

OEB Staff Interrogatories
2020 Cost of Service Rate Application
EnWin Utilities Ltd. (EnWin Utilities)
EB-2019-0032
July 12, 2019

Exhibit 1 Administration

1-Staff-1
Updated RRWF

Upon completing all interrogatories from OEB staff and intervenors, please provide an updated RRWF in working Microsoft Excel format with any corrections or adjustments that EnWin Utilities wishes to make to the amounts in the populated version of the RRWF filed in the initial applications. Entries for changes and adjustments should be included in the middle column on sheet 3 Data_Input_Sheet. Sheets 10 (Load Forecast), 11 (Cost Allocation), 12 (Residential Rate Design) and 13 (Rate Design) should be updated, as necessary. Please include documentation of the corrections and adjustments, such as a reference to an interrogatory response or an explanatory note. Such notes should be documented on Sheet 14 Tracking Sheet, and may also be included on other sheets in the RRWF to assist understanding of changes.

1-Staff-2
Updated Bill Impacts

Upon completing all interrogatories from OEB staff and intervenors, please provide an updated Tariff Schedule and Bill Impact model for all classes at the typical consumption / demand levels (e.g. 750 kWh for residential, 2,000 kWh for GS<50, etc.).

1-Staff-3
Ref: Exhibit 1, Page 65

EnWin Utilities states that “Enwin intends to conduct a second phase of application specific customer engagement. The purpose of this second phase is to follow up with customers, but in any event, a statistically relevant sample, in order to confirm that Enwin has captured the priorities, needs and preferences and struck an appropriate balance between cost and reliability in its DSP and other proposals submitted with this Application. Results from the second phase

consultation will be filed with the Board subsequent to the filing of this Application.”

- a) Please provide the details of this second phase of consultation and the results of the consultation.
- b) Please explain the reasons if the consultation has not been conducted to date.

1-Staff-4

Ref: Exhibit 1, Attachment 1-H

EnWin Utilities provides the 2017 scorecard in the Attachment 1-H.

- a) Please provide the 2018 scorecard and management discussions and analysis.
- b) Please provide reasons when the performance measures are not within the minimum standards or not in compliance.

1-Staff-5

Ref: Exhibit 1, Attachment 1-G, Pages 7 and 8; Exhibit 1, Attachment 1-H

Per the 2018 EnWin Utilities’ customer satisfaction survey in the Attachment 1-G, it appears that EnWin Utilities’ customers prefer the telephone as a communication method with the utility: the % of EnWin Utilities’ customers prefer telephone as a communication method to receive a billing issue and general news are higher than Ontario LDCs. In addition, 43% of EnWin Utilities’ customers prefers EnWin Utilities to use telephone to inform an unplanned outage.

Per the 2017 scorecard in Attachment 1-H, the service quality indicator: Telephone Calls Answered on Time has a decreasing performance trend from 82.20% in 2013 to 78.21% in 2017.

- a) Please explain the reasons for the decreased performance in Telephone Calls Answered on Time.
- b) Please provide EnWin Utilities’ planned processes to improve the performance of this service quality indicator given a significant portion of customers is depending on telephone to communicate with the utility.
- c) Please explain the reasons if the 2018 performance for the Telephone Calls Answered on Time measure that are provided in 1-Staff-4 decreases further as compared to 2017 performance.

1-Staff-6

Ref: Exhibit 1, Attachment 1-J EnWin Utilities' 2017 Audited Financial Statements (AFSs)

OEB staff notes that EnWin Utilities' 2017 AFSs has a Note 24 Restatement and comparative figures. Part of the note states that

During the year, the Corporation became aware of certain components within property, plant and equipment that were being calculated incorrectly since the adoption in 2011. Overhead burden rates were too high resulting in assets being overstated and expenses being understated. Also, some depreciation calculations used inappropriate useful lives as a result of componentization which resulted in lower depreciation expenses. As a consequence of the immaterial adjustments, payments in lieu of taxes, property, plant and equipment, deferred taxes, operating expenses and retained earnings were required to recast.

OEB staff notes that the restated 2016 retained earnings decreased by approximately \$6 million, the restated 2016 PP&E balance decreased by \$7 million, and the restated 2016 net income decreased by \$0.8 million.

- a) Please confirm whether or not the reported numbers in the relevant schedules (e.g. PP&E, Account 1575) reflects the restated numbers that match with the restated numbers as at December 31, 2016.
- b) Please explain the impacts on the regulated return on equity (ROE) that were reported on the scorecard and provide the revised regulated ROE performance if applicable.
- c) Please explain whether or not the 2017 tax return reflected the restated PILs. If not, when does EnWin Utilities plan to report the adjustment?
- d) Please provide the correspondence with OEB staff regarding the mistakes and adjustments.

1-Staff-7

Ref: EnWin Utilities' Response to the Incomplete Letter dated May 17, 2019

EnWin Utilities filed the 2018 AFSs as part of the updated evidence to respond to the incompleteness letter dated May 17, 2019. EnWin Utilities also states that it will file the 2018 annual report as required during the interrogatory process.

- a) Please provide the 2018 annual report.
- b) Given the 2018 audited actual numbers are available, please update the schedules and evidence using the actual numbers in the 2018 AFSs.

Exhibit 2 Rate Base

2-Staff-8**Ref: Appendix 2-Z Cost of Power**

EnWin Utilities calculates the cost of power expense in Appendix 2-Z using the 2017 actual loads for RPP and Non-RPP Class A and Class B customers and using the RPP and Non-RPP prices from “Regulated Price Plan Prices and the Global Adjustment Modifier for the Period May 1, 2018 to April 30, 2019” and the “Regulated Price Plan Cost Supply Report May 1, 2018 – April 30, 2019”.

OEB staff notes that on April 17, 2019, the OEB issued the updated RPP prices and supply cost reports effective May 1, 2019. EnWin Utilities states that it used 2020 load forecast adjusted for the CDM activities to calculate the cost of power. However, OEB staff notes that the 2019 and 2020 loads used in the Appendix 2-Z do not match with the loads in the load forecast model.

- a) Please update the Appendix 2-Z using the most updated RPP prices, GA modifier and the 2018 actual loads.
- b) Please explain the discrepancies noted between the 2019 and 2020 loads used in the Appendix 2-Z and the loads in the load forecast model.

2-Staff-9**Ref: Exhibit 2, Page 57**

EnWin Utilities provides the reconciliation of DSP additions to fixed assets additions in the following table:

Line No.	Reconciliation	2009 Actual	2010 Actual	2011 Actual	2012 Actual	2013 Actual	2014 Actual
1	Total Additions per DSP	\$17,775,511	\$24,843,638	\$17,682,992	\$17,082,682	\$19,013,849	\$18,793,873
2	Contributions in Kind	(520,301)	(224,159)	(321,196)	(1,510,636)	(998,221)	(2,403,163)
3	Spare Transformer Adjustment	-	-	-	(276,563)	3,225	(96,348)
4	Vehicle Additions	-	-	-	-	-	-
5	Net DSP Additions	\$17,255,209	\$24,619,479	\$17,361,796	\$15,295,483	\$18,018,854	\$16,294,362
6	Additions per Fixed Asset Continuity	\$10,156,939	\$25,417,381	\$13,049,669	\$11,913,591	\$9,901,515	\$34,238,456
7	Less Work in Progress Disposals	7,092,908	(7,096,508)	896,068	3,221,275	8,117,338	(8,140,395)
8	Smart Meter Additions (Disposition)	5,362	6,298,606	3,416,060	160,617	-	(9,803,699)
9	Net Fixed Asset Additions	\$17,255,209	\$24,619,479	\$17,361,796	\$15,295,483	\$18,018,854	\$16,294,362

Line No.	Reconciliation	2015 Actual	2016 Actual	2017 Actual	2018 Forecast	2019 Bridge Year	2020 Test Year
1	Total Additions per DSP	\$20,914,948	\$14,605,089	\$15,452,244	\$15,587,598	\$23,632,230	\$21,598,360
2	Contributions in Kind	(4,322,469)	(411,579)	(2,216,539)	(1,888,586)	(4,898,000)	(3,251,860)
3	Spare Transformer Adjustment	192,283	43,322	199,942	9,761	-	-
4	Vehicle Additions	-	-	-	823,917	2,346,808	1,814,576
5	Net DSP Additions	\$16,784,762	\$14,236,832	\$13,435,647	\$14,532,690	\$21,081,038	\$20,161,076
6	Additions per Fixed Asset Continuity	\$18,276,316	\$16,831,839	\$13,709,114	\$14,524,357	\$21,081,038	\$20,161,076
7	Less Work in Progress Disposals	(1,491,554)	(2,595,007)	(313,349)	8,333	-	-
8	MIST Meter Additions	-	-	39,882	-	-	-
9	Net Fixed Asset Additions	\$16,784,762	\$14,236,832	\$13,435,647	\$14,532,690	\$21,081,038	\$20,161,076

- a) Please explain the line of “Work in Progress Disposal” and confirm whether or not it represents the construction work in progress (CWIP)?
- i) If so, please explain why the CWIP was not forecasted in the year of 2019 and 2020?

2-Staff-10

Ref: Exhibit 2, Page 59; Attachment 2-E Capitalization Policy

EnWin Utilities states that it “further revised its capitalization policy effective March 1, 2019 to increase the threshold for capitalization from \$1,000 to \$2,000 and provide additional guidance.” Staff notes that the additional guidance is provided in the Attachment 2-E Capitalization policy as below:

Individual expenditures greater or equal to \$2,000 are eligible for capitalization. Transactions that do not meet this threshold should be charged to an expense account and not capitalized.

The exception to the capitalization dollar limit is meters and desktop/laptops. Those assets may have individual costs including labour and setup costs below the \$2,000 threshold however their useful life and future economic benefit support that they are capital assets.

- a) Please provide the rationale for this threshold change of capitalization policy.
- b) Please provide the estimated impact of this change on the 2019 and 2020 capital expenditures.

2-Staff-11

Ref: Exhibit 2, Pages 59 to 61

EnWin Utilities explains that it capitalizes three types of overhead expenses: labour, material and trucking. The burden rates for these expenses are determined annually. EnWin Utilities provides the following comparison for the burden rates for the capitalization of the overhead:

Burden Type	2009 Rates	2020 Rates
Labour	117.70%	66.20%
Material	16.00%	5.81%
Trucking		
Class 4 Vehicles – Cars	\$ 8.36	\$ 4.53
Class 5 Vehicles – Vans & Pick-up Trucks	\$ 8.44	\$ 5.07
Class 6 Vehicles – Dump & Utility Trucks	\$ 16.11	\$ 8.35
Class 7 Vehicles – Bucket Trucks	\$ 44.85	\$ 25.06
Class 8 Vehicles – Specialty Vehicles	\$ 14.20	\$ 11.97
Class 9 Vehicles – Trailers	\$ 14.97	\$ 2.42

- Please provide the burden rates in 2011 which was the IFRS transition year for EnWin Utilities.
- Please explain why the labour burden rate in 2009 was 117.70% which was greater than 100%.

2-Staff-12

Ref: Appendix 2-D Overhead Expense

OEB staff notes that the total OM&A before capitalization in EnWin Utilities' Appendix 2-D Overhead expense is the total OM&A expense by categories plus the labour burden, material burden and truck burden that are capitalized.

- Please refile the Appendix 2-D by providing the total OM&A expenses before capitalization using the total labour expense, total material expenses and total truck expenses for the year and then compare to the expenses that are capitalized.

2-Staff-13

Ref: Exhibit 2: Rate Base, Attachment 2A, Page 4

Exhibit 2: Rate Base, Attachment 2A, Page 8

Exhibit 2: Rate Base, Attachment 2A, Page 12

EnWin Utilities provides Table 1 as below:

Table 1 Historical and forecast capital expenditures and system O&M										
Category	Historical (\$ '000)					Forecast (\$ '000)				
	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
System Access	\$ 2,762	\$ 3,946	\$ 3,963	\$ 3,310	\$ 7,267	\$ 6,205	\$ 3,476	\$ 3,526	\$ 3,577	\$ 3,628
System Renewal	\$ 8,221	\$ 5,475	\$ 5,456	\$ 5,586	\$ 7,289	\$ 8,440	\$ 8,009	\$ 7,605	\$ 7,850	\$ 7,366
System Service	\$ 6,433	\$ 2,931	\$ 3,976	\$ 4,427	\$ 4,221	\$ 3,537	\$ 3,622	\$ 3,610	\$ 3,986	\$ 3,623
General Plant	\$ 3,499	\$ 2,253	\$ 2,058	\$ 3,098	\$ 7,507	\$ 5,021	\$ 4,283	\$ 3,856	\$ 4,174	\$ 4,213
Total (Gross)	\$ 20,915	\$ 14,605	\$ 15,452	\$ 16,421	\$ 26,284	\$ 23,203	\$ 19,390	\$ 18,597	\$ 19,587	\$ 18,830
Contributed Capital	\$ 4,322	\$ 412	\$ 2,217	\$ 1,889	\$ 4,898	\$ 3,252	\$ 813	\$ 823	\$ 834	\$ 844
Total (Net)	\$ 16,592	\$ 14,194	\$ 13,236	\$ 14,532	\$ 21,386	\$ 19,951	\$ 18,577	\$ 17,774	\$ 18,753	\$ 17,986
System O&M	\$ 4,398	\$ 4,631	\$ 9,757	\$ 9,825	\$ 10,942	\$ 10,904	\$ 11,049	\$ 11,068	\$ 11,102	\$ 11,096

In reference to its capital spending on automation programs, EnWin Utilities states that:

System Service spending was comparatively higher during the Historical Period compared to the Forecast Period mainly due to the completion of a substantial portion of ENWIN's grid automation program.

In reference to its O&M spending resulting from automation, EnWin Utilities states that:

The continuation of the grid modernization ... is expected to automate operations and minimize truck dispatches, while minimizing outages and reducing restoration times. To date, ENWIN's implementation of such automation has facilitated workforce reduction without compromising reliability.

- a) Following the step change in System O&M costs between 2016 & 2017 that EnWin Utilities explains was due to reapportioning costs from Administration to System O&M, System O&M costs are forecast to further increase by almost 14% from 2017 to 2024 despite EnWin Utilities stating that its past and forecast investments in system automation are expected to produce ongoing O&M savings. Please explain why the System O&M spending forecast does not appear to show any savings due to automation. Has EnWin Utilities already realized all (or most) O&M cost savings attributable to past and future system automation investments?

- i. If yes, please show where in the Historical Period these savings are accounted.
 - ii. If no, please explain why there are no savings in the Forecast Period.
- b) Net capital spending is forecast to increase by over 47% from \$14,532,000 in 2018 to \$21,386,000 in 2019. Although forecast capital spending over each year of the test period is lower than in 2019, capital spending never returns to historical spending levels. Given that EnWin Utilities does not forecast significant load growth and EnWin Utilities' reliability performance is not trending unfavourably, what are the primary factors driving this structural capital spending increase?

2-Staff-14

Ref: Exhibit 2: Rate Base, Attachment 2A, Page 5

EnWin Utilities states the following:

In 2018, ENWIN changed its fleet practice to purchase rather than lease vehicles (as further explained in Section 5.4.3.1 (a) of the DSP). This change is reflected in the expenditures for years 2018 and 2019 in the Historical Period, as well as all five years of the Forecast Period, and this, as well as cost inflation, has contributed toward increasing the percent change between the two periods.

- a) Does EnWin Utilities intend to purchase rather than lease all required vehicle replacements going forward? If yes, why?
- b) Has EnWin Utilities prepared a business case that demonstrates benefits to ratepayers of making the change from leased to owned vehicles?
 - i. If yes, please provide the business case documentation.
 - ii. If no, please explain why a business case was not done, and provide the alternative basis supporting the decision to change the historical practice.

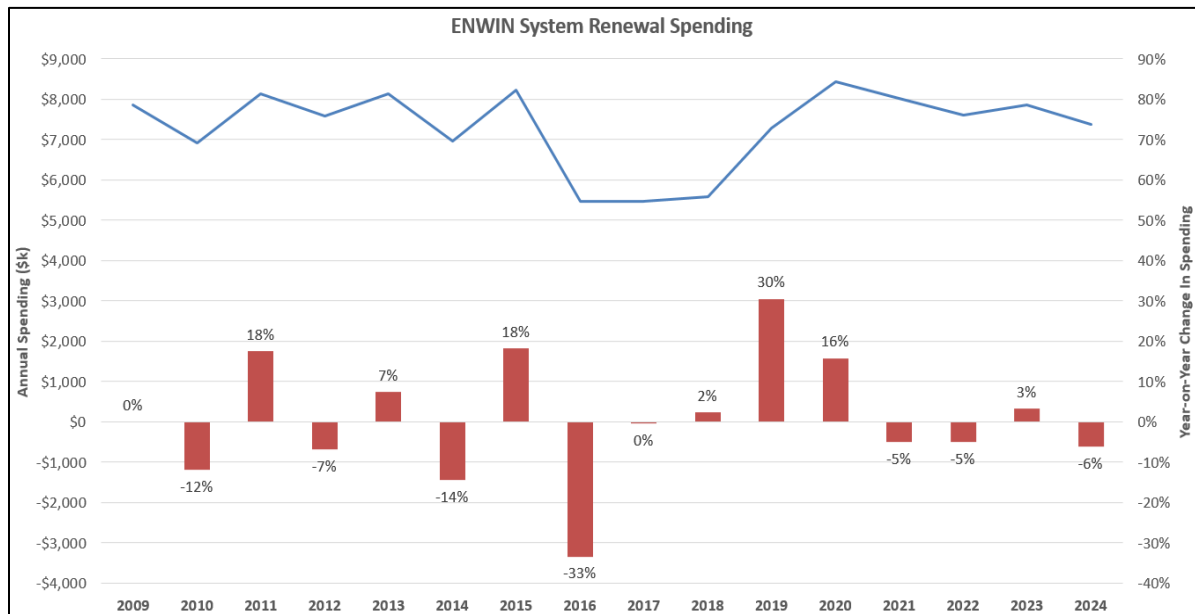
2-Staff-15

Ref: Exhibit 2: Rate Base, Attachment 2A, Page 4
Exhibit 2: Rate Base, Attachment 2A, Page 7

EnWin Utilities states that:

Overall, ENWIN's investment in System Renewal has been relatively consistent year over year and is projected to remain so through the DSP prospective.

Based on the system renewal spending presented in Table 1, staff created the following graph:



Please explain why the inter-annual changes presented in the graph above should be described as "relatively consistent".

2-Staff-16

Ref: Exhibit 2: Rate Base, Attachment 2A, Page 4
Exhibit 2: Rate Base, Attachment 2A, Page 7

EnWin Utilities provides Table 1, which shows a step increase in capital spending from pre-2019 to post-2019:

Category	Historical (\$ '000)					Forecast (\$ '000)				
	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
System Access	\$ 2,762	\$ 3,946	\$ 3,963	\$ 3,310	\$ 7,267	\$ 6,205	\$ 3,476	\$ 3,526	\$ 3,577	\$ 3,628
System Renewal	\$ 8,221	\$ 5,475	\$ 5,456	\$ 5,586	\$ 7,289	\$ 8,440	\$ 8,009	\$ 7,605	\$ 7,850	\$ 7,366
System Service	\$ 6,433	\$ 2,931	\$ 3,976	\$ 4,427	\$ 4,221	\$ 3,537	\$ 3,622	\$ 3,610	\$ 3,986	\$ 3,623
General Plant	\$ 3,499	\$ 2,253	\$ 2,058	\$ 3,098	\$ 7,507	\$ 5,021	\$ 4,283	\$ 3,856	\$ 4,174	\$ 4,213
Total (Gross)	\$ 20,915	\$ 14,605	\$ 15,452	\$ 16,421	\$ 26,284	\$ 23,203	\$ 19,390	\$ 18,597	\$ 19,587	\$ 18,830
Contributed Capital	\$ 4,322	\$ 412	\$ 2,217	\$ 1,889	\$ 4,898	\$ 3,252	\$ 813	\$ 823	\$ 834	\$ 844
Total (Net)	\$ 16,592	\$ 14,194	\$ 13,236	\$ 14,532	\$ 21,386	\$ 19,951	\$ 18,577	\$ 17,774	\$ 18,753	\$ 17,986
System O&M	\$ 4,398	\$ 4,631	\$ 9,757	\$ 9,825	\$ 10,942	\$ 10,904	\$ 11,049	\$ 11,068	\$ 11,102	\$ 11,096

EnWin Utilities states the following:

The ACA was completed by Kinectrics Inc., a category leader in providing life cycle management solutions for the electricity industry. The ACA recommends a “Flagged for Action” (“FFA”) plan of assets expected to require attention over the Forecast Period. System Renewal spending is allocated to assets with the greatest need for replacement. ENWIN has balanced the recommended FFA plan with prudence in order to achieve the desired pace of capital investment over the Forecast Period.

- a) Did adoption of the Kinectrics life cycle management solution cause the 2017 to 2019 step increase in capital spending to satisfy the parameters and metrics set out under the Kinectrics program?
 - i. If yes, please explain what steps EnWin Utilities has taken to ensure the Kinectrics life cycle management solution was properly calibrated to ensure that any changes in spending are appropriate and necessary, given the context of historically good reliability and performance trends and a low load growth environment.
 - ii. If no, explain what has driven the step increase in capital spending?

