EP-1 Reference: Exhibit 1, Page 51, Table 32

Please explain the capital expenditures on SCADA/GIS/AMI/OMS from 2014 to 2019, particularly the amounts spent on GIS and the large variance between 2014 CoS and 2014 Actual.

Response:

Burlington Hydro provides a breakdown of the capital expenditures on SCADA/GIS/AMI/OMS from 2014 to 2019; and the amounts spent on GIS in Table 1 below. The reason for the \$442,914 variance between the 2014 Cost of Service and 2014 Actuals was unplanned expenditures on a new Outage Management System, which needed to be implemented earlier than anticipated. After the December 2013 Ice Storm, it became evident that Burlington Hydro's existing Outage Management software could not adequately meet the needs of the business or Burlington Hydro's customers, and needed to be replaced.

Table 1 - Capital Expenditures on SCADA/GIS/AMI/OMS

Description	2014 CoS	2014 Actual	2015 Actual	2016 Actual	2017 Actual	2018 Actual	2019 Forecast	2020 Budget
Outage Management System	\$100,000	\$513,820	\$338,604	\$198,668	\$122,623	\$63,500	\$50,000	\$50,000
Geographic Information System	\$50,000	\$6,159	\$3,374	\$153	\$0	\$0	\$0	\$664,413
Other	\$0	\$72,935	\$24,055	\$525	\$0	\$25,240	\$0	\$0
Total	\$150,000	\$592,914	\$366,032	\$199,346	\$122,623	\$88,740	\$50,000	\$714,413

EP-2 Reference: Exhibit 1, Page 52

Please explain why Burlington Hydro needs to proceed with the CIS project now instead of delaying it for one year when it files its rebasing application.

Response:

Please refer to the interrogatory response to SEC-2.

EP-3 Reference: Exhibit 1, Page 53

Please explain why Burlington Hydro needs to proceed with the GIS project now instead of delaying it for one year when it files its rebasing application.

Response:

Please refer to the interrogatory response to SEC-2.

EP-4

Reference: Appendix I, Project Summary, Customer Information System, page 2

- a. Please provide cost estimates of the three CIS replacement options.
- b. Please provide the functionality comparison analysis of the three CIS replacement options.
- c. Please provide more details of Option 3 and a more detailed discussion of why it was rejected.
- d. Please explain why Burlington Hydro did not consider outsourcing its customer care including CIS.

Response:

- a. Please refer to response to Staff-15a).
- b. A functionality comparison analysis of the three CIS replacement options is provided in Table 1 below.

Description	Daffron	Tier 1	Tier 2
Customer Account Management	Yes	Yes	Yes
Customer Facing Applications (Online 24X7)			
(i.e. Move In/Move Out Smartphone App)	No	Yes	Yes
Integrated Customer Portal (Online 24X7)			
(i.e. Account Payment Information, Consumption			
Presentation, eBill Presentation & Notifications)	No	Yes	Yes
Delinquency & Collections Processing	No	Yes	Yes
Deposit Administration Processing	Yes	Yes	Yes
Payment Processing	Yes	Yes	Yes
All Billing Processes	Yes	Yes	Yes
Meter Data Management Repository			
(All Meter Data)	No	Yes	Yes
Full Integration with Ontario Central MDM/R	Yes	Yes	Yes
User Configurable Rules Engine for both the Management of			
Meter Data Exceptions and Advanced Meter Infrastructure			
(AMI) 'Service Level Agreements'	No	Yes	Yes
Integrated Accounts Receivable Module (Full Functional)	No	Yes	Yes
Integrated Inventory Control Module (Full Functional)			
(i.e. Meters and related)	No	Yes	Yes
Automated & Streamlined Software Processes with User			
Configurable Tables	No	Yes	Yes
Current Technology Platform	No	Yes	Yes

Table 1 - Functionality Comparison Analysis

- c. Option 3 was replacing Burlington Hydro's existing CIS with a Tier 1 CIS. A Tier 1 solution typically serves clients with large revenues, big market capitalizations and global operations requiring software support offices in multiple countries. Tier 1 solutions are designed to address all possible requirements of these large clients, which are beyond the scope of Burlington Hydro's functional requirements. Please see Burlington Hydro's response to Staff-15c) for more details. Further, the estimated cost of implementing a Tier 1 solution ranged from \$6M to \$14M. The selected Tier 2 solution meets all of Burlington Hydro's business requirements and provides the best value to BHI and its customers. Therefore option 3 was rejected.
- d. No, Burlington Hydro did not consider outsourcing its customer care including CIS. Burlington Hydro considers direct contact with its electricity Customers essential to effectively managing its customer relationship and maintaining service quality and customer satisfaction.

EP-5 Reference: Appendix J, Geographic Information System, page 2

- a. Please provide cost estimates of the three GIS replacement options.
- b. Please provide the functionality comparison analysis of the three GIS replacement options.

Response:

- a. Please refer to response to Staff-18b) for the cost estimates for the replacement options for Vendor A and Vendor B. There is no upfront capital cost associated with the status quo.
- b. The core functionality of the three options is very similar, with the exception of the "connectivity model" linking all of the data points within the GIS.

Vendor A's solution is based on an "implicit" connectivity model, which means it identifies exactly which assets are connected to each other, leveraging data Burlington Hydro has developed over the past number of years and uses in its old GIS. The data conversion effort was minimal in migrating to Vendor A's solution as they are based on the same connectivity principles as Burlington Hydro's existing GIS.

Vendor B's solution is based on a "spatial proximity" connectivity model, which uses geographical coordinates to assume that data points in close proximity to each other are physically connected. A significant data conversion effort would be required in order to migrate to Vendor B's solution. Vendor B is abandoning the spatial proximity connectivity model and moving to an implicit model in 2-3 years. A second significant data conversion effort would be required in 2-3 years.