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BY E-MAIL

November 22, 2017

Kirsten Walli Board Secretary Ontario Energy Board 2300 Yonge Street, 27th Floor Toronto, ON M4P 1E4

Dear Ms. Walli:

Re: Oshawa PUC Networks Inc. (Oshawa PUC) 2018-2019 Distribution Rate Application OEB Staff Submission OEB File No. EB-2017-0069

In accordance with Procedural Order No. 2, please find attached OEB staff's submission on Oshawa PUC's 2018-2019 Custom IR update. This document is also being served on Oshawa PUC, the Consumer Council of Canada, the School Energy Coalition, and the Vulnerable Energy Consumers Coalition.

Yours truly,

Original Signed By

Donald Lau Project Advisor – Rates Major Applications

Encl.

2018-2019 ELECTRICITY DISTRIBUTION RATES OSHAWA PUC NETWORKS INC.

EB-2017-0069

OEB STAFF SUBMISSION

November 22, 2017

INTRODUCTION

Oshawa PUC Networks Inc. (Oshawa PUC) filed an application for its mid-term update to its 2015-2019 Custom Incentive Regulation (Custom IR) application¹ with the Ontario Energy Board (OEB) on July 4, 2017 under section 78 of the *Ontario Energy Board Act, 1998* seeking approval for changes to the rates that Oshawa PUC charges for electricity distribution, effective January 1, 2018 and January 1, 2019 (the application).

In Oshawa PUC's Custom IR decision the OEB directed Oshawa PUC to file a mid-term review to determine if rate adjustments are warranted and should include the following evidence:

- Customer connections and consumption
- Capital expenditures by Oshawa PUC, net of contributions, resulting from:
 - o regional planning
 - third party requests for plant relocations
 - new customer connections
- Cost and schedule of the MS9 substation project and the proposed Hydro One Enfield TS, as well as any related capital contributions to Hydro One by Oshawa PUC
- Cost of capital
- Working capital requirements based on an updated forecast for the cost of power
- Comparisons of OEB-approved to actuals for 2015-2017
- Comparisons of the approved forecasts for 2018 and 2019 that are used to set interim rates in this Decision and updated forecasts for 2018 and 2019
- Comparisons of the interim rates for 2018 and 2019 set in this Decision and the rates that would flow from the updated forecasts Oshawa PUC provides
- Disposition of Group 1 deferral and variance accounts (DVAs) if threshold is exceeded.

¹ EB-2014-0101 Oshawa PUC Networks Inc. Custom IR application

In addition to these updates, Oshawa PUC requested to update the loss factor, and to adjust the retail transmission service rates. All of the proposed changes will be addressed in this submission.

Customer Connections and Consumption

In Oshawa PUC's Custom IR application, a 3.0% growth rate was approved for 2018 and 2019. Oshawa PUC was also given an opportunity to update the forecasted growth rate for 2018 and 2019 based on actual results to date at the mid-term review. In this current application, Oshawa PUC updated the growth rate to 1.82% for 2018 and 2019. This is calculated from the actual historical growth and the Durham Regional Official Plan² (the Durham report). The actual customer growth for 2015 and 2016 was 1.9% and the updated forecast for 2017 was 1.5% and Oshawa updated the model to include this data as part of the baseline for the 2018 and 2019 load forecasts. The Durham report estimated a growth in households of 1.8% for the period up to 2021 and has been added to the baseline load forecast for 2018 and 2019. Oshawa PUC also updated the calculation of purchased power by using a linear trend model instead of a multilinear regression model for 2018 and 2019 because the linear regression model forecasted an increase in purchased power but historical purchased power, on average, has been declining since 2010. Using Oshawa PUC's proposed load forecast method results in a lower weather corrected load forecast. This would have the effect of raising the proposed distribution rates than otherwise would be the case.

OEB staff submits that forecasting purchased power by a linear trend instead of a multi-linear regression analysis is deviating from the Custom IR methodology. Although the decision does not specify the extent to updating customer connections and consumption, the full review of a load forecasting model, including methodology, is typically done during a cost of service application. OEB staff submits that the purchased power forecast should be based on the same methodology from Oshawa PUC's Custom IR decision. This would result in a higher weather corrected load forecast than currently proposed.

