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Ontario

BY EMAIL

November 29, 2018

Ontario Energy Board
P.O. Box 2319
27th Floor
2300 Yonge Street
Toronto ON M4P 1E4
Kirsten.Walli@oeb.ca

Attention: Ms. Kirsten Walli, Board Secretary

Dear Ms. Walli:

Re: Ottawa River Power Corporation
2019 IRM Rate Application
OEB Staff Submission
OEB File No. EB-2018-0063

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

Ottawa River Power's responses to interrogatories are due by December 13, 2018.

Yours truly,

Original Signed By

Judy But
Analyst, Application Policy & Climate Change

Encl.

OEB Staff Interrogatories
Ottawa River Power's 2019 IRM Application (EB-2018-0063)

Staff-1

Ref: IRM Rate Generator (Tabs 1, 11) and ICM model (Tabs 4, 10b, 11) (re: model inconsistencies)

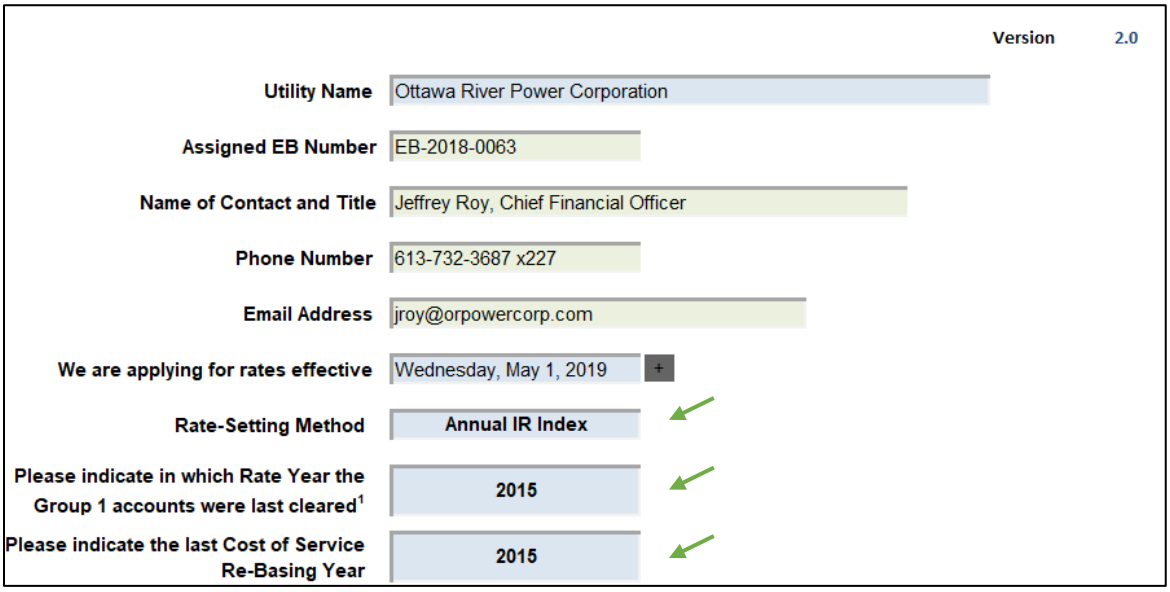
Pre-amble

OEB staff identified some discrepancies in the information filed in the IRM rate generator model and ICM model submitted on September 25, 2018.

Questions

a. For each item below from the IRM rate generator, please confirm accuracy of the following information noted below:

Tab 1 (Information Sheet)



Version	2.0
Utility Name	Ottawa River Power Corporation
Assigned EB Number	EB-2018-0063
Name of Contact and Title	Jeffrey Roy, Chief Financial Officer
Phone Number	613-732-3687 x227
Email Address	jroy@orpowercorp.com
We are applying for rates effective	Wednesday, May 1, 2019
Rate-Setting Method	Annual IR Index
Please indicate in which Rate Year the Group 1 accounts were last cleared[1]	2015
Please indicate the last Cost of Service Re-Basing Year	2015

a. **Rate setting method:** should be "Price Cap Index" rather than "Annual Index IR" as filed

b. **Last rate year in which Group 1 accounts were last cleared:** should be "2016" rather than "2015) as filed

c. **Last cost of service rebasing year:** should be "2016" rather than "2015" as filed

Tab 11 (RTSR – UTRs & Sub-Tx)

If needed, add extra host here. (I)	Unit	2017	2018	2019
Rate Description		Rate	Rate	Rate
Network Service Rate	kW	$ 2.86	$ 2.86	$ 2.86
Line Connection Service Rate	kW			
Transformation Connection Service Rate	kW			
Both Line and Transformation Connection Service Rate	kW	$ -	$ -	$ -

d. **Header "If needed, add extra host here":** should show "Brookfield Power".

