Ontario Energy Board | Commission de l'énergie de l'Ontario

Ontario

BY EMAIL

January 24, 2020

Christine Long
Registrar and Board Secretary
Ontario Energy Board
2300 Yonge Street, 27th Floor
Toronto ON M4P 1E4

Attention: Ms. Christine Long, Registrar and Board Secretary

Dear Ms. Long:

Re: PUC Distribution Inc.
Application for 2020 Electricity Distribution Rates
OEB Staff Submission
Ontario Energy Board File Number: EB-2019-0170

In accordance with Procedural Order No. 1, please find attached OEB staff's submission in the above proceeding.

Yours truly,

Original Signed By

Georgette Vlahos
Advisor – Electricity Distribution: Major Rate Applications & Consolidations

Encl.

ONTARIO ENERGY BOARD

STAFF SUBMISSION

2020 ELECTRICITY DISTRIBUTION RATES

PUC Distribution Inc.

EB-2019-0170

January 24, 2020

INTRODUCTION

PUC Distribution Inc. (PUC Distribution) filed its Price Cap Incentive Rate-setting application with the Ontario Energy Board (OEB) on October 15, 2019 under section 78 of the *Ontario Energy Board Act*, *1998*, seeking approval for changes to the rates that PUC Distribution charges for electricity distribution, to be effective May 1, 2020.

In Procedural Order No. 1, issued December 3, 2019, the OEB, among other matters, set out dates for submissions on the application.

This submission sets out OEB staff's review of the record of the evidence in this proceeding and is intended to assist the OEB in evaluating the application and in setting just and reasonable rates.

Fully Fixed Monthly Distribution Charge – Residential Customers

PUC Distribution is in its last year of transitioning towards a fully fixed monthly distribution charge for its residential customer class in accordance with the OEB's policy, *A New Distribution Rate Design for Residential Electricity Customers*. [1] In PUC Distribution's 2016 Incentive Rate-setting Mechanism (IRM) application[2], the OEB approved an extension to the standard four-year transition period to a fully fixed service charge for Residential customers to five years. This was for mitigation purposes as PUC Distribution calculated the increase to its monthly fixed charge to be greater than $4 per year. In the current application, PUC Distribution has demonstrated that no further rate mitigation is required. OEB staff has no issue with PUC Distribution's current proposal and notes that following the OEB's Decision on the current application, there will no longer be a variable usage rate for this class of customer.

Price Cap Adjustment

In calculating its rates for 2020, PUC Distribution has used its OEB assigned stretch factor of 0.45% based on the updated benchmarking study for use for rates effective in 2020.[3] This is consistent with the annual adjustment mechanism in *Chapter 3 of the Filing Requirements for Electricity Distribution Rate Applications*.[4] In the interrogatory phase of this proceeding, OEB staff provided an updated Rate Generator Model with

[1] EB-2012-0410, Board Policy: A New Distribution Rate Design for Residential Electricity Customers, April 2, 2015
[2] EB-2015-0089
[3] Report to the Ontario Energy Board – "Empirical Research in Support of Incentive Rate-Setting: 2018 Benchmarking Update", prepared by Pacific Economics Group LLC., August 2019
[4] Issued July 12, 2018

the input price index (IPI) applicable for 2020 distribution rate applications of 2.00% as announced by the OEB on October 31, 2019. OEB staff supports the resulting total price-cap index adjustment of 1.55%.

Retail Transmission Service Rates (RTSRs)

Pursuant to the OEB's Guideline G-2008-0001[5], OEB staff will update the Rate Generator Model at the decision stage of this proceeding to account for the changes to the Uniform Transmission Rates (UTRs) and Sub-Transmission Rates, effective January 1, 2020.[6] Consistent with prior years, PUC Distribution's customers are not subject to the retail connection transmission service rates due to the fact that PUC Distribution receives power at 115kV and owns the transformer equipment to step down to distribution levels.[7] Therefore, PUC Distribution is only subject to Network charges by the Independent Electricity System Operator (IESO). OEB staff has no concerns with the data supporting the updated Retail Transmission Service Rates proposed by PUC Distribution.

