11/2020	03/11/2020	N-TS-WILSONTS -TF-T1	STN 'B' PWR EQ INSP-SVI Spr 2020	1183712	Wilson	TF	2020	CR01	Wilson	TF	Wilson - TF
2020	17812240	6	By a Fixed Date	PR	62293093	NOCO ORAS	INIT	CR03	1	04/01/2020	07/06/2019	03/27/2020	N-TS-WILSONTS -TF-T1	TF-GENERAL-GOT	1183712	Wilson	TF	2020	CR03	Wilson	TF	Wilson - TF
2017	14920213	6	By a Fixed Date	PR	61343310	ATCO NOCO ORAS	INIT	CR01	1	07/16/2016	07/16/2016	07/12/2017	N-TS-WILSONTS -TF-T1	TF-GENERAL-GOT	1183712	Wilson	TF	2017	CR01	Wilson	TF	Wilson - TF
2020	18804887	5	On a Fixed Date	PR	62562606	NOCO ORAS	INIT	CR01		04/22/2020	04/22/2020	04/22/2020	N-TS-WILSONTS -TF-T1	STN 'B' PWR EQ INSP-SVI April wk3	1183712	Wilson	TF	2020	CR01	Wilson	TF	Wilson - TF
2018	16813978	5	On a Fixed Date	PR	61570343	NOCO ORAS	INIT	CR01		06/07/2018	06/07/2018	06/07/2018	N-TS-WILSONTS -TF-T1	STN 'B' PWR EQ INSP-SVI Spr 2018	1183712	Wilson	TF	2018	CR01	Wilson	TF	Wilson - TF
2016	15199444	5	On a Fixed Date	PR	61170804	NOCO ORAS	INIT	CR01		10/26/2016	10/26/2016	10/26/2016	N-TS-WILSONTS -TF-T1	STN 'B' PWR EQ INSP-SVI FALL 2016	1183712	Wilson	TF	2016	CR01	Wilson	TF	Wilson - TF
2021	19195819	6	By a Fixed Date	PR	62683757	NOCO ORAS	INIT	CR03	1	04/01/2021	07/18/2020	03/12/2021	N-TS-WILSONTS -TF-T1	TF-GENERAL-GOT	1183712	Wilson	TF	2021	CR03	Wilson	TF	Wilson - TF
2019	17678672	6	By a Fixed Date	PR	62222182	NOCO ORAS	INIT	CR01	1	06/04/2019	06/04/2019	06/10/2019	N-TS-WILSONTS -TF-T1	PREOUTAGE INSPECTION- CAT 1 - G&S	1183712	Wilson	TF	2019	CR01	Wilson	TF	Wilson - TF
2019	17408783	6	By a Fixed Date	PR	62161696	NOCO ORAS	INIT	CR02	1	06/20/2019	03/20/2019	07/16/2019	N-TS-WILSONTS -TF-T1	TF-GENERAL-(SPECIAL)DGA-MAIN TANK	1183712	Wilson	TF	2019	CR02	Wilson	TF	Wilson - TF
2019	17678670	6	By a Fixed Date	PR	62222181	NOCO ORAS	INIT	CR01	1	06/04/2019	06/04/2019	06/05/2019	N-TS-WILSONTS -TF-T1	PREOUTAGE INSPECTION- CAT 1 - ELEC	1183712	Wilson	TF	2019	CR01	Wilson	TF	Wilson - TF
2019	17646015	5	On a Fixed Date	PR	61923630	NOCO ORAS	INIT	CR01		05/24/2019	05/24/2019	05/24/2019	N-TS-WILSONTS -TF-T1	STN 'B' PWR EQ INSP-SVI Spr 2019	1183712	Wilson	TF	2019	CR01	Wilson	TF	Wilson - TF
2017	15479673	5	On a Fixed Date	PR	61325365	NOCO ORAS	INIT	CR01		04/20/2017	04/20/2017	04/20/2017	N-TS-WILSONTS -TF-T1	STN 'B' PWR EQ INSP-SVI Spr 2017	1183712	Wilson	TF	2017	CR01	Wilson	TF	Wilson - TF
2016	14517735	5	On a Fixed Date	PR	61170803	NOCO ORAS	INIT	CR01		02/17/2016	02/17/2016	02/17/2016	N-TS-WILSONTS -TF-T1	STN 'B' PWR EQ INSP-SVI SPRING 2016	1183712	Wilson	TF	2016	CR01	Wilson	TF	Wilson - TF

2017	16109000	5	On a Fixed Date	PR	61325366	NOCO ORAS	INIT	CR01		09/27/2017	09/27/2017	09/27/2017	N-TS-WILSONTS	-TF-T1	STN 'B' PWR EQ INSP-SVI Fall 2017	1183712	Wilson	TF	2017	CR01	Wilson	TF	Wilson - TF
2020	18804888	5	On a Fixed Date	PR	62562606	NOCO ORAS	INIT	CR01		04/22/2020	04/22/2020	04/22/2020	N-TS-WILSONTS	-TF-T4	STN 'B' PWR EQ INSP-SVI April wk3	1188773	Wilson	TF	2020	CR01	Wilson	TF	Wilson - TF
2018	16813979	5	On a Fixed Date	PR	61570343	NOCO ORAS	INIT	CR01		06/07/2018	06/07/2018	06/07/2018	N-TS-WILSONTS	-TF-T4	STN 'B' PWR EQ INSP-SVI Spr 2018	1188773	Wilson	TF	2018	CR01	Wilson	TF	Wilson - TF
2020	19015117	5	On a Fixed Date	PR	62562612	NOCO ORAS	INIT	CR01		06/02/2020	06/02/2020	06/02/2020	N-TS-WILSONTS	-TF-T4	STN 'B' PWR EQ INSP-SVI June wk1	1188773	Wilson	TF	2020	CR01	Wilson	TF	Wilson - TF
2019	17646016	5	On a Fixed Date	PR	61923630	NOCO ORAS	INIT	CR01		05/24/2019	05/24/2019	05/24/2019	N-TS-WILSONTS	-TF-T4	STN 'B' PWR EQ INSP-SVI Spr 2019	1188773	Wilson	TF	2019	CR01	Wilson	TF	Wilson - TF
2016	14517736	5	On a Fixed Date	PR	61170803	NOCO ORAS	INIT	CR01		02/17/2016	02/17/2016	02/17/2016	N-TS-WILSONTS	-TF-T4	STN 'B' PWR EQ INSP-SVI SPRING 2016	1188773	Wilson	TF	2016	CR01	Wilson	TF	Wilson - TF
2020	18389432	6	By a Fixed Date	PR	62480271	NOCO ORAS	INIT	CR02	1	04/24/2020	12/10/2019	04/29/2020	N-TS-WILSONTS	-TF-T4	TF-GENERAL-(SPECIAL)DGA	1188773	Wilson	TF	2020	CR02	Wilson	TF	Wilson - TF
2018	15889747	6	By a Fixed Date	PR	61571258	ATCO NOCO ORAS	INIT	CR02	1	07/22/2017	07/22/2017	02/15/2018	N-TS-WILSONTS	-TF-T4	TF-GENERAL-GOT	1188773	Wilson	TF	2018	CR02	Wilson	TF	Wilson - TF
2017	15479674	5	On a Fixed Date	PR	61325365	NOCO ORAS	INIT	CR01		04/20/2017	04/20/2017	04/20/2017	N-TS-WILSONTS	-TF-T4	STN 'B' PWR EQ INSP-SVI Spr 2017	1188773	Wilson	TF	2017	CR01	Wilson	TF	Wilson - TF
2016	15199445	5	On a Fixed Date	PR	61170804	NOCO ORAS	INIT	CR01		10/26/2016	10/26/2016	10/26/2016	N-TS-WILSONTS	-TF-T4	STN 'B' PWR EQ INSP-SVI FALL 2016	1188773	Wilson	TF	2016	CR01	Wilson	TF	Wilson - TF
2020	18644116	5	On a Fixed Date	PR	62291354	NOCO ORAS	INIT	CR01		03/11/2020	03/11/2020	03/11/2020	N-TS-WILSONTS	-TF-T4	STN 'B' PWR EQ INSP-SVI Spr 2020	1188773	Wilson	TF	2020	CR01	Wilson	TF	Wilson - TF
2020	19332905	5	On a Fixed Date	PR	62291355	NOCO ORAS	INIT	CR01		09/16/2020	09/16/2020	09/16/2020	N-TS-WILSONTS	-TF-T4	STN 'B' PWR EQ INSP-SVI Fall 2020	1188773	Wilson	TF	2020	CR01	Wilson	TF	Wilson - TF
2018	15889742	6	By a Fixed Date	PR	61571253	NOCO ORAS	INIT	CR01	1	07/22/2017	07/22/2017	01/19/2018	N-TS-WILSONTS	-TF-T4	TF-GENERAL-D1	1188773	Wilson	TF	2018	CR01	Wilson	TF	Wilson - TF
2020	17812188	6	By a Fixed Date	PR	62293061	NOCO ORAS	INIT	CR02	1	04/01/2020	07/06/2019	08/04/2020	N-TS-WILSONTS	-TF-T4	TF-GENERAL-GOT	1188773	Wilson	TF	2020	CR02	Wilson	TF	Wilson - TF
2020	19407972	6	By a Fixed Date	PR	62786304	NOCO ORAS	INIT	CR02	1	10/05/2020	10/05/2020	10/15/2020	N-TS-WILSONTS	-TF-T4	PREOUTAGE INSPECTION- CAT 1 - ELEC	1188773	Wilson	TF	2020	CR02	Wilson	TF	Wilson - TF
2017	16109002	5	On a Fixed Date	PR	61325366	NOCO ORAS	INIT	CR01		09/27/2017	09/27/2017	09/27/2017	N-TS-WILSONTS	-TF-T4	STN 'B' PWR EQ INSP-SVI Fall 2017	1188773	Wilson	TF	2017	CR01	Wilson	TF	Wilson - TF
2018	17113058	5	On a Fixed Date	PR	61570344	NOCO ORAS	INIT	CR01		11/12/2018	11/12/2018	11/12/2018	N-TS-WILSONTS	-TF-T4	STN 'B' PWR EQ INSP-SVI Fall 2018	1188773	Wilson	TF	2018	CR01	Wilson	TF	Wilson - TF
2020	18772692	5	On a Fixed Date	PR	62562605	NOCO ORAS	INIT	CR01		04/16/2020	04/16/2020	04/16/2020	N-TS-WILSONTS	-TF-T4	STN 'B' PWR EQ INSP-SVI April wk2	1188773	Wilson	TF	2020	CR01	Wilson	TF	Wilson - TF
2021	19195817	6	By a Fixed Date	PR	62683755	NOCO ORAS	INIT	CR02	1	04/01/2021	07/18/2020	03/15/2021	N-TS-WILSONTS	-TF-T4	TF-GENERAL-GOT	1188773	Wilson	TF	2021	CR02	Wilson	TF	Wilson - TF
2019	14920153	6	By a Fixed Date	PR	61343300	ATCO NOCO ORAS	INIT	CR01	1	07/16/2016	07/16/2016	04/09/2019	N-TS-WILSONTS	-TF-T4	TF-GENERAL-GOT	1188773	Wilson	TF	2019	CR01	Wilson	TF	Wilson - TF
2019	18055532	5	On a Fixed Date	PR	61923631	NOCO ORAS	INIT	CR01		09/25/2019	09/25/2019	09/25/2019	N-TS-WILSONTS	-TF-T4	STN 'B' PWR EQ INSP-SVI Fall 2019	1188773	Wilson	TF	2019	CR01	Wilson	TF	Wilson - TF
2018	17112881	5	On a Fixed Date	PR	61570344	NOCO ORAS	INIT	CR01		11/12/2018	11/12/2018	11/12/2018	N-TS-WILSONTS	-TF-T4	STN 'B' PWR EQ INSP-SVI Fall 2018	1188773	Wilson	TF	2018	CR01	Wilson	TF	Wilson - TF
2019	16893970	6	By a Fixed Date	PR	61925630	NOCO ORAS	INIT	CR03	1	07/07/2018	07/07/2018	10/24/2019	N-TS-WILSONTS	-TF-T4	TF-GENERAL-GOT	1188773	Wilson	TF	2019	CR03	Wilson	TF	Wilson - TF
2020	18892552	5	On a Fixed Date	PR	62562608	NOCO ORAS	INIT	CR01		05/07/2020	05/07/2020	05/07/2020	N-TS-WILSONTS	-TF-T4	STN 'B' PWR EQ INSP-SVI May wk1	1188773	Wilson	TF	2020	CR01	Wilson	TF	Wilson - TF
2018	16513686	5	On a Fixed Date	PR	61554232	NOCO ORAS	INIT	CR02		03/15/2018	03/15/2018	03/15/2018	N-TS-CHARLESTS	-TF-T2	STN 'A' PWR EQ INSP-SVI Spr 2018	1191105	Charles	TF	2018	CR02	Charles	TF	Charles - TF
2019	16877130	6	By a Fixed Date	PR	61908820	ATCO NOCO ORAS	INIT	CR02	1	07/07/2018	07/07/2018	03/26/2019	N-TS-CHARLESTS	-TF-T2	TF-GENERAL-GOT	1191105	Charles	TF	2019	CR02	Charles	TF	Charles - TF
2019	17468971	5	On a Fixed Date	PR	61908456	NOCO ORAS	INIT	CR01		04/02/2019	04/02/2019	04/02/2019	N-TS-CHARLESTS	-TF-T2	STN 'A' PWR EQ INSP-SVI Spr 2019	1191105	Charles	TF	2019	CR01	Charles	TF	Charles - TF
2020	18845976	5	On a Fixed Date	PR	61908457	NOCO ORAS	INIT	CR02		04/29/2020	04/29/2020	04/29/2020	N-TS-CHARLESTS	-TF-T2	STN 'A' PWR EQ INSP-SVI Fall 2019	1191105	Charles	TF	2020	CR02	Charles	TF	Charles - TF
2020	19127596	6	By a Fixed Date	PR	62632237	NOCO ORAS	INIT	CR01		07/06/2020	07/06/2020	07/06/2020	N-TS-CHARLESTS	-TF-T2	PREOUTAGE INSPECTION- CAT 2 - ELEC	1191105	Charles	TF	2020	CR01	Charles	TF	Charles - TF
2018	15872651	6	By a Fixed Date	PR	61554236	ATCO NOCO ORAS	INIT	CR02	1	07/21/2017	07/21/2017	11/14/2018	N-TS-CHARLESTS	-TF-T2	TF-GENERAL-GOT	1191105	Charles	TF	2018	CR02	Charles	TF	Charles - TF
2017	14899747	6	By a Fixed Date	PR	61322866	ATCO NOCO ORAS	INIT	CR02	1	07/16/2016	07/16/2016	05/29/2017	N-TS-CHARLESTS	-TF-T2	TF-GENERAL-GOT	1191105	Charles	TF	2017	CR02	Charles	TF	Charles - TF
2021	19190060	6	By a Fixed Date	PR	62677968	NOCO ORAS	INIT	CR02	1	04/01/2021	07/17/2020	04/07/2021	N-TS-CHARLESTS	-TF-T2	TF-GENERAL-GOT	1191105	Charles	TF	2021	CR02	Charles	TF	Charles - TF
2018	16960748	6	By a Fixed Date	PR	61980007	NOCO ORAS	INIT	CR01	1	08/24/2018	08/24/2018	09/10/2018	N-TS-CHARLESTS	-TF-T2	PREOUTAGE INSPECTION- CAT 1 - G&S	1191105	Charles	TF	2018	CR01	Charles	TF	Charles - TF
2020	19482139	5	On a Fixed Date	PR	62283319	NOCO ORAS	INIT	CR01		10/27/2020	10/27/2020	10/27/2020	N-TS-CHARLESTS	-TF-T2	STN 'A' PWR EQ INSP-SVI Fall 2020	1191105	Charles	TF	2020	CR01	Charles	TF	Charles - TF
2020	18357221	6	By a Fixed Date	PR	62466249	NOCO ORAS	INIT	CR01	1	11/25/2019	11/25/2019	01/03/2020	N-TS-CHARLESTS	-TF-T2	PREOUTAGE INSPECTION- CAT 1 - G&S	1191105	Charles	TF	2020	CR01	Charles	TF	Charles - TF
2020	18357145	6	By a Fixed Date	PR	62466243	NOCO ORAS	INIT	CR02	1	11/25/2019	11/25/2019	01/07/2020	N-TS-CHARLESTS	-TF-T2	PREOUTAGE INSPECTION- CAT 2 - ELEC	1191105	Charles	TF	2020	CR02	Charles	TF	Charles - TF
2020	17802547	6	By a Fixed Date	PR	62283447	NOCO ORAS	INIT	CR02	1	04/01/2020	07/06/2019	05/25/2020	N-TS-CHARLESTS	-TF-T2	TF-GENERAL-GOT	1191105	Charles	TF	2020	CR02	Charles	TF	Charles - TF
2020	18920456	6	By a Fixed Date	PR	62585654	NOCO ORAS	INIT	CR01	1	05/13/2020	05/13/2020	05/21/2020	N-TS-CHARLESTS	-TF-T2	PREOUTAGE INSPECTION- CAT 1 - ELEC	1191105	Charles	TF	2020	CR01	Charles	TF	Charles - TF
2018	17038545	5	On a Fixed Date	PR	61554233	NOCO ORAS	INIT	CR01		10/17/2018	10/17/2018	10/17/2018	N-TS-CHARLESTS	-TF-T2	STN 'A' PWR EQ INSP-SVI Fall 2018	1191105	Charles	TF	2018	CR01	Charles	TF	Charles - TF
2020	18942434	5	On a Fixed Date	PR	62283318	NOCO ORAS	INIT	CR02		05/18/2020	05/18/2020	05/18/2020	N-TS-CHARLESTS	-TF-T2	STN 'A' PWR EQ INSP-SVI Spr 2020	1191105	Charles	TF	2020	CR02	Charles	TF	Charles - TF
2017	15821384	5	On a Fixed Date	PR	61322825	NOCO ORAS	INIT	CR01		06/27/2017	06/27/2017	06/27/2017	N-TS-CHARLESTS	-TF-T2	STN 'A' PWR EQ INSP-SVI Spr 2017	1191105	Charles	TF	2017	CR01	Charles	TF	Charles - TF
2017	16195131	5	On a Fixed Date	PR	61322826	NOCO ORAS	INIT	CR01		11/13/2017	11/13/2017	11/13/2017	N-TS-CHARLESTS	-TF-T2	STN 'A' PWR EQ INSP-SVI Fall 2017	1191105	Charles	TF	2017	CR01	Charles	TF	Charles - TF
2016	15130601	5	On a Fixed Date	PR	61169688	NOCO ORAS	INIT	CR02		09/29/2016	09/29/2016	09/29/2016	N-TS-CHARLESTS	-TF-T2	STN 'A' PWR EQ INSP-SVI FALL 2016	1191105	Charles	TF	2016	CR02	Charles	TF	Charles - TF
2018	16960747	6	By a Fixed Date	PR	61980006	NOCO ORAS	INIT	CR01	1	08/24/2018	08/24/2018	09/28/2018	N-TS-CHARLESTS	-TF-T2	PREOUTAGE INSPECTION- CAT 1 - ELEC	1191105	Charles	TF	2018	CR01	Charles	TF	Charles - TF
2018	17113103	5	On a Fixed Date	PR	61570344	NOCO ORAS	INIT	CR01		11/12/2018	11/12/2018	11/12/2018	N-TS-WILSONTS	-BR-JQ	STN 'B' PWR EQ INSP-SVI Fall 2018	1206693	Wilson	BR	2018	CR01	Wilson	BR	Wilson - BR
2020	18644232	5	On a Fixed Date	PR	62291354	NOCO ORAS	INIT	CR01		03/11/2020	03/11/2020	03/11/2020	N-TS-WILSONTS	-BR-JQ	STN 'B' PWR EQ INSP-SVI Spr 2020	1206693	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2017	14920155	6	By a Fixed Date	PR	61343302	NOCO ORAS	INIT	CR02	1	07/16/2016	07/16/2016	07/21/2017	N-TS-WILSONTS	-BR-JQ	BR-OIL-KSO-LV- BOA	1206693	Wilson	BR	2017	CR02	Wilson	BR	Wilson - BR
2019	17646126	5	On a Fixed Date	PR	61923630	NOCO ORAS	INIT	CR02		05/24/2019	05/24/2019	05/24/2019	N-TS-WILSONTS	-BR-JQ	STN 'B' PWR EQ INSP-SVI Spr 2019	1206693	Wilson	BR	2019	CR02	Wilson	BR	Wilson - BR
2020	19015379	5	On a Fixed Date	PR	62562612	NOCO ORAS	INIT	CR01		06/02/2020	06/02/2020	06/02/2020	N-TS-WILSONTS	-BR-JQ	STN 'B' PWR EQ INSP-SVI June wk1	1206693	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2018	16814015	5	On a Fixed Date	PR	61570343	NOCO ORAS	INIT	CR01		06/07/2018	06/07/2018	06/07/2018	N-TS-WILSONTS	-BR-JQ	STN 'B' PWR EQ INSP-SVI Spr 2018	1206693	Wilson	BR	2018	CR01	Wilson	BR	Wilson - BR
2016	14517763	5	On a Fixed Date	PR	61170803	NOCO ORAS	INIT	CR01		02/17/2016	02/17/2016	02/17/2016	N-TS-WILSONTS	-BR-JQ	STN 'B' PWR EQ INSP-SVI SPRING 2016	1206693	Wilson	BR	2016	CR01	Wilson	BR	Wilson - BR
2018	17112931	5	On a Fixed Date	PR	61570344	NOCO ORAS	INIT	CR01		11/12/2018	11/12/2018	11/12/2018	N-TS-WILSONTS	-BR-JQ	STN 'B' PWR EQ INSP-SVI Fall 2018	1206693	Wilson	BR	2018	CR01	Wilson	BR	Wilson - BR
2020	18893000	5	On a Fixed Date	PR	62562608	NOCO ORAS	INIT	CR01		05/07/2020	05/07/2020	05/07/2020	N-TS-WILSONTS	-BR-JQ	STN 'B' PWR EQ INSP-SVI May wk1	1206693	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2017	15479886	5	On a Fixed Date	PR	61325365	NOCO ORAS	INIT	CR02		04/20/2017	04/20/2017	04/20/2017	N-TS-WILSONTS	-BR-JQ	STN 'B' PWR EQ INSP-SVI Spr 2017	1206693	Wilson	BR	2017	CR02	Wilson	BR	Wilson - BR
2020	19333116	5	On a Fixed Date	PR	62291355	NOCO ORAS	INIT	CR01		09/16/2020	09/16/2020	09/16/2020	N-TS-WILSONTS	-BR-JQ	STN 'B' PWR EQ INSP-SVI Fall 2020	1206693	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2019	18055553	5	On a Fixed Date	PR	61923631	NOCO ORAS	INIT	CR01		09/25/2019	09/25/2019	09/25/2019	N-TS-WILSONTS	-BR-JQ	STN 'B' PWR EQ INSP-SVI Fall 2019	1206693	Wilson	BR	2019	CR01	Wilson	BR	Wilson - BR
2020	17812195	6	By a Fixed Date	PR	62293068	NOCO ORAS	INIT	CR01	1	07/27/2020	07/06/2019	08/17/2020	N-TS-WILSONTS	-BR-JQ	BR-OIL-KSO-LV- BOA	1206693	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2016	15199724	5	On a Fixed Date	PR	61170804	NOCO ORAS	INIT	CR01		10/26/2016	10/26/2016	10/26/2016	N-TS-WILSONTS	-BR-JQ	STN 'B' PWR EQ INSP-SVI FALL 2016	1206693	Wilson	BR	2016	CR01	Wilson	BR	Wilson - BR
2020	18805139	5	On a Fixed Date	PR	62562606	NOCO ORAS	INIT	CR01		04/22/2020	04/22/2020	04/22/2020	N-TS-WILSONTS	-BR-JQ	STN 'B' PWR EQ INSP-SVI April wk3	1206693	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2017	16109441	5	On a Fixed Date	PR	61325366	NOCO ORAS	INIT	CR01		09/27/2017	09/27/2017	09/27/2017	N-TS-WILSONTS	-BR-JQ	STN 'B' PWR EQ INSP-SVI Fall 2017	1206693	Wilson	BR	2017	CR01	Wilson	BR	Wilson - BR
2020	18773042	5	On a Fixed Date	PR	62562605	NOCO ORAS	INIT	CR01		04/16/2020	04/16/2020	04/16/2020	N-TS-WILSONTS	-BR-JQ	STN 'B' PWR EQ INSP-SVI April wk2	1206693	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2020	17811699	6	By a Fixed Date	PR	62292572	NOCO ORAS	INIT	CR01	1	04/01/2020	07/06/2019	06/19/2020	N-TS-WILSONTS	-BR-JQ	BR-OIL-KSO-LV- Strategy	1206693	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2017	16109444	5	On a Fixed Date	PR	61325366	NOCO ORAS	INIT	CR01		09/27/2017	09/27/2017	09/27/2017	N-TS-WILSONTS	-BR-T4Q	STN 'B' PWR EQ INSP-SVI Fall 2017	1206763	Wilson	BR	2017	CR01	Wilson	BR	Wilson - BR
2018	15889388	6	By a Fixed Date	PR	61570899	NOCO ORAS	INIT	CR01	1	07/22/2017	07/22/2017	01/22/2018	N-TS-WILSONTS	-BR-T4Q	BR-OIL-KSO-LV- Strategy	1206763	Wilson	BR	2018	CR01	Wilson	BR	Wilson - BR
2020	17812179	6	By a Fixed Date	PR	62293032	NOCO ORAS	INIT	CR01	1	08/14/2020	07/06/2019	06/04/2020	N-TS-WILSONTS	-BR-T4Q	BR-OIL-KSO-LV- BOA	1206763	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2019	14920151	6	By a Fixed Date	PR	61343178	ATCO NOCO ORAS	INIT	CR02	1	07/16/2016	07/16/2016	04/09/2019	N-TS-WILSONTS	-BR-T4Q	BR-OIL-KSO-LV- BOA	1206763	Wilson	BR	2019	CR02	Wilson	BR	Wilson - BR
2020	18773044	5	On a Fixed Date	PR	62562605	NOCO ORAS	INIT	CR01		04/16/2020	04/16/2020	04/16/2020	N-TS-WILSONTS	-BR-T4Q	STN 'B' PWR EQ INSP-SVI April wk2	1206763	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2020	19015320	5	On a Fixed Date	PR	62562612	NOCO ORAS	INIT	CR01		06/02/2020	06/02/2020	06/02/2020	N-TS-WILSONTS	-BR-T4Q	STN 'B' PWR EQ INSP-SVI June wk1	1206763	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2019	18055554	5	On a Fixed Date	PR	61923631	NOCO ORAS	INIT	CR01		09/25/2019	09/25/2019	09/25/2019	N-TS-WILSONTS	-BR-T4Q	STN 'B' PWR EQ INSP-SVI Fall 2019	1206763	Wilson	BR	2019	CR01	Wilson	BR	Wilson - BR
2016	15199726	5	On a Fixed Date	PR	61170804	NOCO ORAS	INIT	CR01		10/26/2016	10/26/2016	10/26/2016	N-TS-WILSONTS	-BR-T4Q	STN 'B' PWR EQ INSP-SVI FALL 2016	1206763	Wilson	BR	2016	CR01	Wilson	BR	Wilson - BR
2020	18805171	5	On a Fixed Date	PR	62562606	NOCO ORAS	INIT	CR01		04/22/2020	04/22/2020	04/22/2020	N-TS-WILSONTS	-BR-T4Q	STN 'B' PWR EQ INSP-SVI April wk3	1206763	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2020	18644233	5	On a Fixed Date	PR	62291354	NOCO ORAS	INIT	CR01		03/11/2020	03/11/2020	03/11/2020	N-TS-WILSONTS	-BR-T4Q	STN 'B' PWR EQ INSP-SVI Spr 2020	1206763	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2018	16814011	5	On a Fixed Date	PR	61570343	NOCO ORAS	INIT	CR01		06/07/2018	06/07/2018	06/07/2018	N-TS-WILSONTS	-BR-T4Q	STN 'B' PWR EQ INSP-SVI Spr 2018	1206763	Wilson	BR	2018	CR01	Wilson	BR	Wilson - BR
2020	19333212	5	On a Fixed Date	PR	62291355	NOCO ORAS	INIT	CR01		09/16/2020	09/16/2020	09/16/2020	N-TS-WILSONTS	-BR-T4Q	STN 'B' PWR EQ INSP-SVI Fall 2020	1206763	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2019	17646127	5	On a Fixed Date	PR	61923630	NOCO ORAS	INIT	CR02		05/24/2019	05/24/2019	05/24/2019	N-TS-WILSONTS	-BR-T4Q	STN 'B' PWR EQ INSP-SVI Spr 2019	1206763	Wilson	BR	2019	CR02	Wilson	BR	Wilson - BR
2016	14517765	5	On a Fixed Date	PR	61170803	NOCO ORAS	INIT	CR01		02/17/2016	02/17/2016	02/17/2016	N-TS-WILSONTS	-BR-T4Q	STN 'B' PWR EQ INSP-SVI SPRING 2016	1206763	Wilson	BR	2016	CR01	Wilson	BR	Wilson - BR
2020	18893003	5	On a Fixed Date	PR	62562608	NOCO ORAS	INIT	CR01		05/07/2020	05/07/2020	05/07/2020	N-TS-WILSONTS	-BR-T4Q	STN 'B' PWR EQ INSP-SVI May wk1	1206763	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2018	17113104	5	On a Fixed Date	PR	61570344	NOCO ORAS	INIT	CR01		11/12/2018	11/12/2018	11/12/2018	N-TS-WILSONTS	-BR-T4Q	STN 'B' PWR EQ INSP-SVI Fall 2018	1206763	Wilson	BR	2018	CR01	Wilson	BR	Wilson - BR
2018	17112933	5	On a Fixed Date	PR	61570344	NOCO ORAS	INIT	CR01		11/12/2018	11/12/2018	11/12/2018	N-TS-WILSONTS	-BR-T4Q	STN 'B' PWR EQ INSP-SVI Fall 2018	1206763	Wilson	BR	2018	CR01	Wilson	BR	Wilson - BR
2017	15479887	5	On a Fixed Date	PR	61325365	NOCO ORAS	INIT	CR02		04/20/2017	04/20/2017	04/20/2017	N-TS-WILSONTS	-BR-T4Q	STN 'B' PWR EQ INSP-SVI Spr 2017	1206763	Wilson	BR	2017	CR02	Wilson	BR	Wilson - BR
2020	19015321	5	On a Fixed Date	PR	62562612	NOCO ORAS	INIT	CR01		06/02/2020	06/02/2020	06/02/2020	N-TS-WILSONTS	-BR-T3J	STN 'B' PWR EQ INSP-SVI June wk1	1206776	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2019	18055543	5	On a Fixed Date	PR	61923631	NOCO ORAS	INIT	CR01		09/25/2019	09/25/2019	09/25/2019	N-TS-WILSONTS	-BR-T3J	STN 'B' PWR EQ INSP-SVI Fall 2019	1206776	Wilson	BR	2019	CR01	Wilson	BR	Wilson - BR
2016	15199727	5	On a Fixed Date	PR	61170804	NOCO ORAS	INIT	CR01		10/26/2016	10/26/2016	10/26/2016	N-TS-WILSONTS	-BR-T3J	STN 'B' PWR EQ INSP-SVI FALL 2016	1206776	Wilson	BR	2016	CR01	Wilson	BR	Wilson - BR
2017	15479888	5	On a Fixed Date	PR	61325365	NOCO ORAS	INIT	CR02		04/20/2017	04/20/2017	04/20/2017	N-TS-WILSONTS	-BR-T3J	STN 'B' PWR EQ INSP-SVI Spr 2017	1206776	Wilson	BR	2017	CR02	Wilson	BR	Wilson - BR
2018	15889387	6	By a Fixed Date	PR	61570898	NOCO ORAS	INIT	CR03	1	07/22/2017	07/22/2017	09/07/2018	N-TS-WILSONTS	-BR-T3J	BR-OIL-KSO-LV- Strategy	1206776	Wilson	BR	2018	CR03	Wilson	BR	Wilson - BR
2020	18773041	5	On a Fixed Date	PR	62562605	NOCO ORAS	INIT	CR01		04/16/2020	04/16/2020	04/16/2020	N-TS-WILSONTS	-BR-T3J	STN 'B' PWR EQ INSP-SVI April wk2	1206776	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2020	18805172	5	On a Fixed Date	PR	62562606	NOCO ORAS	INIT	CR01		04/22/2020	04/22/2020	04/22/2020	N-TS-WILSONTS	-BR-T3J	STN 'B' PWR EQ INSP-SVI April wk3	1206776	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2018	17113105	5	On a Fixed Date	PR	61570344	NOCO ORAS	INIT	CR01		11/12/2018	11/12/2018	11/12/2018	N-TS-WILSONTS	-BR-T3J	STN 'B' PWR EQ INSP-SVI Fall 2018	1206776	Wilson	BR	2018	CR01	Wilson	BR	Wilson - BR
2020	19333213	5	On a Fixed Date	PR	62291355	NOCO ORAS	INIT	CR01		09/16/2020	09/16/2020	09/16/2020	N-TS-WILSONTS	-BR-T3J	STN 'B' PWR EQ INSP-SVI Fall 2020	1206776	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2018	17112935	5	On a Fixed Date	PR	61570344	NOCO ORAS	INIT	CR01		11/12/2018	11/12/2018	11/12/2018	N-TS-WILSONTS	-BR-T3J	STN 'B' PWR EQ INSP-SVI Fall 2018	1206776	Wilson	BR	2018	CR01	Wilson	BR	Wilson - BR
2020	18893005	5	On a Fixed Date	PR	62562608	NOCO ORAS	INIT	CR01		05/07/2020	05/07/2020	05/07/2020	N-TS-WILSONTS	-BR-T3J	STN 'B' PWR EQ INSP-SVI May wk1	1206776	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR

2020	17812175	6	By a Fixed Date	PR	62293028	NOCO ORAS	INIT	CR01	1	07/27/2020	07/06/2019	06/26/2020	N-TS-WILSONTS	-BR-T3J	BR-OIL-KSO-LV- BOA	1206776	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2017	14920150	6	By a Fixed Date	PR	61343177	NOCO ORAS	INIT	CR02	1	07/16/2016	07/16/2016	07/21/2017	N-TS-WILSONTS	-BR-T3J	BR-OIL-KSO-LV- BOA	1206776	Wilson	BR	2017	CR02	Wilson	BR	Wilson - BR
2020	18644234	5	On a Fixed Date	PR	62291354	NOCO ORAS	INIT	CR01		03/11/2020	03/11/2020	03/11/2020	N-TS-WILSONTS	-BR-T3J	STN 'B' PWR EQ INSP-SVI Spr 2020	1206776	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2017	16109447	5	On a Fixed Date	PR	61325366	NOCO ORAS	INIT	CR01		09/27/2017	09/27/2017	09/27/2017	N-TS-WILSONTS	-BR-T3J	STN 'B' PWR EQ INSP-SVI Fall 2017	1206776	Wilson	BR	2017	CR01	Wilson	BR	Wilson - BR
2018	16814016	5	On a Fixed Date	PR	61570343	NOCO ORAS	INIT	CR01		06/07/2018	06/07/2018	06/07/2018	N-TS-WILSONTS	-BR-T3J	STN 'B' PWR EQ INSP-SVI Spr 2018	1206776	Wilson	BR	2018	CR01	Wilson	BR	Wilson - BR
2019	17646172	5	On a Fixed Date	PR	61923630	NOCO ORAS	INIT	CR01		05/24/2019	05/24/2019	05/24/2019	N-TS-WILSONTS	-BR-T3J	STN 'B' PWR EQ INSP-SVI Spr 2019	1206776	Wilson	BR	2019	CR01	Wilson	BR	Wilson - BR
2016	14517766	5	On a Fixed Date	PR	61170803	NOCO ORAS	INIT	CR01		02/17/2016	02/17/2016	02/17/2016	N-TS-WILSONTS	-BR-T3J	STN 'B' PWR EQ INSP-SVI SPRING 2016	1206776	Wilson	BR	2016	CR01	Wilson	BR	Wilson - BR
2017	16195243	5	On a Fixed Date	PR	61322826	NOCO ORAS	INIT	CR01		11/13/2017	11/13/2017	11/13/2017	N-TS-CHARLESTS	-BR-T3A3A4	STN 'A' PWR EQ INSP-SVI Fall 2017	1207364	Charles	BR	2017	CR01	Charles	BR	Charles - BR
2018	17038599	5	On a Fixed Date	PR	61554233	NOCO ORAS	INIT	CR01		10/17/2018	10/17/2018	10/17/2018	N-TS-CHARLESTS	-BR-T3A3A4	STN 'A' PWR EQ INSP-SVI Fall 2018	1207364	Charles	BR	2018	CR01	Charles	BR	Charles - BR
2018	16513681	5	On a Fixed Date	PR	61554232	NOCO ORAS	INIT	CR01		03/15/2018	03/15/2018	03/15/2018	N-TS-CHARLESTS	-BR-T3A3A4	STN 'A' PWR EQ INSP-SVI Spr 2018	1207364	Charles	BR	2018	CR01	Charles	BR	Charles - BR
2017	15821521	5	On a Fixed Date	PR	61322825	NOCO ORAS	INIT	CR01		06/27/2017	06/27/2017	06/27/2017	N-TS-CHARLESTS	-BR-T3A3A4	STN 'A' PWR EQ INSP-SVI Spr 2017	1207364	Charles	BR	2017	CR01	Charles	BR	Charles - BR
2020	18846105	5	On a Fixed Date	PR	61908457	NOCO ORAS	INIT	CR02		04/29/2020	04/29/2020	04/29/2020	N-TS-CHARLESTS	-BR-T3A3A4	STN 'A' PWR EQ INSP-SVI Fall 2019	1207364	Charles	BR	2020	CR02	Charles	BR	Charles - BR
2019	17469065	5	On a Fixed Date	PR	61908456	NOCO ORAS	INIT	CR01		04/02/2019	04/02/2019	04/02/2019	N-TS-CHARLESTS	-BR-T3A3A4	STN 'A' PWR EQ INSP-SVI Spr 2019	1207364	Charles	BR	2019	CR01	Charles	BR	Charles - BR
2016	15130709	5	On a Fixed Date	PR	61169688	NOCO ORAS	INIT	CR01		09/29/2016	09/29/2016	09/29/2016	N-TS-CHARLESTS	-BR-T3A3A4	STN 'A' PWR EQ INSP-SVI FALL 2016	1207364	Charles	BR	2016	CR01	Charles	BR	Charles - BR
2020	18942450	5	On a Fixed Date	PR	62283318	NOCO ORAS	INIT	CR02		05/18/2020	05/18/2020	05/18/2020	N-TS-CHARLESTS	-BR-T3A3A4	STN 'A' PWR EQ INSP-SVI Spr 2020	1207364	Charles	BR	2020	CR02	Charles	BR	Charles - BR
2016	14515532	6	By a Fixed Date	PR	61262373	NOCO NOPT ORAS	INIT	CR01	1	02/11/2016	02/11/2016	12/23/2016	N-TS-CHARLESTS	-BR-T3A3A4	BR-M/C-AMAG/<30-Strategy	1207364	Charles	BR	2016	CR01	Charles	BR	Charles - BR
2020	19482312	5	On a Fixed Date	PR	62283319	NOCO ORAS	INIT	CR01		10/27/2020	10/27/2020	10/27/2020	N-TS-CHARLESTS	-BR-T3A3A4	STN 'A' PWR EQ INSP-SVI Fall 2020	1207364	Charles	BR	2020	CR01	Charles	BR	Charles - BR
2016	15130724	5	On a Fixed Date	PR	61169688	NOCO ORAS	INIT	CR01		09/29/2016	09/29/2016	09/29/2016	N-TS-CHARLESTS	-BR-T4A3A4	STN 'A' PWR EQ INSP-SVI FALL 2016	1207379	Charles	BR	2016	CR01	Charles	BR	Charles - BR
2017	15821446	5	On a Fixed Date	PR	61322825	NOCO ORAS	INIT	CR01		06/27/2017	06/27/2017	06/27/2017	N-TS-CHARLESTS	-BR-T4A3A4	STN 'A' PWR EQ INSP-SVI Spr 2017	1207379	Charles	BR	2017	CR01	Charles	BR	Charles - BR
2020	19482313	5	On a Fixed Date	PR	62283319	NOCO ORAS	INIT	CR01		10/27/2020	10/27/2020	10/27/2020	N-TS-CHARLESTS	-BR-T4A3A4	STN 'A' PWR EQ INSP-SVI Fall 2020	1207379	Charles	BR	2020	CR01	Charles	BR	Charles - BR
2017	16195245	5	On a Fixed Date	PR	61322826	NOCO ORAS	INIT	CR01		11/13/2017	11/13/2017	11/13/2017	N-TS-CHARLESTS	-BR-T4A3A4	STN 'A' PWR EQ INSP-SVI Fall 2017	1207379	Charles	BR	2017	CR01	Charles	BR	Charles - BR
2021	19190378	6	By a Fixed Date	PR	62678276	NOCO ORAS	INIT	CR02	1	04/01/2021	07/17/2020	03/04/2021	N-TS-CHARLESTS	-BR-T4A3A4	BR-M/C-AMAG/<30-Strategy	1207379	Charles	BR	2021	CR02	Charles	BR	Charles - BR
2020	18846133	5	On a Fixed Date	PR	61908457	NOCO ORAS	INIT	CR02		04/29/2020	04/29/2020	04/29/2020	N-TS-CHARLESTS	-BR-T4A3A4	STN 'A' PWR EQ INSP-SVI Fall 2019	1207379	Charles	BR	2020	CR02	Charles	BR	Charles - BR
2018	17038610	5	On a Fixed Date	PR	61554233	NOCO ORAS	INIT	CR01		10/17/2018	10/17/2018	10/17/2018	N-TS-CHARLESTS	-BR-T4A3A4	STN 'A' PWR EQ INSP-SVI Fall 2018	1207379	Charles	BR	2018	CR01	Charles	BR	Charles - BR
2019	17469069	5	On a Fixed Date	PR	61908456	NOCO ORAS	INIT	CR01		04/02/2019	04/02/2019	04/02/2019	N-TS-CHARLESTS	-BR-T4A3A4	STN 'A' PWR EQ INSP-SVI Spr 2019	1207379	Charles	BR	2019	CR01	Charles	BR	Charles - BR
2018	16513679	5	On a Fixed Date	PR	61554232	NOCO ORAS	INIT	CR01		03/15/2018	03/15/2018	03/15/2018	N-TS-CHARLESTS	-BR-T4A3A4	STN 'A' PWR EQ INSP-SVI Spr 2018	1207379	Charles	BR	2018	CR01	Charles	BR	Charles - BR
2020	18942460	5	On a Fixed Date	PR	62283318	NOCO ORAS	INIT	CR02		05/18/2020	05/18/2020	05/18/2020	N-TS-CHARLESTS	-BR-T4A3A4	STN 'A' PWR EQ INSP-SVI Spr 2020	1207379	Charles	BR	2020	CR02	Charles	BR	Charles - BR
2018	15889726	6	By a Fixed Date	PR	61571237	NOCO ORAS	INIT	CR01	1	07/22/2017	07/22/2017	10/11/2018	N-TS-WILSONTS	-BR-M12	BR-OIL-KSO-LV- BOA	1207581	Wilson	BR	2018	CR01	Wilson	BR	Wilson - BR
2019	18055555	5	On a Fixed Date	PR	61923631	NOCO ORAS	INIT	CR01		09/25/2019	09/25/2019	09/25/2019	N-TS-WILSONTS	-BR-M12	STN 'B' PWR EQ INSP-SVI Fall 2019	1207581	Wilson	BR	2019	CR01	Wilson	BR	Wilson - BR
2018	16814017	5	On a Fixed Date	PR	61570343	NOCO ORAS	INIT	CR01		06/07/2018	06/07/2018	06/07/2018	N-TS-WILSONTS	-BR-M12	STN 'B' PWR EQ INSP-SVI Spr 2018	1207581	Wilson	BR	2018	CR01	Wilson	BR	Wilson - BR
2020	19333214	5	On a Fixed Date	PR	62291355	NOCO ORAS	INIT	CR01		09/16/2020	09/16/2020	09/16/2020	N-TS-WILSONTS	-BR-M12	STN 'B' PWR EQ INSP-SVI Fall 2020	1207581	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2018	17112937	5	On a Fixed Date	PR	61570344	NOCO ORAS	INIT	CR01		11/12/2018	11/12/2018	11/12/2018	N-TS-WILSONTS	-BR-M12	STN 'B' PWR EQ INSP-SVI Fall 2018	1207581	Wilson	BR	2018	CR01	Wilson	BR	Wilson - BR
2017	16109500	5	On a Fixed Date	PR	61325366	NOCO ORAS	INIT	CR01		09/27/2017	09/27/2017	09/27/2017	N-TS-WILSONTS	-BR-M12	STN 'B' PWR EQ INSP-SVI Fall 2017	1207581	Wilson	BR	2017	CR01	Wilson	BR	Wilson - BR
2019	17646173	5	On a Fixed Date	PR	61923630	NOCO ORAS	INIT	CR02		05/24/2019	05/24/2019	05/24/2019	N-TS-WILSONTS	-BR-M12	STN 'B' PWR EQ INSP-SVI Spr 2019	1207581	Wilson	BR	2019	CR02	Wilson	BR	Wilson - BR
2020	16893365	6	By a Fixed Date	PR	61925025	NOCO ORAS	INIT	CR01	1	07/07/2018	07/07/2018	02/21/2020	N-TS-WILSONTS	-BR-M12	BR-OIL-KSO-LV- Strategy	1207581	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2020	18893008	5	On a Fixed Date	PR	62562608	NOCO ORAS	INIT	CR01		05/07/2020	05/07/2020	05/07/2020	N-TS-WILSONTS	-BR-M12	STN 'B' PWR EQ INSP-SVI May wk1	1207581	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2016	15199728	5	On a Fixed Date	PR	61170804	NOCO ORAS	INIT	CR01		10/26/2016	10/26/2016	10/26/2016	N-TS-WILSONTS	-BR-M12	STN 'B' PWR EQ INSP-SVI FALL 2016	1207581	Wilson	BR	2016	CR01	Wilson	BR	Wilson - BR
2020	18773046	5	On a Fixed Date	PR	62562605	NOCO ORAS	INIT	CR01		04/16/2020	04/16/2020	04/16/2020	N-TS-WILSONTS	-BR-M12	STN 'B' PWR EQ INSP-SVI April wk2	1207581	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2020	19015322	5	On a Fixed Date	PR	62562612	NOCO ORAS	INIT	CR01		06/02/2020	06/02/2020	06/02/2020	N-TS-WILSONTS	-BR-M12	STN 'B' PWR EQ INSP-SVI June wk1	1207581	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2016	14517767	5	On a Fixed Date	PR	61170803	NOCO ORAS	INIT	CR01		02/17/2016	02/17/2016	02/17/2016	N-TS-WILSONTS	-BR-M12	STN 'B' PWR EQ INSP-SVI SPRING 2016	1207581	Wilson	BR	2016	CR01	Wilson	BR	Wilson - BR
2020	18644236	5	On a Fixed Date	PR	62291354	NOCO ORAS	INIT	CR01		03/11/2020	03/11/2020	03/11/2020	N-TS-WILSONTS	-BR-M12	STN 'B' PWR EQ INSP-SVI Spr 2020	1207581	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2018	17113106	5	On a Fixed Date	PR	61570344	NOCO ORAS	INIT	CR01		11/12/2018	11/12/2018	11/12/2018	N-TS-WILSONTS	-BR-M12	STN 'B' PWR EQ INSP-SVI Fall 2018	1207581	Wilson	BR	2018	CR01	Wilson	BR	Wilson - BR
2021	19195813	6	By a Fixed Date	PR	62683751	NOCO ORAS	INIT	CR01	1	10/19/2021	07/18/2020	03/12/2021	N-TS-WILSONTS	-BR-M12	BR-OIL-KSO-LV- BOA	1207581	Wilson	BR	2021	CR01	Wilson	BR	Wilson - BR
2017	15479889	5	On a Fixed Date	PR	61325365	NOCO ORAS	INIT	CR02		04/20/2017	04/20/2017	04/20/2017	N-TS-WILSONTS	-BR-M12	STN 'B' PWR EQ INSP-SVI Spr 2017	1207581	Wilson	BR	2017	CR02	Wilson	BR	Wilson - BR
2020	18805173	5	On a Fixed Date	PR	62562606	NOCO ORAS	INIT	CR01		04/22/2020	04/22/2020	04/22/2020	N-TS-WILSONTS	-BR-M12	STN 'B' PWR EQ INSP-SVI April wk3	1207581	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2020	18893040	5	On a Fixed Date	PR	62562608	NOCO ORAS	INIT	CR01		05/07/2020	05/07/2020	05/07/2020	N-TS-WILSONTS	-BR-M13	STN 'B' PWR EQ INSP-SVI May wk1	1207593	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2018	17113107	5	On a Fixed Date	PR	61570344	NOCO ORAS	INIT	CR01		11/12/2018	11/12/2018	11/12/2018	N-TS-WILSONTS	-BR-M13	STN 'B' PWR EQ INSP-SVI Fall 2018	1207593	Wilson	BR	2018	CR01	Wilson	BR	Wilson - BR
2019	17646250	5	On a Fixed Date	PR	61923630	NOCO ORAS	INIT	CR02		05/24/2019	05/24/2019	05/24/2019	N-TS-WILSONTS	-BR-M13	STN 'B' PWR EQ INSP-SVI Spr 2019	1207593	Wilson	BR	2019	CR02	Wilson	BR	Wilson - BR
2018	17112939	5	On a Fixed Date	PR	61570344	NOCO ORAS	INIT	CR01		11/12/2018	11/12/2018	11/12/2018	N-TS-WILSONTS	-BR-M13	STN 'B' PWR EQ INSP-SVI Fall 2018	1207593	Wilson	BR	2018	CR01	Wilson	BR	Wilson - BR
2017	14920096	6	By a Fixed Date	PR	61343173	NOCO ORAS	INIT	CR02	1	07/16/2016	07/16/2016	07/21/2017	N-TS-WILSONTS	-BR-M13	BR-OIL-KSO-LV- BOA	1207593	Wilson	BR	2017	CR02	Wilson	BR	Wilson - BR
2020	19015329	5	On a Fixed Date	PR	62562612	NOCO ORAS	INIT	CR01		06/02/2020	06/02/2020	06/02/2020	N-TS-WILSONTS	-BR-M13	STN 'B' PWR EQ INSP-SVI June wk1	1207593	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2020	18644231	5	On a Fixed Date	PR	62291354	NOCO ORAS	INIT	CR01		03/11/2020	03/11/2020	03/11/2020	N-TS-WILSONTS	-BR-M13	STN 'B' PWR EQ INSP-SVI Spr 2020	1207593	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2020	18773048	5	On a Fixed Date	PR	62562605	NOCO ORAS	INIT	CR01		04/16/2020	04/16/2020	04/16/2020	N-TS-WILSONTS	-BR-M13	STN 'B' PWR EQ INSP-SVI April wk2	1207593	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2016	14517764	5	On a Fixed Date	PR	61170803	NOCO ORAS	INIT	CR01		02/17/2016	02/17/2016	02/17/2016	N-TS-WILSONTS	-BR-M13	STN 'B' PWR EQ INSP-SVI SPRING 2016	1207593	Wilson	BR	2016	CR01	Wilson	BR	Wilson - BR
2018	16814018	5	On a Fixed Date	PR	61570343	NOCO ORAS	INIT	CR01		06/07/2018	06/07/2018	06/07/2018	N-TS-WILSONTS	-BR-M13	STN 'B' PWR EQ INSP-SVI Spr 2018	1207593	Wilson	BR	2018	CR01	Wilson	BR	Wilson - BR
2017	16109503	5	On a Fixed Date	PR	61325366	NOCO ORAS	INIT	CR01		09/27/2017	09/27/2017	09/27/2017	N-TS-WILSONTS	-BR-M13	STN 'B' PWR EQ INSP-SVI Fall 2017	1207593	Wilson	BR	2017	CR01	Wilson	BR	Wilson - BR
2019	18055556	5	On a Fixed Date	PR	61923631	NOCO ORAS	INIT	CR01		09/25/2019	09/25/2019	09/25/2019	N-TS-WILSONTS	-BR-M13	STN 'B' PWR EQ INSP-SVI Fall 2019	1207593	Wilson	BR	2019	CR01	Wilson	BR	Wilson - BR
2020	17812142	6	By a Fixed Date	PR	62293015	NOCO ORAS	INIT	CR01	1	07/27/2020	07/06/2019	06/04/2020	N-TS-WILSONTS	-BR-M13	BR-OIL-KSO-LV- BOA	1207593	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2017	15479890	5	On a Fixed Date	PR	61325365	NOCO ORAS	INIT	CR02		04/20/2017	04/20/2017	04/20/2017	N-TS-WILSONTS	-BR-M13	STN 'B' PWR EQ INSP-SVI Spr 2017	1207593	Wilson	BR	2017	CR02	Wilson	BR	Wilson - BR
2016	15199725	5	On a Fixed Date	PR	61170804	NOCO ORAS	INIT	CR01		10/26/2016	10/26/2016	10/26/2016	N-TS-WILSONTS	-BR-M13	STN 'B' PWR EQ INSP-SVI FALL 2016	1207593	Wilson	BR	2016	CR01	Wilson	BR	Wilson - BR
2020	19333215	5	On a Fixed Date	PR	62291355	NOCO ORAS	INIT	CR01		09/16/2020	09/16/2020	09/16/2020	N-TS-WILSONTS	-BR-M13	STN 'B' PWR EQ INSP-SVI Fall 2020	1207593	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2020	18805170	5	On a Fixed Date	PR	62562606	NOCO ORAS	INIT	CR01		04/22/2020	04/22/2020	04/22/2020	N-TS-WILSONTS	-BR-M13	STN 'B' PWR EQ INSP-SVI April wk3	1207593	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2020	18893042	5	On a Fixed Date	PR	62562608	NOCO ORAS	INIT	CR01		05/07/2020	05/07/2020	05/07/2020	N-TS-WILSONTS	-BR-M11	STN 'B' PWR EQ INSP-SVI May wk1	1207604	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2020	19015350	5	On a Fixed Date	PR	62562612	NOCO ORAS	INIT	CR01		06/02/2020	06/02/2020	06/02/2020	N-TS-WILSONTS	-BR-M11	STN 'B' PWR EQ INSP-SVI June wk1	1207604	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2018	17112951	5	On a Fixed Date	PR	61570344	NOCO ORAS	INIT	CR01		11/12/2018	11/12/2018	11/12/2018	N-TS-WILSONTS	-BR-M11	STN 'B' PWR EQ INSP-SVI Fall 2018	1207604	Wilson	BR	2018	CR01	Wilson	BR	Wilson - BR
2017	16109506	5	On a Fixed Date	PR	61325366	NOCO ORAS	INIT	CR01		09/27/2017	09/27/2017	09/27/2017	N-TS-WILSONTS	-BR-M11	STN 'B' PWR EQ INSP-SVI Fall 2017	1207604	Wilson	BR	2017	CR01	Wilson	BR	Wilson - BR
2019	18055557	5	On a Fixed Date	PR	61923631	NOCO ORAS	INIT	CR01		09/25/2019	09/25/2019	09/25/2019	N-TS-WILSONTS	-BR-M11	STN 'B' PWR EQ INSP-SVI Fall 2019	1207604	Wilson	BR	2019	CR01	Wilson	BR	Wilson - BR
2020	18805242	5	On a Fixed Date	PR	62562606	NOCO ORAS	INIT	CR01		04/22/2020	04/22/2020	04/22/2020	N-TS-WILSONTS	-BR-M11	STN 'B' PWR EQ INSP-SVI April wk3	1207604	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2016	14517768	5	On a Fixed Date	PR	61170803	NOCO ORAS	INIT	CR01		02/17/2016	02/17/2016	02/17/2016	N-TS-WILSONTS	-BR-M11	STN 'B' PWR EQ INSP-SVI SPRING 2016	1207604	Wilson	BR	2016	CR01	Wilson	BR	Wilson - BR
2019	17646177	5	On a Fixed Date	PR	61923630	NOCO ORAS	INIT	CR02		05/24/2019	05/24/2019	05/24/2019	N-TS-WILSONTS	-BR-M11	STN 'B' PWR EQ INSP-SVI Spr 2019	1207604	Wilson	BR	2019	CR02	Wilson	BR	Wilson - BR
2020	17812138	6	By a Fixed Date	PR	62293011	NOCO ORAS	INIT	CR01	1	07/27/2020	07/06/2019	06/26/2020	N-TS-WILSONTS	-BR-M11	BR-OIL-KSO-LV- BOA	1207604	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2017	15479891	5	On a Fixed Date	PR	61325365	NOCO ORAS	INIT	CR02		04/20/2017	04/20/2017	04/20/2017	N-TS-WILSONTS	-BR-M11	STN 'B' PWR EQ INSP-SVI Spr 2017	1207604	Wilson	BR	2017	CR02	Wilson	BR	Wilson - BR
2018	17113108	5	On a Fixed Date	PR	61570344	NOCO ORAS	INIT	CR01		11/12/2018	11/12/2018	11/12/2018	N-TS-WILSONTS	-BR-M11	STN 'B' PWR EQ INSP-SVI Fall 2018	1207604	Wilson	BR	2018	CR01	Wilson	BR	Wilson - BR
2016	15199729	5	On a Fixed Date	PR	61170804	NOCO ORAS	INIT	CR01		10/26/2016	10/26/2016	10/26/2016	N-TS-WILSONTS	-BR-M11	STN 'B' PWR EQ INSP-SVI FALL 2016	1207604	Wilson	BR	2016	CR01	Wilson	BR	Wilson - BR
2018	16380169	3	Medium (30-90 Days)	PR	61781628	NOCO ORAS	INIT	CR01	1	03/16/2018	02/14/2018	10/11/2018	N-TS-WILSONTS	-BR-M11	BR-OIL-KSO-LV- BOA Resample	1207604	Wilson	BR	2018	CR01	Wilson	BR	Wilson - BR
2020	19333216	5	On a Fixed Date	PR	62291355	NOCO ORAS	INIT	CR01		09/16/2020	09/16/2020	09/16/2020	N-TS-WILSONTS	-BR-M11	STN 'B' PWR EQ INSP-SVI Fall 2020	1207604	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2018	16814019	5	On a Fixed Date	PR	61570343	NOCO ORAS	INIT	CR01		06/07/2018	06/07/2018	06/07/2018	N-TS-WILSONTS	-BR-M11	STN 'B' PWR EQ INSP-SVI Spr 2018	1207604	Wilson	BR	2018	CR01	Wilson	BR	Wilson - BR
2020	18773053	5	On a Fixed Date	PR	62562605	NOCO ORAS	INIT	CR01		04/16/2020	04/16/2020	04/16/2020	N-TS-WILSONTS	-BR-M11	STN 'B' PWR EQ INSP-SVI April wk2	1207604	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2020	18644237	5	On a Fixed Date	PR	62291354	NOCO ORAS	INIT	CR01		03/11/2020	03/11/2020	03/11/2020	N-TS-WILSONTS	-BR-M11	STN 'B' PWR EQ INSP-SVI Spr 2020	1207604	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2017	14920095	6	By a Fixed Date	PR	61343172	NOCO ORAS	INIT	CR02	1	07/16/2016	07/16/2016	07/21/2017	N-TS-WILSONTS	-BR-M11	BR-OIL-KSO-LV- BOA	1207604	Wilson	BR	2017	CR02	Wilson	BR	Wilson - BR
2019	18387089	5	On a Fixed Date	PR	61926950	NOCO ORAS	INIT	CR01		12/09/2019	12/09/2019	12/09/2019	N-TS-WILSONTS	-BR-SC1B	STN BREAKER BLOWDOWN 4of4 2019	1211004	Wilson	BR	2019	CR01	Wilson	BR	Wilson - BR
2016	14517769	5	On a Fixed Date	PR	61170803	NOCO ORAS	INIT	CR01		02/17/2016	02/17/2016	02/17/2016	N-TS-WILSONTS	-BR-SC1B	STN 'B' PWR EQ INSP-SVI SPRING 2016	1211004	Wilson	BR	2016	CR01	Wilson	BR	Wilson - BR
2016	15206284	5	On a Fixed Date	PR	61273342	NOCO ORAS	INIT	CR01		10/28/2016	10/28/2016	10/28/2016	N-TS-WILSONTS	-BR-SC1B	STN BREAKER BLOWDOWN 4of4 2016	1211004	Wilson	BR	2016	CR01	Wilson	BR	Wilson - BR
2016	15206246	5	On a Fixed Date	PR	61273340	NOCO ORAS	INIT	CR01		10/28/2016	10/28/2016	10/28/2016	N-TS-WILSONTS	-BR-SC1B	STN BREAKER BLOWDOWN 2of4 2016	1211004	Wilson	BR	2016	CR01	Wilson	BR	Wilson - BR
2017	16109509	5	On a Fixed Date	PR	61325366	NOCO ORAS	INIT	CR01		09/27/2017	09/27/2017	09/27/2017	N-TS-WILSONTS	-BR-SC1B	STN 'B' PWR EQ INSP-SVI Fall 2017	1211004	Wilson	BR	2017	CR01	Wilson	BR	Wilson - BR
2017	15479880	5	On a Fixed Date	PR	61325365	NOCO ORAS	INIT	CR02		04/20/2017	04/20/2017	04/20/2017	N-TS-WILSONTS	-BR-SC1B	STN 'B' PWR EQ INSP-SVI Spr 2017	1211004	Wilson	BR	2017	CR02	Wilson	BR	Wilson - BR
2018	16814020	5	On a Fixed Date	PR	61570343	NOCO ORAS	INIT	CR01		06/07/2018	06/07/2018	06/07/2018	N-TS-WILSONTS	-BR-SC1B	STN 'B' PWR EQ INSP-SVI Spr 2018	1211004	Wilson	BR	2018	CR01	Wilson	BR	Wilson - BR
2020	18773050	5	On a Fixed Date	PR	62562605	NOCO ORAS	INIT	CR01		04/16/2020	04/16/2020	04/16/2020	N-TS-WILSONTS	-BR-SC1B	STN 'B' PWR EQ INSP-SVI April wk2	1211004	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2017	16092345	5	On a Fixed Date	PR	61348645	NOCO ORAS	INIT	CR01		09/22/2017	09/22/2017	09/22/2017	N-TS-WILSONTS	-BR-SC1B	STN BREAKER BLOWDOWN 3of4 2017	1211004	Wilson	BR	2017	CR01	Wilson	BR	Wilson - BR
2018	17031467	5	On a Fixed Date	PR	61572880	NOCO ORAS	INIT	CR01		10/10/2018	10/10/2018	10/10/2018	N-TS-WILSONTS	-BR-SC1B	STN BREAKER BLOWDOWN 3of4 2018	1211004	Wilson	BR	2018	CR01	Wilson	BR	Wilson - BR
2019	16893972	6	By a Fixed Date	PR	61925632	NOCO ORAS	INIT	CR01	1	07/07/2018	07/07/2018	11/05/2019	N-TS-WILSONTS	-BR-SC1B	BR-SF6-SP-M1	1211004	Wilson	BR	2019	CR01	Wilson	BR	Wilson - BR

2019	18055558	5	On a Fixed Date	PR	61923631	NOCO ORAS	INIT	CR01		09/25/2019	09/25/2019	09/25/2019	N-TS-WILSONTS	-BR-SC1B	STN 'B' PWR EQ INSP-SVI Fall 2019	1211004	Wilson	BR	2019	CR01	Wilson	BR	Wilson - BR
2020	18893045	5	On a Fixed Date	PR	62562608	NOCO ORAS	INIT	CR01		05/07/2020	05/07/2020	05/07/2020	N-TS-WILSONTS	-BR-SC1B	STN 'B' PWR EQ INSP-SVI May wk1	1211004	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2017	15649679	5	On a Fixed Date	PR	61348643	NOCO ORAS	INIT	CR01		05/11/2017	05/11/2017	05/11/2017	N-TS-WILSONTS	-BR-SC1B	STN BREAKER BLOWDOWN 1of4 2017	1211004	Wilson	BR	2017	CR01	Wilson	BR	Wilson - BR
2020	19685381	5	On a Fixed Date	PR	62295703	NOCO ORAS	INIT	CR01		12/09/2020	12/09/2020	12/09/2020	N-TS-WILSONTS	-BR-SC1B	STN BREAKER BLOWDOWN 3of4 2020	1211004	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2017	15650337	5	On a Fixed Date	PR	61348644	NOCO ORAS	INIT	CR01		05/11/2017	05/11/2017	05/11/2017	N-TS-WILSONTS	-BR-SC1B	STN BREAKER BLOWDOWN 2of4 2017	1211004	Wilson	BR	2017	CR01	Wilson	BR	Wilson - BR
2020	18543817	5	On a Fixed Date	PR	62295701	NOCO ORAS	INIT	CR01		02/13/2020	02/13/2020	02/13/2020	N-TS-WILSONTS	-BR-SC1B	STN BREAKER BLOWDOWN 1of4 2020	1211004	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2018	17142240	5	On a Fixed Date	PR	61572881	NOCO ORAS	INIT	CR01		12/12/2018	12/12/2018	12/12/2018	N-TS-WILSONTS	-BR-SC1B	STN BREAKER BLOWDOWN 4of4 2018	1211004	Wilson	BR	2018	CR01	Wilson	BR	Wilson - BR
2020	19685395	5	On a Fixed Date	PR	62295704	NOCO ORAS	INIT	CR01		12/09/2020	12/09/2020	12/09/2020	N-TS-WILSONTS	-BR-SC1B	STN BREAKER BLOWDOWN 4of4 2020	1211004	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2019	18073969	5	On a Fixed Date	PR	61926949	NOCO ORAS	INIT	CR01		10/01/2019	10/01/2019	10/01/2019	N-TS-WILSONTS	-BR-SC1B	STN BREAKER BLOWDOWN 3of4 2019	1211004	Wilson	BR	2019	CR01	Wilson	BR	Wilson - BR
2020	18805175	5	On a Fixed Date	PR	62562606	NOCO ORAS	INIT	CR01		04/22/2020	04/22/2020	04/22/2020	N-TS-WILSONTS	-BR-SC1B	STN 'B' PWR EQ INSP-SVI April wk3	1211004	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2017	16201243	5	On a Fixed Date	PR	61348646	NOCO ORAS	INIT	CR01		11/15/2017	11/15/2017	11/15/2017	N-TS-WILSONTS	-BR-SC1B	STN BREAKER BLOWDOWN 4of4 2017	1211004	Wilson	BR	2017	CR01	Wilson	BR	Wilson - BR
2018	16682932	5	On a Fixed Date	PR	61572878	NOCO ORAS	INIT	CR01		04/20/2018	04/20/2018	04/20/2018	N-TS-WILSONTS	-BR-SC1B	STN BREAKER BLOWDOWN 1of4 2018	1211004	Wilson	BR	2018	CR01	Wilson	BR	Wilson - BR
2018	17112957	5	On a Fixed Date	PR	61570344	NOCO ORAS	INIT	CR01		11/12/2018	11/12/2018	11/12/2018	N-TS-WILSONTS	-BR-SC1B	STN 'B' PWR EQ INSP-SVI Fall 2018	1211004	Wilson	BR	2018	CR01	Wilson	BR	Wilson - BR
2020	19015351	5	On a Fixed Date	PR	62562612	NOCO ORAS	INIT	CR01		06/02/2020	06/02/2020	06/02/2020	N-TS-WILSONTS	-BR-SC1B	STN 'B' PWR EQ INSP-SVI June wk1	1211004	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2020	18644238	5	On a Fixed Date	PR	62291354	NOCO ORAS	INIT	CR01		03/11/2020	03/11/2020	03/11/2020	N-TS-WILSONTS	-BR-SC1B	STN 'B' PWR EQ INSP-SVI Spr 2020	1211004	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2019	17648935	5	On a Fixed Date	PR	61926947	NOCO ORAS	INIT	CR01		05/27/2019	05/27/2019	05/27/2019	N-TS-WILSONTS	-BR-SC1B	STN BREAKER BLOWDOWN 1of4 2019	1211004	Wilson	BR	2019	CR01	Wilson	BR	Wilson - BR
2019	17646231	5	On a Fixed Date	PR	61923630	NOCO ORAS	INIT	CR02		05/24/2019	05/24/2019	05/24/2019	N-TS-WILSONTS	-BR-SC1B	STN 'B' PWR EQ INSP-SVI Spr 2019	1211004	Wilson	BR	2019	CR02	Wilson	BR	Wilson - BR
2016	15199760	5	On a Fixed Date	PR	61170804	NOCO ORAS	INIT	CR01		10/26/2016	10/26/2016	10/26/2016	N-TS-WILSONTS	-BR-SC1B	STN 'B' PWR EQ INSP-SVI FALL 2016	1211004	Wilson	BR	2016	CR01	Wilson	BR	Wilson - BR
2016	15206281	5	On a Fixed Date	PR	61273341	NOCO ORAS	INIT	CR01		10/28/2016	10/28/2016	10/28/2016	N-TS-WILSONTS	-BR-SC1B	STN BREAKER BLOWDOWN 3of4 2016	1211004	Wilson	BR	2016	CR01	Wilson	BR	Wilson - BR
2020	19124309	5	On a Fixed Date	PR	62295702	NOCO ORAS	INIT	CR01		07/03/2020	07/03/2020	07/03/2020	N-TS-WILSONTS	-BR-SC1B	STN BREAKER BLOWDOWN 2of4 2020	1211004	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2018	17112497	5	On a Fixed Date	PR	61572879	NOCO ORAS	INIT	CR01		11/10/2018	11/10/2018	11/10/2018	N-TS-WILSONTS	-BR-SC1B	STN BREAKER BLOWDOWN 2of4 2018	1211004	Wilson	BR	2018	CR01	Wilson	BR	Wilson - BR
2020	19333130	5	On a Fixed Date	PR	62291355	NOCO ORAS	INIT	CR01		09/16/2020	09/16/2020	09/16/2020	N-TS-WILSONTS	-BR-SC1B	STN 'B' PWR EQ INSP-SVI Fall 2020	1211004	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2018	17113131	5	On a Fixed Date	PR	61570344	NOCO ORAS	INIT	CR01		11/12/2018	11/12/2018	11/12/2018	N-TS-WILSONTS	-BR-SC1B	STN 'B' PWR EQ INSP-SVI Fall 2018	1211004	Wilson	BR	2018	CR01	Wilson	BR	Wilson - BR
2020	18805247	5	On a Fixed Date	PR	62562606	NOCO ORAS	INIT	CR01		04/22/2020	04/22/2020	04/22/2020	N-TS-WILSONTS	-BR-SC2Y	STN 'B' PWR EQ INSP-SVI April wk3	1211011	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2018	16814021	5	On a Fixed Date	PR	61570343	NOCO ORAS	INIT	CR01		06/07/2018	06/07/2018	06/07/2018	N-TS-WILSONTS	-BR-SC2Y	STN 'B' PWR EQ INSP-SVI Spr 2018	1211011	Wilson	BR	2018	CR01	Wilson	BR	Wilson - BR
2016	15199761	5	On a Fixed Date	PR	61170804	NOCO ORAS	INIT	CR01		10/26/2016	10/26/2016	10/26/2016	N-TS-WILSONTS	-BR-SC2Y	STN 'B' PWR EQ INSP-SVI FALL 2016	1211011	Wilson	BR	2016	CR01	Wilson	BR	Wilson - BR
2019	18074021	5	On a Fixed Date	PR	61926949	NOCO ORAS	INIT	CR01		10/01/2019	10/01/2019	10/01/2019	N-TS-WILSONTS	-BR-SC2Y	STN BREAKER BLOWDOWN 3of4 2019	1211011	Wilson	BR	2019	CR01	Wilson	BR	Wilson - BR
2020	18644239	5	On a Fixed Date	PR	62291354	NOCO ORAS	INIT	CR01		03/11/2020	03/11/2020	03/11/2020	N-TS-WILSONTS	-BR-SC2Y	STN 'B' PWR EQ INSP-SVI Spr 2020	1211011	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2018	17142241	5	On a Fixed Date	PR	61572881	NOCO ORAS	INIT	CR01		12/12/2018	12/12/2018	12/12/2018	N-TS-WILSONTS	-BR-SC2Y	STN BREAKER BLOWDOWN 4of4 2018	1211011	Wilson	BR	2018	CR01	Wilson	BR	Wilson - BR
2020	18543818	5	On a Fixed Date	PR	62295701	NOCO ORAS	INIT	CR01		02/13/2020	02/13/2020	02/13/2020	N-TS-WILSONTS	-BR-SC2Y	STN BREAKER BLOWDOWN 1of4 2020	1211011	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2019	16893973	6	By a Fixed Date	PR	61925633	NOCO ORAS	INIT	CR02	1	07/07/2018	07/07/2018	07/12/2019	N-TS-WILSONTS	-BR-SC2Y	BR-SF6-SP-M1	1211011	Wilson	BR	2019	CR02	Wilson	BR	Wilson - BR
2020	19227705	6	By a Fixed Date	PR	62707804	NOCO ORAS	INIT	CR04	5	08/04/2020	08/04/2020	08/13/2020	N-TS-WILSONTS	-BR-SC2Y	BR-SF6-SP-Strategy	1211011	Wilson	BR	2020	CR04	Wilson	BR	Wilson - BR
2020	18903192	6	By a Fixed Date	PR	62583246	NOCO ORAS	INIT	CR01	2	05/08/2020	05/08/2020	07/17/2020	N-TS-WILSONTS	-BR-SC2Y	BR-SF6-SP-Strategy	1211011	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2018	17031480	5	On a Fixed Date	PR	61572880	NOCO ORAS	INIT	CR01		10/10/2018	10/10/2018	10/10/2018	N-TS-WILSONTS	-BR-SC2Y	STN BREAKER BLOWDOWN 3of4 2018	1211011	Wilson	BR	2018	CR01	Wilson	BR	Wilson - BR
2019	18055559	5	On a Fixed Date	PR	61923631	NOCO ORAS	INIT	CR01		09/25/2019	09/25/2019	09/25/2019	N-TS-WILSONTS	-BR-SC2Y	STN 'B' PWR EQ INSP-SVI Fall 2019	1211011	Wilson	BR	2019	CR01	Wilson	BR	Wilson - BR
2016	14517770	5	On a Fixed Date	PR	61170803	NOCO ORAS	INIT	CR01		02/17/2016	02/17/2016	02/17/2016	N-TS-WILSONTS	-BR-SC2Y	STN 'B' PWR EQ INSP-SVI SPRING 2016	1211011	Wilson	BR	2016	CR01	Wilson	BR	Wilson - BR
2018	16682933	5	On a Fixed Date	PR	61572878	NOCO ORAS	INIT	CR01		04/20/2018	04/20/2018	04/20/2018	N-TS-WILSONTS	-BR-SC2Y	STN BREAKER BLOWDOWN 1of4 2018	1211011	Wilson	BR	2018	CR01	Wilson	BR	Wilson - BR
2017	16109542	5	On a Fixed Date	PR	61325366	NOCO ORAS	INIT	CR01		09/27/2017	09/27/2017	09/27/2017	N-TS-WILSONTS	-BR-SC2Y	STN 'B' PWR EQ INSP-SVI Fall 2017	1211011	Wilson	BR	2017	CR01	Wilson	BR	Wilson - BR
2017	15650338	5	On a Fixed Date	PR	61348644	NOCO ORAS	INIT	CR01		05/11/2017	05/11/2017	05/11/2017	N-TS-WILSONTS	-BR-SC2Y	STN BREAKER BLOWDOWN 2of4 2017	1211011	Wilson	BR	2017	CR01	Wilson	BR	Wilson - BR
2020	19333131	5	On a Fixed Date	PR	62291355	NOCO ORAS	INIT	CR01		09/16/2020	09/16/2020	09/16/2020	N-TS-WILSONTS	-BR-SC2Y	STN 'B' PWR EQ INSP-SVI Fall 2020	1211011	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2017	15479863	5	On a Fixed Date	PR	61325365	NOCO ORAS	INIT	CR02		04/20/2017	04/20/2017	04/20/2017	N-TS-WILSONTS	-BR-SC2Y	STN 'B' PWR EQ INSP-SVI Spr 2017	1211011	Wilson	BR	2017	CR02	Wilson	BR	Wilson - BR
2019	17648937	5	On a Fixed Date	PR	61926947	NOCO ORAS	INIT	CR01		05/27/2019	05/27/2019	05/27/2019	N-TS-WILSONTS	-BR-SC2Y	STN BREAKER BLOWDOWN 1of4 2019	1211011	Wilson	BR	2019	CR01	Wilson	BR	Wilson - BR
2020	19015370	5	On a Fixed Date	PR	62562612	NOCO ORAS	INIT	CR01		06/02/2020	06/02/2020	06/02/2020	N-TS-WILSONTS	-BR-SC2Y	STN 'B' PWR EQ INSP-SVI June wk1	1211011	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2019	17646232	5	On a Fixed Date	PR	61923630	NOCO ORAS	INIT	CR02		05/24/2019	05/24/2019	05/24/2019	N-TS-WILSONTS	-BR-SC2Y	STN 'B' PWR EQ INSP-SVI Spr 2019	1211011	Wilson	BR	2019	CR02	Wilson	BR	Wilson - BR
2020	19124320	5	On a Fixed Date	PR	62295702	NOCO ORAS	INIT	CR01		07/03/2020	07/03/2020	07/03/2020	N-TS-WILSONTS	-BR-SC2Y	STN BREAKER BLOWDOWN 2of4 2020	1211011	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2020	19685396	5	On a Fixed Date	PR	62295704	NOCO ORAS	INIT	CR01		12/09/2020	12/09/2020	12/09/2020	N-TS-WILSONTS	-BR-SC2Y	STN BREAKER BLOWDOWN 4of4 2020	1211011	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2018	17112499	5	On a Fixed Date	PR	61572879	NOCO ORAS	INIT	CR01		11/10/2018	11/10/2018	11/10/2018	N-TS-WILSONTS	-BR-SC2Y	STN BREAKER BLOWDOWN 2of4 2018	1211011	Wilson	BR	2018	CR01	Wilson	BR	Wilson - BR
2018	17113132	5	On a Fixed Date	PR	61570344	NOCO ORAS	INIT	CR01		11/12/2018	11/12/2018	11/12/2018	N-TS-WILSONTS	-BR-SC2Y	STN 'B' PWR EQ INSP-SVI Fall 2018	1211011	Wilson	BR	2018	CR01	Wilson	BR	Wilson - BR
2020	18893048	5	On a Fixed Date	PR	62562608	NOCO ORAS	INIT	CR01		05/07/2020	05/07/2020	05/07/2020	N-TS-WILSONTS	-BR-SC2Y	STN 'B' PWR EQ INSP-SVI May wk1	1211011	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2020	19685386	5	On a Fixed Date	PR	62295703	NOCO ORAS	INIT	CR01		12/09/2020	12/09/2020	12/09/2020	N-TS-WILSONTS	-BR-SC2Y	STN BREAKER BLOWDOWN 3of4 2020	1211011	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2016	15206286	5	On a Fixed Date	PR	61273342	NOCO ORAS	INIT	CR01		10/28/2016	10/28/2016	10/28/2016	N-TS-WILSONTS	-BR-SC2Y	STN BREAKER BLOWDOWN 4of4 2016	1211011	Wilson	BR	2016	CR01	Wilson	BR	Wilson - BR
2017	16201245	5	On a Fixed Date	PR	61348646	NOCO ORAS	INIT	CR01		11/15/2017	11/15/2017	11/15/2017	N-TS-WILSONTS	-BR-SC2Y	STN BREAKER BLOWDOWN 4of4 2017	1211011	Wilson	BR	2017	CR01	Wilson	BR	Wilson - BR
2018	17112959	5	On a Fixed Date	PR	61570344	NOCO ORAS	INIT	CR01		11/12/2018	11/12/2018	11/12/2018	N-TS-WILSONTS	-BR-SC2Y	STN 'B' PWR EQ INSP-SVI Fall 2018	1211011	Wilson	BR	2018	CR01	Wilson	BR	Wilson - BR
2017	15650040	5	On a Fixed Date	PR	61348643	NOCO ORAS	INIT	CR01		05/11/2017	05/11/2017	05/11/2017	N-TS-WILSONTS	-BR-SC2Y	STN BREAKER BLOWDOWN 1of4 2017	1211011	Wilson	BR	2017	CR01	Wilson	BR	Wilson - BR
2019	18387110	5	On a Fixed Date	PR	61926950	NOCO ORAS	INIT	CR01		12/09/2019	12/09/2019	12/09/2019	N-TS-WILSONTS	-BR-SC2Y	STN BREAKER BLOWDOWN 4of4 2019	1211011	Wilson	BR	2019	CR01	Wilson	BR	Wilson - BR
2016	15206283	5	On a Fixed Date	PR	61273341	NOCO ORAS	INIT	CR01		10/28/2016	10/28/2016	10/28/2016	N-TS-WILSONTS	-BR-SC2Y	STN BREAKER BLOWDOWN 3of4 2016	1211011	Wilson	BR	2016	CR01	Wilson	BR	Wilson - BR
2017	16092346	5	On a Fixed Date	PR	61348645	NOCO ORAS	INIT	CR01		09/22/2017	09/22/2017	09/22/2017	N-TS-WILSONTS	-BR-SC2Y	STN BREAKER BLOWDOWN 3of4 2017	1211011	Wilson	BR	2017	CR01	Wilson	BR	Wilson - BR
2016	15206248	5	On a Fixed Date	PR	61273340	NOCO ORAS	INIT	CR01		10/28/2016	10/28/2016	10/28/2016	N-TS-WILSONTS	-BR-SC2Y	STN BREAKER BLOWDOWN 2of4 2016	1211011	Wilson	BR	2016	CR01	Wilson	BR	Wilson - BR
2020	18773051	5	On a Fixed Date	PR	62562605	NOCO ORAS	INIT	CR01		04/16/2020	04/16/2020	04/16/2020	N-TS-WILSONTS	-BR-SC2Y	STN 'B' PWR EQ INSP-SVI April wk2	1211011	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2019	17646234	5	On a Fixed Date	PR	61923630	NOCO ORAS	INIT	CR02		05/24/2019	05/24/2019	05/24/2019	N-TS-WILSONTS	-BR-SC3J	STN 'B' PWR EQ INSP-SVI Spr 2019	1211024	Wilson	BR	2019	CR02	Wilson	BR	Wilson - BR
2018	17112501	5	On a Fixed Date	PR	61572879	NOCO ORAS	INIT	CR01		11/10/2018	11/10/2018	11/10/2018	N-TS-WILSONTS	-BR-SC3J	STN BREAKER BLOWDOWN 2of4 2018	1211024	Wilson	BR	2018	CR01	Wilson	BR	Wilson - BR
2018	17112978	5	On a Fixed Date	PR	61570344	NOCO ORAS	INIT	CR01		11/12/2018	11/12/2018	11/12/2018	N-TS-WILSONTS	-BR-SC3J	STN 'B' PWR EQ INSP-SVI Fall 2018	1211024	Wilson	BR	2018	CR01	Wilson	BR	Wilson - BR
2020	19685401	5	On a Fixed Date	PR	62295703	NOCO ORAS	INIT	CR01		12/09/2020	12/09/2020	12/09/2020	N-TS-WILSONTS	-BR-SC3J	STN BREAKER BLOWDOWN 3of4 2020	1211024	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2018	15889732	6	By a Fixed Date	PR	61571243	NOCO ORAS	INIT	CR02	1	07/22/2017	07/22/2017	08/22/2018	N-TS-WILSONTS	-BR-SC3J	BR-SF6-SP-M1	1211024	Wilson	BR	2018	CR02	Wilson	BR	Wilson - BR
2016	15206288	5	On a Fixed Date	PR	61273342	NOCO ORAS	INIT	CR01		10/28/2016	10/28/2016	10/28/2016	N-TS-WILSONTS	-BR-SC3J	STN BREAKER BLOWDOWN 4of4 2016	1211024	Wilson	BR	2016	CR01	Wilson	BR	Wilson - BR
2019	17648939	5	On a Fixed Date	PR	61926947	NOCO ORAS	INIT	CR01		05/27/2019	05/27/2019	05/27/2019	N-TS-WILSONTS	-BR-SC3J	STN BREAKER BLOWDOWN 1of4 2019	1211024	Wilson	BR	2019	CR01	Wilson	BR	Wilson - BR
2016	15206260	5	On a Fixed Date	PR	61273340	NOCO ORAS	INIT	CR01		10/28/2016	10/28/2016	10/28/2016	N-TS-WILSONTS	-BR-SC3J	STN BREAKER BLOWDOWN 2of4 2016	1211024	Wilson	BR	2016	CR01	Wilson	BR	Wilson - BR
2017	15479892	5	On a Fixed Date	PR	61325365	NOCO ORAS	INIT	CR02		04/20/2017	04/20/2017	04/20/2017	N-TS-WILSONTS	-BR-SC3J	STN 'B' PWR EQ INSP-SVI Spr 2017	1211024	Wilson	BR	2017	CR02	Wilson	BR	Wilson - BR
2016	15199762	5	On a Fixed Date	PR	61170804	NOCO ORAS	INIT	CR01		10/26/2016	10/26/2016	10/26/2016	N-TS-WILSONTS	-BR-SC3J	STN 'B' PWR EQ INSP-SVI FALL 2016	1211024	Wilson	BR	2016	CR01	Wilson	BR	Wilson - BR
2016	14517750	5	On a Fixed Date	PR	61170803	NOCO ORAS	INIT	CR01		02/17/2016	02/17/2016	02/17/2016	N-TS-WILSONTS	-BR-SC3J	STN 'B' PWR EQ INSP-SVI SPRING 2016	1211024	Wilson	BR	2016	CR01	Wilson	BR	Wilson - BR
2020	19124321	5	On a Fixed Date	PR	62295702	NOCO ORAS	INIT	CR01		07/03/2020	07/03/2020	07/03/2020	N-TS-WILSONTS	-BR-SC3J	STN BREAKER BLOWDOWN 2of4 2020	1211024	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2020	18644290	5	On a Fixed Date	PR	62291354	NOCO ORAS	INIT	CR01		03/11/2020	03/11/2020	03/11/2020	N-TS-WILSONTS	-BR-SC3J	STN 'B' PWR EQ INSP-SVI Spr 2020	1211024	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2019	18055570	5	On a Fixed Date	PR	61923631	NOCO ORAS	INIT	CR01		09/25/2019	09/25/2019	09/25/2019	N-TS-WILSONTS	-BR-SC3J	STN 'B' PWR EQ INSP-SVI Fall 2019	1211024	Wilson	BR	2019	CR01	Wilson	BR	Wilson - BR
2020	19333132	5	On a Fixed Date	PR	62291355	NOCO ORAS	INIT	CR01		09/16/2020	09/16/2020	09/16/2020	N-TS-WILSONTS	-BR-SC3J	STN 'B' PWR EQ INSP-SVI Fall 2020	1211024	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2019	18387111	5	On a Fixed Date	PR	61926950	NOCO ORAS	INIT	CR01		12/09/2019	12/09/2019	12/09/2019	N-TS-WILSONTS	-BR-SC3J	STN BREAKER BLOWDOWN 4of4 2019	1211024	Wilson	BR	2019	CR01	Wilson	BR	Wilson - BR
2020	19015371	5	On a Fixed Date	PR	62562612	NOCO ORAS	INIT	CR01		06/02/2020	06/02/2020	06/02/2020	N-TS-WILSONTS	-BR-SC3J	STN 'B' PWR EQ INSP-SVI June wk1	1211024	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2017	16092347	5	On a Fixed Date	PR	61348645	NOCO ORAS	INIT	CR01		09/22/2017	09/22/2017	09/22/2017	N-TS-WILSONTS	-BR-SC3J	STN BREAKER BLOWDOWN 3of4 2017	1211024	Wilson	BR	2017	CR01	Wilson	BR	Wilson - BR
2018	16814022	5	On a Fixed Date	PR	61570343	NOCO ORAS	INIT	CR01		06/07/2018	06/07/2018	06/07/2018	N-TS-WILSONTS	-BR-SC3J	STN 'B' PWR EQ INSP-SVI Spr 2018	1211024	Wilson	BR	2018	CR01	Wilson	BR	Wilson - BR
2019	18074023	5	On a Fixed Date	PR	61926949	NOCO ORAS	INIT	CR01		10/01/2019	10/01/2019	10/01/2019	N-TS-WILSONTS	-BR-SC3J	STN BREAKER BLOWDOWN 3of4 2019	1211024	Wilson	BR	2019	CR01	Wilson	BR	Wilson - BR
2020	18543819	5	On a Fixed Date	PR	62295701	NOCO ORAS	INIT	CR01		02/13/2020	02/13/2020	02/13/2020	N-TS-WILSONTS	-BR-SC3J	STN BREAKER BLOWDOWN 1of4 2020	1211024	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2018	17142242	5	On a Fixed Date	PR	61572881	NOCO ORAS	INIT	CR01		12/12/2018	12/12/2018	12/12/2018	N-TS-WILSONTS	-BR-SC3J	STN BREAKER BLOWDOWN 4of4 2018	1211024	Wilson	BR	2018	CR01	Wilson	BR	Wilson - BR
2020	19685397	5	On a Fixed Date	PR	62295704	NOCO ORAS	INIT	CR01		12/09/2020	12/09/2020	12/09/2020	N-TS-WILSONTS	-BR-SC3J	STN BREAKER BLOWDOWN 4of4 2020	1211024	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2017	16201247	5	On a Fixed Date	PR	61348646	NOCO ORAS	INIT	CR01		11/15/2017	11/15/2017	11/15/2017	N-TS-WILSONTS	-BR-SC3J	STN BREAKER BLOWDOWN 4of4 2017	1211024	Wilson	BR	2017	CR01	Wilson	BR	Wilson - BR
2018	16682934	5	On a Fixed Date	PR	61572878	NOCO ORAS	INIT	CR01		04/20/2018	04/20/2018	04/20/2018	N-TS-WILSONTS	-BR-SC3J	STN BREAKER BLOWDOWN 1of4 2018	1211024	Wilson	BR	2018	CR01	Wilson	BR	Wilson - BR
2020	18805176	5	On a Fixed Date	PR	62562606	NOCO ORAS	INIT	CR01		04/22/2020	04/22/2020	04/22/2020	N-TS-WILSONTS	-BR-SC3J	STN 'B' PWR EQ INSP-SVI April wk3	1211024	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2016	15206285	5	On a Fixed Date	PR	61273341	NOCO ORAS	INIT	CR01		10/28/2016	10/28/2016	10/28/2016	N-TS-WILSONTS	-BR-SC3J	STN BREAKER BLOWDOWN 3of4 2016	1211024	Wilson	BR	2016	CR01	Wilson	BR	Wilson - BR
2018	17031468	5	On a Fixed Date	PR	61572880	NOCO ORAS	INIT	CR01		10/10/2018	10/10/2018	10/10/2018	N-TS-WILSONTS	-BR-SC3J	STN BREAKER BLOWDOWN 3of4 2018	1211024	Wilson	BR	2018	CR01	Wilson	BR	Wilson - BR
2017	15650339	5	On a Fixed Date	PR	61348644	NOCO ORAS	INIT	CR01		05/11/2017	05/11/2017	05/11/2017	N-TS-WILSONTS	-BR-SC3J	STN BREAKER BLOWDOWN 2of4 2017	1211024	Wilson	BR	2017	CR01	Wilson	BR	Wilson - BR
2017	15650041	5	On a Fixed Date	PR	61348643	NOCO ORAS	INIT	CR01		05/11/2017	05/11/2017	05/11/2017	N-TS-WILSONTS	-BR-SC3J	STN BREAKER BLOWDOWN 1of4 2017	1211024	Wilson	BR	2017	CR01	Wilson	BR	Wilson - BR
2020	18893061	5	On a Fixed Date	PR	62562608	NOCO ORAS	INIT	CR01		05/07/2020	05/07/2020	05/07/2020	N-TS-WILSONTS	-BR-SC3J	STN 'B' PWR EQ INSP-SVI May wk1	1211024	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2017	16109545	5	On a Fixed Date	PR	61325366	NOCO ORAS	INIT	CR01		09/27/2017	09/27/2017	09/27/2017	N-TS-WILSONTS	-BR-SC3J	STN 'B' PWR EQ INSP-SVI Fall 2017	1211024	Wilson	BR	2017	CR01	Wilson	BR	Wilson - BR