If this is confirmed, OEB staff will update this information on the revised version of the IRM rate generator model, as this cell has been locked.

b. For each item reproduced from the ICM model, please indicate whether the following changes should be made:

Tab 4 (Growth Factor – Num_Calc1)

		2017 Actual Distribution Demand		
Rate Class	Units	Billed Customers or Connections	Billed kWh	Billed kW (if applicable)
RESIDENTIAL	$/kWh	9,676	74,039,950	
GENERAL SERVICE LESS THAN 50 kW	$/kWh	1,283	28,817,166	
GENERAL SERVICE 50 TO 4,999 KW	$/kW	150		218,712
STREET LIGHTING	$/kW	2,838		3,609
SENTINEL LIGHTING	$/kW	231		545
UNMETERED SCATTERED LOAD	$/kWh	20	611,520	

	Current Approved Distribution Rates		
Rate Class	Monthly Service Charge	Distribution Volumetric Rate kWh	Distribution Volumetric Rate kW
RESIDENTIAL	16.47	0.0099	0.0000
GENERAL SERVICE LESS THAN 50 kW	22.37	0.0127	0.0000
GENERAL SERVICE 50 TO 4,999 KW	84.18	0.0000	3.4865
STREET LIGHTING	2.37	0.0000	12.9781
SENTINEL LIGHTING	2.92	0.0000	9.0478
UNMETERED SCATTERED LOAD	10.29	0.0035	0.0000

i. **# of connections for unmetered scattered load:** should be "88" as per 2017 yearbook statistics rather than "20" from the last cost of service application

ii. **Current "monthly service charge" and "distribution volumetric rates (kWh and kW)"** boxed in green above do not reflect the 2018 approved MFC as per page 9 of IRM application

Tab 11 (Incremental Capital Adj)

Grossed up Taxes/PILs				
Regulatory Taxable Income	O	$	61,185	T
Add Back Amortization Expense (Prorated to Eligible Incremental Capital)	S	$	35,478	U
Deduct CCA (Prorated to Eligible Incremental Capital)		$	127,060	V
Incremental Taxable Income		-$	30,397	W = T + U - V
Current Tax Rate	26.5%	X		
Taxes/PILs Before Gross Up		-$	8,055	Y = W * X
Grossed-Up Taxes/PILs		-$	10,960	Z = Y / (1 - X)

iii. **Current tax rate:** should show "19.5%" approved from the last cost of service application rather than using the default tax rate of 26.5%

Tab 10b (Proposed ACM ICM Projects)

	E	F	G	H	I	J	K	L
53								
54			$ 1,017,620			$ 1,017,828		$
55								
56			$ 228,330			$ 1,682,172		$
57								
58	Year 1 2017			Year 2 2018			Year 3 2019	
59								
60	Amortization Expense	CCA	Proposed ACM/ICM	Amortization Expense	CCA	Proposed ACM/ICM	Amortization Expense	CCA
61	$ -	$ -	$ 87,000			$ -		
62	$ -		$ -			$ 1,698,850	$ 35,830	$ 128,320
63			$ -			$ -		
64			$ -			$ -		
65			$ -			$ -		
66			$ -			$ -		
67			$ -			$ -		
68			$ -			$ -		
69			$ -			$ -		
70			$ -			$ -		

iv. **Year 3 amortization expense:** Based on the amortization expense of $35,830/year, this indicates a 47 year useful life of the asset. Please confirm whether this is consistent with the service life of power assets that were approved in the last rebasing application.

c. Please update the IRM rate generator and ICM models, based on changes made in response to the above interrogatories. (Note: when updating the ICM model,

please “enable content” in the ICM workbook, and click on each tab in sequential order from the first to last tab in order to have all changes reflected in the ICM rate riders.)