² Durham Regional Official Report, p. 38

https://www.durham.ca/departments/planed/planning/op_documents/officialplan/dropoc.pdf

Capital Expenditures

The OEB directed Oshawa PUC in the Custom IR decision to report annually on the status of its capital program, including an analysis of variances from the plan. Oshawa PUC provided the variance analysis in staff interrogatory 1-Staff-3. The total approved capital expenditures from 2015-2017 is \$884k higher than the actual/updated forecast capital expenditures. OEB staff is satisfied with the variance analysis from 2015-2017 and notes that the reduction in capital expenditure implies that the rate base at the end of 2017 should be lower than what was originally approved. This will be discussed in more detail below.

Oshawa PUC also provided updated capital expenditure forecasts for 2018 and 2019 along with evidence to support the variances in the System Access and System Service categories. These updates result in a net reduction of \$1.2M in base revenue requirement for the two years combined. OEB staff will address each of these categories below.

Oshawa PUC updated its estimate for System Access investments, which resulted from changes in third party requests for plant relocation. A comparison of what was originally approved to the updated forecast can be seen in the table below.

Appendi	Appendix 2-AA Capital Projects Approved by OEB for years 2015-2019 (\$'000s)										
Updated Capital Projects for											
Projects	2015	2016	2017	2018	2019	Projects	2015	2016	2017	2 <mark>018</mark>	2019
System Access			6 . K.			System Access		0.5	12	1	
Subdivision Expansions	2,238	0	750	780	815	Subdivision Expansions		725	750	1,180	1,215
Service connections/requests	916	1,170	100	100	100	Service connections/requests		110	100	100	100
Metering service connections	334	635	390	390	390	Metering service connections	375	380	390	390	390
Service/Expansion Contributions	(2,080)	(1,175)	(690)	(484)	(490)	Service/Expansion Contributions	(650)	(675)	(690)	(705)	(730)
Hwy 407 Extension - Plant relocation	1,659	60	480			Hwy 407 Extension - Plant relocation	4,510	700			
Hwy 407 contribution	(856)	(240)	(300)			Hwy 407 contribution	(3,580)	(400)			
Durham Region - Plant relocation	694	1,354	1,319	3,140	1,055	Durham Region - Plant relocation	1,875	935	1,065	1,080	1,055
Durham Region Contribution	(190)	(325)	(615)	(1,270)	(285)	Durham Region Contribution	(506)	(235)	(265)	(280)	(255)
City of Oshawa - Plant relocation	0	0	0	805	1,250	City of Oshawa - Plant relocation		595	470	460	470
City of Oshawa Contribution	0	0	0	(228)	(362)	City of Oshawa Contribution	(175)	(145)	(120)	(110)	(120)
Remote Disconnect/Reconnect Metering	78	54	100	100	100	Remote Disconnect/Reconnect Metering	100	100	100	100	100
PrePaid Metering			150			PrePaid Metering			150		
OEB's MIST Metering	79	142	125	125	125	OEB's MIST Metering	150	150	125	125	125
Long Term load transfers (LTLT)						Long Term load transfers (LTLT)					
MoE approved Micro Grid Project	0	0	45			MoE approved Micro Grid Project	110	45			
System Access Total	2,872	1,675	1,854	3,458	2,698	System Access Total	3,684	2,285	2,075	2,340	2,350

The net City of Oshawa – Plant Relocation investment increased from \$350k in 2018 and 2019 to \$577k in 2018 and \$888k in 2019. Oshawa PUC supported

this forecast increase in response to staff interrogatory 1-Staff-3, where Oshawa PUC stated,

"for 2018 and 2019, Oshawa PUC expects to deliver projects for the City more in line with historical trends plus is currently in discussions with the City for an additional two projects in 2018 and 2019 that will increase forecast capital over its original plan."

OEB staff notes that in Oshawa PUC's variance analysis for 2015-2017 City of Oshawa – Plant Relocation projects, Oshawa PUC stated that all of the proposed projects for City of Oshawa – Plant Relocation from 2015 through 2017 were either cancelled or, upon completion of the design, did not require plant relocation. In addition, OEB staff notes that no detailed explanation was given for the two projects referenced above in response to the staff interrogatory to justify a forecasted incremental capital of \$810k, net of capital contributions.

