Toronto Hydro intends to remain in compliance with Ontario Regulation 22/04 through the 2020-2024 period. The utility's performance under the measure is enabled through a number of programs included in Exhibit 2B, Sections E5-E8, and Exhibit 4A, Tab 2.

### 1.9 Safety: Serious Electrical Incident Index

Toronto Hydro has surpassed the distributor targets, with only one reporting incident in the three years, which results in a ratio of 0.035 incidents per $1,000 \mathrm{~km}$ of line for 2017. /C

For the 2020-2024 period, Toronto Hydro intends to meet or exceed the relevant distributor target for this measure. The mitigation of public safety risk is enabled by a number of programs included in Exhibit 2B, Section E5 and E6 and Exhibit 4A, Tab 2.

### 1.10 System Reliability: SAIDI / SAIFI

Toronto Hydro's average SAIDI performance for the 2013-2017 period was 0.96 while the average SAIFI performance for the period was 1.26. The utility's annual SAIDI and SAIFI results have met or exceeded the OEB's distributor target during this period. Please see Exhibit 1B, Tab 2, Schedule 4 for a comprehensive discussion on the underlying causes of system interruptions captured by SAIDI and SAIFI.

For the 2020-2024 period, Toronto Hydro intends to continue its strong performance and maintain system reliability performance at the 2013-2017 average. ${ }^{5}$ The utility's performance under the measure is enabled through a number of programs including Area Conversions (Exhibit 2B, Section E6.1), Network System Renewal (Exhibit 2B, Section E6.4), and the Underground and Overhead System Renewal programs (Exhibit 2B, Section E6.2, E6.3, and E6.5).

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## LETTERS OF COMMENT RESPONSES

Pursuant to section 2.1.7 of the OEB's Chapter 2 of the Filing Requirements for Electricity Distribution Rate Applications (July 12, 2018), Toronto Hydro provides in this schedule responses to all public letters of comment currently on the record. The utility will further update this section with any additional letters received and replies provided prior to the argument phase of the proceeding.

Toronto Hydro notes that a number of the letters of comment received to date were submitted either before or after the community meetings for this application, which were held from November 22 through December 6, 2018. Toronto Hydro did not have access to the list of attendees for those meetings, and unless they have self-identified as a community meeting attendee, it is not possible for Toronto Hydro to identify which of these individuals attended the community meetings, and may or may not be responding to what they heard from the utility, the OEB, or others at the community meetings. For that reason, unless the commenter has self-identified as a community meeting attendee, Toronto Hydro has responded to each letter assuming that the writers were not in attendance at the community meetings. Toronto Hydro apologizes to the authors of the letters if it is repeating something that they may have already heard from the utility or others during the community meetings, and encourages any and all customers to contact Toronto Hydro at any time should they have questions, comments or concerns via https://www.torontohydro.com/sites/electricsystem/Pages/ContactUs.aspx .

Please also see the process and results for Toronto Hydro's customer engagement activities, including those related to this application, in Exhibit 1B, Tab 2, Schedule 1.

## Letter of Comment: Dean Lancaster: October 4, 2018

I do not believe Toronto Hydro has sufficiently informed the public on why rates are increasing. Rates should be decreasing assuming Toronto Hydro is operating in the interest of the people of Toronto, and any rate increase should be carefully considered along with supporting data to provide evidence as to the reasoning behind rate increases. Toronto Hydro should be requested to justify it's rates vs. other similar jurisdictions with a similar power distribution model (i.e. benchmarking against other Hydro-power majority source providers) along with exploring any opportunities for cost reduction through modernization etc. I believe careful regulation and transparent accounting practices are vital to ensuring a "good deal" for the people of Ontario within our current energy operating model - and with today's data-driven accounting platforms, this should be very easy to implement whilst balancing regulatory burden on Toronto Hydro.

## Toronto Hydro Reply

Dear Mr. Lancaster,
Thank you for your letter of comment. Toronto Hydro recognizes your frustration in lacking access to information about how we have informed the public on why rates are increasing, and your interest in us supporting the proposed increase with data and evidence.

Toronto Hydro has taken a number of steps to not only inform, but also engage the public about the amount of the proposed rate increase, and why we believe this plan achieves the appropriate balance between factors such as price, safety, reliability, and service. In addition to our ongoing customer engagement activities, as part of developing our plan and having that plan tested by the Ontario Energy Board in an open
public process, Toronto Hydro heard from over 10,000 customers, through channels that include:

- Phase 1 customer engagement (2016/17): we asked for input and feedback from customers about their needs, priorities and outcomes they value - we used the results to help develop our business plan.
- Phase 2 customer engagement (2018): before we filed our business plan with the Ontario Energy Board, we went back to customers to confirm that we correctly understood their input from phase 1, and then asked for additional customer input and feedback on the plan itself (including costs of the plan). Approximately 2/3 of customers supported Toronto Hydro's plan, or one that does even more to improve services.
- Community Meetings (2018): after we filed our business plan with the Ontario Energy Board, we attended six community meetings between November 22 and December 6, 2018 to make a presentation on our plan (including the costs), receive feedback from customers and others in attendance, and answer questions.

Toronto Hydro's costs take up approximately one third of the average residential customer's bill. As a result of Toronto Hydro's five year plan for 2020-2024, a typical residential customer can expect an average annual increase of $1.7 \%$ on the Delivery line of the bill, and less than half of one percent on the total electricity bill. We have supported our request for this increase with approximately 4,300 pages of data and evidence filed with the Ontario Energy Board, including many details about our accounting assumptions and practices.

Toronto Hydro believes that the proposed rate increase is necessary to keep the lights on, maintain a grid that provides a safe source of electricity, and ensure that we are a steward of long-term service and value for our customers. Factors driving this rate increase include deteriorating infrastructure, a growing city, more extreme weather, workforce retirements and renewal, and technology advancements including protecting against cyber threats.

We're always looking for ways to minimize cost and rate increases through finding productivity and efficiencies in our plans and work. For example, as part of reducing our facilities footprint in Toronto, we consolidated from 7 operating centers down into 4. As part of this consolidation, we sold properties, and are returning proceeds of close to $\$ 140 \mathrm{M}$ to customers to help reduce bills.

As part of our business plan, Toronto Hydro asked external experts to assess our performance, including benchmarking with respect to productivity, reliability, and unit/cost efficiency. The results of those studies (which are publicly filed with our plan) demonstrate that Toronto Hydro's performance is similar or better than peer utilities.

Finally, Toronto Hydro took what it heard from customers about their priorities, and used this to create a customer-focused outcomes framework to measure its performance during the plan. As part of this plan, we propose to publicly report annually on how we're performing against over 40 unique measures that relate to our goals and objectives - measures such as how frequently you lose power, and when you do lose power, how long it takes us to get it back on.

If you are interested in learning more about Toronto Hydro's proposed plan, the executive summary of Toronto Hydro's application to the Ontario Energy Board may be a helpful document to begin with, and is available at Exhibit 1B, Tab 1, Schedule 1.

Letter of Comment: Lilly Mclsaac: November 20, 2018
I object to rate changes and believe that ratepayers deserve to have more options regarding electricity use and billing. As a homeowner, I do not require a smart meter to tell me when to use my electricity and I never consented to time of use rates or to having a smart meter (RF) emitting device installed on my property. I have developed a disability called microwave sickness which prevents me from being in areas where there are wireless and radio frequencies. It has gotten to the point where I cannot even live comfortably in my own home because I have: headaches (particularly tension headaches along the sides of the head and temple area, heart palpitations and a pressure in the chest (a feeling that the heart wants to jump out of the chest while at the same time the chest is being stepped upon), skin burning, redness, rashes and tingling (particularly on the face and arms), difficulties sleeping (sleep is interrupted, light, dreamless and leaves the person feeling tired in the morning), Tinnitus (ringing in the ears), fatigue and tiredness during the day (even after many hours of sleep, tiredness pervades the day), and cognitive decline (memory and concentration difficulties - a "brain fog". All of these symptoms either disappear or get better when I am in an environment without wireless and radio frequencies, but they return when I am home. People who have symptoms form microwave radiation exposure need accommodation and the ability to opt out of the smart meter / time of use billing without additional costs to do so. I would like Toronto Hydro to offer an opt out for people with disabilities due to radio frequency and microwave (EMF) exposure such as myself. We deserve to live in a safe home without being penalized for asking that the meter be an analogue meter and one which
does not emit harmful emissions. The public has net seen any benefits to having a smart meter and in fact, the smart meter program increased costs for consumers, yet no one has seen any benefit, except for the electricity providers who saved on the cost of employing meter readers. That savings has not been passed on to consumers, not have consumers seen a decrease in electricity bills due to having a smart meter. Our smart mete $r$ is "on" all of the time - even when we turn off our electricity inside our home. The signals wake us up every hour at night and prevents us from getting proper sleep. We have tracked this and it happens at approximately the same time every night. We would like the OMB to change the billing to allow for an opt out of the smart meter program and not agree to more rate increases. Thank you.

## Toronto Hydro Reply

Dear Ms. Mclsaac,
Thank you for your letter of comment. Toronto Hydro is sorry to hear about your experience, which we understand must be difficult.

Toronto Hydro uses a smart meter system that uses wireless technology to deliver the data from each meter to our billing system. Each smart meter has a low power transmitter that communicates with a device known as a gatekeeper, which in turn delivers the meter reading data to our billing system.

Toronto Hydro's customers have identified safe operation of the distribution system as one of their top three priorities. Toronto Hydro will only install smart meter models that have been extensively tested by the manufacturer and clearly demonstrate Radio Frequency ("RF") emissions that are below the City of Toronto precautionary recommendations and the Health Canada Safety Code 6 guideline.

These meters are valuable tools in maintaining the safety and reliability of the grid, as they assist distributors in identifying outages, including during major weather events.

Toronto Hydro is not able to offer you the ability to opt-out of Time of Use rates or using a smart meter, as they are required by provincial law and regulation. Although Toronto Hydro is able install a non-RF transmitting smart meter equipped with a regular telephone connection for you. There is however a cost associated with the installation of the telephone connection and its monthly operation, currently \$201.77 and $\$ 23.13 /$ month respectively.

Regarding rate increases and our plan to invest in the grid, you may also be interested in our reply to Mr. Lancaster's letter of October 4, 2018.

## Letter of Comment: Beverly Brooks: November 22, 2018

This session was extremely disappointing. Neither the OEB or Toronto Hydro has any answers to questions. The first gentleman who gave a presentation had some excellent questions - the same questions that he had in a previous occasion. No answers were provided and he commented that he had never received answers to his previous questions. I strongly oppose the rate increases - nothing I heard tonight justifies the increases.

## Toronto Hydro Reply

Dear Ms. Brooks,
Thank you for your letter of comment. Toronto Hydro is sorry that you were disappointed with the community meeting presentations and responses to questions by OEB and Toronto Hydro staff. Recognizing the value of your time, if you have any
specific feedback on how we in particular can do better, we would appreciate receiving that.

Regarding the gentleman who provided the presentation and asked questions, we believe you are speaking about Mr. Hann. We did not have the information readily available to answer those questions at the community meeting, and even if we had, providing the answers would have taken a number of hours and eliminated the time for other customers to provide their feedback and ask questions at the meeting. As you may recall, during the community meeting, we committed to providing written answers to Mr. Hann's questions on the public record as part of our application process before the Ontario Energy Board. As the OEB has since granted Mr. Hann intervenor status in this proceeding, he has now filed those and other questions in writing and Toronto Hydro is responding to them as part of the public record at the same time as filing this reply to your letter of comment.

Regarding rate increases and our plan to invest in the grid, you may also be interested in our reply to Mr. Lancaster's letter of October 4, 2018.

## Letter of Comment: Christine Douglas: November 22, 2018

 Please see the attached. I prepared a chart which is attached. The charges are in addition to my usage. As a single individual I am paying as much as a neighbour who is using hydro electricity - air conditioner, washer dryer, heat \& I am paying as much as she and her family of 4 people.Attachment:
Toronto Hydro Charges

| DATE | DAYS | USAGE | CHARGES |
| :--- | ---: | ---: | ---: |
| MAY 9/11 | 40 | 49.06 | 53.46 |
| MAR 4/13 | 63 | 93.76 | 91.61 |
| MAY $2 / 13$ | 61 | 91.56 | 88.66 |
| SEPT 11/13 | 99 | 95.13 | 137.99 |
| OCT 30.13 | 62 | 82.92 | 91.17 |
| DEC 31/13 | 60 | 83.41 | 87.86 |
| TOTAL: | $\mathbf{3 8 5}$ | $\mathbf{4 9 5 . 8 4}$ | $\mathbf{5 5 0 . 7 5}$ |


| FEB 28/14 | 63 | 95.16 | 96.81 |
| :--- | ---: | ---: | ---: |
| MAY 1/14 | 60 | 90.33 | 91.41 |
| JUL 18/14 | 60 | 87.19 | 89.92 |
| AUG 29/14 | 62 | 98.07 | 97.77 |
| OCT 30/14 | 60 | 88.13 | 89.58 |
| DEC 31/14 | 60 | 117.335 | 74.32 |
| TOTAL: | $\mathbf{3 6 5}$ | $\mathbf{5 7 6 . 2 1 5}$ | $\mathbf{5 3 9 . 8 1}$ |


| MAR 2/15 | 63 | 106.22 | 100.95 |
| :--- | ---: | ---: | ---: |
| MAY 1/15 | 62 | 97.88 | 95.45 |
| JUN 30.15 | 58 | 87.9 | 81.36 |
| AUG 31/15 | 62 | 101.35 | 91.5 |
| OCT 28/15 | 58 | 92.42 | 83.82 |
| DEC 30/15 | 61 | 98.83 | 87.28 |
| TOTAL: | $\mathbf{3 6 4}$ | $\mathbf{5 8 4 . 6}$ | $\mathbf{5 4 0 . 3 6}$ |


| FEB 26/16 | 62 | 109.43 | 105.04 |
| :--- | ---: | ---: | ---: |
| APR 29/16 | 63 | 108.83 | 122.37 |
| JUN 28/16 | 58 | 103.05 | 115.15 |
| AUG 29/16 | 62 | 147.09 | 148.97 |
| SEPT 29/16 | 31 | 75.63 | 71.85 |
| OCT 28/16 | 31 | 48.04 | 57.24 |
| NOV 29/16 | 30 | 50.77 | 57.3 |
| DEC 30/16 | 29 | 50.46 | 56.79 |
| TOTAL | $\mathbf{3 6 6}$ | $\mathbf{6 9 3 . 3}$ | $\mathbf{7 3 4 . 7 1}$ |


| JAN 30.17 | 33 | 57.89 | 59.13 |
| :--- | ---: | ---: | ---: |
| FEB 28/17 | 29 | 52.85 | 50.45 |
| MAR 28/17 | 28 | 53.46 | 49.64 |
| MAY 1/17 | 34 | 60.59 | 58.76 |
| MAY 29.17 | 28 | 44.05 | 47.15 |
| JUN 28/17 | 30 | 44.04 | 49.16 |
| JUL 28/17 | 32 | 41.42 | 51.54 |
| SEPT 28/17 | 30 | 37.92 | 48.21 |
| OCT 30.17 | 32 | 39.08 | 50.5 |
| NOV 28/17 | 29 | 38.79 | 47.5 |
| TOTAL | 305 | 470.09 | 512.04 |


| DATE | DAYS | USAGE | CHARGES |
| :--- | ---: | ---: | ---: |
| JAN 2/18 | 30 | 40.37 | 49.03 |
| JAN 30.18 | 33 | 47.73 | 59.15 |
| FEB 27.18 | 28 | 40.44 | 50.45 |
| MAR 28/18 | 29 | 42.17 | 52.11 |
| APR 27/18 | 32 | 48.56 | 58.05 |
| MAY 31/18 | 32 | 48.56 | 58.05 |
| JUN 28/18 | 28 | 40.45 | 50.01 |
| JUL28/18 | 32 | 45.97 | 50.01 |
| AUG 29/18 | 30 | 42.81 | 53.4 |
| OCT 1.18 | 33 | 44.21 | 57.66 |
| OCT 29.18 | 28 | 38.75 | 49.34 |
| TOTAL | 335 | 480.02 | 587.26 |

## Toronto Hydro Reply

Dear Ms. Douglas,
Thank you for your letter of comment. Toronto Hydro apologizes that you are finding it difficult to understand your charges compared with those of a neighbour, and we recognize that it is complicated to do so. As you may know, the methodology and presentation of the electricity bill in Ontario is largely set by provincial law and
regulation, and there are a lot of complex charges and credits that go into your bill each month.

Thank you for preparing a table setting out your charges over several years, however without additional information about your and your neighbour's households, plus her consent for privacy purposes, we cannot give you a precise explanation of what is happening with your bill versus hers. Nevertheless, Toronto Hydro's experience is that there are a few common drivers for questions such as yours, relating to the different types of charges on the bill.

## The Delivery Line:

Your column labelled charges represents the delivery line on the bill, which represents the cost of getting power from generators to your home, and ensuring electricity is available when you need it. The delivery line is made up of a number of costs (some ours and some related to others), such as:

- Toronto Hydro costs: this is your distribution charge, which is invested into the local distribution grid to maintain safety and reliability of our infrastructure, help support a growing city, and enable us to plan for and respond to extreme weather. This part of your bill may also include certain credits or charges related to temporary, unpredictable, or deferred costs for delivering electricity and services to customers.
- Non-Toronto Hydro costs:
- Transmission rates which we collect on behalf of companies such as Hydro One
- Pass-through charges in the form of rate riders that credit customers or collect from customers historic over-charges or under-charges on parts of
the bill related to transmission, generation and other commodity costs, and other provincially-administered charges.


## Your Overall Bill

Provincial and OEB law and regulation mean that your delivery line and overall bill is partially based on your overall consumption. This means it includes both charges that do change depending on how much electricity you use (called variable charges) and those which don't change depending how much electricity you use (called fixed charges). The fixed portion of the charge helps cover the costs of the poles and wires that are
available $24 / 7$ to deliver electricity to your home, on demand. Because of this, changes in the amount you pay on your delivery line often do not move by the same amount, or even in the same direction, as changes in how much electricity you use (called kilowatt hours or kWh).

