

EB-2013-0359

ONTARIO ENERGY BOARD

IN THE MATTER OF

the *Ontario Energy Board Act, 1998*, S.O. 1998, c. 15 (Schedule B), as amended;

AND IN THE MATTER OF an Application by
Niagara Peninsula Energy Inc. (NPEI) for an order or orders
approving or fixing just and reasonable distribution rates
relating to final disposition of Smart Meter deployment,
to be effective February 1, 2014 and May 1, 2014.

Niagara Peninsula Energy Inc.'s Responses to VECC's Interrogatories

VECC Question # 1

Reference: Application, Background Page 11

Preamble: The evidence states "As part the NEPA ("Niagara Erie Power Alliance") group, a consortium of like sized and geographically located distributors, NPEI retained the services of Util-Assist to consult on the management of its Smart Meter Initiative."

- a) Please provide the names of the distributors that are part of NEPA.
- b) Please discuss if any efficiencies or cost savings resulted from NPEI's participation in NEPA.

Response:

- a) The members of the NEPA group are: Brant County Power Inc., Brantford Power Inc., Canadian Niagara Power Inc., Grimsby Power Inc., Haldimand County Hydro Inc., Niagara-on-the-Lake Hydro Inc., Niagara Peninsula Energy Inc., Norfolk Power Distribution Inc. and Welland Hydro Electric System Corp.
- b) For all costs that the NEPA Project Manager Util-Assist incurred (consulting, legal and other 3rd party), NPEI's portion was typically 1/9th or 11% of the total.

Efficiencies and cost savings were found in the sharing of services, opportunities, knowledge and resources:

- Shared Project Management resource time and cost: this was extremely important, as internal resources were also involved in Customer Information System and Outage Management implementations. External assistance for the smart meter implementation was required in order to complete all requirements of the Smart Meter Initiative within the provincial mandated timeline. NPEI's portion of this cost was 1/9th or 11%.
- Shared consultant cost and efficiency in the review of AMI/AMCC technology documentation of requirements and procurement of technology. NPEI's portion of this cost was 1/9th or 11%.
- Shared legal costs (review of associated contracts). NPEI's portion of these costs ranged from 1/24th or 4% to 1/9th or 11%.
- Shared cost of Olameter expenses for call centre support from Olameter on installation customer issues. This ensured that there was no further increase in call volume or call response time within NPEI. NPEI's portion of this cost was 1/9th or 11%.
- Shared cost of training of Billing, Operation/Metering staff on smart meter and associated technology (Operational Data Storage, Flexnet/RNI desktop tool to review meter, smart meter infrastructure and meteorology etc.) NPEI's portion of this cost was 1/9th or 11%. All CIS training of NPEI staff costs were not shared due to NPEI's billing system was different than other NEPA members.
- Shared cost and efficiency in the completion of end to end testing of Smart Meter infrastructure: as part of a consortium, with like technology, testing was completed as a consortium. Information was shared resulting in educated and timed completion of testing.
- Collaboration amongst distributors resulted in sharing of information and documentation of liked policies and procedures. This resulted in an efficient process in completion of all re-engineered business processes.

- The security audit expense incurred by Util-Assist for 2010 was split amongst 47 utilities. The Sensus security audit expense incurred by Util-Assist in 2010 and 2011 was split amongst 31 utilities.
- Being within NEPA allowed the process to be well documented and organized; allowing for proper decisions to be made and the project to move forward.

NPEI achieved approximately 90 – 95% savings on the above noted expenses by being a NEPA member.

VECC Question # 2

Reference: Application, Capital and Operating Costs, Page 28

Preamble: NPEI indicates it proposes to address the issue of cost savings from smart meter implementation in its next cost of service rate application.

- a) Please discuss if NPEI has identified any preliminary operational savings at this point in time such as meter reading savings.

Response:

NPEI has not yet performed any analysis relating to cost savings from smart meter implementation, and therefore has not identified any preliminary operational savings at this time. As indicated in the Application, NPEI proposes to address the issue of cost savings from smart meter implementation in its 2015 COS Rate Application.

