EB-2018-0063

Ottawa River Power Corporation Application for electricity distribution rates effective May 1, 2019

Vulnerable Energy Consumers Coalition (VECC) Interrogatories

VECC-13

Ref 1: Ottawa River_2019_IRR_VECC_20181221 Ref 2: Ottawa River_2019_IRR_VECC Revised_20190109

Please provide the differences between the two documents.

There were five revisions made changing the peak kVA from 12,764 to 10,775.

- VECC 6 f)
- VECC 7 a) 1st sentence and 5th sentence
- VECC 8, 1st paragraph and 2nd paragraph

VECC-14

Ref 1: Ottawa River_2019_IRR_OEB Staff_20181221 Ref 2: Ottawa River_2019_IRR_OEB Staff Revised_20190109

Please provide the differences between the two documents.

There were eight revisions made:

- Staff 17 changed from capacity to ampacity
- Staff 18 a) changed to "Please see Appendix M
- Staff 18 b) changed from 12,764 to 10,775 kVA in 1st sentence and 5th sentence
- Staff 19 changed from 5778 to 5067 kVA
- Staff 20 a) ii) changed from 12,764 to 10,775 kVA
- Staff 20 a) iii) changed from 9,500 to 10,000 kVA
- Staff 21 e) changed from 9,500 to 10,000 kVA

VECC-15

Ref 1: Ottawa River_2019_IRR_VECC Revised_20190109 VECC IR#1 Ref 2: Ottawa River_2019_IRR_VECC_App 1_20121221

The capital amounts at reference #1 do not align with the capital amounts at reference #2.

Please reconcile.

Ottawa River Power included contributed capital in the numbers in VECC 1 and not in VECC 2. Ottawa River Power has corrected the Plan/Board Approved numbers for 2015 and 2016. Ottawa River Power has included the contributed capital on its project spreadsheet and can be seen at Appendix 1 Revised.

| | 2015 CAREX | 2016 CAPEX | 2017 CADEX | 2018 CADEX | 2019 CADEX | 2020 CADEX |
|-------------------------------------|---------------|---|---------------|---------------|---------------|---------------|
| - | CAPEX | CAPEX | CAPEX | CAPEX | CAPEX | CAPEX |
| Plan/Board Approved | \$1,167,330 | \$1,206,640 6months at 2010 capex and 6months at 2016 capex Rates implemented July 1, 2016 | \$1,245,950 | \$1,245,950 | \$1,245,950 | \$1,245,950 |
| Actual | \$780,067 | \$1,105,055 | \$1,165,057 | | | |
| In-Service Additions (Actual) | \$780,067 | \$991,531 | \$1,165,057 | | | |

With the revision in the 2015 Board approved number, there is a 33% difference in 2015. This is primarily attributed to account #1930. The approved budget was \$302K with spending of only \$35K. The remaining item is account #1980 with a budget of \$80,000 and no work completed on the Scada in 2015.

VECC-16

Ref: Filing Requirements for Electricity Distribution Rate Applications, Chapter 3 Incentive Rate-Setting Applications July 12, 2018 P24

The Board's Filing Requirements indicate the ICM is not available for incremental funding if a distributor's regulated return exceeds 300 basis points above the deemed return on equity embedded in the distributor's rates.

Please discuss and provide Ottawa River's deemed return on equity in base rates compared to its rate of return for 2017 and 2018.

Ottawa River Power's ROE did not exceed 300 basis points above the deemed return on equity in 2017. It was 11.82% which is 2.63 points above expected. Please note that this increase is because Ottawa River Power applied for it smart meter disposition in 2016 and will be recouping its costs over four years. In 2017 Ottawa River Power had \$241,069 in additional revenue from this rate rider. Without this, the actual ROE would have been 6.87% or 2.32 points below expected.

Ottawa River Power has not completed its 2018 year end at this time, but expects the ROE to be in the same range.

VECC-17

Ref: Filing Requirements for Electricity Distribution Rate Applications, Chapter 3 Incentive Rate-Setting Applications July 12, 2018 P24

The requested amount for an ICM claim must be incremental to a distributor's capital requirements within the context of its financial capacities underpinned by existing rates and satisfy the eligibility criteria of materiality, need and prudence set out in section 4.1.5 of the ACM Report.

| Criteria | Description | |
|-------------|---|--|
| Materiality | 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. | |
| Need | 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. | |
| Prudence | 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. | |

a) Please explain how Ottawa River's ICM request is incremental.

The substation 4 project exceeds the OEB threshold amount. This is calculated in the ICM model at Tab 10. The materiality threshold is \$1,059,224.

The substation build will have a significant impact bringing the total capital budget to \$2.7 million. These costs are not in the current rate base as approved in the 2016 Cost of Service.

b) Please explain how Ottawa River's ICM request satisfies the above criteria: materiality, need, and prudence.

This ICM request is material. The project itself is approximately 1.4 time the approved 2016 CAPEX for Ottawa River Power.

The need as stated is to serve not only new customers but existing customers as well. There is not enough capacity should a 4.16 KV station fail, to serve the rest of the community.

Ottawa River Power intends to build Sub 4 to accommodate current and future load. This was the most prudent option. While MS-3 with a capacity of 3,000 kVA would be a candidate for capacity expansion, the entire station, including transformer, metalclad switchgear, and feeder cables are operating beyond its useful life.

The MS-1 and MS-2 transformers are 5,000 kVA, which is the typical maximum size for 4 kV systems. This is a technical limitation due to the 4 kV short circuit fault levels.