Some of the common factors you may wish to consider in addition to those mentioned in your letter that influence the amount of energy usage and contribute to differences in charges between households include:

- Size and type of home
- Upgraded insulation or windows
- Heating and cooling factors such as gas or electric heating or air conditioning systems, baseboard or portable heaters, thermostat settings, heated floors, heated driveways, pool pumps, etc.
- Gas or electric water heating

Types and frequency of appliances in use, and their energy efficiency ratings.


#### Abstract

We hope this information provides some additional insight into what may be driving the difference in charges. For further background on rates, please visit Toronto Hydro's website at www.torontohydro.com/rates, or for additional tips on managing energy usage, please visit http://www.torontohydro.com/saveonenergy.

\section*{Letter of Comment: Weston Trott: November 22, 2018}

More transparency on Rates - How are distribution rates calculated? Show fixed and variable cost on the bill - Bill is not transparent.

Is the system working to allow utilities to ask and the reduce after the ask? It seems it does not work to have the utilities ask for the sky why not keep them honest from the beginning? The stats for reducing by $38 \%$ shows it does not work the current ask system.


## Toronto Hydro Reply

Dear. Mr. Trott,
Thank you for your letter of comment. Toronto Hydro recognizes that the bill is complicated, and that you are frustrated by the way that the charges are calculated. As you may know, the methodology and presentation of the electricity bill in Ontario is largely set by provincial law and regulation, and there are a lot of complex charges and credits that go into your bill each month.

On the Toronto Hydro website we try to break down the bill and explain it as best as we can:
http://www.torontohydro.com/sites/electricsystem/residential/yourbilloverview/Pages /BillFormat.aspx.

Please see our reply to Ms. Douglas' letter of November 22, 2018 for your questions regarding distribution rates and the way charges are calculated.

Regarding your interest in how our plan has been developed and how the OEB will test it and ensure it strikes the right balance, we have supported our plan with 4,300 pages of evidence and data, and that plan is now before the regulator in a public process where the OEB, customer advocacy groups and other experts are scrutinizing and challenging it. Please also see our reply to Mr. Lancaster's letter of October 4, 2018.

## Letter of Comment: An Ge: November 26, 2018

I'm very concerned and confused about your Delivery Charge. Delivery Charge should not be a fixed rate. It should be determined by the actual usage. The higher usage, the higher the delivery charge; the lower usage, the lower the delivery charge should be. Not on some fixed nonsense charge, IF someone is away from home for, say 6 mnths, barely have usage on the energy, only incure fixed cost of delivery charge. So re-define the delivery charge.

## Toronto Hydro Reply

Dear Mr. Ge,
Thank you for your letter of comment. Toronto Hydro recognizes that the bill is complicated, and that you are frustrated by the fixed charges in the Delivery line. Provincial and OEB law, regulation and methodology for charges mean that your delivery line and overall bill is partially based on your overall consumption and partially based on fixed charges. This means it includes both charges that do change depending on how much electricity you use (called variable charges) and those which don't change depending how much electricity you use (called fixed charges). The fixed portion of the
charge helps cover the costs of the poles and wires that are available $24 / 7$ to deliver electricity to your home, on demand.

Please see our reply to Ms. Douglas' letter of November 22, 2018 regarding the specific concerns that you raise in your letter regarding the delivery charge.

Letter of Comment: Caleb Kouahou: November 26, 2018
I'm concerned by the transmission poles (high tension) crossing residential area (like South Etobicoke) with risk of cancer.

Also the risk related to 50+ old nuclear plant and the safety gap for example populations not sensibilised or distributed the RADBLOCK pills.

## Toronto Hydro Reply

Dear Mr. Kouahou,
Thank you for your letter. Toronto Hydro is the local distributor of electricity in Toronto, and owns and operates the poles and wires that bring electricity to your home. The transmission lines and nuclear plants are owned and operated by others such as Hydro One and Ontario Power Generation.

For more information about your local grid and our plan to invest it in, please see our reply to Mr. Lancaster's letter of October 4, 2018.

## Letter of Comment: Sijing Liu: November 26, 2018

The Delivery Charge on a typical Residential Bill should NOT be set as a fixed rate. It should be billed based on the actual usage of energy. It's not fair to set delivery charge
a set rate. We use only <\$20 energy bill, but our delivery charge is always around $>\$ 35$. Is this Normal for a typical bill?

Anyways, delivery charge needs restructured however it's determined.

## Toronto Hydro Reply

Dear Ms. Liu,
Thank you for your letter of comment. Toronto Hydro recognizes that the bill is complicated, and that you are frustrated by the fixed charges in the Delivery line. Provincial and OEB law, regulation and methodology for charges mean that your delivery line and overall bill is partially based on your overall consumption and partially based on fixed charges. This means it includes both charges that do change depending on how much electricity you use (called variable charges) and those which don't change depending how much electricity you use (called fixed charges). The fixed portion of the charge helps cover the costs of the poles and wires that are available 24/7 to deliver electricity to your home, on demand.

Please see our reply to Ms. Douglas' letter of November 22, 2018 regarding your comments regarding delivery charges. For more information about your local grid and our plan to invest it in, please see our reply to Mr. Lancaster's letter of October 4, 2018.

Letter of Comment: Slobodan and Dobrila Vujnovic: November 26, 2018
I participated in TIME OF USE for many years being probably among the first to apply. Now my husband Slobodan age 86 and myself Dobrila age 83 are not able to adjust our use no more It puts in need to use electricity when it is the most expensive increasing our financial burden as well as time of use schedule loosing any purpose. We are not
only old but old timers as well and know and participate in all possible means to save electricity not only for people of Ontario but for our own budget.

Please assist.

## Toronto Hydro Reply

Dear Mr. and Mrs. Vujnovic,
Thank you for your letter of comment. While Toronto Hydro recognizes that not all customers favour Time of Use rates, Toronto Hydro is required by provincial law and regulation to bill customers in accordance with that pricing structure. To help customers better manage their energy costs, please visit Toronto Hydro's website for additional information and tips.

## http://www.torontohydro.com/saveonenergy

Please see our reply to Ms. Douglas' letter of November 22, 2018 regarding delivery charges. For more information about your local grid and our plan to invest it in, please see our reply to Mr. Lancaster's letter of October 4, 2018.

## Letter of Comment: Bill Gaw: November 29, 2018

Thank you for the opportunity to hear about and question Toronto Hydro's Rate Application for 2020-2024 at the Scarborough Civic Centre Community Meeting on November 26.

I have no issue with the proposed cost recovery rates, but I notice a couple of elements in the application that seem odd and might bear close examination by the Board. "approximately a quarter of the utility's asset base continues to operate beyond useful life..." and "continued investment is required to ensure there is no deterioration in
recently stabilized system performance" do not suggest a strong plan to eliminate the "beyond" part, but simply to maintain the current level of stuff "past their useful life" and accept whatever level of outages that implies.

I think it would be more appropriate to declare an ambition to reduce the "population of assets beyond their useful life" to less than $1 \%$ by 2024, and plan to drive it down from that level going forward until we bump into the structural minimum.

In section D 3.1.2 Asset Replacement Policy, "Toronto Hydro does not have a dedicated proactive renewal strategy for overhead conductors. Where appropriate conductors are replaced as part of a planned area rebuild or reactively upon failure due to age..." Given the illustrated property damage, and potential personal injury risk due to "porcelain pothead failure" plus the know-how to replace "legacy porcelain insulators with new polymeric equivalents", a "dedicated proactive renewal strategy" could be a good thing - perhaps it would even reduce the maintenance expense of "washing the porcelain insulators every six months."

Similarly, if we recognize "below ground rotted poles" and "car accidents" as known risks of catastrophic pole failures, replacement of old wooden poles with new wooden poles rather than composite, concrete, or steel poles, and leaving the new poles unprotected by concrete-steel guard posts, are questionable practices. Those new wooden poles are subject to Toronto's belligerent woodpeckers, unnecessarily reduce our forest carbon absorption somewhere in Canada, and maintain a continuing risk of pole fires.

I did not see a compelling justification for choosing wooden poles going forward.

The argument that "removed assets are typically refurbished and kept as spares due to the scarcity of these obsolete asset types" seems seriously dubious. It might make at least as much sense to chuck the obsolete stuff and invest the savings from refurbishment expenses into fixing the next repair with current standard equipment. That might also conveniently drive down the inventory of obsolete assets that will need continued investment in the future.

## Toronto Hydro Reply

Dear Mr. Gaw,
Thank you for your letter, and for your support of the proposed rate increase. We acknowledge your preference for a plan that would:

- do more to reduce the population of assets beyond useful life to less than $1 \%$ by 2024 (compared with Toronto Hydro's current age profile at approximately a quarter of assets past end of useful life);
- eliminate the practice of using refurbished assets removed from service for spare parts and instead redirect the expenses of refurbishment (and inventory) to additional investment;
- create a dedicated proactive renewal strategy for areas such as overhead conductors (e.g. porcelain insulators); and
- eliminate wooden poles as a replacement option.

Toronto Hydro has developed and refined its plan taking into account customer feedback that limiting price increases was a paramount concern, to the degree that doing so would not adversely affect service performance, and that performance would improve in certain areas. This means that our plan does not include all the reasonable funding requests that it assesses are appropriate given the needs of the system. We
constrained our capital plan, even though a higher level is preferable from an asset management perspective to better manage certain elevated asset risks.

For more information about your local grid and our plan to invest it in, please see our reply to Mr. Lancaster's letter of October 4, 2018.

Letter of Comment: Bruce Bryden: December 4, 2018
Allow me to get all the information on my bill as on my Micro fit Meter Credit, and not have to use a computer to gain this information.

## Toronto Hydro Reply

Dear Mr. Bryden,
Thank you for your letter of comment. Toronto Hydro recognizes that the bill is complicated, and that you are frustrated by the way that the information is presented. As you may know, the methodology and presentation of the electricity bill in Ontario is largely set by provincial law and regulation, and there are a lot of complex charges and credits that go into your bill each month. As a MicroFIT customer, we appreciate that you may want additional billing information and as you may be aware, MicroFIT generation detail is available on Toronto Hydro's PowerLens web portal. Accessing the portal may be an added step, however, it does provide a wealth of account specific information useful for validating your charges and managing your electricity usage. To reduce this effort, we are planning an enhancement that will enable customers to enroll in auto receipt of regular emails providing information specific to their needs.

For more information about your local grid and our plan to invest it in, please see our reply to Mr. Lancaster's letter of October 4, 2018.

Letter of Comment: Joe Gudinskas: December 4, 2018
In the light of how Hydro is going wild, these meetings are very useful.

## Toronto Hydro Reply

Dear Mr. Gudinskas,
Thank you for your letter, and we appreciate that you found the community meeting useful.

For more information about your local grid and our plan to invest it in, please see our reply to Mr. Lancaster's letter of October 4, 2018.

Letter of Comment: Josephine Ng: December 4, 2018
The changes I experienced are fine

1. Monthly bills
2. Summer deals
etc.
I did climate change research for a project and I knew nothing about the OEB. By coming to this meeting I can clearify the things that matter. I feel better about consuming electricity and conserving energy. I'm a new Toronto Hydro customer, but it was really important to make me be at the meeting. I feel appreciated to be someone that was here. So all I can think about now is that I pay hydro and get it at home and that's great! Thank you.

## Toronto Hydro Reply

Dear Ms. Ng,
Thank you for your letter, and we appreciate that you found the community meeting to be a positive experience, and that your experience with your bill, conservation, and incentives has also been positive.

For more information about your local grid and our plan to invest it in, please see our reply to Mr. Lancaster's letter of October 4, 2018.

## Letter of Comment: Paul Stuewe: December 4, 2018

The proposed changes will have no impact on my family. However, I am very concerned about how people on fixed incomes, and people who are just getting by, will be affected. I hoped that this would be addressed during this meeting; it was certainly raised, but I wasn't impressed by the somewhat vague response of the OEB chairman.

## Toronto Hydro Reply

Dear Mr. Stuewe,
Thank you for your letter and your interest in help for those needing assistance paying their bills. A number of assistance programs are available with different types of support ranging from helping customers reduce their electricity usage to on-bill credits to help offset monthly charges. The following are programs available for eligible customers:

- The Independent Electricity System Operator's Home Assistance Program provides energy-efficient upgrades from free light bulbs to appliances;
- The Ontario Energy Board's Low-Income Energy Assistance Program (LEAP) provides a one-time emergency grant to help pay your electricity bill;
- The Ontario Energy Board's Ontario Electricity Support Program (OESP) provides an on-bill credit each month to qualifying households. In 2017, this program was expanded to include more eligible households, and;
- The provincial Affordability Fund provides free upgrades to help lower electricity costs.

Toronto Hydro uses a number of communication channels to make customers aware of these programs. Additional information is available at www.torontohydro.com/help or through the Customer Care team at 416-542-8000.

## Letter of Comment: Greg Pimento: December 10, 2018

I attended the public meeting in Etobicoke on Dec 6th and would like to go on record as not supporting Toronto Hydro's application for a rate increase.

When compared against our natural gas supplier Toronto Hydro does not do well. This is from both a cost and level of service perspective. Both services are regulated but the differences in their structures make for the differences we've experienced as consumers, to my judgement. I pick natural gas over hydro every time.

Given the growth in Toronto I do not understand the need for the increased rate, unless the existing rate payers are subsidizing the capital costs of new connections. I also find the inflexibility with the acceptance of micro-grids bothersome and poorly justified by Toronto Hydro.

I know it is not under Toronto Hydro's or the OEB's control but I want to also go on record that the level of Global Adjustment is totally unacceptable. Incremental power production rates are close to 3 cents whereas the GA is three time that amount. Poorly
managed is the only conclusion I can determine.

I would be interested in helping in any way feasible knowing that the task at hand is massive at best.

Thanks for the opportunity to attend and see the presentations.

## Best Regards,

Greg Pimento

## Toronto Hydro Reply

Dear Mr. Pimento,
Thank you for your letter, and we appreciate that you found the community meeting to be a positive experience.

With respect to your concern about the differences in electricity and natural gas pricing, there are significant differences between the costs of generation and distribution of these fuel types, which leads to differences between costs, prices and services. For more information about the drivers of Toronto Hydro's costs, our plan to invest in the grid, and our performance and efforts to mitigate your rate increases, please see our reply to Mr. Lancaster's letter of October 4, 2018.

Regarding your questions about whether ratepayers are subsidizing developers and new customers, the Ontario Energy Board has regulations designed so that each type of customer pays their own way and cross-subsidization is avoided. This includes calculations around capital costs and a complete economic evaluation designed to
ensure developers pay their fair share. Toronto Hydro has a responsibility to connect customers to the grid and make sure enough capacity exists so that those new customers can receive a safe and reliable source of power.

Regarding your comments about the unacceptability of the global adjustment, we appreciate your recognition that this is not included in our part of the bill and we do not control it.

Table 2: Gross and Net PP\&E - Years Ending December 31 (\$ Millions)

|  | $\mathbf{2 0 1 5}$ <br> Actual | $\mathbf{2 0 1 6}$ <br> Actual | $\mathbf{2 0 1 7}$ <br> Actual | $\mathbf{2 0 1 8}$ <br> Bridge | $\mathbf{2 0 1 9}$ <br> Bridge | $\mathbf{2 0 2 0}$ <br> Forecast |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Land and Buildings | 76.2 | 129.9 | 141.4 | 165.4 | 166.8 | 169.8 |
| Other Distribution Assets | 170.0 | 238.5 | 267.3 | 482.2 | 529.7 | 612.7 |
| General Plant | 127.7 | 185.2 | 247.5 | 239.5 | 240.5 | 243.0 |
| TS Primary Above 50 | 5.8 | 6.0 | 36.9 | 38.9 | 39.0 | 39.1 |
| Distribution System | 149.9 | 156.8 | 184.5 | 228.8 | 251.0 | 277.9 |
| Poles, Wires | $2,172.2$ | $2,430.6$ | $2,663.8$ | $2,902.8$ | $3,151.0$ | $3,426.9$ |
| Contributions and Grants | $(58.2)$ | $(90.5)$ | $(118.0)$ | $(182.1)$ | $(254.4)$ | $(329.2)$ |
| Line Transformers | 412.4 | 465.3 | 515.4 | 574.4 | 645.6 | 714.2 |
| Services and Meters | 262.0 | 290.0 | 321.8 | 362.6 | 403.9 | 451.0 |
| Equipment | 61.5 | 100.4 | 120.8 | 129.7 | 135.7 | 152.5 |
| IT Assets | 27.3 | 47.2 | 58.7 | 70.2 | 77.9 | 89.0 |
| Gross Assets | $\mathbf{3 , 4 0 6 . 8}$ | $\mathbf{3 , 9 5 9 . 4}$ | $\mathbf{4 , 4 4 0 . 1}$ | $\mathbf{5 , 0 1 2 . 4}$ | $\mathbf{5 , 3 8 6 . 6}$ | $\mathbf{5 , 8 4 6 . 8}$ |
| Accumulated Depreciation | $(320.6)$ | $(496.8)$ | $(684.3)$ | $(889.7)$ | $(1,116.2)$ | $(1,357.0)$ |
| Closing PP\&E NBV (MIFRS) | $\mathbf{3 , 0 8 6 . 2}$ | $\mathbf{3 , 4 6 2 . 6}$ | $\mathbf{3 , 7 5 5 . 8}$ | $\mathbf{4 , 1 2 2 . 7}$ | $\mathbf{4 , 2 7 0 . 4}$ | $\mathbf{4 , 4 8 9 . 8}$ |

Note: Variances due to rounding may exist.