2-Staff-17

Ref: Exhibit 2: Rate Base, Attachment 2A, Page 9

Exhibit 2: Rate Base, Attachment 2A, Appendix B, Page 9

EnWin Utilities states that customers rank "maintaining" reliability as their second priority behind controlling costs:

During the consultation process, customers were given the opportunity to provide suggestions regarding how ENWIN can improve service to them. The top priority, consistent across all customer groups, was the need to deliver electricity at a reasonable price. Maintaining reliability was ranked second. Finally, customers ranked safety as a third priority.

- a) Please explain if EnWin Utilities is making any investments that are expected to improve reliability, but which would not materially reduce reliability if they were not made during the forecast period?

2-Staff-18

Ref: Exhibit 2: Rate Base, Attachment 2A, Page 11

EnWin Utilities explains its asset management process as below:

ENWIN continues to implement a number of initiatives to facilitate better planning and execution of its capital and operating expenditures. The implementation of a formal Asset Management Process ("AMPRO") has allowed ENWIN to determine the most appropriate pace and level of investment for renewal of its assets. ENWIN expects to realize cost efficiencies through the reduction in unexpected replacement of equipment on premium time. ENWIN's AMPRO also balances the performance of the distribution system and customers' demand for service and reliability in determining renewal, maintenance, and improvement requirements. The DSP incorporates best practises with regard to asset management from the AMPRO.

- a) Does the AMPRO project pacing recognize the opportunity costs to ratepayers of early replacement of assets with remaining service lives?
- b) Please provide the discount rate and calculations utilized to derive the AMPRO pacing metrics.
- c) Will ratepayers derive any short term economic or rate benefits from EnWin Utilities implementing the AMPRO methodology? Please explain in detail.
- d) Please confirm that the Asset Management Process is the AMPRO CMMS (computerized maintenance management software) application provided by AMPRO Applications Pty Ltd, out of Australia.
 - i. If confirmed, please describe which of the following Asset Management Activities the tool is currently performing:
 - 1) Job Scheduling
 - 2) Job Monitoring and Recording
 - 3) Job Budgeting
 - 4) Job Cost Tracking
 - 5) Inventory Control
 - 6) Generation of Preventative Maintenance Procedures
 - 7) Job Performance Record Keeping
 - 8) Preparation of Preventative Maintenance Procedures
 - 9) Scheduling of Preventative Maintenance Procedures
 - 10) Asset condition tracking
 - 11) Probability of Failure analysis
 - 12) Consequence of Failure analysis
 - 13) Asset Risk Analysis
 - 14) Project Prioritization using either system reliability risk or asset risk analysis
 - ii. If not confirmed, what is the software tool, and which of the above Asset Management Activities does that tool perform?

2-Staff-19

Ref: Exhibit 2: Rate Base, Attachment 2A, Page 12

Exhibit 2: Rate Base, Attachment 2A, Page 52

EnWin Utilities explains that system O&M decreased from 2009 to 2016:

To date, ENWIN's implementation of such automation has facilitated workforce reduction without compromising reliability. Section 5.4.3.1 (b) of the DSP illustrates that, despite drivers that would be expected increase system O&M, during the period from 2009 through 2016, system O&M decreased from \$4,956k to \$4,631k (accounting changes in 2017 made further comparisons incongruous).

EnWin Utilities further explains the reason of the substantial increase in 2017 O&M:

Total O&M per Customer

This measure shows a substantial increase in 2017 due to higher O&M costs than previous years, which was a result of a reclassification of O&M costs (specifically, a re-attribution of administrative costs from "Admin" to "System" O&M).

- a) Please describe the accounting standard changes that drove this 2017 O&M Cost delta.
- b) Will this change have a net impact on customer rates when compared with the prior treatment? Please explain.

2-Staff-20

Ref: Exhibit 2: Rate Base, Attachment 2A, Page 13

EnWin Utilities explains its use of the portable tablets as below:

Since the cost of the work associated with the use of portable tablets is not separately tracked, it is not possible to determine with any reasonable certainty, the quantum of savings resulting from this initiative. The clerical pool has, however, been reduced from eight individuals, to five currently. However, that pool also serves ENWIN's sister company, the Windsor Utilities Commission ("WUC").

- a) Please confirm whether or not the related costs regarding the portable tablets and the clerical pool has been allocated to the sister company WUC.
 - i. If confirmed, please confirm the allocated costs are included in the Appendix 2-N Shared Services and Corporate Cost Allocation.

2-Staff-21

Ref: Exhibit 2: Rate Base, Attachment 2A, Page 14

EnWin Utilities states the following:

As discussed in Section 5.2.1(a), above, asset condition and replacement rates are informed through an ACA, which identifies [a “Flagged for Action” (“FFA”)] plan of assets expected to require attention over ten (10) years. In planning the System Renewal investments for the capital expenditure plan, ENWIN considers the FFA plan in light of observed asset failure rates and consumer rate impacts. The FFA informs ENWIN’s AMP regarding the degree of intervention required to maintain the level of reliability enjoyed by ENWIN’s customers, and also identifies additional health index information to direct future efforts to collect asset health data.

- a) Did EnWin Utilities calibrate historical and forecast spending to eliminate any discontinuities in long-term spending trends that might have inadvertently been caused simply by adopting the new system?
 - i. If yes, please show how that calibration was done.
 - ii. If no, how can EnWin Utilities be confident that the new system did not inadvertently introduce unnecessary cost increases?

2-Staff-22

Ref: Exhibit 2: Rate Base, Attachment 2A, Page 14

Exhibit 2: Rate Base, Attachment 2A, Pages 111-112

EnWin Utilities states the following:

ENWIN began using the Kinectrics PROSORT tool for prioritization of investment across asset categories and investment portfolios based on ENWIN’s business values and their attributes. Projects are ranked based on the ratio of the risks that are mitigated and the associated benefits resulting from the cost incurred. The tool provides a means of evaluating the cost/benefit relationship of dissimilar projects so that the most cost-effective risk minimization for customers is prioritized for action. It also serves as a guideline for providing a consistent approach to decision making, and for optimizing the overall risk to the investment portfolio. This analysis will be performed annually.

In Table 40, EnWin Utilities lists the following major asset classes: Poles, Transformers, Overhead Switches, Underground Switches, Dynamic Protective Devices, Conductor, Meters, and Manholes.

For EnWin Utilities' major asset classes (per Exhibit 2: Rate Base, Attachment 2A, Page 14, Table 40: Poles; Transformers; Overhead Switches; Underground Switches; Dynamic Protective Devices; Conductor; Meters; Manholes), please answer the following questions:

- a) Please provide the definition of risk that EnWin Utilities uses.
- b) Please provide a sample calculation of risk that EnWin Utilities uses.
- c) Please provide the definition of probability of failure that EnWin Utilities uses in its risk calculations.
- d) Please provide the consequence of failure definition that EnWin Utilities uses in its risk calculations.
- e) Describe how the probability of failure is calculated based on asset condition.
- f) By major asset class, provide the % of assets for which EnWin Utilities has calculated a condition index, broken down by primary data source (e.g. age data only, actual condition assessment, no data, etc.).
- g) By major asset class, provide the % of assets for which EnWin Utilities has derived probability of failure curves as a function of asset condition index?
- h) Please describe the process for determining asset risk before and after an investment project, and describe how the mitigated risks are calculated.
- i) Please describe how EnWin Utilities mitigates against introducing a risk overestimation bias via the probability of failure curves and consequence of failure assessments, e.g. if the probabilities of failure are calculated based on expected failure rates and consequence of failure is calculated based on the worst reasonable failure, wouldn't that result in a bias that overestimates risk?
- j) Please provide a prioritized list of investments across all asset categories, including before and after risk assessments, project costs and mitigated risk values.

2-Staff-23

Ref: Exhibit 2: Rate Base, Attachment 2A, Page 15

In explaining the other technology changes, EnWin Utilities states that:

Finally, the full implementation of CYME (power engineering software) in 2017 enabled a clearer understanding of network power flow, and identified constrained areas for remediation. It also allowed for better decision making regarding feeders that may require reinforcement.

- a) Did the full implementation of CYME cause or contribute to the observed recent step increase in annual capital spending?
 - i. If yes, has EnWin Utilities confirmed that it is using CYME correctly, and has ENWIN calibrated the CYME metrics to ensure that its use is not creating unnecessary project triggers?
 - ii. If no, please explain what factors have caused the observed step change in annual capital spending.

2-Staff-24

Ref: Exhibit 2: Rate Base, Attachment 2A, Page 15

EnWin Utilities explains its pole inspection practice as below:

ENWIN re-established its pole inspection database in 2015/16 and retained a contractor to inspect all poles in its distribution system. Concurrently, ENWIN moved data from an old Microsoft Access database to the corporate ERP database which allowed data sharing between applications such as GIS and Work Manager. There were problems identified in the old database that resulted in unreliable project identification, which required additional manual effort to field-verify pole conditions. These issues were minimized through this initiative. Additionally, during a system wide inspection, ENWIN implemented a pre-emptive pole-drilling process to determine baselines for internal rot, and to apply pole preservative before internal rot takes hold rather than after it has started.

- a) Please provide a table and a chart showing actual and forecast pole replacement trends broken out by annualized number of poles replaced, and total annual cost of pole replacements for the years 2009 to 2024.

2-Staff-25

Ref: Exhibit 2: Rate Base, Attachment 2A, Page 17

In explaining the cost-effective grid modernization, EnWin Utilities states that: ENWIN's approach to cost-effective grid modernization planning, DER and climate change adaptation follow the principle objectives below:

1. Manage contingencies and short-term, high load requirements through:
...
 - b. eliminating capacity reservations and allowing loading of transformers to 100% (e.g. to facilitate the connection of EV loads);
- a) Is it EnWin Utilities' understanding that good utility practice does not allow transformers to be loaded above 100% at any time?
 - b) Has EnWin Utilities historically not been allowing its transformers to be loaded to 100%? Please explain the technical basis of this practice.
 - c) Has this historical practice required EnWin Utilities to implement capital additions to avoid loading transformers to 100% (or near 100%) of nameplate on peak? Please list any such investments that have been made since 2009, or that are planned for the forecast period.

2-Staff-26

Ref: Exhibit 2: Rate Base, Attachment 2A, Page 22

EnWin Utilities states the following:

The assets will be replaced in cost-effective and timely manner. The main considerations driving this project include the following:

...

2. Some of the switches rust due to salt spray, needing continuous painting and dry ice cleaning to maintain reliability.
- a) How will the replacement units be protected from being affected by this same issue?

2-Staff-27

Ref: Exhibit 2: Rate Base, Attachment 2A, Page 45

EnWin Utilities explained its worst feeder analysis as follows:

ENWIN analyzes worst performing feeders on a three-year average to give an accurate representation of the worst performing feeder ranking. This ensures that unusual feeder activity in one year will not skew results. Just like the power quality complaints section, there is no specific ENWIN internal target for worst performing feeders, but the obvious goal is to target repeat worst performing feeders with projects that will improve their performance.

Table 9 Worst Performing Feeders										
Year	Worst Performing Feeders In Order									
2012-2014	55M25	24M5	56M8	25M7	55M22	56M7	56M1	24M4	55M23	55M24
2013-2015	25M7	55M25	56M8	55M23	24M5	56M7	55M22	24M4	56M1	15M7
2014-2016	56M8	25M7	55M25	55M23	56M1	56M7	24M5	24M4	24M3	55M22
2015-2017	56M8	25M7	55M22	55M23	56M1	55M25	56M2	56M7	56M5	23M2

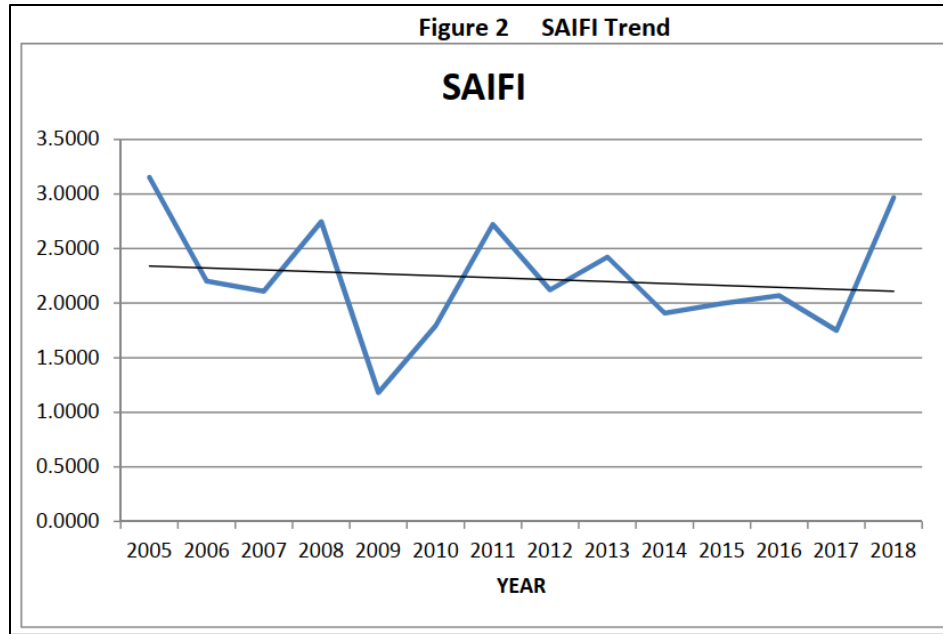
- What is the population for the feeder analysis? Does EnWin Utilities include all its feeders in the analysis?
- Please elaborate on the statement of “there is no specific ENWIN internal target for worst performing feeder” and explain why an internal target is not needed.
- Please confirm that there will always be a worst performing feeder, even if all feeders achieve an objectively determined acceptable performance level.
- What are the internal processes and procedures in the EnWin Utilities’ Worst Performing Feeder program to ensure that feeders that achieve acceptable performance are not inadvertently targeted for capital investments simply because their performance is determined to be the worst in the EnWin Utilities’ system?

Please explain why the feeder 55M22 has moved from 5th worst, to 7th worst, to 10th worst, to 3rd worst over the period shown in Table 9.

2-Staff-28

Ref: Exhibit 2: Rate Base, Attachment 2A, Page 54

EnWin Utilities provides one of the reliability performance for SAIFI trend in Figure 2 below:



EnWin Utilities states that “Long-term trending data for SAIFI since 2005 shows a clear downward trend”.

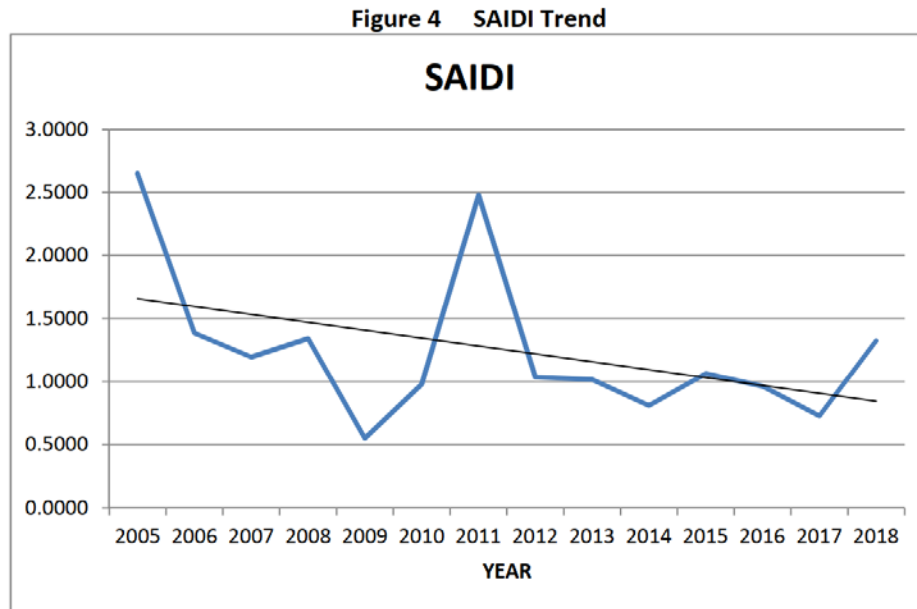
- a) Please confirm that EnWin Utilities' favourable historical outage frequency performance trend indicates that historical levels of System Renewal capital spending have been adequate to maintain EnWin Utilities' system assets in a condition that has supported increasingly good reliability performance.

2-Staff-29

Ref: Exhibit 2: Rate Base, Attachment 2A, Page 56

Exhibit 2: Rate Base, Attachment 2A, Page 12

EnWin Utilities provides one of the reliability performance for SAIDI trend in Figure 4:



In reference to its O&M spending resulting from automation, EnWin Utilities states:

The continuation of the grid modernization ... is expected to automate operations and minimize truck dispatches, while minimizing outages and reducing restoration times. To date, ENWIN's implementation of such automation has facilitated workforce reduction without compromising reliability.

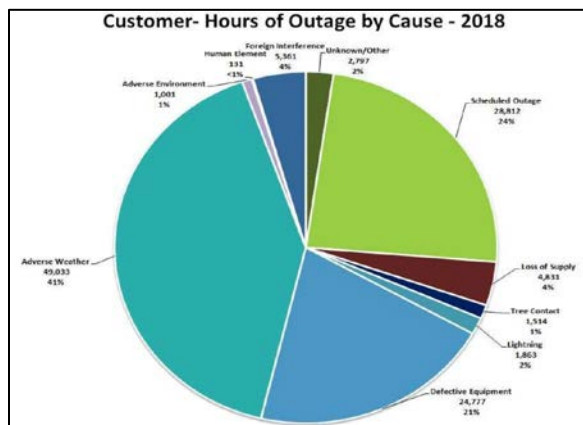
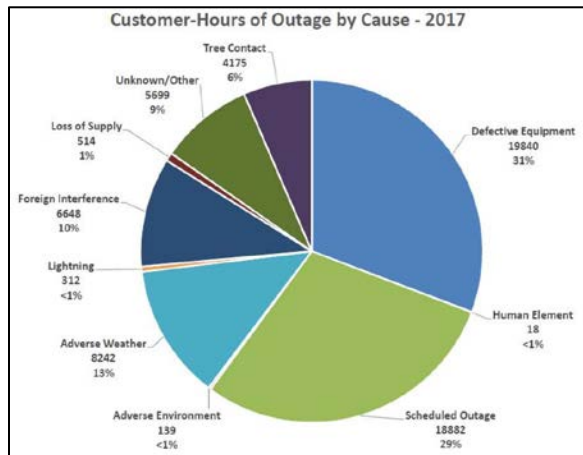
- a) Has EnWin Utilities' system automation program contributed to this outage duration performance improvement?
- b) What proportion of EnWin Utilities' system automation capital investment program will have been completed by the end of 2019?
- c) Please provide the total future spending required to complete the system automation capital investment program by year over the forecast period.

2-Staff-30

Ref: Exhibit 2: Rate Base, Attachment 2A, Page 46

Exhibit 2: Rate Base, Attachment 2A, Page 60

At the above noted reference, EnWin Utilities provides the outages by cause for 2017 and 2018 in the figures below:



Customer-Hours of Outage caused by tree contacts decreased from 4,175 hours (6% of total outage hours) to 1,514 hours (1% of total outage hours) from 2017 to 2018, respectively. In the Worst Performing Feeder section of this DSP, EnWin Utilities explains:

Now that ENWIN's tree trimming clearance has increased to 10 feet, the performance of these feeders should also improve over time.

- a) Does EnWin Utilities attribute the significant reduction in customer outage hours caused by tree contacts between 2017 and 2018 to implementation of the new tree trimming clearance?
 - i. If not, please explain how this reduction was achieved.

2-Staff-31

Ref: Exhibit 2: Rate Base, Attachment 2A, Page 61

EnWin Utilities states the following:

Customers receive notification of Scheduled Outages so they are generally less impactful than unplanned outages. Nevertheless, the number of customer-hours of outage due to planned work is a significant contributor to ENWIN's reliability statistics. The customer-hours of Scheduled Outage interruption was reduced in 2017 to 18,882 or a 23% reduction. This was accomplished in part due to a mild storm season and by combining work into single outages, building temporary supplies to minimize the number of customers involved in an outage and working live where it can be done safely.

- a) Please confirm that EnWin Utilities does not consider outages caused by Scheduled Outages when determining which facilities are performing poorly and require increased System Renewal spending.
 - i. If not confirmed, please explain how EnWin Utilities correlates Scheduled Outage results with reliability performance.

2-Staff-32

Ref: Exhibit 2: Rate Base, Attachment 2A, Pages 84-85

EnWin Utilities states the following:

ENWIN's financial performance objective is to maximize the value it obtains from its assets. ...

ENWIN's operational performance objective is to ensure that assets are able to deliver the value expected by customers and shareholders at optimum cost. ...

ENWIN's risk objective is to minimize probability of occurrence and the impact of asset related negative outcomes. ...

ENWIN's sustainability objective is to minimize the economic and environmental footprint of its operations commensurate with good utility practise. ...

... ENWIN's senior management has consolidated these business values into four categories, and developed a weighting for each category. ...

1. Safety includes the safety of both the public and ENWIN's employees as well as risk of damage to property. ...

2. Reliability includes both the reliability of the distribution system as well as the resiliency of the system itself, and ENWIN's ability to restore it after an upset. ...

3. Financial Risk includes consideration not only for costs borne by ENWIN, but also the risk that a negative outcome will result in ENWIN's customers incurring costs. ...

4. Sustainability is the final category of ENWIN's business values. This category encompasses regulatory compliance, environmental stewardship, conservation, and reputational risk minimization. ...