OEB staff submits that none of the forecasted costs materialized in 2015-2017 for City of Oshawa – Plant relocation and only limited information is available for the two additional projects. Taking into consideration the historical trend in spending for this investment and the lack of concrete evidence that plant relocation projects will materialize in 2018 and 2019, OEB staff does not believe the forecasted capital expenditure envelope is justified. The interim approved budget for the City of Oshawa – Plant Relocation projects for 2018 and 2019 should remain unchanged from that approved in the original application. OEB staff notes that on an annual revenue requirement basis, the impacts are below Oshawa PUC's materiality threshold. In addition, because these projects tend to be outside the control of the applicant, the OEB could establish a variance account to capture the impacts, in the event the work occurs in the timeframe that the utility has forecasted.

The net Durham Region - Plant Relocation investment increased from \$800k to \$1,870k in 2018. Oshawa PUC supported this forecast increase in Oshawa PUC's interrogatory response 1-Staff-3. Oshawa PUC stated that the forecasted increase is due to an unplanned \$1.9M project to relocate existing plant to underground. Oshawa PUC further confirmed in JT1.7 that this project was not originally foreseen in the Distribution System Plan. OEB staff submits that although the variance is significant the unforeseen nature of the project and the

explanation of requiring to go to an underground design due to congestion with Hydro One is justified³. OEB staff notes that in the future a full business case for the project would help strengthen the justification for capital variances, especially one this significant.

Enfield TS

Oshawa PUC updated its System Service, which resulted from updates in regional planning. Oshawa PUC was directed by the OEB in the original Custom IR decision to update the cost and schedule of the Enfield TS project, as well as any related capital contributions to Hydro One by Oshawa PUC. This update resulted in a shift of in-service timing from 2018 to 2019, and a forecast decrease for the investment TS Capacity – HONI Contributions line item from \$13.5M to \$10.5M. Although the \$10.5M is under the investment TS Capacity – HONI Contributions in actuality it is comprised of two projects, the capital contribution to Hydro One for Enfield TS and a related project to construct 44kV overhead feeders which will be connected to the station.

Enfield TS was an identified need to relieve constraints during the regional planning process in Oshawa PUC's Custom IR application and that decision approved \$13.5M for the capital contribution for Enfield TS. This was further verified in Oshawa PUC's application and undertaking JT1.4. In this current proceeding, Oshawa PUC updated the capital contribution to Hydro One to \$4M, subject to final true-up and is supported by Hydro One's Connect and Cost Recovery Agreement. OEB Staff submits that the \$4M capital contribution is sufficiently supported by the Hydro One CCRA filed in the application.

The remaining \$6.5M is for the construction of Enfield TS's station egress and 44kV feeders. As shown in JT1.4 of this current proceeding, this project was not in the original distribution system plan in the Custom IR application. Oshawa PUC submitted an ad hoc business case for this project in undertaking JT1.5 and provided a cost breakdown of the project. The station egress is approximately \$1.5M and the 44kV feeder is approximately \$5M. The scope for the 44kV feeder is to construct approximately 5.5km of 44kV feeder in a greenfield territory. OEB staff submits that the cost of \$5M to construct 5.5km of 44kV feeder may be

³ EB-2017-0069 Staff Interrogatories, October 5, 2017, 1-Staff-3

overestimated. OEB staff offers a project in Hydro One's 2018 distribution rate application for comparison. Hydro One is constructing 18km of two new 44kV feeders out of Enfield TS for \$7.6M⁴. OEB staff also notes that Hydro One has other projects for the construction of a 6km 44kV feeder for \$1.8M⁵, a 10km 44kV feeder for \$2.6M⁶, and 8km of double circuit 44kV feeder for \$2.6M⁷. The unit cost per kilometer ranges from \$260k to \$420k in the examples provided. While the inquiry into these projects is yet to come in the Hydro One rate application, OEB staff is of the view that this information is helpful if only to provide a high level comparison or rule of thumb. OEB staff notes that Oshawa PUC's Enfield 44kV project is over \$900k per kilometer.