2018	17113136	5	On a Fixed Date	PR	61570344	NOCO ORAS	INIT	CR01		11/12/2018	11/12/2018	11/12/2018	N-TS-WILSONTS	-BR-SC3J	STN 'B' PWR EQ INSP-SVI Fall 2018	1211024	Wilson	BR	2018	CR01	Wilson	BR	Wilson - BR
2020	18773059	5	On a Fixed Date	PR	62562605	NOCO ORAS	INIT	CR01		04/16/2020	04/16/2020	04/16/2020	N-TS-WILSONTS	-BR-SC3J	STN 'B' PWR EQ INSP-SVI April wk2	1211024	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2017	16109548	5	On a Fixed Date	PR	61325366	NOCO ORAS	INIT	CR01		09/27/2017	09/27/2017	09/27/2017	N-TS-WILSONTS	-BR-SC4Q	STN 'B' PWR EQ INSP-SVI Fall 2017	1211036	Wilson	BR	2017	CR01	Wilson	BR	Wilson - BR
2018	17112503	5	On a Fixed Date	PR	61572879	NOCO ORAS	INIT	CR01		11/10/2018	11/10/2018	11/10/2018	N-TS-WILSONTS	-BR-SC4Q	STN BREAKER BLOWDOWN 2of4 2018	1211036	Wilson	BR	2018	CR01	Wilson	BR	Wilson - BR
2020	18805177	5	On a Fixed Date	PR	62562606	NOCO ORAS	INIT	CR01		04/22/2020	04/22/2020	04/22/2020	N-TS-WILSONTS	-BR-SC4Q	STN 'B' PWR EQ INSP-SVI April wk3	1211036	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2019	17648941	5	On a Fixed Date	PR	61926947	NOCO ORAS	INIT	CR01		05/27/2019	05/27/2019	05/27/2019	N-TS-WILSONTS	-BR-SC4Q	STN BREAKER BLOWDOWN 1of4 2019	1211036	Wilson	BR	2019	CR01	Wilson	BR	Wilson - BR
2019	18387112	5	On a Fixed Date	PR	61926950	NOCO ORAS	INIT	CR01		12/09/2019	12/09/2019	12/09/2019	N-TS-WILSONTS	-BR-SC4Q	STN BREAKER BLOWDOWN 4of4 2019	1211036	Wilson	BR	2019	CR01	Wilson	BR	Wilson - BR
2019	16893938	6	By a Fixed Date	PR	61925628	NOCO ORAS	INIT	CR02	1	07/07/2018	07/07/2018	07/04/2019	N-TS-WILSONTS	-BR-SC4Q	BR-SF6-SP-M1	1211036	Wilson	BR	2019	CR02	Wilson	BR	Wilson - BR
2016	14517748	5	On a Fixed Date	PR	61170803	NOCO ORAS	INIT	CR01		02/17/2016	02/17/2016	02/17/2016	N-TS-WILSONTS	-BR-SC4Q	STN 'B' PWR EQ INSP-SVI SPRING 2016	1211036	Wilson	BR	2016	CR01	Wilson	BR	Wilson - BR
2020	19015372	5	On a Fixed Date	PR	62562612	NOCO ORAS	INIT	CR01		06/02/2020	06/02/2020	06/02/2020	N-TS-WILSONTS	-BR-SC4Q	STN 'B' PWR EQ INSP-SVI June wk1	1211036	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2018	17112990	5	On a Fixed Date	PR	61570344	NOCO ORAS	INIT	CR01		11/12/2018	11/12/2018	11/12/2018	N-TS-WILSONTS	-BR-SC4Q	STN 'B' PWR EQ INSP-SVI Fall 2018	1211036	Wilson	BR	2018	CR01	Wilson	BR	Wilson - BR
2018	16814023	5	On a Fixed Date	PR	61570343	NOCO ORAS	INIT	CR01		06/07/2018	06/07/2018	06/07/2018	N-TS-WILSONTS	-BR-SC4Q	STN 'B' PWR EQ INSP-SVI Spr 2018	1211036	Wilson	BR	2018	CR01	Wilson	BR	Wilson - BR
2017	16201249	5	On a Fixed Date	PR	61348646	NOCO ORAS	INIT	CR01		11/15/2017	11/15/2017	11/15/2017	N-TS-WILSONTS	-BR-SC4Q	STN BREAKER BLOWDOWN 4of4 2017	1211036	Wilson	BR	2017	CR01	Wilson	BR	Wilson - BR
2018	16682936	5	On a Fixed Date	PR	61572878	NOCO ORAS	INIT	CR01		04/20/2018	04/20/2018	04/20/2018	N-TS-WILSONTS	-BR-SC4Q	STN BREAKER BLOWDOWN 1of4 2018	1211036	Wilson	BR	2018	CR01	Wilson	BR	Wilson - BR
2019	17646121	5	On a Fixed Date	PR	61923630	NOCO ORAS	INIT	CR02		05/24/2019	05/24/2019	05/24/2019	N-TS-WILSONTS	-BR-SC4Q	STN 'B' PWR EQ INSP-SVI Spr 2019	1211036	Wilson	BR	2019	CR02	Wilson	BR	Wilson - BR
2018	17113137	5	On a Fixed Date	PR	61570344	NOCO ORAS	INIT	CR01		11/12/2018	11/12/2018	11/12/2018	N-TS-WILSONTS	-BR-SC4Q	STN 'B' PWR EQ INSP-SVI Fall 2018	1211036	Wilson	BR	2018	CR01	Wilson	BR	Wilson - BR
2016	15206262	5	On a Fixed Date	PR	61273340	NOCO ORAS	INIT	CR01		10/28/2016	10/28/2016	10/28/2016	N-TS-WILSONTS	-BR-SC4Q	STN BREAKER BLOWDOWN 2of4 2016	1211036	Wilson	BR	2016	CR01	Wilson	BR	Wilson - BR
2019	18074026	5	On a Fixed Date	PR	61926949	NOCO ORAS	INIT	CR01		10/01/2019	10/01/2019	10/01/2019	N-TS-WILSONTS	-BR-SC4Q	STN BREAKER BLOWDOWN 3of4 2019	1211036	Wilson	BR	2019	CR01	Wilson	BR	Wilson - BR
2018	17031469	5	On a Fixed Date	PR	61572880	NOCO ORAS	INIT	CR01		10/10/2018	10/10/2018	10/10/2018	N-TS-WILSONTS	-BR-SC4Q	STN BREAKER BLOWDOWN 3of4 2018	1211036	Wilson	BR	2018	CR01	Wilson	BR	Wilson - BR
2020	19685407	5	On a Fixed Date	PR	62295703	NOCO ORAS	INIT	CR01		12/09/2020	12/09/2020	12/09/2020	N-TS-WILSONTS	-BR-SC4Q	STN BREAKER BLOWDOWN 3of4 2020	1211036	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2017	15650540	5	On a Fixed Date	PR	61348644	NOCO ORAS	INIT	CR01		05/11/2017	05/11/2017	05/11/2017	N-TS-WILSONTS	-BR-SC4Q	STN BREAKER BLOWDOWN 2of4 2017	1211036	Wilson	BR	2017	CR01	Wilson	BR	Wilson - BR
2020	18773065	5	On a Fixed Date	PR	62562605	NOCO ORAS	INIT	CR01		04/16/2020	04/16/2020	04/16/2020	N-TS-WILSONTS	-BR-SC4Q	STN 'B' PWR EQ INSP-SVI April wk2	1211036	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2016	15206287	5	On a Fixed Date	PR	61273341	NOCO ORAS	INIT	CR01		10/28/2016	10/28/2016	10/28/2016	N-TS-WILSONTS	-BR-SC4Q	STN BREAKER BLOWDOWN 3of4 2016	1211036	Wilson	BR	2016	CR01	Wilson	BR	Wilson - BR
2020	19685398	5	On a Fixed Date	PR	62295704	NOCO ORAS	INIT	CR01		12/09/2020	12/09/2020	12/09/2020	N-TS-WILSONTS	-BR-SC4Q	STN BREAKER BLOWDOWN 4of4 2020	1211036	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2020	18892919	5	On a Fixed Date	PR	62562608	NOCO ORAS	INIT	CR01		05/07/2020	05/07/2020	05/07/2020	N-TS-WILSONTS	-BR-SC4Q	STN 'B' PWR EQ INSP-SVI May wk1	1211036	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2018	17142243	5	On a Fixed Date	PR	61572881	NOCO ORAS	INIT	CR01		12/12/2018	12/12/2018	12/12/2018	N-TS-WILSONTS	-BR-SC4Q	STN BREAKER BLOWDOWN 4of4 2018	1211036	Wilson	BR	2018	CR01	Wilson	BR	Wilson - BR
2017	15479881	5	On a Fixed Date	PR	61325365	NOCO ORAS	INIT	CR02		04/20/2017	04/20/2017	04/20/2017	N-TS-WILSONTS	-BR-SC4Q	STN 'B' PWR EQ INSP-SVI Spr 2017	1211036	Wilson	BR	2017	CR02	Wilson	BR	Wilson - BR
2016	15206268	5	On a Fixed Date	PR	61273342	NOCO ORAS	INIT	CR01		10/28/2016	10/28/2016	10/28/2016	N-TS-WILSONTS	-BR-SC4Q	STN BREAKER BLOWDOWN 4of4 2016	1211036	Wilson	BR	2016	CR01	Wilson	BR	Wilson - BR
2017	16092348	5	On a Fixed Date	PR	61348645	NOCO ORAS	INIT	CR01		09/22/2017	09/22/2017	09/22/2017	N-TS-WILSONTS	-BR-SC4Q	STN BREAKER BLOWDOWN 3of4 2017	1211036	Wilson	BR	2017	CR01	Wilson	BR	Wilson - BR
2020	19333133	5	On a Fixed Date	PR	62291355	NOCO ORAS	INIT	CR01		09/16/2020	09/16/2020	09/16/2020	N-TS-WILSONTS	-BR-SC4Q	STN 'B' PWR EQ INSP-SVI Fall 2020	1211036	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2020	19124322	5	On a Fixed Date	PR	62295702	NOCO ORAS	INIT	CR01		07/03/2020	07/03/2020	07/03/2020	N-TS-WILSONTS	-BR-SC4Q	STN BREAKER BLOWDOWN 2of4 2020	1211036	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2020	18543820	5	On a Fixed Date	PR	62295701	NOCO ORAS	INIT	CR01		02/13/2020	02/13/2020	02/13/2020	N-TS-WILSONTS	-BR-SC4Q	STN BREAKER BLOWDOWN 1of4 2020	1211036	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2016	15199763	5	On a Fixed Date	PR	61170804	NOCO ORAS	INIT	CR01		10/26/2016	10/26/2016	10/26/2016	N-TS-WILSONTS	-BR-SC4Q	STN 'B' PWR EQ INSP-SVI FALL 2016	1211036	Wilson	BR	2016	CR01	Wilson	BR	Wilson - BR
2019	18055571	5	On a Fixed Date	PR	61923631	NOCO ORAS	INIT	CR01		09/25/2019	09/25/2019	09/25/2019	N-TS-WILSONTS	-BR-SC4Q	STN 'B' PWR EQ INSP-SVI Fall 2019	1211036	Wilson	BR	2019	CR01	Wilson	BR	Wilson - BR
2017	15650042	5	On a Fixed Date	PR	61348643	NOCO ORAS	INIT	CR01		05/11/2017	05/11/2017	05/11/2017	N-TS-WILSONTS	-BR-SC4Q	STN BREAKER BLOWDOWN 1of4 2017	1211036	Wilson	BR	2017	CR01	Wilson	BR	Wilson - BR
2020	18644291	5	On a Fixed Date	PR	62291354	NOCO ORAS	INIT	CR01		03/11/2020	03/11/2020	03/11/2020	N-TS-WILSONTS	-BR-SC4Q	STN 'B' PWR EQ INSP-SVI Spr 2020	1211036	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2018	17113151	5	On a Fixed Date	PR	61570344	NOCO ORAS	INIT	CR01		11/12/2018	11/12/2018	11/12/2018	N-TS-WILSONTS	-BR-T2Y	STN 'B' PWR EQ INSP-SVI Fall 2018	1213509	Wilson	BR	2018	CR01	Wilson	BR	Wilson - BR
2019	18055572	5	On a Fixed Date	PR	61923631	NOCO ORAS	INIT	CR01		09/25/2019	09/25/2019	09/25/2019	N-TS-WILSONTS	-BR-T2Y	STN 'B' PWR EQ INSP-SVI Fall 2019	1213509	Wilson	BR	2019	CR01	Wilson	BR	Wilson - BR
2018	17112998	5	On a Fixed Date	PR	61570344	NOCO ORAS	INIT	CR01		11/12/2018	11/12/2018	11/12/2018	N-TS-WILSONTS	-BR-T2Y	STN 'B' PWR EQ INSP-SVI Fall 2018	1213509	Wilson	BR	2018	CR01	Wilson	BR	Wilson - BR
2020	19015373	5	On a Fixed Date	PR	62562612	NOCO ORAS	INIT	CR01		06/02/2020	06/02/2020	06/02/2020	N-TS-WILSONTS	-BR-T2Y	STN 'B' PWR EQ INSP-SVI June wk1	1213509	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2019	17646122	5	On a Fixed Date	PR	61923630	NOCO ORAS	INIT	CR02		05/24/2019	05/24/2019	05/24/2019	N-TS-WILSONTS	-BR-T2Y	STN 'B' PWR EQ INSP-SVI Spr 2019	1213509	Wilson	BR	2019	CR02	Wilson	BR	Wilson - BR
2021	19204825	6	By a Fixed Date	PR	62693352	NOCO ORAS	INIT	CR01	1	07/21/2020	07/21/2020	01/17/2021	N-TS-WILSONTS	-BR-T2Y	BR-OIL-KSO-LV- BOA	1213509	Wilson	BR	2021	CR01	Wilson	BR	Wilson - BR
2016	14517747	5	On a Fixed Date	PR	61170803	NOCO ORAS	INIT	CR01		02/17/2016	02/17/2016	02/17/2016	N-TS-WILSONTS	-BR-T2Y	STN 'B' PWR EQ INSP-SVI SPRING 2016	1213509	Wilson	BR	2016	CR01	Wilson	BR	Wilson - BR
2020	18892930	5	On a Fixed Date	PR	62562608	NOCO ORAS	INIT	CR01		05/07/2020	05/07/2020	05/07/2020	N-TS-WILSONTS	-BR-T2Y	STN 'B' PWR EQ INSP-SVI May wk1	1213509	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2017	15479882	5	On a Fixed Date	PR	61325365	NOCO ORAS	INIT	CR02		04/20/2017	04/20/2017	04/20/2017	N-TS-WILSONTS	-BR-T2Y	STN 'B' PWR EQ INSP-SVI Spr 2017	1213509	Wilson	BR	2017	CR02	Wilson	BR	Wilson - BR
2020	19333134	5	On a Fixed Date	PR	62291355	NOCO ORAS	INIT	CR01		09/16/2020	09/16/2020	09/16/2020	N-TS-WILSONTS	-BR-T2Y	STN 'B' PWR EQ INSP-SVI Fall 2020	1213509	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2016	15199764	5	On a Fixed Date	PR	61170804	NOCO ORAS	INIT	CR01		10/26/2016	10/26/2016	10/26/2016	N-TS-WILSONTS	-BR-T2Y	STN 'B' PWR EQ INSP-SVI FALL 2016	1213509	Wilson	BR	2016	CR01	Wilson	BR	Wilson - BR
2020	18773066	5	On a Fixed Date	PR	62562605	NOCO ORAS	INIT	CR01		04/16/2020	04/16/2020	04/16/2020	N-TS-WILSONTS	-BR-T2Y	STN 'B' PWR EQ INSP-SVI April wk2	1213509	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2018	16814033	5	On a Fixed Date	PR	61570343	NOCO ORAS	INIT	CR01		06/07/2018	06/07/2018	06/07/2018	N-TS-WILSONTS	-BR-T2Y	STN 'B' PWR EQ INSP-SVI Spr 2018	1213509	Wilson	BR	2018	CR01	Wilson	BR	Wilson - BR
2020	18805030	5	On a Fixed Date	PR	62562606	NOCO ORAS	INIT	CR01		04/22/2020	04/22/2020	04/22/2020	N-TS-WILSONTS	-BR-T2Y	STN 'B' PWR EQ INSP-SVI April wk3	1213509	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2019	16913958	6	By a Fixed Date	PR	61945665	NOCO ORAS	INIT	CR01	1	07/20/2018	07/20/2018	06/20/2019	N-TS-WILSONTS	-BR-T2Y	BR-OIL-KSO-LV- Strategy	1213509	Wilson	BR	2019	CR01	Wilson	BR	Wilson - BR
2017	16109571	5	On a Fixed Date	PR	61325366	NOCO ORAS	INIT	CR01		09/27/2017	09/27/2017	09/27/2017	N-TS-WILSONTS	-BR-T2Y	STN 'B' PWR EQ INSP-SVI Fall 2017	1213509	Wilson	BR	2017	CR01	Wilson	BR	Wilson - BR
2019	14920212	6	By a Fixed Date	PR	61343309	ATCO NOCO ORAS	INIT	CR01	1	07/16/2016	07/16/2016	04/09/2019	N-TS-WILSONTS	-BR-T2Y	BR-OIL-KSO-LV- BOA	1213509	Wilson	BR	2019	CR01	Wilson	BR	Wilson - BR
2019	16380168	3	Medium (30-90 Days)	PR	61781627	NOCO ORAS	INIT	CR01	1	03/16/2018	02/14/2018	12/09/2019	N-TS-WILSONTS	-BR-T2Y	BR-OIL-KSO-LV- BOA Resample	1213509	Wilson	BR	2019	CR01	Wilson	BR	Wilson - BR
2020	18644292	5	On a Fixed Date	PR	62291354	NOCO ORAS	INIT	CR01		03/11/2020	03/11/2020	03/11/2020	N-TS-WILSONTS	-BR-T2Y	STN 'B' PWR EQ INSP-SVI Spr 2020	1213509	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2020	18773075	5	On a Fixed Date	PR	62562605	NOCO ORAS	INIT	CR01		04/16/2020	04/16/2020	04/16/2020	N-TS-WILSONTS	-BR-BY	STN 'B' PWR EQ INSP-SVI April wk2	1213529	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2020	19015374	5	On a Fixed Date	PR	62562612	NOCO ORAS	INIT	CR01		06/02/2020	06/02/2020	06/02/2020	N-TS-WILSONTS	-BR-BY	STN 'B' PWR EQ INSP-SVI June wk1	1213529	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2020	18892931	5	On a Fixed Date	PR	62562608	NOCO ORAS	INIT	CR01		05/07/2020	05/07/2020	05/07/2020	N-TS-WILSONTS	-BR-BY	STN 'B' PWR EQ INSP-SVI May wk1	1213529	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2019	17646120	5	On a Fixed Date	PR	61923630	NOCO ORAS	INIT	CR02		05/24/2019	05/24/2019	05/24/2019	N-TS-WILSONTS	-BR-BY	STN 'B' PWR EQ INSP-SVI Spr 2019	1213529	Wilson	BR	2019	CR02	Wilson	BR	Wilson - BR
2020	17812192	6	By a Fixed Date	PR	62293065	NOCO ORAS	INIT	CR01	1	07/21/2020	07/06/2019	06/04/2020	N-TS-WILSONTS	-BR-BY	BR-OIL-KSO-LV- BOA	1213529	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2020	18805040	5	On a Fixed Date	PR	62562606	NOCO ORAS	INIT	CR01		04/22/2020	04/22/2020	04/22/2020	N-TS-WILSONTS	-BR-BY	STN 'B' PWR EQ INSP-SVI April wk3	1213529	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2019	18055573	5	On a Fixed Date	PR	61923631	NOCO ORAS	INIT	CR01		09/25/2019	09/25/2019	09/25/2019	N-TS-WILSONTS	-BR-BY	STN 'B' PWR EQ INSP-SVI Fall 2019	1213529	Wilson	BR	2019	CR01	Wilson	BR	Wilson - BR
2020	18644293	5	On a Fixed Date	PR	62291354	NOCO ORAS	INIT	CR01		03/11/2020	03/11/2020	03/11/2020	N-TS-WILSONTS	-BR-BY	STN 'B' PWR EQ INSP-SVI Spr 2020	1213529	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2020	19333135	5	On a Fixed Date	PR	62291355	NOCO ORAS	INIT	CR01		09/16/2020	09/16/2020	09/16/2020	N-TS-WILSONTS	-BR-BY	STN 'B' PWR EQ INSP-SVI Fall 2020	1213529	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2019	14920154	6	By a Fixed Date	PR	61343301	ATCO NOCO ORAS	INIT	CR02	1	07/16/2016	07/16/2016	04/09/2019	N-TS-WILSONTS	-BR-BY	BR-OIL-KSO-LV- BOA	1213529	Wilson	BR	2019	CR02	Wilson	BR	Wilson - BR
2016	15199765	5	On a Fixed Date	PR	61170804	NOCO ORAS	INIT	CR01		10/26/2016	10/26/2016	10/26/2016	N-TS-WILSONTS	-BR-BY	STN 'B' PWR EQ INSP-SVI FALL 2016	1213529	Wilson	BR	2016	CR01	Wilson	BR	Wilson - BR
2017	16109574	5	On a Fixed Date	PR	61325366	NOCO ORAS	INIT	CR01		09/27/2017	09/27/2017	09/27/2017	N-TS-WILSONTS	-BR-BY	STN 'B' PWR EQ INSP-SVI Fall 2017	1213529	Wilson	BR	2017	CR01	Wilson	BR	Wilson - BR
2016	14517774	5	On a Fixed Date	PR	61170803	NOCO ORAS	INIT	CR01		02/17/2016	02/17/2016	02/17/2016	N-TS-WILSONTS	-BR-BY	STN 'B' PWR EQ INSP-SVI SPRING 2016	1213529	Wilson	BR	2016	CR01	Wilson	BR	Wilson - BR
2017	15479883	5	On a Fixed Date	PR	61325365	NOCO ORAS	INIT	CR02		04/20/2017	04/20/2017	04/20/2017	N-TS-WILSONTS	-BR-BY	STN 'B' PWR EQ INSP-SVI Spr 2017	1213529	Wilson	BR	2017	CR02	Wilson	BR	Wilson - BR
2018	16814024	5	On a Fixed Date	PR	61570343	NOCO ORAS	INIT	CR01		06/07/2018	06/07/2018	06/07/2018	N-TS-WILSONTS	-BR-BY	STN 'B' PWR EQ INSP-SVI Spr 2018	1213529	Wilson	BR	2018	CR01	Wilson	BR	Wilson - BR
2018	17113020	5	On a Fixed Date	PR	61570344	NOCO ORAS	INIT	CR01		11/12/2018	11/12/2018	11/12/2018	N-TS-WILSONTS	-BR-BY	STN 'B' PWR EQ INSP-SVI Fall 2018	1213529	Wilson	BR	2018	CR01	Wilson	BR	Wilson - BR
2018	17113152	5	On a Fixed Date	PR	61570344	NOCO ORAS	INIT	CR01		11/12/2018	11/12/2018	11/12/2018	N-TS-WILSONTS	-BR-BY	STN 'B' PWR EQ INSP-SVI Fall 2018	1213529	Wilson	BR	2018	CR01	Wilson	BR	Wilson - BR
2020	18644294	5	On a Fixed Date	PR	62291354	NOCO ORAS	INIT	CR01		03/11/2020	03/11/2020	03/11/2020	N-TS-WILSONTS	-BR-M5	STN 'B' PWR EQ INSP-SVI Spr 2020	1213614	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2020	19333136	5	On a Fixed Date	PR	62291355	NOCO ORAS	INIT	CR01		09/16/2020	09/16/2020	09/16/2020	N-TS-WILSONTS	-BR-M5	STN 'B' PWR EQ INSP-SVI Fall 2020	1213614	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2018	16814025	5	On a Fixed Date	PR	61570343	NOCO ORAS	INIT	CR01		06/07/2018	06/07/2018	06/07/2018	N-TS-WILSONTS	-BR-M5	STN 'B' PWR EQ INSP-SVI Spr 2018	1213614	Wilson	BR	2018	CR01	Wilson	BR	Wilson - BR
2016	14517775	5	On a Fixed Date	PR	61170803	NOCO ORAS	INIT	CR01		02/17/2016	02/17/2016	02/17/2016	N-TS-WILSONTS	-BR-M5	STN 'B' PWR EQ INSP-SVI SPRING 2016	1213614	Wilson	BR	2016	CR01	Wilson	BR	Wilson - BR
2018	17113153	5	On a Fixed Date	PR	61570344	NOCO ORAS	INIT	CR01		11/12/2018	11/12/2018	11/12/2018	N-TS-WILSONTS	-BR-M5	STN 'B' PWR EQ INSP-SVI Fall 2018	1213614	Wilson	BR	2018	CR01	Wilson	BR	Wilson - BR
2020	17812218	6	By a Fixed Date	PR	62293081	NOCO ORAS	INIT	CR01	1	06/23/2020	07/06/2019	03/19/2020	N-TS-WILSONTS	-BR-M5	BR-OIL-KSO-LV- BOA	1213614	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2020	18773077	5	On a Fixed Date	PR	62562605	NOCO ORAS	INIT	CR01		04/16/2020	04/16/2020	04/16/2020	N-TS-WILSONTS	-BR-M5	STN 'B' PWR EQ INSP-SVI April wk2	1213614	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2017	16109630	5	On a Fixed Date	PR	61325366	NOCO ORAS	INIT	CR01		09/27/2017	09/27/2017	09/27/2017	N-TS-WILSONTS	-BR-M5	STN 'B' PWR EQ INSP-SVI Fall 2017	1213614	Wilson	BR	2017	CR01	Wilson	BR	Wilson - BR
2019	18055575	5	On a Fixed Date	PR	61923631	NOCO ORAS	INIT	CR01		09/25/2019	09/25/2019	09/25/2019	N-TS-WILSONTS	-BR-M5	STN 'B' PWR EQ INSP-SVI Fall 2019	1213614	Wilson	BR	2019	CR01	Wilson	BR	Wilson - BR
2020	18825394	3	Medium (30-90 Days)	PR	62573268	NOCO ORAS	INIT	CR01	1	04/28/2020	04/27/2020	06/26/2020	N-TS-WILSONTS	-BR-M5	BR-OIL-KSO-LV- BOA(BOA)	1213614	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2018	17113022	5	On a Fixed Date	PR	61570344	NOCO ORAS	INIT	CR01		11/12/2018	11/12/2018	11/12/2018	N-TS-WILSONTS	-BR-M5	STN 'B' PWR EQ INSP-SVI Fall 2018	1213614	Wilson	BR	2018	CR01	Wilson	BR	Wilson - BR
2016	15199766	5	On a Fixed Date	PR	61170804	NOCO ORAS	INIT	CR01		10/26/2016	10/26/2016	10/26/2016	N-TS-WILSONTS	-BR-M5	STN 'B' PWR EQ INSP-SVI FALL 2016	1213614	Wilson	BR	2016	CR01	Wilson	BR	Wilson - BR
2019	14920159	6	By a Fixed Date	PR	61343306	ATCO NOCO ORAS	INIT	CR02	1	07/16/2016	07/16/2016	04/09/2019	N-TS-WILSONTS	-BR-M5	BR-OIL-KSO-LV- BOA	1213614	Wilson	BR	2019	CR02	Wilson	BR	Wilson - BR
2020	18805061	5	On a Fixed Date	PR	62562606	NOCO ORAS	INIT	CR01		04/22/2020	04/22/2020	04/22/2020	N-TS-WILSONTS	-BR-M5	STN 'B' PWR EQ INSP-SVI April wk3	1213614	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2019	17646123	5	On a Fixed Date	PR	61923630	NOCO ORAS	INIT	CR02		05/24/2019	05/24/2019	05/24/2019	N-TS-WILSONTS	-BR-M5	STN 'B' PWR EQ INSP-SVI Spr 2019	1213614	Wilson	BR	2019	CR02	Wilson	BR	Wilson - BR
2020	18892932	5	On a Fixed Date	PR	62562608	NOCO ORAS	INIT	CR01		05/07/2020	05/07/2020	05/07/2020	N-TS-WILSONTS	-BR-M5	STN 'B' PWR EQ INSP-SVI May wk1	1213614	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2017	15479884	5	On a Fixed Date	PR	61325365	NOCO ORAS	INIT	CR02		04/20/2017	04/20/2017	04/20/2017	N-TS-WILSONTS	-BR-M5	STN 'B' PWR EQ INSP-SVI Spr 2017	1213614	Wilson	BR	2017	CR02	Wilson	BR	Wilson - BR
2019	15942793	3	Medium (30-90 Days)	PR	61612914	ATCO NOCO ORAS	INIT	CR02	1	08/16/2017	08/16/2017	04/12/2019	N-TS-WILSONTS	-BR-M5	BR-OIL-KSO-LV- BOA(Resample)	1213614	Wilson	BR	2019	CR02	Wilson	BR	Wilson - BR
2020	19015319	5	On a Fixed Date	PR	62562612	NOCO ORAS	INIT	CR01		06/02/2020	06/02/2020	06/02/2020	N-TS-WILSONTS	-BR-M5	STN 'B' PWR EQ INSP-SVI June wk1	1213614	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR

2020	18773054	5	On a Fixed Date	PR	62562605	NOCO ORAS	INIT	CR01		04/16/2020	04/16/2020	04/16/2020	N-TS-WILSONTS	-BR-M1	STN 'B' PWR EQ INSP-SVI April wk2	1213628	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2020	16893366	6	By a Fixed Date	PR	61925026	NOCO ORAS	INIT	CR01	1	07/07/2018	07/07/2018	06/29/2020	N-TS-WILSONTS	-BR-M1	BR-OIL-KSO-LV- Strategy	1213628	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2020	18644295	5	On a Fixed Date	PR	62291354	NOCO ORAS	INIT	CR01		03/11/2020	03/11/2020	03/11/2020	N-TS-WILSONTS	-BR-M1	STN 'B' PWR EQ INSP-SVI Spr 2020	1213628	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2016	14517776	5	On a Fixed Date	PR	61170803	NOCO ORAS	INIT	CR01		02/17/2016	02/17/2016	02/17/2016	N-TS-WILSONTS	-BR-M1	STN 'B' PWR EQ INSP-SVI SPRING 2016	1213628	Wilson	BR	2016	CR01	Wilson	BR	Wilson - BR
2017	16109633	5	On a Fixed Date	PR	61325366	NOCO ORAS	INIT	CR01		09/27/2017	09/27/2017	09/27/2017	N-TS-WILSONTS	-BR-M1	STN 'B' PWR EQ INSP-SVI Fall 2017	1213628	Wilson	BR	2017	CR01	Wilson	BR	Wilson - BR
2017	15479897	5	On a Fixed Date	PR	61325365	NOCO ORAS	INIT	CR02		04/20/2017	04/20/2017	04/20/2017	N-TS-WILSONTS	-BR-M1	STN 'B' PWR EQ INSP-SVI Spr 2017	1213628	Wilson	BR	2017	CR02	Wilson	BR	Wilson - BR
2020	19333137	5	On a Fixed Date	PR	62291355	NOCO ORAS	INIT	CR01		09/16/2020	09/16/2020	09/16/2020	N-TS-WILSONTS	-BR-M1	STN 'B' PWR EQ INSP-SVI Fall 2020	1213628	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2019	17646124	5	On a Fixed Date	PR	61923630	NOCO ORAS	INIT	CR02		05/24/2019	05/24/2019	05/24/2019	N-TS-WILSONTS	-BR-M1	STN 'B' PWR EQ INSP-SVI Spr 2019	1213628	Wilson	BR	2019	CR02	Wilson	BR	Wilson - BR
2016	15199722	5	On a Fixed Date	PR	61170804	NOCO ORAS	INIT	CR01		10/26/2016	10/26/2016	10/26/2016	N-TS-WILSONTS	-BR-M1	STN 'B' PWR EQ INSP-SVI FALL 2016	1213628	Wilson	BR	2016	CR01	Wilson	BR	Wilson - BR
2020	19015376	5	On a Fixed Date	PR	62562612	NOCO ORAS	INIT	CR01		06/02/2020	06/02/2020	06/02/2020	N-TS-WILSONTS	-BR-M1	STN 'B' PWR EQ INSP-SVI June wk1	1213628	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2020	18805106	5	On a Fixed Date	PR	62562606	NOCO ORAS	INIT	CR01		04/22/2020	04/22/2020	04/22/2020	N-TS-WILSONTS	-BR-M1	STN 'B' PWR EQ INSP-SVI April wk3	1213628	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2019	18055578	5	On a Fixed Date	PR	61923631	NOCO ORAS	INIT	CR01		09/25/2019	09/25/2019	09/25/2019	N-TS-WILSONTS	-BR-M1	STN 'B' PWR EQ INSP-SVI Fall 2019	1213628	Wilson	BR	2019	CR01	Wilson	BR	Wilson - BR
2020	18892933	5	On a Fixed Date	PR	62562608	NOCO ORAS	INIT	CR01		05/07/2020	05/07/2020	05/07/2020	N-TS-WILSONTS	-BR-M1	STN 'B' PWR EQ INSP-SVI May wk1	1213628	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2020	17812199	6	By a Fixed Date	PR	62293072	NOCO ORAS	INIT	CR01	1	08/10/2020	07/06/2019	03/19/2020	N-TS-WILSONTS	-BR-M1	BR-OIL-KSO-LV- BOA	1213628	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2018	17113028	5	On a Fixed Date	PR	61570344	NOCO ORAS	INIT	CR01		11/12/2018	11/12/2018	11/12/2018	N-TS-WILSONTS	-BR-M1	STN 'B' PWR EQ INSP-SVI Fall 2018	1213628	Wilson	BR	2018	CR01	Wilson	BR	Wilson - BR
2018	16814027	5	On a Fixed Date	PR	61570343	NOCO ORAS	INIT	CR01		06/07/2018	06/07/2018	06/07/2018	N-TS-WILSONTS	-BR-M1	STN 'B' PWR EQ INSP-SVI Spr 2018	1213628	Wilson	BR	2018	CR01	Wilson	BR	Wilson - BR
2018	17113156	5	On a Fixed Date	PR	61570344	NOCO ORAS	INIT	CR01		11/12/2018	11/12/2018	11/12/2018	N-TS-WILSONTS	-BR-M1	STN 'B' PWR EQ INSP-SVI Fall 2018	1213628	Wilson	BR	2018	CR01	Wilson	BR	Wilson - BR
2019	14920156	6	By a Fixed Date	PR	61343303	ATCO NOCO ORAS	INIT	CR02	1	07/16/2016	07/16/2016	04/09/2019	N-TS-WILSONTS	-BR-M1	BR-OIL-KSO-LV- BOA	1213628	Wilson	BR	2019	CR02	Wilson	BR	Wilson - BR
2019	17646125	5	On a Fixed Date	PR	61923630	NOCO ORAS	INIT	CR02		05/24/2019	05/24/2019	05/24/2019	N-TS-WILSONTS	-BR-M3	STN 'B' PWR EQ INSP-SVI Spr 2019	1213636	Wilson	BR	2019	CR02	Wilson	BR	Wilson - BR
2016	14517751	5	On a Fixed Date	PR	61170803	NOCO ORAS	INIT	CR01		02/17/2016	02/17/2016	02/17/2016	N-TS-WILSONTS	-BR-M3	STN 'B' PWR EQ INSP-SVI SPRING 2016	1213636	Wilson	BR	2016	CR01	Wilson	BR	Wilson - BR
2017	15479898	5	On a Fixed Date	PR	61325365	NOCO ORAS	INIT	CR02		04/20/2017	04/20/2017	04/20/2017	N-TS-WILSONTS	-BR-M3	STN 'B' PWR EQ INSP-SVI Spr 2017	1213636	Wilson	BR	2017	CR02	Wilson	BR	Wilson - BR
2016	15199767	5	On a Fixed Date	PR	61170804	NOCO ORAS	INIT	CR01		10/26/2016	10/26/2016	10/26/2016	N-TS-WILSONTS	-BR-M3	STN 'B' PWR EQ INSP-SVI FALL 2016	1213636	Wilson	BR	2016	CR01	Wilson	BR	Wilson - BR
2019	18055544	5	On a Fixed Date	PR	61923631	NOCO ORAS	INIT	CR01		09/25/2019	09/25/2019	09/25/2019	N-TS-WILSONTS	-BR-M3	STN 'B' PWR EQ INSP-SVI Fall 2019	1213636	Wilson	BR	2019	CR01	Wilson	BR	Wilson - BR
2020	18644297	5	On a Fixed Date	PR	62291354	NOCO ORAS	INIT	CR01		03/11/2020	03/11/2020	03/11/2020	N-TS-WILSONTS	-BR-M3	STN 'B' PWR EQ INSP-SVI Spr 2020	1213636	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2017	16158196	6	By a Fixed Date	PR	61691311	NOCO ORAS	INIT	CR03	1	10/25/2017	10/25/2017	12/14/2017	N-TS-WILSONTS	-BR-M3	BR-OIL-KSO-LV- Strategy	1213636	Wilson	BR	2017	CR03	Wilson	BR	Wilson - BR
2020	18773006	5	On a Fixed Date	PR	62562605	NOCO ORAS	INIT	CR01		04/16/2020	04/16/2020	04/16/2020	N-TS-WILSONTS	-BR-M3	STN 'B' PWR EQ INSP-SVI April wk2	1213636	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2020	18892935	5	On a Fixed Date	PR	62562608	NOCO ORAS	INIT	CR01		05/07/2020	05/07/2020	05/07/2020	N-TS-WILSONTS	-BR-M3	STN 'B' PWR EQ INSP-SVI May wk1	1213636	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2020	19015377	5	On a Fixed Date	PR	62562612	NOCO ORAS	INIT	CR01		06/02/2020	06/02/2020	06/02/2020	N-TS-WILSONTS	-BR-M3	STN 'B' PWR EQ INSP-SVI June wk1	1213636	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2020	19333138	5	On a Fixed Date	PR	62291355	NOCO ORAS	INIT	CR01		09/16/2020	09/16/2020	09/16/2020	N-TS-WILSONTS	-BR-M3	STN 'B' PWR EQ INSP-SVI Fall 2020	1213636	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2017	16109351	5	On a Fixed Date	PR	61325366	NOCO ORAS	INIT	CR01		09/27/2017	09/27/2017	09/27/2017	N-TS-WILSONTS	-BR-M3	STN 'B' PWR EQ INSP-SVI Fall 2017	1213636	Wilson	BR	2017	CR01	Wilson	BR	Wilson - BR
2019	16893971	6	By a Fixed Date	PR	61925631	NOCO ORAS	INIT	CR01	1	07/07/2018	07/07/2018	09/24/2019	N-TS-WILSONTS	-BR-M3	BR-OIL-KSO-LV- BOA	1213636	Wilson	BR	2019	CR01	Wilson	BR	Wilson - BR
2018	16814028	5	On a Fixed Date	PR	61570343	NOCO ORAS	INIT	CR01		06/07/2018	06/07/2018	06/07/2018	N-TS-WILSONTS	-BR-M3	STN 'B' PWR EQ INSP-SVI Spr 2018	1213636	Wilson	BR	2018	CR01	Wilson	BR	Wilson - BR
2018	17113157	5	On a Fixed Date	PR	61570344	NOCO ORAS	INIT	CR01		11/12/2018	11/12/2018	11/12/2018	N-TS-WILSONTS	-BR-M3	STN 'B' PWR EQ INSP-SVI Fall 2018	1213636	Wilson	BR	2018	CR01	Wilson	BR	Wilson - BR
2018	17113030	5	On a Fixed Date	PR	61570344	NOCO ORAS	INIT	CR01		11/12/2018	11/12/2018	11/12/2018	N-TS-WILSONTS	-BR-M3	STN 'B' PWR EQ INSP-SVI Fall 2018	1213636	Wilson	BR	2018	CR01	Wilson	BR	Wilson - BR
2020	18805248	5	On a Fixed Date	PR	62562606	NOCO ORAS	INIT	CR01		04/22/2020	04/22/2020	04/22/2020	N-TS-WILSONTS	-BR-M3	STN 'B' PWR EQ INSP-SVI April wk3	1213636	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2020	19333139	5	On a Fixed Date	PR	62291355	NOCO ORAS	INIT	CR01		09/16/2020	09/16/2020	09/16/2020	N-TS-WILSONTS	-BR-M6	STN 'B' PWR EQ INSP-SVI Fall 2020	1213645	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2019	17646175	5	On a Fixed Date	PR	61923630	NOCO ORAS	INIT	CR02		05/24/2019	05/24/2019	05/24/2019	N-TS-WILSONTS	-BR-M6	STN 'B' PWR EQ INSP-SVI Spr 2019	1213645	Wilson	BR	2019	CR02	Wilson	BR	Wilson - BR
2018	16814029	5	On a Fixed Date	PR	61570343	NOCO ORAS	INIT	CR01		06/07/2018	06/07/2018	06/07/2018	N-TS-WILSONTS	-BR-M6	STN 'B' PWR EQ INSP-SVI Spr 2018	1213645	Wilson	BR	2018	CR01	Wilson	BR	Wilson - BR
2020	18644205	5	On a Fixed Date	PR	62291354	NOCO ORAS	INIT	CR01		03/11/2020	03/11/2020	03/11/2020	N-TS-WILSONTS	-BR-M6	STN 'B' PWR EQ INSP-SVI Spr 2020	1213645	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2018	17113158	5	On a Fixed Date	PR	61570344	NOCO ORAS	INIT	CR01		11/12/2018	11/12/2018	11/12/2018	N-TS-WILSONTS	-BR-M6	STN 'B' PWR EQ INSP-SVI Fall 2018	1213645	Wilson	BR	2018	CR01	Wilson	BR	Wilson - BR
2020	19015378	5	On a Fixed Date	PR	62562612	NOCO ORAS	INIT	CR01		06/02/2020	06/02/2020	06/02/2020	N-TS-WILSONTS	-BR-M6	STN 'B' PWR EQ INSP-SVI June wk1	1213645	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2018	17113032	5	On a Fixed Date	PR	61570344	NOCO ORAS	INIT	CR01		11/12/2018	11/12/2018	11/12/2018	N-TS-WILSONTS	-BR-M6	STN 'B' PWR EQ INSP-SVI Fall 2018	1213645	Wilson	BR	2018	CR01	Wilson	BR	Wilson - BR
2020	18892936	5	On a Fixed Date	PR	62562608	NOCO ORAS	INIT	CR01		05/07/2020	05/07/2020	05/07/2020	N-TS-WILSONTS	-BR-M6	STN 'B' PWR EQ INSP-SVI May wk1	1213645	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2019	14920210	6	By a Fixed Date	PR	61343307	ATCO NOCO ORAS	INIT	CR02	1	07/16/2016	07/16/2016	04/09/2019	N-TS-WILSONTS	-BR-M6	BR-OIL-KSO-LV- BOA	1213645	Wilson	BR	2019	CR02	Wilson	BR	Wilson - BR
2019	18055574	5	On a Fixed Date	PR	61923631	NOCO ORAS	INIT	CR01		09/25/2019	09/25/2019	09/25/2019	N-TS-WILSONTS	-BR-M6	STN 'B' PWR EQ INSP-SVI Fall 2019	1213645	Wilson	BR	2019	CR01	Wilson	BR	Wilson - BR
2016	14517752	5	On a Fixed Date	PR	61170803	NOCO ORAS	INIT	CR01		02/17/2016	02/17/2016	02/17/2016	N-TS-WILSONTS	-BR-M6	STN 'B' PWR EQ INSP-SVI SPRING 2016	1213645	Wilson	BR	2016	CR01	Wilson	BR	Wilson - BR
2020	17812222	6	By a Fixed Date	PR	62293085	NOCO ORAS	INIT	CR01	1	06/23/2020	07/06/2019	04/16/2020	N-TS-WILSONTS	-BR-M6	BR-OIL-KSO-LV- BOA	1213645	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2020	18773078	5	On a Fixed Date	PR	62562605	NOCO ORAS	INIT	CR01		04/16/2020	04/16/2020	04/16/2020	N-TS-WILSONTS	-BR-M6	STN 'B' PWR EQ INSP-SVI April wk2	1213645	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2016	15199769	5	On a Fixed Date	PR	61170804	NOCO ORAS	INIT	CR01		10/26/2016	10/26/2016	10/26/2016	N-TS-WILSONTS	-BR-M6	STN 'B' PWR EQ INSP-SVI FALL 2016	1213645	Wilson	BR	2016	CR01	Wilson	BR	Wilson - BR
2017	15479862	5	On a Fixed Date	PR	61325365	NOCO ORAS	INIT	CR02		04/20/2017	04/20/2017	04/20/2017	N-TS-WILSONTS	-BR-M6	STN 'B' PWR EQ INSP-SVI Spr 2017	1213645	Wilson	BR	2017	CR02	Wilson	BR	Wilson - BR
2020	18805249	5	On a Fixed Date	PR	62562606	NOCO ORAS	INIT	CR01		04/22/2020	04/22/2020	04/22/2020	N-TS-WILSONTS	-BR-M6	STN 'B' PWR EQ INSP-SVI April wk3	1213645	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2017	16109577	5	On a Fixed Date	PR	61325366	NOCO ORAS	INIT	CR01		09/27/2017	09/27/2017	09/27/2017	N-TS-WILSONTS	-BR-M6	STN 'B' PWR EQ INSP-SVI Fall 2017	1213645	Wilson	BR	2017	CR01	Wilson	BR	Wilson - BR
2020	18892937	5	On a Fixed Date	PR	62562608	NOCO ORAS	INIT	CR01		05/07/2020	05/07/2020	05/07/2020	N-TS-WILSONTS	-BR-M4	STN 'B' PWR EQ INSP-SVI May wk1	1213655	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2018	17113109	5	On a Fixed Date	PR	61570344	NOCO ORAS	INIT	CR01		11/12/2018	11/12/2018	11/12/2018	N-TS-WILSONTS	-BR-M4	STN 'B' PWR EQ INSP-SVI Fall 2018	1213655	Wilson	BR	2018	CR01	Wilson	BR	Wilson - BR
2016	15199723	5	On a Fixed Date	PR	61170804	NOCO ORAS	INIT	CR01		10/26/2016	10/26/2016	10/26/2016	N-TS-WILSONTS	-BR-M4	STN 'B' PWR EQ INSP-SVI FALL 2016	1213655	Wilson	BR	2016	CR01	Wilson	BR	Wilson - BR
2020	18805260	5	On a Fixed Date	PR	62562606	NOCO ORAS	INIT	CR01		04/22/2020	04/22/2020	04/22/2020	N-TS-WILSONTS	-BR-M4	STN 'B' PWR EQ INSP-SVI April wk3	1213655	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2020	19015375	5	On a Fixed Date	PR	62562612	NOCO ORAS	INIT	CR01		06/02/2020	06/02/2020	06/02/2020	N-TS-WILSONTS	-BR-M4	STN 'B' PWR EQ INSP-SVI June wk1	1213655	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2018	17112953	5	On a Fixed Date	PR	61570344	NOCO ORAS	INIT	CR01		11/12/2018	11/12/2018	11/12/2018	N-TS-WILSONTS	-BR-M4	STN 'B' PWR EQ INSP-SVI Fall 2018	1213655	Wilson	BR	2018	CR01	Wilson	BR	Wilson - BR
2017	15479864	5	On a Fixed Date	PR	61325365	NOCO ORAS	INIT	CR02		04/20/2017	04/20/2017	04/20/2017	N-TS-WILSONTS	-BR-M4	STN 'B' PWR EQ INSP-SVI Spr 2017	1213655	Wilson	BR	2017	CR02	Wilson	BR	Wilson - BR
2020	19333117	5	On a Fixed Date	PR	62291355	NOCO ORAS	INIT	CR01		09/16/2020	09/16/2020	09/16/2020	N-TS-WILSONTS	-BR-M4	STN 'B' PWR EQ INSP-SVI Fall 2020	1213655	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2017	16109636	5	On a Fixed Date	PR	61325366	NOCO ORAS	INIT	CR01		09/27/2017	09/27/2017	09/27/2017	N-TS-WILSONTS	-BR-M4	STN 'B' PWR EQ INSP-SVI Fall 2017	1213655	Wilson	BR	2017	CR01	Wilson	BR	Wilson - BR
2020	18773007	5	On a Fixed Date	PR	62562605	NOCO ORAS	INIT	CR01		04/16/2020	04/16/2020	04/16/2020	N-TS-WILSONTS	-BR-M4	STN 'B' PWR EQ INSP-SVI April wk2	1213655	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2020	17812215	6	By a Fixed Date	PR	62293078	NOCO ORAS	INIT	CR01	1	07/21/2020	07/06/2019	08/05/2020	N-TS-WILSONTS	-BR-M4	BR-OIL-KSO-LV- BOA	1213655	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2020	18644298	5	On a Fixed Date	PR	62291354	NOCO ORAS	INIT	CR01		03/11/2020	03/11/2020	03/11/2020	N-TS-WILSONTS	-BR-M4	STN 'B' PWR EQ INSP-SVI Spr 2020	1213655	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2018	16814026	5	On a Fixed Date	PR	61570343	NOCO ORAS	INIT	CR01		06/07/2018	06/07/2018	06/07/2018	N-TS-WILSONTS	-BR-M4	STN 'B' PWR EQ INSP-SVI Spr 2018	1213655	Wilson	BR	2018	CR01	Wilson	BR	Wilson - BR
2019	16158198	6	By a Fixed Date	PR	61691312	NOCO ORAS	INIT	CR01	1	10/25/2017	10/25/2017	01/02/2019	N-TS-WILSONTS	-BR-M4	BR-OIL-KSO-LV- Strategy	1213655	Wilson	BR	2019	CR01	Wilson	BR	Wilson - BR
2019	18055584	5	On a Fixed Date	PR	61923631	NOCO ORAS	INIT	CR01		09/25/2019	09/25/2019	09/25/2019	N-TS-WILSONTS	-BR-M4	STN 'B' PWR EQ INSP-SVI Fall 2019	1213655	Wilson	BR	2019	CR01	Wilson	BR	Wilson - BR
2016	14517753	5	On a Fixed Date	PR	61170803	NOCO ORAS	INIT	CR01		02/17/2016	02/17/2016	02/17/2016	N-TS-WILSONTS	-BR-M4	STN 'B' PWR EQ INSP-SVI SPRING 2016	1213655	Wilson	BR	2016	CR01	Wilson	BR	Wilson - BR
2019	14920158	6	By a Fixed Date	PR	61343305	ATCO NOCO ORAS	INIT	CR02	1	07/16/2016	07/16/2016	04/09/2019	N-TS-WILSONTS	-BR-M4	BR-OIL-KSO-LV- BOA	1213655	Wilson	BR	2019	CR02	Wilson	BR	Wilson - BR
2019	17646252	5	On a Fixed Date	PR	61923630	NOCO ORAS	INIT	CR02		05/24/2019	05/24/2019	05/24/2019	N-TS-WILSONTS	-BR-M4	STN 'B' PWR EQ INSP-SVI Spr 2019	1213655	Wilson	BR	2019	CR02	Wilson	BR	Wilson - BR
2019	15942794	3	Medium (30-90 Days)	PR	61612915	ATCO NOCO ORAS	INIT	CR02	1	08/16/2017	08/16/2017	04/12/2019	N-TS-WILSONTS	-BR-M2	BR-OIL-KSO-LV- BOA(Resample)	1213666	Wilson	BR	2019	CR02	Wilson	BR	Wilson - BR
2020	19015324	5	On a Fixed Date	PR	62562612	NOCO ORAS	INIT	CR01		06/02/2020	06/02/2020	06/02/2020	N-TS-WILSONTS	-BR-M2	STN 'B' PWR EQ INSP-SVI June wk1	1213666	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2020	18805130	5	On a Fixed Date	PR	62562606	NOCO ORAS	INIT	CR01		04/22/2020	04/22/2020	04/22/2020	N-TS-WILSONTS	-BR-M2	STN 'B' PWR EQ INSP-SVI April wk3	1213666	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2019	14920157	6	By a Fixed Date	PR	61343304	ATCO NOCO ORAS	INIT	CR02	1	07/16/2016	07/16/2016	04/09/2019	N-TS-WILSONTS	-BR-M2	BR-OIL-KSO-LV- BOA	1213666	Wilson	BR	2019	CR02	Wilson	BR	Wilson - BR
2017	15479885	5	On a Fixed Date	PR	61325365	NOCO ORAS	INIT	CR02		04/20/2017	04/20/2017	04/20/2017	N-TS-WILSONTS	-BR-M2	STN 'B' PWR EQ INSP-SVI Spr 2017	1213666	Wilson	BR	2017	CR02	Wilson	BR	Wilson - BR
2016	15199800	5	On a Fixed Date	PR	61170804	NOCO ORAS	INIT	CR01		10/26/2016	10/26/2016	10/26/2016	N-TS-WILSONTS	-BR-M2	STN 'B' PWR EQ INSP-SVI FALL 2016	1213666	Wilson	BR	2016	CR01	Wilson	BR	Wilson - BR
2020	18892934	5	On a Fixed Date	PR	62562608	NOCO ORAS	INIT	CR01		05/07/2020	05/07/2020	05/07/2020	N-TS-WILSONTS	-BR-M2	STN 'B' PWR EQ INSP-SVI May wk1	1213666	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2017	16109672	5	On a Fixed Date	PR	61325366	NOCO ORAS	INIT	CR01		09/27/2017	09/27/2017	09/27/2017	N-TS-WILSONTS	-BR-M2	STN 'B' PWR EQ INSP-SVI Fall 2017	1213666	Wilson	BR	2017	CR01	Wilson	BR	Wilson - BR
2016	14517754	5	On a Fixed Date	PR	61170803	NOCO ORAS	INIT	CR01		02/17/2016	02/17/2016	02/17/2016	N-TS-WILSONTS	-BR-M2	STN 'B' PWR EQ INSP-SVI SPRING 2016	1213666	Wilson	BR	2016	CR01	Wilson	BR	Wilson - BR
2020	17812211	6	By a Fixed Date	PR	62293074	NOCO ORAS	INIT	CR01	1	07/21/2020	07/06/2019	06/26/2020	N-TS-WILSONTS	-BR-M2	BR-OIL-KSO-LV- BOA	1213666	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2019	17646236	5	On a Fixed Date	PR	61923630	NOCO ORAS	INIT	CR02		05/24/2019	05/24/2019	05/24/2019	N-TS-WILSONTS	-BR-M2	STN 'B' PWR EQ INSP-SVI Spr 2019	1213666	Wilson	BR	2019	CR02	Wilson	BR	Wilson - BR
2020	18773058	5	On a Fixed Date	PR	62562605	NOCO ORAS	INIT	CR01		04/16/2020	04/16/2020	04/16/2020	N-TS-WILSONTS	-BR-M2	STN 'B' PWR EQ INSP-SVI April wk2	1213666	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2020	18644296	5	On a Fixed Date	PR	62291354	NOCO ORAS	INIT	CR01		03/11/2020	03/11/2020	03/11/2020	N-TS-WILSONTS	-BR-M2	STN 'B' PWR EQ INSP-SVI Spr 2020	1213666	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2018	16814030	5	On a Fixed Date	PR	61570343	NOCO ORAS	INIT	CR01		06/07/2018	06/07/2018	06/07/2018	N-TS-WILSONTS	-BR-M2	STN 'B' PWR EQ INSP-SVI Spr 2018	1213666	Wilson	BR	2018	CR01	Wilson	BR	Wilson - BR
2019	18055589	5	On a Fixed Date	PR	61923631	NOCO ORAS	INIT	CR01		09/25/2019	09/25/2019	09/25/2019	N-TS-WILSONTS	-BR-M2	STN 'B' PWR EQ INSP-SVI Fall 2019	1213666	Wilson	BR	2019	CR01	Wilson	BR	Wilson - BR
2020	19292166	3	Medium (30-90 Days)	PR	62743949	NOCO ORAS	INIT	CR02	1	11/27/2020	09/01/2020	12/21/2020	N-TS-WILSONTS	-BR-M2	BR-OIL-KSO-LV- BOA(BOA)	1213666	Wilson	BR	2020	CR02	Wilson	BR	Wilson - BR
2020	19333200	5	On a Fixed Date	PR	62291355	NOCO ORAS	INIT	CR01		09/16/2020	09/16/2020	09/16/2020	N-TS-WILSONTS	-BR-M2	STN 'B' PWR EQ INSP-SVI Fall 2020	1213666	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2018	17113130	5	On a Fixed Date	PR	61570344	NOCO ORAS	INIT	CR01		11/12/2018	11/12/2018	11/12/2018	N-TS-WILSONTS	-BR-M2	STN 'B' PWR EQ INSP-SVI Fall 2018	1213666	Wilson	BR	2018	CR01	Wilson	BR	Wilson - BR
2018	17112955	5	On a Fixed Date	PR	61570344	NOCO ORAS	INIT	CR01		11/12/2018	11/12/2018	11/12/2018	N-TS-WILSONTS	-BR-M2	STN 'B' PWR EQ INSP-SVI Fall 2018	1213666	Wilson	BR	2018	CR01	Wilson	BR	Wilson - BR
2020	19333201	5	On a Fixed Date	PR	62291355	NOCO ORAS	INIT	CR01		09/16/2020	09/16/2020	09/16/2020	N-TS-WILSONTS	-BR-M8	STN 'B' PWR EQ INSP-SVI Fall 2020	1213676	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2018	16814031	5	On a Fixed Date	PR	61570343	NOCO ORAS	INIT	CR01		06/07/2018	06/07/2018	06/07/2018	N-TS-WILSONTS	-BR-M8	STN 'B' PWR EQ INSP-SVI Spr 2018	1213676	Wilson	BR	2018	CR01	Wilson	BR	Wilson - BR

2016	14517755	5	On a Fixed Date	PR	61170803	NOCO ORAS	INIT	CR01		02/17/2016	02/17/2016	02/17/2016	N-TS-WILSONTS	-BR-M8	STN 'B' PWR EQ INSP-SVI SPRING 2016	1213676	Wilson	BR	2016	CR01	Wilson	BR	Wilson - BR
2018	17112972	5	On a Fixed Date	PR	61570344	NOCO ORAS	INIT	CR01		11/12/2018	11/12/2018	11/12/2018	N-TS-WILSONTS	-BR-M8	STN 'B' PWR EQ INSP-SVI Fall 2018	1213676	Wilson	BR	2018	CR01	Wilson	BR	Wilson - BR
2020	18805108	5	On a Fixed Date	PR	62562606	NOCO ORAS	INIT	CR01		04/22/2020	04/22/2020	04/22/2020	N-TS-WILSONTS	-BR-M8	STN 'B' PWR EQ INSP-SVI April wk3	1213676	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2020	18773009	5	On a Fixed Date	PR	62562605	NOCO ORAS	INIT	CR01		04/16/2020	04/16/2020	04/16/2020	N-TS-WILSONTS	-BR-M8	STN 'B' PWR EQ INSP-SVI April wk2	1213676	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2020	18644299	5	On a Fixed Date	PR	62291354	NOCO ORAS	INIT	CR01		03/11/2020	03/11/2020	03/11/2020	N-TS-WILSONTS	-BR-M8	STN 'B' PWR EQ INSP-SVI Spr 2020	1213676	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2018	17113133	5	On a Fixed Date	PR	61570344	NOCO ORAS	INIT	CR01		11/12/2018	11/12/2018	11/12/2018	N-TS-WILSONTS	-BR-M8	STN 'B' PWR EQ INSP-SVI Fall 2018	1213676	Wilson	BR	2018	CR01	Wilson	BR	Wilson - BR
2017	16109675	5	On a Fixed Date	PR	61325366	NOCO ORAS	INIT	CR01		09/27/2017	09/27/2017	09/27/2017	N-TS-WILSONTS	-BR-M8	STN 'B' PWR EQ INSP-SVI Fall 2017	1213676	Wilson	BR	2017	CR01	Wilson	BR	Wilson - BR
2018	15889753	6	By a Fixed Date	PR	61571264	NOCO ORAS	INIT	CR01	1	07/22/2017	07/22/2017	12/07/2018	N-TS-WILSONTS	-BR-M8	BR-OIL-KSO-LV- BOA	1213676	Wilson	BR	2018	CR01	Wilson	BR	Wilson - BR
2020	18892938	5	On a Fixed Date	PR	62562608	NOCO ORAS	INIT	CR01		05/07/2020	05/07/2020	05/07/2020	N-TS-WILSONTS	-BR-M8	STN 'B' PWR EQ INSP-SVI May wk1	1213676	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2017	15479861	5	On a Fixed Date	PR	61325365	NOCO ORAS	INIT	CR02		04/20/2017	04/20/2017	04/20/2017	N-TS-WILSONTS	-BR-M8	STN 'B' PWR EQ INSP-SVI Spr 2017	1213676	Wilson	BR	2017	CR02	Wilson	BR	Wilson - BR
2016	15199768	5	On a Fixed Date	PR	61170804	NOCO ORAS	INIT	CR01		10/26/2016	10/26/2016	10/26/2016	N-TS-WILSONTS	-BR-M8	STN 'B' PWR EQ INSP-SVI FALL 2016	1213676	Wilson	BR	2016	CR01	Wilson	BR	Wilson - BR
2019	18055591	5	On a Fixed Date	PR	61923631	NOCO ORAS	INIT	CR01		09/25/2019	09/25/2019	09/25/2019	N-TS-WILSONTS	-BR-M8	STN 'B' PWR EQ INSP-SVI Fall 2019	1213676	Wilson	BR	2019	CR01	Wilson	BR	Wilson - BR
2019	17646239	5	On a Fixed Date	PR	61923630	NOCO ORAS	INIT	CR02		05/24/2019	05/24/2019	05/24/2019	N-TS-WILSONTS	-BR-M8	STN 'B' PWR EQ INSP-SVI Spr 2019	1213676	Wilson	BR	2019	CR02	Wilson	BR	Wilson - BR
2020	19015325	5	On a Fixed Date	PR	62562612	NOCO ORAS	INIT	CR01		06/02/2020	06/02/2020	06/02/2020	N-TS-WILSONTS	-BR-M8	STN 'B' PWR EQ INSP-SVI June wk1	1213676	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2017	15821447	5	On a Fixed Date	PR	61322825	NOCO ORAS	INIT	CR01		06/27/2017	06/27/2017	06/27/2017	N-TS-CHARLESTS	-BR-T4A1A2	STN 'A' PWR EQ INSP-SVI Spr 2017	1213796	Charles	BR	2017	CR01	Charles	BR	Charles - BR
2021	19190377	6	By a Fixed Date	PR	62678275	NOCO ORAS	INIT	CR02	1	04/01/2021	07/17/2020	03/03/2021	N-TS-CHARLESTS	-BR-T4A1A2	BR-M/C-AMAG/<30-Strategy	1213796	Charles	BR	2021	CR02	Charles	BR	Charles - BR
2020	18846135	5	On a Fixed Date	PR	61908457	NOCO ORAS	INIT	CR02		04/29/2020	04/29/2020	04/29/2020	N-TS-CHARLESTS	-BR-T4A1A2	STN 'A' PWR EQ INSP-SVI Fall 2019	1213796	Charles	BR	2020	CR02	Charles	BR	Charles - BR
2017	16195247	5	On a Fixed Date	PR	61322826	NOCO ORAS	INIT	CR01		11/13/2017	11/13/2017	11/13/2017	N-TS-CHARLESTS	-BR-T4A1A2	STN 'A' PWR EQ INSP-SVI Fall 2017	1213796	Charles	BR	2017	CR01	Charles	BR	Charles - BR
2018	16513680	5	On a Fixed Date	PR	61554232	NOCO ORAS	INIT	CR01		03/15/2018	03/15/2018	03/15/2018	N-TS-CHARLESTS	-BR-T4A1A2	STN 'A' PWR EQ INSP-SVI Spr 2018	1213796	Charles	BR	2018	CR01	Charles	BR	Charles - BR
2016	15130725	5	On a Fixed Date	PR	61169688	NOCO ORAS	INIT	CR01		09/29/2016	09/29/2016	09/29/2016	N-TS-CHARLESTS	-BR-T4A1A2	STN 'A' PWR EQ INSP-SVI FALL 2016	1213796	Charles	BR	2016	CR01	Charles	BR	Charles - BR
2019	17469066	5	On a Fixed Date	PR	61908456	NOCO ORAS	INIT	CR01		04/02/2019	04/02/2019	04/02/2019	N-TS-CHARLESTS	-BR-T4A1A2	STN 'A' PWR EQ INSP-SVI Spr 2019	1213796	Charles	BR	2019	CR01	Charles	BR	Charles - BR
2020	19482314	5	On a Fixed Date	PR	62283319	NOCO ORAS	INIT	CR01		10/27/2020	10/27/2020	10/27/2020	N-TS-CHARLESTS	-BR-T4A1A2	STN 'A' PWR EQ INSP-SVI Fall 2020	1213796	Charles	BR	2020	CR01	Charles	BR	Charles - BR
2020	18942452	5	On a Fixed Date	PR	62283318	NOCO ORAS	INIT	CR02		05/18/2020	05/18/2020	05/18/2020	N-TS-CHARLESTS	-BR-T4A1A2	STN 'A' PWR EQ INSP-SVI Spr 2020	1213796	Charles	BR	2020	CR02	Charles	BR	Charles - BR
2018	17038611	5	On a Fixed Date	PR	61554233	NOCO ORAS	INIT	CR01		10/17/2018	10/17/2018	10/17/2018	N-TS-CHARLESTS	-BR-T4A1A2	STN 'A' PWR EQ INSP-SVI Fall 2018	1213796	Charles	BR	2018	CR01	Charles	BR	Charles - BR
2021	19195814	6	By a Fixed Date	PR	62683752	NOCO ORAS	INIT	CR01	1	02/23/2021	07/18/2020	03/12/2021	N-TS-WILSONTS	-BR-M14	BR-OIL-KSO-LV- BOA	1215063	Wilson	BR	2021	CR01	Wilson	BR	Wilson - BR
2020	18892970	5	On a Fixed Date	PR	62562608	NOCO ORAS	INIT	CR01		05/07/2020	05/07/2020	05/07/2020	N-TS-WILSONTS	-BR-M14	STN 'B' PWR EQ INSP-SVI May wk1	1215063	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2019	17646251	5	On a Fixed Date	PR	61923630	NOCO ORAS	INIT	CR02		05/24/2019	05/24/2019	05/24/2019	N-TS-WILSONTS	-BR-M14	STN 'B' PWR EQ INSP-SVI Spr 2019	1215063	Wilson	BR	2019	CR02	Wilson	BR	Wilson - BR
2018	17112974	5	On a Fixed Date	PR	61570344	NOCO ORAS	INIT	CR01		11/12/2018	11/12/2018	11/12/2018	N-TS-WILSONTS	-BR-M14	STN 'B' PWR EQ INSP-SVI Fall 2018	1215063	Wilson	BR	2018	CR01	Wilson	BR	Wilson - BR
2018	17113134	5	On a Fixed Date	PR	61570344	NOCO ORAS	INIT	CR01		11/12/2018	11/12/2018	11/12/2018	N-TS-WILSONTS	-BR-M14	STN 'B' PWR EQ INSP-SVI Fall 2018	1215063	Wilson	BR	2018	CR01	Wilson	BR	Wilson - BR
2016	15199801	5	On a Fixed Date	PR	61170804	NOCO ORAS	INIT	CR01		10/26/2016	10/26/2016	10/26/2016	N-TS-WILSONTS	-BR-M14	STN 'B' PWR EQ INSP-SVI FALL 2016	1215063	Wilson	BR	2016	CR01	Wilson	BR	Wilson - BR
2017	15479899	5	On a Fixed Date	PR	61325365	NOCO ORAS	INIT	CR02		04/20/2017	04/20/2017	04/20/2017	N-TS-WILSONTS	-BR-M14	STN 'B' PWR EQ INSP-SVI Spr 2017	1215063	Wilson	BR	2017	CR02	Wilson	BR	Wilson - BR
2017	16109678	5	On a Fixed Date	PR	61325366	NOCO ORAS	INIT	CR01		09/27/2017	09/27/2017	09/27/2017	N-TS-WILSONTS	-BR-M14	STN 'B' PWR EQ INSP-SVI Fall 2017	1215063	Wilson	BR	2017	CR01	Wilson	BR	Wilson - BR
2018	15889385	6	By a Fixed Date	PR	61570896	NOCO ORAS	INIT	CR01	1	07/22/2017	07/22/2017	02/13/2018	N-TS-WILSONTS	-BR-M14	BR-OIL-KSO-LV- Strategy	1215063	Wilson	BR	2018	CR01	Wilson	BR	Wilson - BR
2018	16814005	5	On a Fixed Date	PR	61570343	NOCO ORAS	INIT	CR01		06/07/2018	06/07/2018	06/07/2018	N-TS-WILSONTS	-BR-M14	STN 'B' PWR EQ INSP-SVI Spr 2018	1215063	Wilson	BR	2018	CR01	Wilson	BR	Wilson - BR
2020	18644371	5	On a Fixed Date	PR	62291354	NOCO ORAS	INIT	CR01		03/11/2020	03/11/2020	03/11/2020	N-TS-WILSONTS	-BR-M14	STN 'B' PWR EQ INSP-SVI Spr 2020	1215063	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2016	14517756	5	On a Fixed Date	PR	61170803	NOCO ORAS	INIT	CR01		02/17/2016	02/17/2016	02/17/2016	N-TS-WILSONTS	-BR-M14	STN 'B' PWR EQ INSP-SVI SPRING 2016	1215063	Wilson	BR	2016	CR01	Wilson	BR	Wilson - BR
2020	19015326	5	On a Fixed Date	PR	62562612	NOCO ORAS	INIT	CR01		06/02/2020	06/02/2020	06/02/2020	N-TS-WILSONTS	-BR-M14	STN 'B' PWR EQ INSP-SVI June wk1	1215063	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2020	18805134	5	On a Fixed Date	PR	62562606	NOCO ORAS	INIT	CR01		04/22/2020	04/22/2020	04/22/2020	N-TS-WILSONTS	-BR-M14	STN 'B' PWR EQ INSP-SVI April wk3	1215063	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2019	15889729	6	By a Fixed Date	PR	61571240	ATCO NOCO ORAS	INIT	CR02	1	07/22/2017	07/22/2017	04/11/2019	N-TS-WILSONTS	-BR-M14	BR-OIL-KSO-LV- BOA	1215063	Wilson	BR	2019	CR02	Wilson	BR	Wilson - BR
2019	18055592	5	On a Fixed Date	PR	61923631	NOCO ORAS	INIT	CR01		09/25/2019	09/25/2019	09/25/2019	N-TS-WILSONTS	-BR-M14	STN 'B' PWR EQ INSP-SVI Fall 2019	1215063	Wilson	BR	2019	CR01	Wilson	BR	Wilson - BR
2020	19333203	5	On a Fixed Date	PR	62291355	NOCO ORAS	INIT	CR01		09/16/2020	09/16/2020	09/16/2020	N-TS-WILSONTS	-BR-M14	STN 'B' PWR EQ INSP-SVI Fall 2020	1215063	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2020	18773023	5	On a Fixed Date	PR	62562605	NOCO ORAS	INIT	CR01		04/16/2020	04/16/2020	04/16/2020	N-TS-WILSONTS	-BR-M14	STN 'B' PWR EQ INSP-SVI April wk2	1215063	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2019	18055586	5	On a Fixed Date	PR	61923631	NOCO ORAS	INIT	CR01		09/25/2019	09/25/2019	09/25/2019	N-TS-WILSONTS	-BR-M15	STN 'B' PWR EQ INSP-SVI Fall 2019	1215072	Wilson	BR	2019	CR01	Wilson	BR	Wilson - BR
2020	18773008	5	On a Fixed Date	PR	62562605	NOCO ORAS	INIT	CR01		04/16/2020	04/16/2020	04/16/2020	N-TS-WILSONTS	-BR-M15	STN 'B' PWR EQ INSP-SVI April wk2	1215072	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2020	16893937	6	By a Fixed Date	PR	61925627	NOCO ORAS	INIT	CR01	1	07/07/2018	07/07/2018	03/31/2020	N-TS-WILSONTS	-BR-M15	BR-OIL-KSO-LV- BOA	1215072	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2016	15199802	5	On a Fixed Date	PR	61170804	NOCO ORAS	INIT	CR01		10/26/2016	10/26/2016	10/26/2016	N-TS-WILSONTS	-BR-M15	STN 'B' PWR EQ INSP-SVI FALL 2016	1215072	Wilson	BR	2016	CR01	Wilson	BR	Wilson - BR
2016	14517757	5	On a Fixed Date	PR	61170803	NOCO ORAS	INIT	CR01		02/17/2016	02/17/2016	02/17/2016	N-TS-WILSONTS	-BR-M15	STN 'B' PWR EQ INSP-SVI SPRING 2016	1215072	Wilson	BR	2016	CR01	Wilson	BR	Wilson - BR
2017	16109639	5	On a Fixed Date	PR	61325366	NOCO ORAS	INIT	CR01		09/27/2017	09/27/2017	09/27/2017	N-TS-WILSONTS	-BR-M15	STN 'B' PWR EQ INSP-SVI Fall 2017	1215072	Wilson	BR	2017	CR01	Wilson	BR	Wilson - BR
2020	18805103	5	On a Fixed Date	PR	62562606	NOCO ORAS	INIT	CR01		04/22/2020	04/22/2020	04/22/2020	N-TS-WILSONTS	-BR-M15	STN 'B' PWR EQ INSP-SVI April wk3	1215072	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2018	17112976	5	On a Fixed Date	PR	61570344	NOCO ORAS	INIT	CR01		11/12/2018	11/12/2018	11/12/2018	N-TS-WILSONTS	-BR-M15	STN 'B' PWR EQ INSP-SVI Fall 2018	1215072	Wilson	BR	2018	CR01	Wilson	BR	Wilson - BR
2020	19015323	5	On a Fixed Date	PR	62562612	NOCO ORAS	INIT	CR01		06/02/2020	06/02/2020	06/02/2020	N-TS-WILSONTS	-BR-M15	STN 'B' PWR EQ INSP-SVI June wk1	1215072	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2018	17113135	5	On a Fixed Date	PR	61570344	NOCO ORAS	INIT	CR01		11/12/2018	11/12/2018	11/12/2018	N-TS-WILSONTS	-BR-M15	STN 'B' PWR EQ INSP-SVI Fall 2018	1215072	Wilson	BR	2018	CR01	Wilson	BR	Wilson - BR
2020	18644372	5	On a Fixed Date	PR	62291354	NOCO ORAS	INIT	CR01		03/11/2020	03/11/2020	03/11/2020	N-TS-WILSONTS	-BR-M15	STN 'B' PWR EQ INSP-SVI Spr 2020	1215072	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2019	17646235	5	On a Fixed Date	PR	61923630	NOCO ORAS	INIT	CR02		05/24/2019	05/24/2019	05/24/2019	N-TS-WILSONTS	-BR-M15	STN 'B' PWR EQ INSP-SVI Spr 2019	1215072	Wilson	BR	2019	CR02	Wilson	BR	Wilson - BR
2017	15479896	5	On a Fixed Date	PR	61325365	NOCO ORAS	INIT	CR02		04/20/2017	04/20/2017	04/20/2017	N-TS-WILSONTS	-BR-M15	STN 'B' PWR EQ INSP-SVI Spr 2017	1215072	Wilson	BR	2017	CR02	Wilson	BR	Wilson - BR
2020	19333204	5	On a Fixed Date	PR	62291355	NOCO ORAS	INIT	CR01		09/16/2020	09/16/2020	09/16/2020	N-TS-WILSONTS	-BR-M15	STN 'B' PWR EQ INSP-SVI Fall 2020	1215072	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2020	18892971	5	On a Fixed Date	PR	62562608	NOCO ORAS	INIT	CR01		05/07/2020	05/07/2020	05/07/2020	N-TS-WILSONTS	-BR-M15	STN 'B' PWR EQ INSP-SVI May wk1	1215072	Wilson	BR	2020	CR01	Wilson	BR	Wilson - BR
2018	16814006	5	On a Fixed Date	PR	61570343	NOCO ORAS	INIT	CR01		06/07/2018	06/07/2018	06/07/2018	N-TS-WILSONTS	-BR-M15	STN 'B' PWR EQ INSP-SVI Spr 2018	1215072	Wilson	BR	2018	CR01	Wilson	BR	Wilson - BR
2020	19482315	5	On a Fixed Date	PR	62283319	NOCO ORAS	INIT	CR01		10/27/2020	10/27/2020	10/27/2020	N-TS-CHARLESTS	-BR-T2A5A6	STN 'A' PWR EQ INSP-SVI Fall 2020	1216275	Charles	BR	2020	CR01	Charles	BR	Charles - BR
2019	17468998	5	On a Fixed Date	PR	61908456	NOCO ORAS	INIT	CR01		04/02/2019	04/02/2019	04/02/2019	N-TS-CHARLESTS	-BR-T2A5A6	STN 'A' PWR EQ INSP-SVI Spr 2019	1216275	Charles	BR	2019	CR01	Charles	BR	Charles - BR
2017	15821448	5	On a Fixed Date	PR	61322825	NOCO ORAS	INIT	CR01		06/27/2017	06/27/2017	06/27/2017	N-TS-CHARLESTS	-BR-T2A5A6	STN 'A' PWR EQ INSP-SVI Spr 2017	1216275	Charles	BR	2017	CR01	Charles	BR	Charles - BR
2018	17038612	5	On a Fixed Date	PR	61554233	NOCO ORAS	INIT	CR01		10/17/2018	10/17/2018	10/17/2018	N-TS-CHARLESTS	-BR-T2A5A6	STN 'A' PWR EQ INSP-SVI Fall 2018	1216275	Charles	BR	2018	CR01	Charles	BR	Charles - BR
2020	18846136	5	On a Fixed Date	PR	61908457	NOCO ORAS	INIT	CR02		04/29/2020	04/29/2020	04/29/2020	N-TS-CHARLESTS	-BR-T2A5A6	STN 'A' PWR EQ INSP-SVI Fall 2019	1216275	Charles	BR	2020	CR02	Charles	BR	Charles - BR
2020	18942453	5	On a Fixed Date	PR	62283318	NOCO ORAS	INIT	CR02		05/18/2020	05/18/2020	05/18/2020	N-TS-CHARLESTS	-BR-T2A5A6	STN 'A' PWR EQ INSP-SVI Spr 2020	1216275	Charles	BR	2020	CR02	Charles	BR	Charles - BR
2017	16195249	5	On a Fixed Date	PR	61322826	NOCO ORAS	INIT	CR01		11/13/2017	11/13/2017	11/13/2017	N-TS-CHARLESTS	-BR-T2A5A6	STN 'A' PWR EQ INSP-SVI Fall 2017	1216275	Charles	BR	2017	CR01	Charles	BR	Charles - BR
2016	15130726	5	On a Fixed Date	PR	61169688	NOCO ORAS	INIT	CR01		09/29/2016	09/29/2016	09/29/2016	N-TS-CHARLESTS	-BR-T2A5A6	STN 'A' PWR EQ INSP-SVI FALL 2016	1216275	Charles	BR	2016	CR01	Charles	BR	Charles - BR
2018	16513666	5	On a Fixed Date	PR	61554232	NOCO ORAS	INIT	CR01		03/15/2018	03/15/2018	03/15/2018	N-TS-CHARLESTS	-BR-T2A5A6	STN 'A' PWR EQ INSP-SVI Spr 2018	1216275	Charles	BR	2018	CR01	Charles	BR	Charles - BR
2016	15130523	5	On a Fixed Date	PR	61169688	NOCO ORAS	INIT	CR01		09/29/2016	09/29/2016	09/29/2016	N-TS-CHARLESTS	-TF-T1	STN 'A' PWR EQ INSP-SVI FALL 2016	1222229	Charles	TF	2016	CR01	Charles	TF	Charles - TF
2016	15130524	5	On a Fixed Date	PR	61169688	NOCO ORAS	INIT	CR01		09/29/2016	09/29/2016	09/29/2016	N-TS-CHARLESTS	-TF-T1	STN 'A' PWR EQ INSP-SVI FALL 2016	1222230	Charles	TF	2016	CR01	Charles	TF	Charles - TF
2016	15130525	5	On a Fixed Date	PR	61169688	NOCO ORAS	INIT	CR01		09/29/2016	09/29/2016	09/29/2016	N-TS-CHARLESTS	-TF-T1	STN 'A' PWR EQ INSP-SVI FALL 2016	1222232	Charles	TF	2016	CR01	Charles	TF	Charles - TF
2016	15130526	5	On a Fixed Date	PR	61169688	NOCO ORAS	INIT	CR01		09/29/2016	09/29/2016	09/29/2016	N-TS-CHARLESTS	-TF-T1	STN 'A' PWR EQ INSP-SVI FALL 2016	1222234	Charles	TF	2016	CR01	Charles	TF	Charles - TF
2016	15130529	5	On a Fixed Date	PR	61169688	NOCO ORAS	INIT	CR01		09/29/2016	09/29/2016	09/29/2016	N-TS-CHARLESTS	-TF-T1	STN 'A' PWR EQ INSP-SVI FALL 2016	1222236	Charles	TF	2016	CR01	Charles	TF	Charles - TF
2016	15130540	5	On a Fixed Date	PR	61169688	NOCO ORAS	INIT	CR01		09/29/2016	09/29/2016	09/29/2016	N-TS-CHARLESTS	-TF-T1	STN 'A' PWR EQ INSP-SVI FALL 2016	1222238	Charles	TF	2016	CR01	Charles	TF	Charles - TF
2016	15130541	5	On a Fixed Date	PR	61169688	NOCO ORAS	INIT	CR01		09/29/2016	09/29/2016	09/29/2016	N-TS-CHARLESTS	-TF-T1	STN 'A' PWR EQ INSP-SVI FALL 2016	1222239	Charles	TF	2016	CR01	Charles	TF	Charles - TF
2016	15130542	5	On a Fixed Date	PR	61169688	NOCO ORAS	INIT	CR01		09/29/2016	09/29/2016	09/29/2016	N-TS-CHARLESTS	-TF-T1	STN 'A' PWR EQ INSP-SVI FALL 2016	1222241	Charles	TF	2016	CR01	Charles	TF	Charles - TF
2016	15130545	5	On a Fixed Date	PR	61169688	NOCO ORAS	INIT	CR01		09/29/2016	09/29/2016	09/29/2016	N-TS-CHARLESTS	-TF-T1	STN 'A' PWR EQ INSP-SVI FALL 2016	1222243	Charles	TF	2016	CR01	Charles	TF	Charles - TF
2016	15130546	5	On a Fixed Date	PR	61169688	NOCO ORAS	INIT	CR01		09/29/2016	09/29/2016	09/29/2016	N-TS-CHARLESTS	-TF-T1	STN 'A' PWR EQ INSP-SVI FALL 2016	1222245	Charles	TF	2016	CR01	Charles	TF	Charles - TF
2016	15130547	5	On a Fixed Date	PR	61169688	NOCO ORAS	INIT	CR01		09/29/2016	09/29/2016	09/29/2016	N-TS-CHARLESTS	-TF-T1	STN 'A' PWR EQ INSP-SVI FALL 2016	1222247	Charles	TF	2016	CR01	Charles	TF	Charles - TF
2019	16880399	6	By a Fixed Date	PR	61912089	NOCO ORAS	INIT	CR01	1	07/07/2018	07/07/2018	04/01/2019	N-TS-CHARLESTS	-TF-T1	UT-CWC/MR/UVT-UTOA	1222374	Charles	TF	2019	CR01	Charles	TF	Charles - TF
2021	19190751	6	By a Fixed Date	PR	62678659	NOCO ORAS	INIT	CR02	1	10/01/2021	07/17/2020	08/20/2021	N-TS-CHARLESTS	-TF-T1	UT-CWC/MR/UVT-UTOA	1222374	Charles	TF	2021	CR02	Charles	TF	Charles - TF
2017	15821449	5	On a Fixed Date	PR	61322825	NOCO ORAS	INIT	CR01		06/27/2017	06/27/2017	06/27/2017	N-TS-CHARLESTS	-TF-T1	STN 'A' PWR EQ INSP-SVI Spr 2017	1222374	Charles	TF	2017	CR01	Charles	TF	Charles - TF
2017	16195251	5	On a Fixed Date	PR	61322826	NOCO ORAS	INIT	CR01		11/13/2017	11/13/2017	11/13/2017	N-TS-CHARLESTS	-TF-T1	STN 'A' PWR EQ INSP-SVI Fall 2017	1222374	Charles	TF	2017	CR01	Charles	TF	Charles - TF
2016	15130548	5	On a Fixed Date	PR	61169688	NOCO ORAS	INIT	CR01		09/29/2016	09/29/2016	09/29/2016	N-TS-CHARLESTS	-TF-T1	STN 'A' PWR EQ INSP-SVI FALL 2016	1222374	Charles	TF	2016	CR01	Charles	TF	Charles - TF
2020	19482316	5	On a Fixed Date	PR	62283319	NOCO ORAS	INIT	CR01		10/27/2020	10/27/2020	10/27/2020	N-TS-CHARLESTS	-TF-T1	STN 'A' PWR EQ INSP-SVI Fall 2020	1222374	Charles	TF	2020	CR01	Charles	TF	Charles - TF
2018	17038613	5	On a Fixed Date	PR	61554233	NOCO ORAS	INIT	CR01		10/17/2018	10/17/2018	10/17/2018	N-TS-CHARLESTS	-TF-T1	STN 'A' PWR EQ INSP-SVI Fall 2018	1222374	Charles	TF	2018	CR01	Charles	TF	Charles - TF
2020	17803459	6	By a Fixed Date	PR	62284279	NOCO ORAS	INIT	CR01	1	04/01/2020	07/06/2019	02/05/2020	N-TS-CHARLESTS	-TF-T1	UT-CWC/MR/UVT-UTOA	1222374	Charles	TF	2020	CR01	Charles	TF	Charles - TF
2019	17468999	5	On a Fixed Date	PR	61908456	NOCO ORAS	INIT	CR01		04/02/2019	04/02/2019	04/02/2019	N-TS-CHARLESTS	-TF-T1	STN 'A' PWR EQ INSP-SVI Spr 2019	1222374	Charles	TF	2019	CR01	Charles	TF	Charles - TF
2018	16996964	6	By a Fixed Date	PR	62006487	ATCO NOCO ORAS	INIT	CR01	1	11/13/2018	09/19/2018	11/19/2018	N-TS-CHARLESTS	-TF-T1	UT-CWC/MR/UVT-(SPECIAL)MCT-X	1222374	Charles	TF	2018	CR01	Charles	TF	Charles - TF
2020	18364142	6	By a Fixed Date	PR	62468657	NOCO ORAS	INIT	CR01	1	01/10/2020	11/27/2019	01/28/2020	N-TS-CHARLESTS	-TF-T1	UT-CWC/MR/UVT-(SPECIAL)MCT-X	1222374	Charles	TF	2020	CR01	Charles	TF	Charles - TF
2019	15873146	6	By a Fixed Date	PR	61554740	ATCO NOCO ORAS	INIT	CR02	1	07/21/2017	07/21/2017	04/11/2019	N-TS-CHARLESTS	-TF-T1	UT-CWC/MR/UVT-UTOA	1222374	Charles	TF	2019	CR02	Charles	TF	Charles - TF
2020	17803490	6	By a Fixed Date	PR	62284400	NOCO ORAS	INIT	CR02	1	10/01/2020	07/06/2019	09/27/2020	N-TS-CHARLESTS	-TF-T1	UT-CWC/MR/UVT-UTOA	1222374	Charles	TF	2020	CR02	Charles	TF	Charles - TF