The Table 25 below shows the weightings for ENWIN's business values.

Category	Weighting
Safety (including public and employee safety and property risk minimization)	30%
Reliability (including sufficiency, contingency and risk minimization)	25%
Financial Risk (including customer and utility costs risk minimization and Capital and O&M efficiency)	25%
Sustainability (including regulatory compliance, environmental stewardship, conservation, and reputational risk minimization)	20%

- a) For EnWin Utilities' financial, operational, risk, and sustainability objectives, please define in quantitative terms how the objective is measured.
- b) How do EnWin Utilities' financial, operational, risk, and sustainability objectives relate to its Business Values, including a discussion of precedence?
- c) What is the relative ranking of financial, operational, risk, and sustainability objectives?
- d) Are the financial, operational, risk, and sustainability objectives (and their ranking, if applicable) informed by the customer preferences expressed in Exhibit 2: Rate Base, Attachment 2A, Appendix B, Page 9? In particular, do the objectives account for the fact that EnWin Utilities' customers' top priority is low costs?
- e) Please confirm the following ranking of Business Values from most to least important.
 1. Safety
 2. Reliability
 3. Financial Risk
 4. Sustainability
- f) Please show how the different business value weightings have been calculated, quantitatively.

- g) Please define cost risk minimization (Table 25) and how it is calculated in quantitative terms.
- h) Please define Capital and O&M efficiency (Table 25) and how it is calculated in quantitative terms.
- i) Please explain why Ratepayer Cost Minimization has not been identified as an EnWin Utilities' business value.
- j) Does EnWin Utilities' asset management decision-making process consider ratepayer cost impacts?
 - i. If no, please explain why not.
 - ii. If yes, show explicitly how consideration of ratepayer cost impacts is integrated into the asset management decision-making process.

2-Staff-33

Ref: Exhibit 2: Rate Base, Attachment 2A, Page 87

In reference to reliability strategies, EnWin Utilities states that:

Reliability Strategies:

...

3. ENWIN will utilize a program of maintenance for its assets to ensure their serviceable life is maximized.

- a) How do serviceable life, asset life, estimated service life, and end of life (measured in years) compare as metrics for describing an asset? Please provide specific quantified examples of how these terms each apply to transformers and wood poles.

2-Staff-34

Ref: Exhibit 2: Rate Base, Attachment 2A, Page 87

In reference to reliability strategies, EnWin Utilities states that:

5. ENWIN will improve the reliability and economic operation of its network through the improvement of its SCADA system.

- a) Is EnWin Utilities able to quantitatively calculate the improvement in reliability that will result from the improvement of the SCADA system?
 - i) If yes, what is the calculated improvement in reliability?
 - ii) What is the cost of achieving that reliability improvement?

- b) Is improving reliability capped at a specific cost / reliability improvement level, either for financial reasons or for customer preference reasons? If so, please provide the specific cost/reliability level.

2-Staff-35

Ref: Exhibit 2: Rate Base, Attachment 2A, Page 87

EnWin Utilities explains its sufficiency strategy as follows:

ENWIN will maintain a capacity reserve of an average of 1 to 2 MW per feeder. When this reserve is compromised because of load additions, ENWIN will make adjustments to its distribution system to maintain the capacity reserve or make plans to build for more capacity.

- a) Is the capacity reserve calculated assuming peak feeder load, peak feeder load while providing backup to an adjacent feeder, or using a different basis?
 - i. How many hours would the feeder be exposed to this situation in an average year?
 - ii. What risks are associated with exceeding this limit for several hours each year?
- b) What is the analytic basis for EnWin Utilities' decision to maintain a capacity reserve average of 1 to 2 MW per feeder?
- c) Does this strategy change in areas of negative load growth, flat load growth, and positive load growth? Please quantify the change in strategy based on load growth projections.

2-Staff-36

Ref: Exhibit 2: Rate Base, Attachment 2A, Page 88

EnWin Utilities explains its risk minimization strategies as follows:

- 3. Risk assessment will be performed informally through asset inspections where assets at risk are identified and brought forward for mitigation.

- a) Please explain what "risk assessment will be performed informally through asset inspections" means.
- b) Please explain the inputs and frequency of the asset inspection.
- c) Please explain the outputs from a typical asset inspection.
- d) Please explain how risk is calculated based on a typical asset inspection.
- e) When assets at risk are brought forward for mitigation, how many mitigation alternatives are typically considered and how is the ultimate mitigation selected? Please use an example for the illustration.

2-Staff-37

Ref: Exhibit 2: Rate Base, Attachment 2A, Page 88

Exhibit 2: Rate Base, Attachment 2A, Page 111-112

EnWin Utilities explains its Capital Efficiency Strategies as follows:

1. ENWIN will consider the full life-cycle cost, including retirement and recycling costs, for the elements that make up its distribution system.
2. ENWIN will design its assets with due regard to their efficiency of operation and maintenance over the lifetime of the assets.
3. ENWIN will maintain its assets in order to maximize their useful service life.

In Table 40, EnWin Utilities lists the following major asset classes: Poles, Transformers, Overhead Switches, Underground Switches, Dynamic Protective Devices, Conductor, Meters, and Manholes.

- a) Please provide examples of quantified analyses applying each of the three referenced strategies for each of EnWin Utilities' major asset classes.

2-Staff-38

Ref: Exhibit 2: Rate Base, Attachment 2A, Page 89

EnWin Utilities states the following:

Each supply station and feeder is reviewed for deficiency and opportunity; as is the interconnected distribution system. The review is intended to:

1. identify assets at risk because of their health assessment or location;

- a) Please describe how risk is calculated based on health assessment.

- b) Please describe how risk is calculated based on location.

2-Staff-39

Ref: Exhibit 2: Rate Base, Attachment 2A, Page 91

EnWin Utilities explains the risk review activity as below:

Unlike “Asset Knowledge Collection” which seeks to gather information about the health attributes of particular assets, the “Risk Review” looks at assets and the distribution system in the context of their environment and the reliance which is made upon the asset(s). Risk Review is an activity whose purpose is to identify asset-related risks, assess their likelihood, consequence and detectability, and describe the operational controls that are in place to mitigate the risk to an acceptable level. The Risk Review informs the Asset Planning Activity. The output of the Risk Review is a listing of assets that have been identified as candidates for additional risk mitigation controls.

- a) What does “detectability” mean as that term is used in the reference?
- b) Please explain what impact detectability has on the risk calculation. Specifically, how does detectability influence the determination of probability and consequence of failure?

2-Staff-40

Ref: Exhibit 2: Rate Base, Attachment 2A, Page 91

EnWin Utilities explains the Asset Knowledge Collection Activity as below:

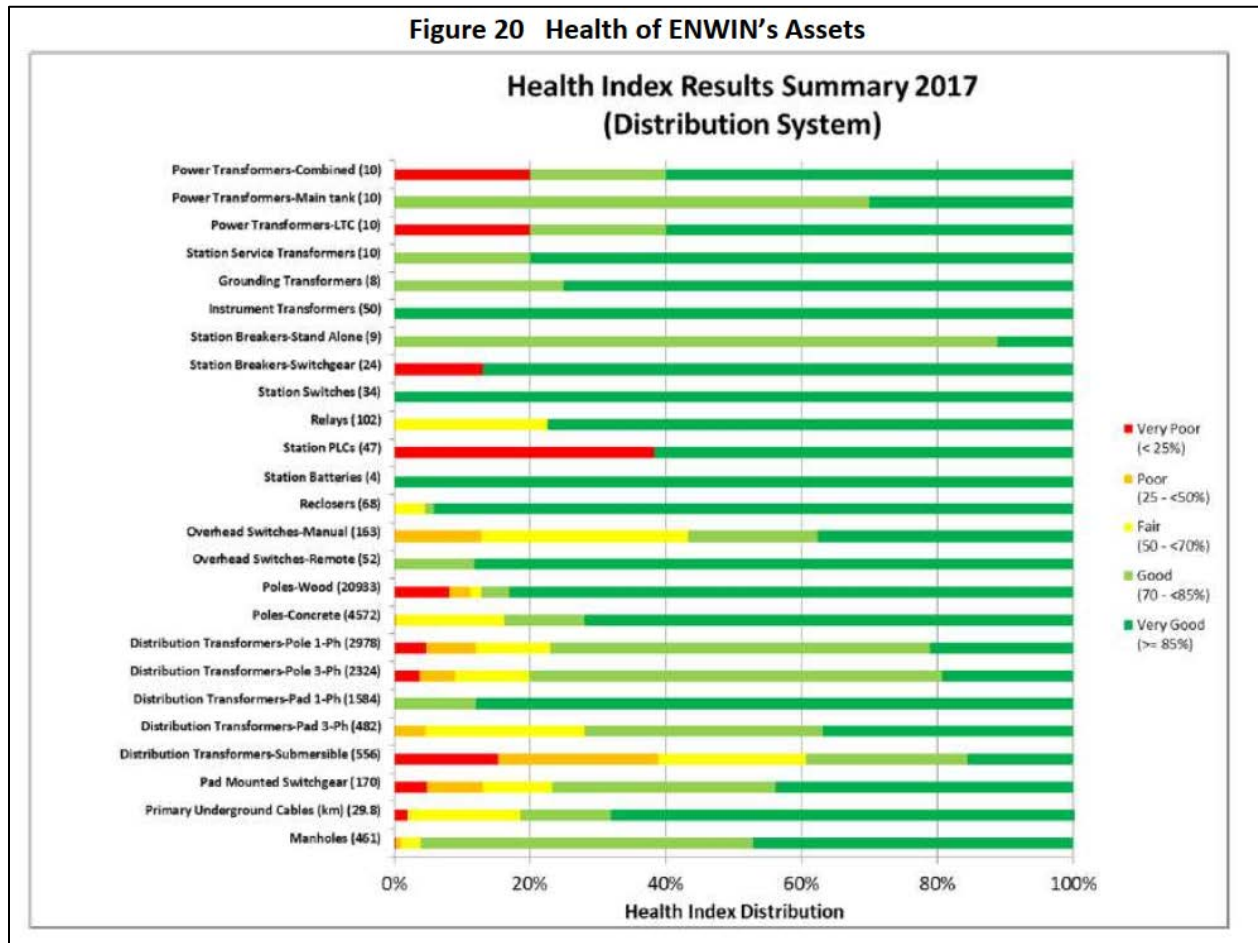
This is the activity of collecting the data that describes the health attributes of the assets. This data is obtained through asset health inspection programs, performance reviews and experiential inputs. The outputs of the Asset Knowledge Collection Activity are reports describing the ability of the assets to perform or continue to perform their designed functions. These reports inform the “Asset Planning Activity”...

- a) How are experiential inputs, performance review and health inspections compared on a quantitative basis?
- b) If not comparable on a quantitative basis, what is the basis of comparison?
- c) Please use an example to explain the activity.

2-Staff-41

Ref: Exhibit 2: Rate Base, Attachment 2A, Page 110

EnWin Utilities provides Figure 20 for health index results of EnWin Utilities' Assets:



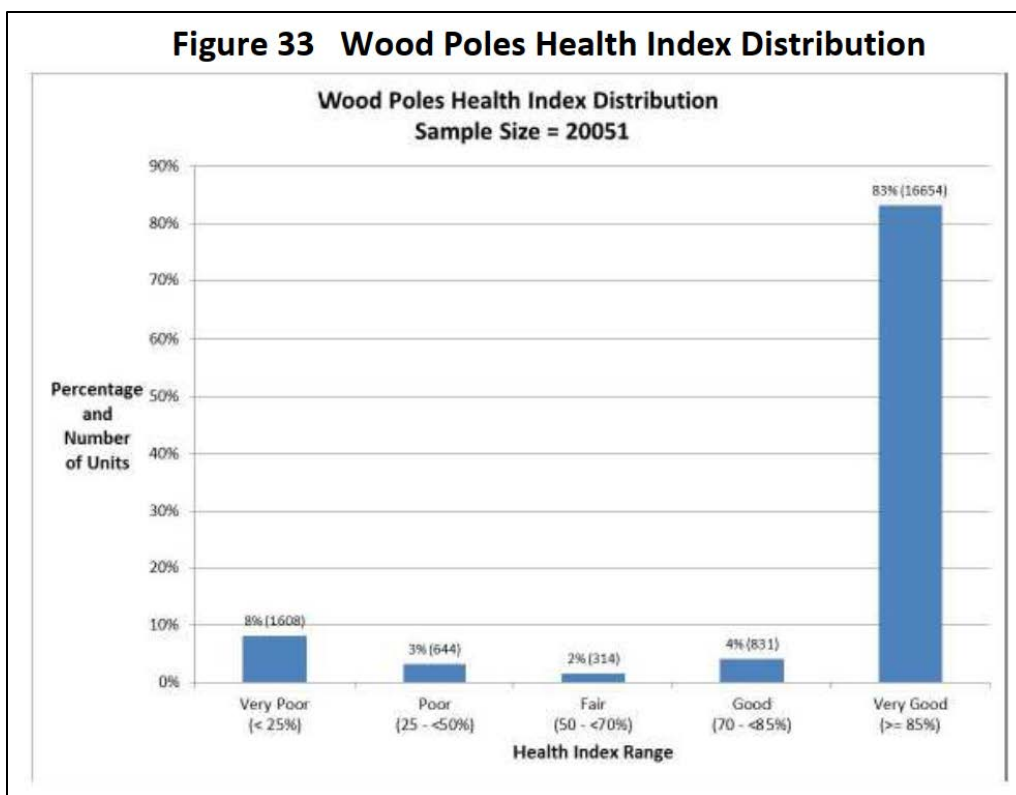
- For each of the 25 asset types presented in Figure 20, please provide the year-by-year costs and number of system renewal projects being undertaken over the bridge and forecast periods.
- Please show how the priorities implied by spending and number of projects align with the health index results in Figure 20?

2-Staff-42

Ref: Exhibit 2: Rate Base, Attachment 2A, Page 120

Exhibit 2: Rate Base, Attachment 2A, Page 285

EnWin Utilities provides Table 33 for Wood Poles Health Index Distribution:



EnWin Utilities explains the pole expenditures as below:

In 2015 and 2016, ENWIN undertook a mass re-inspection of its pole fleet as the data that had been maintained for those assets had become unreliable. This work was completed, and the database of pole health information is now improved and reliable. That database currently indicates that there are approximately 2,750 poles that are flagged for action ["FFA"]. That is a sufficient number of poles to support the level of expenditure proposed for the Test Year and the Forecast Period of the DSP. Additionally, it is expected that as that period progresses, there will be more poles that fall into the FFA category.

- a) Please explain why EnWin Utilities' pole health index distribution shows significantly fewer poles in the middle of the distribution (i.e. poor/fair/good health index) relative to the Very Poor and Very Good health index categories.
- b) Is this distribution caused by a demographic distribution skewed towards new poles?
- c) Has EnWin Utilities historically focused its efforts on replacing poles assessed as being in Poor, Fair and Good condition, and allowing poles in Very Poor condition to run to fail?

- d) Why did the pole fleet data become unreliable in 2015/16?
- e) Have outages caused by pole failures contributed negatively to an otherwise favourable reliability performance trend over the historical period?
 - i. If yes, please provide evidence to demonstrate the relationship between pole failures and the deteriorating performance trend.
 - ii. If no, has EnWin Utilities made any attempt to pace the investments in addressing its FFA pole inventory over a longer period, to better align the program with actual historical pole performance?
- f) What is the makeup of the 2,750 FFA poles, in terms of their health index category? As part of your answer, please list 2,750 FFA poles by health index.

2-Staff-43

Ref: Exhibit 2: Rate Base, Attachment 2A, Page 154

EnWin Utilities explains its asset replacement and refurbishment considerations as follows:

ENWIN utilizes a combination of patrols and maintenance activities to complete inspection requirements, and records information regarding the condition of distribution assets. A minimum of one-third of each major asset is either patrolled or has maintenance performed each year.

- a) On what basis was the "one-third of each major asset" determined?
- b) Please provide the analysis showing that one-third is the optimal cycle frequency for patrol / maintenance.

2-Staff-44**Ref: Exhibit 2: Rate Base, Attachment 2A, Page 155-157**

EnWin Utilities provides its asset-specific strategies. Staff summarizes these philosophies in the table below:

Distribution System Assets	Strategy	Rationale for Strategy
Pole	"manage[d] ... proactively"	"the reliability of [customers' electrical] service depends upon the health of the pole assets"
Feeder Cable	"manage[d] ... proactively"	"the dependence of ENWIN's customers on their electrical service and ... the reliability of that service ... upon the health of the cable assets"
Subdivision Cable	"manage[d] ... proactively"	"Repair and replacement ... typically requires a great deal of effort and time"
Polyphase Padmount Transformer	"proactive[e] maint[enance] and replace[ment] ... to avoid an in-service failure"	"generally used to serve larger commercial customers... [who] are judged to suffer a greater degree of hardship due to loss of power than a residential customer"
Submersible Transformer	"proactive[e] maint[enance] and replace[ment] ... to avoid an in-service failure"	Long replacement timeframe if failure occurs in winter (frozen in place).
Minipad Transformer	"run to failure"	"an in-service failure or a planned replacement will result in nearly the same level of inconvenience for customers"
Three-Phase Overhead Transformer	"proactive[e] maint[enance] and replace[ment] ... in order to avoid an in-service failure"	"generally used to serve larger commercial customers... [who] are judged to suffer a greater degree of hardship due to loss of power relative to residential or small commercial customers"
Single Phase Overhead Transformer	"run to failure"	"an in-service failure or a planned replacement will result in nearly the same level of inconvenience for customers"
Padmount Switching Unit	"repair or replace ... on a proactive basis"	"in-service failure of a switch when it is being relied upon to isolate and/or connect distribution segments can significantly prolong an outage"
Manhole	"regula[r] inspect[i]on... and, where appropriate, remediati[i]on"	"sudden failure of a roadway manhole can result in vehicle damage, cable damage, and life-threatening endangerment of the vehicle driver"

- a) For each of the distribution system assets, please confirm that the asset strategy and rationale in the table above are correct.

2-Staff-45**Ref: Exhibit 2: Rate Base, Attachment 2A, Page 155**

EnWin Utilities explains its pole sustainment philosophy as below:

The alternatives for maintenance of pole assets are either run-to-failure or proactively maintain the poles to extend their life and replace them prior to failure. Given the dependence of ENWIN's customers on their electrical service and that the reliability of that service depends upon the health of the pole assets, ENWIN chooses to manage the pole infrastructure proactively through its pole sustainment program. ENWIN treats its poles with boron rods mid-life in order to extend the useful life of the pole.

- a) Does EnWin Utilities have a single strategy for all poles, or do poles in low consequence of failure locations (e.g. at the ends of feeders / lightly loaded feeders) have a different strategy than poles in higher consequence of failure locations (e.g. closer to the substation, high utilization feeders)?

2-Staff-46**Ref: Exhibit 2: Rate Base, Attachment 2A, Page 156**

EnWin Utilities explains its three-phase overhead transformer sustainment philosophy as below:

The sustainment alternatives for overhead transformers are to either proactively maintain and replace the transformers, or run them to failure. Three phase overhead transformer banks (and 3-in-1s) are generally used to serve larger commercial customers. Such customers are judged to suffer a greater degree of hardship due to loss of power relative to residential or small commercial customers. Consequently, to best serve these customers, ENWIN proactively maintains and replaces these transformers in order to avoid an in-service failure.

- a) Please define "greater degree of hardship due to loss of power relative to residential or small commercial customers" that warrants a change in strategy from run to failure to a proactive replacement strategy.
- b) Please define the combination of consequence of failure (e.g. "increased hardship") and probability of failure that is the threshold for asset replacement.

2-Staff-47

Ref: Exhibit 2: Rate Base, Attachment 2A, Page 165

EnWin Utilities explains its flag for action (FFA) plan as below:

To develop an FFA plan, the risk of removal of each unit must be quantified. Risk is the product of a unit's likelihood of removal and its consequence of failure. An asset unit is FFA when the calculated risk value exceeds a pre-set threshold.

For the asset categories listed below, the risk-based approach is used to estimate the FFA plan.

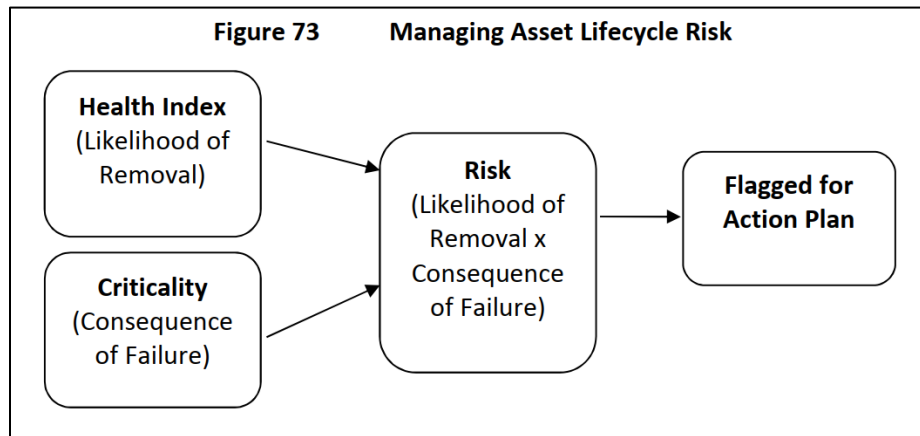
1. Power transformers (main tank + LTC)
2. Station service transformers
3. Grounding transformers
4. Station breakers
5. Station switches
6. Station batteries

- a) Please provide the “pre-set thresholds” for all the asset categories listed at the reference.