OEB staff submits that there is ample evidence that the feeders being proposed are needed. However, OEB staff is of the view that the cost of the project has not been justified and submits that the cost of the 44kV project should be reduced by half. OEB staff does not support a larger reduction that may fall within the range noted above, because Hydro One has the ability to leverage economies of scale when doing similar projects contemporaneously.

MS9

Oshawa PUC planned for the MS9 substation to have distribution capacity available to service its future customers and budgeted \$7M for the station to be in-service in 2018 and an additional \$7.5M for overhead distribution feeders to be in-service over the 2018 and 2019 time period. In the application, Oshawa PUC has confirmed that the forecast remains unchanged and has not requested updates to the project.

⁴ EB-2017-0049 Hydro One Custom IR application Exhibit B1-1-1, ISD:SS-02 Project ID: LG-11 (page 1845 of 2076)

⁵ EB-2017-0049 Hydro One Custom IR application Exhibit B1-1-1, ISD:SS-02 Project ID: LG-4 (page 1844 of 2076)

⁶ EB-2017-0049 Hydro One Custom IR application Exhibit B1-1-1, ISD:SS-03 Project ID: RI-4 (page 1858 of 2076)

⁷ EB-2017-0049 Hydro One Custom IR application Exhibit B1-1-1, ISD:SS-02 Project ID: LG-26 (page 1846 of 2076)

Rate Base

Oshawa PUC stated the following in JT1.6:

"The OEB did not instruct Oshawa to update or adjust its 2017 closing rate base/2018 opening rate base as part of the mid-term update. For adjustments (reductions) to rates for 2018 and 2019, Oshawa started with the 2018 and 2019 rate base previously approved, and calculated adjustments to that previously approved rate base, if necessary, for the items directed by the Board to be updated in setting final 2018 and 2019 rates, if necessary."

To set rates based on the previously approved 2018 and 2019 opening rate base would be inappropriate as there is current actual/updated forecast information available to set just and reasonable rates. OEB staff notes that in the Custom IR decision, section 4.2 Annual Adjustments and a Mid-term review, the findings state that "the mid-term review will have a narrow scope with a limited number of 2016 actual and forecast updates". OEB staff notes that since rates from 2015-2017 were set on a final basis, updating 2016 actuals during the mid-term review would not make sense unless it was for the purpose of setting 2018 and 2019 rates. At the time of setting 2018 rates, the 2016 actual closing rate base would be the most recent available complete year along with the 2017 updated forecast closing rate base. OEB staff interprets the intent of the finding is to set 2018 and 2019 rates with the latest available actual and forecast data.

OEB staff also notes that the OEB-approved capital expenditures are approximately \$884k higher than the actual/forecast capital expenditures for 2015-2017, as shown in the tables in staff interrogatory 1-Staff-3. This would imply that the previously approved 2018 and 2019 opening rate base is higher than the actual rate base. If the rate base for 2015 to 2017 is not updated using the updated 2015-2017 actual/updated forecast Capital Expenditures, this would cause the rate base for the period 2018-2019 to be inflated causing the updated base revenue requirement to be overstated. OEB staff submits that the starting point for the 2018 and 2019 rate base should be the updated forecasted 2017 closing rate base based on actual/updated forecast capital expenditures for 2015-2017.

Cost of Capital

Oshawa PUC has updated the return on equity (ROE) and short-term interest rate of 9.19% and 1.65% respectively, with the 2017 OEB approved cost of capital parameters. The return on equity and short-term debt rate are 8.78% and 1.76% respectively. The long-term debt rate of 4.03% was approved in the Custom IR application and was calculated as the weighted average of unfunded debt at the OEB approved long-term debt rate and funded debt at the actual debt rate. Oshawa PUC has updated the OEB approved long-term debt rate. The unfunded long-term debt rate used was 3.72% with a resultant long-term debt rate of 3.48%. OEB staff submits that this methodology is consistent with the Custom IR Decision and Order and should be updated with 2018 OEB approved cost of capital parameters should they be available before final rates are set for 2018 and 2019 as per the Custom IR decision.

Working Capital – Updated Cost of Power

In the Custom IR decision, the OEB approved a working capital allowance of 9.37% and allowed for the cost of power to be updated. Oshawa PUC has updated the cost of power based on the OEB's "Regulated Price Plan Report – April 20, 2017" to reflect the impacts of the Fair Hydro Plan. Oshawa PUC calculated the cost of power estimate based on a 25% reduction to 2017 base Non-RPP and base RPP prices and then adjusting it by 2% inflation for 2018 and 2019.