2021 16880570	6	By a Fixed Date	PR	61912090	NOCO ORAS	INIT	CR01	1	07/07/2018	07/07/2018	10/27/2021	N-TS-CHARLESTS -TF-T1	UT-CWC/MR/UVT-UTOA	1222374	Charles	TF	2021	CR01	Charles	TF	Charles - TF
2018 16513688	5	On a Fixed Date	PR	61554232	NOCO ORAS	INIT	CR01		03/15/2018	03/15/2018	03/15/2018	N-TS-CHARLESTS -TF-T1	STN 'A' PWR EQ INSP-SVI Spr 2018	1222374	Charles	TF	2018	CR01	Charles	TF	Charles - TF
2020 18942458	5	On a Fixed Date	PR	62283318	NOCO ORAS	INIT	CR02		05/18/2020	05/18/2020	05/18/2020	N-TS-CHARLESTS -TF-T1	STN 'A' PWR EQ INSP-SVI Spr 2020	1222374	Charles	TF	2020	CR02	Charles	TF	Charles - TF
2020 18846151	5	On a Fixed Date	PR	61908457	NOCO ORAS	INIT	CR02		04/29/2020	04/29/2020	04/29/2020	N-TS-CHARLESTS -TF-T1	STN 'A' PWR EQ INSP-SVI Fall 2019	1222374	Charles	TF	2020	CR02	Charles	TF	Charles - TF
2021 19190750	6	By a Fixed Date	PR	62678658	NOCO ORAS	INIT	CR01	1	04/01/2021	07/17/2020	02/01/2021	N-TS-CHARLESTS -TF-T1	UT-CWC/MR/UVT-UTOA	1222374	Charles	TF	2021	CR01	Charles	TF	Charles - TF
2018 15873145	6	By a Fixed Date	PR	61554739	ATCO NOCO ORAS	INIT	CR01	1	07/21/2017	07/21/2017	02/08/2018	N-TS-CHARLESTS -TF-T1	UT-CWC/MR/UVT-UTOA	1222374	Charles	TF	2018	CR01	Charles	TF	Charles - TF
2017 14904252	6	By a Fixed Date	PR	61327381	ATCO NOCO ORAS	INIT	CR02	1	07/16/2016	07/16/2016	12/11/2017	N-TS-CHARLESTS -TF-T1	UT-CWC/MR/UVT-UTOA	1222374	Charles	TF	2017	CR02	Charles	TF	Charles - TF
2017 14904251	6	By a Fixed Date	PR	61327380	ATCO NOCO ORAS	INIT	CR01	1	07/16/2016	07/16/2016	04/11/2017	N-TS-CHARLESTS -TF-T1	UT-CWC/MR/UVT-UTOA	1222374	Charles	TF	2017	CR01	Charles	TF	Charles - TF
2017 14904253	6	By a Fixed Date	PR	61327382	ATCO NOCO ORAS	INIT	CR01	1	07/16/2016	07/16/2016	04/11/2017	N-TS-CHARLESTS -TF-T1	UT-CWC/MR/UVT-UTOA	1222376	Charles	TF	2017	CR01	Charles	TF	Charles - TF
2020 17803495	6	By a Fixed Date	PR	62284405	NOCO ORAS	INIT	CR01	1	10/01/2020	07/06/2019	09/14/2020	N-TS-CHARLESTS -TF-T1	UT-CWC/MR/UVT-UTOA	1222376	Charles	TF	2020	CR01	Charles	TF	Charles - TF
2020 18942459	5	On a Fixed Date	PR	62283318	NOCO ORAS	INIT	CR02		05/18/2020	05/18/2020	05/18/2020	N-TS-CHARLESTS -TF-T1	STN 'A' PWR EQ INSP-SVI Spr 2020	1222376	Charles	TF	2020	CR02	Charles	TF	Charles - TF
2020 18845836	5	On a Fixed Date	PR	61908457	NOCO ORAS	INIT	CR02		04/29/2020	04/29/2020	04/29/2020	N-TS-CHARLESTS -TF-T1	STN 'A' PWR EQ INSP-SVI Fall 2019	1222376	Charles	TF	2020	CR02	Charles	TF	Charles - TF
2020 19482317	5	On a Fixed Date	PR	62283319	NOCO ORAS	INIT	CR01		10/27/2020	10/27/2020	10/27/2020	N-TS-CHARLESTS -TF-T1	STN 'A' PWR EQ INSP-SVI Fall 2020	1222376	Charles	TF	2020	CR01	Charles	TF	Charles - TF
2018 16513663	5	On a Fixed Date	PR	61554232	NOCO ORAS	INIT	CR01		03/15/2018	03/15/2018	03/15/2018	N-TS-CHARLESTS -TF-T1	STN 'A' PWR EQ INSP-SVI Spr 2018	1222376	Charles	TF	2018	CR01	Charles	TF	Charles - TF
2018 17038577	5	On a Fixed Date	PR	61554233	NOCO ORAS	INIT	CR01		10/17/2018	10/17/2018	10/17/2018	N-TS-CHARLESTS -TF-T1	STN 'A' PWR EQ INSP-SVI Fall 2018	1222376	Charles	TF	2018	CR01	Charles	TF	Charles - TF
2016 15130571	5	On a Fixed Date	PR	61169688	NOCO ORAS	INIT	CR01		09/29/2016	09/29/2016	09/29/2016	N-TS-CHARLESTS -TF-T1	STN 'A' PWR EQ INSP-SVI FALL 2016	1222376	Charles	TF	2016	CR01	Charles	TF	Charles - TF
2020 17803494	6	By a Fixed Date	PR	62284404	NOCO ORAS	INIT	CR01	1	04/01/2020	07/06/2019	02/05/2020	N-TS-CHARLESTS -TF-T1	UT-CWC/MR/UVT-UTOA	1222376	Charles	TF	2020	CR01	Charles	TF	Charles - TF
2020 18364143	6	By a Fixed Date	PR	62468659	NOCO ORAS	INIT	CR01	1	01/10/2020	11/27/2019	01/28/2020	N-TS-CHARLESTS -TF-T1	UT-CWC/MR/UVT-(SPECIAL)MCT-Y	1222376	Charles	TF	2020	CR01	Charles	TF	Charles - TF
2017 14904254	6	By a Fixed Date	PR	61327383	ATCO NOCO ORAS	INIT	CR02	1	07/16/2016	07/16/2016	12/11/2017	N-TS-CHARLESTS -TF-T1	UT-CWC/MR/UVT-UTOA	1222376	Charles	TF	2017	CR02	Charles	TF	Charles - TF
2021 19384320	6	By a Fixed Date	PR	62776215	NOCO ORAS	INIT	CR02	1	01/15/2021	09/28/2020	01/21/2021	N-TS-CHARLESTS -TF-T1	UT-CWC/MR/UVT-(SPECIAL)MCT-Y	1222376	Charles	TF	2021	CR02	Charles	TF	Charles - TF
2021 19190753	6	By a Fixed Date	PR	62678701	NOCO ORAS	INIT	CR01	1	04/01/2021	07/17/2020	01/14/2021	N-TS-CHARLESTS -TF-T1	UT-CWC/MR/UVT-UTOA	1222376	Charles	TF	2021	CR01	Charles	TF	Charles - TF
2019 17469000	5	On a Fixed Date	PR	61908456	NOCO ORAS	INIT	CR01		04/02/2019	04/02/2019	04/02/2019	N-TS-CHARLESTS -TF-T1	STN 'A' PWR EQ INSP-SVI Spr 2019	1222376	Charles	TF	2019	CR01	Charles	TF	Charles - TF
2019 15873148	6	By a Fixed Date	PR	61554742	ATCO NOCO ORAS	INIT	CR01	1	07/21/2017	07/21/2017	04/11/2019	N-TS-CHARLESTS -TF-T1	UT-CWC/MR/UVT-UTOA	1222376	Charles	TF	2019	CR01	Charles	TF	Charles - TF
2017 15821461	5	On a Fixed Date	PR	61322825	NOCO ORAS	INIT	CR01		06/27/2017	06/27/2017	06/27/2017	N-TS-CHARLESTS -TF-T1	STN 'A' PWR EQ INSP-SVI Spr 2017	1222376	Charles	TF	2017	CR01	Charles	TF	Charles - TF
2018 15873147	6	By a Fixed Date	PR	61554741	ATCO NOCO ORAS	INIT	CR01	1	07/21/2017	07/21/2017	02/08/2018	N-TS-CHARLESTS -TF-T1	UT-CWC/MR/UVT-UTOA	1222376	Charles	TF	2018	CR01	Charles	TF	Charles - TF
2019 16880573	6	By a Fixed Date	PR	61912093	NOCO ORAS	INIT	CR01	1	07/07/2018	07/07/2018	04/01/2019	N-TS-CHARLESTS -TF-T1	UT-CWC/MR/UVT-UTOA	1222376	Charles	TF	2019	CR01	Charles	TF	Charles - TF
2021 19190754	6	By a Fixed Date	PR	62678702	NOCO ORAS	INIT	CR02	1	10/01/2021	07/17/2020	08/23/2021	N-TS-CHARLESTS -TF-T1	UT-CWC/MR/UVT-UTOA	1222376	Charles	TF	2021	CR02	Charles	TF	Charles - TF
2017 16195253	5	On a Fixed Date	PR	61322826	NOCO ORAS	INIT	CR01		11/13/2017	11/13/2017	11/13/2017	N-TS-CHARLESTS -TF-T1	STN 'A' PWR EQ INSP-SVI Fall 2017	1222376	Charles	TF	2017	CR01	Charles	TF	Charles - TF
2019 16996987	6	By a Fixed Date	PR	62006490	ATCO NOCO ORAS	INIT	CR02	1	11/13/2018	09/19/2018	01/17/2019	N-TS-CHARLESTS -TF-T1	UT-CWC/MR/UVT-(SPECIAL)MCT-Y	1222376	Charles	TF	2019	CR02	Charles	TF	Charles - TF
2019 16880574	6	By a Fixed Date	PR	61912094	NOCO ORAS	INIT	CR03	1	07/07/2018	07/07/2018	11/27/2019	N-TS-CHARLESTS -TF-T1	UT-CWC/MR/UVT-UTOA	1222376	Charles	TF	2019	CR03	Charles	TF	Charles - TF
2020 19269623	6	By a Fixed Date	PR	62732420	NOCO ORAS	INIT	CR02	1	12/18/2020	08/24/2020	12/24/2020	N-TS-CHARLESTS -TF-T1	UT-CWC/MR/UVT-(SPECIAL)MCT-Y	1222376	Charles	TF	2020	CR02	Charles	TF	Charles - TF
2017 14904255	6	By a Fixed Date	PR	61327384	ATCO NOCO ORAS	INIT	CR01	1	07/16/2016	07/16/2016	05/04/2017	N-TS-CHARLESTS -TF-T2	UT-CWC/MR/UVT-UTOA	1222378	Charles	TF	2017	CR01	Charles	TF	Charles - TF
2021 19190757	6	By a Fixed Date	PR	62678705	NOCO ORAS	INIT	CR02	1	10/01/2021	07/17/2020	11/08/2021	N-TS-CHARLESTS -TF-T2	UT-CWC/MR/UVT-UTOA	1222378	Charles	TF	2021	CR02	Charles	TF	Charles - TF
2020 18845837	5	On a Fixed Date	PR	61908457	NOCO ORAS	INIT	CR02		04/29/2020	04/29/2020	04/29/2020	N-TS-CHARLESTS -TF-T2	STN 'A' PWR EQ INSP-SVI Fall 2019	1222378	Charles	TF	2020	CR02	Charles	TF	Charles - TF
2017 15821462	5	On a Fixed Date	PR	61322825	NOCO ORAS	INIT	CR01		06/27/2017	06/27/2017	06/27/2017	N-TS-CHARLESTS -TF-T2	STN 'A' PWR EQ INSP-SVI Spr 2017	1222378	Charles	TF	2017	CR01	Charles	TF	Charles - TF
2019 18206807	6	By a Fixed Date	PR	62421926	NOCO ORAS	INIT	CR02	1	12/02/2019	10/15/2019	11/19/2019	N-TS-CHARLESTS -TF-T2	UT-CWC/MR/UVT-(SPECIAL)UTOA-X	1222378	Charles	TF	2019	CR02	Charles	TF	Charles - TF
2020 18942461	5	On a Fixed Date	PR	62283318	NOCO ORAS	INIT	CR02		05/18/2020	05/18/2020	05/18/2020	N-TS-CHARLESTS -TF-T2	STN 'A' PWR EQ INSP-SVI Spr 2020	1222378	Charles	TF	2020	CR02	Charles	TF	Charles - TF
2020 17803497	6	By a Fixed Date	PR	62284407	NOCO ORAS	INIT	CR03	1	10/01/2020	07/06/2019	09/11/2020	N-TS-CHARLESTS -TF-T2	UT-CWC/MR/UVT-(SPECIAL)UTOA 2/2 2020	1222378	Charles	TF	2020	CR03	Charles	TF	Charles - TF
2019 16995794	6	By a Fixed Date	PR	62004958	ATCO NOCO ORAS	INIT	CR02	1	11/26/2018	09/18/2018	01/28/2019	N-TS-CHARLESTS -TF-T2	UT-CWC/MR/UVT-(SPECIAL)MCT-X	1222378	Charles	TF	2019	CR02	Charles	TF	Charles - TF
2018 16513669	5	On a Fixed Date	PR	61554232	NOCO ORAS	INIT	CR01		03/15/2018	03/15/2018	03/15/2018	N-TS-CHARLESTS -TF-T2	STN 'A' PWR EQ INSP-SVI Spr 2018	1222378	Charles	TF	2018	CR01	Charles	TF	Charles - TF
2018 15873149	6	By a Fixed Date	PR	61554743	ATCO NOCO ORAS	INIT	CR01	1	07/21/2017	07/21/2017	02/08/2018	N-TS-CHARLESTS -TF-T2	UT-CWC/MR/UVT-UTOA	1222378	Charles	TF	2018	CR01	Charles	TF	Charles - TF
2016 15130572	5	On a Fixed Date	PR	61169688	NOCO ORAS	INIT	CR01		09/29/2016	09/29/2016	09/29/2016	N-TS-CHARLESTS -TF-T2	STN 'A' PWR EQ INSP-SVI FALL 2016	1222378	Charles	TF	2016	CR01	Charles	TF	Charles - TF
2021 19190756	6	By a Fixed Date	PR	62678704	NOCO ORAS	INIT	CR01	1	04/01/2021	07/17/2020	03/31/2021	N-TS-CHARLESTS -TF-T2	UT-CWC/MR/UVT-UTOA	1222378	Charles	TF	2021	CR01	Charles	TF	Charles - TF
2020 19142275	6	By a Fixed Date	PR	62637906	NOCO ORAS	INIT	CR01	1	07/16/2020	07/10/2020	07/10/2020	N-TS-CHARLESTS -TF-T2	UT-CWC/MR/UVT-(SPECIAL)RUSH-MCT-X	1222378	Charles	TF	2020	CR01	Charles	TF	Charles - TF
2019 16880575	6	By a Fixed Date	PR	61912095	ATCO NOCO ORAS	INIT	CR01	1	07/07/2018	07/07/2018	04/01/2019	N-TS-CHARLESTS -TF-T2	UT-CWC/MR/UVT-UTOA	1222378	Charles	TF	2019	CR01	Charles	TF	Charles - TF
2020 19127711	5	On a Fixed Date	PR	62632237	NOCO ORAS	INIT	CR01		07/06/2020	07/06/2020	07/06/2020	N-TS-CHARLESTS -TF-T2	PREOUTAGE INSPECTION- CAT 2 - ELEC	1222378	Charles	TF	2020	CR01	Charles	TF	Charles - TF
2019 16880576	6	By a Fixed Date	PR	61912096	NOCO ORAS	INIT	CR03	1	07/07/2018	07/07/2018	10/15/2019	N-TS-CHARLESTS -TF-T2	UT-CWC/MR/UVT-UTOA	1222378	Charles	TF	2019	CR03	Charles	TF	Charles - TF
2018 15873160	6	By a Fixed Date	PR	61554744	ATCO NOCO ORAS	INIT	CR03	1	07/21/2017	07/21/2017	09/19/2018	N-TS-CHARLESTS -TF-T2	UT-CWC/MR/UVT-UTOA	1222378	Charles	TF	2018	CR03	Charles	TF	Charles - TF
2017 16195255	5	On a Fixed Date	PR	61322826	NOCO ORAS	INIT	CR01		11/13/2017	11/13/2017	11/13/2017	N-TS-CHARLESTS -TF-T2	STN 'A' PWR EQ INSP-SVI Fall 2017	1222378	Charles	TF	2017	CR01	Charles	TF	Charles - TF
2017 14904256	6	By a Fixed Date	PR	61327385	NOCO ORAS	INIT	CR01	1	07/16/2016	07/16/2016	10/19/2017	N-TS-CHARLESTS -TF-T2	UT-CWC/MR/UVT-UTOA	1222378	Charles	TF	2017	CR01	Charles	TF	Charles - TF
2020 19482318	5	On a Fixed Date	PR	62283319	NOCO ORAS	INIT	CR01		10/27/2020	10/27/2020	10/27/2020	N-TS-CHARLESTS -TF-T2	STN 'A' PWR EQ INSP-SVI Fall 2020	1222378	Charles	TF	2020	CR01	Charles	TF	Charles - TF
2020 17803496	6	By a Fixed Date	PR	62284406	NOCO ORAS	INIT	CR02	1	04/01/2020	07/06/2019	02/13/2020	N-TS-CHARLESTS -TF-T2	UT-CWC/MR/UVT-UTOA	1222378	Charles	TF	2020	CR02	Charles	TF	Charles - TF
2020 19365709	6	By a Fixed Date	PR	62767313	NOCO ORAS	INIT	CR02	1	12/04/2020	09/21/2020	11/30/2020	N-TS-CHARLESTS -TF-T2	UT-CWC/MR/UVT-(SPECIAL)MCT-X	1222378	Charles	TF	2020	CR02	Charles	TF	Charles - TF
2018 17038616	5	On a Fixed Date	PR	61554233	NOCO ORAS	INIT	CR01		10/17/2018	10/17/2018	10/17/2018	N-TS-CHARLESTS -TF-T2	STN 'A' PWR EQ INSP-SVI Fall 2018	1222378	Charles	TF	2018	CR01	Charles	TF	Charles - TF
2019 17469001	5	On a Fixed Date	PR	61908456	NOCO ORAS	INIT	CR01		04/02/2019	04/02/2019	04/02/2019	N-TS-CHARLESTS -TF-T2	STN 'A' PWR EQ INSP-SVI Spr 2019	1222378	Charles	TF	2019	CR01	Charles	TF	Charles - TF
2016 15130573	5	On a Fixed Date	PR	61169688	NOCO ORAS	INIT	CR01		09/29/2016	09/29/2016	09/29/2016	N-TS-CHARLESTS -TF-T2	STN 'A' PWR EQ INSP-SVI FALL 2016	1222380	Charles	TF	2016	CR01	Charles	TF	Charles - TF
2018 15873162	6	By a Fixed Date	PR	61554746	ATCO NOCO ORAS	INIT	CR03	1	07/21/2017	07/21/2017	09/19/2018	N-TS-CHARLESTS -TF-T2	UT-CWC/MR/UVT-UTOA	1222380	Charles	TF	2018	CR03	Charles	TF	Charles - TF
2017 15821463	5	On a Fixed Date	PR	61322825	NOCO ORAS	INIT	CR01		06/27/2017	06/27/2017	06/27/2017	N-TS-CHARLESTS -TF-T2	STN 'A' PWR EQ INSP-SVI Spr 2017	1222380	Charles	TF	2017	CR01	Charles	TF	Charles - TF
2019 16880578	6	By a Fixed Date	PR	61912098	NOCO ORAS	INIT	CR03	1	07/07/2018	07/07/2018	10/15/2019	N-TS-CHARLESTS -TF-T2	UT-CWC/MR/UVT-UTOA	1222380	Charles	TF	2019	CR03	Charles	TF	Charles - TF
2021 19190770	6	By a Fixed Date	PR	62678708	NOCO ORAS	INIT	CR02	1	10/01/2021	07/17/2020	11/08/2021	N-TS-CHARLESTS -TF-T2	UT-CWC/MR/UVT-UTOA	1222380	Charles	TF	2021	CR02	Charles	TF	Charles - TF
2020 19366060	6	By a Fixed Date	PR	62767314	NOCO ORAS	INIT	CR02	1	11/06/2020	09/21/2020	11/19/2020	N-TS-CHARLESTS -TF-T2	UT-CWC/MR/UVT-(SPECIAL)DGA-Y	1222380	Charles	TF	2020	CR02	Charles	TF	Charles - TF
2020 18942464	5	On a Fixed Date	PR	62283318	NOCO ORAS	INIT	CR02		05/18/2020	05/18/2020	05/18/2020	N-TS-CHARLESTS -TF-T2	STN 'A' PWR EQ INSP-SVI Spr 2020	1222380	Charles	TF	2020	CR02	Charles	TF	Charles - TF
2017 14904294	6	By a Fixed Date	PR	61327393	ATCO NOCO ORAS	INIT	CR01	1	07/16/2016	07/16/2016	05/04/2017	N-TS-CHARLESTS -TF-T2	UT-CWC/MR/UVT-UTOA	1222380	Charles	TF	2017	CR01	Charles	TF	Charles - TF
2018 17038578	5	On a Fixed Date	PR	61554233	NOCO ORAS	INIT	CR01		10/17/2018	10/17/2018	10/17/2018	N-TS-CHARLESTS -TF-T2	STN 'A' PWR EQ INSP-SVI Fall 2018	1222380	Charles	TF	2018	CR01	Charles	TF	Charles - TF
2020 17803498	6	By a Fixed Date	PR	62284408	NOCO ORAS	INIT	CR02	1	04/01/2020	07/06/2019	02/13/2020	N-TS-CHARLESTS -TF-T2	UT-CWC/MR/UVT-UTOA	1222380	Charles	TF	2020	CR02	Charles	TF	Charles - TF
2018 16513668	5	On a Fixed Date	PR	61554232	NOCO ORAS	INIT	CR01		03/15/2018	03/15/2018	03/15/2018	N-TS-CHARLESTS -TF-T2	STN 'A' PWR EQ INSP-SVI Spr 2018	1222380	Charles	TF	2018	CR01	Charles	TF	Charles - TF
2019 16995805	6	By a Fixed Date	PR	62005080	ATCO NOCO ORAS	INIT	CR02	1	11/26/2018	09/18/2018	01/28/2019	N-TS-CHARLESTS -TF-T2	UT-CWC/MR/UVT-(SPECIAL)MCT-Y	1222380	Charles	TF	2019	CR02	Charles	TF	Charles - TF
2020 17803499	6	By a Fixed Date	PR	62284409	NOCO ORAS	INIT	CR03	1	10/01/2020	07/06/2019	09/13/2020	N-TS-CHARLESTS -TF-T2	UT-CWC/MR/UVT-UTOA	1222380	Charles	TF	2020	CR03	Charles	TF	Charles - TF
2019 18206965	6	By a Fixed Date	PR	62421933	NOCO ORAS	INIT	CR01	1	12/02/2019	10/15/2019	11/18/2019	N-TS-CHARLESTS -TF-T2	UT-CWC/MR/UVT-(SPECIAL)UTOA-Y	1222380	Charles	TF	2019	CR01	Charles	TF	Charles - TF
2019 14904295	6	By a Fixed Date	PR	61327394	ATCO NOCO ORAS	INIT	CR01	1	07/16/2016	07/16/2016	04/09/2019	N-TS-CHARLESTS -TF-T2	UT-CWC/MR/UVT-UTOA	1222380	Charles	TF	2019	CR01	Charles	TF	Charles - TF
2019 17469067	5	On a Fixed Date	PR	61908456	NOCO ORAS	INIT	CR01		04/02/2019	04/02/2019	04/02/2019	N-TS-CHARLESTS -TF-T2	STN 'A' PWR EQ INSP-SVI Spr 2019	1222380	Charles	TF	2019	CR01	Charles	TF	Charles - TF
2020 19482319	5	On a Fixed Date	PR	62283319	NOCO ORAS	INIT	CR01		10/27/2020	10/27/2020	10/27/2020	N-TS-CHARLESTS -TF-T2	STN 'A' PWR EQ INSP-SVI Fall 2020	1222380	Charles	TF	2020	CR01	Charles	TF	Charles - TF
2020 18845850	5	On a Fixed Date	PR	61908457	NOCO ORAS	INIT	CR02		04/29/2020	04/29/2020	04/29/2020	N-TS-CHARLESTS -TF-T2	STN 'A' PWR EQ INSP-SVI Fall 2019	1222380	Charles	TF	2020	CR02	Charles	TF	Charles - TF
2020 19127712	5	On a Fixed Date	PR	62632237	NOCO ORAS	INIT	CR02		07/06/2020	07/06/2020	07/13/2020	N-TS-CHARLESTS -TF-T2	PREOUTAGE INSPECTION- CAT 2 - ELEC	1222380	Charles	TF	2020	CR02	Charles	TF	Charles - TF
2021 19190759	6	By a Fixed Date	PR	62678707	NOCO ORAS	INIT	CR01	1	04/01/2021	07/17/2020	03/31/2021	N-TS-CHARLESTS -TF-T2	UT-CWC/MR/UVT-UTOA	1222380	Charles	TF	2021	CR01	Charles	TF	Charles - TF
2020 19142276	6	By a Fixed Date	PR	62637908	NOCO ORAS	INIT	CR01	1	07/16/2020	07/10/2020	07/10/2020	N-TS-CHARLESTS -TF-T2	UT-CWC/MR/UVT-(SPECIAL)RUSH-MCT-Y	1222380	Charles	TF	2020	CR01	Charles	TF	Charles - TF
2018 15873161	6	By a Fixed Date	PR	61554745	ATCO NOCO ORAS	INIT	CR01	1	07/21/2017	07/21/2017	02/08/2018	N-TS-CHARLESTS -TF-T2	UT-CWC/MR/UVT-UTOA	1222380	Charles	TF	2018	CR01	Charles	TF	Charles - TF
2017 16195257	5	On a Fixed Date	PR	61322826	NOCO ORAS	INIT	CR01		11/13/2017	11/13/2017	11/13/2017	N-TS-CHARLESTS -TF-T2	STN 'A' PWR EQ INSP-SVI Fall 2017	1222380	Charles	TF	2017	CR01	Charles	TF	Charles - TF
2019 16880577	6	By a Fixed Date	PR	61912097	NOCO ORAS	INIT	CR01	1	07/07/2018	07/07/2018	04/01/2019	N-TS-CHARLESTS -TF-T2	UT-CWC/MR/UVT-UTOA	1222380	Charles	TF	2019	CR01	Charles	TF	Charles - TF
2020 19482340	5	On a Fixed Date	PR	62283319	NOCO ORAS	INIT	CR01		10/27/2020	10/27/2020	10/27/2020	N-TS-CHARLESTS -TF-T3	STN 'A' PWR EQ INSP-SVI Fall 2020	1222382	Charles	TF	2020	CR01	Charles	TF	Charles - TF
2019 17469002	5	On a Fixed Date	PR	61908456	NOCO ORAS	INIT	CR01		04/02/2019	04/02/2019	04/02/2019	N-TS-CHARLESTS -TF-T3	STN 'A' PWR EQ INSP-SVI Spr 2019	1222382	Charles	TF	2019	CR01	Charles	TF	Charles - TF
2018 17038579	5	On a Fixed Date	PR	61554233	NOCO ORAS	INIT	CR01		10/17/2018	10/17/2018	10/17/2018	N-TS-CHARLESTS -TF-T3	STN 'A' PWR EQ INSP-SVI Fall 2018	1222382	Charles	TF	2018	CR01	Charles	TF	Charles - TF
2020 18942465	5	On a Fixed Date	PR	62283318	NOCO ORAS	INIT	CR02		05/18/2020	05/18/2020	05/18/2020	N-TS-CHARLESTS -TF-T3	STN 'A' PWR EQ INSP-SVI Spr 2020	1222382	Charles	TF	2020	CR02	Charles	TF	Charles - TF
2016 15130577	5	On a Fixed Date	PR	61169688	NOCO ORAS	INIT	CR01		09/29/2016	09/29/2016	09/29/2016	N-TS-CHARLESTS -TF-T3	STN 'A' PWR EQ INSP-SVI FALL 2016	1222382	Charles	TF	2016	CR01	Charles	TF	Charles - TF
2020 17811719	6	By a Fixed Date	PR	62292621	NOCO ORAS	INIT	CR02	1	02/24/2020	07/06/2019	12/02/2020	N-TS-CHARLESTS -TF-T3	UT-MR-DIII-UTOA	1222382	Charles	TF	2020	CR02	Charles	TF	Charles - TF
2017 15821460	5	On a Fixed Date	PR	61322825	NOCO ORAS	INIT	CR01		06/27/2017	06/27/2017	06/27/2017	N-TS-CHARLESTS -TF-T3	STN 'A' PWR EQ INSP-SVI Spr 2017	1222382	Charles	TF	2017	CR01	Charles	TF	Charles - TF
2021 19192458	6	By a Fixed Date	PR	62680386	NOCO ORAS	INIT	CR02	1	02/24/2021	07/18/2020	08/23/2021	N-TS-CHARLESTS -TF-T3	UT-MR-DIII-UTOA	1222382	Charles	TF	2021	CR02	Charles	TF	Charles - TF
2017 16195259	5	On a Fixed Date	PR	61322826	NOCO ORAS	INIT	CR01		11/13/2017	11/13/2017	11/13/2017	N-TS-CHARLESTS -TF-T3	STN 'A' PWR EQ INSP-SVI Fall 2017	1222382	Charles	TF	2017	CR01	Charles	TF	Charles - TF
2019 15875753	6	By a Fixed Date	PR	61557297	ATCO NOCO ORAS	INIT	CR01	1	07/21/2017	07/21/2017	04/11/2019	N-TS-CHARLESTS -TF-T3	UT-MR-DIII-UTOA	1222382	Charles	TF	2019	CR01	Charles	TF	Charles - TF
2019 17046365	6	By a Fixed Date	PR	62045074	ATCO NOCO ORAS	INIT	CR01	1	12/14/2018	10/24/2018	01/09/2019	N-TS-CHARLESTS -TF-T3	UT-MR-DIII-(SPECIAL)MCT-X	1222382	Charles	TF	2019	CR01	Charles	TF	Charles - TF
2018 16513671	5	On a Fixed Date	PR	61554232	NOCO ORAS	INIT	CR01		03/15/2018	03/15/2018	03/15/2018	N-TS-CHARLESTS -TF-T3	STN 'A' PWR EQ INSP-SVI Spr 2018	1222382	Charles	TF	2018	CR01	Charles	TF	Charles - TF