2-Staff-48

Ref: Exhibit 2: Rate Base, Attachment 2A, Pages 164-5

At the above noted reference, EnWin Utilities provided Figure 73 for how it is managing asset lifecycle risk:



- a) Does the “consequence of failure” calculation take into account the location of an asset in EnWin Utilities’ system – specifically, whether that asset is located in a redundant/networked area, or on a radial part of the system?

- i. If yes, please quantify how much lower the “Criticality” score for an asset would be if it was located in a redundant/networked part of the system, vs. a radial part of the system. Assume an otherwise similar asset.
- ii. If no, please explain why the consequence of failure does not account for asset location within the system with respect to redundant/networked or radial functionality.

2-Staff-49

Ref: Exhibit 2: Rate Base, Attachment 2A, Page 182

Exhibit 2: Rate Base, Attachment 2A, Appendix B, Page 8

As seen from Table 68 provided by EnWin Utilities, the customer ranks the price as the first priority in the online and telephone engagement:

Table 68 Analysis of Customer Engagement			
Top 3 Customer Priorities	Online	Telephone	
	Residential	Residential	Small Business
1 st	Price	Price	Price
2 nd	Reliability	Reliability	Reliability
3 rd	Safety	Safety	Safety

In reference to customer satisfaction with current reliability levels, EnWin Utilities' customer engagement study stated:

In terms of delivering reliable service, ENWIN is performing very well. ...

In the quantitative phase questions were framed to determine satisfaction with various aspects of reliability; number of outages, restoration time, and power quality. All measures show a high degree of satisfaction ...

- a) Please confirm that EnWin Utilities' customers have indicated that ENWIN is providing adequate reliability performance, and that ENWIN's first focus should be to contain the price of its service.
- b) Please confirm that this DSP proposes significant investments to improve reliability performance, that those investments will cause rates to increase, and therefore the DSP is not responsive to customer desires. If not confirmed, please explain how the DSP responds to the customers' 1st priority.

2-Staff-50**Ref: Exhibit 2: Rate Base, Attachment 2A, Page 184**

EnWin Utilities states the following:

System Renewal investments are needed to proactively replace aging infrastructure. The customer engagement feedback was:

“When it comes to replacing aging infrastructure, respondents are divided with a slight lean in favour of investing what it takes to maintain system reliability; even if this increases customer monthly bills.”

- a) Please quantify "slight lean" as a percentage of respondents.
- b) Does the above statement imply that nearly half of customers (i.e. the group not included in the “slight lean”) would be willing to have reliability decrease if it saves them money?
 - i. If yes, how has EnWin Utilities considered that customer feedback in the development of its capital spending plan?
 - ii. If no, how should the statement instead be interpreted?

2-Staff-51**Ref: Exhibit 2: Rate Base, Attachment 2A, Page 184**

EnWin Utilities states the following:

This shows that ENWIN needs to be aware of the price its customers are paying. This principle is captured in ENWIN’s tagline—“to deliver electricity at a reasonable price”. However, the tradeoff is clear in the customers’ mind as, “Customers expect ENWIN to maintain a proactive capital investment program that either improves or maintains system reliability.” ENWIN has been proactive in system enhancement investments to meet this expectation. These projects include: Sectionalizing Load Break Switches, Underground Switching Units, Feeder Ties and other similar projects.

- a) Please provide evidence demonstrating that the cited "tradeoff is clear in the customers' mind".
- b) Please provide evidence demonstrating that customers have indicated they want EnWin Utilities to "maintain a proactive capital investment program that ... improves ... reliability".

2-Staff-52

Ref: Exhibit 2: Rate Base, Attachment 2A, Page 192

EnWin Utilities provides Figure 79 for system peak for 2018, 2017 and all-time:

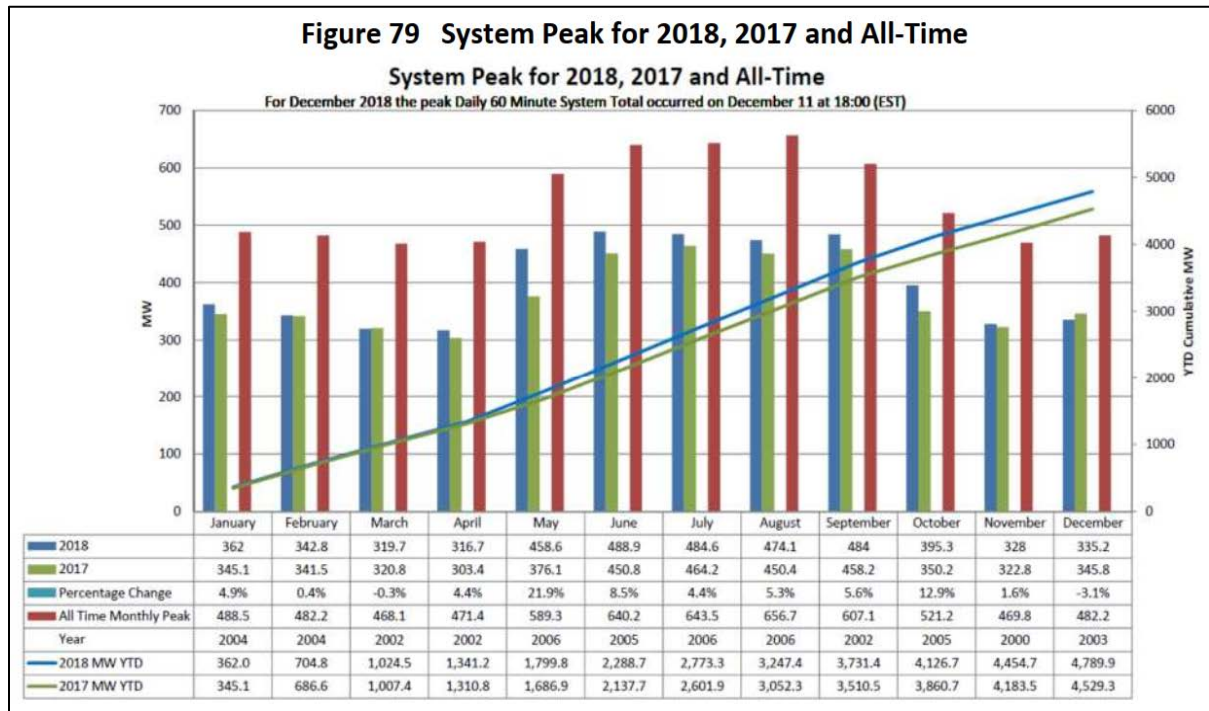


Figure 79 above shows the system peak for 2018, 2017 and all-time. While the present growth is low or minimal, EnWin Utilities' distribution area has potential for future development. These areas may not see load growth in the near term, but eventually these loads will appear at the existing TSS, and ENWIN will have to serve those customers. EnWin Utilities studied the City land allocation maps as published by the City planning department.

- What does cumulative MW mean as that parameter is used in Figure 79? It appears to be a simple sum of the peak load reached in each month with the peaks reached in prior months. What is the purpose of this parameter?
- Please confirm that EnWin Utilities is not proposing to make speculative capital investments to serve potential future loads in the identified future development areas.

2-Staff-53

Ref: Exhibit 2: Rate Base, Attachment 2A, Page 195

EnWin Utilities explains the impacts on the customers of its grid modernization program as below:

(c) Grid Modernization

ENWIN upgraded its old 4 kV distribution system to a 27.6 kV system (as discussed in Section 5.2.1 (h) of the DSP). This upgrade increased the number of customers on a feeder, which resulted in worse reliability despite the newer infrastructure, as it increased the number of customers that are affected by a single event. As a result, ENWIN developed a longer term grid modernization plan to remediate the current reliability issues and to lay the groundwork to address future challenges with DER, and possible climate change consequences.

- a) Please quantify the deterioration in reliability attributable to implementing the voltage upgrade program.
 - i. Is the level of reliability deterioration material?
 - ii. Has EnWin Utilities received independent corroboration from customers that they perceive the impact as material? If yes, please provide evidence.
- b) Was this reliability deterioration anticipated when the voltage upgrade program was planned?
 - i. If yes, was the need for (and cost of) the related reliability enhancement projects understood to be part of the upgrade project?
 - ii. If no, why not?

2-Staff-54

Ref: Exhibit 2: Rate Base, Attachment 2A, Page 195

EnWin Utilities explained the conductor upgrades project as below:

ENWIN has identified the need for a number of conductor upgrade projects. This work was initiated due to previous design standards which utilized a single-ended radial feed concept. Since radial feeders were not expected to connect to other feeders nor support the loads of other feeders, the conductor size was often reduced to a size needed to just support the feeder end load. Consequently, the conductor capacities of feeders vary along the main feeder trunk. There are many cases where the end of the old feeders were built with 4/0 or 336 MCM conductors

(normal conductor size is 556 MCM). Today, these feeders are expected to carry a full additional feeder section, which means the conductors used at feeder ends are undersized.

- a) Please provide the consequence of failure ratings for the conductor, towers, breakers, transformers etc. before and after the single end-radial feeder conductor replacement project is completed.
- b) Please provide the risk reduction and project cost for a typical single-ended radial feeder conductor replacement project. Please show the before and after probability and consequence of failure, and before and after total risk calculation.
- c) Was the migration from a radial to a backup-capable configuration philosophy wholly or partly driven by the Grid Modernization voltage upgrade discussed earlier on page 195? Please explain.

2-Staff-55

Ref: Exhibit 2: Rate Base, Attachment 2A, Pages 196-7

EnWin Utilities states the following:

Feeder Reliability Improvement Projects:

Reliability is the main driver of this project.

ENWIN is planning to maintain the distribution infrastructure for an “N-1” full station contingency. Such contingencies have occurred in other place in the Province, such as the recent tornado in the Ottawa Merivale TS, or the fire at the HONI’s Finch TS in Toronto. These are considered long-term contingencies, meaning that the time to effect restoration after the contingency is in the order of weeks to months. Based on the reasonable risk of a complete loss of a supply station, ENWIN developed a long-term plan to build high capacity power transfer corridors between stations that will be constructed in coordination with ENWIN’s EOL replacement pole projects and City infrastructure re-development projects.

...

Radial Branch Backups:

ENWIN will complete all radial feed removals with large customer pockets (>500 customers) during its present planning cycle. This helps to increase the reliability of the system, and the supply reliability to the customers.

- a) Please quantify "reasonable risk"? Is this equivalent to the probability of supply station loss?

- b) What is the annual probability of complete loss of Keith TS, Malden TS and Crawford TS? Please explain how the probabilities were derived and list the assumptions made when deriving them.
- c) Please provide the before and after risk evaluations and the associated project cost for each of the remaining planned radial feed removals.

2-Staff-56

Ref: **Exhibit 2: Rate Base, Attachment 2A, Page 4**

Exhibit 2: Rate Base, Attachment 2A, Pages 204-206

EnWin Utilities provides Table 1, which shows a step increase in capital spending from pre-2019 to post-2019:

Table 1 Historical and forecast capital expenditures and system O&M										
Category	Historical (\$ '000)					Forecast (\$ '000)				
	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
System Access	\$ 2,762	\$ 3,946	\$ 3,963	\$ 3,310	\$ 7,267	\$ 6,205	\$ 3,476	\$ 3,526	\$ 3,577	\$ 3,628
System Renewal	\$ 8,221	\$ 5,475	\$ 5,456	\$ 5,586	\$ 7,289	\$ 8,440	\$ 8,009	\$ 7,605	\$ 7,850	\$ 7,366
System Service	\$ 6,433	\$ 2,931	\$ 3,976	\$ 4,427	\$ 4,221	\$ 3,537	\$ 3,622	\$ 3,610	\$ 3,986	\$ 3,623
General Plant	\$ 3,499	\$ 2,253	\$ 2,058	\$ 3,098	\$ 7,507	\$ 5,021	\$ 4,283	\$ 3,856	\$ 4,174	\$ 4,213
Total (Gross)	\$ 20,915	\$ 14,605	\$ 15,452	\$ 16,421	\$ 26,284	\$ 23,203	\$ 19,390	\$ 18,597	\$ 19,587	\$ 18,830
Contributed Capital	\$ 4,322	\$ 412	\$ 2,217	\$ 1,889	\$ 4,898	\$ 3,252	\$ 813	\$ 823	\$ 834	\$ 844
Total (Net)	\$ 16,592	\$ 14,194	\$ 13,236	\$ 14,532	\$ 21,386	\$ 19,951	\$ 18,577	\$ 17,774	\$ 18,753	\$ 17,986
System O&M	\$ 4,398	\$ 4,631	\$ 9,757	\$ 9,825	\$ 10,942	\$ 10,904	\$ 11,049	\$ 11,068	\$ 11,102	\$ 11,096

EnWin Utilities identifies corporate risks that it is facing:

5. Management Retirements, Knowledge Gap ... Like other utilities, ENWIN is experiencing high levels of retirements of senior personnel in both managerial and field staff ranks.

6. Field Retirements, Knowledge Gap ... Similar to the issue with management staff, ENWIN is dealing with retirement of experienced field staff.

...

9. Workforce Overloaded-Quality Impacted/Number and complexity of projects is exceeding the organization's ability to deliver on them.

... ENWIN has reduced its staff complement over the years since the last CoS, but demands on ENWIN have continued to increase. To mitigate the

risk that the quality of work may suffer because of the increased demands on staff, ENWIN has adopted a formal project management framework to be used for all substantial projects. This framework helps to ensure that projects are formally planned, resources identified, milestone timeframes set and reporting identified and executed.

- a) What is the threshold for "substantial" project?
- b) What % of projects by both number and dollar value are classified as "substantial" vs. not "substantial"?
- c) Does EnWin Utilities consider it to be good utility practice to not have a formal project management framework for projects assessed as being not "substantial"?
 - i. How does EnWin Utilities ensure project execution effectiveness for non-substantial projects in the absence of a "formal project management framework"?
- d) Given the retirements of experienced staff and associated loss of organizational capacity and knowledge, please describe why the lack of formal PM framework doesn't put ratepayers at cost risk due to potential cost overruns and/or reduced execution productivity?
- e) Given the proposed increase in capital spending vs. pre-2019 levels, how does EnWin Utilities propose to compensate for the reduced staff complement and ongoing field and management retirements?

2-Staff-57**Ref: Exhibit 2: Rate Base, Attachment 2A, Page 272**

EnWin Utilities provided Table 132 for 2018 forecast and 2019 bridge system renewal expenditures:

Expenditure Category	2018 Forecast	2019 Bridge	Difference
4 kV Conversion	\$0	\$0	\$0
27.6 kV Pole Replacements	\$2,200,000	\$2,950,000	\$750,000
Planned Cable Replacements	\$215,077	\$120,000	-\$95,077
Planned & Reactive Transformers	\$1,265,000	\$1,350,000	\$85,000
Reactive Pole Replacements	\$150,000	\$100,000	-\$50,000
Reactive Equipment Replacements	\$115,218	\$280,000	\$164,782
Reactive Conductor Replacements	\$30,000	\$90,000	\$60,000
Manhole Rebuilds	\$160,000	\$150,000	-\$10,000
Switching Units	\$340,000	\$825,000	\$485,000
Station Equipment	\$2,658	\$0	-\$2,658
Other/ (Pole Inspection)	\$1,108,250	\$1,424,000	\$315,750
Total	\$5,586,203	\$7,289,000	\$1,702,797

System Renewal expenditures are increased in 2019 by approximately \$1.7 million. An increase in pole replacement budget of \$750k was made to bring the pole replacement budget closer to the values indicated in the ACA, which was done in 2017.

- a) Please update the 2018 figures using the 2018 actuals and explain the variances if the 2018 actuals are +/-10% different than the 2018 forecast.

2-Staff-58

Ref: Exhibit 2: Rate Base, Attachment 2A, Page 284

Regarding its historical levels and forecast levels of system renewal expenditures, EnWin Utilities provides Table 144 and states:

Table 144 ENWIN's Investments in System Renewal			
System Renewal Expenditures - Actual		System Renewal Expenditures - Prospective	
Year	Amount	Year	Amount
2009	\$ 7,848,312	2018	\$ 5,586,000
2010	\$ 6,921,307	2019	\$ 7,289,000
2011	\$ 8,132,941	2020	\$ 8,440,000
2012	\$ 7,569,208	2021	\$ 8,009,000
2013	\$ 8,126,349	2022	\$ 7,605,000
2014	\$ 6,951,993	2023	\$ 7,850,000
2015	\$ 8,221,104	2024	\$ 7,366,000
2016	\$ 5,474,883	Average	\$ 7,449,000
2017	\$ 5,455,688		
Average	\$ 7,211,804		

As can be seen in Table 144 above, EnWin Utilities' investment in System Renewal has been relatively consistent year over year, and is projected to remain so through the DSP prospective period.

- a) Table 144 shows inter-annual System Renewal spending increases of +30% from 2018 to 2019, and +15% from 2019 to 2020. Is EnWin Utilities' position that these inter-annual variations represent investments that are "relatively consistent from year to year"?
- If yes, what is the threshold of inter-annual spending increase that would be considered outside the bounds of "relatively consistent from year to year"?
 - If not, please explain the rationale of the increased expenditures in 2019 and 2020 and gradually decreased expenditures in 2021 to 2024.

2-Staff-59**Ref: Exhibit 2: Rate Base, Attachment 2A, Page 286**

EnWin Utilities provides Table 145 for system renewal expenditures for 2020:

Table 145 System Renewal Expenditures for the 2020 Test Year	
Asset Renewal Type	2020 Investment Amount (\$'000)
Poles	\$3,300
Metering Equipment	\$294
Reactive (poles, cable, etc.)	\$470
Transformers	\$1,325
Manholes	\$150
Switches	\$1,025
Cable	\$512
Walker Road Pole Replacement	\$750
Customer Vault Relocations	\$400
Other Miscellaneous	\$214
Total	\$8,440

- a) Please provide a table showing historical and forecast annual pole replacement spending from 2009 to 2024.
- b) How many poles have been replaced on average over each of the historical years under the Reactive (poles, cable, etc.) Program? Please provide a table.
- c) Are the poles scheduled for replacement under the Walker Road Pole Replacement project considered in EnWin Utilities' evaluation of its forecast pole demographics changes?
- d) What is EnWin Utilities' average unit cost (\$ per pole replaced) from 2005 to 2018? Please indicate the currency year(s) used in responding.
- e) What is EnWin Utilities' forecast average unit cost (\$ per pole replaced) from 2019 to 2024? Please indicate the currency year(s) used in responding.

2-Staff-60**Ref: Exhibit 2: Rate Base, Attachment 2A, Page 288**

EnWin Utilities states the following:

Similarly, ENWIN's system planning efforts identified that the ENWIN distribution system is, unable to supply all load on a peak day with a loss of supply of the Lauzon station. While HONI, DESN stations are constructed for redundancy, whole stations outages have occurred as, happened to the Lauzon station twice in 2017, and Malden TS and Keith TS in 2018., Additionally, HONI lost a large TS in Toronto due to fire and a station in Ottawa due to a, tornado in 2018. Thus, there is a very realizable risk of such occurrences. ENWIN judges that, extended periods of repeated interruptions due to loss of a station would be unacceptable to, ENWIN's customers.

- a) What were the direct causes of the whole station outages at Lauzon TS, Malden TS and Keith TS?
- b) What was the duration of each outage?
- c) Does EnWin Utilities know if any steps have been taken by Hydro One to mitigate the probability of future whole station outages at these TS locations?

2-Staff-61**Ref: Exhibit 2: Rate Base, Attachment 2A, Page 291-2**

EnWin Utilities provides Table 148 for historical and prospective general plant expenditures:

Table 148 Historical and Prospective General Plant Expenditures									
Plant	General	Year	IT	Site	Vehicles	Fleet/Weld	Tools	Total	
	2009	\$8,066,576	2018	\$1,733,000	\$354,000	\$833,547	87500	\$90,000	\$3,098,047
	2010	\$9,453,392	2019	\$2,005,400	\$2,592,330	\$2,652,178	\$70,500	\$187,000	\$7,507,408
	2011	\$3,724,687	2020	\$1,719,000	\$1,521,000	\$1,604,576	\$74,500	\$102,000	\$5,021,076
	2012	\$2,660,388	2021	\$2,288,000	\$507,000	\$1,303,000	\$75,000	\$111,000	\$4,284,000
	2013	\$4,679,933	2022	\$1,863,000	\$500,000	\$1,309,000	\$75,000	\$111,000	\$3,858,000
	2014	\$4,885,125	2023	\$1,828,000	\$501,000	\$1,660,000	\$75,000	\$111,000	\$4,175,000
	2015	\$3,498,840	2024	\$2,013,000	\$496,000	\$1,530,000	\$75,000	\$101,000	\$4,215,000
	2016	\$2,253,412	Average	\$4,594,076					
	2017	\$2,057,547	Avg. Exc. '19 & '20:	\$3,926,009					
Last 5 Year									
Average:									
\$3,474,971									

- What is driving the doubling of the tools budget in 2019?
- What is driving the 20% step change between the 2018 tools budget (\$90,000) and the 2021 to 2023 forecasts (\$111,000 for each year)?
- Is the step increase in Vehicles spending from 2018 to 2019 entirely attributable to the recent change from leasing to purchasing vehicles? If not, please provide any other drivers of the change.
- The \$75,000 Fleet/Weld flat value shown in years 2021 to 2024 implies that this is a placeholder. What is the target of the proposed spending and how was the cost estimated?

