

OSHAWA PUC NETWORKS INC.

Undertaking TC2.1

To provide a confirmation of deferral accounts.

Response:

As noted in OPUCN's response to part B. of interrogatory 10.0-Staff-41, OPUCN has proposed rates riders to be added to rates once costs for the following categories of uncontrollable expenditures are known:

- Unbudgeted contributions to Hydro One Networks Inc. Transmission.
- Unbudgeted distribution projects required as a result of regional planning.

Staff's interrogatory correctly notes that *"the revenue requirement impacts of these costs will be tracked by OPUCN"*. OPUCN's proposed *Unbudgeted Regional Planning Investment Cost Variance Account* (URPICVA) to capture actual versus forecast costs in the two foregoing uncontrollable cost categories is detailed at Exhibit 1, Tab C, page 38. The proposed URPICVA is in addition to the proposed deferral/variance accounts listed by Staff in part C. of its interrogatory 10.0-Staff-41.

OSHAWA PUC NETWORKS INC.

Undertaking TC2.2

To consider the answer to the Board Staff interrogatory regarding the NBM information.

Response:

The resource table used by NBM is set out below:

	Type	Rate/Unit	Unit	# Resource	# Units	Total
2 Staff, + Vehicles						
Lead Hand	Labour	\$ 66.01	h	1	1	\$ 66.01
Regular Staff	Labour	\$ 61.41	h	1	1	\$ 61.41
Large Truck	Vehicle	\$ 28.14	h	1	1	\$ 28.14
3 Staff, + Vehicles						
Lead Hand	Labour	\$ 66.01	h	1	1	\$ 66.01
Regular Staff	Labour	\$ 61.41	h	2	1	\$ 122.82
Large Truck	Vehicle	\$ 28.14	h	1	1	\$ 28.14
Small Truck	Vehicle	\$ 28.14	h	1	1	\$ 28.14
4 Staff, + Vehicles						
Lead Hand	Labour	\$ 66.01	h	2	1	\$ 132.03
Regular Staff	Labour	\$ 61.41	h	2	1	\$ 122.82
Large Truck	Vehicle	\$ 28.14	h	2	1	\$ 56.28
5 Staff, + Vehicles						
Lead Hand	Labour	\$ 66.01	h	2	1	\$ 132.03
Regular Staff	Labour	\$ 61.41	h	3	1	\$ 184.23
Large Truck	Vehicle	\$ 28.14	h	2	1	\$ 56.28
Small Truck	Vehicle	\$ 28.14	h	1	1	\$ 28.14
6 Staff, + Vehicles						
Lead Hand	Labour	\$ 66.01	h	2	1	\$ 132.03
Regular Staff	Labour	\$ 61.41	h	4	1	\$ 245.64
Large Truck	Vehicle	\$ 28.14	h	3	1	\$ 84.42
7 Staff, + Vehicles						
Lead Hand	Labour	\$ 66.01	h	2	1	\$ 132.03
Regular Staff	Labour	\$ 61.41	h	5	1	\$ 307.04
Large Truck	Vehicle	\$ 28.14	h	3	1	\$ 84.42
Small Truck	Vehicle	\$ 28.14	h	1	1	\$ 28.14

Please note the definition of terms for the above items:

- Regular staff resources is a certified tradesperson.
- Large truck is a single bucket aerial device.
- Small truck is a quad capacity pickup truck.

OSHAWA PUC NETWORKS INC.

Undertaking TC2.3

To provide parameters of capital efficiency incentive assessment.

Response:

The request was to consider parameters that could be used at the end of the five-year rate plan period to determine whether OPUCN, or ratepayers, would be eligible for an incentive payment pursuant to the Controllable Capital Investment Efficiency Incentive Mechanism (CCIEIM).