Staff-2

Ref: 2018 Decision and Order, EB-2017-0070, p. 6 (re: Group 1 DVA review results)

Pre-amble

In section 9 of the 2018 IRM decision, the OEB stated this finding as follows:

> To ensure the accuracy of the balances, **Ottawa River is directed to undertake a review of all of its Group 1 balances prior to applying for disposition. The OEB expects Ottawa River Power to perform a more detailed analysis on its Group 1 account balances to provide the OEB with a clearer understanding of how the balances in the accounts were determined**. The evidence should clearly indicate how Ottawa River Power derived its preliminary RPP settlement figures, and any subsequent RPP settlement true-up adjustments, to ensure adherence to the rules and guidelines outlined in the Accounting Procedures Handbook. The methodology and data used to appropriately allocate commodity costs between different classes of ratepayers, namely RPP and non-RPP consumers, should also be clearly documented.
> **(emphasis added)**

Questions

a. Please provide a copy of a report detailing the results of the review of Ottawa River Power’s Group 1 DVA balances.

b. If a report is not available, please provide the analysis that was undertaken in accordance with section 9 of the 2018 IRM Decision referenced above, and the outcomes of the review of Group 1 DVA balances.

c. Please detail the adjustments made by Ottawa River Power to its Group 1 DVA balances explaining each.

d. What improvements or process changes have been made by Ottawa River Power as a result of its review and analysis of Group 1 DVA balances?

e. Please explain the changes made to Ottawa River Power's RPP settlements and settlement true-up processes to ensure greater accuracy of its settlements and account balances in 1588 and 1589.

Staff-3

Ref: Application, p. 12 (re: reconciliation procedures)

Pre-amble

In the current application, Ottawa River Power indicated that it "follows an approach using reconciliation procedures to ensure accuracy and completeness of the settlement submission process where possible."

Questions

Please elaborate on this statement by explaining, in detail:

a. What exactly is being reconciled?

b. What is the timing of these reconciliations? Specifically, which periods are being reconciled and how frequently does this occur?

Staff-4

Ref: EB-2017-0070 Interrogatory Responses to OEB Staff (re: Response to OEB Staff Interrogatory Question #4 b. iii)

Pre-amble

In the prior year's application, Ottawa River Power stated in its response to Staff 4 b) iii:

> "ORPC's CIS does not collect actual RPP vs. non-RPP consumption for all customers (e.g. customers billed on a non-calendar month). An estimate is used where not available – there is no true-up."

Questions

a. Please confirm whether or not Ottawa River Power is now able to determine RPP consumption by month and non-RPP consumption by month in order to accurately record the Cost of Power, Global Adjustment Charges, and RPP Settlement amounts to Accounts 1588 and 1589?

b. If the above is confirmed, please indicate as of which date Ottawa River Power began determining RPP and Non-RPP consumption by calendar month for the purposes of allocating GA and for RPP Settlement?

c. Please confirm that Ottawa River Power is able to perform RPP settlement true-ups, the frequency of such true-ups, and provide an explanation regarding its process for performing such true-ups.

Staff-5

Ref: "Questions on Accounts 1588 and 1589" document

Please confirm that Ottawa River Power has updated its RPP Settlement true-up procedures consistent with the OEB's May 23, 2017 letter regarding the Guidance on the Disposition of Accounts 1588 and 1589.

Staff-6

Ref: Questions on Accounts 1588 and 1589" document, paragraph 4 under "RSVA Power – Account 1588", page 1 of 3, filed November 16, 2018 (re: a/c 1588 true-up)

Pre-amble

In the "Questions on Accounts 1588 and 1589" document submitted by Ottawa River Power, the following statement is made with respect to Account 1588:

> "The difference between the price charged to the customer and the WAP [weighted average price] is settled with Hydro One. The only item remaining in Account 1588 is the difference between the hourly weighted average price paid for electricity and the billing period weighted average price charged to customers…In regards to the 2018 proceeding, there were no true-ups required in 2018 for months from 2017 and no principal or other adjustments in the DVA continuity schedule as ORPC settles using Hydro One purchases from one month prior to the settlement date."