2-Staff-62**Ref: Exhibit 2: Rate Base, Attachment 2A, Page 310****Exhibit 2: Rate Base, Attachment 2A, Page 213**

EnWin Utilities states the following:

ENWIN has developed a capital investment plan and detailed descriptions of the material plans for the Test Year are presented in Appendix F – Material Investment Summaries. In addition to this, ENWIN has assessed those plans through its PROSORT project prioritization tool that was described in section 5.4.1 (b). The PROSORT tool determines a relative

Change in Risk Benefit Factor (“CRBF”) which is the cost of the project divided by the change in risk benefit. PROSORT ranks project lowest to highest cost for a change in risks and benefits. Thus, by ranking projects, the projects that provide the least cost per unit change in risks and benefits are ranked highest as they provide the best value proposition for Customers.

At the Exhibit 2: Rate Base, Attachment 2A, Page 213 of 317, EnWin Utilities stated the following:

	Factor	Values	Categories	1	2	3	4	5
				Insignificant	Minor	Moderate	Major	Catastrophic
Consequence	0.3	Safety	Life/Health	Injuries not requiring medical attention	Minor injuries/First Aid	Serious Injury/Medical Aid/Hospitalization	Life Threatening Injury/Multiple serious injuries	Death/Multiple life threatening injuries
			Property Damage	Minor loss to utility property, <\$5k	Loss to Customer/Utility property/claims for damages, \$1k - \$10k	Damage to buildings/vehicles requiring major repairs, \$10k - \$100k	Serious damage to buildings/vehicles - non-repairable, \$100k - \$1 million	Damage to multiple properties, > \$1 million
	0.25	Financial	Customer Costs	Minor inconvenience, no claims	<\$1,000	\$1k - \$100k	\$100k - \$1 million	> \$1 million
			Utility Costs	Minor inconvenience	<\$1,000	\$1k - \$100k	\$100k - \$1 million	> \$1 million
			Fines/Penalties	Inquiries from Regulators	Audits from Regulators	Order for change from Regulators	Fines > \$50k, \$1k/day	Fines > \$100k, \$1k/day
	0.25	Reliability	Legal/Insurance	No implications	Claims for Damages, settled by Insurance	Lawsuits likely to be settled, <\$100k	Lawsuits likely to be defended in court, <\$1 million	Lawsuits >\$1 million, Insurance claim in excess of deductible
			Customer Disruption	<10 Customers affected, Customers out <1hr	<500 Customers affected, majority of affected customers out <1 hour, SED	1 feeder out, Majority of affected customers out 1-8 hours, MED	> 1 feeder out, Majority of affected customers out 8-24 hours, MED	Station out for > 8 hours, Majority of affected customers out > 1 day, MED
	0.2	Sustainability	Environmental Damage	Minor clean-up required	MOE Notification required, clean-up required	Major cleanup required, cleanup last 1 day - 1 week	Major cleanup required, barricading/area restrictions,	Irreparable harm to environment, large fines, charges
			Non-Compliance	Reported to Regulators	Inquiries from Regulators	Audits from Regulators	Sanctions from Regulators	Threat or Loss of Distribution License, Severe Penalties Imposed
			Reputational Damage	Brief/social media comments	Adverse reports on local papers, media	Adverse regional media reporting, loss of faith in ability to operate, loss of jobs	Adverse provincial media reporting, loss of senior staff jobs	Adverse provincial media reporting, sale of company
Likelihood	1	Expected to occur in the next 5 years	Almost Certain	9	25	68	184	500
	2	Will probably occur in the next 5 years	Likely	7	19	51	139	379
	3	Might occur in the next 5 years	Possible	5	13	34	93	253
	4	Doubtful to occur in the next 5 years	Unlikely	2	6	17	46	126
	5	May occur but only in exceptional circumstances	Rare	1	3	7	19	51

- How does EnWin Utilities ensure that projects prioritized using a “low cost per unit change in risks” metric excludes projects that start in an acceptable risk category (i.e. green and potentially yellow), and therefore do not need to be executed?
- How does EnWin Utilities ensure that projects prioritized using a “low cost per unit change in risks” metric instead select lower total cost projects that would change risk from an unacceptable risk category (i.e. red or orange) to an acceptable risk category (i.e. green and possibly yellow), even though those projects have a higher “cost per unit change in risk” metric?

2-Staff-63

Ref: Exhibit 2: Rate Base, Attachment 2A, Appendix F, Page 1 (PDF Page 825)

EnWin Utilities provides the explanation for one of the material investments planned in 2020 test year as below:

Project Name/Description: Walker Road – Foster to Airport Road – Feeder Connection

...

While ENWIN has a proposal to proceed there is risk that the City, upon re-engaging their plans, may change their plans and put ENWIN's running line in the way of new construction. There are no contributions to the transmitter for completion of this section of line.

- a) Why did the City lose interest in completing the remaining section of the Walker Road rebuild?
- b) Please explain whether or how EnWin Utilities plans to address the risk that the City may change their plans and put EnWin Utilities' running line in the way of new construction.
- c) Could this project be deferred until the City has made a final decision about the road rebuild?

2-Staff-64

Ref: Exhibit 2: Rate Base, Attachment 2A, Appendix F, Page 2 (PDF Page 826)

EnWin Utilities states the following:

Project Name/Description: Walker Road – Foster to Airport Road – Feeder Connection

...

As South Windsor has grown, that feeder's load has grown to the point where now the feeder is not able to support cold load pickup when there is a momentary outage during peak load times. The consequence of this is that staff have to be dispatched to open switches on sections of the system supplied from the 55M25 feeder and then close them one-by-one so that the load can be picked up.

- a) Please quantify the average number of hours each year when the described cold load pickup peak constraint condition exists.
- b) What is the probability that an outage requiring cold load pickup will occur during the at-risk hours?

2-Staff-65

Ref: Exhibit 2: Rate Base, Attachment 2A, Appendix F, Page 16-17 (PDF Page 840-841)

EnWin Utilities explains the main driver for the material investment of underground padmount transformer sustainment program of \$255k budgeted in 2020 as below:

Replacing three-phase padmount transformers which are at end of life is fundamental to being able to maintain service to customers. As noted in the description of ENWIN's Asset Management System in section 5.3.1, inspections are performed as part of the 3-year OEB inspection cycle and the transformers with the lowest, worst, health index are replaced first.

EnWin Utilities further states regarding the timing of the expenditures that:

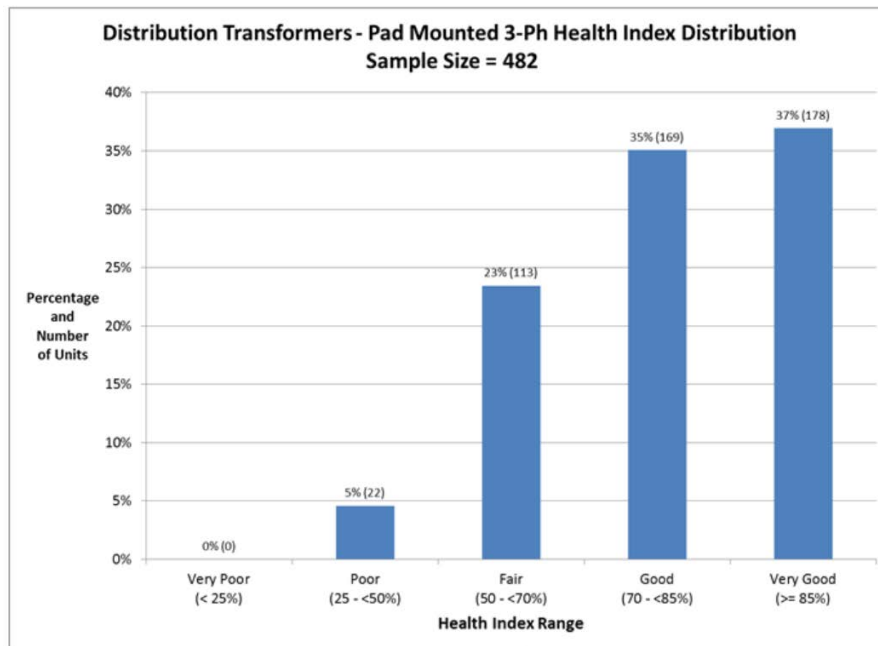
ENWIN has budgeted \$255,000 for 6 padmount transformer replacements in 2020. An example project for 2020 is the replacement of the 300KVA padmount transformer TP0433 – servicing a high rise residential building in Windsor. Average replacement cost is \$42,500 per unit. Expenditures will be \$42.5k at end of Q1, \$85k at end of Q2, \$85k at end of Q3 and \$42.5k at end of Q4.

- a) Are all commercial padmount transformer replacements driven by an asset specific condition assessment?
- b) Are any replacements driven by asset age only?
- c) Please provide the actual expenditures up to date for the transformers and compare to the budgeted expenditures as at end of Q1 and Q2.

2-Staff-66

Ref: Exhibit 2: Rate Base, Attachment 2A, Appendix F, Page 20 (PDF Page 844)

EnWin Utilities provides the following graph regarding its padmount transformer health index distribution:



OEB staff notes from the bar chart above that 22 pad mounted transformers are in poor health condition. EnWin Utilities also provided the table below to compare the Kinectrics and EnWin Utilities' plan:

Kinectrics and ENWIN Plan Comparison (# of Units)		
Year	Kinectrics	ENWIN
2019	4	7
2020	4	6
2021	6	7
2022	6	7
2023	7	6
5-Year Total	27	33
5-Year Average	5.4	6.6
2024	7	6
2025	7	6
2026	9	6
2027	9	6
2028	10	7
10 Year Total	69	64
10 Year Average	6.9	6.4

OEB staff notes that EnWin Utilities' planned units in 5 years of 33, which is 6 units greater than the Kinectrics' plan and EnWin Utilities' planned units in 10 years of 64, which is 5 units less than the Kinectrics' plan.

- a) Assuming that all 22 of the “Poor” condition padmount transformers are scheduled for replacement, how did EnWin Utilities select the remaining 42 units planned for replacement over the next 10 years?
- b) Please explain why EnWin Utilities plans to replace 6 more units as compared to the Kinectrics’ plan in 5 years, while EnWin Utilities plans to replace 5 fewer units as compared to the Kinectrics’ plan in 10 years.
- c) How is the replacement program prioritized to ensure that all units presently assessed as being in poor condition are replaced first?

2-Staff-67

Ref: Exhibit 2: Rate Base, Attachment 2A, Appendix F, Page 30 (PDF Page 854)

Regarding its Submersible Transformer Sustainment Program, EnWin Utilities states:

ENWIN's experience with its submersible transformer fleet is that the units commonly fail in service prior to their expected useful life. In 2015 – 2017 there were 9, 7 and 7 in-service failures respectively of submersible transformers. This information as well as the condition inspections performed every 3 years inform the asset management process and the determination of which transformers are at end of life.

- a) Are all Submersible Transformer replacements driven by an asset specific condition assessment?
- b) Are any replacements driven by asset age only?
- c) Has EnWin Utilities revised the useful life for the submersible transformer fleet after 2015 given “ENWIN's experience with its submersible transformer fleet is that the units commonly fail in service prior to their expected useful life”? If not, why not.

2-Staff-68

Ref: Exhibit 2: Rate Base, Attachment 2A, Appendix F, Page 46 (PDF Page 870)

EnWin Utilities provides the following table:

Project Name/Description: Conductor Upgrade Project – 23M2 LTP1

Assessment of Impact of Investment to Business Values										
Business Values		Before				After				Comment
		Consequence	Likelihood	Score	TRS	Consequence	Likelihood	Score	TRS	
0.3	Safety									NO SAFETY ISSUES
0.25	Reliability	Catastrophic	Rare	51	12.75	Insignificant	Rare	1	0.25	REDUCES RISK OF INABILITY TO SERVE UPON STN LOSS
0.25	Financial	Major	Rare	19	4.75	Insignificant	Rare	1	0.25	REDUCES RISK OF CUSTOMER LOSSES/COSTS UPON STN LOSS
0.2	Sustainability	Moderate	Rare	7	1.4	Insignificant	Rare	1	0.2	REDUCES RISK TO REPUTATION

- a) Please quantify how the Catastrophic consequence rating was determined for Reliability, and provide the assumptions used in making that assessment.

2-Staff-69

Ref: Exhibit 2: Rate Base, Attachment 2A, Appendix F, Page 47 (PDF Page 871)

In reference to planning of its project “Conductor Upgrade Project – 23M2 LTP1”, EnWin Utilities stated:

The entire ENWIN distribution system is fed by eight transformer stations spread around the City. Given the number of stations, there is a reasonable probability of a given station being unavailable from time to time. Currently, ENWIN is unable to sustain the complete distribution system at peak times if there is a loss of one complete station. In reliability terms, this situation is often referred to as a “loss of critical unit” contingency. For that contingency, at peak times, ENWIN would be forced to institute a rolling blackout of certain sections of the distribution system.

- a) How many hours in an average year are loads high enough to create the described risk exposure?

2-Staff-70

Ref: Exhibit 2: Rate Base, Attachment 2A, Appendix F, Page 51 of 94 (PDF Page 875)

Exhibit 2: Rate Base, Attachment 2A, Appendix F, Page 62 of 94 (PDF Page 886)

EnWin Utilities provides the assessment of impact for the following project:

Project Name/Description: Feeder Reliability Improvement Project – 25M7 Feeder Ring Pilot Project

Assessment of Impact of Investment to Business Values										
Business Values		Before				After				
		Consequence	Likelihood	Score	TRS	Consequence	Likelihood	Score	TRS	Comment
0.3	Safety									NO SAFETY ISSUES
0.25	Reliability	Minor	Possible	13	3.25	Insignificant	Possible	5	1.25	IMPROVE RESTORATION TIME FROM MINUTES TO SECONDS
0.25	Financial	Minor	Possible	13	3.25	Insignificant	Possible	5	1.25	MINOR INTERRUPTIONS ELIMINATED
0.2	Sustainability	Insignificant	Unlikely	2	0.4	Insignificant	Rare	1	0.2	UNLIKELY TO HAVE REPUTATIONAL RISK

ENWIN provides the assessment of impact for the following project:

Project Name/Description: Feeder Reliability Improvement Project –
Prince to Brock

Assessment of Impact of Investment to Business Values										
Business Values		Before				After				
		Consequence	Likelihood	Score	TRS	Consequence	Likelihood	Score	TRS	Comment
0.3	Safety									NO SAFETY RISK MITIGATED
0.25	Reliability	Catastrophic	Unlikely	126	31.5	Minor	Rare	1	0.75	MAINTAIN SUPPLY IN LOSS OF STATION CONTINGENCY
0.25	Financial	Major	Unlikely	46	11.5	Minor	Rare	1	0.75	CUSTOMER COSTS >100k
0.2	Sustainability	Moderate	Unlikely	17	3.4	Insignificant	Rare	1	0.2	LOCAL MEDIA REPORTING – LOSS OF REPUTATION

- Please confirm that the Consequence outcomes and likelihoods in the referenced tables do not appear to support rating these project as high priority. Please discuss.
- Please provide the quantitative thresholds for Consequence & Likelihood scores for a project to be assigned as high priority.

Exhibit 3 Operating Revenues

3-Staff-71

Ref: Exhibit 3, Page 3

EnWin Utilities states:

According to the most recently published Filing Requirements for Electricity Distribution Rate Applications, dated July 12, 2018, multivariate regression is an approved modelling approach for forecasting load. **Traditionally, kWh and kW data is collected by month for 10 historic years for use in the regression analysis.** Accordingly, ENWIN has utilized kWh and kW data, by month, for its entire service territory from January 2008 to December 2017 in order to ensure that all billed consumption and demand is collected and applied to its appropriate consumed month. [Emphasis added by staff]

- a) Please confirm that the Filing Requirements do not specify a minimum or maximum length of time or number of data points for a load forecast model based on a multivariate regression modelling approach?
- b) What is the basis for EnWin Utilities' statement that: "[t]raditionally, kWh and kW data is collected by month for 10 historic years for use in the regression analysis"?
- c) Why did EnWin Utilities or its consultant, Elenchus, limit the historical data range to the 10-year period from January 2008 to December 2017?

3-Staff-72

Ref: Exhibit 3, Pages 7-18

EnWin Utilities provides its analysis of the year-over-year variances in revenues, customers, kWh and kW by customer class. Historical data up to 2017 are shown as actuals.

- a) Are these actuals weather-normalized or not?
- b) In the reasons or drivers for variances in revenues, customers and electricity consumption and demand, EnWin Utilities does not identify weather or CDM as factors. Please explain why these are not factors explaining variances in revenues and demand and consumption.
- c) Please update Table 3-17 and the associated analysis to include an additional column for 2018 actuals.

3-Staff-73

Ref: Exhibit 3, Page 5

EnWin Utilities states that it has made a specific adjustment to the 3TS class due to the loss of a customer:

Large Use – 3TS Customer Class

Prior to any modeling, ENWIN identified that a significant facility closure had occurred within its service territory and notified Elenchus to ensure that historic load for this customer would be factored out of the analysis.

Due to the loss of this Large Use – 3TS (automotive sector) customer, usage prior to 2012 has been adjusted to exclude the lost customer. Excluding that customer, and after adding back persisting CDM, the Large Use 3TS energy consumption has varied in a range of 254GWh - 287GWh from 2008-2017 with no clear trend. The forecast was calculated as an average of the 2008-2017 consumption, having adjusted for CDM.

It is not clear what was done in terms of both removing the specific customer's historical load and adjusting for CDM for the class.

For large customers, CDM programs may be specifically tailored to each customer.

- a) Was the CDM for the class also adjusted historically to remove the CDM attributable to that particular customer's historical load? If not, please explain why not.

3-Staff-74

Ref: Chapter 2 Filing Requirements, Section 2.3.1.1

Exhibit 3, Attachment 3-A, Page 1

On page 23 of Chapter 2 of the Filing Requirements for electricity distributors, the minimal documentation necessary to support a multivariate regression analysis is listed. This includes the following:

- Explanation of the weather-normalization methodology proposed including:
 - o If monthly Heating Degree Days (HDD) and/or Cooling Degree Days (CDD) are used to determine normal weather, the monthly HDD and CDD based on: a) 10-year average and b) a trend based on 20-years. If the applicant proposes an alternative approach, it must be supported.
 - o Definitions of HDD and CDD, including:
 - Climatological measurement point(s) (i.e. identification of Environment Canada weather station(s)) and why these are appropriate for the distributor's service territory
 - Identification of base degrees from which HDDs and CDDs are measured (e.g. 18° C or other)
 - o In addition to the proposed test year load forecast, the load forecasts based on 10-year average and 20-year trends in HDD and CDD
 - o Rationale to support the weather-normalization methodology chosen

On page 1 of its report, EnWin Utilities' consultant, Elenchus, stated that 18°C was used as the threshold for both Heating Degree Days (HDD) and Cooling Degree Days (CDD).

- a) What is the basis for choosing the 18°C threshold for both HDD and CDD?

- b) What analysis did EnWin Utilities or Elenchus conduct to assess alternative HDD and CDD thresholds?

3-Staff-75

Ref: Exhibit 3, Attachment 3-A, Page 1; Load Forecast Excel Spreadsheet

Elenchus states the following in its report:

To isolate the impact of CDM, persisting CDM as measured by the IESO is added back to rate class consumption to simulate the rate class consumption had there been no CDM program delivery. This is labelled as “Actual No CDM” throughout the model. The effect is to remove the impact of CDM from any explanatory variables which may capture a trend, and focus on the external factors. A weather normalized forecast is produced first based on no CDM delivery, and then CDM savings of historic programs are subtracted off to reflect the actual normal forecast.

While statistical regression is appropriate for estimating a relationship between explanatory variables and energy use, in the case of CDM, an independent measurement is available providing a greater level of accuracy than could be obtained through regression.

- a) Is the CDM adjustment added back to the historical actual data based on gross or net CDM as reported by the IESO, or its predecessor, the Ontario Power Authority (OPA)?
- b) It appears from sheet “Monthly Data”, that the annual CDM results were converted to monthly adjustments simply by dividing by 12 (months).
 - i. Please confirm this, and explain the reason for this CDM adjustment approach.
 - ii. Please explain how this approach does not introduce measurement errors in the adjusted historical data due to the timing of when CDM programs may be actually implemented in a year, on the fact that OPA/IESO results are annualized (i.e., do not reflect actual first year impacts depending on when they actually occur), and on seasonal/monthly variability in the impacts of CDM programs on consumption and demand.
- c) Why is this approach used instead of including a suitable CDM variable as an explanatory variable in the model?

3-Staff-76

Ref: Exhibit 3, Attachment 3-A, Pages 5-8 Residential Class Load Forecast Model

Elenchus documents the load forecast regression model for the Residential class on pages 5-8 of its report.

- a) Elenchus notes that a linear trend variable is included, which begins with a value of 1 in January 2008 and increasing to 120 for December 2017. The estimated coefficient is negative and statistically significant. Since the historical consumption data are adjusted to add back CDM, as measured by the OPA/IESO, over the period, what, in the view of EnWin Utilities or Elenchus, is this trend variable actually measuring?
- b) Elenchus states on p. 5 that: “[s]everal other variables were examined and found to not show a statistically significant relationship to energy usage. Those included economic indicators of full time employment and GDP, and a count of customer accounts.” Was the linear time trend variable included or excluded from the models where economic measures such as employment and GDP were tested and found to be not statistically significant?