2020	19127701	5	On a Fixed Date	PR	62632238	NOCO ORAS	INIT	CR03		07/06/2020	07/06/2020	07/13/2020	N-TS-CHARLESTS -TF-T3	PREOUTAGE INSPECTION- CAT 2 - ELEC	1222382	Charles	TF	2020	CR03	Charles	TF	Charles - TF
2019	16892582	6	By a Fixed Date	PR	61924243	ATCO NOCO ORAS	INIT	CR02	1	07/07/2018	07/07/2018	02/21/2019	N-TS-CHARLESTS -TF-T3	UT-MR-DIII-UTOA	1222382	Charles	TF	2019	CR02	Charles	TF	Charles - TF
2017	14922847	6	By a Fixed Date	PR	61345986	NOCO ORAS	INIT	CR01	1	07/16/2016	07/16/2016	07/24/2017	N-TS-CHARLESTS -TF-T3	UT-MR-DIII-UTOA	1222382	Charles	TF	2017	CR01	Charles	TF	Charles - TF
2020	18845851	5	On a Fixed Date	PR	61908457	NOCO ORAS	INIT	CR02		04/29/2020	04/29/2020	04/29/2020	N-TS-CHARLESTS -TF-T3	STN 'A' PWR EQ INSP-SVI Fall 2019	1222382	Charles	TF	2020	CR02	Charles	TF	Charles - TF
2020	19144080	6	By a Fixed Date	PR	62639264	NOCO ORAS	INIT	CR02	1	09/18/2020	07/13/2020	09/11/2020	N-TS-CHARLESTS -TF-T3	UT-MR-DIII-(SPECIAL)MCT-X	1222382	Charles	TF	2020	CR02	Charles	TF	Charles - TF
2020	19127702	5	On a Fixed Date	PR	62632238	NOCO ORAS	INIT	CR01		07/06/2020	07/06/2020	07/06/2020	N-TS-CHARLESTS -TF-T3	PREOUTAGE INSPECTION- CAT 2 - ELEC	1222384	Charles	TF	2020	CR01	Charles	TF	Charles - TF
2021	19192459	6	By a Fixed Date	PR	62680387	NOCO ORAS	INIT	CR02	1	03/01/2021	07/18/2020	08/23/2021	N-TS-CHARLESTS -TF-T3	UT-MR-DIII-UTOA	1222384	Charles	TF	2021	CR02	Charles	TF	Charles - TF
2020	18942469	5	On a Fixed Date	PR	62283318	NOCO ORAS	INIT	CR02		05/18/2020	05/18/2020	05/18/2020	N-TS-CHARLESTS -TF-T3	STN 'A' PWR EQ INSP-SVI Spr 2020	1222384	Charles	TF	2020	CR02	Charles	TF	Charles - TF
2016	15130578	5	On a Fixed Date	PR	61169688	NOCO ORAS	INIT	CR01		09/29/2016	09/29/2016	09/29/2016	N-TS-CHARLESTS -TF-T3	STN 'A' PWR EQ INSP-SVI FALL 2016	1222384	Charles	TF	2016	CR01	Charles	TF	Charles - TF
2020	19144069	6	By a Fixed Date	PR	62639263	NOCO ORAS	INIT	CR03	1	09/18/2020	07/13/2020	09/11/2020	N-TS-CHARLESTS -TF-T3	UT-MR-DIII-(SPECIAL)MCT-Y	1222384	Charles	TF	2020	CR03	Charles	TF	Charles - TF
2021	19365707	6	By a Fixed Date	PR	62767306	NOCO ORAS	INIT	CR02	1	12/04/2020	09/21/2020	11/11/2021	N-TS-CHARLESTS -TF-T3	UT-MR-DIII-(SPECIAL)MCT-Y	1222384	Charles	TF	2021	CR02	Charles	TF	Charles - TF
2020	17811760	6	By a Fixed Date	PR	62292622	NOCO ORAS	INIT	CR01	1	03/02/2020	07/06/2019	11/10/2020	N-TS-CHARLESTS -TF-T3	UT-MR-DIII-UTOA	1222384	Charles	TF	2020	CR01	Charles	TF	Charles - TF
2020	19482280	5	On a Fixed Date	PR	62283319	NOCO ORAS	INIT	CR01		10/27/2020	10/27/2020	10/27/2020	N-TS-CHARLESTS -TF-T3	STN 'A' PWR EQ INSP-SVI Fall 2020	1222384	Charles	TF	2020	CR01	Charles	TF	Charles - TF
2018	17038590	5	On a Fixed Date	PR	61554233	NOCO ORAS	INIT	CR01		10/17/2018	10/17/2018	10/17/2018	N-TS-CHARLESTS -TF-T3	STN 'A' PWR EQ INSP-SVI Fall 2018	1222384	Charles	TF	2018	CR01	Charles	TF	Charles - TF
2019	15875754	6	By a Fixed Date	PR	61557298	ATCO NOCO ORAS	INIT	CR01	1	07/21/2017	07/21/2017	04/10/2019	N-TS-CHARLESTS -TF-T3	UT-MR-DIII-UTOA	1222384	Charles	TF	2019	CR01	Charles	TF	Charles - TF
2019	17468997	5	On a Fixed Date	PR	61908456	NOCO ORAS	INIT	CR01		04/02/2019	04/02/2019	04/02/2019	N-TS-CHARLESTS -TF-T3	STN 'A' PWR EQ INSP-SVI Spr 2019	1222384	Charles	TF	2019	CR01	Charles	TF	Charles - TF
2018	16513672	5	On a Fixed Date	PR	61554232	NOCO ORAS	INIT	CR01		03/15/2018	03/15/2018	03/15/2018	N-TS-CHARLESTS -TF-T3	STN 'A' PWR EQ INSP-SVI Spr 2018	1222384	Charles	TF	2018	CR01	Charles	TF	Charles - TF
2017	16195261	5	On a Fixed Date	PR	61322826	NOCO ORAS	INIT	CR01		11/13/2017	11/13/2017	11/13/2017	N-TS-CHARLESTS -TF-T3	STN 'A' PWR EQ INSP-SVI Fall 2017	1222384	Charles	TF	2017	CR01	Charles	TF	Charles - TF
2019	16892583	6	By a Fixed Date	PR	61924244	NOCO ORAS	INIT	CR02	1	07/07/2018	07/07/2018	02/21/2019	N-TS-CHARLESTS -TF-T3	UT-MR-DIII-UTOA	1222384	Charles	TF	2019	CR02	Charles	TF	Charles - TF
2017	14922848	6	By a Fixed Date	PR	61345987	NOCO ORAS	INIT	CR01	1	07/16/2016	07/16/2016	07/24/2017	N-TS-CHARLESTS -TF-T3	UT-MR-DIII-UTOA	1222384	Charles	TF	2017	CR01	Charles	TF	Charles - TF
2020	18845855	5	On a Fixed Date	PR	61908457	NOCO ORAS	INIT	CR02		04/29/2020	04/29/2020	04/29/2020	N-TS-CHARLESTS -TF-T3	STN 'A' PWR EQ INSP-SVI Fall 2019	1222384	Charles	TF	2020	CR02	Charles	TF	Charles - TF
2019	17045211	6	By a Fixed Date	PR	62043982	ATCO NOCO ORAS	INIT	CR01	1	12/14/2018	10/23/2018	01/09/2019	N-TS-CHARLESTS -TF-T3	UT-MR-DIII-(SPECIAL)MCT-Y-DIV	1222384	Charles	TF	2019	CR01	Charles	TF	Charles - TF
2017	15821464	5	On a Fixed Date	PR	61322825	NOCO ORAS	INIT	CR01		06/27/2017	06/27/2017	06/27/2017	N-TS-CHARLESTS -TF-T3	STN 'A' PWR EQ INSP-SVI Spr 2017	1222384	Charles	TF	2017	CR01	Charles	TF	Charles - TF
2017	14922160	6	By a Fixed Date	PR	61345269	ATCO NOCO ORAS	INIT	CR01	1	07/16/2016	07/16/2016	04/03/2017	N-TS-CHARLESTS -TF-T4	UT-MR-DIII-UTOA	1222387	Charles	TF	2017	CR01	Charles	TF	Charles - TF
2018	17038591	5	On a Fixed Date	PR	61554233	NOCO ORAS	INIT	CR01		10/17/2018	10/17/2018	10/17/2018	N-TS-CHARLESTS -TF-T4	STN 'A' PWR EQ INSP-SVI Fall 2018	1222387	Charles	TF	2018	CR01	Charles	TF	Charles - TF
2018	16513676	5	On a Fixed Date	PR	61554232	NOCO ORAS	INIT	CR01		03/15/2018	03/15/2018	03/15/2018	N-TS-CHARLESTS -TF-T4	STN 'A' PWR EQ INSP-SVI Spr 2018	1222387	Charles	TF	2018	CR01	Charles	TF	Charles - TF
2020	19482281	5	On a Fixed Date	PR	62283319	NOCO ORAS	INIT	CR01		10/27/2020	10/27/2020	10/27/2020	N-TS-CHARLESTS -TF-T4	STN 'A' PWR EQ INSP-SVI Fall 2020	1222387	Charles	TF	2020	CR01	Charles	TF	Charles - TF
2020	18845895	5	On a Fixed Date	PR	61908457	NOCO ORAS	INIT	CR02		04/29/2020	04/29/2020	04/29/2020	N-TS-CHARLESTS -TF-T4	STN 'A' PWR EQ INSP-SVI Fall 2019	1222387	Charles	TF	2020	CR02	Charles	TF	Charles - TF
2018	16996877	6	By a Fixed Date	PR	62006480	ATCO NOCO ORAS	INIT	CR01	1	11/13/2018	09/19/2018	11/19/2018	N-TS-CHARLESTS -TF-T4	UT-MR-DIII-(SPECIAL)MCT-X	1222387	Charles	TF	2018	CR01	Charles	TF	Charles - TF
2017	15821489	5	On a Fixed Date	PR	61322825	NOCO ORAS	INIT	CR01		06/27/2017	06/27/2017	06/27/2017	N-TS-CHARLESTS -TF-T4	STN 'A' PWR EQ INSP-SVI Spr 2017	1222387	Charles	TF	2017	CR01	Charles	TF	Charles - TF
2021	19192247	6	By a Fixed Date	PR	62680205	NOCO ORAS	INIT	CR02	1	02/05/2021	07/18/2020	02/01/2021	N-TS-CHARLESTS -TF-T4	UT-MR-DIII-UTOA	1222387	Charles	TF	2021	CR02	Charles	TF	Charles - TF
2016	15130579	5	On a Fixed Date	PR	61169688	NOCO ORAS	INIT	CR01		09/29/2016	09/29/2016	09/29/2016	N-TS-CHARLESTS -TF-T4	STN 'A' PWR EQ INSP-SVI FALL 2016	1222387	Charles	TF	2016	CR01	Charles	TF	Charles - TF
2017	16195263	5	On a Fixed Date	PR	61322826	NOCO ORAS	INIT	CR01		11/13/2017	11/13/2017	11/13/2017	N-TS-CHARLESTS -TF-T4	STN 'A' PWR EQ INSP-SVI Fall 2017	1222387	Charles	TF	2017	CR01	Charles	TF	Charles - TF
2019	17469004	5	On a Fixed Date	PR	61908456	NOCO ORAS	INIT	CR01		04/02/2019	04/02/2019	04/02/2019	N-TS-CHARLESTS -TF-T4	STN 'A' PWR EQ INSP-SVI Spr 2019	1222387	Charles	TF	2019	CR01	Charles	TF	Charles - TF
2019	16891728	6	By a Fixed Date	PR	61923359	ATCO NOCO ORAS	INIT	CR02	1	07/07/2018	07/07/2018	02/21/2019	N-TS-CHARLESTS -TF-T4	UT-MR-DIII-UTOA	1222387	Charles	TF	2019	CR02	Charles	TF	Charles - TF
2020	18942470	5	On a Fixed Date	PR	62283318	NOCO ORAS	INIT	CR02		05/18/2020	05/18/2020	05/18/2020	N-TS-CHARLESTS -TF-T4	STN 'A' PWR EQ INSP-SVI Spr 2020	1222387	Charles	TF	2020	CR02	Charles	TF	Charles - TF
2018	15875623	6	By a Fixed Date	PR	61557177	ATCO NOCO ORAS	INIT	CR01	1	07/21/2017	07/21/2017	02/15/2018	N-TS-CHARLESTS -TF-T4	UT-MR-DIII-UTOA	1222387	Charles	TF	2018	CR01	Charles	TF	Charles - TF
2020	17811508	6	By a Fixed Date	PR	62292370	NOCO ORAS	INIT	CR02	1	02/05/2020	07/06/2019	08/03/2020	N-TS-CHARLESTS -TF-T4	UT-MR-DIII-UTOA	1222387	Charles	TF	2020	CR02	Charles	TF	Charles - TF
2020	18845896	5	On a Fixed Date	PR	61908457	NOCO ORAS	INIT	CR02		04/29/2020	04/29/2020	04/29/2020	N-TS-CHARLESTS -TF-T4	STN 'A' PWR EQ INSP-SVI Fall 2019	1222389	Charles	TF	2020	CR02	Charles	TF	Charles - TF
2018	17038592	5	On a Fixed Date	PR	61554233	NOCO ORAS	INIT	CR01		10/17/2018	10/17/2018	10/17/2018	N-TS-CHARLESTS -TF-T4	STN 'A' PWR EQ INSP-SVI Fall 2018	1222389	Charles	TF	2018	CR01	Charles	TF	Charles - TF
2017	15821500	5	On a Fixed Date	PR	61322825	NOCO ORAS	INIT	CR01		06/27/2017	06/27/2017	06/27/2017	N-TS-CHARLESTS -TF-T4	STN 'A' PWR EQ INSP-SVI Spr 2017	1222389	Charles	TF	2017	CR01	Charles	TF	Charles - TF
2018	15875624	6	By a Fixed Date	PR	61557178	ATCO NOCO ORAS	INIT	CR01	1	07/21/2017	07/21/2017	02/15/2018	N-TS-CHARLESTS -TF-T4	UT-MR-DIII-UTOA	1222389	Charles	TF	2018	CR01	Charles	TF	Charles - TF
2019	16891729	6	By a Fixed Date	PR	61923440	ATCO NOCO ORAS	INIT	CR02	1	07/07/2018	07/07/2018	02/21/2019	N-TS-CHARLESTS -TF-T4	UT-MR-DIII-UTOA	1222389	Charles	TF	2019	CR02	Charles	TF	Charles - TF
2021	19192248	6	By a Fixed Date	PR	62680206	NOCO ORAS	INIT	CR02	1	02/05/2021	07/18/2020	01/31/2021	N-TS-CHARLESTS -TF-T4	UT-MR-DIII-UTOA	1222389	Charles	TF	2021	CR02	Charles	TF	Charles - TF
2020	18942474	5	On a Fixed Date	PR	62283318	NOCO ORAS	INIT	CR02		05/18/2020	05/18/2020	05/18/2020	N-TS-CHARLESTS -TF-T4	STN 'A' PWR EQ INSP-SVI Spr 2020	1222389	Charles	TF	2020	CR02	Charles	TF	Charles - TF
2017	16195265	5	On a Fixed Date	PR	61322826	NOCO ORAS	INIT	CR01		11/13/2017	11/13/2017	11/13/2017	N-TS-CHARLESTS -TF-T4	STN 'A' PWR EQ INSP-SVI Fall 2017	1222389	Charles	TF	2017	CR01	Charles	TF	Charles - TF
2018	16996878	6	By a Fixed Date	PR	62006483	ATCO NOCO ORAS	INIT	CR01	1	11/13/2018	09/19/2018	11/19/2018	N-TS-CHARLESTS -TF-T4	UT-MR-DIII-(SPECIAL)MCT-Y	1222389	Charles	TF	2018	CR01	Charles	TF	Charles - TF
2019	17469005	5	On a Fixed Date	PR	61908456	NOCO ORAS	INIT	CR01		04/02/2019	04/02/2019	04/02/2019	N-TS-CHARLESTS -TF-T4	STN 'A' PWR EQ INSP-SVI Spr 2019	1222389	Charles	TF	2019	CR01	Charles	TF	Charles - TF
2018	16513675	5	On a Fixed Date	PR	61554232	NOCO ORAS	INIT	CR01		03/15/2018	03/15/2018	03/15/2018	N-TS-CHARLESTS -TF-T4	STN 'A' PWR EQ INSP-SVI Spr 2018	1222389	Charles	TF	2018	CR01	Charles	TF	Charles - TF
2020	19482282	5	On a Fixed Date	PR	62283319	NOCO ORAS	INIT	CR01		10/27/2020	10/27/2020	10/27/2020	N-TS-CHARLESTS -TF-T4	STN 'A' PWR EQ INSP-SVI Fall 2020	1222389	Charles	TF	2020	CR01	Charles	TF	Charles - TF
2020	17811509	6	By a Fixed Date	PR	62292371	NOCO ORAS	INIT	CR02	1	02/05/2020	07/06/2019	08/03/2020	N-TS-CHARLESTS -TF-T4	UT-MR-DIII-UTOA	1222389	Charles	TF	2020	CR02	Charles	TF	Charles - TF
2016	15130607	5	On a Fixed Date	PR	61169688	NOCO ORAS	INIT	CR01		09/29/2016	09/29/2016	09/29/2016	N-TS-CHARLESTS -TF-T4	STN 'A' PWR EQ INSP-SVI FALL 2016	1222389	Charles	TF	2016	CR01	Charles	TF	Charles - TF
2017	14922161	6	By a Fixed Date	PR	61345270	ATCO NOCO ORAS	INIT	CR01	1	07/16/2016	07/16/2016	04/03/2017	N-TS-CHARLESTS -TF-T4	UT-MR-DIII-UTOA	1222389	Charles	TF	2017	CR01	Charles	TF	Charles - TF
2017	16109711	5	On a Fixed Date	PR	61325366	NOCO ORAS	INIT	CR01		09/27/2017	09/27/2017	09/27/2017	N-TS-WILSONTS -TF-T1	STN 'B' PWR EQ INSP-SVI Fall 2017	1223907	Wilson	TF	2017	CR01	Wilson	TF	Wilson - TF
2020	19333205	5	On a Fixed Date	PR	62291355	NOCO ORAS	INIT	CR01		09/16/2020	09/16/2020	09/16/2020	N-TS-WILSONTS -TF-T1	STN 'B' PWR EQ INSP-SVI Fall 2020	1223907	Wilson	TF	2020	CR01	Wilson	TF	Wilson - TF
2020	18644206	5	On a Fixed Date	PR	62291354	NOCO ORAS	INIT	CR01		03/11/2020	03/11/2020	03/11/2020	N-TS-WILSONTS -TF-T1	STN 'B' PWR EQ INSP-SVI Spr 2020	1223907	Wilson	TF	2020	CR01	Wilson	TF	Wilson - TF
2019	17646106	5	On a Fixed Date	PR	61923630	NOCO ORAS	INIT	CR02		05/24/2019	05/24/2019	05/24/2019	N-TS-WILSONTS -TF-T1	STN 'B' PWR EQ INSP-SVI Spr 2019	1223907	Wilson	TF	2019	CR02	Wilson	TF	Wilson - TF
2018	16814007	5	On a Fixed Date	PR	61570343	NOCO ORAS	INIT	CR01		06/07/2018	06/07/2018	06/07/2018	N-TS-WILSONTS -TF-T1	STN 'B' PWR EQ INSP-SVI Spr 2018	1223907	Wilson	TF	2018	CR01	Wilson	TF	Wilson - TF
2020	18773061	5	On a Fixed Date	PR	62562605	NOCO ORAS	INIT	CR01		04/16/2020	04/16/2020	04/16/2020	N-TS-WILSONTS -TF-T1	STN 'B' PWR EQ INSP-SVI April wk2	1223907	Wilson	TF	2020	CR01	Wilson	TF	Wilson - TF
2020	17812622	6	By a Fixed Date	PR	62293485	NOCO ORAS	INIT	CR02	1	01/24/2020	07/06/2019	08/05/2020	N-TS-WILSONTS -TF-T1	UT-MR-FIII-UTOA	1223907	Wilson	TF	2020	CR02	Wilson	TF	Wilson - TF
2020	18805132	5	On a Fixed Date	PR	62562606	NOCO ORAS	INIT	CR01		04/22/2020	04/22/2020	04/22/2020	N-TS-WILSONTS -TF-T1	STN 'B' PWR EQ INSP-SVI April wk3	1223907	Wilson	TF	2020	CR01	Wilson	TF	Wilson - TF
2016	15199803	5	On a Fixed Date	PR	61170804	NOCO ORAS	INIT	CR01		10/26/2016	10/26/2016	10/26/2016	N-TS-WILSONTS -TF-T1	STN 'B' PWR EQ INSP-SVI FALL 2016	1223907	Wilson	TF	2016	CR01	Wilson	TF	Wilson - TF
2019	16893111	6	By a Fixed Date	PR	61924781	NOCO ORAS	INIT	CR01	1	07/07/2018	07/07/2018	08/15/2019	N-TS-WILSONTS -TF-T1	UT-MR-FIII-SI	1223907	Wilson	TF	2019	CR01	Wilson	TF	Wilson - TF
2016	14517771	5	On a Fixed Date	PR	61170803	NOCO ORAS	INIT	CR01		02/17/2016	02/17/2016	02/17/2016	N-TS-WILSONTS -TF-T1	STN 'B' PWR EQ INSP-SVI SPRING 2016	1223907	Wilson	TF	2016	CR01	Wilson	TF	Wilson - TF
2017	14922590	6	By a Fixed Date	PR	61345689	ATCO NOCO ORAS	INIT	CR01	1	07/16/2016	07/16/2016	05/11/2017	N-TS-WILSONTS -TF-T1	UT-MR-FIII-UTOA	1223907	Wilson	TF	2017	CR01	Wilson	TF	Wilson - TF
2020	18892972	5	On a Fixed Date	PR	62562608	NOCO ORAS	INIT	CR01		05/07/2020	05/07/2020	05/07/2020	N-TS-WILSONTS -TF-T1	STN 'B' PWR EQ INSP-SVI May wk1	1223907	Wilson	TF	2020	CR01	Wilson	TF	Wilson - TF
2019	17210579	6	By a Fixed Date	PR	62115707	ATCO NOCO ORAS	INIT	CR02	1	02/04/2019	01/17/2019	03/20/2019	N-TS-WILSONTS -TF-T1	UT-MR-FIII-(SPECIAL)DGA-ULTC	1223907	Wilson	TF	2019	CR02	Wilson	TF	Wilson - TF
2021	19195949	6	By a Fixed Date	PR	62683877	NOCO ORAS	INIT	CR02	1	01/25/2021	07/18/2020	03/12/2021	N-TS-WILSONTS -TF-T1	UT-MR-FIII-UTOA	1223907	Wilson	TF	2021	CR02	Wilson	TF	Wilson - TF
2019	15890118	6	By a Fixed Date	PR	61571629	NOCO ORAS	INIT	CR03	1	07/22/2017	07/22/2017	01/17/2019	N-TS-WILSONTS -TF-T1	UT-MR-FIII-UTOA	1223907	Wilson	TF	2019	CR03	Wilson	TF	Wilson - TF
2019	18055593	5	On a Fixed Date	PR	61923631	NOCO ORAS	INIT	CR01		09/25/2019	09/25/2019	09/25/2019	N-TS-WILSONTS -TF-T1	STN 'B' PWR EQ INSP-SVI Fall 2019	1223907	Wilson	TF	2019	CR01	Wilson	TF	Wilson - TF
2017	15479893	5	On a Fixed Date	PR	61325365	NOCO ORAS	INIT	CR02		04/20/2017	04/20/2017	04/20/2017	N-TS-WILSONTS -TF-T1	STN 'B' PWR EQ INSP-SVI Spr 2017	1223907	Wilson	TF	2017	CR02	Wilson	TF	Wilson - TF
2018	17113138	5	On a Fixed Date	PR	61570344	NOCO ORAS	INIT	CR01		11/12/2018	11/12/2018	11/12/2018	N-TS-WILSONTS -TF-T1	STN 'B' PWR EQ INSP-SVI Fall 2018	1223907	Wilson	TF	2018	CR01	Wilson	TF	Wilson - TF
2018	17112992	5	On a Fixed Date	PR	61570344	NOCO ORAS	INIT	CR01		11/12/2018	11/12/2018	11/12/2018	N-TS-WILSONTS -TF-T1	STN 'B' PWR EQ INSP-SVI Fall 2018	1223907	Wilson	TF	2018	CR01	Wilson	TF	Wilson - TF
2019	16894254	6	By a Fixed Date	PR	61925924	NOCO ORAS	INIT	CR03	1	07/07/2018	07/07/2018	11/13/2019	N-TS-WILSONTS -TF-T1	UT-MR-FIII-UTOA	1223907	Wilson	TF	2019	CR03	Wilson	TF	Wilson - TF
2020	18310036	6	By a Fixed Date	PR	62455935	NOCO ORAS	INIT	CR02	1	01/23/2020	11/13/2019	01/24/2020	N-TS-WILSONTS -TF-T1	UT-MR-FIII-(SPECIAL)MCT-DIV	1223907	Wilson	TF	2020	CR02	Wilson	TF	Wilson - TF
2020	19015327	5	On a Fixed Date	PR	62562612	NOCO ORAS	INIT	CR01		06/02/2020	06/02/2020	06/02/2020	N-TS-WILSONTS -TF-T1	STN 'B' PWR EQ INSP-SVI June wk1	1223907	Wilson	TF	2020	CR01	Wilson	TF	Wilson - TF
2020	19333118	5	On a Fixed Date	PR	62291355	NOCO ORAS	INIT	CR01		09/16/2020	09/16/2020	09/16/2020	N-TS-WILSONTS -TF-T2	STN 'B' PWR EQ INSP-SVI Fall 2020	1223909	Wilson	TF	2020	CR01	Wilson	TF	Wilson - TF
2018	17112994	5	On a Fixed Date	PR	61570344	NOCO ORAS	INIT	CR01		11/12/2018	11/12/2018	11/12/2018	N-TS-WILSONTS -TF-T2	STN 'B' PWR EQ INSP-SVI Fall 2018	1223909	Wilson	TF	2018	CR01	Wilson	TF	Wilson - TF
2019	15890122	6	By a Fixed Date	PR	61571633	NOCO ORAS	INIT	CR02	1	07/22/2017	07/22/2017	01/17/2019	N-TS-WILSONTS -TF-T2	UT-MR-DIII-UTOA	1223909	Wilson	TF	2019	CR02	Wilson	TF	Wilson - TF
2016	14517772	5	On a Fixed Date	PR	61170803	NOCO ORAS	INIT	CR01		02/17/2016	02/17/2016	02/17/2016	N-TS-WILSONTS -TF-T2	STN 'B' PWR EQ INSP-SVI SPRING 2016	1223909	Wilson	TF	2016	CR01	Wilson	TF	Wilson - TF
2018	17113139	5	On a Fixed Date	PR	61570344	NOCO ORAS	INIT	CR01		11/12/2018	11/12/2018	11/12/2018	N-TS-WILSONTS -TF-T2	STN 'B' PWR EQ INSP-SVI Fall 2018	1223909	Wilson	TF	2018	CR01	Wilson	TF	Wilson - TF
2021	19195970	6	By a Fixed Date	PR	62683878	NOCO ORAS	INIT	CR03	1	01/19/2021	07/18/2020	03/12/2021	N-TS-WILSONTS -TF-T2	UT-MR-DIII-UTOA	1223909	Wilson	TF	2021	CR03	Wilson	TF	Wilson - TF
2020	18773063	5	On a Fixed Date	PR	62562605	NOCO ORAS	INIT	CR01		04/16/2020	04/16/2020	04/16/2020	N-TS-WILSONTS -TF-T2	STN 'B' PWR EQ INSP-SVI April wk2	1223909	Wilson	TF	2020	CR01	Wilson	TF	Wilson - TF
2017	14922591	6	By a Fixed Date	PR	61345690	NOCO ORAS	INIT	CR01	1	07/16/2016	07/16/2016	11/29/2017	N-TS-WILSONTS -TF-T2	UT-MR-DIII-UTOA	1223909	Wilson	TF	2017	CR01	Wilson	TF	Wilson - TF
2018	16814008	5	On a Fixed Date	PR	61570343	NOCO ORAS	INIT	CR01		06/07/2018	06/07/2018	06/07/2018	N-TS-WILSONTS -TF-T2	STN 'B' PWR EQ INSP-SVI Spr 2018	1223909	Wilson	TF	2018	CR01	Wilson	TF	Wilson - TF
2020	17812624	6	By a Fixed Date	PR	62293487	NOCO ORAS	INIT	CR03	5	01/20/2020	07/06/2019	02/12/2020	N-TS-WILSONTS -TF-T2	UT-MR-DIII-UTOA	1223909	Wilson	TF	2020	CR03	Wilson	TF	Wilson - TF
2019	18055545	5	On a Fixed Date	PR	61923631	NOCO ORAS	INIT	CR01		09/25/2019	09/25/2019	09/25/2019	N-TS-WILSONTS -TF-T2	STN 'B' PWR EQ INSP-SVI Fall 2019	1223909	Wilson	TF	2019	CR01	Wilson	TF	Wilson - TF
2019	16894255	6	By a Fixed Date	PR	61925925	NOCO ORAS	INIT	CR02	1	07/07/2018	07/07/2018	09/16/2019	N-TS-WILSONTS -TF-T2	UT-MR-DIII-UTOA	1223909	Wilson	TF	2019	CR02	Wilson	TF	Wilson - TF
2020	18644370	5	On a Fixed Date	PR	62291354	NOCO ORAS	INIT	CR01		03/11/2020	03/11/2020	03/11/2020	N-TS-WILSONTS -TF-T2	STN 'B' PWR EQ INSP-SVI Spr 2020	1223909	Wilson	TF	2020	CR01	Wilson	TF	Wilson - TF
2017	16109715	5	On a Fixed Date	PR	61325366	NOCO ORAS	INIT	CR01		09/27/2017	09/27/2017	09/27/2017	N-TS-WILSONTS -TF-T2	STN 'B' PWR EQ INSP-SVI Fall 2017	1223909	Wilson	TF	2017	CR01	Wilson	TF	Wilson - TF
2020	19015352	5	On a Fixed Date	PR	62562612	NOCO ORAS	INIT	CR01		06/02/2020	06/02/2020	06/02/2020	N-TS-WILSONTS -TF-T2	STN 'B' PWR EQ INSP-SVI June wk1	1223909	Wilson	TF	2020	CR01	Wilson	TF	Wilson - TF