OEB staff makes detailed submissions on the following:

- Group 1 Deferral and Variance Accounts
- Incremental Capital Module (ICM) Request

Group 1 Deferral and Variance Accounts

In each year of an IRM term, the OEB will review a distributor's Group 1 deferral and variance accounts in order to determine whether their total balance should be disposed.

OEB policy requires that Group 1 accounts be disposed if they exceed (as a debit or credit) a pre-set disposition threshold of $0.001 per kWh, unless a distributor justifies why balances should not be disposed.[8] If the balance does not exceed the threshold, a distributor may elect to request disposition.

The 2018 actual year-end total balance for PUC Distribution's Group 1 accounts including interest projected to April 30, 2020 is a debit balance of $540,724.[9] This

[5] G-2008-0001, Guideline – Electricity Distribution Retail Transmission Service Rates, Revised June 28, 2012
[6] EB-2019-0296, Decision and Interim Rate Order, December 19, 2019; EB-2019-0043, Decision and Order, December 17, 2019
[7] EB-2019-0170, Application, Page 8
[8] Report of the Board on Electricity Distributors' Deferral and Variance Account Review Initiative (EDDVAR), EB-2008-0046, July 31, 2009
[9] Including Accounts 1588 - Power and 1589 – Global Adjustment

amount represents a total debit claim of $0.0009 per kWh, which does not exceed the disposition threshold. PUC Distribution is not proposing disposition of any Group 1 account balance in this proceeding.

Regarding Accounts 1588 and 1589, in its 2019 IRM application[10], OEB staff was concerned with the large balance in Account 1588 – Power. In relation to Account 1589, OEB staff noted that it was not clear about the appropriate amount that should be disposed to Non-RPP Class B customers.

OEB staff noted that given the timing of the 2019 application, PUC Distribution was unable to take into consideration the new accounting guidance[11] in the context of the 2017 balances requested for disposition, as well as the 2015 and 2016 balances that were approved for disposition on an interim basis. Therefore, Accounts 1588 and 1589 should not be disposed until PUC Distribution addressed the above noted concerns, and completed its review of the account balances in accordance with the expectations of the new accounting guidance. In its reply submission, PUC Distribution agreed.

In the current 2020 application, in response to OEB staff interrogatories, PUC Distribution noted that it has completed a preliminary review of the Account 1588 and 1589 balances in the context of the new accounting guidance. PUC Distribution aims to complete the full review and update its processes in the upcoming year (retroactive to January 1, 2019), prior to submitting any claims in future years.[12]

OEB staff does not take issue with PUC Distribution's proposal.

In its interrogatories, OEB staff noted that Account 1580, WMS CBR Class A had a balance as at December 31, 2018, and while small, this sub-account is not expected to hold a balance at year-end as per the accounting guidance for this sub-account. PUC Distribution confirmed that it followed the accounting guidance for this sub-account and indicated that the balance is due to an accounting timing variance between CBR Class A revenue and cost of power.[13] OEB staff notes that the accounting guidance for the sub-account states that, "…in any given month, the variance arising from the new transactions in Account 1580 – WMS, CBDR Class A will be zero."[14] OEB staff submits that PUC Distribution should ensure that the balance in the sub-account is zero at the

[10] EB-2018-0219, OEB Staff Submission, Pages 4-5, May 31, 2019
[11] Accounting Guidance Related to Commodity Pass-Through Accounts 1588 & 1589 issued February 21, 2019
[12] EB-2019-0170, Interrogatory Response to Staff-4 and Staff-5, January 10, 2020
[13] EB-2019-0170, Interrogatory Response to Staff-6, January 10, 2020
[14] Guidance on Wholesale Market Services Accounting for Capacity Based Demand Response (CBDR) and new IESO Charge Type 9920, March 29, 2016, Pages 2 and 3. CBDR was subsequently renamed CBR

end of each month as per the accounting guidance. OEB staff submits that PUC Distribution should review its accounting procedures to ensure that its CBR Class A cost accruals are equal its CBR Class A unbilled revenue accruals, and its CBR Class A actual costs are equal to its CBR Class A revenues billed to customers.