The PP\&E NBV reported by Toronto Hydro pursuant to the OEB's Reporting and Recordkeeping Requirements ("RRR") and determined for rate base purposes are aligned, with the exception of one difference: in 2015 to 2017, assets related to the monthly billing program ${ }^{2}$ were included in PP\&E for RRR purposes but excluded in the determination of $\mathcal{C}$ rate base as these amounts are reported in the approved regulatory account. ${ }^{3}$

[^1]Table 7: 2019 Bridge versus 2020 Forecast (\$ Millions)

|  | $\mathbf{2 0 1 9}$ <br> Bridge | $\mathbf{2 0 2 0}$ <br> Forecast | Variance <br> $\mathbf{( \$ )}$ | Variance <br> $\mathbf{( \% )}$ |
| :--- | ---: | ---: | ---: | ---: |
| Land and Buildings | 166.8 | 169.8 | 3.0 | $1.8 \%$ |
| Other Distribution Assets | 529.7 | 612.7 | 83.0 | $15.7 \%$ |
| General Plant | 240.5 | 243.0 | 2.5 | $1.0 \%$ |
| TS Primary Above 50 | 39.0 | 39.1 | 0.1 | $0.3 \%$ |
| Distribution System | 251.0 | 277.9 | 26.8 | $10.7 \%$ |
| Poles, Wires | $3,151.0$ | $3,426.9$ | 275.9 | $8.8 \%$ |
| Contributions and Grants | $(254.4)$ | $(329.2)$ | $(74.8)$ | $29.4 \%$ |
| Line Transformers | 645.6 | 714.2 | 68.6 | $10.6 \%$ |
| Services and Meters | 403.9 | 451.0 | 47.1 | $11.7 \%$ |
| Equipment | 135.7 | 152.5 | 16.8 | $12.4 \%$ |
| IT Assets | 77.9 | 89.0 | 11.1 | $14.2 \%$ |
| Gross Assets | $\mathbf{5 , 3 8 6 . 6}$ | $\mathbf{5 , 8 4 6 . 8}$ | $\mathbf{4 6 0 . 2}$ | $\mathbf{8 . 5 \%}$ |
| Accumulated Depreciation | $\mathbf{( 1 , 1 1 6 . 2 )}$ | $\mathbf{( 1 , 3 5 7 . 0 )}$ | $\mathbf{( 2 4 0 . 8 )}$ | $\mathbf{2 1 . 6 \%}$ |
| Closing PP\&E NBV (MIFRS) | $\mathbf{4 , 2 7 0 . 4}$ | $\mathbf{4 , 4 8 9 . 8}$ | $\mathbf{2 1 9 . 4}$ | $\mathbf{5 . 1 \%}$ |

From 2019 to 2020, "other distribution assets" are expected to increase by $\$ 83.0$ million or 15.7 percent, primarily due to the in-service amount for Hydro One Contributions (see Exhibit 2B, Section E7.4) and IT software additions (see Exhibit 2B, Section E8.4).

General Plant assets are expected to increase by $\$ 2.5$ million or 1.0 percent primarily due to the in-service amounts for facilities-related assets. Refer to the Facilities Management and Security program (Exhibit 2B, Section E8.2) for more information.

Distribution system assets are expected to increase by $\$ 26.8$ million or 10.7 percent, primarily due to the forecasted completion of stations projects. Refer to the Stations Renewal program (Exhibit 2B, Section E6.6) for details.

Capital investment in poles and wires is expected to increase by $\$ 275.9$ million or 8.8 percent and investment in line transformer assets are expected to increase by $\$ 68.6$
million or 10.6 percent. The increase in these major plant categories is primarily attributed to the Underground System Renewal - Horseshoe (Exhibit 2B, Section E6.2), Underground System Renewal - Downtown (Exhibit 2B, Section E6.3), Overhead System Renewal (Exhibit 2B, Section E6.5), Reactive and Corrective Capital (Exhibit 2B, Section E6.7) and Customer Connections (Exhibit 2B, Section E5.1) programs.

Contributions and grants are expected to increase by $\$ 74.8$ million or 29.4 percent on account of realized contributions related to in-service assets, resulting in a reduction to NBV.

Services and meter assets are expected to increase by $\$ 47.1$ million or 11.7 percent. The increase in services and meter assets is primarily related to the Metering program (Exhibit 2B, Section E5.4).

Equipment assets are expected to increase by $\$ 16.8$ million or 12.4 percent, primarily /C due to investment in fleet and facilities-related assets. Refer to the Fleet and Equipment Services program (Exhibit 2B, Section E8.3) for details.

IT assets are expected to increase by $\$ 11.1$ million or 14.2 percent, primarily due to investment in computer hardware equipment. Refer to the IT/OT Systems program (Exhibit 2B, Section E8.4) for more information.

## OEB Appendix 2-BA Fixed Asset Continuity Schedule - MIFRS

|  |  |  | Cost (Forecast) |  |  |  |  |  |  |  | Accumulated Depreciation (Forecast) |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| cCA Class | OEB Account | Description | Opening Balance |  | Additions |  | Disposals |  | Closing Balance |  | Opening Balance |  | Additions |  | Disposals |  | Closing Balance |  | Net Book Value |  |
| 12 | 1611 | Computer Sotware (Formally known as Account 1925) | s | 267,62,967 | S | 30,655,579 | \$ |  | s | 298,258,546 | (s) | 133,790,477) | (s | 36,09,942) | s | . | (s | 169,890,439 | \$ | 128,36, ,107 |
| N/A | 1612 | Land Rights | s |  | 5 |  | S |  | S |  | \$ |  | S |  | s | . | s |  | s |  |
| N/A | 1805 | Land | S | 7,001,832 | 5 | - | S |  | S | 7,001,832 | S |  | s |  | s | . | s |  | 5 | 7,001,832 |
| , | 1808 | Buildings | S | 142,41,844 |  | 2,986,710 |  |  | S | 145,404,554 | (15 | 16,453,350) | (s) | 3,720,102) | s |  | (s | 20,17, 452 | s | 125,23,1,122 |
| 47 | 1815 | Transformer Station Equipment 550 kV | S | 38,971,341 | S | 112,337 | s |  | S | 39,08, 6 ,78 | Ls | 4,476,217) | (s | 1,325,172) | S |  | (s | 5,801,389 | 5 | 33,282,289 |
| 47 | 1820 | Distribution Station Equipment 550 kV | S | 251,03, 850 | 5 | 27,166,846 | (s | 326,796) | S | 277,870,899 | (s) | 47,736,208) | (s | 11,273,000) | 5 | 95,923 | 15 | 58,913,285 | S | 218,957,614 |
| 47 | 1830 | Poles, Towers \& Fixtures | S | 408,23, ,75 | S | 34,478,688 | (s | 6,888,194) | S | 435,816,251 | 15 | 56,927,928 | (s | 11,73,3966) | 5 | 927,888 | (s | 67,73, 3887 | S | 368,07, 864 |
| 47 | 1835 | Overread Conductors \& Devices | s | 470,63,605 | 5 | 47,031,817 | (s | 2,629,678) | S | $515,032,744$ | 15 | $55,177,206$ | (s | 12,364,683) | S | 283,889 | S | 67,258,000 | S | 447,74,745 |
| 47 | 1840 | Underground Conduit | S | 1,321,929,677 | S | 111,08, ,570 | (s | 668,599 | S | 1,43, 3 , 88,688 | [5 | 246,72, ,584) | (s | 50,25,599) | S | 98,099 | S | 296,881,084) | S | 1,135,467,604 |
| 47 | 1845 | Underground Conductors $\&$ Devices | S | 950,15,9,45 | 5 | 9,413,968 | IS | 5,903,043) | 5 | 1,043,666,871 | 15 | 128,104,051) | (s | 29,25,810) | S | 560,001 | (s) | 156,769,861 | S | 886,897,010 |
| 47 | 1850 | Line Transformers | 5 | 645,603,131 | S | 79,659,607 | (s | 11,048,456) | 5 | 714,214,282 | (s) | 125,01,987) | (s | 28,23,015) | 5 | 1,545,228 | (s | 151,702,773 | S | 562,51,508 |
| 47 | 1855 | Services (Overhead \& Underground) | S | 155,84, 896 | s | 19,887,315 | (s | 398,088) | s | 175,312,122 | Ls | 15,123,088) | (s | 3,818,256) | s | 22,965 | (s | 18,918,379 | s | 156,39,773 |
| 47 | 1860 | Meters | S | 114,917,588 | \$ | 20,046,264 | (s | 1,022,851) | S | 133,941,001 | (s) | 22,879,514) | (s | 6,389,230) | \$ | 140,733 | (s | 29,128,011 | \$ | 104,812,991 |
| 47 | 1860 | Meters (Smart Meters) | 5 | 133,10,598 | S | 9,339,433 | (s | 713,141) | S | 141,731,890 | (15 | 61,457,036 | (s | 12,222,117) | s | 163,557 | (s | 73,515,966 | S | 68,216,295 |
| N/A | 1905 | Land | s | 17,35,057 | S |  | s |  | S | 17,35,057 | \$ |  | S |  | s |  | s |  | s | 17,35,057 |
| 1 | 1908 | Buildings \& Fixtures | s | 239,73,7712 | 5 | 2,499,408 | S | . | S | 242,239,120 | (15 | 48,920,103) | (s | 11,382,932) | S | . | (s | 60,303,035 | S | 181,93,086 |
| 13 | 1910 | Leasehold Improvements | S | 753,840 | S |  | S | . | S | 753,840 | (s) | 753,840) | s |  | S | - | (s | 753,840 | S |  |
|  | 1915 | Office Furniture \& Equipment | S | 20,231,295 | S | 896,014 | \$ | . | \$ | 21,127,310 | (s) | 11,505,619 | (s | 1,905,523 | 5 | - | (s | 13,411,122 | S | 7,716,167 |
| 50 | 1920 | Computer Equipment- Hardware | s | 77,902,724 | S | 11,081,996 | s | . | s | 88,984,420 | (15 | 52,064,292) | (s) | 11,692,222) | S | . | (s | 63,756,513 | S | 25,227,907 |
| 10 | 1930 | Transportation Equipment | S | 41,495,087 | 5 | 4,554,924 | \$ | - | s | 46,15,010 | (s) | 28,580,408) | (s | 3,045,967) | \$ | - | (s) | 31,626,375 | S | 14,523,635 |
| 8 | 1935 | Stores Equipment | \$ | 7,066 | 5 |  | S |  | S | 7,066 | (s) | 7,066) | s |  | 5 |  | (s | 7,066 | S |  |
| 8 | 1940 | Tools, Shop \& Garage Equipment | s | 33,583,396 | S | 9,772,286 | \$ | . | S | 43,35,682 | Is | 13,827,242) | (s | 3,095,774) | s | - | is | 16,923,016 | s | 26,432,666 |
| 8 | 1945 | Measurement \& Testing Equipment | S | 481,035 | S | 2,661 | S | - | S | 483,695 | S | 394,236) | S | 44,522) | S |  | (s | 438,758 | 5 | 44,937 |
| 8 | 1950 | Service Equipment | s | 1,114,955 | S | 59,523 | \$ | - | S | 1,174,478 | 15 | 691,091) | (s | 84,739) | S |  | (s | 775,830 | S | 398,647 |
| 8 | 1955 | Communications Equipment | S | 46,633,950 | S | 1,711,630 | s |  | s | 48,345,580 | Ls | 18,758,557) | (s | 3,827,071) | 5 |  | (s | 22,55,628 | s | 25,759,953 |
| 8 | 1960 | Miscellaneous Equipment | 5 | 275,770 | S |  | s | . | s | 275,770 | (s) | 223,488) | (s | 34,673) | s | - | (s | 258,121 | s | 17,649 |
| 47 | 1970 | Load Management Controls Customer Premises | s | 3,022,834 | s |  | s |  | s | 3,022,834 | (s) | 3,022,834 | s |  | s |  | (s | 3,022,834 | S |  |
| 47 | 1975 | Load Management Controls utility Premises | s |  | s |  | s |  | s |  | $s$ |  | s |  | s |  |  |  | 5 |  |
| 47 | 1980 | System Supervisor Equipment | S | 61,907,132 | s | 9,907,190 | (s | 627,898) | s | 71,18,424 | S | 15,107,184) | (s) | 4,128,590) | s | 67,859 | (s) | 19,167,914 | s | 52,018,509 |
| 47 | 2440 | Contributions \& Grants (Formally known as | (s) | 254,372,738) |  | 75,354,275) | \$ | 565,896 | Is | 329,161,177) | \$ | 22,701,606 | s | 8,995,336 | Is | 28,847) | \$ | 31,668,995 | Is |  |
| N/A | 1609 | Capital Contributions Paid | s | 191,774,015 | 5 | 46,229,405 | s |  | s | 238,003,420 | (s) | 20,491,327) | s | 8,780,8911 | s |  | (s) | 2, $2,272,218$ | S | 208, ${ }^{231,202}$ |
| N/A | 2005 | Property Under Capital Leases | s | 18,170,834 | s | $\cdots$ | \$ | - | s | 18,170,834 | S | 11,516,281) | (s) | 89,433 | s |  | (s) | 11,605,704 | S | 6,565,130 |
|  |  | Sub-Total | s | 5,407,522,996 | s | 493,306,595 | (s | 29,670,808 | s | 5.877,156,783 | (s) | 1,117,020,588) | (s | 245,788,261) | s | 3,877,295 | (s | $1,356,931,554$ | s | 4,512,227,229 |
|  |  | Less Socialized Renewable Energy Generation Investments (input as negative) | (s) | 8,138,769 |  | 263,784) | s |  | (s) | 8,402,553 | s | 119,756 | s | 570,353 | s |  | s | 690,109 | Is | 7,712,444 |
|  |  | Less Other Non Rate-Regulated U Utitity Assets sinut as negative) | (s | 12,762.660) | (s | 3,195,791 | s |  | L | 15,958,4511 | 5 | 674.182 |  | 587711 | s |  | $s$ | 1.261,893 | 15 | 14,696,558) |
|  |  | Total PPRE | s | 5,386,621,566 |  | 489,847,20 |  | 29,67,808) | s | ${ }_{5,846,797,779}$ | /s | 1,116,226,651) | (s | 244, 330,196 | s | 3,877,295 | (s | 1,356,979,552) |  | 4,489,8818,227 |
|  |  | Depreciaition Expense adj. from gain or loss | on | tof assets (pool | of li | eassets) |  |  |  |  |  |  | s |  |  |  |  |  |  |  |
|  |  | Total |  |  |  |  |  |  |  |  |  |  | (s) | 244,630,196) |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  | y Alocated Depreca | eciato |  |  |  |  |  |  |  |
| 10 |  | Transportation |  |  |  |  |  |  |  |  |  | ation | ( | 1,759,521) |  |  |  |  |  |  |
|  |  | Stores Equipment |  |  |  |  |  |  |  |  |  | dipment | $\frac{5}{15}$ | 242,870,675) |  |  |  |  |  |  |

Notes:
Fixed Asset Continuity Schedule includes monthly willing
Srogram
Other Non Rate-Regulated Utility
Monitoring and Control program

## OEB Appendix 2-BA Fixed Asset Continuity Schedule - MIFRS



Notes:
Fixed Asset Continuity Schedule includes monthly billing
Socriram
Other Non Rate-Regulated Utility
Monitoring and Control program

## OEB Appendix 2-BA Fixed Asset Continuity Schedule - MIFRS


$\underset{\substack{\text { Notes: } \\ \text { Fixed } \\ \text { S } \\ \text { St }}}{ }$
Fixed Asset Continuity Schedule includes monthly willing
Srogram
Other Non Rate-Regulated Utitity
Monitoring and Control program

## OEB Appendix 2-BA Fixed Asset Continuity Schedule - MIFRS



Notes:
Fixed Assed Continuity Schedule includes monthly billing
Srogram
Other Non Rate-Regulated Utitity
Monitoring and Control program

## OEB Appendix 2-BA Fixed Asset Continuity Schedule - MIFRS



Notes:
Fixed Asset Continuity Schedule includes monthly billing
Socriram
Other Non Rate-Regulated Utility
Monitoring and Control program

Appendix A. Table 2-Gross Assets Breakdown by Major Plant Account - Detailed by Uniform System of Account

|  | Description | 2015 Actuals MIFRS | 2016 Actuals MIFRS | 2017 Actuals MIFRS | 2018 Bridge MIFRS | 2019 Bridge MIFRS | 2020 Forecast MIFRS |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1815 | Transformer Station Equipment | 5.8 | 6.0 | 36.9 | 38.9 | 39.0 | 39.1 |
|  | Subtotal High Voltage Plant | 5.8 | 6.0 | 36.9 | 38.9 | 39.0 | 39.1 |
| 1805 | Land | 7.1 | 7.1 | 7.0 | 7.0 | 7.0 | 7.0 |
| 1808 | Buildings and Fixtures | 51.4 | 105.1 | 116.6 | 141.0 | 142.4 | 145.4 |
| 1810 | Leasehold Improvements | - |  |  | - |  |  |
| 1820 | Distribution Station Equipment | 149.9 | 156.8 | 184.5 | 228.8 | 251.0 | 277.9 |
| 1830 | Poles, Towers and Fixtures | 311.0 | 339.5 | 362.5 | 386.5 | 408.2 | 435.8 |
| 1835 | O/H Conductors and Devices | 299.4 | 349.5 | 390.5 | 432.2 | 470.6 | 515.0 |
| 1840 | U/G Conduit | 952.0 | 1,051.0 | 1,127.9 | 1,225.7 | 1,321.9 | 1,432.3 |
| 1845 | U/G Conductors and Devices | 609.9 | 690.6 | 782.8 | 858.3 | 950.2 | 1,043.7 |
| 1850 | Line Transformers | 412.4 | 465.3 | 515.4 | 574.4 | 645.6 | 714.2 |
| 1855 | Services | 93.3 | 109.1 | 122.1 | 139.6 | 155.8 | 175.3 |
| 1860 | Meters (includes Smart Meters) | 168.7 | 180.9 | 199.7 | 223.0 | 248.0 | 275.7 |
| 1970 | Load Management-Customer | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 |
| 1975 | Load Management-Utility |  |  |  |  |  |  |
| 1980 | System Supervisory Equipment | 25.4 | 28.2 | 33.6 | 42.1 | 49.1 | 55.2 |
| 1609 | Capital Contributions Paid | 21.7 | 75.6 | 75.6 | 186.2 | 191.8 | 238.0 |
| 2440 | Contributed Capital | (58.2) | (90.5) | (118.0) | (182.1) | (254.4) | (329.2) |
|  | Subtotal Distribution Plant | 3,047.0 | 3,471.1 | 3,803.4 | 4,265.9 | 4,590.4 | 4,989.4 |
| 1611 | Computer Software | 101.6 | 113.6 | 137.0 | 232.7 | 267.6 | 298.3 |
| 1905 | Land | 17.7 | 17.7 | 17.7 | 17.4 | 17.4 | 17.4 |
| 1908 | Buildings and Fixtures | 126.9 | 184.5 | 246.7 | 238.7 | 239.7 | 242.2 |
| 1910 | Leasehold Improvements | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 |
| 1915 | Office Furniture and Equipment | 10.8 | 15.4 | 19.0 | 19.9 | 20.2 | 21.1 |
| 1920 | Computer Equipment | 27.3 | 47.2 | 58.7 | 70.2 | 77.9 | 89.0 |
| 1930 | Transportation Equipment | 26.6 | 29.9 | 33.7 | 38.4 | 41.5 | 46.2 |
| 1935 | Stores Equipment | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1940 | Tools, Shop and Garage Equipment | 14.7 | 17.8 | 21.2 | 23.7 | 25.4 | 35.0 |
| 1945 | Measurement \& Test Equipment | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| 1950 | Power Operated Equipment | 0.6 | 0.7 | 0.8 | 1.0 | 1.1 | 1.2 |
| 1955 | Communication Equipment | 8.0 | 35.9 | 45.4 | 46.0 | 46.6 | 48.3 |
| 1960 | Miscellaneous Equipment | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 |
| 2005 | Property Under Capital Leases | 18.2 | 18.2 | 18.2 | 18.2 | 18.2 | 18.2 |
|  | Subtotal General Plant | 354.0 | 482.3 | 599.8 | 707.6 | 757.2 | 818.3 |
| 1610 | Miscellaneous Intangible Plant |  |  |  |  |  |  |
|  | GROSS FIXED ASSETS BEFORE CWIP | 3,406.8 | 3,959.4 | 4,440.1 | 5,012.4 | 5,386.6 | 5,846.8 |
| 2055 | Construction Work-in-Process | 577.7 | 502.9 | 485.8 | 311.5 | 343.5 | 367.7 |
|  | TOTAL INCLUDING CWIP | 3,984.5 | 4,462.3 | 4,925.9 | 5,323.9 | 5,730.2 | 6,214.5 |

# Table 2: Costs and Gains Associated with the OCCP Program (\$ Millions) 

|  | Planned | Actual | Variance |
| :--- | :---: | :---: | :---: |
| Capital Cost | 160.0 | 206.6 | 46.6 |
| Net gain from Sale | 72.5 | 142.2 | 69.7 |

Beyond the original planned scope of consolidation, the program's space utilization efforts allowed Toronto Hydro to dispose of an additional property, at 60 Eglinton Ave., the proceeds of which will also be returned to ratepayers in the form of a rider over the 20202024 period. The employees from 60 Eglinton Ave. were transferred to other Toronto Hydro owned properties in June 2017, allowing for a reduction in maintenance costs related to that property. Overall, the program has achieved an increase of $\$ 69.8$ million in amounts to be returned to rate payers compared to the original plan.