2017	15479894	5	On a Fixed Date	PR	61325365	NOCO ORAS	INIT	CR02		04/20/2017	04/20/2017	04/20/2017	N-TS-WILSONTS	-TF-T2	STN 'B' PWR EQ INSP-SVI Spr 2017	1223909	Wilson	TF	2017	CR02	Wilson	TF	Wilson - TF
2020	18892939	5	On a Fixed Date	PR	62562608	NOCO ORAS	INIT	CR01		05/07/2020	05/07/2020	05/07/2020	N-TS-WILSONTS	-TF-T2	STN 'B' PWR EQ INSP-SVI May wk1	1223909	Wilson	TF	2020	CR01	Wilson	TF	Wilson - TF
2016	15199804	5	On a Fixed Date	PR	61170804	NOCO ORAS	INIT	CR01		10/26/2016	10/26/2016	10/26/2016	N-TS-WILSONTS	-TF-T2	STN 'B' PWR EQ INSP-SVI FALL 2016	1223909	Wilson	TF	2016	CR01	Wilson	TF	Wilson - TF
2020	18537248	6	By a Fixed Date	PR	62525898	NOCO ORAS	INIT	CR01	1	05/08/2020	02/12/2020	05/13/2020	N-TS-WILSONTS	-TF-T2	UT-MR-DIII-(SPECIAL)DGA-ULTC	1223909	Wilson	TF	2020	CR01	Wilson	TF	Wilson - TF
2019	17646107	5	On a Fixed Date	PR	61923630	NOCO ORAS	INIT	CR02		05/24/2019	05/24/2019	05/24/2019	N-TS-WILSONTS	-TF-T2	STN 'B' PWR EQ INSP-SVI Spr 2019	1223909	Wilson	TF	2019	CR02	Wilson	TF	Wilson - TF
2020	18805001	5	On a Fixed Date	PR	62562606	NOCO ORAS	INIT	CR01		04/22/2020	04/22/2020	04/22/2020	N-TS-WILSONTS	-TF-T2	STN 'B' PWR EQ INSP-SVI April wk3	1223909	Wilson	TF	2020	CR01	Wilson	TF	Wilson - TF
2020	18644373	5	On a Fixed Date	PR	62291354	NOCO ORAS	INIT	CR01		03/11/2020	03/11/2020	03/11/2020	N-TS-WILSONTS	-TF-T3	STN 'B' PWR EQ INSP-SVI Spr 2020	1223911	Wilson	TF	2020	CR01	Wilson	TF	Wilson - TF
2018	17113150	5	On a Fixed Date	PR	61570344	NOCO ORAS	INIT	CR01		11/12/2018	11/12/2018	11/12/2018	N-TS-WILSONTS	-TF-T3	STN 'B' PWR EQ INSP-SVI Fall 2018	1223911	Wilson	TF	2018	CR01	Wilson	TF	Wilson - TF
2020	19015355	5	On a Fixed Date	PR	62562612	NOCO ORAS	INIT	CR01		06/02/2020	06/02/2020	06/02/2020	N-TS-WILSONTS	-TF-T3	STN 'B' PWR EQ INSP-SVI June wk1	1223911	Wilson	TF	2020	CR01	Wilson	TF	Wilson - TF
2018	16814009	5	On a Fixed Date	PR	61570343	NOCO ORAS	INIT	CR01		06/07/2018	06/07/2018	06/07/2018	N-TS-WILSONTS	-TF-T3	STN 'B' PWR EQ INSP-SVI Spr 2018	1223911	Wilson	TF	2018	CR01	Wilson	TF	Wilson - TF
2017	14922245	6	By a Fixed Date	PR	61345334	NOCO ORAS	INIT	CR02	1	07/16/2016	07/16/2016	07/21/2017	N-TS-WILSONTS	-TF-T3	UT-ABB-UCBRN/GRN/LRN-UTOA	1223911	Wilson	TF	2017	CR02	Wilson	TF	Wilson - TF
2019	18055546	5	On a Fixed Date	PR	61923631	NOCO ORAS	INIT	CR01		09/25/2019	09/25/2019	09/25/2019	N-TS-WILSONTS	-TF-T3	STN 'B' PWR EQ INSP-SVI Fall 2019	1223911	Wilson	TF	2019	CR01	Wilson	TF	Wilson - TF
2020	19333206	5	On a Fixed Date	PR	62291355	NOCO ORAS	INIT	CR01		09/16/2020	09/16/2020	09/16/2020	N-TS-WILSONTS	-TF-T3	STN 'B' PWR EQ INSP-SVI Fall 2020	1223911	Wilson	TF	2020	CR01	Wilson	TF	Wilson - TF
2017	15479866	5	On a Fixed Date	PR	61325365	NOCO ORAS	INIT	CR02		04/20/2017	04/20/2017	04/20/2017	N-TS-WILSONTS	-TF-T3	STN 'B' PWR EQ INSP-SVI Spr 2017	1223911	Wilson	TF	2017	CR02	Wilson	TF	Wilson - TF
2019	16894194	6	By a Fixed Date	PR	61925864	NOCO ORAS	INIT	CR02	1	07/07/2018	07/07/2018	10/24/2019	N-TS-WILSONTS	-TF-T3	UT-ABB-UCBRN/GRN/LRN-UTOA	1223911	Wilson	TF	2019	CR02	Wilson	TF	Wilson - TF
2018	17112996	5	On a Fixed Date	PR	61570344	NOCO ORAS	INIT	CR01		11/12/2018	11/12/2018	11/12/2018	N-TS-WILSONTS	-TF-T3	STN 'B' PWR EQ INSP-SVI Fall 2018	1223911	Wilson	TF	2018	CR01	Wilson	TF	Wilson - TF
2016	15199805	5	On a Fixed Date	PR	61170804	NOCO ORAS	INIT	CR01		10/26/2016	10/26/2016	10/26/2016	N-TS-WILSONTS	-TF-T3	STN 'B' PWR EQ INSP-SVI FALL 2016	1223911	Wilson	TF	2016	CR01	Wilson	TF	Wilson - TF
2020	18892918	5	On a Fixed Date	PR	62562608	NOCO ORAS	INIT	CR01		05/07/2020	05/07/2020	05/07/2020	N-TS-WILSONTS	-TF-T3	STN 'B' PWR EQ INSP-SVI May wk1	1223911	Wilson	TF	2020	CR01	Wilson	TF	Wilson - TF
2020	17812533	6	By a Fixed Date	PR	62293396	NOCO ORAS	INIT	CR02	1	01/22/2020	07/06/2019	08/03/2020	N-TS-WILSONTS	-TF-T3	UT-ABB-UCBRN/GRN/LRN-UTOA	1223911	Wilson	TF	2020	CR02	Wilson	TF	Wilson - TF
2016	14517773	5	On a Fixed Date	PR	61170803	NOCO ORAS	INIT	CR01		02/17/2016	02/17/2016	02/17/2016	N-TS-WILSONTS	-TF-T3	STN 'B' PWR EQ INSP-SVI SPRING 2016	1223911	Wilson	TF	2016	CR01	Wilson	TF	Wilson - TF
2019	15890033	6	By a Fixed Date	PR	61571544	NOCO ORAS	INIT	CR02	1	07/22/2017	07/22/2017	01/17/2019	N-TS-WILSONTS	-TF-T3	UT-ABB-UCBRN/GRN/LRN-UTOA	1223911	Wilson	TF	2019	CR02	Wilson	TF	Wilson - TF
2020	18805133	5	On a Fixed Date	PR	62562606	NOCO ORAS	INIT	CR01		04/22/2020	04/22/2020	04/22/2020	N-TS-WILSONTS	-TF-T3	STN 'B' PWR EQ INSP-SVI April wk3	1223911	Wilson	TF	2020	CR01	Wilson	TF	Wilson - TF
2017	16109353	5	On a Fixed Date	PR	61325366	NOCO ORAS	INIT	CR01		09/27/2017	09/27/2017	09/27/2017	N-TS-WILSONTS	-TF-T3	STN 'B' PWR EQ INSP-SVI Fall 2017	1223911	Wilson	TF	2017	CR01	Wilson	TF	Wilson - TF
2019	17646108	5	On a Fixed Date	PR	61923630	NOCO ORAS	INIT	CR02		05/24/2019	05/24/2019	05/24/2019	N-TS-WILSONTS	-TF-T3	STN 'B' PWR EQ INSP-SVI Spr 2019	1223911	Wilson	TF	2019	CR02	Wilson	TF	Wilson - TF
2021	19195909	6	By a Fixed Date	PR	62683837	NOCO ORAS	INIT	CR02	1	01/22/2021	07/18/2020	03/15/2021	N-TS-WILSONTS	-TF-T3	UT-ABB-UCBRN/GRN/LRN-UTOA	1223911	Wilson	TF	2021	CR02	Wilson	TF	Wilson - TF
2020	18773070	5	On a Fixed Date	PR	62562605	NOCO ORAS	INIT	CR01		04/16/2020	04/16/2020	04/16/2020	N-TS-WILSONTS	-TF-T3	STN 'B' PWR EQ INSP-SVI April wk2	1223911	Wilson	TF	2020	CR01	Wilson	TF	Wilson - TF
2018	16814010	5	On a Fixed Date	PR	61570343	NOCO ORAS	INIT	CR01		06/07/2018	06/07/2018	06/07/2018	N-TS-WILSONTS	-TF-T4	STN 'B' PWR EQ INSP-SVI Spr 2018	1223913	Wilson	TF	2018	CR01	Wilson	TF	Wilson - TF
2020	19015356	5	On a Fixed Date	PR	62562612	NOCO ORAS	INIT	CR01		06/02/2020	06/02/2020	06/02/2020	N-TS-WILSONTS	-TF-T4	STN 'B' PWR EQ INSP-SVI June wk1	1223913	Wilson	TF	2020	CR01	Wilson	TF	Wilson - TF
2020	18644374	5	On a Fixed Date	PR	62291354	NOCO ORAS	INIT	CR01		03/11/2020	03/11/2020	03/11/2020	N-TS-WILSONTS	-TF-T4	STN 'B' PWR EQ INSP-SVI Spr 2020	1223913	Wilson	TF	2020	CR01	Wilson	TF	Wilson - TF
2017	15479867	5	On a Fixed Date	PR	61325365	NOCO ORAS	INIT	CR02		04/20/2017	04/20/2017	04/20/2017	N-TS-WILSONTS	-TF-T4	STN 'B' PWR EQ INSP-SVI Spr 2017	1223913	Wilson	TF	2017	CR02	Wilson	TF	Wilson - TF
2017	16109355	5	On a Fixed Date	PR	61325366	NOCO ORAS	INIT	CR01		09/27/2017	09/27/2017	09/27/2017	N-TS-WILSONTS	-TF-T4	STN 'B' PWR EQ INSP-SVI Fall 2017	1223913	Wilson	TF	2017	CR01	Wilson	TF	Wilson - TF
2018	17113154	5	On a Fixed Date	PR	61570344	NOCO ORAS	INIT	CR01		11/12/2018	11/12/2018	11/12/2018	N-TS-WILSONTS	-TF-T4	STN 'B' PWR EQ INSP-SVI Fall 2018	1223913	Wilson	TF	2018	CR01	Wilson	TF	Wilson - TF
2018	17113024	5	On a Fixed Date	PR	61570344	NOCO ORAS	INIT	CR01		11/12/2018	11/12/2018	11/12/2018	N-TS-WILSONTS	-TF-T4	STN 'B' PWR EQ INSP-SVI Fall 2018	1223913	Wilson	TF	2018	CR01	Wilson	TF	Wilson - TF
2017	14922246	6	By a Fixed Date	PR	61345335	NOCO ORAS	INIT	CR03	1	07/16/2016	07/16/2016	07/31/2017	N-TS-WILSONTS	-TF-T4	UT-ABB-UCBRN/GRN/LRN-UTOA	1223913	Wilson	TF	2017	CR03	Wilson	TF	Wilson - TF
2016	15199806	5	On a Fixed Date	PR	61170804	NOCO ORAS	INIT	CR01		10/26/2016	10/26/2016	10/26/2016	N-TS-WILSONTS	-TF-T4	STN 'B' PWR EQ INSP-SVI FALL 2016	1223913	Wilson	TF	2016	CR01	Wilson	TF	Wilson - TF
2020	18805245	5	On a Fixed Date	PR	62562606	NOCO ORAS	INIT	CR01		04/22/2020	04/22/2020	04/22/2020	N-TS-WILSONTS	-TF-T4	STN 'B' PWR EQ INSP-SVI April wk3	1223913	Wilson	TF	2020	CR01	Wilson	TF	Wilson - TF
2020	18773074	5	On a Fixed Date	PR	62562605	NOCO ORAS	INIT	CR01		04/16/2020	04/16/2020	04/16/2020	N-TS-WILSONTS	-TF-T4	STN 'B' PWR EQ INSP-SVI April wk2	1223913	Wilson	TF	2020	CR01	Wilson	TF	Wilson - TF
2016	14517749	5	On a Fixed Date	PR	61170803	NOCO ORAS	INIT	CR01		02/17/2016	02/17/2016	02/17/2016	N-TS-WILSONTS	-TF-T4	STN 'B' PWR EQ INSP-SVI SPRING 2016	1223913	Wilson	TF	2016	CR01	Wilson	TF	Wilson - TF
2019	16894195	6	By a Fixed Date	PR	61925865	NOCO ORAS	INIT	CR02	1	07/07/2018	07/07/2018	10/24/2019	N-TS-WILSONTS	-TF-T4	UT-ABB-UCBRN/GRN/LRN-UTOA	1223913	Wilson	TF	2019	CR02	Wilson	TF	Wilson - TF
2020	19333207	5	On a Fixed Date	PR	62291355	NOCO ORAS	INIT	CR01		09/16/2020	09/16/2020	09/16/2020	N-TS-WILSONTS	-TF-T4	STN 'B' PWR EQ INSP-SVI Fall 2020	1223913	Wilson	TF	2020	CR01	Wilson	TF	Wilson - TF
2017	16085560	6	By a Fixed Date	PR	61648307	NOCO ORAS	INIT	CR01	1	11/03/2017	09/18/2017	11/23/2017	N-TS-WILSONTS	-TF-T4	UT-ABB-UCBRN/GRN/LRN-(SPECIAL)MCT-ULTC	1223913	Wilson	TF	2017	CR01	Wilson	TF	Wilson - TF
2021	19195920	6	By a Fixed Date	PR	62683838	NOCO ORAS	INIT	CR02	1	01/26/2021	07/18/2020	03/15/2021	N-TS-WILSONTS	-TF-T4	UT-ABB-UCBRN/GRN/LRN-UTOA	1223913	Wilson	TF	2021	CR02	Wilson	TF	Wilson - TF
2019	18055547	5	On a Fixed Date	PR	61923631	NOCO ORAS	INIT	CR01		09/25/2019	09/25/2019	09/25/2019	N-TS-WILSONTS	-TF-T4	STN 'B' PWR EQ INSP-SVI Fall 2019	1223913	Wilson	TF	2019	CR01	Wilson	TF	Wilson - TF
2019	17646253	5	On a Fixed Date	PR	61923630	NOCO ORAS	INIT	CR02		05/24/2019	05/24/2019	05/24/2019	N-TS-WILSONTS	-TF-T4	STN 'B' PWR EQ INSP-SVI Spr 2019	1223913	Wilson	TF	2019	CR02	Wilson	TF	Wilson - TF
2020	17812536	6	By a Fixed Date	PR	62293399	NOCO ORAS	INIT	CR02	1	01/27/2020	07/06/2019	08/05/2020	N-TS-WILSONTS	-TF-T4	UT-ABB-UCBRN/GRN/LRN-UTOA	1223913	Wilson	TF	2020	CR02	Wilson	TF	Wilson - TF
2018	15890037	6	By a Fixed Date	PR	61571548	ATCO NOCO ORAS	INIT	CR02	1	07/22/2017	07/22/2017	02/15/2018	N-TS-WILSONTS	-TF-T4	UT-ABB-UCBRN/GRN/LRN-UTOA	1223913	Wilson	TF	2018	CR02	Wilson	TF	Wilson - TF
2017	15913972	6	By a Fixed Date	PR	61596559	ATCO NOCO ORAS	INIT	CR01	1	08/08/2017	07/31/2017	09/19/2017	N-TS-WILSONTS	-TF-T4	UT-ABB-(SPECIAL)RUSH-MCT-DIV	1223913	Wilson	TF	2017	CR01	Wilson	TF	Wilson - TF
2020	18892973	5	On a Fixed Date	PR	62562608	NOCO ORAS	INIT	CR01		05/07/2020	05/07/2020	05/07/2020	N-TS-WILSONTS	-TF-T4	STN 'B' PWR EQ INSP-SVI May wk1	1223913	Wilson	TF	2020	CR01	Wilson	TF	Wilson - TF
2016	14495582	5	On a Fixed Date	PR	60978344	NOCO ORAS	INIT	CR03		01/14/2016	01/14/2016	04/28/2016	N-TS-CHARLESTS	-TF-T4	Tx PCB Reduction Oil Sample	1227369	Charles	TF	2016	CR03	Charles	TF	Charles - TF
2016	14495583	5	On a Fixed Date	PR	60978344	NOCO ORAS	INIT	CR03		01/14/2016	01/14/2016	04/28/2016	N-TS-CHARLESTS	-TF-T4	Tx PCB Reduction Oil Sample	1227371	Charles	TF	2016	CR03	Charles	TF	Charles - TF
2017	15821503	5	On a Fixed Date	PR	61322825	NOCO ORAS	INIT	CR01		06/27/2017	06/27/2017	06/27/2017	N-TS-CHARLESTS	-TF-T4	STN 'A' PWR EQ INSP-SVI Spr 2017	1227373	Charles	TF	2017	CR01	Charles	TF	Charles - TF
2016	14495548	5	On a Fixed Date	PR	60978344	NOCO ORAS	INIT	CR03		01/14/2016	01/14/2016	04/28/2016	N-TS-CHARLESTS	-TF-T4	Tx PCB Reduction Oil Sample	1227373	Charles	TF	2016	CR03	Charles	TF	Charles - TF
2016	14495546	5	On a Fixed Date	PR	60978344	NOCO ORAS	INIT	CR03		01/14/2016	01/14/2016	04/28/2016	N-TS-CHARLESTS	-TF-T4	Tx PCB Reduction Oil Sample	1227375	Charles	TF	2016	CR03	Charles	TF	Charles - TF
2017	15821504	5	On a Fixed Date	PR	61322825	NOCO ORAS	INIT	CR01		06/27/2017	06/27/2017	06/27/2017	N-TS-CHARLESTS	-TF-T4	STN 'A' PWR EQ INSP-SVI Spr 2017	1227375	Charles	TF	2017	CR01	Charles	TF	Charles - TF
2016	14495547	5	On a Fixed Date	PR	60978344	NOCO ORAS	INIT	CR03		01/14/2016	01/14/2016	04/28/2016	N-TS-CHARLESTS	-TF-T4	Tx PCB Reduction Oil Sample	1227376	Charles	TF	2016	CR03	Charles	TF	Charles - TF
2016	14495545	5	On a Fixed Date	PR	60978344	NOCO ORAS	INIT	CR03		01/14/2016	01/14/2016	04/28/2016	N-TS-CHARLESTS	-TF-T4	Tx PCB Reduction Oil Sample	1227378	Charles	TF	2016	CR03	Charles	TF	Charles - TF
2016	14495580	5	On a Fixed Date	PR	60978344	NOCO ORAS	INIT	CR03		01/14/2016	01/14/2016	04/28/2016	N-TS-CHARLESTS	-TF-T4	Tx PCB Reduction Oil Sample	1227380	Charles	TF	2016	CR03	Charles	TF	Charles - TF
2016	14495581	5	On a Fixed Date	PR	60978344	NOCO ORAS	INIT	CR03		01/14/2016	01/14/2016	04/28/2016	N-TS-CHARLESTS	-TF-T4	Tx PCB Reduction Oil Sample	1227382	Charles	TF	2016	CR03	Charles	TF	Charles - TF
2016	14495584	5	On a Fixed Date	PR	60978344	ATCO NOCO ORAS	INIT	CR01		01/14/2016	01/14/2016	04/28/2016	N-TS-CHARLESTS	-TF-T4	Tx PCB Reduction Oil Sample	1227384	Charles	TF	2016	CR01	Charles	TF	Charles - TF
2016	14495585	5	On a Fixed Date	PR	60978344	ATCO NOCO ORAS	INIT	CR01		01/14/2016	01/14/2016	04/28/2016	N-TS-CHARLESTS	-TF-T4	Tx PCB Reduction Oil Sample	1227386	Charles	TF	2016	CR01	Charles	TF	Charles - TF
2016	14495549	5	On a Fixed Date	PR	60978344	ATCO NOCO ORAS	INIT	CR01		01/14/2016	01/14/2016	04/28/2016	N-TS-CHARLESTS	-TF-T4	Tx PCB Reduction Oil Sample	1227388	Charles	TF	2016	CR01	Charles	TF	Charles - TF
2020	18683411	5	On a Fixed Date	PR	62420936	NOCO ORAS	INIT	CR01		03/20/2020	03/20/2020	03/20/2020	N-TS-CHARLESTS	-TF-T3	Tx PCB Reduction Oil Sample	1227390	Charles	TF	2020	CR01	Charles	TF	Charles - TF
2016	15130673	5	On a Fixed Date	PR	61169688	NOCO ORAS	INIT	CR01		09/29/2016	09/29/2016	09/29/2016	N-TS-CHARLESTS	-TF-T3	STN 'A' PWR EQ INSP-SVI FALL 2016	1227390	Charles	TF	2016	CR01	Charles	TF	Charles - TF
2020	18683412	5	On a Fixed Date	PR	62420936	NOCO ORAS	INIT	CR01		03/20/2020	03/20/2020	03/20/2020	N-TS-CHARLESTS	-TF-T3	Tx PCB Reduction Oil Sample	1227392	Charles	TF	2020	CR01	Charles	TF	Charles - TF
2016	15130674	5	On a Fixed Date	PR	61169688	NOCO ORAS	INIT	CR01		09/29/2016	09/29/2016	09/29/2016	N-TS-CHARLESTS	-TF-T3	STN 'A' PWR EQ INSP-SVI FALL 2016	1227392	Charles	TF	2016	CR01	Charles	TF	Charles - TF
2020	18683413	5	On a Fixed Date	PR	62420936	NOCO ORAS	INIT	CR01		03/20/2020	03/20/2020	03/20/2020	N-TS-CHARLESTS	-TF-T3	Tx PCB Reduction Oil Sample	1227394	Charles	TF	2020	CR01	Charles	TF	Charles - TF
2016	15130675	5	On a Fixed Date	PR	61169688	NOCO ORAS	INIT	CR01		09/29/2016	09/29/2016	09/29/2016	N-TS-CHARLESTS	-TF-T3	STN 'A' PWR EQ INSP-SVI FALL 2016	1227394	Charles	TF	2016	CR01	Charles	TF	Charles - TF
2016	15130676	5	On a Fixed Date	PR	61169688	NOCO ORAS	INIT	CR01		09/29/2016	09/29/2016	09/29/2016	N-TS-CHARLESTS	-TF-T3	STN 'A' PWR EQ INSP-SVI FALL 2016	1227396	Charles	TF	2016	CR01	Charles	TF	Charles - TF
2020	18683414	5	On a Fixed Date	PR	62420936	NOCO ORAS	INIT	CR01		03/20/2020	03/20/2020	03/20/2020	N-TS-CHARLESTS	-TF-T3	Tx PCB Reduction Oil Sample	1227396	Charles	TF	2020	CR01	Charles	TF	Charles - TF
2020	18683415	5	On a Fixed Date	PR	62420936	NOCO ORAS	INIT	CR01		03/20/2020	03/20/2020	03/20/2020	N-TS-CHARLESTS	-TF-T3	Tx PCB Reduction Oil Sample	1227398	Charles	TF	2020	CR01	Charles	TF	Charles - TF
2016	15130680	5	On a Fixed Date	PR	61169688	NOCO ORAS	INIT	CR01		09/29/2016	09/29/2016	09/29/2016	N-TS-CHARLESTS	-TF-T3	STN 'A' PWR EQ INSP-SVI FALL 2016	1227398	Charles	TF	2016	CR01	Charles	TF	Charles - TF
2020	18683416	5	On a Fixed Date	PR	62420936	NOCO ORAS	INIT	CR01		03/20/2020	03/20/2020	03/20/2020	N-TS-CHARLESTS	-TF-T3	Tx PCB Reduction Oil Sample	1227400	Charles	TF	2020	CR01	Charles	TF	Charles - TF
2016	15130681	5	On a Fixed Date	PR	61169688	NOCO ORAS	INIT	CR01		09/29/2016	09/29/2016	09/29/2016	N-TS-CHARLESTS	-TF-T3	STN 'A' PWR EQ INSP-SVI FALL 2016	1227400	Charles	TF	2016	CR01	Charles	TF	Charles - TF
2016	15130682	5	On a Fixed Date	PR	61169688	NOCO ORAS	INIT	CR01		09/29/2016	09/29/2016	09/29/2016	N-TS-CHARLESTS	-TF-T3	STN 'A' PWR EQ INSP-SVI FALL 2016	1227402	Charles	TF	2016	CR01	Charles	TF	Charles - TF
2020	18683417	5	On a Fixed Date	PR	62420936	NOCO ORAS	INIT	CR01		03/20/2020	03/20/2020	03/20/2020	N-TS-CHARLESTS	-TF-T3	Tx PCB Reduction Oil Sample	1227402	Charles	TF	2020	CR01	Charles	TF	Charles - TF
2016	15130683	5	On a Fixed Date	PR	61169688	NOCO ORAS	INIT	CR01		09/29/2016	09/29/2016	09/29/2016	N-TS-CHARLESTS	-TF-T3	STN 'A' PWR EQ INSP-SVI FALL 2016	1227404	Charles	TF	2016	CR01	Charles	TF	Charles - TF
2016	15130686	5	On a Fixed Date	PR	61169688	NOCO ORAS	INIT	CR01		09/29/2016	09/29/2016	09/29/2016	N-TS-CHARLESTS	-TF-T3	STN 'A' PWR EQ INSP-SVI FALL 2016	1227406	Charles	TF	2016	CR01	Charles	TF	Charles - TF
2016	15130687	5	On a Fixed Date	PR	61169688	NOCO ORAS	INIT	CR01		09/29/2016	09/29/2016	09/29/2016	N-TS-CHARLESTS	-TF-T3	STN 'A' PWR EQ INSP-SVI FALL 2016	1227408	Charles	TF	2016	CR01	Charles	TF	Charles - TF
2016	15130493	5	On a Fixed Date	PR	61169688	NOCO ORAS	INIT	CR01		09/29/2016	09/29/2016	09/29/2016	N-TS-CHARLESTS	-TF-T3	STN 'A' PWR EQ INSP-SVI FALL 2016	1227410	Charles	TF	2016	CR01	Charles	TF	Charles - TF
2020	18683418	5	On a Fixed Date	PR	62420936	NOCO ORAS	INIT	CR01		03/20/2020	03/20/2020	03/20/2020	N-TS-CHARLESTS	-TF-T3	Tx PCB Reduction Oil Sample	1227410	Charles	TF	2020	CR01	Charles	TF	Charles - TF
2016	15130688	5	On a Fixed Date	PR	61169688	NOCO ORAS	INIT	CR01		09/29/2016	09/29/2016	09/29/2016	N-TS-CHARLESTS	-TF-T2	STN 'A' PWR EQ INSP-SVI FALL 2016	1231283	Charles	TF	2016	CR01	Charles	TF	Charles - TF
2016	15130689	5	On a Fixed Date	PR	61169688	NOCO ORAS	INIT	CR01		09/29/2016	09/29/2016	09/29/2016	N-TS-CHARLESTS	-TF-T2	STN 'A' PWR EQ INSP-SVI FALL 2016	1231285	Charles	TF	2016	CR01	Charles	TF	Charles - TF
2016	15130694	5	On a Fixed Date	PR	61169688	NOCO ORAS	INIT	CR01		09/29/2016	09/29/2016	09/29/2016	N-TS-CHARLESTS	-TF-T2	STN 'A' PWR EQ INSP-SVI FALL 2016	1231287	Charles	TF	2016	CR01	Charles	TF	Charles - TF
2016	15130695	5	On a Fixed Date	PR	61169688	NOCO ORAS	INIT	CR01		09/29/2016	09/29/2016	09/29/2016	N-TS-CHARLESTS	-TF-T2	STN 'A' PWR EQ INSP-SVI FALL 2016	1231289	Charles	TF	2016	CR01	Charles	TF	Charles - TF
2016	15130696	5	On a Fixed Date	PR	61169688	NOCO ORAS	INIT	CR01		09/29/2016	09/29/2016	09/29/2016	N-TS-CHARLESTS	-TF-T2	STN 'A' PWR EQ INSP-SVI FALL 2016	1231291	Charles	TF	2016	CR01	Charles	TF	Charles - TF
2016	15130697	5	On a Fixed Date	PR	61169688	NOCO ORAS	INIT	CR01		09/29/2016	09/29/2016	09/29/2016	N-TS-CHARLESTS	-TF-T2	STN 'A' PWR EQ INSP-SVI FALL 2016	1231293	Charles	TF	2016	CR01	Charles	TF	Charles - TF
2016	15130703	5	On a Fixed Date	PR	61169688	NOCO ORAS	INIT	CR01		09/29/2016	09/29/2016	09/29/2016	N-TS-CHARLESTS	-TF-T2	STN 'A' PWR EQ INSP-SVI FALL 2016	1231295	Charles	TF	2016	CR01	Charles	TF	Charles - TF
2016	15130704	5	On a Fixed Date	PR	61169688	NOCO ORAS	INIT	CR01		09/29/2016	09/29/2016	09/29/2016	N-TS-CHARLESTS	-TF-T2	STN 'A' PWR EQ INSP-SVI FALL 2016	1231297	Charles	TF	2016	CR01	Charles	TF	Charles - TF
2016	15130705	5	On a Fixed Date	PR	61169688	NOCO ORAS	INIT	CR01		09/29/2016	09/29/2016	09/29/2016	N-TS-CHARLESTS	-TF-T2	STN 'A' PWR EQ INSP-SVI FALL 2016	1231315	Charles	TF	2016	CR01	Charles	TF	Charles - TF
2016	15130706	5	On a Fixed Date	PR	61169688	NOCO ORAS	INIT	CR01		09/29/2016	09/29/2016	09/29/2016	N-TS-CHARLESTS	-TF-T2	STN 'A' PWR EQ INSP-SVI FALL 2016	1231317	Charles	TF	2016	CR01	Charles	TF	Charles - TF
2016	15130720	5	On a Fixed Date	PR	61169688	NOCO ORAS	INIT	CR01		09/29/2016	09/29/2016	09/29/2016	N-TS-CHARLESTS	-TF-T2	STN 'A' PWR EQ INSP-SVI FALL 2016	1231319	Charles	TF	2016	CR01	Charles	TF	Charles - TF

2016	14536013	5	On a Fixed Date	PR	60977900	NOCO ORAS	INIT	CR01		03/14/2016	03/14/2016	03/14/2016	N-TS-WILSONTS	-TF-SS2	Tx PCB Reduction Oil Sample	1356867	Wilson	TF	2016	CR01	Wilson	TF	Wilson - TF
2016	14536014	5	On a Fixed Date	PR	60977900	NOCO ORAS	INIT	CR01		03/14/2016	03/14/2016	03/14/2016	N-TS-WILSONTS	-TF-SS2	Tx PCB Reduction Oil Sample	1357319	Wilson	TF	2016	CR01	Wilson	TF	Wilson - TF
2016	14536015	5	On a Fixed Date	PR	60977900	NOCO ORAS	INIT	CR01		03/14/2016	03/14/2016	03/14/2016	N-TS-WILSONTS	-TF-SS2	Tx PCB Reduction Oil Sample	1357771	Wilson	TF	2016	CR01	Wilson	TF	Wilson - TF
2018	16924562	5	On a Fixed Date	PR	61779298	NOCO ORAS	INIT	CR01		07/31/2018	07/31/2018	07/31/2018	N-TS-WILSONTS	-BR-M3	AR20126 NA54 PCB Resampling - EMD	1358609	Wilson	BR	2018	CR01	Wilson	BR	Wilson - BR
2016	15252787	5	On a Fixed Date	PR	60978094	NOCO ORAS	INIT	CR01		11/16/2016	11/16/2016	11/16/2016	N-TS-WILSONTS	-BR-T1B	Tx PCB Reduction Oil Sample	1358699	Wilson	BR	2016	CR01	Wilson	BR	Wilson - BR
2017	15923150	5	On a Fixed Date	PR	60979045	NOCO ORAS	INIT	CR01		08/03/2017	08/03/2017	08/03/2017	N-TS-WILSONTS	-BR-T4Q	Tx PCB Reduction Oil Sample	1359280	Wilson	BR	2017	CR01	Wilson	BR	Wilson - BR
2016	15003402	5	On a Fixed Date	PR	60979046	NOCO ORAS	INIT	CR01		08/16/2016	08/16/2016	08/16/2016	N-TS-WILSONTS	-BR-T3J	Tx PCB Reduction Oil Sample	1359281	Wilson	BR	2016	CR01	Wilson	BR	Wilson - BR
2017	15814665	5	On a Fixed Date	PR	60978188	NOCO ORAS	INIT	CR01		06/22/2017	06/22/2017	06/22/2017	N-TS-WILSONTS	-BR-M12	Tx PCB Reduction Oil Sample	1359300	Wilson	BR	2017	CR01	Wilson	BR	Wilson - BR
2017	15918689	5	On a Fixed Date	PR	61413421	NOCO ORAS	INIT	CR01		08/02/2017	08/02/2017	08/02/2017	N-TS-WILSONTS	-BR-M7	AR20221 NA54 M7 Bushings were replaced,	1359414	Wilson	BR	2017	CR01	Wilson	BR	Wilson - BR
2017	15816852	5	On a Fixed Date	PR	60978676	NOCO ORAS	INIT	CR01		06/23/2017	06/23/2017	06/23/2017	N-TS-WILSONTS	-BR-T2Y	Tx PCB Reduction Oil Sample	1359443	Wilson	BR	2017	CR01	Wilson	BR	Wilson - BR
2019	16938715	6	By a Fixed Date	PR	61959335	NOCO ORAS	INIT	CR01	1	01/02/2019	08/03/2018	06/20/2019	N-TS-WILSONTS	-BR-T2Y	AR21060 NA54 LV Bush 1 PCB Replace EMD	1359443	Wilson	BR	2019	CR01	Wilson	BR	Wilson - BR
2016	14523340	5	On a Fixed Date	PR	60978678	NOCO ORAS	INIT	CR01		02/23/2016	02/23/2016	02/23/2016	N-TS-WILSONTS	-BR-BY	Tx PCB Reduction Oil Sample	1359445	Wilson	BR	2016	CR01	Wilson	BR	Wilson - BR
2018	16924564	5	On a Fixed Date	PR	61779298	NOCO ORAS	INIT	CR01		07/31/2018	07/31/2018	07/31/2018	N-TS-WILSONTS	-BR-M3	AR20126 NA54 PCB Resampling - EMD	1359452	Wilson	BR	2018	CR01	Wilson	BR	Wilson - BR
2016	14535999	5	On a Fixed Date	PR	60977731	NOCO ORAS	INIT	CR01		03/14/2016	03/14/2016	03/14/2016	N-TS-WILSONTS	-BR-M2	Tx PCB Reduction Oil Sample	1359458	Wilson	BR	2016	CR01	Wilson	BR	Wilson - BR
2016	14536027	5	On a Fixed Date	PR	60977732	NOCO ORAS	INIT	CR01		03/14/2016	03/14/2016	03/14/2016	N-TS-WILSONTS	-BR-M8	Tx PCB Reduction Oil Sample	1359459	Wilson	BR	2016	CR01	Wilson	BR	Wilson - BR
2017	16094337	5	On a Fixed Date	PR	60978711	NOCO ORAS	INIT	CR01		09/23/2017	09/23/2017	09/23/2017	N-TS-WILSONTS	-BR-M14	Tx PCB Reduction Oil Sample	1359549	Wilson	BR	2017	CR01	Wilson	BR	Wilson - BR
2018	16924566	5	On a Fixed Date	PR	61779298	NOCO ORAS	INIT	CR01		07/31/2018	07/31/2018	07/31/2018	N-TS-WILSONTS	-BR-M3	AR20126 NA54 PCB Resampling - EMD	1360102	Wilson	BR	2018	CR01	Wilson	BR	Wilson - BR
2017	15923153	5	On a Fixed Date	PR	60979045	NOCO ORAS	INIT	CR01		08/03/2017	08/03/2017	08/03/2017	N-TS-WILSONTS	-BR-T4Q	Tx PCB Reduction Oil Sample	1360773	Wilson	BR	2017	CR01	Wilson	BR	Wilson - BR
2016	15003403	5	On a Fixed Date	PR	60979046	NOCO ORAS	INIT	CR01		08/16/2016	08/16/2016	08/16/2016	N-TS-WILSONTS	-BR-T3J	Tx PCB Reduction Oil Sample	1360774	Wilson	BR	2016	CR01	Wilson	BR	Wilson - BR
2017	15814666	5	On a Fixed Date	PR	60978188	NOCO ORAS	INIT	CR01		06/22/2017	06/22/2017	06/22/2017	N-TS-WILSONTS	-BR-M12	Tx PCB Reduction Oil Sample	1360793	Wilson	BR	2017	CR01	Wilson	BR	Wilson - BR
2017	15918810	5	On a Fixed Date	PR	61413421	NOCO ORAS	INIT	CR01		08/02/2017	08/02/2017	08/02/2017	N-TS-WILSONTS	-BR-M7	AR20221 NA54 M7 Bushings were replaced,	1360907	Wilson	BR	2017	CR01	Wilson	BR	Wilson - BR
2017	15816854	5	On a Fixed Date	PR	60978676	NOCO ORAS	INIT	CR01		06/23/2017	06/23/2017	06/23/2017	N-TS-WILSONTS	-BR-T2Y	Tx PCB Reduction Oil Sample	1360936	Wilson	BR	2017	CR01	Wilson	BR	Wilson - BR
2019	16938716	6	By a Fixed Date	PR	61959336	NOCO ORAS	INIT	CR01	1	01/02/2019	08/03/2018	06/20/2019	N-TS-WILSONTS	-BR-T2Y	AR21060 NA54 LV Bush 2 PCB Replace EMD	1360936	Wilson	BR	2019	CR01	Wilson	BR	Wilson - BR
2016	14523341	5	On a Fixed Date	PR	60978678	NOCO ORAS	INIT	CR01		02/23/2016	02/23/2016	02/23/2016	N-TS-WILSONTS	-BR-BY	Tx PCB Reduction Oil Sample	1360938	Wilson	BR	2016	CR01	Wilson	BR	Wilson - BR
2016	14536020	5	On a Fixed Date	PR	60977731	NOCO ORAS	INIT	CR01		03/14/2016	03/14/2016	03/14/2016	N-TS-WILSONTS	-BR-M2	Tx PCB Reduction Oil Sample	1360951	Wilson	BR	2016	CR01	Wilson	BR	Wilson - BR
2016	14536028	5	On a Fixed Date	PR	60977732	NOCO ORAS	INIT	CR01		03/14/2016	03/14/2016	03/14/2016	N-TS-WILSONTS	-BR-M8	Tx PCB Reduction Oil Sample	1360952	Wilson	BR	2016	CR01	Wilson	BR	Wilson - BR
2017	16094338	5	On a Fixed Date	PR	60978711	NOCO ORAS	INIT	CR01		09/23/2017	09/23/2017	09/23/2017	N-TS-WILSONTS	-BR-M14	Tx PCB Reduction Oil Sample	1361042	Wilson	BR	2017	CR01	Wilson	BR	Wilson - BR
2018	16924567	5	On a Fixed Date	PR	61779298	NOCO ORAS	INIT	CR01		07/31/2018	07/31/2018	07/31/2018	N-TS-WILSONTS	-BR-M3	AR20126 NA54 PCB Resampling - EMD	1361141	Wilson	BR	2018	CR01	Wilson	BR	Wilson - BR
2018	16924568	5	On a Fixed Date	PR	61779298	NOCO ORAS	INIT	CR01		07/31/2018	07/31/2018	07/31/2018	N-TS-WILSONTS	-BR-M3	AR20126 NA54 PCB Resampling - EMD	1361595	Wilson	BR	2018	CR01	Wilson	BR	Wilson - BR
2016	15252788	5	On a Fixed Date	PR	60978094	NOCO ORAS	INIT	CR01		11/16/2016	11/16/2016	11/16/2016	N-TS-WILSONTS	-BR-T1B	Tx PCB Reduction Oil Sample	1361685	Wilson	BR	2016	CR01	Wilson	BR	Wilson - BR
2017	15923154	5	On a Fixed Date	PR	60979045	NOCO ORAS	INIT	CR01		08/03/2017	08/03/2017	08/03/2017	N-TS-WILSONTS	-BR-T4Q	Tx PCB Reduction Oil Sample	1362266	Wilson	BR	2017	CR01	Wilson	BR	Wilson - BR
2016	15003404	5	On a Fixed Date	PR	60979046	NOCO ORAS	INIT	CR01		08/16/2016	08/16/2016	08/16/2016	N-TS-WILSONTS	-BR-T3J	Tx PCB Reduction Oil Sample	1362267	Wilson	BR	2016	CR01	Wilson	BR	Wilson - BR
2017	15814667	5	On a Fixed Date	PR	60978188	NOCO ORAS	INIT	CR01		06/22/2017	06/22/2017	06/22/2017	N-TS-WILSONTS	-BR-M12	Tx PCB Reduction Oil Sample	1362286	Wilson	BR	2017	CR01	Wilson	BR	Wilson - BR
2017	15918811	5	On a Fixed Date	PR	61413421	NOCO ORAS	INIT	CR01		08/02/2017	08/02/2017	08/02/2017	N-TS-WILSONTS	-BR-M7	AR20221 NA54 M7 Bushings were replaced,	1362400	Wilson	BR	2017	CR01	Wilson	BR	Wilson - BR
2017	15816855	5	On a Fixed Date	PR	60978676	NOCO ORAS	INIT	CR01		06/23/2017	06/23/2017	06/23/2017	N-TS-WILSONTS	-BR-T2Y	Tx PCB Reduction Oil Sample	1362429	Wilson	BR	2017	CR01	Wilson	BR	Wilson - BR
2016	14523342	5	On a Fixed Date	PR	60978678	NOCO ORAS	INIT	CR01		02/23/2016	02/23/2016	02/23/2016	N-TS-WILSONTS	-BR-BY	Tx PCB Reduction Oil Sample	1362431	Wilson	BR	2016	CR01	Wilson	BR	Wilson - BR
2016	14536021	5	On a Fixed Date	PR	60977731	NOCO ORAS	INIT	CR01		03/14/2016	03/14/2016	03/14/2016	N-TS-WILSONTS	-BR-M2	Tx PCB Reduction Oil Sample	1362444	Wilson	BR	2016	CR01	Wilson	BR	Wilson - BR
2016	14536029	5	On a Fixed Date	PR	60977732	NOCO ORAS	INIT	CR01		03/14/2016	03/14/2016	03/14/2016	N-TS-WILSONTS	-BR-M8	Tx PCB Reduction Oil Sample	1362445	Wilson	BR	2016	CR01	Wilson	BR	Wilson - BR
2017	16094339	5	On a Fixed Date	PR	60978711	NOCO ORAS	INIT	CR01		09/23/2017	09/23/2017	09/23/2017	N-TS-WILSONTS	-BR-M14	Tx PCB Reduction Oil Sample	1362535	Wilson	BR	2017	CR01	Wilson	BR	Wilson - BR
2018	16924569	5	On a Fixed Date	PR	61779298	NOCO ORAS	INIT	CR01		07/31/2018	07/31/2018	07/31/2018	N-TS-WILSONTS	-BR-M3	AR20126 NA54 PCB Resampling - EMD	1363088	Wilson	BR	2018	CR01	Wilson	BR	Wilson - BR
2016	15252789	5	On a Fixed Date	PR	60978094	NOCO ORAS	INIT	CR01		11/16/2016	11/16/2016	11/16/2016	N-TS-WILSONTS	-BR-T1B	Tx PCB Reduction Oil Sample	1363178	Wilson	BR	2016	CR01	Wilson	BR	Wilson - BR
2017	15923156	5	On a Fixed Date	PR	60979045	NOCO ORAS	INIT	CR01		08/03/2017	08/03/2017	08/03/2017	N-TS-WILSONTS	-BR-T4Q	Tx PCB Reduction Oil Sample	1363759	Wilson	BR	2017	CR01	Wilson	BR	Wilson - BR
2016	15003405	5	On a Fixed Date	PR	60979046	NOCO ORAS	INIT	CR01		08/16/2016	08/16/2016	08/16/2016	N-TS-WILSONTS	-BR-T3J	Tx PCB Reduction Oil Sample	1363760	Wilson	BR	2016	CR01	Wilson	BR	Wilson - BR
2017	15814668	5	On a Fixed Date	PR	60978188	NOCO ORAS	INIT	CR01		06/22/2017	06/22/2017	06/22/2017	N-TS-WILSONTS	-BR-M12	Tx PCB Reduction Oil Sample	1363779	Wilson	BR	2017	CR01	Wilson	BR	Wilson - BR
2017	15918812	5	On a Fixed Date	PR	61413421	NOCO ORAS	INIT	CR01		08/02/2017	08/02/2017	08/02/2017	N-TS-WILSONTS	-BR-M7	AR20221 NA54 M7 Bushings were replaced,	1363893	Wilson	BR	2017	CR01	Wilson	BR	Wilson - BR
2019	16938717	6	By a Fixed Date	PR	61959337	NOCO ORAS	INIT	CR01	1	01/02/2019	08/03/2018	06/20/2019	N-TS-WILSONTS	-BR-T2Y	AR21060 NA54 LV Bush 4 PCB Replace EMD	1363922	Wilson	BR	2019	CR01	Wilson	BR	Wilson - BR
2017	15816856	5	On a Fixed Date	PR	60978676	NOCO ORAS	INIT	CR01		06/23/2017	06/23/2017	06/23/2017	N-TS-WILSONTS	-BR-T2Y	Tx PCB Reduction Oil Sample	1363922	Wilson	BR	2017	CR01	Wilson	BR	Wilson - BR
2016	14536022	5	On a Fixed Date	PR	60977731	NOCO ORAS	INIT	CR01		03/14/2016	03/14/2016	03/14/2016	N-TS-WILSONTS	-BR-M2	Tx PCB Reduction Oil Sample	1363937	Wilson	BR	2016	CR01	Wilson	BR	Wilson - BR
2016	14536030	5	On a Fixed Date	PR	60977732	NOCO ORAS	INIT	CR01		03/14/2016	03/14/2016	03/14/2016	N-TS-WILSONTS	-BR-M8	Tx PCB Reduction Oil Sample	1363938	Wilson	BR	2016	CR01	Wilson	BR	Wilson - BR
2017	16094350	5	On a Fixed Date	PR	60978711	NOCO ORAS	INIT	CR01		09/23/2017	09/23/2017	09/23/2017	N-TS-WILSONTS	-BR-M14	Tx PCB Reduction Oil Sample	1364028	Wilson	BR	2017	CR01	Wilson	BR	Wilson - BR
2016	15252850	5	On a Fixed Date	PR	60978094	NOCO ORAS	INIT	CR01		11/16/2016	11/16/2016	11/16/2016	N-TS-WILSONTS	-BR-T1B	Tx PCB Reduction Oil Sample	1364671	Wilson	BR	2016	CR01	Wilson	BR	Wilson - BR
2017	15923158	5	On a Fixed Date	PR	60979045	NOCO ORAS	INIT	CR01		08/03/2017	08/03/2017	08/03/2017	N-TS-WILSONTS	-BR-T4Q	Tx PCB Reduction Oil Sample	1365252	Wilson	BR	2017	CR01	Wilson	BR	Wilson - BR
2016	15003406	5	On a Fixed Date	PR	60979046	NOCO ORAS	INIT	CR01		08/16/2016	08/16/2016	08/16/2016	N-TS-WILSONTS	-BR-T3J	Tx PCB Reduction Oil Sample	1365253	Wilson	BR	2016	CR01	Wilson	BR	Wilson - BR
2017	15814669	5	On a Fixed Date	PR	60978188	NOCO ORAS	INIT	CR01		06/22/2017	06/22/2017	06/22/2017	N-TS-WILSONTS	-BR-M12	Tx PCB Reduction Oil Sample	1365272	Wilson	BR	2017	CR01	Wilson	BR	Wilson - BR
2017	15918813	5	On a Fixed Date	PR	61413421	NOCO ORAS	INIT	CR01		08/02/2017	08/02/2017	08/02/2017	N-TS-WILSONTS	-BR-M7	AR20221 NA54 M7 Bushings were replaced,	1365386	Wilson	BR	2017	CR01	Wilson	BR	Wilson - BR
2017	15816857	5	On a Fixed Date	PR	60978676	NOCO ORAS	INIT	CR01		06/23/2017	06/23/2017	06/23/2017	N-TS-WILSONTS	-BR-T2Y	Tx PCB Reduction Oil Sample	1365415	Wilson	BR	2017	CR01	Wilson	BR	Wilson - BR
2016	14523344	5	On a Fixed Date	PR	60978678	NOCO ORAS	INIT	CR01		02/23/2016	02/23/2016	02/23/2016	N-TS-WILSONTS	-BR-BY	Tx PCB Reduction Oil Sample	1365417	Wilson	BR	2016	CR01	Wilson	BR	Wilson - BR
2016	14536023	5	On a Fixed Date	PR	60977731	NOCO ORAS	INIT	CR01		03/14/2016	03/14/2016	03/14/2016	N-TS-WILSONTS	-BR-M2	Tx PCB Reduction Oil Sample	1365430	Wilson	BR	2016	CR01	Wilson	BR	Wilson - BR
2016	14536031	5	On a Fixed Date	PR	60977732	NOCO ORAS	INIT	CR01		03/14/2016	03/14/2016	03/14/2016	N-TS-WILSONTS	-BR-M8	Tx PCB Reduction Oil Sample	1365431	Wilson	BR	2016	CR01	Wilson	BR	Wilson - BR
2017	16094351	5	On a Fixed Date	PR	60978711	NOCO ORAS	INIT	CR01		09/23/2017	09/23/2017	09/23/2017	N-TS-WILSONTS	-BR-M14	Tx PCB Reduction Oil Sample	1365521	Wilson	BR	2017	CR01	Wilson	BR	Wilson - BR
2016	15252851	5	On a Fixed Date	PR	60978094	NOCO ORAS	INIT	CR01		11/16/2016	11/16/2016	11/16/2016	N-TS-WILSONTS	-BR-T1B	Tx PCB Reduction Oil Sample	1366164	Wilson	BR	2016	CR01	Wilson	BR	Wilson - BR
2017	15923160	5	On a Fixed Date	PR	60979045	NOCO ORAS	INIT	CR01		08/03/2017	08/03/2017	08/03/2017	N-TS-WILSONTS	-BR-T4Q	Tx PCB Reduction Oil Sample	1366745	Wilson	BR	2017	CR01	Wilson	BR	Wilson - BR
2016	15003407	5	On a Fixed Date	PR	60979046	NOCO ORAS	INIT	CR01		08/16/2016	08/16/2016	08/16/2016	N-TS-WILSONTS	-BR-T3J	Tx PCB Reduction Oil Sample	1366746	Wilson	BR	2016	CR01	Wilson	BR	Wilson - BR
2017	15814750	5	On a Fixed Date	PR	60978188	NOCO ORAS	INIT	CR01		06/22/2017	06/22/2017	06/22/2017	N-TS-WILSONTS	-BR-M12	Tx PCB Reduction Oil Sample	1366765	Wilson	BR	2017	CR01	Wilson	BR	Wilson - BR
2017	15918814	5	On a Fixed Date	PR	61413421	NOCO ORAS	INIT	CR01		08/02/2017	08/02/2017	08/02/2017	N-TS-WILSONTS	-BR-M7	AR20221 NA54 M7 Bushings were replaced,	1366879	Wilson	BR	2017	CR01	Wilson	BR	Wilson - BR
2019	16938718	6	By a Fixed Date	PR	61959338	NOCO ORAS	INIT	CR01	1	01/02/2019	08/03/2018	06/20/2019	N-TS-WILSONTS	-BR-T2Y	AR21060 NA54 LV Bush 6 PCB Replace EMD	1366908	Wilson	BR	2019	CR01	Wilson	BR	Wilson - BR
2017	15816858	5	On a Fixed Date	PR	60978676	NOCO ORAS	INIT	CR01		06/23/2017	06/23/2017	06/23/2017	N-TS-WILSONTS	-BR-T2Y	Tx PCB Reduction Oil Sample	1366908	Wilson	BR		CR01	Wilson	BR	Wilson - BR
2016	14523345	5	On a Fixed Date	PR	60978678	NOCO ORAS	INIT	CR01		02/23/2016	02/23/2016	02/23/2016	N-TS-WILSONTS	-BR-BY	Tx PCB Reduction Oil Sample	1366910	Wilson	BR	2016	CR01	Wilson	BR	Wilson - BR
2016	14536024	5	On a Fixed Date	PR	60977731	NOCO ORAS	INIT	CR01		03/14/2016	03/14/2016	03/14/2016	N-TS-WILSONTS	-BR-M2	Tx PCB Reduction Oil Sample	1366923	Wilson	BR	2016	CR01	Wilson	BR	Wilson - BR
2016	14536032	5	On a Fixed Date	PR	60977732	NOCO ORAS	INIT	CR01		03/14/2016	03/14/2016	03/14/2016	N-TS-WILSONTS	-BR-M8	Tx PCB Reduction Oil Sample	1366924	Wilson	BR	2016	CR01	Wilson	BR	Wilson - BR
2017	16094352	5	On a Fixed Date	PR	60978711	NOCO ORAS	INIT	CR01		09/23/2017	09/23/2017	09/23/2017	N-TS-WILSONTS	-BR-M14	Tx PCB Reduction Oil Sample	1367014	Wilson	BR	2017	CR01	Wilson	BR	Wilson - BR
2016	15252852	5	On a Fixed Date	PR	60978094	NOCO ORAS	INIT	CR01		11/16/2016	11/16/2016	11/16/2016	N-TS-WILSONTS	-BR-T1B	Tx PCB Reduction Oil Sample	2387220	Wilson	BR	2016	CR01	Wilson	BR	Wilson - BR
2020	18460582	5	On a Fixed Date	PR	62477744	NOCO ORAS	INIT	CR01		01/21/2020	01/21/2020	01/21/2020	N-TS-WILSONTS	-TF-T2	Tx PCB Reduction Oil Sample 2020	3022567	Wilson	TF	2020	CR01	Wilson	TF	Wilson - TF

Asset Health Index – AC & DC Equipment

Station	Asset	Type	Age	Final Review		Cond	Demog	Econ	Perf	Utiliz	Critic	Obsol	HS&E
				Asset Risk	Technical Assessment and Recommendations								
Milton SS	BT1A	LV AC Breaker	34	High Risk	▪ **Near-term replacement** recommended due to risk from obsolescence, economics, and performance	1[1]	70	100	100		35	Y	N
	BT2A	LV AC Breaker	34	High Risk	▪ **Near-term replacement** recommended due to risk from obsolescence, economics, and performance	1[1]	70	100	100		35	Y	N
	SS1A	LV AC Breaker	34	Very High Risk	▪ **Near-term replacement** recommended due to risk from obsolescence, condition, economics, and performance	100[1]	70	100	100		35	Y	N
	SS2A	LV AC Breaker	34	High Risk	▪ **Near-term replacement** recommended due to risk from obsolescence and performance	1[1]	70	18	100		35	Y	N
	PNL SS1A	Transfer Scheme	34	High Risk	▪ **Near-term replacement** recommended due to risk from obsolescence	1[1]	70	1	1		35	Y	N
	PNL SS2A	Transfer Scheme	34	High Risk	▪ **Near-term replacement** recommended due to risk from obsolescence	1[1]	70	1	1		35	Y	N
	BT1	LV DC Breaker	34	High Risk	▪ **Near-term replacement** recommended due to risk from obsolescence	1[1]	85	1	1		60	Y	N
	BT2	LV DC Breaker	34	High Risk	▪ **Near-term replacement** recommended due to risk from obsolescence	1[1]	85	1	1		60	Y	N
	BR DC1	LV DC Breaker	34	High Risk	▪ **Near-term replacement** recommended due to risk from obsolescence	1[1]	85	1	1		60	Y	N
	BR DC2	LV DC Breaker	34	High Risk	▪ **Near-term replacement** recommended due to risk from obsolescence	1[1]	85	1	1		60	Y	N
	PNL DC1	Transfer Scheme	34	High Risk	▪ **Near-term replacement** recommended due to risk from obsolescence economics	1[1]	85	1	100		60	Y	N
	PNL DC2	Transfer Scheme	34	High Risk	▪ **Near-term replacement** recommended due to risk from obsolescence	1[1]	85	1	1		60	Y	N

Footnotes

1. AC/DC station service breaker and transfer scheme Condition Risk Factor stem from the last maintenance activity performed and the Condition Rating given by field staff. While there may be no *current* outstanding issues with the equipment, these assets are obsolete, difficult to find replacement parts for, and are known to have a poor history of performance.