Incremental Capital Module (ICM) Request

The ICM is a mechanism available to electricity distributors whose rates are established under the Price Cap IR regime. The ICM is intended to address the treatment of a distributor's capital investment needs that arise during the rate-setting plan which are incremental to a materiality threshold.

PUC Distribution has requested incremental capital funding for 2020 to support its Substation 16 renewal (Sub-16) project. The total capital cost of the project is $4.7M. Based on the materiality threshold discussed below, PUC Distribution is only eligible to recover a maximum amount of $2,602,851, given a materiality threshold of $6,497,525. In its application, PUC Distribution stated that it is only seeking recovery of the maximum eligible incremental capital amount.[15] The associated incremental revenue requirement is $195,553.

Requirements for ICM Funding

Based on the evidence presented, OEB staff supports the ICM request proposed by PUC Distribution as it is in the public interest to renew this station and the materiality, need and prudence requirements set out below have been met.

In arriving at this position, OEB staff was guided by the following tests established in section 4.1.5 of the *Report of the Board – New Policy Options for the Funding of Capital Investments: The Advanced Capital Module* (ACM Report)[16] to review ICM projects:

> The ICM is available for discretionary and non-discretionary projects, capital projects not included in the distributor's previously filed Distribution System Plan (DSP), and is not limited to extraordinary or unanticipated investments.

To qualify for incremental capital funding, distributors must show that three distinct requirements have been met - materiality, need, and prudence. A discussion of each follow.

[15] EB-2019-0170, Application, Appendix 7, Page 9
[16] Report of the Board – New Policy Options for the Funding of Capital Investments: The Advanced Capital Module, EB-2014-0219, September 18, 2014

Materiality

The ACM Report states that distributors must meet an OEB-defined materiality threshold and a project-specific materiality threshold.

The ACM Report explains materiality as follows:[17]

> A capital budget will be deemed to be material, and as such reflect eligible projects, if it exceeds the OEB-defined materiality threshold. Any incremental capital amounts approved for recovery must fit within the total eligible incremental capital amount (as defined in this ACM Report) and must clearly have a significant influence on the operation of the distributor; otherwise they should be dealt with at rebasing.
>
> Minor expenditures in comparison to the overall capital budget should be considered ineligible for ACM or ICM treatment. A certain degree of project expenditure over and above the OEB-defined threshold calculation is expected to be absorbed within the total capital budget.

In its application as originally filed, PUC Distribution used a price cap index of 0.90% as a placeholder since the implicit price index (IPI) for 2020 was not yet available. This was based on an inflation factor of 1.20% (the inflation factor for 2018 rate year applications) less a productivity factor of 0.00% and a stretch factor of 0.30%. Using the formula above, PUC Distribution calculated its materiality threshold to be $5,665,251.[18] This resulted in a maximum eligible incremental capital amount of $3,435,125. As stated above, PUC Distribution is only seeking recovery of the maximum eligible incremental capital amount.

As part of its interrogatory responses, PUC Distribution updated the Capital Module Applicable to ACM and ICM for the 2020 inflation rate of 2.00%.[19] The recalculated materiality threshold for PUC Distribution is $6,497,525. [20] OEB staff expects that PUC Distribution would be able to finance capital expenditures of this amount through its existing rates.