VECC Question # 3

Reference: Application, Capital and Operating Costs, Page 20

Preamble: NPEI has participated as part of a group of 31 LDCs working with Util-Assist in the issuance of the May 2010 RFP, "Smart Meter Network Security Audit Services". Bell Wurldtech ("Bell") was the vendor selected to provide the audit services for the Smart Meter network security.

- a) Please provide the status of the security audit.
- b) Please identify the security audit costs included in this application and where they can be found on Sheet 2 of the Smart Meter Model.

Response:

- a) The two year term, with annual audits completed by Bell Wurldtech within this term, consisted of the following phases:
 - Data Gathering, Equipment Set Up & Generation of Component Attack Vector
 - Evaluate Architecture and Components, finalize testing methodology
 - Perform bottom up Risk Assessment of the lead test LDC, Powerstream
 - Powerstream Data consolidation, Mitigation Analysis
 - Configuration validation for all utilities
 - Data consolidation, mitigation analysis and documentation generation.

At the end of the Year 1 engagement, the consortium reviewed a detailed report outlining the testing completed, detailed review of individual utilities checklist, templates for proposed security policies to be put into place at each utility as industry best practices, remediation plan to work with Sensus on required changes, and outline of expectations for Year 2 term.

As of the last update of 2013, dated 12/12/2013, we are within the Year 2 statement of work where the following deliverables will be achieved:

- Project Charter
- Updated Security Vendor Assessment Framework for testing the Vendor hardware and software and evaluating the utility environments. The framework will include Threat Risk Assessment information, including selected attack vectors.
- Updated Common Security Checklist
- Sample Template for the Year 2 Report which will address the strengths, weaknesses, opportunities and threats found. It will also identify the minimum acceptable security practices to allow the Consortium to review and decide what should be adopted so that the proper reporting can be set up to indicate the level being achieved.
- Security Risk Assessment Reports: Two reports will be developed - a Vulnerability Assessment Report and a Threat and Risk Assessment Report – detailing all vulnerabilities identified in the security assessment including methods employed and compensating controls (mitigations) in alignment with industry best practices.
- Power Point Presentation & Executive Review
- Remediation Assistance - Bell will participate in the remediation process with Sensus, until the point where Sensus has provided the Consortium with a Bell/Wurldtech-approved remediation plan.

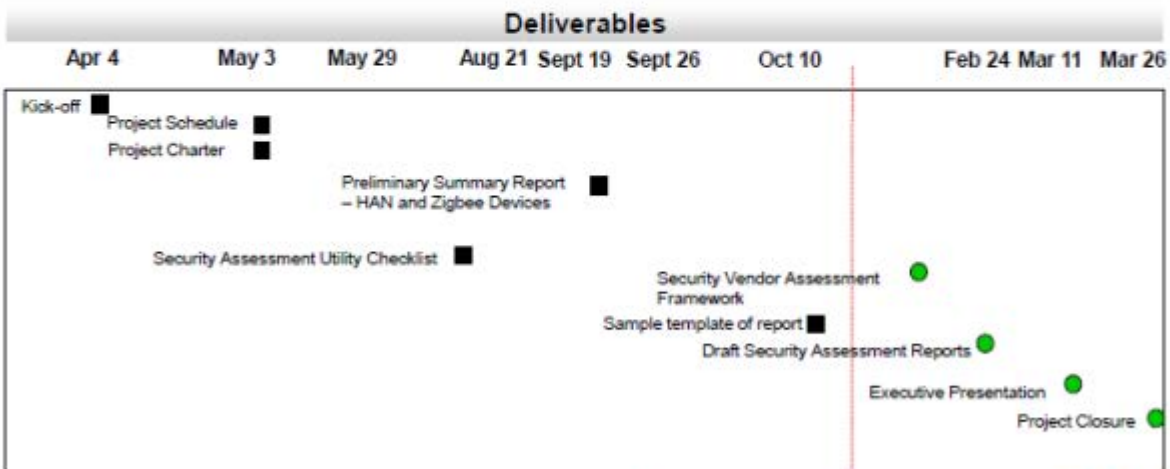
Project Charter and schedule has been delivered. Testing is underway. TGB testing is completed. RNI testing is in its final validation. ISA2 meter firmware dates provided by Sensus which may impact the project timeline. Summary assessment report for HAN and zigbee devices has been delivered. Security Assessment Utility Checklist has been completed by individual utilities; results of

the review of the checklist will be inclusive in the final report. Sample template of the report has been delivered.