From a practical view, the only amounts that should remain in Account 1588 after all transactions are accounted for and trued-up is the difference between commodity revenues received at the approved loss factors and actual system losses incurred (or unaccounted for energy). The total principal balance being requested for disposition in Account 1588 from 2015-2017 is $125,555.

Questions

a. Please provide an explanation, or quantitative analysis, that demonstrates that the $125,555 principal balance being requested for disposition in Account 1588 is substantially represented by the difference between Ottawa River Power's approved total loss factor (TLF) and its actual system losses, or unaccounted for energy.

b. When Ottawa River Power retrieves RPP kWh consumption volume information for a particular calendar month, how does it determine the kWh consumption volumes for those customers that are not on calendar month billing cycles to ensure that the statistics it is using in settlement represent the full calendar month of RPP-related consumption?

Staff-7

Ref: General question regarding true-up approaches based on responses to "Questions on Accounts 1588 and 1589" document, filed November 16, 2018

In booking journal entries for RPP Settlement (a credit or a charge) and Global Adjustment (a charge) from the monthly Hydro One invoice, please confirm which of the following approaches is used:

a. RPP Settlement is booked into Account 1588. Global Adjustment is pro-rated based on RPP/non-RPP consumption and then booked into Account 1588 and 1589 respectively.
b. Global Adjustment is booked into Account 1589. The portion of the RPP Settlement total equaling (RPP-related revenue less RPP-related HOEP) is booked into Account 1588. The portion of RPP Settlement equaling RPP-related GA is credited into Account 1589.
c. If another approach is used, please explain in detail. OEB staff is seeking clarification on the journal entries (debits or credits, and to which accounts) made by Ottawa River Power upon receipt of the Hydro One invoice.

Staff-8

Ref: "Questions on Accounts 1588 and 1589" document, paragraph 1 under "Global Adjustment – Account 1589", page 2 of 3, filed November 16, 2018 (re: 2017 true-up adjustments)

Pre-amble

In the "Questions on Accounts 1588 and 1589" document submitted by Ottawa River Power, the following statement is made with respect to Account 1589:

> "[S]ettlement for GA purposes relates to actual data for the applicable month (i.e. the settlement submitted on November 2, 2018 related to billed amounts in October for usage in September and the Hydro One bill used for settlement related to September usage)."

Questions

a. Please confirm that, for consumption in December 2017, the amount of RPP-related GA charges was calculated by taking the total billed amounts in January 2018 and subtracting the non-RPP billed amounts in January 2018, submitted to Hydro One on February 2, 2018, and was reflected on the Hydro One bill received later in February 2018. If this is not the case, please describe how RPP-related GA for December 2017 was claimed by Ottawa River Power.

b. If the above circumstance is confirmed, please indicate the posting date reflected in the general ledger of the RPP-related GA claim.

c. When Ottawa River Power retrieves consumption information for a particular month for the purposes of settling GA attributable to RPP customers, OEB staff is of the understanding that the non-RPP consumption is subtracted from total consumption figures. How does Ottawa River Power account for those non-RPP customers that are not on calendar month billing cycles to ensure that the statistics it is using in settlement represent a full calendar month of RPP-related consumption?

d. Are the books for the 2017 fiscal year kept open long enough so that the RPP-related GA claim associated with December 2017 consumption can be journalized in the 2017 fiscal year?

e. If the RPP-related GA claim associated with December 2017 consumption is reflected in the general ledger in 2018, please explain i) why a reconciling item in the GA Analysis Workform is not required, and similarly, ii) why a principal adjustment in the 2017 continuity schedule is not required, so that all activity associated with 2017 is reflected in the balances being requested for disposition?

f. Please update the GA Analysis Workform and IRM Rate Generator Model, as appropriate, in response to this interrogatory.

Staff-9

Ref: "Questions on Accounts 1588 and 1589" document, paragraph 2 under "Global Adjustment – Account 1589", page 2 of 3, filed November 16, 2018 (re: unbilled non-RPP GA revenue true-up)

Pre-amble

In the "Questions on Accounts 1588 and 1589" document submitted by Ottawa River Power, the following statement is made with respect to Account 1589:

"The consumption used for settlement purposes is trued-up as required on an annual basis in Account 1589 compared to actual usage in each month by calculating unbilled non-RPP GA consumption."