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[17] *Ibid*
[18] EB-2019-0170, Application, Appendix 7, Page 9
[19] EB-2019-0170, Interrogatory Response to Staff-9, January 10, 2020
[20] The OEB-defined materiality threshold is the product of depreciation expense included in rates and the materiality threshold percentage ($6,497,525 = $3,780,329 x 172%). The materiality threshold is based on an updated price cap index of 1.70% (inflation rate of 2.0% minus a stretch factor of 0.3%)

PUC Distribution is forecasting a total capital budget of $9,100,376 for 2020. As the revised OEB-defined materiality threshold is $6,497,525, the updated maximum available eligible incremental capital amount is $2,602,851 resulting from the difference in the 2020 capital budget and the OEB-defined materiality threshold.[21]

OEB staff notes that the ICM project is material as the requested ICM project cost is more than 51% of the 2020 capital budget. [22]

The total capital required by the utility, including that required for the renewal of Sub-16, exceeds the materiality threshold. Additionally, the Sub-16 renewal capital has a significant influence on the operation of PUC Distribution. PUC Distribution is seeking recovery of the maximum eligible incremental capital of $2,602,851, which is approximately 55% of the total planned Sub-16 capital expenditure.

For the reasons above, OEB staff submits this project represents a significant capital expenditure for PUC Distribution and therefore satisfies the project-specific materiality threshold.

Need

The OEB describes the need threshold as follows:[23]

> The distributor must pass the Means Test (as defined in the ACM Report).
>
> Amounts must be based on discrete projects, and should be directly related to the claimed driver. The amounts must be clearly outside of the base upon which the rates were derived.

Under the Means Test, if a distributor's regulated return on equity (ROE) exceeds 300 basis points above the deemed ROE embedded in the distributor's rates, the funding for any incremental capital project will not be allowed. PUC Distribution's current deemed ROE is 9.00% as determined during its 2018 cost of service application.[24] PUC Distribution provided the following historical and projected information on its regulated return: [25]

[21] $2,602,581 = $9,100,376 – $6,497,525
[22] Based on a revenue requirement of approximately $19.1 million as per PUC Distribution's 2018 cost of service rate application, PUC Distribution's materiality threshold as defined in Chapter 2 of the Filing Requirements is approximately $110k
[23] Report of the Board – New Policy Options for the Funding of Capital Investments: The Advanced Capital Module, EB-2014-0219, September 18, 2014
[24] EB-2017-0071
[25] EB-2019-0170, Application, Appendix 7, Page 10

Year	Deemed Rate of Return	Achieved Rate of Return	Variance
2016	8.98%	0.98%	(8.00)%
2017	8.98%	1.78%	(7.20)%
2018	9.00%	4.25%	(4.75)%
2019 (projected)	9.00%	8.19%	(0.81)%
2020 (projected)	9.00%	7.48%	(1.52)%

OEB staff submits that PUC Distribution's regulated ROE does not exceed 300 basis points above the deemed ROE, and has in fact been below (or projected to be below) for each year information was provided. OEB staff submits that PUC Distribution passes the Means Test.

PUC Distribution's 2018 cost of service application contained a Distribution System Plan which identified Sub-16 as the highest priority project planned for 2018 due to the state of the existing infrastructure, which significantly reduces reliability and contingency buffers for connected customers.[26] This being said, as part of the approved settlement proposal, PUC Distribution agreed that the Sub-16 work planned for 2018 would not be in service in 2018, and as such, all costs were removed.[27] As such, the costs are outside the base upon which PUC Distribution's current rates were derived. OEB staff submits that the renewal of Sub-16 represents a discrete project for PUC Distribution.

Prudence

The OEB describes the prudence threshold in the ACM Report as follows:[28]

> The amounts to be incurred must be prudent. This means that the distributor's decision to incur the amounts must represent the most cost-effective option (not necessarily least initial cost) for ratepayers.