The project is on scheduled to have remaining deliverables completed by March 26, 2014.

Sensus Security Assessment

Y	TGB testing is complete; RNI testing is in its final validation. ISA2 meter firmware dates provided by Sensus; assessing impact to project CRS developed - 68 hours for test bench re-assembly, lost efficiency from meter testing, additional project project management
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Legend: ● On schedule ▲ Caution/Issue ◆ Not going to meet ■ Completed



b) The table below shows the security audit costs that have been included in this Application, and where they are found in Sheet 2 of the Smart Meter Model.

Year	Category in Smart Meter Model Sheet 2	Amount
2011	1.5.3 - Professional Fees - Bell Wurldtech	9,281.08
2012	1.5.3 - Professional Fees - Bell Wurldtech	2,990.84
		<u>12,271.92</u>

The above costs are NPEI's proportional share of the phases of the audit. NPEI's share is 1/31st or 3%.

VECC Question # 4

Reference 1: Application, Capital and Operating Costs, Page 26

Reference 2: Appendix C, Page 66

Reference 3: Appendix C, Page 68

Preamble: At reference 1, the evidence indicates that projected 2014 operating costs include the salary expense for two incremental Smart Meter Coordinator staff positions to administer the Smart Meter and TOU programs. NPEI notes that these staff positions were created in 2009 and 2010 solely due to the installation of Smart Meters and implementation of TOU billing. At reference 2, NEPI indicates in June 2009 a Smart Meter Coordinator was hired on a contract basis to help with the installation of smart meters that commenced in December 2009 and will be completed in September 2010. At reference 3, NPEI indicates a second Smart Meter Coordinator was hired in August 2010 on a contract basis to assist with the implementation of smart meters and billing.

- a) Please provide the details of the original employment contract for each contract position in terms of proposed length of contract, position status (i.e. temporary, contract, part-time vs. full-time, etc.), work activities to be performed and annual salary.
- b) Please discuss the current status (contract vs. permanent position) and rationale in 2014 for each position noting that NPEI has completed its smart meter deployment and TOU implementation.

Response:

- a) The initial incremental Smart Meter Coordinator contract position had a proposed length of contract for one year. This position commenced June 9, 2009. This contract was extended from June 10, 2010 to December 31, 2010. The incumbent was hired full time January 1, 2011. Work activities include performing a variety of co-ordination and testing duties to assist in the success of smart meter implementation.

Primary Responsibilities:

- 1) The incumbent will complete co-ordination duties of Customer Service, Billing, Meter and IT resources to ensure that smart meter implementation duties are completed per the smart meter project plan. These duties will include but are not limited to oversee implementation process, to monitor progress, and to coordinate activities between Customer Service, Billing, Meter and IT staff as per the smart meter project plan.
- 2) Work with Billing Supervisors, IT resource, and Metering staff to determine schedule of implementation per reading schedule. To maintain timelines according to the schedule.
- 3) Documentation of workflow procedures as developed by Billing and Customer Service Supervisors and staff.
- 4) The incumbent will participate as a performance tester of smart meter workflow. Documentation of user test scripts and expected results, performance testing, documentation of actual results and update of impacted workflow procedures in customer service and billing.
- 5) Assist in the training of Billing and Customer Service staff. This may include documentation of training materials, preparation of training materials for training session.
- 6) Assist in the update of customer correspondence as it relates to smart meter initiatives.