The purchase of a spare transformer was also considered, but this would not allow timely restoration of power following a failure at one of the existing stations. Each of the existing stations in Almonte has different physical configurations, and it would be challenging to find a spare transformer that could be installed quickly without major modifications to the station. It is estimated that changing a transformer could take one to two days minimum, which would result in a prolonged outage. Further, if there was a major failure in the 4 kV metalclad switchgear, a spare transformer would not help. In our experience, faults in switchgear can take many days to repair.

VECC-18

When exactly will new load growth exceed available capacity? Please provide all assumptions and calculations.

Load growth is not the only issue in Almonte. Current loading is also a factor. Ottawa River Power is following typical utility practise to be tolerate of the failure of any single major component to prevent prolonged outages. Substation transformers do fail, often without warning, and ORPC has a responsibility to be able to restore power in that circumstance in a reasonable time. Typically, this means within an hour or so. If there is no spare capacity in the system, outages could last days or longer.

VECC-19

Ref: EB-2015- DSP

a) Please provide the capital projections for 2016 to 2020.

| Ottaw | a River Power Corporation | | | | | |
|--------|---------------------------------|-----------|-----------|-----------|-----------|-----------|
| | Capital For VECC | | | | | |
| | | | | | | |
| | | | | | | |
| | | 2016 | 2017 | 2018 | 2019 | 2020 |
| | | | | | | |
| 180600 | Land Rights | | 39,130 | 88,721 | | |
| 180870 | Building | 54,222 | 4,010 | 1,573 | 20,000 | 50,000 |
| 182000 | Mun. Trans. Stn - <50kv | 215,585 | 16,362 | 54,055 | 1,657,000 | 140,000 |
| 183000 | Poles Towers Fixtures | 213,082 | 133,966 | 155,714 | 110,000 | 130,000 |
| 183500 | O/H Conductors, Devices | 213,608 | 317,294 | 286,947 | 202,000 | 240,000 |
| 184000 | Distribution lines u/g | 16,314 | 31,950 | 44,327 | 3,500 | 32,000 |
| 184500 | Undergd Conductor/Dev | 42,864 | 140,969 | 134,406 | 51,000 | 100,000 |
| 185000 | Distributrion Transformers | 127,653 | 197,153 | 316,413 | 269,000 | 230,000 |
| 185503 | Customer services | 102,071 | 125,335 | 66,351 | 92,000 | 100,000 |
| 186000 | Meters | 36,172 | 35,397 | 6,766 | 33,000 | 150,000 |
| 191500 | Office equipment | 27,072 | 4,398 | | 10,000 | 10,000 |
| 192000 | Computer Hardware | 1,669 | 6,397 | 1,083 | 10,000 | 50,000 |
| 192501 | Computer Software | 21,070 | 33,881 | 10,652 | 25,000 | 30,000 |
| 193000 | Rolling Stock and equipment | 116,565 | 322,428 | 30,997 | 350,000 | 50,000 |
| 194000 | Miscellaneous Tools & Equipment | 14,007 | 3,354 | 3,542 | 5,000 | 10,000 |
| 194500 | Measurement Equipment | | 1,000 | | | 5,000 |
| 195500 | Communication Equipment | | | | | 10,000 |
| 196000 | Miscellaneous Equipment | | | | | |
| 198000 | System Supervisory Equipment | | 35,234 | 17,294 | 50,000 | 75,000 |
| | Contributed Capital | (96,899) | (263,533) | (100,000) | (187,500) | (166,050) |
| | | 1,105,055 | 1,184,725 | 1,118,841 | 2,700,000 | 1,245,950 |

VECC-20

Ref: VECC IR#2 (c)

Please discuss the potential to defer the new bucket truck in Almonte proposed for 2019.

Ottawa River Power has already signed a purchase order and is expecting delivery of the new vehicle in July of 2019. The truck that it is replacing has had numerous hydraulic repairs and continues to get stuck in the up position. It has become very unreliable.

VECC-21

Ref: VECC IR#3 (b)

Please compare load growth rate projections to the Almonte 4 kV system over the next 5 years compared to previous years.

Ottawa River Power provides the following table of peaks up to 2022.

The issue is not the individual station loading, it is the coincident system load. The 2019 through 2022 forecast is based on a typical 3% annual increase as supplied in Appendix M. The table below was converted to MVA using a 94% power factor.

| Year | Summer Peak (MVA) | Winter Peak (MVA) |
|------|-------------------|-------------------|
| 2017 | 8.2 | 8.7 |
| 2018 | 8.9 | 9.1 |
| 2019 | 9.2 | 9.4 |
| 2020 | 9.5 | 9.7 |
| 2021 | 9.8 | 10.0 |
| 2022 | 10.1 | 10.3 |

The peak demands for the period of 2017 through 2022 are somewhat irrelevant to the current situation of inadequate capacity under failure contingency situations.

When the utility amalgamated in 2000, there were 1837 residential customers. The current number of residential customers is 2810. This is a 60% growth over 18 years. Consumption increased from 17,823,044 kWh to 22,810,328 kWh, which is a 28% increase. GS > 50 kW also grew from 11 customers to its present 22, which is a 100% growth rate in 18 years. In 2000 this class consumed 5,711,060 kWh. In 2018 this had risen by 95% to 11,161,488 kWh.

This growth is expected to continue as stated in the application. Providing predictions beyond 2022 would not add to information already provided.

VECC-21

Ref: VECC IR#12

Please provide the historical failure at one of the three existing stations rate compare load growth.

Ottawa River Power does not understand this question.