PUC Distribution considered six options before coming to the determination to renew Sub-16 and provided a reasoned discussion on each in its application.[29] The options considered included:

[26] EB-2017-0071, Distribution System Plan, Page 95, March 21, 2018
[27] EB-2017-0071, Settlement Agreement, Page 11; EB-2019-0170, Interrogatory Response to Staff-13, Pages 19-20
[28] *Ibid*
[29] EB-2019-0170, Application, Appendix 7, Pages 16-20, October 15, 2019

1. Do nothing
2. Rehabilitate for another five years and then renew
3. Renew Sub-16 now
4. Non-wires alternative
5. Transfer load to other stations and remove Sub-16 from service
6. Renew Sub-16 like-for-like

Option 1 was not considered acceptable as it would result in deteriorating reliability and increased costs related to maintenance and remediating oil leaks identified by the Electrical Safety Authority. Option 2 was to defer the station renewal for five years by replacing failed components at a cost $900,000 but was considered not financially feasible. Option 4 considered the use of energy storage to offset the station capacity at a cost of $65,000,000 over time and was considered not financially feasible. Option 5 was not acceptable as nearby stations do not have capacity to support Sub-16 load for long periods of time. Option 6 was considered unacceptable as the existing technology on Sub-16 is obsolete, parts are difficult to source, and do not meet today's standards. In reviewing the evidence provided on the options considered, OEB staff agrees that the renewal of Sub-16 (option 3) was the most prudent given the noted alternatives.

PUC Distribution proposes to rebuild the existing Sub-16 as the station has been in service for over 50 years, is in very poor condition and has reached end-of-life. The following table provides the age of the equipment at Sub-16.[30]

Equipment	Age (Years)	Life Expectancy (Years)
Transformer 1	54	40
Transformer 2	53	40
34.5kV Switchgear (4 switches, 2 set of fuses)	~54	40
12.47kV Switchgear (7 breakers, 2 switches)	54	40
48 VDC System	21	20
Protection Relays (7)	20+	12-15

The new station design is different from the existing station in the following ways:

- The existing station has two 7.5MVA transformers with a single 34.5kV supply, while the new station will have two 10MVA transformers with dual 34.5kV supply
- The existing station does not have an On-Load Tap Changer, while the new station will
- The existing station structure is a lattice open air design, while the new station will be enclosed in a building

[30] EB-2019-0170, Interrogatory Response to VECC-3, January 10, 2020

- The existing station uses air insulated switchgear (AIS), while the new station uses gas insulated switchgear (GIS)

PUC Distribution upgraded the transformer size in consideration of the load growth within its service territory. PUC Distribution states that it expects more than 2MW of new load to come online over the next three years. Through interrogatories, PUC Distribution provided supporting evidence that the projected load growth on the station will reach Sub-16's current capacity with the addition of four subdivisions, two commercial properties and a restaurant.[31] PUC Distribution also stated that it has standardized the transformer size at all stations at 10MVA, which allows for operational flexibility.[32] Furthermore, PUC Distribution showed from a recent budgetary quote that a 7.5MVA transformer would actually cost $31,000 more than what PUC Distribution has paid for a 10MVA transformer.[33] Based on the projected load growth, cost synergies of standardization, and lower costs, OEB staff submits that the decision to utilize larger transformers is prudent.

Due to the rural nature of the station, long feeders, and load densification, PUC Distribution specified On-Load Tap Changers for the transformers. The difference between On-Load Tap Changers and Off-Load Tap Changers is that the former are suitable for addressing varying voltage issues, while the latter are suitable for addressing constant voltage issues. PUC Distribution showed that Sub-16 experiences voltage variability in its 34.5kV supply.[34] PUC Distribution also showed that 19 of 25 customers at the end of Sub-16 feeders experienced periodic voltages outside of CSA standards.[35] OEB staff submits that due to the voltage variability experienced historically, On-Load Tap Changers are prudent for the Sub-16 station.

PUC stated that, the decision to enclose Sub-16 in a building was made to be non-obstructive and to provide safety and security for the public. PUC Distribution estimated that there are no cost differences between an outdoor style station design and an enclosed building design.[36] The enclosed building design will also prevent break-ins and copper theft (which PUC Distribution has experienced over the last three years) while protecting staff during maintenance and operating activities in the Northern Ontario winter climate. OEB staff has reviewed the factors that PUC Distribution used for estimating the differences in costs between an outdoor style station design and an enclosed building design and agrees that there could reasonably be no cost difference

[31] EB-2019-0170, Interrogatory Response to Staff-12, January 10, 2020
[32] *Ibid*
[33] *Ibid*
[34] EB-2019-0170, Interrogatory Response to Staff-15, January 10, 2020
[35] *Ibid*
[36] EB-2019-0170, Interrogatory Response to Staff-14, January 10, 2020

(or only minimal difference). Considering the additional benefits that an enclosed building design provides, and at similar costs as an outdoor design, OEB staff submits that the decision to house Sub-16 in an enclosed building is prudent.