Questions

a. Why is there a need to true-up consumption if, for example, consumption in December 2017 is obtained by retrieving billed amounts in January 2018 and submitting that to Hydro One on February 2nd, 2018? Does the billed amount in January 2018 represent total consumption in December 2017 or only a portion of December 2017?

b. Why is there a need to calculate the unbilled non-RPP GA consumption if the statement in part a) above is confirmed and the billed amounts in one month represents the entire consumption from the prior month?

c. With respect to the statement made in the pre-amble above, are these true-ups journalized in the respective fiscal year that they relate to? If not, please explain why a principal adjustment is not required on the DVA continuity schedule, or why a reconciling item is not required in the GA Analysis Workform.

d. For each year of 2015, 2016 and 2017, please quantify the true-ups referred to in the pre-amble above, describe in detail what is being trued up, and indicate on which date in Ottawa River Power's general ledger the journal entry for the true-up is reflected on.

e. Please reconcile the statement in the pre-amble above with the statement "In regards to the 2018 proceeding, there were no true-ups in 2018 for months from 2017".

f. Please update the GA Analysis Workform and IRM Rate Generator Model, as appropriate, in response to this interrogatory.

Staff-10

Ref: GA Analysis Workform; IRM Rate Generator Model (Tab 3); "Questions on Accounts 1588 and 1589" document, paragraph 3 under "Global Adjustment – Account 1589", page 2 of 3, filed November 16, 2018 (re: recording of GA credit received on the generator payment)

Pre-amble

In the "Questions on Accounts 1588 and 1589" document submitted by Ottawa River Power, the following statement is made with respect to Account 1589:

"ORPC also receives a monthly generator payment from Hydro One for all electricity, if any, that was over-generated by embedded generators directly into the grid. The GA credit received on the generator payment is recorded into Account 1589. The value of the RPP GA to be settled with Hydro One is then reduced by the GA credit received on the generator payment."

Questions

a. Does Hydro One charge Ottawa River Power for this excess generation in one month, but then provide Ottawa River Power with a credit for the same amount in a subsequent month?

b. Does Ottawa River Power post the credit received from Hydro One into the same month in the general ledger as the associated charge from Hydro One?

    i. If this is not the case, please explain how a variance for the end of 2017 with respect to this charge (and credit) does not exist in the balances being requested for disposition, and that this variance should be adjusted for.

Staff-11

Ref: GA Analysis Workform (reconciling item 9, "2015 RPP true-up included in 2017" variance); "Questions on Accounts 1588 and 1589" document filed November 16, 2018

Pre-amble

In the 2017 tab of the GA Analysis Workform, Ottawa River Power included a reconciling adjustment of a debit of $174,549 for RPP Settlement-related amounts of GA that pertained to 2015 in reconciling item 9. However, the credit entry of $174,549 is shown in the 2016 tab of the GA Analysis Workform.

Questions

a. Please confirm which period(s) this pertains to (2015 or 2016) and how this figure was calculated.

b. Please explain why this timing difference only appears in one year of the GA Analysis Workform and how the circumstances related to this adjustment are not applicable to other years (for instance, amounts recorded in 2018 that related to 2017, or amounts recorded in 2016 that related to 2015)?

c. Please explain why such an adjustment exists, as Ottawa River Power had indicated in its "Questions on Accounts 1588 and 1589" document that it settles GA on a one-month lag based on actual consumption.

Staff-12

Ref: GA Analysis Workform (re: reconciling adjustment items 2a/2b)

a. Please provide the supporting calculations with respect to reconciling adjustments 2a/2b. For example, reconciling item 2b in 2017 is a credit of $7,588.

b. In table format, please provide the kWh and the GA rate used in recording the unbilled revenue accrual for the year end of 2017, as well as the kWh and the GA rate that should have been used, if the accrual was recorded on an actual basis rather than on an estimated basis. Please provide this information for each year ended 2014, 2015, 2016 and 2017.

Staff-13

Ref: GA Analysis Workform (re: short-term load transfer)

Pre-amble

In the 2016 tab of the GA Analysis Workform, Ottawa River Power has recorded a debit reconciling item of $176,622 for a short-term load transfer.