Asset Health Index – Protections

Station	Asset	Type	Age	Final Review		Cond	Demog	Econ	Perf	Utiliz	Critic	Obsoles	HS&E
				Asset Risk	Technical Assessment and Recommendations								
Milton SS (Protections)	N-TS-MILTONSS -PR-M570V A	Microprocessor Relays	19	High	- This early version of microprocessor relay is obsolete and no longer supported. - This early version design continues to utilize the older vintage of auxilliary relays which are currently around 40 years old (past ESL) and mounted on separate racks. The new design will not utilize auxiliary relays.	1[1]	25	100	100		87	Y	Y
	N-TS-MILTONSS -PR-M570V B		19	High		1[1]	25	1	1		87	Y	Y
	N-TS-MILTONSS -PR-M572T A		19	High		1[1]	25	1	1		87	Y	Y
	N-TS-MILTONSS -PR-M572T B		19	High		1[1]	25	100	100		87	Y	Y
	N-TS-MILTONSS -PR-M585M A		19	High		1[1]	25	33	95		87	Y	Y
	N-TS-MILTONSS -PR-M585M B		19	High		1[1]	25	1	1		87	Y	Y
	N-TS-MILTONSS -PR-HL585 BF	Solid-state Relays	45	Very High	- Solid-state relays are obsolete. Currently being maintained with spare parts when they fail. - The new BF relays will be fully redundant protections.	1[1]	100	35	89		87	Y	Y
	N-TS-MILTONSS -PR-KL570 BF		45	Very High		1[1]	100	72	100		87	Y	Y
	N-TS-MILTONSS -PR-KL561 BF		45	Very High		1[1]	100	83	100		87	Y	Y
	N-TS-MILTONSS -PR-KL572 BF		45	Very High		1[1]	100	42	89		87	Y	Y
	N-TS-MILTONSS -PR-L72L85 BF		45	Very High		1[1]	100	50	100		87	Y	Y
	N-TS-MILTONSS -PR-M570V LEO		39	Very High		1[1]	100	1	1		41	Y	Y
	N-TS-MILTONSS -PR-M572T LEO		39	Very High		1[1]	100	1	1		41	Y	Y
	N-TS-MILTONSS -PR-M585M LEO		39	Very High		1[1]	100	1	1		41	Y	Y
	N-TS-MILTONSS -PR-K B		29	High		1[1]	50	1	1		87	Y	Y
	N-TS-MILTONSS -PR-K A	Electromechanical Relays	29	Fair	- Electromechanical relays are obsolete and no longer supported. They are currently being maintained with spare parts when they fail. - This new bus protection supports improved protection and monitoring functionality as well as design flexibility not provided by the current electromechanical relays.	1[1]	25	100	100		87	Y	Y

Footnotes

1. No Condition Assessment available for these assets.

Quantity of Defect Reports and Trouble Calls						
Station - Asset	Year					
	2016	2017	2018	2019	2020	2021
Milton SS - AC Station Service	2	7	4	2	15	7
Milton SS - DC Station Service	1	0	6	4	6	2

Quantity of Preventative Maintenance Reports						
Station - Asset	Year					
	2016	2017	2018	2019	2020	2021
Milton SS - AC Station Service	6	6	2	6	6	6
Milton SS - DC Station Service	18	18	13	18	20	19

Preventative Maintenance Report Condition Ratings																		
	2016			2017			2018	2019				2020			2021			
Station - Asset	**CR01**	**CR02**	**CR03**	**CR01**	**CR02**	**CR03**	**CR01**	**CR01**	**CR02**	**CR03**	**CR04**	**CR01**	**CR02**	**CR03**	**CR01**	**CR02**	**CR03**	**CR04**
Milton SS - AC Station Service	6			6			2	6				6			5			1
Milton SS - DC Station Service	15	1	2	13	3	2	13	14	1	2	1	15	1	4	14	2	1	2

Year	Notification	Priority	Notifictn type	Order	Completn date	Functional Loc.	Description	Equipment	Asset Type
2019	17248092	On a Fixed Date	DR	62136400	02/25/2019	N-TS-MILTONSS -AC	NK40 Disconnect Inspections AL0487		AC SS
2021	19235904	Emergent (< 7 Days)	DR	62717407	01/28/2021	N-TS-MILTONSS -AC	Repair SS2CA Cable Terminal Leaks		AC SS
2020	19073200	On a Fixed Date	DR	62614290	06/18/2020	N-TS-MILTONSS -AC-BR BT1A	NK40 BT1A SS BREAKER FAIL TO OPEN		AC SS
2020	19653333	On a Fixed Date	DR		12/02/2020	N-TS-MILTONSS -AC-BR BT2A	NK40 Station Service BT2A Trip Coil		AC SS
2020	19690653	High (7-30 Days)	DR	62855192	12/10/2020	N-TS-MILTONSS -AC-BR BT2A	NK40 BT2A fails to close during transfer		AC SS
2020	19684939	High (7-30 Days)	DR	62855189	12/10/2020	N-TS-MILTONSS -AC-BR SS1A	NK40 SS1A breaker trip free		AC SS
2020	19312303	High (7-30 Days)	DR	62761079	09/24/2020	N-TS-MILTONSS -AC-BR SS2A	NK40 Invest & Repair SS2A Fuses		AC SS
2020	19139900	Medium (30-90 Days)	DR	62636515	10/29/2020	N-TS-MILTONSS -AC-BR SS2A	NK40 SS2A Trip Free		AC SS
2017	14995502	Low (> 90 Days)	DR	61358419	01/16/2017	N-TS-MILTONSS -AC-PNL SS1A	NK40 SS1A Exhaust fan seized		AC SS
2020	19078868	Medium (30-90 Days)	DR	62639096	07/21/2020	N-TS-MILTONSS -AC-PNL SS2A	NK40 52-11-SS2A Breaker		AC SS
2020	19078866	Medium (30-90 Days)	DR	62639098	07/21/2020	N-TS-MILTONSS -AC-PNL SS2A	NK40 52-3-SS2A Breaker		AC SS
2020	18422928	Low (> 90 Days)	DR	62508317	05/11/2020	N-TS-MILTONSS -DC-BA250A	NK40 250V "A" BATTERY TOP UP WATER		DC SS
2020	18422961	On a Fixed Date	DR	62508318	05/11/2020	N-TS-MILTONSS -DC-BA250B	NK40 250V "B" BATTERY TOP UP WATER		DC SS
2017	15345227	Emergent (< 7 Days)	DR	61415500	01/25/2017	N-TS-MILTONSS -AC-BR BT1A	NK40 BT1A Breaker defective trip coil	1089778	AC SS
2020	19467706	On a Fixed Date	DR	62805437	10/23/2020	N-TS-MILTONSS -AC-BR BT1A	NK40 BT1A operation falure	1089778	AC SS
2020	19281208	High (7-30 Days)	DR	62743319	09/10/2020	N-TS-MILTONSS -AC-BR BT1A	NK40 BT1A failed to trip	1089778	AC SS
2021	19079477	Low (> 90 Days)	DR	62614291	03/09/2021	N-TS-MILTONSS -AC-BR BT2A	NK40 BT2A Will Not Close From Pistol Gri	1090061	AC SS
2021	19577308	Low (> 90 Days)	DR	62829648	02/26/2021	N-TS-MILTONSS -AC-BR BT2A	Nk40 BT2A transfer fail P4	1090061	AC SS
2020	19467780	On a Fixed Date	DR	62805438	10/23/2020	N-TS-MILTONSS -AC-BR BT2A	NK40 BT2A operation falure	1090061	AC SS
2020	19037662	High (7-30 Days)	DR	62605373	06/22/2020	N-TS-MILTONSS -AC-BR SS1A	NK40 Station Service SS1A Breaker Repair	1092537	AC SS
2017	14716402	High (7-30 Days)	DR	61292777	01/16/2017	N-TS-MILTONSS -AC-BR SS1A	NK40 SS1A Breaker malfunction	1092537	AC SS
2018	15847307	On a Fixed Date	DR	61534235	01/10/2018	N-TS-MILTONSS -AC-BR SS1A	Investigate possible loose connections	1092537	AC SS
2018	16346825	Emergent (< 7 Days)	DR	61779139	02/16/2018	N-TS-MILTONSS -AC-BR SS1A	NK40 SS1A Brkr Trip-Free During Transfer	1092537	AC SS
2018	17004500	High (7-30 Days)	DR	62013871	09/28/2018	N-TS-MILTONSS -DC-PNL DC1	Milton TS - DC1 Defective Transformers	1118211	DC SS
2018	14497531	Low (> 90 Days)	DR	61256468	10/22/2018	N-TS-MILTONSS -DC-BA250A	NK40 250V A Batt Repair	3086856	DC SS
2020	19574222	Emergent (< 7 Days)	TC	62829701	11/20/2020	N-TS-MILTONSS -AC	Nk40 STATION SERVICE TRANSFER FAIL		AC SS
2020	19016461	Emergent (< 7 Days)	TC	62603839	06/12/2020	N-TS-MILTONSS -AC	ITMC EMD RE: AC SUPPLY FAIL ALARM INTERM		AC SS
2019	17508175	Emergent (< 7 Days)	TC	62181880	04/17/2019	N-TS-MILTONSS -AC	S2 EMD PN NH RE: MILTON STATION HORN ALA		AC SS
2018	16736571	Emergent (< 7 Days)	TC	61840852	05/23/2018	N-TS-MILTONSS -AC	SEC2-EMD-B501M SWITCHING		AC SS
2016	14685512	Emergent (< 7 Days)	TC	61289746	05/27/2016	N-TS-MILTONSS -AC	S2 RE: RELAY ROOM A^C FAIL		AC SS
2016	14712354	Emergent (< 7 Days)	TC	61291828	06/02/2016	N-TS-MILTONSS -AC	S2^ EMD^ MILTON SS^ RE: STATION SERVICE		AC SS
2017	15342797	Emergent (< 7 Days)	TC	61414802	01/10/2017	N-TS-MILTONSS -AC	S2 RE: 500KV BREAKER ACDC SUPPLY FAIL		AC SS
2017	15844212	Emergent (< 7 Days)	TC	61530827	07/07/2017	N-TS-MILTONSS -AC-BR SS1A	ITMC EMD AC FAIL TICKET1798237		AC SS
2020	19366727	Emergent (< 7 Days)	TC	62773089	09/24/2020	N-TS-MILTONSS -AC-BR SS2A	NK40 STATION SERVICE Power Loss		AC SS
2020	18866106	Emergent (< 7 Days)	TC	62579060	05/13/2020	N-TS-MILTONSS -DC	S2 RE: DC GROUND		DC SS
2019	18358369	Emergent (< 7 Days)	TC	62467618	12/03/2019	N-TS-MILTONSS -DC	S2: EMD RE: 250V AND 48V RECTIFIER FAIL		DC SS
2019	17247937	Emergent (< 7 Days)	TC	62136157	02/12/2019	N-TS-MILTONSS -DC	S2: P&C RE: A BATTERY GROUND		DC SS
2019	17139598	Emergent (< 7 Days)	TC	62116994	01/18/2019	N-TS-MILTONSS -DC	S2 - PD EMD - INVESTIGATE STATION HORN		DC SS
2019	17244028	Emergent (< 7 Days)	TC	62132047	02/06/2019	N-TS-MILTONSS -DC-BA250A	SEC2-P&C-250 V DC BATTERY A AND B		DC SS
2020	18940685	Emergent (< 7 Days)	TC	62588748	05/21/2020	N-TS-MILTONSS -DC-BA250A	S2 P&C TO INVESTIGATE 250 V DC BATTERY G		DC SS
2020	19061698	Emergent (< 7 Days)	TC	62609507	06/18/2020	N-TS-MILTONSS -DC-BA250B	S2 PD PC 250V DC BATTERY GROUND B ALARM		DC SS
2020	19653771	Emergent (< 7 Days)	TC	62847678	12/04/2020	N-TS-MILTONSS -DC-CH250A	ITMC#2215308 - P&C - INTERMITTENT ISSUES		DC SS
2018	16728040	Emergent (< 7 Days)	TC	61839378	05/17/2018	N-TS-MILTONSS -AC-BR BT2A	S2 EMD NO STATION SERVICE SAP	1090061	AC SS
2017	15844211	Emergent (< 7 Days)	TC	61530826	07/07/2017	N-TS-MILTONSS -AC-BR SS1A	S2 EMD STATION SERVICE TRANSFER	1092537	AC SS
2017	15844357	Emergent (< 7 Days)	TC	61532890	07/13/2017	N-TS-MILTONSS -AC-BR SS1A	S2 EMD RE:STATION SERVICE AUTO TRANSFER	1092537	AC SS
2018	17004619	Emergent (< 7 Days)	TC	62013775	10/05/2018	N-TS-MILTONSS -DC-BA250A	S2 P&C PD 250 DC BATTERY GROUND A	3086856	DC SS
2018	17004215	Emergent (< 7 Days)	TC	62012216	09/26/2018	N-TS-MILTONSS -DC-BA250A	S2 P&C 250V DC BATTERY GROUND A	3086856	DC SS
2018	16945631	Emergent (< 7 Days)	TC	61968477	08/15/2018	N-TS-MILTONSS -DC-BA250A	S2, EMD, RE: BATTERY LOAD LOW, STATION B	3086856	DC SS
2018	16940414	Emergent (< 7 Days)	TC	61962027	08/09/2018	N-TS-MILTONSS -DC-BA250B	NK40 250V B battery low Voltage	3086857	DC SS
2015	13956653	Emergent (< 7 Days)	DR	61152748	07/09/2015	N-TS-MILTONSS -AC	Milton ACS17 600V BKR replace		AC SS

2015	13496559	Medium (30-90 Days)	DR	61103253	03/12/2015	N-TS-MILTONSS	-DC	AR17694 AL360 NK40 DC Jumper P&C		DC SS
2015	13524367	Emergent (< 7 Days)	DR	61113026	02/09/2015	N-TS-MILTONSS	-AC-BR BT2A	NK40 BT2A Defective closed coil	1090061	AC SS
2015	13524368	Medium (30-90 Days)	DR	61113027	09/01/2015	N-TS-MILTONSS	-AC-PNL SS1A	NK40 SS1A heater relay replaced	1096430	AC SS
2015	13523713	Medium (30-90 Days)	DR	61113028	02/26/2015	N-TS-MILTONSS	-DC-CH48FMW	Repair Charger at Milton	1109804	DC SS
2015	13963903	Emergent (< 7 Days)	DR	61153766	07/17/2015	N-TS-MILTONSS	-DC-BR DC2	NK40 DC2 breaker not transfering	1116676	DC SS
2016	13589001	Low (> 90 Days)	DR	61126711	02/09/2016	N-TS-MILTONSS	-DC-BA250A	NA40 250V A Battery Stripped Bolt	3086856	DC SS
2015	13959965	Emergent (< 7 Days)	TC	61153426	07/10/2015	N-TS-MILTONSS	-DC	S2 RE: DC PANEL REDUNDENCY		DC SS
2015	13924509	Emergent (< 7 Days)	TC	61150459	07/09/2015	N-TS-MILTONSS	-DC-CH250B	s 2 imd emd re: battery voltage	1119462	DC SS
2021	21017044	On a Fixed Date	DR	63251796	11/09/2021	N-TS-MILTONSS	-AC-BR BT2A	NK40 BT2A Breaker failed to open		AC SS
2021	20008034	On a Fixed Date	DR	62921473	03/04/2021	N-TS-MILTONSS	-AC-BR SS1A	NK40 BT1A 52Y failure		AC SS
2021	19765539	Medium (30-90 Days)	DR	62875659	01/15/2021	N-TS-MILTONSS	-DC-BA250A	NK40 250VDC Battery Top Up		DC SS
2021	19765590	Medium (30-90 Days)	DR	62875800	01/15/2021	N-TS-MILTONSS	-DC-BA250B	NK40 250VDC Battery Top Up		DC SS
2021	20708960	Emergent (< 7 Days)	TC	62836463	08/18/2021	N-TS-MILTONSS	-AC	TX LINES PD RE: V586M TRIPPED / WANTING		AC SS
2021	20997188	Emergent (< 7 Days)	TC	63251638	11/16/2021	N-TS-MILTONSS	-AC	S2 REQ EMD PN NH RE: RESET GENERIC PILOT		AC SS

Year	Notification	Notifictn type	Order	System status	Coding	Completn date	Functional Loc.	Description	Asset Tp
2021	19165327	PR	62654812	NOCO ORAS	CR01	03/04/2021	N-TS-MILTONSS -AC-BR BT1A	AC&DC-BR-SPRING-125+-SI	AC SS
2017	14899053	PR	61322162	NOCO ORAS	CR01	01/16/2017	N-TS-MILTONSS -AC-BR BT1A	AC&DC-BR-SPRING-125+-SI	AC SS
2019	16866097	PR	61897797	NOCO ORAS	CR01	03/23/2019	N-TS-MILTONSS -AC-BR BT1A	AC&DC-BR-SPRING-125+-SI	AC SS
2020	17782872	PR	62263854	NOCO ORAS	CR01	03/16/2020	N-TS-MILTONSS -AC-BR BT1A	AC&DC-BR-SPRING-125+-SI	AC SS
2021	19165328	PR	62654813	NOCO ORAS	CR01	02/26/2021	N-TS-MILTONSS -AC-BR BT2A	AC&DC-BR-SPRING-125+-SI	AC SS
2017	14899055	PR	61322164	NOCO ORAS	CR01	01/16/2017	N-TS-MILTONSS -AC-BR BT2A	AC&DC-BR-SPRING-125+-SI	AC SS
2020	17782873	PR	62263855	NOCO ORAS	CR01	01/23/2020	N-TS-MILTONSS -AC-BR BT2A	AC&DC-BR-SPRING-125+-SI	AC SS
2019	16866098	PR	61897798	NOCO ORAS	CR01	01/09/2019	N-TS-MILTONSS -AC-BR BT2A	AC&DC-BR-SPRING-125+-SI	AC SS
2020	17782874	PR	62263856	NOCO ORAS	CR01	03/16/2020	N-TS-MILTONSS -AC-BR SS1A	AC&DC-BR-SPRING-125+-SI	AC SS
2021	19165329	PR	62654814	NOCO ORAS	CR04	03/04/2021	N-TS-MILTONSS -AC-BR SS1A	AC&DC-BR-SPRING-125+-SI	AC SS
2019	16866112	PR	61897822	NOCO ORAS	CR01	03/23/2019	N-TS-MILTONSS -AC-BR SS1A	AC&DC-BR-SPRING-125+-SI	AC SS
2017	14899056	PR	61322165	NOCO ORAS	CR01	01/25/2017	N-TS-MILTONSS -AC-BR SS1A	AC&DC-BR-SPRING-125+-SI	AC SS
2020	17782875	PR	62263857	NOCO ORAS	CR01	01/23/2020	N-TS-MILTONSS -AC-BR SS2A	AC&DC-BR-SPRING-125+-SI	AC SS
2021	19165342	PR	62654827	NOCO ORAS	CR01	02/26/2021	N-TS-MILTONSS -AC-BR SS2A	AC&DC-BR-SPRING-125+-SI	AC SS
2017	14899057	PR	61322166	NOCO ORAS	CR01	01/16/2017	N-TS-MILTONSS -AC-BR SS2A	AC&DC-BR-SPRING-125+-SI	AC SS
2019	16866122	PR	61897832	NOCO ORAS	CR01	01/09/2019	N-TS-MILTONSS -AC-BR SS2A	AC&DC-BR-SPRING-125+-SI	AC SS
2020	17782876	PR	62263858	NOCO ORAS	CR01	03/22/2020	N-TS-MILTONSS -AC-PNL SS1A	AC&DC-BR-SPRING-125+-D1	AC SS
2019	16866123	PR	61897833	NOCO ORAS	CR01	03/23/2019	N-TS-MILTONSS -AC-PNL SS1A	AC&DC-BR-SPRING-125+-D1	AC SS
2021	19165343	PR	62654828	NOCO ORAS	CR01	03/04/2021	N-TS-MILTONSS -AC-PNL SS1A	AC&DC-BR-SPRING-125+-D1	AC SS
2017	14899081	PR	61322170	NOCO ORAS	CR01	01/16/2017	N-TS-MILTONSS -AC-PNL SS1A	AC&DC-BR-SPRING-125+-D1	AC SS
2018	15870132	PR	61551751	NOCO ORAS	CR01	01/10/2018	N-TS-MILTONSS -AC-PNL SS1A	AC&DC-BR-SPRING-125+-D1	AC SS
2021	19165344	PR	62654829	NOCO ORAS	CR01	02/26/2021	N-TS-MILTONSS -AC-PNL SS2A	AC&DC-BR-SPRING-125+-D1	AC SS
2017	14899083	PR	61322172	NOCO ORAS	CR01	01/16/2017	N-TS-MILTONSS -AC-PNL SS2A	AC&DC-BR-SPRING-125+-D1	AC SS
2018	15870133	PR	61551752	NOCO ORAS	CR01	01/10/2018	N-TS-MILTONSS -AC-PNL SS2A	AC&DC-BR-SPRING-125+-D1	AC SS
2020	17782877	PR	62263859	NOCO ORAS	CR01	01/23/2020	N-TS-MILTONSS -AC-PNL SS2A	AC&DC-BR-SPRING-125+-D1	AC SS
2019	16866124	PR	61897834	NOCO ORAS	CR01	01/09/2019	N-TS-MILTONSS -AC-PNL SS2A	AC&DC-BR-SPRING-125+-D1	AC SS
2021	19165357	PR	62654842	NOCO ORAS	CR01	02/26/2021	N-TS-MILTONSS -DC-BR BT1	AC&DC-BR-SPRING-125+-SI	DC SS
2017	14899085	PR	61322174	NOCO ORAS	CR01	01/24/2017	N-TS-MILTONSS -DC-BR BT1	AC&DC-BR-SPRING-125+-SI	DC SS
2019	16866125	PR	61897835	NOCO ORAS	CR01	01/11/2019	N-TS-MILTONSS -DC-BR BT1	AC&DC-BR-SPRING-125+-SI	DC SS
2020	17782878	PR	62263860	NOCO ORAS	CR01	03/04/2020	N-TS-MILTONSS -DC-BR BT1	AC&DC-BR-SPRING-125+-SI	DC SS
2017	14899087	PR	61322176	NOCO ORAS	CR01	01/24/2017	N-TS-MILTONSS -DC-BR BT2	AC&DC-BR-SPRING-125+-SI	DC SS
2021	19165358	PR	62654843	NOCO ORAS	CR01	01/13/2021	N-TS-MILTONSS -DC-BR BT2	AC&DC-BR-SPRING-125+-SI	DC SS
2020	17782879	PR	62263861	NOCO ORAS	CR01	03/05/2020	N-TS-MILTONSS -DC-BR BT2	AC&DC-BR-SPRING-125+-SI	DC SS
2019	16866151	PR	61897861	NOCO ORAS	CR01	01/11/2019	N-TS-MILTONSS -DC-BR BT2	AC&DC-BR-SPRING-125+-SI	DC SS
2017	14899088	PR	61322177	NOCO ORAS	CR01	02/01/2017	N-TS-MILTONSS -DC-BR DC1	AC&DC-BR-SPRING-125+-SI	DC SS
2020	17782880	PR	62263862	NOCO ORAS	CR01	03/04/2020	N-TS-MILTONSS -DC-BR DC1	AC&DC-BR-SPRING-125+-SI	DC SS
2021	19165359	PR	62654844	NOCO ORAS	CR01	02/26/2021	N-TS-MILTONSS -DC-BR DC1	AC&DC-BR-SPRING-125+-SI	DC SS
2019	16866159	PR	61897869	NOCO ORAS	CR01	01/11/2019	N-TS-MILTONSS -DC-BR DC1	AC&DC-BR-SPRING-125+-SI	DC SS
2020	17782881	PR	62263863	NOCO ORAS	CR01	03/05/2020	N-TS-MILTONSS -DC-BR DC2	AC&DC-BR-SPRING-125+-SI	DC SS
2017	14899100	PR	61322179	NOCO ORAS	CR01	02/01/2017	N-TS-MILTONSS -DC-BR DC2	AC&DC-BR-SPRING-125+-SI	DC SS
2019	16866170	PR	61897870	NOCO ORAS	CR01	01/11/2019	N-TS-MILTONSS -DC-BR DC2	AC&DC-BR-SPRING-125+-SI	DC SS

2021	19165360	PR	62654845	NOCO ORAS	CR01	01/13/2021	N-TS-MILTONSS	-DC-BR DC2	AC&DC-BR-SPRING-125+-SI	DC SS
2020	17782882	PR	62263864	NOCO ORAS	CR01	03/04/2020	N-TS-MILTONSS	-DC-PNL DC1	AC&DC-BR-SPRING-125+-D1	DC SS
2021	19165373	PR	62654858	NOCO ORAS	CR01	02/26/2021	N-TS-MILTONSS	-DC-PNL DC1	AC&DC-BR-SPRING-125+-D1	DC SS
2017	14899102	PR	61322221	NOCO ORAS	CR01	01/25/2017	N-TS-MILTONSS	-DC-PNL DC1	AC&DC-BR-SPRING-125+-D1	DC SS
2018	15870138	PR	61551757	NOCO ORAS	CR01	02/15/2018	N-TS-MILTONSS	-DC-PNL DC1	AC&DC-BR-SPRING-125+-D1	DC SS
2019	16866171	PR	61897871	NOCO ORAS	CR01	01/11/2019	N-TS-MILTONSS	-DC-PNL DC1	AC&DC-BR-SPRING-125+-D1	DC SS
2020	17782883	PR	62263865	NOCO ORAS	CR01	03/05/2020	N-TS-MILTONSS	-DC-PNL DC2	AC&DC-BR-SPRING-125+-D1	DC SS
2017	14899104	PR	61322223	NOCO ORAS	CR01	01/25/2017	N-TS-MILTONSS	-DC-PNL DC2	AC&DC-BR-SPRING-125+-D1	DC SS
2021	19165374	PR	62654859	NOCO ORAS	CR01	01/13/2021	N-TS-MILTONSS	-DC-PNL DC2	AC&DC-BR-SPRING-125+-D1	DC SS
2018	15870139	PR	61551758	NOCO ORAS	CR01	02/15/2018	N-TS-MILTONSS	-DC-PNL DC2	AC&DC-BR-SPRING-125+-D1	DC SS
2019	16866172	PR	61897872	NOCO ORAS	CR01	01/11/2019	N-TS-MILTONSS	-DC-PNL DC2	AC&DC-BR-SPRING-125+-D1	DC SS
2017	14889325	PR	61312435	NOCO ORAS	CR01	01/30/2017	N-TS-MILTONSS	-DC-CH250B	DC-CHARGER/RECTIFIER-D1	DC SS
2018	15865780	PR	61547529	NOCO ORAS	CR01	02/23/2018	N-TS-MILTONSS	-DC-CH250B	DC-CHARGER/RECTIFIER-D1	DC SS
2021	19157384	PR	62647845	NOCO ORAS	CR01	01/30/2021	N-TS-MILTONSS	-DC-CH250B	DC-CHARGER/RECTIFIER-D1	DC SS
2020	17781091	PR	62262074	NOCO ORAS	CR01	01/16/2020	N-TS-MILTONSS	-DC-CH250B	DC-CHARGER/RECTIFIER-D1	DC SS
2019	16860638	PR	61892338	NOCO ORAS	CR01	02/06/2019	N-TS-MILTONSS	-DC-CH250B	DC-CHARGER/RECTIFIER-D1	DC SS
2019	16878541	PR	61910199	NOCO ORAS	CR04	02/01/2019	N-TS-MILTONSS	-DC-CH250A	DC-CHARGER/RECTIFIER-D1	DC SS
2021	19171110	PR	62660244	NOCO ORAS	CR04	01/14/2021	N-TS-MILTONSS	-DC-CH250A	DC-CHARGER/RECTIFIER-D1	DC SS
2017	14914108	PR	61337227	NOCO ORAS	CR01	04/11/2017	N-TS-MILTONSS	-DC-CH250A	DC-CHARGER/RECTIFIER-D1	DC SS
2018	15879637	PR	61561173	NOCO ORAS	CR01	02/21/2018	N-TS-MILTONSS	-DC-CH250A	DC-CHARGER/RECTIFIER-D1	DC SS
2020	17785165	PR	62266067	NOCO ORAS	CR03	01/16/2020	N-TS-MILTONSS	-DC-CH250A	DC-CHARGER/RECTIFIER-D1	DC SS
2019	16879610	PR	61911288	NOCO ORAS	CR03	02/08/2019	N-TS-MILTONSS	-DC-BA250A	DC-BATT-LC/250- D1	DC SS
2020	17785358	PR	62266260	NOCO ORAS	CR03	01/09/2020	N-TS-MILTONSS	-DC-BA250A	DC-BATT-LC/250- VI	DC SS
2018	15880188	PR	61561724	NOCO ORAS	CR01	02/21/2018	N-TS-MILTONSS	-DC-BA250A	DC-BATT-LC/250- D2	DC SS
2019	16879611	PR	61911289	NOCO ORAS	CR01	01/10/2019	N-TS-MILTONSS	-DC-BA250A	DC-BATT-LC/250- VI	DC SS
2017	14914885	PR	61338004	NOCO ORAS	CR02	01/09/2017	N-TS-MILTONSS	-DC-BA250A	DC-BATT-LC/250- VI	DC SS
2019	16879614	PR	61911292	NOCO ORAS	CR03	02/01/2019	N-TS-MILTONSS	-DC-BA250A	DC-BATT-LC/250- D2	DC SS
2021	19171370	PR	62660546	NOCO ORAS	CR01	05/19/2021	N-TS-MILTONSS	-DC-BA250A	DC-BATT-LC/250- VI	DC SS
2018	15880186	PR	61561722	NOCO ORAS	CR01	09/18/2018	N-TS-MILTONSS	-DC-BA250A	DC-BATT-LC/250- VI	DC SS
2020	17785356	PR	62266258	NOCO ORAS	CR01	01/16/2020	N-TS-MILTONSS	-DC-BA250A	DC-BATT-LC/250- D1	DC SS
2018	15880185	PR	61561721	NOCO ORAS	CR01	09/04/2018	N-TS-MILTONSS	-DC-BA250A	DC-BATT-LC/250- VI	DC SS
2020	17785359	PR	62266261	NOCO ORAS	CR01	05/13/2020	N-TS-MILTONSS	-DC-BA250A	DC-BATT-LC/250- VI	DC SS
2017	14914887	PR	61338006	NOCO ORAS	CR03	09/11/2017	N-TS-MILTONSS	-DC-BA250A	DC-BATT-LC/250- VI	DC SS
2020	17785361	PR	62266263	NOCO ORAS	CR01	01/16/2020	N-TS-MILTONSS	-DC-BA250A	DC-BATT-LC/250- D2	DC SS
2017	14914886	PR	61338005	NOCO ORAS	CR01	05/02/2017	N-TS-MILTONSS	-DC-BA250A	DC-BATT-LC/250- VI	DC SS
2019	16879612	PR	61911290	NOCO ORAS	CR01	05/24/2019	N-TS-MILTONSS	-DC-BA250A	DC-BATT-LC/250- VI	DC SS
2021	19171371	PR	62660547	NOCO ORAS	CR01	08/09/2021	N-TS-MILTONSS	-DC-BA250A	DC-BATT-LC/250- VI	DC SS
2020	17785360	PR	62266262	NOCO ORAS	CR01	09/29/2020	N-TS-MILTONSS	-DC-BA250A	DC-BATT-LC/250- VI	DC SS
2020	17785357	PR	62266259	NOCO ORAS	CR01	02/20/2020	N-TS-MILTONSS	-DC-BA250A	DC-BATT-LC/250- BLT	DC SS
2017	14914888	PR	61338007	NOCO ORAS	CR01	04/11/2017	N-TS-MILTONSS	-DC-BA250A	DC-BATT-LC/250- D2	DC SS
2021	19171359	PR	62660545	NOCO ORAS	CR02	01/07/2021	N-TS-MILTONSS	-DC-BA250A	DC-BATT-LC/250- VI	DC SS
2021	19171372	PR	62660548	NOCO ORAS	CR01	01/14/2021	N-TS-MILTONSS	-DC-BA250A	DC-BATT-LC/250- D2	DC SS

2021	19171358	PR	62660544	NOCO ORAS	CR04	01/14/2021	N-TS-MILTONSS	-DC-BA250A	DC-BATT-LC/250- D1	DC SS
2017	14914884	PR	61338003	NOCO ORAS	CR01	04/11/2017	N-TS-MILTONSS	-DC-BA250A	DC-BATT-LC/250- D1	DC SS
2018	15880184	PR	61561720	NOCO ORAS	CR01	01/04/2018	N-TS-MILTONSS	-DC-BA250A	DC-BATT-LC/250- VI	DC SS
2019	16879613	PR	61911291	NOCO ORAS	CR01	09/20/2019	N-TS-MILTONSS	-DC-BA250A	DC-BATT-LC/250- VI	DC SS
2021	15880183	PR	61561719	NOCO ORAS	CR01	10/27/2021	N-TS-MILTONSS	-DC-BA250A	DC-BATT-LC/250- D1	DC SS
2021	19171376	PR	62660552	NOCO ORAS	CR01	08/09/2021	N-TS-MILTONSS	-DC-BA250B	DC-BATT-LC/250- VI	DC SS
2020	17785363	PR	62266265	NOCO ORAS	CR02	03/04/2020	N-TS-MILTONSS	-DC-BA250B	DC-BATT-LC/250- BLT	DC SS
2020	17785362	PR	62266264	NOCO ORAS	CR03	01/16/2020	N-TS-MILTONSS	-DC-BA250B	DC-BATT-LC/250- D1	DC SS
2020	17785367	PR	62266269	NOCO ORAS	CR01	01/16/2020	N-TS-MILTONSS	-DC-BA250B	DC-BATT-LC/250- D2	DC SS
2017	14914940	PR	61338009	NOCO ORAS	CR02	01/09/2017	N-TS-MILTONSS	-DC-BA250B	DC-BATT-LC/250- VI	DC SS
2021	19171375	PR	62660551	NOCO ORAS	CR01	05/19/2021	N-TS-MILTONSS	-DC-BA250B	DC-BATT-LC/250- VI	DC SS
2019	16879615	PR	61911293	NOCO ORAS	CR02	02/06/2019	N-TS-MILTONSS	-DC-BA250B	DC-BATT-LC/250- D1	DC SS
2019	16879664	PR	61911352	NOCO ORAS	CR01	02/06/2019	N-TS-MILTONSS	-DC-BA250B	DC-BATT-LC/250- D2	DC SS
2018	15880204	PR	61561740	NOCO ORAS	CR01	02/23/2018	N-TS-MILTONSS	-DC-BA250B	DC-BATT-LC/250- D2	DC SS
2019	16879662	PR	61911350	NOCO ORAS	CR01	09/20/2019	N-TS-MILTONSS	-DC-BA250B	DC-BATT-LC/250- VI	DC SS
2021	19171374	PR	62660550	NOCO ORAS	CR02	01/07/2021	N-TS-MILTONSS	-DC-BA250B	DC-BATT-LC/250- VI	DC SS
2020	17785366	PR	62266268	NOCO ORAS	CR01	09/29/2020	N-TS-MILTONSS	-DC-BA250B	DC-BATT-LC/250- VI	DC SS
2017	14914941	PR	61338010	NOCO ORAS	CR01	05/02/2017	N-TS-MILTONSS	-DC-BA250B	DC-BATT-LC/250- VI	DC SS
2018	15880200	PR	61561736	NOCO ORAS	CR01	02/23/2018	N-TS-MILTONSS	-DC-BA250B	DC-BATT-LC/250- D1	DC SS
2019	16879661	PR	61911349	NOCO ORAS	CR01	05/24/2019	N-TS-MILTONSS	-DC-BA250B	DC-BATT-LC/250- VI	DC SS
2017	14914942	PR	61338011	NOCO ORAS	CR03	09/08/2017	N-TS-MILTONSS	-DC-BA250B	DC-BATT-LC/250- VI	DC SS
2020	17785365	PR	62266267	NOCO ORAS	CR01	05/13/2020	N-TS-MILTONSS	-DC-BA250B	DC-BATT-LC/250- VI	DC SS
2020	17785364	PR	62266266	NOCO ORAS	CR03	01/09/2020	N-TS-MILTONSS	-DC-BA250B	DC-BATT-LC/250- VI	DC SS
2017	14914943	PR	61338012	NOCO ORAS	CR01	01/30/2017	N-TS-MILTONSS	-DC-BA250B	DC-BATT-LC/250- D2	DC SS
2021	19171373	PR	62660549	NOCO ORAS	CR03	02/10/2021	N-TS-MILTONSS	-DC-BA250B	DC-BATT-LC/250- D1	DC SS
2021	19171377	PR	62660553	NOCO ORAS	CR01	01/30/2021	N-TS-MILTONSS	-DC-BA250B	DC-BATT-LC/250- D2	DC SS
2018	15880201	PR	61561737	NOCO ORAS	CR01	01/04/2018	N-TS-MILTONSS	-DC-BA250B	DC-BATT-LC/250- VI	DC SS
2018	15880202	PR	61561738	NOCO ORAS	CR01	09/04/2018	N-TS-MILTONSS	-DC-BA250B	DC-BATT-LC/250- VI	DC SS
2018	15880203	PR	61561739	NOCO ORAS	CR01	09/05/2018	N-TS-MILTONSS	-DC-BA250B	DC-BATT-LC/250- VI	DC SS
2019	16879660	PR	61911348	NOCO ORAS	CR01	01/10/2019	N-TS-MILTONSS	-DC-BA250B	DC-BATT-LC/250- VI	DC SS
2017	14914889	PR	61338008	NOCO ORAS	CR02	01/30/2017	N-TS-MILTONSS	-DC-BA250B	DC-BATT-LC/250- D1	DC SS
2016	14046519	PR	61186388	NOCO ORAS	CR01	02/01/2016	N-TS-MILTONSS	-AC-BR BT1A	AC&DC-BR-SPRING-125+-SI	AC SS
2016	14046520	PR	61186389	NOCO ORAS	CR01	02/02/2016	N-TS-MILTONSS	-AC-BR BT2A	AC&DC-BR-SPRING-125+-SI	AC SS
2016	14046521	PR	61186390	NOCO ORAS	CR01	02/01/2016	N-TS-MILTONSS	-AC-BR SS1A	AC&DC-BR-SPRING-125+-SI	AC SS
2016	14046522	PR	61186391	NOCO ORAS	CR01	02/02/2016	N-TS-MILTONSS	-AC-BR SS2A	AC&DC-BR-SPRING-125+-SI	AC SS
2016	14046523	PR	61186392	NOCO ORAS	CR01	02/01/2016	N-TS-MILTONSS	-AC-PNL SS1A	AC&DC-BR-SPRING-125+-D1	AC SS
2016	14046524	PR	61186393	NOCO ORAS	CR01	02/02/2016	N-TS-MILTONSS	-AC-PNL SS2A	AC&DC-BR-SPRING-125+-D1	AC SS
2016	14046525	PR	61186394	NOCO ORAS	CR01	03/17/2016	N-TS-MILTONSS	-DC-BR BT1	AC&DC-BR-SPRING-125+-SI	DC SS
2016	14046526	PR	61186395	NOCO ORAS	CR01	03/17/2016	N-TS-MILTONSS	-DC-BR BT2	AC&DC-BR-SPRING-125+-SI	DC SS
2016	14046527	PR	61186396	NOCO ORAS	CR01	03/17/2016	N-TS-MILTONSS	-DC-BR DC1	AC&DC-BR-SPRING-125+-SI	DC SS
2016	14046529	PR	61186398	NOCO ORAS	CR01	03/24/2016	N-TS-MILTONSS	-DC-BR DC2	AC&DC-BR-SPRING-125+-SI	DC SS
2015	13582387	PR	61125848	NOCO ORAS	CR01	04/02/2015	N-TS-MILTONSS	-DC-BA250A	DC-BATT-LC/250-BLT	DC SS

2016	14046530	PR	61186399	NOCO ORAS	CR01	03/17/2016	N-TS-MILTONSS	-DC-PNL DC1	AC&DC-BR-SPRING-125+-D1	DC SS
2016	14046531	PR	61186400	NOCO ORAS	CR01	03/23/2016	N-TS-MILTONSS	-DC-PNL DC2	AC&DC-BR-SPRING-125+-D1	DC SS
2015	13582388	PR	61125849	NOCO ORAS	CR01	04/02/2015	N-TS-MILTONSS	-DC-BA250B	DC-BATT-LC/250-BLT	DC SS
2016	14044986	PR	61184855	NOCO ORAS	CR01	02/12/2016	N-TS-MILTONSS	-DC-CH250B	DC-CHARGER/RECTIFIER-D1	DC SS
2016	14052166	PR	61192034	NOCO ORAS	CR01	05/19/2016	N-TS-MILTONSS	-DC-CH250A	DC-CHARGER/RECTIFIER-D1	DC SS
2016	14052673	PR	61192541	NOCO ORAS	CR03	05/30/2016	N-TS-MILTONSS	-DC-BA250A	DC-BATT-LC/250- D1	DC SS
2016	14461740	PR	61244008	NOCO ORAS	CR03	06/01/2016	N-TS-MILTONSS	-DC-BA250A	DC-BATT-LC/250- VI	DC SS
2016	14461519	PR	61244007	NOCO ORAS	CR02	01/06/2016	N-TS-MILTONSS	-DC-BA250A	DC-BATT-LC/250- VI	DC SS
2015	14242880	PR	61223529	NOCO ORAS	CR01	10/26/2015	N-TS-MILTONSS	-DC-BA250A	DC-BATT-LC/250- VI	DC SS
2015	13985817	PR	61155573	NOCO ORAS	CR01	08/11/2015	N-TS-MILTONSS	-DC-BA250A	DC-BATT-LC/250- VI	DC SS
2016	14461741	PR	61244009	NOCO ORAS	CR01	11/07/2016	N-TS-MILTONSS	-DC-BA250A	DC-BATT-LC/250- VI	DC SS
2016	14052674	PR	61192542	NOCO ORAS	CR01	05/19/2016	N-TS-MILTONSS	-DC-BA250A	DC-BATT-LC/250- D2	DC SS
2016	14461743	PR	61244011	NOCO ORAS	CR01	06/01/2016	N-TS-MILTONSS	-DC-BA250B	DC-BATT-LC/250- VI	DC SS
2016	14461744	PR	61244012	NOCO ORAS	CR01	11/07/2016	N-TS-MILTONSS	-DC-BA250B	DC-BATT-LC/250- VI	DC SS
2016	14052675	PR	61192543	NOCO ORAS	CR01	02/12/2016	N-TS-MILTONSS	-DC-BA250B	DC-BATT-LC/250- D1	DC SS
2016	14052676	PR	61192544	NOCO ORAS	CR01	02/12/2016	N-TS-MILTONSS	-DC-BA250B	DC-BATT-LC/250- D2	DC SS
2016	14461742	PR	61244010	NOCO ORAS	CR01	01/06/2016	N-TS-MILTONSS	-DC-BA250B	DC-BATT-LC/250- VI	DC SS
2015	14242881	PR	61223530	NOCO ORAS	CR01	10/26/2015	N-TS-MILTONSS	-DC-BA250B	DC-BATT-LC/250- VI	DC SS
2015	13985818	PR	61155574	NOCO ORAS	CR01	08/11/2015	N-TS-MILTONSS	-DC-BA250B	DC-BATT-LC/250- VI	DC SS