Further discussion was had regarding this question later in the day (at Transcript TC2, page 30, line 21 through page 34, line 21). That further discussion echoes OPUCN's prefiled evidence on the matter, which states as follows [Exhibit 10, Tab C, page 16, bottom paragraph – emphasis added]:

OPUCN is requesting approval of a new variance account to capture that portion of the variance in its actual from forecast costs for execution of the two controllable capital programs (proposed as 50%) that is eligible for CCIEIM treatment (with a sub-account for each of the programs to allow for separate tracking). At the end of the rate period, OPUCN will bring forward its request for disposition of the revenue requirement impact of the balance in this account through a rate rider in accord with the CCIEIM as proposed. Such application for disposal and CCIEIM rate rider will be supported by evidence demonstrating completion of the subject capital program (subject to uncontrollable delays as noted above) and detailing the final scope of the program (relative to the scope and criteria proposed in OPUCN's Distribution System Plan filed as Exhibit 2, Tab B in this application) and its final costs. The onus will be on OPUCN to demonstrate that the completed projects achieve the results of the capital program as reflected in the scope and criteria for the projects defined in OPUCN's Distribution System Plan.

As stated at the technical conference, OPUCN's request is for the Board to accept the concept of the proposal, and recognize that the onus will rest with OPUCN to justify any incentive claim at the end of the plan period relative to the approved distribution system plan. OPUCN is prepared to take the risk associated with assuming such evidentiary onus and the consequent uncertainty regarding whether what OPUCN believes to be an

efficient execution of the approved distribution system plan defined projects merits an incentive reward.

OSHAWA PUC NETWORKS INC.

Undertaking TC2.4

To update the table in 1-SEC-2 to include forecast inflation and load growth.

Response:

Year	EB-2014-01	Price Escalator	Revenue From Price Escalator
2015	21,565,264	1.45%	21,565,264
2016	23,547,653	1.63%	21,916,627
2017	24,391,239	1.44%	22,232,936
2018	25,605,243	2.05%	22,688,178
2019	26,193,843	2.16%	23,177,771

Year	Inflation Rate per PEG	OEB IRM Price Escalator	OPUCN Stretch Factor	Price Escalator
2014	1.93%	1.70%	0.15%	1.55%
2015	1.74%	1.60%	0.15%	1.45%
2016	2.20%	1.93%	0.30%	1.63%
2017	2.31%	1.74%	0.30%	1.44%
2018	2.33%	2.20%	0.15%	2.05%
2019	2.27%	2.31%	0.15%	2.16%

In the first table, OPUCN assumes it rebases rates for 2015. The first column presents the base revenue requirement proposed in OPUCN's Custom IR rate application. For comparison, OPUCN was asked to provide estimated base revenue requirements for each of the Test Years using a price escalator estimated based upon the OEB's current practice for 4th Generation IRM rate applications.

In determining a price escalator, PEG provided an inflation rate based upon the OEB's methodology from data inputs used in their Benchmarking Report prepared for OPUCN (refer to Column – Inflation Rate per PEG). In the next column OPUCN is applying inflation factors from PEG's results assuming a two year lag consistent with the OEB's current practice. From the estimated OEB IRM Price escalator, OPUCN is deducting the expected stretch factor based upon the OEB's current stretch factor rates and PEG's estimate of OPUCN's performance from their Benchmarking Report to compute an estimated Price Escalator for the first table.

OSHAWA PUC NETWORKS INC.

Undertaking TC2.5

To provide a reference to the updated table.

Response:

In response to VECC's question relating to CDM activities, OPUCN reviewed its current results and made a number of refinements.

With respect to CDM savings from the City of Oshawa's plans to install LED lights, OPUCN revised its original assumptions to include the following:

- Savings were calculated from converting the City's current inventory of streetlights represented by the number of average connections in 2014.
- Streetlight connections added thereafter were presumed to be LED upon installation.