- IT/OT program investments are expected to exceed planned investments over the 20152019 period. Actuals in 2017 and forecasts in 2018 and 2019 are offset by lower than planned expenditures in 2015 and 2016, resulting in an expected variance over the 2015-2019 period of $\$ 18.3$ million, or 9 percent.

The majority of this variance is attributed to increased investment in Toronto Hydro's new ERP system, which the utility plans to complete in 2018. Approximately half of the ERP variance is attributed to higher infrastructure costs compared to the original high-level estimates developed in 2013. Drivers of cost changes included changes in the Canadian to American dollar exchange rate, a change in hardware requirements necessitated by standards changes during the period between the initial project estimate and the commencement of the project, additional requirements for components not identified in the 2013 estimate, and scope changes to include additional subscriptions and licenses for capabilities that would deliver greater benefits and better align with business requirements. The remaining variance is the result of a greater allocation of internal employee time in support of the project.

## E4.1.4 2015-2019 Variances: Other Capital

Expenditures in the "Other Capital" investment category are projected to be 40 percent less than forecast over the 2015-2019 period. The Other Capital budget had included approximately $\$ 20.6$ million in road cut repair costs. Toronto Hydro revised its approach during the period to begin
Capital Expenditure Plan System Renewal Investments
unique, looped distribution design serving primarily low-rise residential customers in limited areas of the pre-amalgamation City of Toronto.

The Program is grouped into the three segments summarized below:

- Underground Cable Renewal: This segment replaces the PILC Leakers \& Piece-outs program ${ }^{6}$ which Toronto Hydro is on track to complete in the 2015-2019 period. While the PILC Leakers \& Piece-outs program addressed immediate safety and operational risks related to known leaking cables and congested chambers, this Program focuses on the longer-term challenge of gradually removing the large population of these deteriorating and obsolete cable types from the system. Specifically, the segment will replace obsolete underground lead covered cables with standard tree retarded cross-linked polyethylene cables. Based on the age and condition of Toronto Hydro's population of lead cables, the utility anticipates a decline in reliability performance and an increase in operational and safety risks. Toronto Hydro recognizes the customer value stemming from the removal of these high risk, lead based cables, and plans to invest $\$ 89.7$ million over the 2020-2024 period to replace approximately 2.5 percent of $1,100 \mathrm{~km}$ paper-insulated lead-covered ("PILC") cable and 24 percent of 220 km asbestos-insulated lead-covered ("AILC") cable. It is estimated that these replacements will prevent 2,800 Customer Interruptions ("Cls") and 8,700 Customer Hours Interrupted ("CHI") for downtown customers (mostly commercial customers) over the 2020-2024 period. This will also decrease the presence of designated substances (i.e. lead and asbestos) on the grid. These cables are a critical part of the distribution infrastructure serving large customers (e.g. major financial institutions) and other reliability-sensitive customers (e.g. multiresidential high-rises) in the downtown core. To manage the pacing of investment in this segment, Toronto Hydro has begun to predict with increasing accuracy and precision the cable segments at the highest risk of failure. Combining this risk-based prioritization with the amount and criticality of the load served by each feeder allows Toronto Hydro to direct expenditures to the projects with the greatest customer value.
- Cable Chamber Renewal: This segment involves the reconstruction of cable chambers or cable chamber components (e.g. roofs, duct banks) that are at risk of failure due to their poor structural condition. To date, Toronto Hydro has managed the reconstruction of cable chambers reactively. However, due to the growing number of failing chambers and the

[^2]
## E6.3.2 Outcomes and Measures

Table 2: Outcomes \& Measures Summary

| Reliability | - Contributes to Toronto Hydro's system reliability objectives (e.g. SAIFI, SAIDI, FESI-7) and reduces the risk of lengthy outages on feeders serving thousands of downtown customers, including large, critical customers in the core while improving long-term system health by: <br> - Replacing an estimated 27 kilometres of PILC cable that is subject to a high risk of failure. <br> - Rebuilding cable chambers known to be in HI5 and HI4 condition. <br> - Reducing the average number of splices and transition joints on downtown feeders. |
| :---: | :---: |
| Environment | - Contributes to improving Toronto Hydro's Spills of Oil Containing PCBs measure and reducing the risk of toxic exposure to the environment by: Eliminating PILC cable containing oil and potentially PCBs; Eliminating AILC cable containing asbestos; and Eliminating PILC and AILC cable containing lead. |
| Safety | - Contributes to the utility's public and employee safety objectives and performance by: <br> - Replacing 200 chamber lids per year to reduce the risk of injury or property damage from cable chambers lid ejections; <br> - Eliminating safety hazards such as poor structural integrity and cable congestion; <br> - Reducing the safety hazards related to the structural failure of cable chambers in high-traffic areas by replacing or abandoning HI5 and HI4 condition chambers and chamber roofs; and <br> - Reduce the potential exposure to lead and asbestos classified as Designated Substances under the Occupational Health and Safety Act (O. Reg. 490/09 Sections 5 and 10). <br> - Safely hand and dispose of asbestos (and lead) as prescribed in the Ontario Occupational Health and Safety Act (Reg. 833) and the Canadian Environmental Protection Act. |

## System Renewal Investments

are no longer any suppliers of AILC cables). As a result, approximately 42 percent of all PILC cables and 68 percent of all AILC cables in the system are more than 30 years old. Aged cables are showing signs of deterioration, including pin holes, cracks, and leaks.

Other utilities across North America have recognized the customer value stemming from the removal of high-risk lead-based cable. For example, the U.S. Environmental Protection Agency ("EPA") has recognized utilities ConEd of New York and PSE\&G of New Jersey for their efforts to remove lead cable from their system. ConEd began their replacement efforts in the 1990s to remove PILC. At the end of 2015, based on an average rate of 120 miles of cable replacement per year, ConEd had 10 percent of PILC cable remaining in its system. PSE\&G successfully removed 1.3 million pounds of lead from PILC.

Toronto Hydro is planning to remove approximately 24 percent of AILC cable ( 53 circuit kilometres of 220 kilometres) and 2.5 percent of PILC cable ( 27 circuit kilometres of 1,100 kilometres) between 2020 and 2024. The cables will be replaced based on the risk level associated with each cable segment. A statistical method has been developed by Toronto Hydro to prioritize primary cable segments to improve reliability. This was accomplished to generate a prioritized list of high risk cable segments. Various factors, including historical failures, number of splices on feeders, age and customer base, are used to determine cable segment risks. In addition, as primary cables and cable segments are being tested or replaced, Toronto Hydro will re-prioritize at-risk feeders. Where at-risk primary cable sections are identified, this will drive the replacement of the legacy type AILC cable that is connected downstream of these cable sections.

PILC cable consists of a conductor surrounded by oil-impregnated paper insulation, lead sheath and an optional linear low-density polyethylene jacket. There are approximately 1,100 circuit-kilometres of 13.8 kV PILC underground cable on the system. These cables are used as the primary service cable in the downtown core, connecting transformer stations to customers or Toronto Hydro owned distribution transformers (these transformers step down voltage and supply residential customers). Approximately 60 percent of all primary cable in the downtown core is PILC cable and approximately 40 percent is XLPE cable.

Figure 1 shows the distribution of PILC cable in the City of Toronto and the level of risk associated with them based on the type of cable, age, and condition (including number of splices and historical faults). The highest risk cables are found both within and around the downtown core, while the medium risk cables are heavily concentrated within the core, and the Financial District in particular.

## Capital Expenditure Plan <br> System Renewal Investments

replaced with a newer design that reduces the dirt, debris and water entering the vaults, improves safety by reducing tripping incidents and creates a larger opening for replacing old switches. Along with roof rebuilds, electrical equipment such as transformers or switches within the vault will be replaced with the equivalent latest standard. Switches will be replaced with the new generation of $\mathrm{SF}_{6}$-insulated switches which have stainless steel enclosure to prevent premature rusting and degradation of the cabinet.

## E6.3.4 Expenditure Plan

To address the needs of the underground assets in downtown Toronto, Toronto Hydro plans to invest $\$ 122.0$ million over the 2020-2024 period. Each segment entails a unique investment strategy. As this Program is replacing the Piece-Out and Leakers program (see section E4 for details), it is considered as a new program with no historical costs.

Table 6: Forecast Program Costs (\$ Millions) ${ }^{13}$

| Segments | Forecast |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  | $\mathbf{2 0 2 0}$ | $\mathbf{2 0 2 1}$ | $\mathbf{2 0 2 2}$ | $\mathbf{2 0 2 3}$ | $\mathbf{2 0 2 4}$ |
| Underground Cable | 8.9 | 16.2 | 17.3 | 23.4 | 23.9 |
| Cable Chamber | 5.6 | 5.7 | 5.8 | 5.9 | 6.1 |
| Underground Residential Distribution ("URD") | 0.6 | 0.6 | 0.7 | 0.7 | 0.6 |
| Total | $\mathbf{1 5 . 1}$ | $\mathbf{2 2 . 5}$ | $\mathbf{2 3 . 9}$ | $\mathbf{3 0 . 0}$ | $\mathbf{3 0 . 6}$ |

## E6.3.4.1 Underground Cable Renewal

Table 7: Underground Cable Renewal 2020-2024 Program Costs (\$ Millions)

|  | $\mathbf{2 0 2 0}$ | $\mathbf{2 0 2 1}$ | $\mathbf{2 0 2 2}$ | $\mathbf{2 0 2 3}$ | $\mathbf{2 0 2 4}$ | Total |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Underground Cable | 8.9 | 16.2 | 17.3 | 23.4 | 23.9 | 89.7 |

Table 8: 2020-2024 Volumes (Forecast): Underground Cable Renewal

| Asset Class |  | $\mathbf{2 0 2 0}$ | $\mathbf{2 0 2 1}$ | $\mathbf{2 0 2 2}$ | $\mathbf{2 0 2 3}$ | $\mathbf{2 0 2 4}$ | Total |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| PILC Cable | km | 2.9 | 5.1 | 5.3 | 7.1 | 7.1 | $\mathbf{2 7 . 4}$ |
| AILC Cable | km | 5.6 | 9.9 | 10.4 | 13.8 | 13.8 | $\mathbf{5 3 . 3}$ |$\}$ /C

[^3]
## System Renewal Investments

The Underground System Renewal - Downtown program prioritizes at risk cable segments based on historical failures, number of splices on feeders, age and customer base. This will be used in conjunction with complementary cable testing data to validate the volume of cable replacement required. This is considered to be a best practice in the industry and is used by utilities such as Consolidated Edison (ConEd) in New York City for their PILC cable replacement program. ${ }^{14}$ Studies have shown that this method is driven by condition and is a reliable alternative to traditional methods for asset ranking. ${ }^{15}$

Toronto Hydro has determined that approximately 2.5 percent of the PILC population is in a critical state and should be addressed through proactive replacement during the 2020-2024 period. This 2.5 percent amounts to 27 circuit-kilometres of PILC, and will trigger replacement of 24 percent of the existing AILC population (53 circuit-kilometres) connected downstream of PILC cable.

Based on similar past work, Toronto Hydro estimates that PILC cable replacement projects will cost, on average, approximately $\$ 1.8$ million per circuit-km, while AILC replacement will cost approximately $\$ 0.5$ million per circuit-km. Toronto Hydro has applied these volumetric costs to the forecast population of critical cables to develop the 2020-2024 segment cost of $\$ 63$ million.

## E6.3.4.2 Cable Chamber Renewal

Table 9: Cable Chamber Renewal 2020-2024 Program Costs (\$ Millions)

|  | $\mathbf{2 0 2 0}$ | $\mathbf{2 0 2 1}$ | $\mathbf{2 0 2 2}$ | $\mathbf{2 0 2 3}$ | $\mathbf{2 0 2 4}$ | Total |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Cable Chamber | 5.6 | 5.7 | 5.8 | 5.9 | 6.1 | $\mathbf{2 9 . 1}$ |

Table 10: 2020-2024 Volumes (Forecast): Cable Chamber Renewal

| Asset Class | $\mathbf{2 0 2 0}$ | $\mathbf{2 0 2 1}$ | $\mathbf{2 0 2 2}$ | $\mathbf{2 0 2 3}$ | 2024 |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Cable Chamber | 15 | 15 | 15 | 15 | 15 |
| Cable Chamber Roof | 24 | 24 | 24 | 24 | 24 |
| Cable Chamber Abandonment | 3 | 3 | 3 | 3 | 3 |
| Cable Chamber Lid | 200 | 200 | 200 | 200 | 200 |

[^4]
## System Renewal Investments

cables that serve many large and critical loads. Consequently, feeder life expectancy and probability of failure worsen drastically. This will negatively impact customer service in the downtown area. The status quo option would not be prudent as it does not address the needs of downtown customers that prioritize reliability over price.

Additionally, when a cable can no longer be maintained through splicing, Toronto Hydro will replace the cable. The costs of replacing a cable reactively is also higher than proactive replacement. Toronto Hydro estimates that replacing all cables reactively could vary considerably, but average out to approximately 10 percent more than the costs allocated to the preferred option (discussed below). Reactive work is especially challenging in the downtown area due to considerable coordination with third parties that is required. Therefore, Toronto Hydro does not recommend pursuing this option.

## 2. Option 2 (Selected Option): Targeted Replacement of PILC and AILC Cables

Toronto Hydro is planning to remove approximately 24 percent of AILC cable ( 53 circuit kilometres of 220 kilometres) and 2.5 percent of PILC cable ( 27 circuit kilometres of 1,100 kilometres) between 2020 and 2024. The cables will be replaced based on the risk level associated with the cable segment. This proposed pace is a particularly conservative pace given that it will take approximately 200 years to renew the existing PILC in Toronto Hydro's distribution system. As a result, the utility expects to increase the pace of this segment following the 2020-2024 period.

In addition, as primary cables and cable segments are being tested or replaced, Toronto Hydro will re-prioritize at-risk feeders. Where at-risk primary cable sections are identified, this will drive the replacement of the legacy type AILC cable that is connected downstream of these cable sections.

Under this option, Toronto Hydro would mitigate the failure risk on the downtown distribution system and increase reliability. As mentioned in section 3.1, and in Option 1 above, non-uniformity (i.e. cable splicing) increases the risk of failure. Therefore, by replacing the highest risk cables, the utility will increase the uniformity of cable types in the system (i.e. by replacing the non-uniform cable with XLPE cable), which will increase reliability on the system.

In addition to increasing reliability, this option will reduce the risk of oil leakage from the insulation on PILC cables and therefore, reduce the need for service interruptions on customers to address the leaks.

Table 8: 2020-2024 Hydro One Contribution Projects based on the most recent Needs Assessment report

| Project | Project Type |
| :--- | :---: |
| Horner Expansion | Station Capacity Expansion |
| Charles TS - T3/T4 Upgrade | Transformer Upgrade |
| Duplex TS - T1/T2 Upgrade | Transformer Upgrade |
| Windsor TS - T1/T2/T3/T4 Upgrades | Transformer Upgrade |
| Finch TS B-Y Replacement | Bus Replacement |

## 1. Horner TS Expansion

Toronto Hydro plans to make a capital contribution to Hydro One of $\$ 34.4$ million over the 20202024 period for a large-scale expansion project at Horner TS. The result will be an additional capacity of 192 MVA to alleviate forecasted capacity constraints at Manby TS in the South-West area of Toronto. This need has been identified in the Needs Assessment report as shown in Table 32 and as discussed in detail in the IRRP, Section 7.2.3. ${ }^{14}$

Figure 2 below shows the four stations in this area that require capacity relief in the near future: Manby TS, Horner TS, Runnymede TS, and Fairbank TS.