Questions

a. Please explain the nature of this adjustment and provide the supporting calculation behind the $176,622.

b. Please explain how this adjustment is isolated only to 2016, and that 2015 or 2017 are not fiscal years that were affected by this item, or similar types of adjustments related to short-term load transfers.

c. Please indicate the year that this adjustment was actually recorded in the general ledger of Ottawa River Power.

Staff-14

Ref: GA Analysis Workform (re: 2017 embedded generation)

Pre-amble

In the 2017 tab of the GA Analysis Workform, Ottawa River Power has recorded a debit reconciling item of $249,978 for GA on 2017 embedded generation remitted in 2018.

Questions

a. Please explain the nature of this adjustment and provide the supporting calculation behind the $249,978.

b. Please explain how this adjustment is isolated only to 2017, and that 2015 or 2016 are not fiscal years that were affected by this item, or similar types of adjustments related to embedded generation remittances.

c. Please indicate in which month and year this adjustment is reflected in Ottawa River Power's general ledger.

d. If Ottawa River Power understated its embedded generation in 2017, is there also a corresponding 2017 credit for the monthly generator payment from Hydro One for the GA on generation that was injected into the grid? If so, please quantify this GA credit, with supporting calculations, and adjust the GA Analysis Workform if necessary.

Staff-15

Ref: IRM Rate Generator Model, Tab 3 (re: LV Variance Account 1550)

Pre-amble

OEB staff notes that the balance of Ottawa River Power's USoA account 1550 is significant. The balance being requested for disposition is $891,187. This balance represents the principal and interest transactions from 2015 to 2017 plus forecasted interest to April 30, 2019.

Questions

a. Please provide an explanation for the large size of the account balance.

b. Please provide a quantitative analysis for amounts paid and amounts collected through base distribution rates (or other means) that reconciles this large balance, if practicable.

Staff-16

Ref: 1595 Analysis Workform

Pre-amble

In the 1595 Analysis Workform, Ottawa River Power indicated that the Global Adjustment rate rider calculated for the General Service 50 to 4,999 kW service class customers was based on a forecasted consumption of 99,086 kW, however, the actual amounts returned to customers were applied against 187,715 kW.

Likewise, Ottawa River Power indicated that the Global Adjustment rate rider calculated for the Residential service class customers was based on a forecasted consumption of 8,642,866 kWh, however, the actual amounts returned to customers were applied against 3,854,579 kWh.

Questions

a. Are there any specific circumstances that Ottawa River Power can identify that explain the large variances between the consumption figures projected for these rate classes at the time the riders were approved and the billed consumption that the riders were applied against?

b. Please explain why Ottawa River Power has not populated Column L (Billed Consumption per RRR filings) under the Global Adjustment Rate Rider Table.

c. Please update the 1595 Analysis Workform accordingly.

Staff-17

Ref: EB-2014-0105, Distribution System Plan (DSP), "2016 Misc. Small Projects", p. 146

Pre-amble

Based on Ottawa River Power's DSP submitted for the last rebasing application, the DSP included capital projects between 2015 and 2019. In that DSP, it included some expenditures for betterments to the Almonte MS-2 and MS-3 substations, but a need for a new substation in Almonte was not identified at that time.

Ottawa River Power notes in the application that the previous Substation Condition Assessment Study indicated that a new substation in Almonte could be built after 2020.

Questions

a. Please confirm why building a new MS-4 substation in Almonte was not identified in the DSP submitted in EB-2014-0105.

b. Please discuss the key changes from the time the DSP was submitted in EB-2014-0105 and now, with respect to the condition of the substations in Almonte and the ability of the substations to meet projected load growth in its service area. Please provide supporting documentation, analysis and assumptions as required.

c. In table format, please itemize the types of expenditures incurred to date for the substations in Almonte.

d. Please explain the factors that influenced Ottawa River Power's decision to propose building a new substation in 2019, rather than after 2020.