3-Staff-77

Ref: Exhibit 3, Attachment 3-A, Pages 8-11 GS < 50 kW Class Load Forecast Model

Elenchus documents the load forecast regression model for the GS < 50 kW class on pages 8-11 of its report.

- a) Elenchus notes that a linear trend variable is included, which begins with a value of 1 in January 2008 and increasing to 120 for December 2017. The estimated coefficient is negative and statistically significant. Since the historical consumption data are adjusted to add back CDM, as measured by the OPA/IESO, over the period, what, in the view of EnWin Utilities or Elenchus, is this trend variable actually measuring?
- b) For the GS < 50 kW model, Elenchus includes a binary variable for the “shoulder seasons of spring and fall, covering the months of March, April, May and September, October and November, as well as binary variables for the months of March and September. The “shoulder season” variable is statistically significant with a negative coefficient while each of the March and September variables are statistically significant with positive coefficients. The model also includes HDD and CDD days to proxy seasonal weather impacts, as well as Windsor employment as a proxy for economic activity. The monthly March and September variables offset, in

part, the shoulder season variable. Since weather and economic activity are accounted for by other variables:

- i. What is the rationale and purpose of the March and September binary variables in addition to the “shoulder season” variable?
- ii. What, in the view of EnWin Utilities or Elenchus, are the March and September binary variables, in combination with the other variables in the GS < 50 kW model, measuring?

3-Staff-78

Ref: Exhibit 3, Attachment 3-A, Pages 11-14

Elenchus documents the load forecast regression model for the GS > 50 kW class on pages 11-14 of its report.

- a) Elenchus notes that a linear trend variable is included, which begins with a value of 1 in January 2008 and increasing to 120 for December 2017. The estimated coefficient is negative and statistically significant. Since the historical consumption data are adjusted to add back CDM, as measured by the OPA/IESO, over the period, what, in the view of EnWin Utilities or Elenchus, is this trend variable actually measuring?
- b) The model includes variables for both the number of days in each month as well as the number of business days (PEAK_Days) in each month. Coefficients for both variables are positive and statistically significant. The customers in this class are generally medium-sized businesses. What is the rationale for having both variables in the model, and what customer energy demand phenomena are these two variables jointly measuring, in the view of EnWin Utilities or Elenchus?
- c) Elenchus notes that binary variables for the months of April, June, August, September and October were “much more statistically significant” than seasonal shoulder variables. The April binary variable coefficient is negative, indicating that the model would over-predict consumption for that month in its absence. The coefficients for June, August, September and October are all positive, indicating that the model would under-predict consumption in each month in the absence of that variable. The model includes variables for HDD and CDD and for Ontario GDP. The absence of binary variables for the months of May and July suggest that, otherwise, the model including weather and economic variables reasonably predicts consumption in these months, all else being equal.
 - i. Elenchus thus includes separate binary variables for 5 out of the 12 months in the year. What is the rationale for including so many monthly binary variables?

- ii. Since the model also includes weather and economic activity variables, what, in the view of EnWin Utilities or Elenchus, drivers of energy demand in this class are being proxied by these monthly binary variables?
- iii. The Durbin-Watson statistic for this model is 1.02, indicating likely serial correlation of the monthly residual errors. Has Elenchus assessed the reason for this serial correlation? Is it related to the inclusion of these monthly binary variables?

3-Staff-79

Ref: Exhibit 3/Attachment 3-A, Pages 11-16

Elenchus documents the load forecast regression model for the Intermediate Class on pages 14-16 of its report.

- a) Elenchus notes that a linear trend variable is included, which begins with a value of 1 in January 2008 and increasing to 120 for December 2017. The estimated coefficient is negative and statistically significant. Since the historical consumption data are adjusted to add back CDM, as measured by the OPA/IESO, over the period, what, in the view of EnWin Utilities or Elenchus, what is this trend variable actually measuring?
- b) Elenchus states that HDD and CDD were not found to be statistically significant explanatory variables for this class. However, for the GS 50-2999 kW that EnWin Utilities is proposing to merge this class, HDD and CDD were found to be statistically significant. There are significant other differences in the variables found to be significant for the models for the two classes.
 - i. Why did EnWin Utilities not have its consultant develop the load forecast based on the proposed customer class?
 - ii. If the drivers of demand are as different between these two existing classes as the estimated load forecast models suggest, why does EnWin Utilities consider that its proposed class merger is appropriate?
 - iii. Assuming that the proposed class merger is appropriate, please provide EnWin Utilities' basis for believing that, given the differences in the two estimated models, adding the load forecasts for these two classes provides a reasonable test year load forecast for the merged class, and where the associated merged billing determinants will be used to establish the base rates to recover the class revenue requirement for the merged class?

3-Staff-80

Ref: Exhibit 3, Attachment 3-A, Page 21

EnWin_2017_Load_Forecast_Model_20190517.xls, Sheet Employment

On page 21 of its report, under **Section 3.3 Economic Forecast**, Elenchus states:

GDP and employment forecasts are based on the mean forecasts of four major Canadian banks, RBC, TD, Scotiabank and BMO, as of October 2018. Forecast growth rates in 2020 were available only from TD and Scotiabank at this time. Average forecast rates are applied to the most recent GDP and Labour Force Survey data available from Statistics Canada.

On Sheet Employment, in cells F1 to K13, Elenchus provides the following data:

FTE Report Date	BMO 2-Nov- 2018	TD 18-Sep- 2018	Scotia 15-Oct- 2018	RBC 12-Sep- 2018	Average
2018	1.40%	1.40%	1.50%	1.40%	1.43%
2019	1.30%	0.60%	1.10%	0.60%	0.90%
2020		0.50%	0.90%		0.70%
GDP					
2017	2.80%		2.80%	2.70%	
2018	2.20%	2.20%	2.10%	2.00%	2.13%
2019	1.80%	2.20%	2.10%	1.90%	2.00%
2020		1.70%	1.60%		1.65%

Latest as of November 6th, 2018

- Please provide the definitions of FTE and GDP. In particular, are these forecasts national, for Ontario, or for the Windsor Census Metropolitan Area?
- Please provide the source documents used for the economic forecast.
- Please provide further explanation on how Elenchus used the forecasted growth rates to forecast the employment or economic data past October 2018.

3-Staff-81

Ref: Appendix 2-IB

The following table is provided in Appendix 2-IB:

Distribution System (Total)

	Calendar Year (for 2020 Cost of Service)		Consumption (kWh) ⁽³⁾			
				Actual (Weather actual)	Weather- normalized	Weather-normalized
Historical	2009		Actual	2,381,532,329	2,454,693,020	Board Approved 2,596,512,398
Historical	2010		Actual	2,521,864,890	2,500,489,529	
Historical	2011		Actual	2,500,918,608	2,479,507,609	
Historical	2012		Actual	2,480,837,615	2,477,871,786	
Historical	2013		Actual	2,450,616,245	2,451,029,476	
Historical	2014		Actual	2,463,137,594	2,441,447,556	
Historical	2015		Actual	2,397,631,611	2,405,193,061	
Historical	2016		Actual	2,471,215,846	2,425,111,572	
Historical	2017		Actual	2,367,940,087	2,409,664,890	
Historical	2018		Forecast		2,373,403,713	
Bridge Year	2019		Forecast		2,307,487,797	
Test Year	2020		Forecast		2,230,875,607	

Variance Analysis	Year	Year-over-year		Versus Board- approved
	2009			
	2010	5.9%	1.9%	
	2011	-0.8%	-0.8%	
	2012	-0.8%	-0.1%	
	2013	-1.2%	-1.1%	
	2014	0.5%	-0.4%	
	2015	-2.7%	-1.5%	
	2016	3.1%	0.8%	
	2017	-4.2%	-0.6%	
	2018		-1.5%	
	2019		-2.8%	
	2020		-3.3%	
	Geometric Mean	-0.1%	-0.9%	

OEB staff has also calculated that the Geometric Mean for the weather-normalized actuals from 2009 to 2017 is -0.2%, while the geometric mean growth rate from 2017 weather-normalized actual to 2020 test year weather-normalized forecast is -2.5%.

EnWin Utilities has forecasted a total system consumption with an accelerating decline part of this is accounted for by demand drivers, as estimated through the regression models, and part due to the CDM adjustment to the load forecast. However, the rate of change in the forecasted bridge and test year period is

much larger (in a negative sense) than EnWin Utilities has seen over the historical period since 2009.

OEB staff notes that the Government of Ontario issued, on March 20, 2019, Orders-in-Council to the OEB and to the Independent Electricity System Operator (IESO).¹ These Orders-in-Council and the Minister's Directives attached to these change the focus of the existing 2015-2020 CDM framework and shift the delivery of CDM programs from being LDC-led to being centrally-led by the IESO. Existing CDM plans to March 31, 2019 were allowable, as well as CDM programs for 2019 that the LDC had already committed to.

OEB staff has also prepared a separate analysis (Figure 1 below and excel file attached in Appendix 1) based on the above table, but wanting to see what the trend is based on the "weather-normalized actuals". In using the weather-normalized actuals, this starting point assumes measured actuals and EnWin Utilities' weather-normalization of consumption for the applicable customer classes.

¹ Order-in-Council 378/2019 is addressed to the OEB and Order-in-Council 379/2019 is to the IESO.

Figure 1: OEB Staff Analysis for Linear Trend of EnWin Utilities' Weather-normalized System Consumption (kWh) based on Appendix 2-IB Data

Distribution System (Total)

	Calendar Year (for 2020 Cost of Service)	Consumption (kWh) ⁽³⁾					P	Q	R	
			Actual (Weather actual)	Weather- normalized	Weather- normalized		Weather- normalized	Ln(Weather- Normalized)	Exp(Ln (Weather- Normalized))	
Historical	2009	Actual	2,381,532,329	2,454,693,020	Board Approved	2,596,512,398	2,454,693,020	21.62126755	2,454,693,020	Actual
Historical	2010	Actual	2,521,864,890	2,500,489,529			2,500,489,529	21.63975236	2,500,489,529	Actual
Historical	2011	Actual	2,500,918,608	2,479,507,609			2,479,507,609	21.63132583	2,479,507,609	Actual
Historical	2012	Actual	2,480,837,615	2,477,871,786			2,477,871,786	21.63066588	2,477,871,786	Actual
Historical	2013	Actual	2,450,616,245	2,451,029,476			2,451,029,476	21.61977397	2,451,029,476	Actual
Historical	2014	Actual	2,463,137,594	2,441,447,556			2,441,447,556	21.61585696	2,441,447,556	Actual
Historical	2015	Actual	2,397,631,611	2,405,193,061			2,405,193,061	21.60089601	2,405,193,061	Actual
Historical	2016	Actual	2,471,215,846	2,425,111,572			2,425,111,572	21.60914337	2,425,111,572	Actual
Historical	2017	Actual	2,367,940,087	2,409,664,890			2,409,664,890	21.60275352	2,409,664,890	Actual
Historical	2018	Forecast		2,373,403,713			2,400,170,412	21.5989191	2,400,442,859	Trend
Bridge Year	2019	Forecast		2,307,487,797			2,390,315,417	21.5948932	2,390,798,437	Trend
Test Year	2020	Forecast		2,230,875,607			2,380,460,422	21.5908674	2,381,192,765	Trend

Variance Analysis	Year	Year-over-year		Versus Board- approved	Year-over-year	
	2009					
	2010	5.9%	1.9%		1.9%	1.9%
	2011	-0.8%	-0.8%		-0.8%	-0.8%
	2012	-0.8%	-0.1%		-0.1%	-0.1%
	2013	-1.2%	-1.1%		-1.1%	-1.1%
	2014	0.5%	-0.4%		-0.4%	-0.4%
	2015	-2.7%	-1.5%		-1.5%	-1.5%
	2016	3.1%	0.8%		0.8%	0.8%
	2017	-4.2%	-0.6%		-0.6%	-0.6%
	2018		-1.5%		-0.4%	-0.4%
	2019		-2.8%		-0.4%	-0.4%
	2020		-3.3%		-0.4%	-0.4%
	Geometric Mean	-0.1%	-0.9%		-0.3%	-0.3%

In the Column labelled P of Appendix 1, staff have used the Excel function TREND to do a simple linear trend to forecast the weather-normalized consumption for the bridge years 2018 and 2019 and the test year 2020 based on the weather-normalized actuals from 2009 to 2017.

In Column Q, staff have calculated first the natural logarithm of the weather-normalized actuals for 2009 to 2017, and then calculated the forecasts of the natural logarithm for 2018 to 2020. In Column R, the logarithmic values in Column Q are exponentiated, using the EXP function, to get raw weather-normalized values based on the mathematical equation that:

$$e^{\ln(X)} = X$$

The year-over year variances are shown in the sub-table below, and estimates a growth rate of -0.4% per year in the bridge and forecast period.

- a) Please provide the basis for EnWin Utilities' projection for weather-normalized consumption to reduce at a rate of -2.5% for the bridge and test year period and which is a significant (and increasing) acceleration of the consumption reduction relative to historical consumption.
- b) Since CDM, both natural and promoted, is in the historical data and would thus be a factor in the historical trend, is, and if so, why is, EnWin Utilities assuming that CDM will have an increasing and accelerating influence on system-wide consumption in the 2018-2020, particularly in light of the changes to the CDM framework per Orders-in-Council 378/2019 and 379/2019.
- c) In the trend analysis the staff has prepared, since CDM is factored into the historical data, it is also implicitly factored into the forecasts for the 2018-2020 period. However the assumption is that the influence of CDM on a going-forward basis is similar, relatively speaking to what it has been historically.
 - i. Please provide EnWin Utilities' views on whether this approach provides a more realistic system-level forecast where, in light of Orders-in-Council 378/2019 and 379/2019, natural and promoted CDM continues but in line with the changed CDM framework focus of the Government of Ontario.
 - ii. The straight linear trend and the linear trend of the logarithmic approaches produce similar results. The trend of $\ln(\text{consumption})$ is more related to geometric growth, similar to compounded interest growth. Please provide EnWin Utilities' views on whether the approach in Column P, of the logarithmic trend in Columns Q-R, would be preferable.
 - iii. While staff has done this at the system-level, the results would have to be separated into the class-specific consumption and then associated kW demand for demand-billed customer classes. This potentially could be done based on historical or projected class proportions. An alternative approach would be apply a similar TREND analysis for the class-specific weather-normalized actuals. Please provide EnWin Utilities' views on whether applying a trend at the system-level or at class-specific levels is preferred.

- d) Based on EnWin Utilities' responses to c), please provide a load forecast estimate of consumption (kWh) and, as applicable, demand (kW) on a system basis and at a class level.

3-Staff-82

Ref: Exhibit 3, Page 20; Appendix 2-H Other Operating Revenues; Revenue Requirement Work Form

The total other revenues in Table 3-20 of Exhibit 3 and Appendix 2-H for 2020 test year is \$4,825,347. Staff notes that the other revenues on the Revenue Requirement Work Form (RRWF) is \$4,007,915.

- Please update Appendix 2-H using the actual other revenues in 2018.
- Please explain the discrepancy and provide the updated schedule(s) as necessary.

3-Staff-83

Ref: Appendix 2-H Other Operating Revenues

EnWin Utilities did not provide the variance analysis between the 2009 actual and 2009 approved other revenues. Staff calculates the variances between the 2009 approved other revenues and 2009 actual other revenues and noted that the variance is mainly due to the lack of forecast of revenues and expenses of Non-Utility Operations in 2009 CoS application as below:

Other Revenues Category	2009 Approved	2009 Actual	Variance
Distribution Service Revenue (SSS admin charges)	269,649	\$ -	\$ (269,649)
Rent from Electric Property	453,616	\$ 450,701	\$ (2,915)
Other Utility Operating Income	-	\$ 2,410	\$ 2,410
Late Payment Charges	979,749	\$ 1,409,969	\$ 430,220
Miscellaneous Service Revenue	421,473	695,962	\$ 274,489
Gain on Disposition on Property	-	67,300	\$ 67,300
Miscellaneous Non-Operating Revenue	235,316	295,911	\$ 60,595
Foreign Exchange Gain/Loss	-	1,534	\$ 1,534
Interest and Dividend Income	84,000	(183,361)	\$ (267,361)
Revenues from Non-Utility Operations	0	\$ 12,506,800	\$ 12,506,800
Expenses of Non-Utility Operations	0	\$(11,006,320)	\$(11,006,320)
Total Other Revenues	2,443,803	4,240,904	1,797,101
Variance %			74%

- a) Please explain why the revenues and expenses of Non-Utility Operations were not forecasted as part of other revenues in 2009 CoS application?

3-Staff-84

Ref: Appendix 2-H Other Revenues and Appendix 2-EA Account 1575

OEB staff understands that the transitional adjustments from the CGAAP to MIFRS are accumulated in Account 1575 and the annual adjustment is recorded in Account 4310 Regulatory Credit. OEB staff prepares a reconciliation of the changes in Account 1575 and Account 4310 and notes some discrepancies as below:

	2011	2012	2013	2014	2015	2016	2017	2018	2019
1575	(3,382,035)	(4,389,506)	(2,597,508)	(2,265,827)	(1,934,269)	(2,371,364)	(2,280,328)	(2,697,952)	(2,222,271)
4310	(3,382,035)	(4,389,506)	(2,597,508)	(2,265,827)	(1,934,269)	(2,371,364)	(2,280,328)	(2,216,822)	(2,216,822)
difference	-	0	0	0	0	0	0	481,130	5,449

- a) Please explain the above two discrepancies in 2018 and 2019.

3-Staff-85

Ref: Appendix 2-H Other Operating Revenues

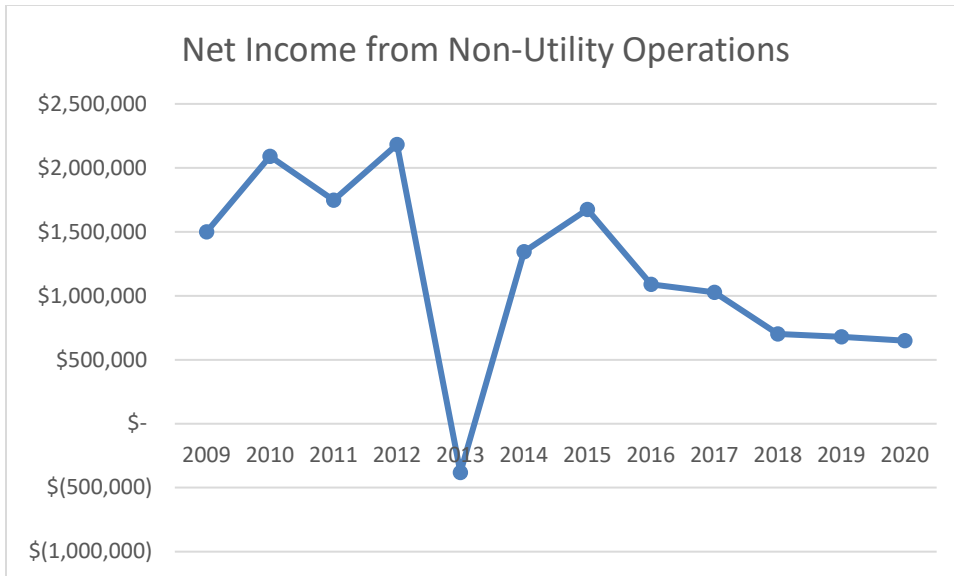
OEB staff notes that Account 4210 Rent from Electric Properties of \$1,485,454 in 2020 has increased more than double as compared to the rent forecasted in 2019 of \$759,211.

- a) Please confirm whether or not this rent represents the pole attachment rental revenues.
- i) If so, please provide a breakdown of the forecasted 2020 rent and the forecast 2019 rent into the number of poles and the unit cost.

3-Staff-86

Ref: Appendix 2-H Other Operating Revenues; Exhibit 3, Page 22

Using the historical and forecast balances in two accounts (Account 4375 Revenues from Non-Utility Operation and Account 4380 Expenses of Non-Utility Operation), staff prepared the following trend graph showing the net income from Non-Utility Operation:



EnWin Utilities states that an additional expense of \$1,703,886 was recorded to Account 4380 Expenses of Non- Utility Operations in 2013 because of the undercharging of an affiliate for their appropriate share of employee future benefit expenses.

- 1) Please explain why EnWin Utilities undercharged the \$1,703,886 to the affiliates for their share of employee future benefit expenses and which prior period(s) is this amount pertaining to.
- 2) Please explain why the forecast net income from Non-utility operations in 2019 and 2020 significantly decrease from the historical years, as can be seen from the graph.

3-Staff-87

Ref: Exhibit 3, Attachment 3-D, letter (August 8, 2018)

ENWIN_Exh 3_AttachmentD_CDM Plan Resub Summary of Key Updates_20190426 (excel attachment)

Appendix 2-I of Chapter 2 Appendices

In the letter dated October 1, 2018 in Attachment 3-D, EnWin Utilities requested that the IESO deliver CDM programs for the remainder of the term as its conservation budget of \$38.4 million was exhausted. Attachment 3-D notes that 191,141 MWh of savings were expected to be delivered for the remainder of the term.