The following table illustrates the results for billed kWhs and purchased kWhs:

Total Lights	Average Connections	Billed Before LED		Billed With LED		Purchased kWh		
		kWh	kW	kWh	kW	Before LED	With LED	Adjustment
2014 Bridge Year (Regression)	12,465	9,155,875	25,520	9,155,875	25,520	9,600,851	9,600,851	0
2015 Test Year (Regression)	12,838	9,242,735	24,983	6,934,206	18,743	9,691,932	7,271,209	2,420,723
2016 Test Year (Regression)	13,224	9,330,419	25,220	4,625,488	12,503	9,783,878	4,850,287	4,933,591
2017 Test Year (Regression)	13,620	9,418,935	25,459	4,583,340	12,389	9,876,696	4,806,091	5,070,605
2018 Test Year (Regression)	14,029	9,508,291	25,701	4,541,713	12,276	9,970,394	4,762,440	5,207,954
2019 Test Year (Regression)	14,450	9,598,495	25,944	4,500,564	12,165	10,064,981	4,719,291	5,345,690

The CDM savings generated including the conversion and installation of new lights are:

CDM Savings	Average Connections	Billed		Purchased
		kWh	kW	
2014 Bridge Year (Regression)	12,465	0	0	0
2015 Test Year (Regression)	12,838	2,308,529	6,240	2,420,723
2016 Test Year (Regression)	13,224	4,704,931	12,717	4,933,591
2017 Test Year (Regression)	13,620	4,835,595	13,070	5,070,605
2018 Test Year (Regression)	14,029	4,966,578	13,424	5,207,954
2019 Test Year (Regression)	14,450	5,097,931	13,780	5,345,690

With respect to updating the original load forecast with actual 2014 results and OPUCN's CDM Plan filed with the IESO on May 1, 2015, the following table presents the current CDM savings included in OPUCN's updated load forecast:

OPA Program Year	CDM Savings									
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Pre-2011	23,940,409	22,739,420	22,381,806	22,309,529	21,747,881	19,730,014	18,946,290	16,748,951	14,366,129	13,626,336
2011		1,292,000	2,562,149	2,540,484	2,516,050	2,393,865	2,114,650	1,775,179	1,488,994	1,235,307
2012			1,997,500	3,924,954	3,800,045	3,543,479	3,154,512	2,522,270	1,949,488	1,505,781
2013				2,624,000	5,163,469	5,015,308	4,634,807	3,741,778	2,719,566	1,975,181
2014					3,713,000	3,713,000	3,713,000	3,713,000	3,713,000	7,426,000
2015						8,009,371	16,018,742	16,018,742	16,018,742	16,018,742
2016							4,393,951	8,787,902	8,787,902	8,787,902
2017								3,276,975	6,553,951	6,553,951
2018									7,039,666	14,079,332
2019										7,044,226
Sub-total	23,940,409	24,031,420	26,941,455	31,398,967	3,713,000	11,722,371	24,125,693	31,796,619	42,113,261	59,910,152
LED Streetlights						2,308,529	4,704,931	4,835,595	4,966,578	5,097,931
Net	23,940,409	24,031,420	26,941,455	31,398,967	3,713,000	9,413,842	19,420,761	26,961,024	37,146,682	54,812,221

The results not shaded represent the CDM savings included in the load forecast. OPUCN has filed its load forecast model – Response to TC2.5 – through RESS.

OSHAWA PUC NETWORKS INC.

Undertaking TC2.6

To update LRAM table to reflect the same CDM savings that are in updated load forecast.

Response:

Please refer to spreadsheet – Response to TC2.6 filed through RESS.

OSHAWA PUC NETWORKS INC.

Undertaking TC2.7

Best efforts to identify the dependency of the load forecast on the pace of the 407 extension.

Response:

Based on the information received from the developer and the City of Oshawa, the portion of the total system load growth that is dependent on the 407 expansion is approximately 4MW. This represents 10% of the entire load growth forecast for this area and is anchored by one large commercial development (RioCan). This is approximately 0.30% out of the average 3.0% load growth forecast.

OSHAWA PUC NETWORKS INC.

Undertaking TC2.8

To provide a description of what the maps illustrate and the relevance to the load forecast.