[^5]|  |  | 2015 Mrres |  |  | 2016 MrFs |  |  | 2017 MrFs |  |  | 2018 MFFRS |  |  | 2019 Mrrs |  |  | 2020 MFRS |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| оев | ripio | Depreciation Expense | Derecogntition | $\begin{gathered} \text { Total } \\ \text { Depreciation } \\ \text { Expense } \\ \hline \end{gathered}$ | $\begin{gathered} \text { Depreciation } \\ \text { Exnense } \end{gathered}$ | Derecogntition |  | $\begin{aligned} & \text { Depreciation } \\ & \text { Expense } \end{aligned}$ | Derecogntion | $\begin{gathered} \text { Total } \\ \text { Depreciation } \\ \text { Expense } \\ \hline \end{gathered}$ | $\begin{aligned} & \text { Depreciation } \\ & \text { Expense } \end{aligned}$ | Derecogntion | $\begin{gathered} \text { Total } \\ \text { Depreciation } \\ \text { Expense } \\ \hline \end{gathered}$ | Depreciation <br> Expens | Derecognition | $\begin{gathered} \text { Total } \\ \text { Depreciation } \\ \text { Expense } \\ \hline \end{gathered}$ | $\begin{aligned} & \text { Depreciation } \\ & \text { Expense } \end{aligned}$ | Derecogntition | $\begin{gathered} \text { Total } \\ \text { Depreciation } \\ \text { Expense } \\ \hline \end{gathered}$ |
| 161 | Compulue Sotware (Formaly known as Account 1925) | 19,200,957 | s . | 19,20,957 | 19,291,705 |  | 19,291,705 | 19,982,844 | 5 | 19,982,844 | 20,82, 805 | 1,355,063 | 22,277,868 | 31,822,793 | s | ¢ 31,83,793 | 99,942 | s | \$ 36,09,942 |
| 1612 | Land Righs |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | land |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| $\frac{1808}{1815}$ | Suididins Transorme Station Equipment 5 50 kV $^{\text {a }}$ | ${ }_{\text {2, } 266,788}^{404,102}$ |  |  | ${ }_{\text {2,404,722 }}^{404,897}$ | S ${ }^{5}$ | $\frac{2,413,312}{404,897}$ | ${ }_{\text {2, }}^{6,96,835}$ | 11.479 | ${ }_{\text {2,796,835 }}^{663,78}$ | 3,08,486 | 9,993 | ${ }_{\text {3, }}^{3,288,799}$ | 3,671,135 ${ }^{1,321,96}$ |  | ${ }_{\text {3,671,135 }}^{1,31,006}$ | $\frac{3,72,102}{1,351,172}$ |  | ${ }^{3,720,102} 1$ |
| 1820 | Distribution Station Equipment 50 kV | 7,285,185 | 21,005 | 7,307,090 | 7,499,328 | 374,856 | 7,85,1,85 | 7,811,055 | 717,437 | 8,528,492 | 8,622,713 | 751,97 | 9,373,810 | 10,158,330 | 187,293 | 10,34,623 | 11,27,000 | 230,873 | 11,503,874 |
| 1830 | Poles, Towers \& Fixtures | 9,200,599 | 6,288,477 | 15,59,036 | S 10,031,935 | 5,542,995 | 15,57,929 | 10,43,048 | 2,73,544 | 13,178,593 | 10,921,669 | 2,529,950 | 13,41, 118 | 11,27,091 | 4.507,458 | 15,78,548 | 11,73,396 | 5,970,306 | 17,709,652 |
| 1835 | Overhead Conductors 8 Devices | 7,893,309 | 2,637,264 | 10,53,573 | 9,360,888 | 1,974,920 | 11,35,5088 | 10,246,549 | 2,290,636 | 12,537,185 | 10,827,432 | 2,919,19921 | 13,746,626 | 11,59,944 | ${ }^{1,766,477}$ | 1,323,022 | 12,364,683 | 2,345,789 | 14,770,472 |
| ${ }^{1840}$ | Underfround Condut Undersound Conductor \& Devices | S7,55,567 | ${ }_{4}^{43372,266}$ | S ${ }_{\text {s }}^{51,994,9,93}$ | 40,921,100 210 | ${ }_{5}^{51,477,560}$ | ${ }^{4.5,51,880} \mathbf{2 6 , 0 , 6 0 3}$ | ${ }^{42,854,89} 2$ | ${ }_{5}^{4.946,699}$ |  | ${ }^{4,4,88,8,20}$ | ${ }_{6,2126,24}^{424}$ | ${ }^{4,4,35,041}$ | ${ }^{47,53,9,41} 2$ | ${ }_{\text {a }}^{4,917,577}$ | ${ }^{4,9,98,627} 3$ | ${ }^{50,257,599} 29$ | ${ }_{5}^{57,343,404}$ | 50,82,0,59 3 |
| 1850 | Line Tranformers | 19,94, 274 | S 8,10,405 | \$ $28,09,679$ | 21,21, ,738 | ¢ 8,59,0,02 | S 29,70,760 | 22,73,608 | ¢ 8,36,045 | \$ $31,105,563$ | 23,997,546 | S $7,327,46$ | ¢ $31,35,006$ | 25,93, 134 | 7,491,866 | S 33,24,820 | 28,23,015 | 9,503,228 | 37,73,243 |
| 1855 | Senices (0veremead 8 Underground) | 2,012,677 | 292,242 | 2,304,920 | 2,418,759 | 516,109 | 2,934,869 | 2,723,949 | 1,113,020 | 3,886,969 | 2,947,588 | 480,467 | 3,428,026 | 3,429,537 | 268,161 | 3,697,988 | 3,881,256 | 375,123 |  |
| ${ }^{1380}$ | Meers | 13,384,647 | $1,458,318$ | 14,842,965 | 14,216,811 | 4,332,466 | 18,49,457 | 14,95,008 | 3,81,022 | 18,537,030 | 16,018,913 | 2.559,854 | 18,58,767 | 17,18,9,912 | ${ }_{1}^{1.526,243}$ | 18,712,155 | 18,611,366 | 1,431,703 | 20,043,099 |
| 1908 | Builidings \& Fixtures | 6,451,486 | 230,096 | 6,681, 82 | 7,88,271 | 7,299 | 7,905,570 | 10,74,877 | ${ }^{23,837}$ | 10,78,714 | 11,31,1,161 | 113,573 | 11,423,734 | 11,34,805 |  | 11,39,8,05 | 11,382,932 |  | 11,382,932 |
| $\frac{1910}{1915}$ | Leashold Improvements | ${ }_{\text {2 }}^{2347715}$ |  | $\xrightarrow{234,715} 1$ | $\frac{1880.054}{1.68833}$ | 1.606 | ${ }_{1.890,054}^{189}$ | ${ }_{1.888,974}^{\text {30, }}$ | 66973 | ${ }_{\text {1.965,7887 }}^{\text {3, }}$ | ${ }_{\text {20,4,281 }}^{10.264}$ | 3.544 |  | ${ }_{\text {2,734 }}^{\text {2,9611 }}$ | s | ${ }_{\text {2,07734 }}^{8,61}$ | 1.905 .53 | s | 523 |
| 1920 | Computer ¢ ¢uipment- Hardware | 5.612,079 |  | 5,612,079 | 8,721,873 |  | 8,712,873 | 9,95,801 |  | 9,195,801 | 10,74,855 |  | 10,74,855 | 11,74,632 |  | 11,74, 632 | 11,692,22 |  | 11,692,222 |
| ${ }^{1930}$ | Transporataion Euiipment | 5,882,780 | s | 5,852,780 | S $5.294,930$ | s | 5,294,930 | 4,455,106 |  | 4,45,106 | 3,666,383 | s | 3,686,383 | 3,254,411 |  | 3,254,411 | 3,045,967 |  | 3,045,967 |
| -1935 | Stores Equipment | 2,401,040 |  | 2,401,040 | 2,288,169 |  | 2,288,169 | 2,100,269 |  | 2,100,269 | 2, 257,857 |  | 2, 257,857 | 2,480,670 |  | 2,480,670 | 3,095,74 |  | 3,095,74 |
| 1945 | Measurement \& Testing Equipment | 67,711 |  | ${ }^{\text {2,7,711 }}$ | 67,71 |  | , |  |  | 620 |  |  |  |  |  | 920 |  |  |  |
| $\underline{1950}$ | Power Operated Equipment | ${ }^{122,523}$ |  | ${ }^{122,523}$ | 102,041 |  | 102,041 | 95,035 |  | 95,035 | 158,280 |  | 158,280 | 95,793 |  | 95,793 | 84,739 |  | 4,7391 |
| ${ }^{1955}$ | Communicatons Equipment | 2, 2 202,404 |  | 2, 2 ,20,404 | ${ }_{\substack{\text { 2,10,612 } \\ 37,245}}$ | 5 | ${ }_{\text {2,10,612 }}^{37,245}$ | ${ }_{\text {4,010,188 }}^{77,310}$ |  | 4,010,1,58 <br> 37,310 | $\xrightarrow{4,60,337} 37$ |  | ${ }_{\text {4,690,37 }}^{37,310}$ | ${ }_{\text {4,122,018 }}^{37,712}$ |  | ${ }_{\frac{4,122,018}{37,712}}$ | ${ }_{3,827,011}^{34,673}$ |  | (32,0,071 |
| 1970 | Lad Manazement Controls Customer Premis | 1,067,30 |  | 1.067,300 | 836,068 | . | 836,068 | 37,39 |  | 37,379 | ${ }_{6}^{62,634}$ |  | 62, 2341 |  |  |  |  |  |  |
| 1975 <br> 1980 <br> 1 | Load Management Contros Uutily Premises |  |  |  |  |  |  |  |  |  | 2,68,961 | 308,12 | 2,977,573 |  |  | 3,991,391 | 4,128,590 |  | 5 5,688,628 |
| 2440 | Contributions 8 Crant | 2,210,580] | 375,192) | 2,585,733 | 3,765,318) | 501,631) | (5) $4,266,949$ | 4,710,955 | 1,113,168) | 5,824,124] | s | 5 |  | 6,334,922 | 400,524) | 6,735,216] | 8,995,366 | 537,050] | 9,532,8861 |
| - 1609 | Capital Contribution Paid |  | s | ${ }^{1,127,378}{ }^{2,54,564}$ | s $2,0,0,0,08$ <br> 5 $2,54,564$ |  | ${ }_{2}^{2,055,9,564}$ |  |  | 3,404,006 | 3,58,390 | s | ${ }^{3,588,390} 1.30 .504$ | $\xrightarrow{7,76,972}$ | ${ }_{5}^{5}$ | 7,676,972 |  |  |  |
|  | Sub-Total | 167,799,494 | 24,139,160 | 191,918,654 | 180,807,588 | s $26,990,771$ | 207,98,309 | 194,109,167 | 24,577,611 | 218,646,778 | 21,493,835 | 25,031,872 | 236,525,08 | 230,599,049 | 20,122,625 | 250,691,674 | 245,788,261 | 25,793,51 | 27,58,7744 |
|  |  | s | ${ }_{\text {s }}$ |  | s | ${ }_{\text {s }}$ |  |  |  |  |  |  |  | ${ }_{\text {4 }}^{1353,8229}$ |  |  |  |  |  |
|  |  |  | 2,139,16 |  | ,807, |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

## $\frac{\text { OEB Appendix 2-C }}{\text { Depreciation and Amortization Expense }}$

This appendix is to be completed in coniunction with the accounting instructions in Appendix 2 -B

| Scenario that applies | Appicable Years and Accounting Standard | Year felleted in | Accounting Standard Reflected in Sch |
| :---: | :---: | :---: | :---: |
| Rebasing for the first time with depreciation policy changes made in 2012. $\square$ |  changes to MIFRS are material) |  |  |
| Rebasing for the first time with depreciation policy changes <br> made in 2013. |  changes to MIFRS are material). |  |  |
| Already rebased with depreciation policy changes in a prior rate application |  | 2015 | MFRS |


|  |  | Book Values |  |  |  |  |  |  |  | Service Lives |  |  |  | Depreciation Expense |  |  |  |  | Varance ${ }^{\circ}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Account | escripition |  | Opening Net Book Value of Policy Change (Jan. 1) ${ }^{1}$ | Less Fully Depreciated $^{7}$ | $\begin{array}{\|c\|} \text { Net Amount of Existing } \\ \text { Assets Before Policy } \\ \text { Change to be } \\ \text { Depreciated } \end{array}$ | Opening Gross Book Value of Assets Acquired After Policy Change ${ }^{2}$ | Less Fully Depreciated $^{8}$ | Net Amount of Assets Acquired After Policy Change to be Depreciated | $\underbrace{}_{\substack{\text { Curent tear } \\ \text { Additons }}}$ | Average Remaining Life of Assets Existing Before Policy Change | Depreciation Rate <br> Assets Acquired Af Policy Chang | Life of Assets Acquired After Policy Change |  | Depreciation Expense on Assets Existing Before Policy Chang |  | Depreciation Expense on Current Year Additions ${ }^{5}$ | Total Current Year Depreciation Expense |  |  |
|  |  |  | $\square{ }^{\text {a }}$ | b | $\mathrm{c}=\mathrm{a}$ | d | - | $t=d \cdot e$ | 9 |  | $i=1 \mathrm{~h}$ |  | $k=11 /$ | l=ch |  | $9^{\circ}$. | $0=1+m+n$ | p | EP |
| 1611 |  |  | 52,669 | 6.806,320 | \$ $62.76,349$ | \$ 17,158.081 |  | 081 | 812 | 4.91 | 0.36\% | 4.76 | 21.020 | s 12,76,458 | s 3,606,252 | s 1.567,003 | ,512 | \$ 19,20,957 |  |
| \%162 <br> 1805 <br> 105 | Land fight |  |  |  |  |  |  |  |  |  |  |  | 0.0 |  |  |  |  |  |  |
| ${ }^{18008}$ | Lead |  | ${ }_{\text {2, }}^{\text {2, }, 677,6,626}$ | 2.912,639 | 26,764.988 | -s 402,428 |  | 402428 | 22,28,048 | 18.08 | 5.53\% | 62.45 | $1.600 \%$ | 1,480,511 | 6.44 | 178.456 | 1.652,523 | 2,686,758 | 35 |
| 1885 <br> 1820 <br> 180 | Transomere Sation Euupment 5 S KV |  | 5.8399955 <br> 12.667 .45 | 174,306 |  | ${ }_{30,399,194}^{24}$ |  | 30,39, 194 | 6,822.070 |  |  | 28.31 | ${ }^{0.009}$ |  | $1.073,873$ | 120,47 |  |  | 23,843 |
| - 1830 | Pous. Toves 8 Fixules |  |  |  |  | ${ }^{\text {s }}$ |  | 70,674946 | ${ }_{\substack{38,38,574 \\ 4848750}}$ |  |  |  |  |  | ${ }_{1.1868,230}$ | ${ }_{\substack{506,81 \\ 543215}}^{\text {cis }}$ |  | $\xrightarrow{9,290,5}$ |  |
| ${ }^{18950}$ | Underearound oonduitit |  | 639,376,7,70 | ${ }_{854,436}^{268}$ | 638.522,274 | ¢ ${ }^{\text {s }}$ |  | 216,195,167 | ${ }_{96,834,688}$ | ${ }_{22,27}$ |  |  |  | \% $2.0,67,3,375$ | ${ }_{\text {f,50, }}^{1.850,15}$ | 1,455,718 |  | 37,556,567 |  |
| ${ }^{1845}$ | Undearaund Conotuctos 8 Devie |  |  | ${ }_{\text {l }}^{1,7919,873}$ |  | (r ${ }^{\text {s }}$ |  | $131,334.521$ <br> 63607838 |  | $\begin{array}{r}31.09 \\ 18.14 \\ \hline\end{array}$ | 3.22\% |  | (e.729\% |  |  |  |  | $\xrightarrow{18.848 .588}$19,90274 |  |
| ${ }^{1885}$ | Sericics Soventead 8 Undegroung) |  |  | 14.306 | ${ }^{6.4 .405 .079}$ | ${ }_{\text {13, }}^{\text {13,822.001 }}$ |  |  |  | ${ }_{40.50}$ | 2.47\% | ${ }_{44.3}$ | 2.25\% | Li, |  | ${ }^{207,069}$ | ${ }_{5}{ }_{5}$ | ${ }_{\text {2, } 2012.677}$ | ${ }_{\text {240,69 }}^{22581}$ |
| -1860 | $\frac{\text { Meiers }}{\text { Niess }}$ STmat Meess) |  |  | ${ }_{6,6,53}^{4,685}$ |  | ${ }_{\substack{6.517 .788 \\ 7.273,57}}$ |  |  | ${ }_{\text {10,74.470 }}^{6,712.905}$ | ${ }_{\text {O. }}^{19.75}$ |  | ${ }_{19.00}^{19.0}$ | ${ }_{\text {che }}^{6.64 \%}$ | $\xrightarrow{2,2,58,868} 9$ | 341,680 <br> 489,96 | ${ }_{\substack{261,785 \\ 223,64}}$ |  | 3.137 .003 <br> $10.552,84$ | $\pm$24,9531 <br> 152694 |
|  | nd |  | 9, 9,150,994 |  | 9,150,994 | ${ }_{\text {9,250.03 }}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |
| -1908 | Builings \& flutues |  | $\begin{array}{r}65.555,6.634 \\ 701434 \\ \hline\end{array}$ | $3,796,564$ <br> 13244 | ${ }^{61.560 .071}$ | ${ }_{\text {16,995,733 }}^{52065}$ |  | $\xrightarrow{16,995,733}$ | 45,213,438 | 12.89 <br> 3.03 | - | 26.13 <br> 5.00 | ${ }_{\text {20, }}^{3.03 \% \%}$ | ${ }_{4}^{4,747,727}$ | ¢50,368 | 865,012 | (6,20,055 | ${ }^{6,451,486}$ |  |
| $\stackrel{1915}{ }$ | Oficee funitue e E Euioment |  | 9.802.431 |  | ${ }^{\text {9, } 9.45 .7475}$ |  |  | -33,3919 | $\frac{921.298}{72,298}$ | 5.87 <br> $\substack{34 \\ \hline \\ \hline}$ |  | $\stackrel{10.00}{103}$ | ${ }^{10.000 \%}$ | ${ }_{\text {L }}^{1,55,9,985}$ | 3.332 | 46.065 | ${ }^{\text {s }}$ | ${ }_{\text {1,762 } 2999}$ | ${ }_{\text {IT, }}^{15,5}$ |
| ${ }^{1920}$ | Tompurer EGupment - -arawar |  |  | ${ }_{\text {2, 2650,73 }}^{1,54.65}$ | ${ }^{\text {20.372, } 2.416}$ |  |  |  |  |  | ${ }^{2.9 .850 \%}$ | ${ }_{7}^{4.73}$ | ${ }^{22.05 \%}$ |  | , | 810.094 <br> 163,196 |  | ${ }_{5}^{5 ., 652,780}$ |  |
| ${ }^{1} 1935$ | Trese Euipment |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ${ }^{1949}$ |  |  |  | ${ }_{4}^{580.502}$ |  |  |  | (1.852,5757 | 1,879.488 | ${ }^{5.39}$ |  | 4.39 | $\underset{\substack { 10.007 \% \\ \begin{subarray}{c}{12.750{ 1 0 . 0 0 7 \% \\ \begin{subarray} { c } { 1 2 . 7 5 0 } }\end{subarray}}{ }$ |  | ${ }_{\text {L202,524 }}$ | ${ }_{93,974}^{27}$ | ${ }_{\text {2, }}^{1089,395}$ |  | ${ }_{\substack{26,7,71 \\ 4.065}}^{1.065}$ |
| ${ }^{1950}$ | Serice Eauiment |  | $\frac{615,688}{4593}$ | $\frac{64.211}{911610}$ | 551.476 | ${ }_{\text {s }}^{\text {s }}$ |  | ${ }^{2020,747}$ |  | ${ }_{2}^{509}$ | 19.66\% | 8.8.0 |  | 108,436 | ${ }^{25939}$ |  |  | 122.523 |  |
| ${ }^{\text {a }} 1950$ | (iscollaneous Efuivenent | ${ }_{8}$ | 4.957.071 |  | ${ }^{3.687,697}$ |  |  |  | 511.663 | - | ${ }^{34.848296}$ |  | 18.00\% | ${ }_{\substack{1,253,215 \\ 36,99}}$ | 52,700 | 66,32 | ¢, $1.128,24$ |  |  |
| ${ }^{1970}{ }^{1975}$ |  |  | 3.022,834 | 87,491 | 2,993,342 |  |  |  |  | 2.85 | (35.12\% |  | ${ }_{\text {0.000\% }}^{0.00 \%}$ | 1,030,988 | ${ }_{\text {s }}^{5}$ | s | ,003,988 | ${ }^{1.067,31}$ | s ${ }_{\text {s }}$ |
| \% 1980 | Sistem Superisor Eaimment |  | 19,17 | ${ }_{8}^{8} 400.04$ | 18.76 | ${ }^{3} 88$ |  | ${ }^{3}, 88$ | s 3,177,94 | 11.09 | 年.02\% | 14.86 |  | 1,621.192 | 261,713 | 105.60 | 2.059,599 | ${ }_{\text {s }}^{5}$ 2,253,207 | \% 193,999 |
| 240 | Conatiulios S Grants formaly kown as |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 169 | Copoutias Contibution Paid |  | 19,104,312 |  | 19,104,312 | ${ }^{28.510 .499}$ |  | ${ }^{28.50,4897} 8$ | ${ }^{30.083 .501} 1.76 .500$ | ${ }^{21.68}$ |  |  |  | ${ }_{881,195}$ |  | ${ }_{\text {alibebs }}^{38,22}$ |  | ${ }_{\text {2, }}^{1.210 .580} 1$ |  |
| 2005 | Propert Under Capalal Leases |  |  | 70.56 | \% ${ }^{\text {s }}$ | ${ }^{10.9999,744}$ | 1.648,742 | 9.33, 1.02 | s |  |  |  |  | ${ }^{\text {80,4,23 }}$ |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  | 00\% |  | 00\% |  |  |  |  | \%, |  |
|  | Less Other Noo Raie Pepuluate UViliy Assels |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  | ${ }^{2,366,982,267}$ |  | s ${ }^{2,386,567,02}$ |  |  | $15 \quad 631,082329$ |  |  |  |  |  |  |  |  | ${ }^{5}$ \% $16,1066.041$ |  |  |