OEB staff submits that the cost of power calculation should be calculated as per the more recent report "Regulated Price Plan Prices and the Global Adjustment Modifier for the Period July 1, 2017 to April 30, 2018". For customers that qualify under the Ontario Rebate for Electricity Consumers Act (ORECA) the cost of power should include the reduced global adjustment price or the Global Adjustment Modifier. For customers that do not qualify for the ORECA the cost of power should use the global adjustment price. These values should be used to calculate the cost of power for both 2018 and 2019. This is because the adjustments to the global adjustment and GA modifier are calculated based on Toronto Hydro's rate order and the outcome after April 30, 2018 is unknown at this time.

Loss Factor

Oshawa PUC updated its loss factor from 4.86% to 3.59% in the application. The Custom IR mid-term review did not make provisions for an update to the loss factor. Oshawa PUC has not explained the reasons for the reduction nor have they provided an updated version of Appendix 2-R, and therefore OEB staff is hard pressed to support the reduction. That said, if the OEB was inclined to accept the change because it is a significant reduction to the Total Loss Factor, any variances from actual will continue to be captured in the commodity variance account.

Retail Transmission Service Rates

OEB staff submits that the Retail Transmission Service Rates should be updated to reflect 2017 Uniform Transmission Rates (UTRs), should they be available before the final rate order. Subject to the updating for the new 2017 UTRs, OEB staff has no concern with the rates proposed.

Rate Class	Unit	2018 Proposed	2018 Proposed
	12.000	RTSR-Network	RTSR-Connection
Residential	kWh	0.0076	0.0068
General Service Less Than 50 kW	kWh	0.0070	0.0063
General Service 50 to 999 kW	kW	2.5485	2.2013
General Service 50 to 999 kW - Interval Metered	kW	3.2665	2.7964
General Service 1,000 to 4,999 kW - Interval Metered	kW	3.2665	2.7964
Large Use > 5000 kW	kW	3.4805	3.0512
Unmetered Scattered Load	kWh	0.0070	0.0063
Sentinel Lighting	kW	1.7579	2.5840
Street Lighting	kW	1.7281	2.5404

Deferral and Variance Accounts

Oshawa PUC is requesting disposition of its Group 1 Deferral and Variance Account balances as at December 31, 2016, totaling a credit of \$2,539,209. This includes a credit balance of \$656,675 in Account 1589 – RSVA - Global Adjustment, which is applicable only to Non-RPP customers. The total balance being sought for disposition includes interest calculated up to December 31, 2016. Based on the calculation of the threshold test, the Group 1 Deferral and Variance Account balances equate to approximately \$0.002 per kWh and therefore exceeds the preset disposition threshold of \$0.001 per kWh. Oshawa PUC has requested the disposition of its Group 1 Accounts over a period of oneyear. OEB staff has reviewed Oshawa PUC's Group 1 Deferral and Variance Account balances as presented in the DVA continuity schedule and notes that the principal balances as of December 31, 2016 reconcile with the balances reported in the December 31, 2016 audited financial statements and to those reported as part of the applicant's Reporting and Record-Keeping Requirements.

OEB staff notes that the balances presented in Tables 16 and 17 in Exhibit A of the application, along with the rate rider calculation presented in the DVA continuity schedule, exclude the disposition of Account 1551, which is a credit balance of \$36,292. Through interrogatories, the applicant has acknowledged that this omission was due to a technical issue in the DVA continuity schedule and that it will be resolved and updated prior to final rates being calculated. OEB staff further notes that the total balance being sought for disposition by the applicant does not include the projected interest on the Group 1 account balances for the period January 1, 2017 to December 31, 2017. This interest should be calculated using the OEB's prescribed DVA rates for this period and included in the overall balance being sought for disposition. OEB Staff submits that the applicant must complete an updated DVA continuity schedule that addresses each of the above matters.

Upon resolution of the matters noted above, OEB Staff has no concerns with the applicant's request to dispose of its December 31, 2016 Group 1 Deferral and Variance Account balances.

All of which is respectfully submitted