Staff-18

Ref: Application, p. 19 (re: analysis of forecasted peak load growth vs. existing substation capacity)
Attachment IR 18 i) – excel spreadsheet (attachment)

Pre-amble

In this application, Ottawa River Power made an ICM request to build a new substation (Almonte MS-4) by June 2019. Ottawa River Power indicates that this new substation was intended to provide relief to Almonte MS-3. Ottawa River Power also indicated plans to eventually replace Almonte MS-3.

In order to establish a need to build a new substation, forecasted peak loads should be compared with the existing substations capacity, while taking into account the condition of the existing equipment.

OEB staff created a table (Attachment IR 18 – excel spreadsheet) to request data on actual and forecasted peak loads in MW for the Almonte service area and at each individual Almonte substation.

Questions

a. Please complete Attachment IR 18 – excel spreadsheet, and file a completed table in response to this interrogatory.

b. Please provide the analysis and assumptions that Ottawa River Power used to determine why the new substation in Almonte North is needed to meet forecasted load growth in Almonte.

Staff-19

Ref: Application, p. 22 (re: capacity of transformers)
Appendix D – part 1, MS-1 single line diagram, p. 9 of appendix a
Appendix D – part 2, station photographs, drawings DSC_2412 (MS-1), DSC_2477 (MS-2) and DSC_2546 (MS-3)

Pre-amble

For the Almonte MS-1 transformer refurbished in 2009, there is inconsistent information on the capacity of this transformer based on the single-line diagram, nameplate capacity on station photographs and the application. Because of the conflicting information, it is unclear how much of capacity is still available at Almonte MS-1. Specifically, based on

the nameplate rating in the station photograph, it appears as though this transformer's peak is less than 10% of its capacity of 18.7 MVA, with both sets of cooling fans on for a 10 MVA transformer.

In addition, the nameplate pictures indicate that the transformers at Almonte MS-2 (built in 1975) and Almonte MS-3 (built in 1965) could be fitted with a set of cooling fans. If this were the case, the rating for each of the MSs could be increased by 33% to 6.667 MVA and 4 MVA, for MS-2 and MS-3 respectively.

Questions

a. Please provide the number and size of MS-1 transformer(s) with and without cooling fans.

b. Please confirm the percentage of loading for MS-1 and show calculations.

c. Have cooling fans been installed at MS-2 and MS-3 transformers? If yes, when were the fans installed?

Staff-20

Ref: Application, p. 23 (re: discussion of alternatives)

Pre-amble

Ottawa River Power's application did not include any discussion of the alternatives that were considered before deciding to build the Almonte MS-4 substation in 2019.

Questions

a. Please discuss whether any of these alternatives, or combination of these alternatives, listed below were considered:
    i. Purchasing a mobile transformer unit capable of backing up any of the 3 Almonte stations in times of emergencies and/or to facilitate planned maintenance activities
    ii. Transferring some of the load from Almonte MS-2 and Almonte MS-3 to Almonte MS-1 permanently or when needed (during peak hours) particularly since Almonte MS-1 appears to have more than 90% of capacity available and is located much closer to Almonte MS-3 than the proposed Almonte MS-4
    iii. If not yet done, installing cooling fans at Almonte MS-2 and Almonte MS-3 to increase their rating by 33%
    iv. Renting a mobile transformer unit
    v. Replacing switchgear at Almonte MS-3

vi. Installing monitoring equipment at Almonte MS-2 and Almonte MS-3 to ensure their loading does not exceed dynamic ratings
vii. Any other alternatives not listed above

b. Please provide the estimated cost of the alternatives that were considered by Ottawa River Power.

c. Please advise whether cost-benefit analysis was conducted, prior to concluding that building MS-4 was the most strategic or cost-effective option. If yes, please discuss the results.

Staff-21

Ref: Appendix D – part 1, sections 2.2, 3.8, 3.9 and 3.10 (re: condition of substations)

Pre-amble

In the 2017 Substation Condition Assessment Study, the criteria used by Costello Utility Associates to assess the condition of the station included the following:

- Public safety
- Worker safety
- Risk of major equipment failure

The deficiencies found by Costello Utility Associates in the 2017 Substation Condition Assessment Study were primarily related to safety risks.

The 2017 Substation Condition Assessment Study, however, did not include information on the tests conducted and inspection records of the substation transformers at any of the Almonte substations. It is not immediately clear whether there was a proper assessment of the actual condition of the substation transformers.