Notes:




## This appendix is to be completed in conjurcion with the accounting instructions in Appendix 2 －B

| Scenario that appies | Applicabie Years and Accounting Standard |  |  |
| :---: | :---: | :---: | :---: |
| Rebasing for the first time with depreciation policy changes made in 2012 ． |  |  |  |
| Rebasing for the first time with depreciation policy changes made in 2013．$\square$ |  |  |  |
| Already rebased with depreciation policy changes in a prior rate application |  | 2016 | MFRS |


|  |  | Book Values |  |  |  |  |  |  | Service Lives |  |  |  | Derreciaion Expense |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Account | Description |  | Less Fully Depreciated $^{7}$ |  | $\begin{gathered} \text { Opening Gross Book } \\ \text { Value of Assets } \\ \text { Acquired After Policy } \\ \text { Change }^{2} \\ \hline \end{gathered}$ | ${ }^{\text {Less Fully }}$ <br> Depreciated |  | Curent $\begin{aligned} & \text { Adear } \\ & \text { Adtions }\end{aligned}$ | Average Remaining <br> Life of Assets <br> Existing Before Policy <br> Change <br> $h$ | $\begin{array}{\|c\|} \hline \text { Depreciation Rate } \\ \text { Assets Acquired After } \\ \text { Policy Change } \\ \hline \end{array}$ |  |  | Deereciation <br> $\substack{\text { Expense on Assels } \\ \text { Exising } \\ \text { Poforicy } \\ \text { Policy Change }}$ |  |  | $\left.\begin{gathered}\text { Total Curenten } \\ \text { Denerealition } \\ \text { Expense }\end{gathered} \right\rvert\,$ |  | Varanco |
| 611 | ${ }_{\text {coidem }}^{\text {comp }}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1612 | Land Rights |  |  |  |  |  |  |  | 4.91 |  |  |  |  |  |  |  |  |  |
| ${ }^{1805} 1$ | Lend Eididios |  | 4．319，418 | 25，356，208 | ${ }^{21.886,6.621}$ | 5.350 | 21，881，2，271 | ${ }_{53,726.576}$ | 18.08 | 5．53\％ | 68.65 | －0．00\％ | ${ }_{1,402,694}$ | 318，756 | 39,332 | 2．112，782 | 2．404，722 | 29，940 |
| ${ }_{1}^{1815}$ | Trastomer Staion |  |  |  |  |  |  |  |  |  |  |  |  | S 129766 | ${ }^{23385}$ | 406，486 | ${ }^{404,899}$ | 148 |
|  |  | ${ }_{\text {H2，}}^{1206}$ | ${ }_{593,507}^{593}$ | 112073．949 |  |  |  | ${ }^{\text {ci．f．555．346 }}$ |  |  |  |  |  | ${ }_{\text {2，} 20404001}$ | ${ }_{\text {ctici，66 }}$ | \％．950．599 |  |  |
| ${ }^{1835}$ |  | 199，786，423 | 556，091 | 197，230，322 | ${ }_{104,298,726}$ | ${ }^{67,113}$ | 104，231，613 | ${ }^{\text {52，320，421 }}$ | 34.02 | 2．94\％ | 4424 | 2.268 | ${ }_{5}^{5,777,697}$ | 2，35，0，02 | ${ }_{\text {590，} 1238}$ |  | 9.360 .88 |  |
|  | Undergound Conduit |  | 1，807，136 |  | 313，029，005 | 72,195 | ${ }^{312,957,6}$ | 99， 687,834 |  | 4．99\％ | ${ }^{33.3}$ | 3．00\％ | 20，63，5888 | 9，387，375 | 1，995，102 | 30，510，065 | 40，927，10 |  |
| ${ }^{1885}$ | Undeground Conductors 8 Devie | 397.494 .067 <br> 3052505 | $\begin{array}{r}3.692,376 \\ 4.2789 \\ \hline\end{array}$ | 393．80， 1.99 |  | 1．064，923 |  |  | $\begin{array}{r}31.09 \\ 181 \\ \hline 18\end{array}$ |  | －36.93 <br> 275 <br> 25 | 2．770 |  |  | ${ }_{\text {l }}^{1,172,7710}$ | 19，69，744 | 21.057 .038 2,1201738 | ， |
| 1855 |  | 61，419，385 | 204,199 | 61，215，186 | 32，199，061 |  | 32，19，9，93 | 16，333．022 |  | ${ }^{2} 477 \%$ | ${ }^{44,37}$ |  |  |  | 184,064 |  | 2．418，75 |  |
| 1880 | Noters | 44，538，583 | 676 | ${ }^{43,862,49}$ | 17，259，253 | 20.96 | ${ }_{17,288,55}$ | ${ }_{13,064}$ |  | $5.07 \%$ |  | 4.89 | 2224,80 | ${ }_{883,045}$ |  | 3，387，3 | ${ }_{3.742}$ |  |
|  | eis Smat Meies） | 94，589，51］ | 退，230 | 93，316，284 | ${ }_{13,986,49}$ |  | 13，986，493 | 4．59，069 | ${ }^{9.75}$ |  | 15.00 |  | 0，56，996 | ${ }^{\text {932 } 23}$ | ［13，22 |  | 10．474， |  |
|  | Land | 9，5356．934 |  |  | 9，200．037 | 281185 | 9．2020．039 | ${ }^{309}$ |  |  |  | 3120 |  |  |  |  | 7.998 .2 |  |
| 1910 | Leasshold I mporoveme | \％．500．434 |  |  |  |  |  |  | ${ }^{1203}$ |  |  | ${ }^{20.000}$ |  | 1，0，481 |  | 5 |  |  |
| 1915 | Office funitue 8 Equiement | 9，802，431 | 1，653，568 | ${ }_{8,1}$ |  |  |  | 4．541，01 |  | 77．02\％ |  | 10．00\％ | $1,387,24$ | 95，42 | ${ }^{277,051}$ | 1，79， | 1．688，5 |  |
| ${ }_{\text {－}}^{1929}$ |  | ${ }_{\text {1，192，6331 }}^{21967081}$ | ${ }_{5}^{4,96}$ |  | $16,12,136$ <br> 4.65365 | 389．901 | $\begin{array}{r}15,736,235 \\ \hline 4.65365 \\ \hline\end{array}$ | ｜19，99，10r | $\begin{array}{r}3.34 \\ 4.03 \\ \hline\end{array}$ | － | 73 |  | $1,915,23$ <br> 4.0361 | 3，474，799 |  | ${ }_{7}^{7,055,527}$ | $8,212,87$ <br> 5.29493 |  |
|  | 隹 |  | 7 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1940 | Toos，Shop \＆Garage Equiment | 11．036．987 | $2.153,19$ | 8，883，790 | 3．704，715 |  | 3，704，71 | 3，129，24 | 5.61 | 7．81\％ | 9.9 | 10．09\％ | 1，582，629 | 373，966 | 157，93 | 2．14，933 | 2．24，16 |  |
| 1995 | asimemen eresing Euioment | ${ }_{\text {9，367，51 }}^{615}$ |  | 9．363，${ }^{\text {coin }}$ | 8．887，268 |  | ${ }_{8,8877,26}$ |  |  |  |  | $\frac{22.776}{12500}$ | ${ }_{\text {2，} 213,8,812}$ |  |  |  |  |  |
|  |  | \％ 4.5930288 | ${ }_{\text {H，} 18.48808}$ | ${ }_{\text {L00．248 }}^{1.40988}$ | ${ }^{\text {a }}$ 3，423，541 |  |  | ${ }_{27}^{27.860 .75}$ |  |  |  | $12.50 \%$ <br> 8.99 <br>  | $\xrightarrow[\substack{\text { 9，3，36 } \\ 47977}]{ }$ | ${ }^{301,587}$ |  | 1023 | $\frac{1020}{}$ |  |
| ${ }^{1950}$ | Communaions Equipment |  |  |  |  |  |  | ${ }^{3,90}$ |  |  | 10.00 | 0．00\％ | 36，999 |  | ${ }^{195}$ |  | 37． |  |
| ，900 |  | 3，022，834 | 2．013，119 | ${ }^{1,009,71}$ |  |  |  |  | ${ }^{2.85}$ | 35．12\％ |  | 0.002 | 24，631 |  |  |  |  |  |
| － 1975 | Lead Management Contros Sulitp Peemises | 19.174 .795 | 1.353 .959 | ${ }^{17820,8,87}$ | 7025．733 |  | 7．025．733 | ${ }^{3.264626}$ | 11.09 |  | 14.90 |  | 999 | ${ }_{\text {s }}^{5}$ | ${ }_{5}{ }^{109,535}$ | ，982 | 2273.836 |  |
| 1985 | cellaneus 5 Fread $A$ S |  |  |  |  |  |  |  |  | 0．00\％ |  |  |  | ${ }_{5}$ | s |  |  |  |
| 240 | Contributions \＆ |  |  |  | 58．54，290 | 829，259 | 57，765，032 | 32，842，799 |  | 0．00\％ | 35.42 |  |  | 1，60，963 | 63，68 | 2094，612 | 3，765．318 |  |
| 1609 <br>  <br> 2005 <br> 2 |  | 年，104，312 |  | $\xrightarrow{19,104.312} 7$ | 2．625．976 | 1．648，742 | $\xrightarrow{2.6259 .976} 9$ | 8 53， 444.210 | 21．68 <br> 80.42 | ${ }_{\text {c }}^{4.246 \%}$ | 24.92 <br> 4.31 | ${ }^{4.0 .20 \% \%}$ | coin |  | 1.004 | 2， | ${ }_{\text {2，056，028 }}^{2,254,564}$ | S ${ }_{\text {s }}$ |
|  | sub－Total | 2，36，9，98，267 | 59，006，622 | 2，307，529，639 | 1．06，099， 84 | 3，041，282 | 1．065，00，562 | 584，296，135 |  |  |  |  | 12，94，${ }^{\text {1，933 }}$ | $41,05,771$ | 12，739， | 175，76，302 | 180，007， |  |
|  |  | s |  | s ． | s |  | s | \＄ |  | 0．0\％\％ |  | 0．00\％ | s | $s$ ． | $s$ ． | s | s | s |
|  | Less Other Non Rate－Regulated Utility Assets | s |  | 5 | ${ }^{5}$ |  | ${ }^{5}$ | ${ }^{5}$ |  | 0．00\％ |  | 0．00\％ | s | s | s | $s$ ． | s |  |
|  |  | 6，938，2］ | S 59，006，628 | S $2.307,529,639$ | s 1.068 .099 .84 | s 3．041，282 | ls 1 1，065．08， 5 | ［s $584,26,135$ |  |  |  |  |  |  |  |  |  |  |


Notes：






OEB Appendix 2－C
Depreciation and Amortization Expense
（t）

| Scenario that applies | Applicale Vears and Accounting Slandard |  |  |
| :---: | :---: | :---: | :---: |
| Rebasing for the first time with depreciation policy changes made in 2012 ． | This appendix must be duplicated and completed tor the years 2012 to 2018 ．The appendix for 2012 is to be completed under CGAAP（pirio to changes in depreciaion policies）．The appendix for 2012 to 2014 must be completed under Revised CGAAP（atere changes in depreciaion policies）．The appendix tor 2014 to 2018 is to be mer under MIFRS（2014 if changes to MIFRS are material） |  |  |
| Rebasing for the first time with depreciation policy changes made in 2013．$\square$ | This appendix must be duplicated and completed tor the years 2013 to 2018 ．The appendix for 2013 is to be completed under CGAAP（prior to changes in depreciaition policies）．The appendix for 2013 to 2014 must te completed under Revised CGAAP（after changes in depreciation policies）．The appendix for 2014 to 2018 is to be |  |  |
| Already rebased with depreciation policy changes in a prior rate application |  | 2017 | mFRS |