- a) Please discuss whether there have been any further updates/revisions to EnWin Utilities' CDM Plan that shows continuing programs and savings to the end of the 2015-2020 Conservation First Framework.
- b) As EnWin Utilities filed a 6-year target of 151,300 MWh in Appendix 2-I, please discuss whether this reflects all continuing level of energy savings expected for the remainder of the Conservation First Framework. If not, how does this figure reconcile with the remaining CDM projects that EnWin Utilities is contractually obligated to complete under the CFF?
- c) Please provide a summary that describes and clearly shows the total number of projects EnWin Utilities is contractually obligated to complete under the CFF, the total amount of projected savings (kWh and kW) and the expected completion date of the final project.

Exhibit 4 Operating Expenses

4-Staff-88

Ref: Exhibit 4, Page 11; Appendix 2-JB OM&A Cost Drivers

One of the OM&A cost drivers in Appendix 2-JB is the information system. EnWin Utilities states that "Information Technology services and purchases increased by \$787 thousand over the 11 year period. Since the time of the last rebasing, ENWIN has installed a new customer facing IT system, customer internet portal, meter data management data base (MeterSense), GIS system, and outage management system".

- a) Please explain how the installation of the new IT systems increases the OM&A costs.

4-Staff-89

Ref: Exhibit 4, Page 11; Appendix 2-JB OM&A Cost Drivers

One of the OM&A cost drivers in Appendix 2-JB is billing and metering outside services. EnWin Utilities provides the explanation as below:

Billing and Metering Services and expenses have increased by approximately \$320 thousand as a result of conversion to electronic meter reading and the MDM/R and time of use systems. Previously ENWIN split the costs of manual meter reading with the Windsor Utilities Commission as it was obtaining water usage readings at the same time. Now under the new platform, ENWIN must cover the communication and MDM/R data base costs on its own, resulting in a higher level of cost.

Staff notes from the Appendix 2-JB that \$151k out of \$320k increase in the billing and metering expenses incurred in 2019 bridge year.

- a) Please reconcile the explanation of the higher costs due to electronic metering and the time of use system with the year of the significant increase in 2019.

4-Staff-90

Ref: Appendix 2-JB OM&A Cost Drivers

Per the Appendix 2-JB, another cost driver for the OM&A increase is the increase in the property tax. The property tax has increased by \$400k in 2020 test year as compared to 2009 approved property tax. EnWin Utilities forecasts \$147k increase in 2020 out of the total \$400k increase.

- a) Please provide the basis of the forecasted increase of the property tax in 2020.

4-Staff-91

Ref: Exhibit 4, Page 13

Appendix 2-IB

EnWin Utilities indicates “[s]tagnant customer growth” as one of the challenges that the utility faced over the 2009-2017 period. However, an analysis by OEB staff of the data provided in Appendix 2-IB provides the following average annual growth rates (measured as the geometric mean growth rate from 2009 to 2017).

Geometric Mean Annual Growth Rates 2009-2017, from Appendix 2-IB

	Customers	kWh (Weather Actual)	kW (Weather Actual)
Residential	0.5%	-0.5%	
GS < 50 kW	0.3%	-1.5%	
GS > 50 kW and Intermediate	0.9%	0.3%	-0.1%
Large Use - Regular	0.0% (6 customers throughout period)	1.4%	-0.1%
Large Use – 3TS and Ford Annex	-4.0% (from 4 to 3 customers in 2013)	-0.4%	-5.4%
Unmetered Scattered Load	0.1%	-7.9%	
Sentinel Lighting	-2.6%	-3.1%	-3.1%
Street Lighting	0.4%	-11.9%	-12.1%

Most of the decline is in terms of demand (kWh and kW). A few customer classes do show negative growth, but these classes have relatively few customers and

represent only a small fraction of EnWin Utilities' customer base. Residential and GS customer classes show small but positive growth in customers over that period.

- a) Please explain how EnWin Utilities is defining "stagnant customer growth" in Exhibit 4.

4-Staff-92

Ref: Exhibit 4, Page 23

EnWin Utilities identifies "[a] one-time write off related to traffic lighting occurred in 2016 in the amount of \$137 thousand for the period from 2011-2013" as being a factor in the variance in bad debt expense from 2017 compared to 2016.

Customers with traffic lights would typically be municipal or provincial governments or road authorities, who would normally be considered low risk.

- a) Please provide further explanation of the \$137,000 write-off related to traffic lighting.

4-Staff-93

Ref: Exhibit 4, Page 30

EnWin Utilities states the following with respect to Customer Service and Billings:

Customer Service & Billings

2017 Actuals	2020 Test Year	Variance
\$ 1,993,014	\$ 2,358,932	\$ 365,918

In 2017, approximately \$141,000 for system related costs for meter reading were recorded in administration and general expenses but in 2018 and going forward, those costs are being recorded in the customer service & billing category to better reflect the cost of meter reading. There is also an increase of approximately \$158,000 of expenses that were not incurred in 2017 due to vacancies within the call centre that are not expected to occur in the future therefore, the full cost of the call centre approved complement is being budgeted in the 2020 Test Year. Unplanned vacancies that create short term variances are out of the control of ENWIN.

- a) Please provide the following for the customer service & billing expense:
- 2018 actuals
 - 2019 Year-to-date actuals
 - 2019 updated year-end projection
- b) Please provide a table showing the variances of the 2020 test year budget compared to the 2018 actuals and the 2019 year-end projection.

- c) Was the call centre fully staffed at the end of 2018? Is the call centre fully staffed now? Please provide information on the following:
- i. the percentage of call centre staff complement that is vacant, and for how long this situation has persisted
 - ii. the factors affecting the degree and persistence of understaffing
 - iii. What efforts EnWin Utilities is undertaking to address the situation?
 - iv. Why EnWin Utilities believes that it will have a full complement of call centre staff for the 2020 test year?

4-Staff-94

Ref: Exhibit 4, Pages 14 and 35; Windsor Star Publication Jun 26, 2019

EnWin Utilities states:

For 2019 and 2020 ENWIN has projected inflationary increases of 2.25% for wages and salaries estimated as necessary given the strong economic climate in Windsor presently and local competitive forces for skilled trade positions.

EnWin Utilities further explains in employee compensation section that ENWIN has used an increase of 2.25% for the 2019 Bridge Year and 2.25% for the 2020 Test Year for wages and salaries and an increase of 2.0% for benefits, compared to 2.0% utilized for non-labour items.

OEB staff notes from the June 26, 2019 publication of the Windsor Star that **Enwin hydro** workers have ratified a new five-year collective agreement. **EnWin Utilities** Ltd. and the members of the International Brotherhood of **Electrical** Workers (IBEW) Local 636, representing the **hydro** division, said in a Tuesday news release that the workers had ratified the new deal. The agreement runs from April 1, 2019 to March 31, 2024. Unionized workers in **Enwin's** water division ratified a four-year agreement in February. The five-year deal announced Tuesday for about 60 unionized workers includes **two per cent wage increases** each year, plus some increases to boot and clothing allowances, benefits and shift premiums. [Emphasis Added by Staff]

- a) Please update the applicable employee wage increase for 2019 and 2020 using the new rate of 2% in the new five-year collective agreement.

4-Staff-95**Ref: Exhibit 4, Page 21**

EnWin Utilities provides the explanation of the increase in OM&A expense of \$657,301 due to the IT systems from 2009 actuals and 2010 actuals as follows:

The increase in costs were a result of the implementation of a new ERP system, specifically SAP. Costs declined in 2011 and 2012 back to the 2009 Board Approved levels once the system was fully implemented.

- a) Please explain the types of costs expensed in the 2010 OM&A due to the implementation of the new ERP system SAP.

4-Staff-96**Ref: Exhibit 4, Page 22**

EnWin Utilities explains the variance in 2019 OM&A as compared to 2018 due to the information systems of \$373,144 as follows:

The variance is a result of lower than normal operating costs as a result of delays in implementing a customer portal in 2018. The Bridge Year also contains cyber security related costs.

- a) Please provide the cyber security related costs that were included in the 2019 bridge year.

4-Staff-97**Ref: Exhibit 4, Page 23**

OEB staff notes that the bad debt expense fluctuates significantly over the period of 2009 to 2020.

- a) Please explain EnWin Utilities' accounting policy to accrue the annual bad debt expenses. If there has been a change of the policy in the period of 2009 to 2020, please explain the change.

4-Staff-98**Ref: Exhibit 4, Page 24**

EnWin Utilities, in explaining the cost driver of professional fee and consulting for the increase in 2018 forecast as compared to 2017 of \$278,228, states that

The 9 year average in audit, legal and consulting is \$863,258 for the periods 2009 – 2017. The 2017 year was unusually low with less legal and consulting work required compared to previous.

- a) Please provide the 2018 actual professional and consulting fee and update the figure.

4-Staff-99

Ref: Exhibit 4, Page 30

EnWin Utilities states that

At the time of filing, the 2017 balances were the most recent OEB filed actual results. The 2018 balances were forecasted and were not used in this analysis. As a result, the variance analysis below highlights the last filed actual balances with the Test Year.

- a) Please provide the program variance analysis of 2020 test year versus 2018 actual balances given the 2018 actual balances are available.
- b) Please explain the material variances.

4-Staff-100

Ref: Exhibit 4, Page 30; Exhibit 2, Page 27

EnWin Utilities explains the reasons of its 2020 general plant and vehicles expense is \$322k less than 2017 general plant and vehicles as follows:

ENWIN is planning on allocating more vehicle costs to capital and O&M in 2020 compared to 2017 Actuals. ENWIN is also attempting to extend the lives of vehicles and delay maintenance on buildings whenever possible. ENWIN does have control over these costs.

EnWin Utilities states in Exhibit 2 that it decided to move from leasing the vehicles to buy the vehicles in 2018 based on a lease versus buy analysis.

- a) Please provide the analysis.
- b) Please explain the saving of the 2018 actual and 2019 and 2020 forecast vehicle expenses in OM&A expense from this decision.

4-Staff-101

Ref: Exhibit 4, Pages 38 and 39

EnWin Utilities explains it uses the administration service only for the health and dental program for its employees:

Health & Dental Benefits – ENWIN has an Administrative Services Only (ASO) plan with Green Shield Canada. The plan has specific stop loss levels to protect ENWIN against individual claims in excess of a specific limit.

EnWin Utilities provides the costs for its health and dental in figure 4-16 below:

Page 39 |

	2009	2020	Change		
	Board	Proposed	2009 Board Approved		
	Approved	Test Year	to 2020 Test Year		
	\$	\$	\$	%	CAGR
OMERS	943,897	1,892,628	948,731	100.5%	6.5%
LTD Insurance	138,784	220,458	81,674	58.8%	4.3%
Life Insurance	351,862	305,312	(46,550)	-13.2%	-1.3%
Health and Dental Benefits	671,304	672,602	1,298	0.2%	0.0%
Total Company Benefits	2,105,847	3,091,000	985,153	46.8%	3.6%

Figure 4-16: Company Benefits Costs

OEB staff notes that the health and dental costs has increased slightly from 2009 to 2020 but it is account for almost 22% (\$672,602/\$3,091,000) of the total company benefits in 2020.

- a) Please provide the reasons that EnWin Utilities decides to use the Administrative Services Only plan instead of other options such as a fully insured plan.
- b) Please provide the other options that EnWin Utilities has in terms of health and dental plan (i.e. fully insured plan).
- c) Has EnWin Utilities considered the other options and performed the cost and benefit analysis?
 - i) If so, please provide the analysis.
 - ii) If not, why not.

4-Staff-102

Ref: Exhibit 4, Pages 46 and 47

In explaining the year-over-year variances for wages and benefits, EnWin Utilities states that

The increase in 2010 Actual wages compared to 2009 Actual wages for Management and Non-Management of \$263 thousand and \$ 729 thousand was due to the general rate increase for the year together with restructuring costs for changes in staffing.

OEB staff notes that the FTE headcount for non-management decreased by 5 from 2009 to 2010.

- a) Please explain why the non-management wages had increased by \$729k while the FTE decreased by 5 in 2010.
- b) Please provide the restructuring cost for the non-management in 2010.

4-Staff-103

Ref: Exhibit 4, Page 51

EnWin Utilities states that

Please refer to Attachment 4-I Study of Affiliate service Costs and Cost Allocation 2008 ("Study") performed by BDR North America Inc. ("BDR") in 2008 to review ENWIN's approaches to transfer pricing arrangements. An update to this Study was performed in 2012 and can be found in Appendix 4-J Allocation of Costs to Affiliates, Update to 2008 Study ("Study Update") to update changes since the 2008 Study. ENWIN continues to review and enhance where necessary its pricing methodology.

- a) Please confirm whether or not EnWin Utilities has updated its cost allocation study for its affiliated service costs since 2012?
 - i) If not, why not.
 - ii) When does EnWin Utilities plan to perform another study or update?

4-Staff-104

Ref: Exhibit 4, Attachment 4-J Allocation of Costs to Affiliates, Update to 2008 Study

The 2012 report provided in Attachment 4-J states that

Since that time, there have been changes in the services provided, and in the structure by which certain services are being provided. Specifically, an allocation of costs must now been made for CDM activities, the costs of which are recoverable from the Ontario Power Authority.

OEB staff notes how the allocation of costs for the CDM activities was not provide in the 2012 report.

- a) Please provide the allocation methodology for the CDM activities.

4-Staff-105

Ref: Exhibit 4, Page 54

EnWin Utilities provides a figure in explaining the variances as below:

Item	2009 Board Approved	2017 Actual	2020 Test Year	2020 Test Year vs. 2009 Board Approved	2020 Test Year vs. 2017 Actual
	\$	\$	\$	\$	\$
Price for the Services Provided	13,959,036	22,394,673	22,473,542	8,514,506	78,868
Costs for the Services Provided	12,152,294	21,684,366	21,861,824	9,709,530	177,457
Net Miscellaneous Revenue	1,806,742	710,307	611,718	- 1,195,024	- 98,589

Figure 4-26: Summary of Affiliate Services and Corporate Cost Allocations

EnWin Utilities explains the variances between 2020 test year and 2009 last rebasing year as below:

The two main factors for the increase in Price for services provided from the 2009 Board Approved amount and the 2020 Test Year are: the WSOA and inflation. The addition of direct water production, transmission, distribution, engineering and administrative services is neutral to the electrical utility but the non-utility revenue and costs filed in the USOA 4375 and 4380 accounts significantly increased as a result of the transition.

- a) Please explain why the costs increased more than the prices so that the net revenues has been decreased from 2009 to 2020.

4-Staff-106

Ref: Exhibit 4, Pages 60 and 61; Appendix 2-BB Service Life Comparison

OEB staff notes that the transportation equipment has 20 years useful lives which is above the maximum (10 years) range in the Kinetrics Report.

- a) Please explain the rationale of setting the transportation useful life as a much longer period of 20 years as compared to the range in Kinetrics Report.
- b) Please explain whether or not EnWin Utilities has performed an analysis of the increased maintenance expenses on the old equipment vs. the purchase of new equipment. If not, why not.

4-Staff-107

Ref: Exhibit 4, Section 4.14.1, p. 67

Tab 1-a (summary of changes) of LRAMVA workform (April 26, 2019)
Tab 5 of LRAMVA workform (April 26, 2019)

EnWin Utilities is applying to dispose of an LRAMVA debit balance of \$2,771,982 associated with new CDM program savings between 2017 and 2018, including persisting savings from 2011 to 2016 in 2017, persisting savings from 2011 to

2017 in 2018, and carrying charges up to December 31, 2019. The LRAMVA debit balance of \$2,771,982 includes both 2017 savings adjustments and unverified 2018 incremental savings results.

In Tab 1-a of the LRAMVA workform, EnWin Utilities states that it included unverified 2017 adjustments as the IESO announced on March 21, 2019 that they would not be providing LDCs with Final Verified Results Reporting for 2018-2020. For the justification of 2018 lost revenues, EnWin Utilities states in the application that it has relied on the monthly Participation and Cost reports for the 2018 implementation year.

- a) Please file a copy of the 2017 Final Verified Annual CDM Program Results Report in excel format.
- b) Please provide the source document for the 2017 savings adjustments included in the lost revenue calculation.
- c) Please file all applicable monthly Participation and Cost reports to substantiate the 2018 unverified savings by program in Tab 5 of the LRAMVA workform. Please provide the reports in excel format.

4-Staff-108

Ref: Tab 1-a & Tab 5 of LRAMVA workform (April 26, 2019)

Tab 5 of LRAMVA workform (2018 IRM Application, EB-2017-0037)

In Tab 1-a of the LRAMVA workform, EnWin Utilities notes that it overrode formulas in cells Y565 - AF571 of Tab 5 in order to ensure consistency between work form and calculations used in annual LRAMVA filings to the OEB. This suggests that EnWin program level savings (both incremental and persistent) and allocation splits have not changed from its previous LRAM filing in 2018 IRM application.

- a) Please confirm that the persistence of 2015 and 2016 program savings in 2017 reflects IESO verified adjustments from the 2017 Final Verified Annual CDM Program Results Report.
- b) Please show the inputs and calculations of the persistence of 2015 and 2016 program savings in 2017 in the LRAMVA workform, as they are not included in the pre-filed evidence.

4-Staff-109

Ref: Tab 1-a & Tab 6 of LRAMVA workform (April 26, 2019)

In Tab 1-a of the LRAMVA workform, EnWin Utilities notes the formulas in Table 6-a (2017 and Q1 2018 carrying charges) were overridden to allow EnWin

Utilities to pull LRAMVA amounts previously claimed to calculate carrying charges prior to disposition (May 1, 2018 - EB-2017-0037).

- a) Please explain in greater detail the rationale for not calculating carrying charges for 2017 and Q1 2018 based on the LRAMVA balance.

4-Staff-110

Ref: Tab 1 of the LRAMVA workform

Exhibit 9, Section 9.6.3, p. 26 of 37

2020 DVA Model, Tab 7 (Rate Rider Calculations)

In Exhibit 9, EnWin Utilities shows the breakdown of the LRAMVA balances by rate class. EnWin Utilities states that the residential LRAM amounts are proposed to be recovered through a monthly fixed charge. It appears that disposition of the residential LRAM is recovered through a volumetric charge, as shown in the DVA Model.

- a) Please confirm whether EnWin Utilities seeks to dispose of the residential LRAM through a fixed customer charge. If yes, please make the necessary revisions to Tab 7 of the DVA Model.

4-Staff-111

Ref: Tab 1 & Tab 1-a of LRAMVA workform (April 26, 2019)

- a) Please update the formula in row 85 of Table 1-b (Tab 1) to include the 2018 LRAMVA balance in Table 1-b of the LRAMVA workform.
- b) Please file an updated LRAMVA work form as a result of its responses to the above LRAMVA interrogatories.
- c) Please confirm any changes to the LRAMVA workform in response to these LRAMVA interrogatories in "Table A-2. Updates to LRAMVA Disposition (Tab 2)".

4-Staff-112

Ref: Exhibit 4 – Section 4.13, PILs

- a) Please provide a copy of the 2018 Income Tax Return
- b) Please provide an updated PILs model (using the updated 2020 OEB PILs model – attached as Appendix 2) for the historical, bridge and test years to align with EnWin Utilities' closing 2018 tax continuity schedules as appropriate (Schedule 4, Schedule 8, Schedule 13) and update any other areas of the application that include the 200 PILs forecast.

4-Staff-113

Ref: Exhibit 4 – Section 4.13, PILs Workform, Appendix 2-BA, Appendix 2-C

The depreciation expense for 2020 in Appendix 2-C is calculated as \$11,817,000, Appendix 2-BA shows \$11,500,628 and PILs Workform Tab T1 shows Amortization of tangible assets (additions for tax purposes under line 104) an amount of \$10,799,612 for the test year.

- a) Please explain the discrepancies in the numbers noted above, and provide updated PILs tax model tab T1 to align with the depreciation expense for the test year used elsewhere in the application.

4-Staff-114

Ref: Exhibit 4 – Section 4.13, PILs and Exhibit 9 Tab 2b.

The 2019 Budget Implementation Act (Bill C-97) was given royal assent on June, 21, 2019. Bill C-97 includes changes to the Income Tax Act that included new accelerated capital cost allowance (CCA) deductions on capital assets acquired after November 20, 2018. Generally speaking, the first-year CCA claim is three times the amount it would have been under the prior rules for these assets. The tax rates and rules assumed in Enwin Utilities' existing rates do not include these tax deductions.

- a) Please prepare an analysis to calculate the revenue requirement impact for 2018 as a result of the new accelerated CCA rules and adjust the Account 1592 principal and interest balances accordingly.
- b) Please provide the same analysis in a) above for calendar 2019 and confirm that EnWin Utilities will record these entries in Account 1592 during 2019. If this is not confirmed, please explain EnWin Utilities' position.

Exhibit 7 Cost Allocation**7-Staff-115**

Ref: Exhibit 7, pp. 3-4, 9

EnWin_2017_Load_Forecast_Model_20190517.xls, Sheet Customer Data

On page 9 of Exhibit 7, EnWin Utilities states:

In a letter, dated June 12, 2015, the Board stated that it expected distributors to be mindful of material changes to load profiles and to propose updates in their respective cost of service applications

when warranted. ENWIN is not aware of any reason for the load profiles to have materially changed between the classes. As a result, ENWIN has not updated its load profiles at this time.

On pages 3-4 of Exhibit 7, EnWin Utilities documents that it is proposing to eliminate two existing customer classes and migrate the customers in those classes to other existing customer classes. Specifically, EnWin Utilities is proposing to eliminate the GS 3000-4999 kW (Intermediate) class and migrate the three existing customers to the GS 50-4999 kW class. EnWin Utilities is also proposing to eliminate the Large Use – Ford Annex class and migrate the customer to the Large Use – 3TS class.