Annual salary range for these two contracts were: \$53,817 – \$61,351. Meters commenced installation in November 2009. In June 2010, a second Smart-Meter Co-ordinator contract was filled by NPEI. This contract was initially for nine months. On March 1, 2011 the incumbent was hired full time by NPEI as a second Smart Meter Co-ordinator. The salary range and primary responsibilities for both Smart Meter Co-ordinators are the same.

b) Both Smart Meter Co-coordinators are now permanent positions. The roles succeeded in reflecting a need for individual(s) to be available outside of production to support Billing, Customer Service, and Metering staff in the migration from conventional billing to Time of Use, as well as, liaison between MDM/R and Billing. The aggressive move of new technology such as Operational Data Storage and use of Meter Data Analytics as result of smart meters to improve upon efficiencies within the Billing, Metering and Customer Service processes provided rationale for permanent positions to realize those efficiencies. The smart meter co-ordinators continue to perform data analysis, root cause problem resolution, testing, documentation and improvement of smart meter workflows, procedures, and training of billing and customer service staff as it relates to updates or changes within smart meter initiatives including monitoring and automation of MDM/R processes.

Further the skill set and knowledge of the individuals with the role provided opportunities for succession planning within the organization.

Time is allocated between smart meter duties (approximately 95% of time) and billing and FIT/micro fit support (please note that the support of FIT and micro fit support is due to the implementations including that of a smart meter.)

VECC Question # 5

Reference: Application, Page 1

Preamble: NPEI proposes an effective date of February 1, 2014 for the SMDR.

- a) Please confirm the rationale for an effective date of February 1, 2014 compared to May 1, 2014.

Response:

NPEI originally planned to file its Smart Meter Application in August 2013. At that time, NPEI reviewed several Smart Meter Applications filed in 2012 in order to determine how much time was typically required for the applications to be processed by the Board. Waterloo North Hydro Inc. filed a Smart Meter Application on May 31, 2012 (EB-2012-0266), requesting rate riders effective November 1, 2012. The Board's Decision and Order for this application was dated October 4, 2012. Haldimand County Hydro Inc. filed a Smart Meter Application on July 18, 2012 (EB-2012-0272), requesting rate riders effective November 1, 2012. The Board's Decision and Order for this application was dated November 1, 2012.

Based upon this review, NPEI determined that a reasonable period of time for the application to be processed was 5 months, and therefore proposed an effective date for the SMDR of February 1, 2014.

However, NPEI's 2014 IRM Rate Application (EB-2013-0154) was assigned to an earlier filing tranche than usual. NPEI's 2014 IRM Application was due on August 30, 2013, whereas NPEI's 2012 and 2013 IRM Applications were due in October of the prior year. Therefore, NPEI delayed filing its Smart Meter Application in order to prepare the 2014 IRM Application.

When NPEI filed its Smart Meter Application on October 10, 2013, the proposed effective date for the SMDR of February 1, 2014 was not revised. NPEI has proposed a new effective date of March 1, 2014 based on the timelines contained in Procedural Order No. 1 dated November 27, 2013.

VECC Question # 6

Reference: 2014 Smart Meter Model, Sheet 2

- a) Please provide an explanation of the increase in costs at line 2.3.2 Software Maintenance for the years 2012 to 2014.
- b) Please provide an explanation of the increase in costs at line 2.5.3. Program Management for the years 2011 to 2014 compared to 2010.
- c) Please provide an explanation of the costs at line 2.5.6 Other AML expenses for the year 2010.
- d) Please provide an explanation of the Professional Fees at line 1.5.3 for the years 2012 to 2014.

Response:

- a) The costs included in the Smart Meter Model in line 2.3.2 Software Maintenance are for monthly invoices paid to Sensus for base station service and Flexnet monitoring service. The charges from Sensus are based on the number of base stations, and the number of active meters.

The base station service started in October 2010 with one base station. A second base station was added in May 2011, and the third base station was added in August 2012. The Flexnet monitoring service commenced in October 2012. The table below provides the monthly amounts of the Sensus charges. NPEI notes that actual costs were included to June 2013. The projection for July to December 2013 and the forecast for 2014 are based on the June 2013 actual amount.