|  |  | Book Values |  |  |  |  |  |  | Service Lives |  |  |  | Depreciaion Expense |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Account | Descripion |  | ${ }_{\text {L }}^{\text {Less Fully }}$ |  | $\begin{gathered} \text { Opening Gross Book } \\ \text { Value of Assets } \\ \text { Acquired After Policy } \\ \text { Change }^{2} \\ \hline \end{gathered}$ | Less Fully Depreciated $^{8}$ |  | Curren tear $\begin{gathered}\text { Adtitions }\end{gathered}$ | $\begin{aligned} & \text { Average Remaining } \\ & \text { Life of Assets Existing } \\ & \text { Before Policy Change } \end{aligned}$ |  | Life of Assets Acquired After Policy Change ${ }^{4}$ | $\begin{gathered} \text { Depreciation } \\ \text { Rate on New } \\ \text { Additions } \end{gathered}$ | Depreciation Expense on Assets Existing Before Policy Chang |  |  | $\begin{array}{\|c\|} \text { Total Current } \\ \text { Year Depreciation } \\ \text { Expense } \end{array}$ | Depreciation Expense per Appendix 2－BA Fixed Assets，Column J | Variane ${ }^{\circ}$ |
|  | Compuer Sotur |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | $\underline{q=p .0}$ |
| ${ }_{1612}$ | ${ }_{\text {Lemen }}^{1929}$ | ${ }^{\text {s }}$ 8 69.572 .669 | ${ }_{\text {\＄}}^{8}$ 28，723，849 | 40.8 | 1.094 |  | 094 | ${ }^{5}$ 23，996．902 | 4.91 | 20．36\％ $0.00 \%$ | 8 | 20．489 | 15.016 | 900，298 | 2，395，822 | 20，137 | ${ }^{5} \quad 19.982844$ |  |
| 1805 |  | 7，588，531 |  | 7．588，53 | 8.030 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| （1008 | $\frac{\text { Buidins }}{\text { Transome }}$ | ${ }_{\substack{29,677.266 \\ 5.89955}}$ | 3．130，730 |  | ${ }_{\text {5，} 5161.1979}^{15297}$ | 5．350 |  | $11,714,238$ <br> 30938545 | 18.08 <br> 1445 |  | ${ }_{\substack{66.17 \\ 3708}}$ |  |  | ${ }_{\text {，} 42.686}^{4118}$ | ${ }_{\text {c }}^{\text {s }}$ | ${ }_{\text {2，699，644 }}$ | ${ }^{2,796,835}$ |  |
| ${ }_{1880} 18$ | Dinstibution Staioion Euuimmentit 50 kV |  |  |  |  |  | ${ }_{44,661,013}$ |  |  |  |  |  |  | ${ }_{\text {1，472，016 }}^{\text {仵 }}$ | 463,98 | ${ }^{\text {8，7，5，9098 }}$ | ${ }_{\text {7．}}^{\text {7．11，} 1.055}$ |  |
| 1830 | Poles，Towers 8 fixtues | ${ }^{208,620.348}$ | ${ }^{714.621}$ | 207．95．7．727 |  | ${ }^{9356.696}$ | 142．709．771 | ${ }^{20,137.2}$ |  |  |  |  |  | ${ }_{3}^{17.7272989}$ | 345，50］ |  | 10.433 .0 |  |
| －1835 | OVerhad Conotuctas 8 Devices | ${ }^{1977,76,423}$ | 656．967 <br> 3.010 .04 | ${ }^{1977120.456}{ }^{63636667}$ | ${ }_{\text {If6，699，147 }}^{412717640}$ |  | ${ }^{155,766,927}{ }_{412}$ | ${ }^{43,677.62}$ |  | $\frac{2.946}{4.90 \%}$ | ${ }_{\text {44，48 }}^{3311}$ |  |  |  | ${ }_{\text {400，933 }}$ | ， 9.787 .505 | 10.246 .598 <br> 42854989 <br>  <br>  | ${ }_{\substack{4959044 \\ 645173}}^{173}$ |
| 1885 | Undergound Cononducors 8 Devices | 3997，494，067 | ${ }^{\text {c，796，942 }}$ | 391，697，125 | ${ }_{\text {30，3，802，} 242}$ | 2，977，281 | 300，824，761 | 98，821，342 | 31.09 | ${ }_{3.22 \%}$ | ${ }_{37.13}$ | 2.69 |  | 8， 8 ， 2 2，996 | 1，330，923 | 22，022，300 | 23，402，291 | 1，369，661 |
| － 1850 | Line Transiomets Semices（ovenead U Undeground） | $\underset{\substack{305,21,5,157 \\ 66.419,355}}{ }$ |  | 2990．017．702 | $179.412,764$ <br> $48,53,063$ | 1，297，388 |  |  | $\begin{array}{r}18.14 \\ 4.50 \\ \hline 0 .\end{array}$ | ${ }^{5.5419 \%}$ | ${ }_{\text {27．99 }}^{27.5}$ | 2．2．39\％ | $16,482,889$ <br> 1,098983 |  | 1,207728 <br> 162381 | 24，60，975 | 22，739．608 <br> $2,72,949$ | ， |
| 1880 | Neers |  |  | 43，340．106 | ${ }_{30,323.67}$ |  | ${ }^{30,198.641}$ | 8．019，22 | ${ }_{\text {19，72 }}$ |  | 150 |  | ${ }_{2,19893}$ |  | ${ }^{192}$ | 3，800，470 | 4，133．5． |  |
| Hes | Meeies Smar Meeies | 94，689．513 | 2，16，23 | 92，413，280 | －18．982，56 | 106，09 | $\xrightarrow{18,4656.43}$ | 26．83 |  |  |  |  | 9，474，900 | ${ }_{1,231,765}$ | 530,89 | 11，23，067 | 10．822，44 |  |
| $\begin{array}{r}1908 \\ \hline 190 \\ \hline 100\end{array}$ | Buidins 8 Fixulues | 65．350．634 | 4，656．826 | 00，699，008 | 19，882， 2065 | 2，372．563 | 117，450．501 | 65，192，176 | 12.89 | 7．76\％ | ${ }^{31.10}$ | 3.220 | 8.00 | 3，776．548 | （1，048，107 | $0.532,657$ | 10，714．877 | 1，182，2， |
| ${ }^{1919}$ | Cofice fumiture e Eemuement | 9，．802，4341 | ${ }_{\text {L }}^{\text {2，135，} 113}$ | 7，667，318 | 5，495，628 |  |  | 3，73，69 | ${ }^{3.03}$ | － | 10．00 | $\xrightarrow{20.00}$ | 1，35，264 | ${ }_{\text {H0，4，} 63} 5$ | 186,55 | 20041，412 | ${ }_{\text {1．389，974 }}$ |  |
|  | muver Equimenent－Harwa | ${ }_{\text {s }}^{\text {s }}$ | 9，482．093 | $\frac{1.710 .533}{1.9092}$ | 8 | 389，901 | s ${ }_{\text {s }}$ | ${ }^{11.455 .46}$ | ${ }_{\text {3，34 }}^{4.3}$ |  | 74 | $\frac{20.3}{13}$ | 511,96 | ${ }_{7}^{7}, 24$ |  |  |  |  |
| $\stackrel{1935}{1905}$ | Stoses Equioment | ${ }^{2}$ | ${ }^{\text {T }}$ |  |  |  |  |  |  | － $0.000 \%$ |  | H．00\％ |  | ${ }_{5}$ | ， |  |  |  |
| － 1940 |  | （11．036，9879,3650 | 2.633 .504 <br> 35.289 | c．i．403．483 | ${ }_{\substack{6.833 .955 \\ 8.887 .268}}$ |  | ${ }_{\text {c，}}^{6.838,955}$ | ${ }^{\text {s }}$ 3，32，955 | 5.61 <br> 4.39 | 年．89\％6 | 9.94 4.39 | $\xrightarrow{10.06 \%}$ | ， |  | s 167，34 | 2，352．509 | ${ }^{2,100,269}$ |  |
| $\stackrel{\text { Hess }}{\substack{1955 \\ \hline}}$ | Sevice Euipmont | ${ }^{6} 515.688$ | $\xrightarrow{\substack{15.4 .47 \\ \hline 150}}$ | 500．210 | ， 4.27 .747 |  | － 4.2 .787 | 187.338 | $\stackrel{4}{509}$ | ${ }^{19.686 \%}$ | ${ }_{8.00}$ | 12．50\％ | 9， 9 9，36 | 5，343 | 11,709 | ${ }^{115,5098}$ | 95.0 |  |
| $\stackrel{\text { Hes5 }}{\stackrel{1960}{1960}}$ | Coimulation Equimen | ${ }_{\text {4，} 2697,288}$ | 3．682，500 | ${ }^{960,787} 26$ | ${ }^{31,293,298} 3$ |  | ${ }^{31,292,298} 8$ |  | 2.94 7.23 | 年， $13.89 \%$ | 13,43 10.0 | $\xrightarrow{70.05}$ |  |  | ${ }^{352}$ |  | （010， |  |
| ${ }_{\text {l }}^{1970}$ |  | 22，83 | 3．022，834 |  |  |  |  |  | ${ }_{2} .85$ | ${ }^{35.12 \%}$ |  | 0 |  |  |  |  |  | ${ }^{3} \quad 37,379$ |
| $\stackrel{1980}{1985}$ | Sele | 19，174，995 | 1，357，009 | 7186 | 20，35 | ， 327 | 10，220．032 | 7．882，436 | 11.09 | （0．020\％ | 14.95 |  | ，006，60 | 683,73 | ${ }^{26,688}$ | 2．54，121 | 2.364096 | 00，026 |
| 1985 | Msorilanous Cred A Asests |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1609 |  |  |  |  |  | 1.00 |  | ，350 |  |  | ${ }_{24.12}^{242}$ |  |  |  |  |  | ${ }_{\text {¢ }}^{4.710 .0955}$ |  |
| 2005 | Pioperty Under capatial leases | 7.191 .090 |  | $7,719,090$ | 10．999，744 |  |  |  | 80.42 | 1．24\％ | 4.31 | 23．20\％ |  |  | s | 2，151，577 | ${ }^{5}$ 2．064，349 |  |
|  | Sub－Total | 2，366，93，267 | 91，78，094 | 2，275，460，173 | $1.652,345,978$ | 7，38，686 | 1，645，007，292 | 522，261，877 |  |  |  |  | 115，315，156 | 65．687，42］ | 11，8， | 193，03，726 | 194，099，16 | ．075，44 |
|  |  | s ． |  | \＄ | s |  | \＄ | $\checkmark$ ¢ |  | 0．00\％ |  | $0.00 \%$ | $s$ ． | $s$ ． | $s$ ． | $s$ ． | ${ }^{\text {s }}$ | s ． |
|  | （input as negative） |  |  |  |  |  |  | 002.023 |  | 0．00\％ | 15.00 | $6.67 \%$ |  |  |  |  |  |  |
|  | Total | 2，366，938，267］ | 9，478，094 | 2，275，46， | 1，652．345．978 | ， 338.68 | Is 1，665，007，292 | ${ }_{520,29,765}$ |  |  |  |  | s 115，315，156 | 樶，642 | 退， 193 | s 192，96，992 | s 199，075．500 | s $1,108,008$ |


Nooes：





$\frac{\text { OEB Appendix 2-C }}{\text { Depreciation and Amortization Expense }}$


\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline \& \& \multicolumn{7}{|c|}{Book Values} \& \multicolumn{4}{|c|}{Service Lives} \& \multicolumn{3}{|r|}{Depreciation Expense} \& \& \& \\
\hline Account \& Descripion \&  \& Less Fully
Depreciated \(^{7}\) \&  \&  \& Less Fully
Depreciated \(^{8}\) \&  \& \(\underset{\substack{\text { Curent }{ }^{\text {adear }} \\ \text { Adtions }}}{ }\) \&  \& \[
\begin{gathered}
\text { Depreciation Rate } \\
\text { Assets Acquired } \\
\text { After Policy Change } \\
\hline
\end{gathered}
\] \& \[
\begin{array}{|l|l}
\text { Lite of Assets } \\
\text { Accuirec Anter } \\
\text { Policy Change }{ }^{4}
\end{array}
\] \&  \& \begin{tabular}{c}
\begin{tabular}{c} 
Depreciation Expense \\
on Assets Existing \\
Before Policy Change
\end{tabular} \\
\hline \(\mathrm{l}=\mathrm{c} / \mathrm{h}\)
\end{tabular} \&  \& \begin{tabular}{c} 
Deprecation \\
Expension on \\
Curner \\
Additions \\
\hline
\end{tabular} \& Total Current
Depreation
Expensen \&  \& \({ }^{\text {Varance }{ }^{6}}\) \\
\hline 1661 \& \({ }_{\text {arampuer }}\) \& \& \& \& \& \& \& 96,16, 279 \& \& \& 6.84 \& \& s \(\quad 6.655 .32\) \& \& \& \& \& \\
\hline 1612 \& Land Pighs \& \& \& \& \& \& \& \& \& \& \& \& \& \& \& \& \& \\
\hline \({ }_{1008}^{1008}\) \& Leand \& \({ }^{7,588,531}\) \& 3,203,94 \& 26,43,732 \& \({ }_{87,327,033}\) \& 5.350 \& \({ }_{87,322,084}\) \& 16,45, 257 \& 18.08 \& 5.53\% \& 62.90 \& \({ }^{0.009 \%}\) \& 1,464,400 \& 1,388,355 \& 130,873 \& 2,993,568 \& 3,351,463 \& 667,95 \\
\hline 1815 \& Transtomer Station Euw \& \& \& \& \({ }^{31,099,235}\) \& \& \& \& \& \& \& 2.719 \& 403,18 \& 843,138 \& \& \& \& \\
\hline 退 1820 \& \& 112,667,45 \& 1,707,005 \& 110.99 \& \& \&  \& \({ }^{4.458 .078}\) \& \& \& \& \& \& \& 700.97 \& 8,94,418 \& 8,800 \& \\
\hline \({ }^{18305}\) \&  \& \({ }^{2097,7806.423}\) \& \({ }_{7}^{7355.569}\) \& \({ }_{\text {27, }}^{1070,050,954}\) \& \({ }^{1000,789,773}\) \& , 1.434 .3082 \&  \&  \& 34.02 \&  \& \begin{tabular}{|c}
\(\frac{38.16}{44.44}\) \\
\\
\hline
\end{tabular} \& \({ }^{2.629}\) 2.20\% \&  \& \(\xrightarrow{4.447,728} 4\) \& \({ }_{\substack{36,299 \\ 49,14}}^{1 / 24}\) \&  \& \begin{tabular}{l}
\(10.810,688\) \\
10.809893 \\
\hline
\end{tabular} \& ¢ \\
\hline \& Undergound Conduit \& 639,376,710 \& 5.008,668 \& 634,368,042 \& 490,166,792 \& \& 489,960,001 \& \& 22.27 \& 4.99\% \& \& 3.01\% \& 28,89,9,06 \& 14,75,7616 \& 1,480,047 \& 44,72,5,59 \& 44,902, \& \\
\hline \({ }^{1845}\) \& Undergound Conout ois 8 de \& \begin{tabular}{l}
\(397,944,067\) \\
30525157 \\
\hline
\end{tabular} \& \begin{tabular}{l}
\(6,633,322\) \\
8.045785 \\
\hline
\end{tabular} \& \({ }^{390,860,745}\) \&  \& \begin{tabular}{l}
\(5.11,479\) \\
\(1.52,80\) \\
\hline
\end{tabular} \& \begin{tabular}{l} 
397, 51, 1,005 \\
24438434 \\
\hline
\end{tabular} \& 88,499,944
67842711 \& 18,14 \& \& \(\begin{array}{r}3746 \\ 2749 \\ \hline 29\end{array}\) \&  \& - \begin{tabular}{l}
\(1,5,57,8,80\) \\
16,581002 \\
\hline
\end{tabular} \& \begin{tabular}{c}
\(10.60,301\) \\
8.890963 \\
\hline
\end{tabular} \& \({ }^{1.1,81,111}\) \& \begin{tabular}{l} 
24,363,221 \\
2.504020 \\
\hline
\end{tabular} \& 24,98,5666 \& cilig.35 \\
\hline 1855 \& Servics (0verenead \(\&\) Undegrgoun) \& 61,419,385 \& \& 60,698.921 \& 62,815,335 \& 76.476 \& \& 17,736,555 \& \& \({ }^{2} 44^{2} \%\) \& 44.28 \& \& \& \& \({ }^{200,278}\) \& \& 3.057.508 \& \\
\hline \& Neiets \& 44.588 .583 \& 1,198,476 \& 43,30,106 \& 38, 342,883 \& \& 38,107,15 \& 17,692 \& 19.72 \& \(5.07 \%\) \& 21.06 \& 4.75\% \& 2,198,3 \& \(1.090,3{ }^{\text {a }}\) \& \& 4,427,67 \& 4.618,5 \& \\
\hline 1860 \& Neeies S Smant Meeis) \& 94,599,513 \& 2,176,233 \& 92,413,280 \& \({ }^{34,509,399}\) \& 106,085 \& \({ }^{34,403,3}\) \& 8,399,704 \& 9.75 \& \& 15.00 \& \& 9,47,400 \& 2,23, \& 279,9, \& 12,047,9, \& 1,305,11 \& 742805 \\
\hline 星 \& and \& \({ }^{5}{ }_{5}^{5}\) 9, 9,50.994 \& \& \& 9, \& 237258 \& 9,260,337 \& 384718 \& \& \& \& \& \& \& \& \& \& \\
\hline \({ }_{1910}\) \& Unings frxues \& 60.750.63 \& 16.460,53 \& 48,909.88 \& 185.015 .240 \& 2.372.563 \& 182,642,670 \& 3,834,118 \& | \&  \& \(\begin{array}{r}30.98 \\ \hline\end{array}\) \& 200 \& 3,93,522 \& 5,095,327 \& 61.88 \& 9,70.813 \& H,331.950 \& 1,581,138 \\
\hline \({ }^{1915}\) \& Office funutue \& Eaviement \& 9.802, 431 \& \({ }_{2}^{2.404 .3995}\) \& 7,398,035 \& 9,227,322 \& \&  \& 567.033 \& \({ }_{5.8}\) \& \begin{tabular}{c} 
S.2.0\%\% \\
17.02\% \\
\hline
\end{tabular} \& (10.0. \& 10.00\% \& 1,259,922 \& \({ }_{922,732}\) \& 28.35 \& 2.20 .9005 \& 2.112 \& \({ }^{\text {5 }}\) 98,125 \\
\hline \(\stackrel{1920}{1020}\) \& mputer Equipment Hardwal \& \(\xrightarrow{11,192}\) \& 11,254,100 \& 61.476 \& \(47.490,710\) \& 4,698,090 \& \({ }_{42}^{4279296}\) \& 11,534,2827 \& \& \& \({ }_{4}^{4.75}\) \& \& 18,40 \& 9.008, \& ,214,0 \& 10,203 \& \& \\
\hline \& Trassorataon Euwiment \& 21,967, \& [,,57 \& 6.609.08 \& 12,088,00 \& \& 12,088, \& 4,622.87 \& 4.03 \& \& \& \& 1.689, \& \& 31,92 \& 3,683,42 \& 3,73.97 \& \\
\hline 1990 \& Toos, Shop \& Carage Equiment \& 11,036,987 \& 3,17,964 \& 7.863,293 \& 10,159.910 \& \& 10,159,910 \& 3,306,026 \& 5.61 \& \({ }^{17.8 .81 \%}\) \& 0.95 \& 10.05\% \& 1,400,300 \& 1,020,722 \& 166,08 \& 2,587,600 \& 2,282,386 \& \\
\hline \({ }^{1945}\) \& Measurement ¢ Testing Eauioment \& 9,367,510 \& \& 9.332.22 \& 8.887,26 \& \& 8.887,26 \& \& \& \(22.77 \%\) \& \& \({ }^{22,779}\) \& 2,124,778 \& \(2.023,4\) \& \& 101,329 \& \& 4,4, \\
\hline \& enve Euiument \& C5028 \& 44461 \& \& 20 \& \& 200.0 \& \& \& 9,66\% \& \& 12,509 \& 6e.6 \& \(2{ }^{2,76}\) \& \({ }_{12,022}\) \& 109 \& \& \\
\hline -1950 \& Comminaion Equipment \&  \& . \&  \& 40.764.7.987 \& \& -6,907 \& \% 10.492 \& \& \& \({ }_{\substack{13.35 \\ 10.00}}\) \& \&  \& 3,055.32 \& \({ }^{\text {s }}\) \&  \& \({ }^{37734}\) \& \\
\hline 1907 \& Load Management Controls Susiomer Pre \& \({ }_{3.022,834}\) \& 3.022,834 \& \& \& \& \& \& 2.85 \& 35.12\% \& \& \& \({ }_{5}\) \& \(\stackrel{\text { s }}{ }\) \& \({ }^{5}\) \& s \& \& \\
\hline 1975 \& coad Management contrios uili \& \({ }^{5} 19174795\) \& \& \& \& \& \& \& \& \& \& \& \& \& \& \& \& \\
\hline \(\stackrel{1985}{1985}\) \&  \& \({ }_{5}^{5}\) \& \& 17,449,66 \& \({ }_{18,172,95}\) \& 70.327 \& 18,102,468 \& 15,40, 125 \& 11.09 \& \({ }_{\text {g.0.02\% }}^{0.00 \%}\) \& 14.97 \&  \& 1,573,518 \& 1,299,10 \& 515.683 \& 3,289,271 \& 2.887,47 \& \({ }^{5} \quad 410.524\) \\
\hline 240 \& Contriutions S Gants Formaly known as \& s \& \& \& \& \& \& \& \& \& \& \& \& \& \& \& \& \\
\hline 1609