- a) What communication has EnWin Utilities had with each of the three customers in the Intermediate class who would be migrated to the GS 50-4999 kW class? Please indicate the communication that EnWin Utilities has done, and the reaction of the customers.
- b) Please provide the bill comparison of a “typical” Intermediate class customer under EnWin Utilities current approved Intermediate Class rates relative to:
 - i. EnWin Utilities’ current approved rates for the GS 50-2999 kW class
 - ii. EnWin Utilities’ proposed rates for the GS 50-4999 kW class.
- c) From the sheet “Customer Data” of EnWin_2017_Load_Forecast_Model_20190517.xls, EnWin Utilities documents 1,253 GS 50-2999 kW customers as of December 2017. EnWin Utilities is proposing to merge the 3 Intermediate (GS 3000-4999 kW) customers with these, and has reflected this proposal in its Cost Allocation model. The three Intermediate customers are already different from the existing GS 50-2999 kW class customers in having higher average monthly peak demands.
 - i. What is the average or median peak monthly demand for an existing GS 50-2999 kW class customer?
 - ii. How has EnWin Utilities reflected the integration of the GS 50-2999 kW and Intermediate classes into its proposed GS 50-4999 kW class in the Cost Allocation model? Has it done any direct allocation?
 - iii. How has EnWin Utilities satisfied itself that the allocators for both the existing GS 50-2999 kW and Intermediate customers are consistent enough so that its simple merging of class data is reasonable for purposes of cost allocation?

- iv. How has EnWin Utilities satisfied itself that its proposed merger of these two classes and its approach to reflecting this proposal in the cost allocation study does not have unintended and adverse impacts on the allocation of costs for this or other customer classes? Specifically, what alternative analyses has EnWin Utilities done, such as a counterfactual analysis assuming no merger?
- d) OEB staff note that Ford PowerHouse is an existing LU – 3TS customer of EnWin Utilities. What communication has EnWin Utilities had with the LU – Ford Annex customer regarding the migration of this customer to the LU – 3TS class. Please indicate the communication that EnWin Utilities has done, and the reaction of the customer.
- e) Please provide the bill comparison the LU – Ford Annex customer for “typical” demand and consumption under EnWin Utilities current approved LU – Ford Annex Class rates relative to:
 - i. EnWin Utilities’ current approved rates for the LU – 3TS class
 - ii. EnWin Utilities’ proposed rates for the LU – 3TS class.
- f) In Section 7.3.5, EnWin Utilities documents a direct allocation of costs for the existing LU – 3TS customers in the cost allocation model.
 - i. Does this direct allocation reflect the proposed integration of the LU – Ford Annex customer into the LU – 3TS customer class?
 - ii. If not, where are the costs and allocators for this customer reflected in the cost allocation model?

Exhibit 8 Rate Design

8-Staff-116

Ref: Exhibit 8, Pages 14-16

EnWin Utilities states that there are two options for the MIST meter conversion:

- A. Public carrier cellular communication. ENWIN had previously established a private APN with a public carrier that using compatible cellular modems would reliably backhaul the necessary meter data for this rate group.
- B. Existing Smart Meter Advanced Metering Infrastructure (AMI) network. The vendor supported ENWIN to evaluate current infrastructure capacity and what optimization and/or level of investment is necessary to accommodate new meters in the future. At the time, the MIST communications technology was not available to meet the August 2020 deadline on our existing Smart Meter Network.

EnWin Utilities is proposing a new specific service charge for the option 1 as below:

ENWIN hereby makes application to the OEB for the creation of a new Specific Service Charge (being a monthly “Cellular Meter Reading Charge”) in the amount of \$7.50 to be applied to customers adopting Option 1: Public Carrier Cellular Internet Communication.

OEB Staff notes from the installed base for the \$7.50 monthly charge is 825 meters.

Enwin Utilities states that

Currently ENWIN has no reasonable estimate of the potential uptake of the various options to be proffered to the 966 demand metered customers however based on the communications cost comparisons we anticipate >80% cellular penetration.

- a) Please explain how the installed base of 825 meters for the option 1 is derived and the basis of the assumption(s) used if any.
- b) Please confirm the \$7.50 monthly charge is charged to all demand customers who choose the option 1. If so, why.

Exhibit 9 Deferral and Variance Accounts

9-Staff-117

Ref: Exhibit 9; DVA Continuity Schedule; GA Analysis Workform

- a) OEB staff notes that the “Principal Adjustments during 2018” for Accounts 1588 and 1589 pertain to the reversals for the previous year (reconciling item 1b and 2b in 2017). OEB staff notes that there are no 1b and 2b reconciling items for 2018 on the GA workform. Please confirm that the 2018 variances presented on the DVA continuity schedule have been calculated in accordance with the APH Accounting Guidance dated February 21, 2019, i.e. all true-ups are reflected in EnWin Utilities’ 2018 GL balance for disposition.
 - i. Did EnWin Utilities keep its books of accounts open long enough to include all true-ups for 2018 in 2018 balances?
- b) OEB staff notes that EnWin Utilities is showing principal adjustments for Accounts 1508, Sub-account - Other (Productivity Initiatives) and Account

1518 in 2018. Please explain why these adjustments were made? Please explain the nature of these adjustments. If the adjustment is related to the prior periods, please breakdown the adjustment into transaction debits by each of the prior year.

- c) OEB staff notes that EnWin Utilities is showing principal adjustments for Accounts 1531 and 1532 in 2018. Why were these adjustments made?
- d) OEB staff notes that EnWin Utilities did show transactions in Accounts 1531 and 1532 up to year 2017.
 - i. Does EnWin Utilities have a balance in these accounts? If so, how much?
 - ii. Why is EnWin Utilities not proposing disposition of these accounts in this proceeding, as all Group 2 accounts must be disposed in a cost of service proceeding?
 - iii. Did EnWin Utilities follow the APH accounting guidance, including the March 2015 guidance for these accounts?
 - iv. The 2015 accounting guidance indicates that these accounts must be discontinued after a distributor has filed a DSP in a cost of service proceeding. Please confirm that EnWin Utilities would discontinue the use of these accounts in accordance with the OEB policy.
 - v. Please update EnWin Utilities' Group 2 rate rider including disposition of Accounts 1531 and 1532.

9-Staff-118**Ref: GA Analysis Workform for 2018**

The 2018 GA Analysis Workform shows a reconciling item #8 for the billing adjustment of \$942,819.

- a) Please provide a detailed explanation for this adjustment.

9-Staff-119**Ref: Exhibit 9, Section 9.4, pages 16 – 17; EnWin Utilities' 2009 CoS application EB-2008-0227 Settlement Agreement, Page 26**

The settlement agreement of EnWin Utilities' 2009 CoS application stated that:

The Parties have agreed to the establishment of a new deferral account to be called the "Productivity Initiatives Deferral Account" to enable EWU to retain external experts and to facilitate stakeholder involvement to further EWU's productivity initiatives. The Parties propose that this account be a subaccount of 1508 "Other Regulatory Assets". The account would include expenditures of up to \$100,000 per year paid to external persons, including both experts and stakeholders, to assist in developing or assessing productivity initiatives. Internal costs associated with such initiatives are included in the Base Revenue Requirement. Disposition of the Productivity Initiatives Deferral Account would be reviewed in EWU's next rebasing rate case.

EnWin Utilities is requesting recovery of \$977,507 in Account 1508, Sub-account Other (Productivity Initiatives).

OEB staff summarizes the continuity schedule for this account using the 2018 DVA workform filed by EnWin Utilities as below:

2013		2014	2014-2017	2018				2019	
Opening Bal.	Interest (Opening + 2013)	Transaction Debits	Interests	Transaction Debits	Principle adjustment	Interest	Interest adjustment	Interest	Total Request
307,871	10,682	15,447	15,855	100,000	476,682	16,638	14,105	20,228	977,508

- a) Please confirm the above table prepared by staff.
- b) Please provide a breakdown of the 2013 opening balance of \$307,871 to the prior years showing how this opening balance was derived by year.

- c) For each of the transaction debits made in the account from 2009 to 2018, please discuss in detail the related productivity initiatives EnWin Utilities undertook and the funds spent on each activity.
- d) Please confirm that the expenditures recorded in the accounts were 100% incurred and paid to the external persons but not the internal costs.
- e) Did the external experts retained by EnWin Utilities make any recommendations with respect to the productivity initiatives?
 - i) If 'yes' to the previous question sub-part, what were they, and have they been implemented?
- f) Did the productivity initiatives result in measurable outcomes and productivity gains?
- g) Please discuss the productivity improvements that have been accomplished as a result of investing in the productivity initiative activities.

9-Staff-120

Ref: Exhibit 9, pages 16 to 18; Appendix 2-H Revenue Offsets

a) Account 1518 Retail Cost Variance Account

EnWin Utilities is requesting a debit balance of \$319,456 for disposition.

According to the APH:

This account shall be used monthly to record the net of: i) revenues derived, including accruals, from the following services: a) Establishing Service Agreements; b) Distributor-Consolidated Billing; and c) Retailer-Consolidated Billing. AND ii) the costs of entering into Service Agreements, and related contract administration, monitoring, and other expenses necessary to maintain the contract, as well as the **incremental costs** incurred to provide the services in (b) and (c) above, as applicable, and the avoided costs credit arising from Retailer-Consolidated Billing, including accruals. [Emphasis added]

- i. Please confirm that all costs pertaining to RCVA Retailer causing variance in this account are incremental to the costs that were built in EnWin Utilities' rates for years 2009 – 2018.
- ii. Please describe in detail EnWin Utilities' process for determining the amounts that were recorded in Account 1518 from 2009 to 2018.

b) Revenue offsets

- i. Please confirm that EnWin Utilities has included the revenues in Appendix 2-H for retail services in its proposed distribution rates using the updated charges outlined in the EB-2015-0304 Decision and Order. If this is not the case, please explain why not.
- ii. Please confirm that EnWin Utilities has implemented the new service charges outlined in the Decision and Order above with respect to retail services as of May 1, 2019, and has continued to accumulate the retail service cost and revenue variances in Accounts 1518 and 1548. If this is not the case, please explain why not.
- iii. Please provide EnWin Utilities' best estimate of what the Account 1518 and 1548 balances will be as of the end of December 31, 2019, given year to date amounts and projections for the remainder of 2019.
- iv. Does EnWin Utilities believe that it can reasonably forecast the December 31, 2019 balances in these accounts? If so, what would EnWin Utilities' position be with respect to disposing these amounts in the current application, as well as discontinuing these accounts effective January 1, 2020, given that EnWin Utilities would discontinue the use of these accounts?
- v. If EnWin Utilities can reasonably forecast the December 31, 2019 balance in Accounts 1518 and 1548, please make this adjustment in the DVA continuity schedule and recalculate the amount requested for disposition and the associated rate riders.
- vi. The use of Account 1518 and Account 1548 is predicated on the fact that retail service costs and revenues are excluded from distribution rates (and thus are recorded in variance accounts instead). Please confirm that EnWin Utilities excluded these items from the calculation of their distribution rates in their prior rate application. If this is not the case, please explain, in detail, the types of costs and revenues included in distribution rates versus the ones that have been recorded in these variance accounts.

c) Account 1508 – Sub-account Pole Attachment Revenue Variance

EnWin Utilities has proposed to dispose of the excess pole rental revenue earned up to December 31, 2018, which was recognized as a result of the charge increasing from \$22.35 to \$28.09 in September 30, 2018.

- i. Please confirm that EnWin Utilities has included the most recent charge of \$43.63, effective January 1, 2019, for the purposes of

forecasting other operating revenue. If this is not the case, please explain why not.

- ii. EnWin Utilities has proposed to discontinue this Sub-account in 2020. Please confirm that EnWin Utilities commenced charging the Pole Rental rate of \$43.63 as of January 1, 2019, and has been recording the difference between \$43.63 and \$22.35 in this sub-account during 2019. If this is not the case, please explain why not.
- iii. Does EnWin Utilities believe that it can reasonably forecast the December 31, 2019 balance in the Pole Rental Revenue account? If so, what would EnWin Utilities' position be with respect to refunding these amounts in the current application and discontinuing this sub-account effective January 1, 2020, rather than waiting until the subsequent cost-based application?
- iv. Please provide EnWin Utilities' best estimate of what the Pole Rental Revenue sub-account balance will be as of the end of December 31, 2019, given year to date amounts and projections for the remainder of 2019.
- v. If EnWin Utilities can reasonably forecast the December 31, 2019 balance in the Pole Rental Revenue account, please make this adjustment in the DVA continuity schedule and recalculate the amount requested for disposition and the associated rate riders.

9-Staff-121

Ref: Exhibit 9, Page 19

EnWin Utilities has stated that is not requesting disposition of Account 1557, Meter Cost Deferral Account – MIST Meters in this application. OEB staff notes that Group 2 accounts can only be disposed of in a rebasing proceeding. Also, the OEB policy is to dispose of all account balances in the cost of service proceeding.

- a) Please provide justification for EnWin Utilities' proposal to not dispose of the balance in Account 1557 in this proceeding.
- b) What is the balance in Account 1557 – Sub-account Capital, and Sub-account OM&A as of December 31, 2018?
- c) What percent of MIST meter deployment was completed as of December 31, 2018?
- d) Using the revenue requirement methodology (from the in-service date of the investment to January 1, 2010), similar to the one used in the disposition of smart meter deferral account balances, please calculate the rate riders for Account 1557.

- e) Please roll the undepreciated capital cost into the rate base calculation for the test year, ensuring that the rate base is correctly reflected for the historic, bridge and test years.

9-Staff-122

Ref: Exhibit 9, Pages 21 to 22

EnWin Utilities is requesting a new deferral account to record a one-time net gain on sale of the property at 787 Ouellette Avenue. The “Net Gain” is defined by EnWin Utilities as the Actual Gain on the sale of the property, minus the water proportion, with the remainder shared 50% to the shareholder and 50% to the ratepayer. EnWin Utilities has defined the “Actual gain” as the proceeds from the sale of the property, minus the closing costs, minus the net book value.

- a) EnWin Utilities has discussed the causation, materiality and prudence of the new deferral account and stated that the estimated gain of \$576,062 from the sale of the property was removed from the other revenues in 2020. EnWin Utilities also states that the estimated gain is depending on the OEB’s approval of EnWin Utilities’ business plan. Is this asset included in the calculation of the rate base in this application?
 - i) If so, please indicate what portion of this particular asset is included in the PP&E for the purpose of the rate base calculation (i.e. electricity vs. the water portion).
 - ii) If “yes” to the previous sub-part of this question, please discuss how is EnWin Utilities proposing to account for the excess amount in its revenue requirement over the IRM term when the property would no longer be used for the electricity business (i.e. after it has been sold).
- b) Why does EnWin Utilities think it is appropriate to share only 50% of the net gain with the ratepayer when the rate payer has paid 100% for it over the years when it was in EnWin Utilities’ rate base?
- c) Please confirm that the account would not be needed if the OEB does not approve the proposed business plan regarding the consolidation of the facilities.
- d) Please provide a detailed draft accounting order, including details such as the purpose, effective date (from and to), how the amounts would be calculated and recorded in this account, when the account would be brought to the OEB for disposition, whether and how the carrying charges would apply.

9-Staff-123

Ref: Exhibit 9, Page 23; the OEB letter issued on February 9, 2016

In an OEB letter dated February 9, 2016 where Account 1508 – OEB Cost Assessment Variance Account was established, stated the following:

Regulated entities are to cease recording amounts in these accounts when their rates, payment amounts or fees (as applicable) are rebased/reset (cost of service or customer IR) incorporating an updated forecast of cost assessments.

.....Regulated entities are expected to seek disposition of the variance account balances when their rates, payment amounts or fees, as applicable, are next rebased/reset, and the accounts will be closed to any further entries at that time.

- a) In light of the above OEB letter, please provide EnWin Utilities' rationale for its proposal to continue this account.

9-Staff-124

Ref: Exhibit 9, Page 23: EnWin Utilities' proposal for Continuance of Smart Grid Accounts 1534 & 1535; the OEB Accounting Guidance issued in March 2015

The OEB accounting guidance of March 2015 stated the following:

Under the most recent policy direction of the OEB, the existing deferral accounts for renewable generation connection and smart grid development are to be discontinued following the approval of a rate order that is underpinned by a distributor's first consolidated DS plan. Additionally, the distributors filing cost of service applications in 2014 and subsequent years must include proposals for disposition of any existing balances relating to.....deferral Account 1534 Smart Grid Capital Deferral Account and Account 1535 Smart Grid OM&A Deferral Account

- a) In light of the above OEB guidance, please provide EnWin Utilities' rationale for its proposal to continue the Smart Grid accounts 1534 and 1535.

9-Staff-125**Ref: Exhibit 9, Pages 25 to 26**

EnWin Utilities provides the Table below for the Non-RPP billing determinants:

Line No	Rate Class	Percent of 2018 kWh	2020 Non-RPP kWh	Percent of 2018 kW	2020 Non-RPP kW
1	RESIDENTIAL	2.81%	15,610,676	-	-
2	GS<50 KW	13.91%	27,195,353	-	-
3	GS>50 - 4,999 KW	81.51%	742,476,099	80.83%	2,071,136
4	LARGE USE REGULAR	100.00%	281,863,540	100.00%	542,339
5	LARGE USE 3TS	100.00%	277,391,364	100.00%	528,993
6	STREET LIGHT	99.72%	6,400,935	99.72%	18,379
7	SENTINEL	8.59%	63,183	8.53%	174
8	UNMETERED SCATTERED LOAD	96.01%	2,133,170	-	-
9	Total		1,353,134,321		3,161,021

It is not clear to the staff how Table 9-14 is calculating the load forecast. For example the columns “Percent of 2018 kWh” and “Percent of 2018 kW” do not each add to a total of 100%.

- a) Please clarify and provide an amended Table 9-14 as necessary.

9-Staff-126**Ref: Exhibit 9, Page 32**

EnWin Utilities has indicated that settlement for embedded generation is performed with a one month lag and is based on the balance in Enwin Utilities' general ledger for generation (MicroFit and FIT) less Cost of Power.

- a) Are EnWin Utilities' commodity account balances as of December 31, 2018 proposed for disposition, presented on trued-up costs basis?
- b) When was the embedded generation related Cost of Power for December 2018 settled with the IESO, and when was it recorded in EnWin Utilities' general ledger?

When were the embedded generation and Class A volumes for December 2018 reported to the IESO for the purpose of the determination of Charge Type 148 (per OEB's February 21, 2019 Accounting Guidance, Section IV)? And when was this recorded in EnWin Utilities' general ledger?

9-Staff-127**Ref: Updated Evidence received June 11, 2019; Appendix 2-EA**

The updated evidence states:

For Account 1575 IFRS-CGAAP Transitional PP&E Amounts, EnWin Utilities originally filed Appendix 2-EA using 2018 forecast values. The

value included in KPMG's audit report represents actual values for 2018. EnWin Utilities is working on updating Appendix 2-EA with 2018 actuals and will be prepared to file this updated information during interrogatory responses.

OEB staff notes from Appendix 2-EA that the net depreciation from 2011 to 2019 for PP&E value under MIFRS matches with the addition in accumulated depreciation of 2011 to 2019 before excluding the fully allocated depreciation for transportation and stores equipment. Please see below for 2019 as an example:

	2019 Bridge Year
	MIFRS
Net Depreciation per Appendix 2-EA	(12,779,291)
Net Depreciation per Appendix 2-BA (cell k723)	(12,498,480)
Diff	(280,811)

Fully Allocated Depreciation per Appendix 2-BA	2019 Bridge Year
Transportation	(251,760)
Stores Equipment	(29,051)
Total fully allocated depreciation	(280,811)

- a) Please confirm the above staff observation as illustrated in the tables.
 - i) If confirmed, please explain why EnWin Utilities is not using the fully allocated depreciation for the purpose of calculating the balance in Account 1575.

- b) If applicable, please file an updated Appendix 2-EA, as well as the underlying Appendices 2-BAs (fixed asset schedules) and 2-Cs (depreciation schedules) to support the balance for disposition in Account 1575.

9-Staff-128

Ref: the updated evidence filed on June 11, 2019; Appendix 2-EA

The updated evidence filed by EnWin Utilities on June 11, 2019 includes an audit report for EnWin Utilities' 2018 DVA balances. Staff notes that the audit opinion on page 1 of the KPMG audit report states:

We have audited the accompanying schedule of Group 1 regulatory balances of EnWin Utilities Ltd. (the entity) as at December 31, 2018 and notes to the schedule including a summary of significant accounting policies (Hereinafter referred to as the "schedule").

In our opinion, the accompanying schedule as at December 31, 2018 of the Entity is prepared, in all material respects, in accordance with Article 490 of the Accounting Procedures Handbook for Electricity Distributors as published by the Ontario Energy Board effective January 1, 2012 and Guidance and Frequently Asked Questions issued by the Ontario Energy Board from time to time.

OEB staff notes that the 2018 audited balance for Account 1575 is (21,594,606.03).

- a) Please provide the materiality threshold used in the audit of the 2018 DVA balances.
- b) Please explain how EnWin Utilities has ensured that the forecasted 2019 transactions that are recorded in Account 1575 and to be disposed in this rate application are reasonably accurate.