Sensus - Base Station and Monitoring Fees					
Month	2010	2011	2012	2013	2014
Jan		2,086.49	4,170.62	11,185.33	11,676.47
Feb		2,006.24	4,047.95	11,315.92	11,676.47
Mar		2,006.24	3,966.62	11,321.71	11,676.47
Apr		2,066.43	4,170.62	11,671.50	11,676.47
May		4,092.73	3,966.62	11,676.47	11,676.47
Jun		3,811.86	4,044.39	11,676.47	11,676.47
Jul		4,012.48	4,044.39	11,676.47	11,676.47
Aug		4,052.60	5,770.15	11,676.47	11,676.47
Sep		4,092.73	5,847.93	11,676.47	11,676.47
Oct	2,106.55	4,211.51	11,156.15	11,676.47	11,676.47
Nov	2,106.55	4,211.51	11,163.01	11,676.47	11,676.47
Dec	2,086.49	4,170.62	11,186.40	11,676.47	11,676.47
Total	6,299.59	40,821.44	73,534.85	138,906.22	140,117.64

b) The expenses that have been included in the Smart Meter Model in line 2.5.3 Program Management mostly consists of labour, and there are also some miscellaneous immaterial items. The increase in costs for the years 2011 to 2014, compared to 2010, is due to the fact that 2010 only includes a partial year of wages for NPEI's second Smart Meter Coordinator, who was hired in June 2010. Also, salary wage increases effective January 1st of each year from 2011 to 2014 based on performance and consistent with NPEI's union contract are included. The table below provides further detail of the 2.5.3 Program Management costs.

2.5.3 - Program Management						
	Month	2010	2011	2012	2013	2014
Labour	Jan	4,229.20	8,382.98	8,752.78	15,441.12	15,806.00
	Feb	3,090.02	10,422.00	16,442.31	12,741.31	12,644.80
	Mar	2,648.59	14,415.37	12,189.08	10,249.23	12,644.80
	Apr	2,363.80	10,654.13	11,359.18	13,765.87	15,806.00
	May	3,488.74	9,865.59	14,134.14	15,562.61	12,644.80
	Jun	2,292.59	13,385.29	11,281.39	12,300.82	12,644.80
	June 30, 2010 - transfer to rate base	(8,757.43)	-	-	-	-
	Jul	5,881.01	11,605.04	11,644.48	15,973.41	15,806.00
	Aug	5,482.29	14,025.29	15,301.21	12,644.80	12,644.80
	Sep	7,675.21	10,639.07	11,333.28	12,644.80	12,644.80
	Oct	5,581.97	11,078.37	14,575.07	15,806.00	15,806.00
	Nov	6,293.95	15,391.19	13,200.51	12,644.80	12,644.80
	Dec	7,589.03	9,433.32	11,981.62	12,644.80	15,806.00
Total Labour expensed		47,858.97	139,297.64	152,195.05	162,419.57	167,543.60
Miscellaneous Expenses		969.11	187.92	562.89	88.89	
Total		48,828.08	139,485.56	152,757.94	162,508.46	167,543.60

- c) The costs in line 2.5.6 Other AMI Expense for 2010 consist of repairs made to customer meter bases and the rental of bins to store the stranded conventional meters until they were recycled. The table below provides further details of these costs.

2.5.6 - Other AMI Expense	
Item	2010 Amount
Customer Meter Base Repairs (79)	37,126.58
Storage Bin Rentals	2,665.50
	<u>39,792.08</u>

- d) The costs in line 1.5.3 Professional Fees mainly consist of invoices from Util-assist for AMI consulting. In 2012, there is a charge from Bell for the security audit. In 2013, there is a charge from Powerstream for RNI software testing. The table below provides further details of these costs.

1.5.3 Professional Fees			
Item	2012	2013	2014
Util-assist (AMI consulting)	14,636.67	12,000.00	12,000.00
Bell (Security Audit)	2,990.84		
Powerstream (RNI software testing)		5,000.00	
	<u>17,627.51</u>	<u>17,000.00</u>	<u>12,000.00</u>