205 \& Coant Contiblions Paid \& 19,104.412 \& \& 19,104, ${ }^{\text {a }}$ \& ${ }_{\text {20,4,40, }}^{5686}$ \& \& 56,47, 186 \& -10,60.4.47 \& ${ }^{21.68}$ \& ${ }_{\text {4, }}^{4.6090}$ \& ${ }_{\text {254.37 }}$ \& ${ }_{4}^{2.00 \%}$ \& 881,195 \& $\xrightarrow{\frac{3}{2,230,645}} \mathbf{2 , 5 1 , 3 0}$ \& ${ }_{\text {2, } 214,0,05}$ \& ${ }^{4.145,707}$ \&  \& <br>
\hline \&  \& ${ }_{\text {L }}^{\text {2,66,9989,687 }}$ \& 125,923,184 \&  \& ${ }^{10,74,6,67,7666}$ \& 27,66,533 \& 2,14, 242,402 \& 616,209,155 \& \& \& \& \& $\xrightarrow{110,16,922023}$ \& 82.075 .979 \& 17,190,199 \&  \&  \& 987,433 <br>
\hline \&  \& s . \& \& s . \& s . \& \& s . \& 806,300 \& \& 0.00\% \& 10.00 \& 10.00\% \& s . \& s . \& 40.315 \& 40.315 \& 5.944 \& <br>
\hline \&  \& s \& \& \& 2.002 .023 \& \& 02, 202 \& \& \& $0.00 \%$ \& 1500 \& $6.67 \%$ \& \& \& \& \& \& <br>
\hline \& \& ${ }^{2.366,938,267}$ \& 125,923,184 \& s 2.241 .015 .083 \& |s ${ }^{\text {2,12, } 605,743}$ \& s 27,365.63 \& $1{ }^{\text {s }}$ 2,145,20,309 \& \% $600,922,343$ \& \& \& \& \& 10,185,20] \& 81,924,510 \& \% $16.93,8,871$ \& s 20,06, 547 \& 212 \& 5 ${ }_{\text {3,410,453 }}$ <br>
\hline
\end{tabular}


Notes:






This appendix is to be completed in conjunction with the accounting instructions in Appendix 2 -

| othat applies | Irs and Accounting Stane | Year Reflected in Schedule Below | $\begin{aligned} & \text { Accounting Standard } \\ & \text { Reflected in Schedule } \\ & \text { Below } \end{aligned}$ |
| :---: | :---: | :---: | :---: |
| Rebasing for the first time with depreciation policy changes <br> made in 2012. $\quad \square$ |  (2014 if changes to MIFRS are material). |  |  |
| Rebasing for the first time with depreciation policy changes |  |  |  |
| Altaedy reaseed with depereaition noliey changes in a p pior |  | 2019 | MFRS |



Notes:



$\frac{\text { OEB Appendix } 2 \text {-C }}{\text { Depreciation and Amortization Expense }}$
This appendix is to be completed in conjunction with the accounting instructions in Appendix 2

| Scenario that aplies | Applicable Years and Accounting Standard | Year feteced din | $\begin{gathered} \text { Accounting Standard } \\ \text { Reflected in Schedule } \\ \text { Below } \end{gathered}$ |
| :---: | :---: | :---: | :---: |
| Rebasing for the first time with depreciation policy changes made in 2012 . |  under MIFRS (2014 if changes to MIFRS are material). |  |  |
| Rebasing for the first time with depreciation policy changes made in 2013. |  |  |  |
|  | , | 202 | MFRS |


|  |  | Bool |  |  |  |  |  |  | Service Lives |  |  |  |  | Depreciation Expense |  |  |  | Varance |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Account | Descripion | Opening Net Book Value of Existing Assets as at Date of Policy Change (Jan. 1) | Less Fully Depreciated $^{7}$ |  |  | Less Fully <br> Depreciated | Net Amount of Assets Acquired After Policy Change to be Depreciated |  | $\begin{gathered} \text { Average Remaining } \\ \text { Life of Assets } \\ \text { Existing Before } \\ \text { Policy Change }^{3} \end{gathered}$ | Depreciation Rate <br> After Policy <br> Change |  | $\begin{gathered} \text { Depreciation } \\ \text { Rate on New } \\ \text { Additions } \end{gathered}$ |  | Depreciation Expense After Policy Change |  | $\begin{array}{\|l} \text { Total Current Year } \\ \text { Depreciation } \\ \text { Expense } \end{array}$ |  |  |
|  |  | $\stackrel{\square}{ }$ | b | $\bigcirc \mathrm{c}=$ ab |  | - | d.e |  |  | 1 th |  | $k=1 /$ | $1=\mathrm{ch}$ | $\mathrm{m}=\mathrm{ij}$ | $n=90.5]^{\prime}$ |  |  | PP |
| 1611 | ${ }^{\text {and }}$ | 69,57,669 | 36.87, 357 | 32,695,312 | 198,45, 137 | 39 | 166,582.798 | 5.579 | 4.91 | 20.36\% | 6.31 | 15.85 | 32 | 80,467 | 2,42,955 | 34 | 9,942 | 8 |
| - 1612 | Land fighs |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1808 | Leulings | ${ }^{29,67,626}$ | 3.502,025 | 26,175,601 | 105,173,460 | 5,350 | 105,168, | 2.986,710 | 18.08 | 5.53\% | 61.39 | $1.63{ }^{\text {a }}$ | 1,447,909 | 1,713,087 | 24,325 | 3,185,321 | 3,720,102 | 5347881 |
| 1815 | Transomerer Staion Euiement 5 50 |  |  |  | 322.499,983 |  |  |  |  |  |  | ${ }^{2,719}$ | ${ }^{403,185}$ | 8882095 |  |  |  |  |
| 1820 | , | 112.667,45 | 3.47.402 | $\xrightarrow{1097}$ |  |  | ${ }^{140}$ | 27,168.846 |  |  |  |  |  |  | ${ }_{4}^{436,306}$ | 10,637,799 | 11.27, |  |
| ${ }_{1}^{1835}$ |  | 200.07, ${ }^{\text {a }}$ | ${ }_{1,150.248}^{18}$ | ${ }^{207,8665994}$ |  | ${ }_{\text {l }}^{\text {l.797.281 }}$ | ${ }^{224.999 .539}$ | ${ }^{344,47.6888} 4$ | 34.02 |  | ${ }_{\substack{38.64 \\ 44.50}}$ | 2.25\% |  |  |  | 12,83,992 | ${ }^{11,739.346}$ |  |
|  | Undergound Conduit | 639,376,710 | 10,972,359 | 628,404,350 | 685,246,277 |  | 685,040,485 | 111,087,570 | ${ }^{22.2}$ | 4.99\% | ${ }^{33.29}$ | 3.00\% | 28,21,973 | 20,55,2,26 | 1,668,264 | 50,46,502 | 50,277,59 |  |
| ${ }_{\substack{1845 \\ 1850}}$ | Undeground Conoultois 8 Devicos | $397,494,067$ <br> 30525157 | $7,329.048$ <br> 1.30411 |  |  | $5.858,818$ <br> $1.50,800$ |  | ${ }^{99,413,968}$ | -31.09 <br> 18.4 | -3.22\% <br> 5.510 |  | 2.662 |  |  | (1,424,522 | 20,36,369 | ${ }^{29,25,8,810}$ | (142,599 |
| 1855 | Senices (overenead \& Undegrioun) | ${ }_{\text {60, } 1,419,385}$ | 720,464 | 60,698.921 | 97,079,942 |  | 97,001,862 | ${ }_{19,867,315}$ |  | ${ }^{2} 4770$ | 44. |  |  |  |  |  | 3,818,2, |  |
| 1860 | eis | 44,58.583 | 1,198.47 | $43.340,106$ | 74,467, 878 | 273.448 | 74,194,530 | 20.046 | 19.72 | 5.072 |  | 4.75 | 2, 198, | ${ }_{3,522,41}$ | 475. | 6,199,56 | 6,389,2, |  |
| 1860 | Neeies Smar Meers) | 94,589,5 | 2,176,233 | 92,413,280 | $51,399,142$ | 106,08. | 51,285 | 9,339,433 | 9.75 |  | 15.00 |  | 9,474,408 | 3,419,004 | ${ }^{311,32}$ | $13,204,726$ | 12,22,1 | 828,09 |
|  | and | 9,9,150 |  |  | , 200.332 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| H080 |  | 6.5550.034 | 5.809.870 | 59.486,824 | ${ }^{189.844,166}$ | ${ }^{2,372.563}$ | 469,60 | 2,499,408 | - ${ }_{\text {12,89 }}^{3}$ | (76\%\% |  | 3.249 | 4,613,922 | 6,078,026 | 40.51 | 10,722,465 | 11,382,93 | 65,467 |
| 1915 | Officice funture 8 Equisment | 9.882, 437 | 5.698.460 | 4,103,971 |  |  | 10,150,022 | 896,014 | 87 | 17.02\% | 10.00 | 0.009 | 698,699 | 1.015,02 | 4.801 | 1,758,452 | 1.905 .52 | 147,071 |
| -1920 | cmpuer Equipment- -harware |  |  | ${ }^{61,889}$ |  | 23.468,393 | ${ }_{\text {43,24,1,62 }}$ | (1,081.692 | 43 |  | 4.5 |  |  | 9,962 | ,212 |  | 11,692, |  |
|  | Sora | 2,967, | 2, | 182.35 | 19.864, | 9,94 | 19.44, | 4.654, |  |  | 7.40 |  |  | 2626 | 314,32 |  | 3.045.9. | 6,275 |
| 1940 | Tools, Shop \& Carage Equiment | 11.03,9897 | 6.458.923 | 4.578.064 | 22,591,742 |  | 22.591,742 | 9.772,286 | 5.61 | - $7.81 \%$ | 9.98 | ${ }_{\text {1.0.02 }}$ | 811,573 | 2,26,431 | 9,535 | ,5,56,539 | 3,095,774 |  |
| ${ }^{1945}$ | Measurement ¢ Testing Eauioment | 9.367.51 |  | 9,217.811 | 8.886,47 |  | $8.888,476$ |  |  | $2.77 \%$ | ${ }_{4}^{4.39}$ | 22, | 2,098,729 | ${ }^{2}, 023,290$ | 303 | 75,742 |  |  |
| ${ }^{1959}$ | Sence Euiument | 615 |  | H7, | 4 |  | 40920 | 59.1. |  | 9.600 |  | - |  |  | 3,20 |  | ${ }^{84}$ |  |
| ${ }^{1050}$ | Comminaion Equament | 4,599,2 | 4,440 | ${ }_{4}^{139}$ | 42.04 | 4.143,448 | 3,.897.2159 |  |  |  | $\xrightarrow{13.09}$ |  | coious | 5720 | 6, 6.92 | 20, | 3467 |  |
| 1990 |  | $\xrightarrow{3.022,834}$ | 3,022, 384 |  | ${ }_{\text {s }}$ |  |  | ${ }^{\text {s }}$ | 2.85 | ${ }^{35.1}$ |  |  | $\stackrel{5}{\text { s }}$ | s | s | $\stackrel{\text { s }}{ }$ |  |  |
| 1975 <br> 1900 <br> 1 | ood Management Contros uniliy Peemises | ${ }_{5}{ }^{\text {s }}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| $\stackrel{1985}{1985}$ | Sysem Suen sor equipment | 19,174,99 | 2,694,612 | 16,480,184 | 45,39, 344 | 70.327 | 45,325,077 | 9,907,190 | 11.09 | \%002 | 14.98 | 6.6.70 | 1.486,096 | 3,025,098 | ${ }^{330.6515}$ | 4,841,009 | 4,128,590 | ${ }^{713,20}$ |
| 240 | Contibutions S Gants formaly kown as |  |  |  |  |  |  |  |  |  |  |  |  | S 7193835 |  |  |  |  |
| 1609 2005 | Capial Contibions Paid | 19,104, ${ }^{\text {1032 }}$ |  | 19.104.312 | ${ }_{\text {172.66,903 }}$ |  | 172,669,703 | 46,299,46 | ${ }_{\text {21.68 }}^{20.68}$ | 4.610\% | ${ }^{\frac{24.98}{}{ }^{24.98}}$ | ${ }^{\text {20,000 }}$ |  | 6,912,697 | ${ }^{\text {925,390 }}$ | 退, | 8,780.099 | 61,620 |
|  | ${ }^{\text {Property }}$ Soder Capial Lease | \% ${ }^{\text {s }}$ | 144,7,2,344 | ${ }^{\text {c }}$ | ${ }^{3,2000,26,543}$ | \% |  | 493,306,595 |  |  |  |  | 107,55,9,046 |  | 11,66,234 | ${ }^{249,59,4,123}$ | ${ }^{245,784,8,261}$ | 3,665,822 |
|  |  | ${ }^{5}$ |  | s . | 8,13,769 |  | 8.138 .769 | 263.784 |  | 0.00\% | 10.00 | 10.00\% | s | S 81387 | S ${ }^{13,189}$ |  | 353 | 566713 |
|  | Lesso Other Non Raterefegulated | s |  |  | s 12762660 |  | 12762 | 95.91 |  | $0.00 \%$ | 5.00 | 6.6\% | s | - 85084 |  |  |  |  |
|  | Tooal | / 2 266,938,27] | 144,772,344 | s ${ }_{\text {2,22, } 16,5934}$ | [s $3.179,363,984$ | 7,57,941 | Is ${ }^{\text {3,1017,76,093 }}$ | s 489,877,020 |  |  |  |  | 107,559.06 | $\stackrel{128,661,122}{ }$ | [ $11.54,599$ | /s $247,569,66$ | 244,650,196 | 2,93,990 |


Notes:






## RESPONSES TO ASSOCIATION OF MAJOR POWER CONSUMERS IN ONTARIO INTERROGATORIES

## INTERROGATORY 2:

Reference(s): $\quad$ Exhibit 1B, Tab 1, Schedule 1, p. 25, Figure 12
a) Please provide the number of outages for each of the years 2006 to 2018.
b) Please confirm an outage results in a customer interruption. If not, please explain.

## RESPONSE:

a) Table 1: Number of outages 2006-2018

| Year | Customer Interruptions (Excl. LoS, MEDs) |
| :---: | :---: |
| 2006 | $1,247,848$ |
| 2007 | $1,199,921$ |
| 2008 | $1,132,890$ |
| 2009 | $1,021,481$ |
| 2010 | $1,067,276$ |
| 2011 | $1,045,478$ |
| 2012 | 910,167 |
| 2013 | 967,367 |
| 2014 | 863,787 |
| 2015 | 976,890 |
| 2016 | 967,610 |
| 2017 | 898,933 |
| 2018 | 869,713 |

b) In reference to part (a), an outage is a customer interruption.

# RESPONSES TO SCHOOL ENERGY COALITION INTERROGATORIES 

## INTERROGATORY 56:

Reference(s): $\quad$ Exhibit 2B, Section E5.4, p. 14

On the same basis as Tables 5-6, please provide the number of meters per year by category.

## RESPONSE:

Please see Table 1 and Table 2 below.

Table 1: 2015-2019 Meter Volumes

|  | Actuals |  |  | Forecast |  | Total |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\mathbf{2 0 1 5}$ | $\mathbf{2 0 1 6}$ | $\mathbf{2 0 1 7}$ | $\mathbf{2 0 1 8}$ | $\mathbf{2 0 1 9}$ |  |
| Residential and Small C\&I Meters | 7,166 | 17,612 | $\mathbf{2 5 , 3 3 3}$ | 16,512 | 13,569 | $\mathbf{8 0 , 1 9 2}$ |
| Suite Meters | 9,724 | 6,447 | $5,387^{1}$ | 5,725 | 5,500 | $\mathbf{3 2 , 7 8 3}$ |
| Large User and Interval Meters | 174 | 215 | 856 | 1,114 | 790 | $\mathbf{3 , 1 4 9}$ |
| Wholesale Meters | 138 | 6 | 109 | 85 | 10 | $\mathbf{3 4 8}$ |

Table 2: 2020-2024 Meter Volumes

|  | Forecast |  |  |  |  | Total |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\mathbf{2 0 2 0}$ | $\mathbf{2 0 2 1}$ | $\mathbf{2 0 2 2}$ | $\mathbf{2 0 2 3}$ | $\mathbf{2 0 2 4}$ | Total |
| Residential and Small C\&I Meters | 706 | 384 | 52,408 | 103,035 | 155,455 | $\mathbf{3 1 1 , 9 7 8}$ |
| Suite Meters | 5,500 | 5,500 | 5,500 | 5,500 | 5,500 | $\mathbf{2 7 , 5 0 0}$ |
| Large User and Interval Meters | 17 | 0 | 2 | 8 | 33 | $\mathbf{6 0}$ |
| Wholesale Meters | 24 | 8 | 0 | 0 | 0 | $\mathbf{3 2}$ |

[^6]
[^0]:    ${ }^{5}$ Toronto Hydro will be using performance results from 2013-2017, which is the most current five-year average, as opposed to the fixed five-year (2010-2014) average distributor specific target.

[^1]:    ${ }^{2}$ See Exhibit 9.
    ${ }^{3} \mathrm{lbid}$.

[^2]:    ${ }^{6}$ EB-2014-0116, Exhibit 2B, Section E6.2

[^3]:    ${ }^{13}$ Note that costs associated with former streetlighting assets are embedded in the costs of the segments.

[^4]:    ${ }^{14}$ M. Olearczyk et. al., Notes from Underground - Cable Fleet Management, Nov. 2010. Available at <http://www.neetrac.gatech.edu/publications/Note from Underground Nov2010.pdf>.
    ${ }^{15}$ M. Buhari, V. Levi and S. K. E. Awadallah, "Modelling of Ageing Distribution Cable for Replacement Planning," in IEEE Transactions on Power Systems, vol. 31, no. 5, pp. 3996-4004, Sept. 2016.

[^5]:    ${ }^{14}$ Exhibit 2B, Section B, Appendix E

[^6]:    ${ }^{1}$ Please note that Figure 1 in Exhibit 2B, Section E5.4 showed a preliminary 2017 number for suite meters of approximately 4,000 . The finalized number is 5,387 .