Response:

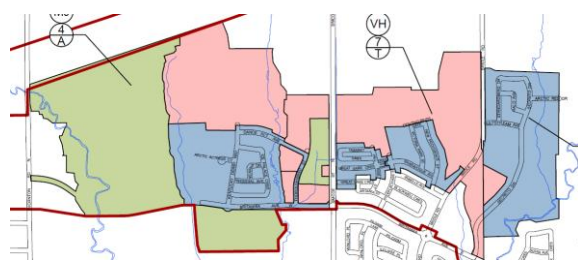
Residential Subdivision Development Activity (“RSDA”) is a City of Oshawa document that provides information on the number of permit applications. The RSDA map also illustrates the geographic location of the proposed building(s) and its progress status (color coded) towards registration. For the load forecast, the RSDA is being utilized by OPUCN for load growth forecasting by assessing the specific number and type of building applications and estimated in-service year.

The December 2014 RSDA, submitted in response to 3.0-Staff-18, is an updated version of the June 2013 RSDA submitted with the original OPUCN application. The map scale makes the graphic difficult to visualize and some of the examples of the color coding changes are highlighted below as follows:

From June 2013 RSDA



To Dec 2014 RSDA



The changes between the prefiled map and the updated map are summarized in the table below:

Site Plan Status	Number of Construction Units	
	June 2013 RSDA	December 2014 RSDA
Proposed Site Plan	1,419	711
Approved Site Plan	3,620	3,459
Registered & Permits Issued	1,117	1,255
Sub Total – Planning Stage	6,156	5,425
OPUCN Connections		743
Total	6,156	6,168

OSHAWA PUC NETWORKS INC.

Undertaking TC2.9

To provide correspondence to HONI referred to in OPUCN's response to 2-Staff-6.

Response:

Please refer to the final GTA East planning report document filed by HONI on May 15, 2015 called "Final – Local Planning Report", which can be found on the HONI website by following the link below:

http://www.hydroone.com/REGIONALPLANNING/GTA_EAST/Pages/Default.aspx

OSHAWA PUC NETWORKS INC.

Undertaking TC2.10

To provide the date forecast was completed.

Response:

The 2014 OPUCN load forecast submitted with this application was completed in Q3, 2013 using the 2012 summer actual system peak load and weather normalized to 2012.

The current load information provided in the application shows a difference between the actual and forecasted load as a result of change in expected weather conditions. Based on Environment Canada information (refer to table below), the Cooling Degree Days (“CDD”) for 2013 and 2014 has decreased when compared to 2012 data, consequently, reducing the expected peak load for those years accordingly.

Year	Cooling Degree Days (“CDD”)			
	June	July	August	September
2012	64.3	155.3	102.8	24.4
2013	32.2	110.0	55.9	13.3
2014	40.1	54.6	58.0	22.5

http://climate.weather.gc.ca/climateData/dailydata_e.html?Prov=&timeframe=2&StationID=4996&cmdB1=Go&Year=2014&Month=9&cmdB1=Go

OSHAWA PUC NETWORKS INC.

Undertaking TC2.11

To provide updated table incorporating Enfield TS and column "Forecast OPUCN Combined Utilization".

Response:

The following table shows the load allocation at all TS's supplying OPUCN including the effect of the proposed Enfield TS solution.

TS	Total Station Capacity	OPUCN Allocated Capacity	Actual OPUCN Utilization (2014)	Forecast OPUCN Utilization (2014)	Forecast OPUCN Utilization – w/o Enfield (2018)	Forecast OPUCN Utilization – w/ Enfield (2018)
Thornton TS	156MVA (100%)	78 MVA (50%)	87 MVA (56%)	109 MVA (70%)	133 MVA (85%)	103 MVA (66%)
Wilson TS	310 MVA (100%)	155 MVA (50%)	153 MVA (49%)	163MVA (53%)	171MVA (55%)	163 MVA (53%)
Enfield TS	150 MVA* (100%)	75MVA* (50%)	N/A	N/A	0MVA	38MVA (25%)
TOTAL	616 MVA (100%)	308MVA (50%)	240MVA	272MVA	304MVA (49%)	304MVA (49%)

*Based on draft proposed design.