Questions

a. Transformer test results:
    i. Please indicate what transformer tests (such as DGA, oil quality, Doble testing, etc.) were performed for substation transformers at Almonte area substations.
    ii. Who performed the test, and when the results were available to Ottawa River Power?
    iii. Please explain how the results were used in determining the condition of the substation transformers.
    iv. What specific transformer test results indicated that the transformers at the Almonte MS-2 and MS-3 substations were in poor condition?

b. Visual inspections:
    i. Please indicate what visual inspections were performed for substation assets in Almonte.
    ii. Who did the inspection, and when the inspection results were available to Ottawa River Power?
    iii. Please explain how the results were used in determining the condition of substation assets.
    iv. What specific inspection findings indicated that the substation assets were in poor condition?

c. Other than obsolescence of the Almonte MS-3 switchgear, please discuss whether there were any additional problems identified with MS-3, via testing or inspections, that indicates the switchgear was in poor condition.

d. Please confirm whether Ottawa River Power has addressed all the concerns identified in the 2017 Substation Condition Assessment. If no, please discuss how Ottawa River Power plans on addressing the issues. If yes, please discuss what has been done.

e. Please discuss how building a new substation in Almonte can mitigate the concerns identified in Almonte in the 2017 Substation Condition Assessment Study.

Staff-22

Ref: Application, p. 21 (re: maintenance program activities)

Pre-amble

Ottawa River Power indicates that it can only perform maintenance activities during off-season.

Questions

a. Please discuss the type of planned maintenance activities performed during off-season, requiring the Almonte MSs to be offline.

b. What is the duration of its planned maintenance activities, and who does this?

c. Please discuss what preventative maintenance activities have been performed in the last scheduled maintenance.

Staff-23

Ref: Application, executive summary and pp. 18, 19, 23 (re: project cost)
Appendix D – part 1, page 3 (executive summary) and section 3.10

Pre-amble

Ottawa River Power provided a cost breakdown of MS-4. The projected cost of $1,785,850 for building a new substation comprised of the following elements:

1. Property costs: $87,000
2. Engineering and design: $180,000
3. Equipment: $798,000
4. Civic construction: $388,000
5. Electrical: $115,500
6. Miscellaneous: $55,000
7. Contingency: $162,350

In the executive summary of the 2017 Substation Condition Assessment Study, Costellos Utility Consultants recommend that "a new station was required for growth". Further, the application indicates that Costellos Utility Consultants was retained to do the electrical engineering and project management work. Ottawa River Power indicates that the total estimate was verified for reasonableness by Costellos Utility Consultants.

Questions

a. If the single source approach was used in this case, please explain why this approach was taken.

b. Were any other vendors besides Costellos Utility Consultants asked to provide an estimate? If yes, how many were considered? Please provide the detailed estimates by cost component for the new substation. If no, please confirm whether Costellos Utility Consultants provided the estimate for the overall cost of $1,785,850 and the breakdown of the costs.

c. Please discuss the process that was undertaken by Costellos Utility Consultants to validate the reasonableness of the total cost estimate of MS-4. Please provide any supporting documentation prepared by Costellos Utility Consultants.

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Ref: Application, p. 20 (re: other project details such as location and project timelines)

Pre-amble

Ottawa River Power states that Almonte MS-4 is proposed to be located in the northern portion of Almonte, while Almonte MS-3 is located in the southern portion of Almonte. Almonte MS-1 is located in the middle of Almonte between MS-2 and MS-3.

However, the specific location of MS-4 was not included on the maps, and the MS-4 station single-line diagram was not provided in the application.

Questions

a. Please confirm the exact location of the proposed Almonte MS-4. If this is known, please show the proposed location of MS-4 on the map that was provided in the application.

b. Please provide the Almonte MS-4 single-line diagram. If a single-line diagram is not available at this time, please provide a substantive piece of documentation that shows the components of this proposed substation.

c. Given earlier plans to begin tendering in September this year, please provide a detailed breakdown of the timelines to plan and construct MS-4. Specifically, how long would it take to build the MS-4 substation from the time that approvals were to be granted by the OEB?

d. Please discuss your plans, if the ICM project is not approved by the OEB.