Part of the design for the Sub-16 rebuild included the use of GIS instead of AIS. PUC Distribution provided the cost analysis between GIS and AIS and showed that the total GIS cost is less expensive due to a smaller physical footprint even though the GIS switchgear itself is more expensive.[37] OEB staff agrees that the use of GIS is a prudent choice in this case.

In procuring the engineering services and equipment for Sub-16, PUC Distribution used a competitive Request for Proposal (RFP) process and contracts were awarded on a best-value basis. The selection criteria for vendors were based on technical capabilities, past experience, schedule and price. The Sub-16 rebuild was divided into multiple RFPs such as engineering services, project management services, construction services, and switchgear and transformer procurement. Each RFP had multiple bidders, and in each case, PUC Distribution selected the bidder whose proposal best balanced the selection criteria. OEB staff submits that PUC Distribution has used a prudent process to be cost-effective for the construction of Sub-16.

Accelerated Capital Cost Allowance for ICM

Bill C-97, the *Budget Implementation Act, 2019, No. 1* received Royal Assent on June 21, 2019. Bill C-97 introduced the Accelerated Investment Incentive program, which provides for a first-year increase in capital cost allowance (CCA) deductions on eligible capital assets acquired after November 20, 2018.

In the letter *Accounting Direction Regarding Bill C-97 and Other Changes in Regulatory or Legislated Tax Rules for Capital Cost Allowance*[38]*,* the OEB provided accounting guidance on the impacts from accelerated CCA (CCA Guidance). The OEB established a separate sub-account of Account 1592 - PILs and Tax Variances – CCA Changes to track the impact of any differences that result from the CCA change to the tax rates or rules that were used to determine the tax amount that underpins rates.

In the current ICM proposal, PUC Distribution has incorporated accelerated CCA into the PILS calculation used to determine revenue requirement. PUC Distribution proposes to use a three-year average CCA deduction in order to smooth the effects of

[37] *Ibid*
[38] Issued July 25, 2019

accelerated CCA over the three-year period until its next cost of service rate application. PUC Distribution indicated that revenue requirement excluding accelerated CCA is $237,816. Revenue requirement including smoothed accelerated CCA is $195,533.[39] OEB staff calculates revenue requirement including unsmoothed accelerated CCA to be $162,740. PUC Distribution indicated that if it does not smooth the CCA, it would have to pay $131,352 more in taxes than it recovers in rates and incur a revenue deficiency.[40]

OEB staff submits that accelerated CCA should not be reflected in PUC Distribution's PILS and therefore, in the ICM revenue requirement. It should be included in the Account 1592 sub-account for CCA changes as per the OEB's CCA Guidance. OEB staff notes the CCA Guidance stated that any impacts arising from the CCA rule changes are to be reflected in cost-based applications for 2020 rates and beyond. The current application is an ICM application and therefore, may not fully capture all tax implications. OEB staff notes that if the ICM is approved, the appropriate revenue requirement excluding the impacts of accelerated CCA would be $237,816.

In the event that the OEB accepts PUC Distribution's proposal to include accelerated CCA in the PILS calculation, OEB staff submits that it is appropriate for PUC Distribution to smooth the effects of accelerated CCA as it would be more representative of PUC Distribution's actual tax circumstances.

All of which is respectfully submitted

[39] EB-2019-0170, Interrogatory Response to Staff-21, January 10, 2020
[40] EB-2019-0170, Incremental Capital Module Manager's Summary, Page 25