



Greater Sudbury Hydro Inc  
Hydro du Grand Sudbury Inc

empowering communities  
le pouvoir aux communautés



AGSU company

500 Regent Street | 500, rue Regent  
Sudbury ON P3E 3Y2

t 705.675.7536 x0000

f 705.675.0529

w sudburyhydro.com

January 12, 2012

Ms Kirsten Walli  
Board Secretary  
Ontario Energy Board  
PO Box 2319  
27th Floor - 2300 Yonge Street  
Toronto, ON M4P 1E4

RE: Greater Sudbury Hydro Inc - Board Staff Interrogatory Responses EB2011-0169

Dear Ms Walli,

Enclosed are the responses to the Board Staff Interrogatories as per the board order.

The responses to the Board as well as the Intervenor responses have been submitted through the OEB web portal as well as delivered to the Intervenors as directed by the Notice of Application dated November 7, 2011.

Should you require further information or clarification, please do not hesitate to contact the undersigned at 1-705-675-7536 extension 2241 or via email at [catherineh@shec.com](mailto:catherineh@shec.com).

Respectfully submitted,

Catherine Huneault, CGA  
Supervisor - Accounting and Administrative Services

cc: Frank Kallonen, President and CEO - Greater Sudbury Hydro Inc.  
Nancy Whissell, Vice President - Corporate Services - Greater Sudbury Hydro Inc.

**Board Staff Interrogatories**  
**2012 IRM3 Electricity Distribution Rates**  
**Greater Sudbury Hydro Inc. ("GSHi")**  
**EB-2011-0169**  
**2012 IRM3 Rate Generator Model**

**Board Staff Interrogatory No. 1**

Ref: 2012 IRM3 Rate Generator Model – Sheet 6

GSHi's 2011 tariff of rates and charges shows a Rate Rider for Tax of \$(0.0003)/kWh for the GS < 50 kW class. If GSHi has entered \$(0.00003) in error, please note the error and Board staff will make the appropriate changes. Otherwise, please provide evidence in support of the Rate Rider for Tax Change for the GS < 50 kW class.

Response:

*GSHi does acknowledge that Sheet 6 "Current Rate Riders" of the 2012 IRM Rate Generator model does have a entry error.*

*Please correct the Rate Rider for Tax for GS<50KW class to (.0003)/kwh.*

**Board Staff Interrogatory No. 2**

Ref: Application, Manager's Summary – Page 4  
Ref: 2012 IRM3 Rate Generator Model – Sheet 9

On page 4 of the Manager's Summary, GSHi states:  
See Appendix B for the 2012 EDDVAR WorkForm and Special Purpose Charge and Account 1590 Variance reconciliations.

Board staff notes that Appendix B of GSHi's application, as filed October 28, 2011, only contains a reproduction of the 2012 EDDVAR WorkForm.

- a) Please provide the reconciliations for accounts 1590 and 1521.
- b) Please account for the variances shown in column BX of Sheet 9 of the 2012 IRM3 Rate Generator Model.

Response:

a). See attachment 1 for the reconciliation for Account 1590 and Attachment 2 for the reconciliation of Account 1521.

b) The variances in column BX are explained in the reconciliations for Account 1590 and 1521.

The small \$1. variances are rounding differences.

Line 48 - sub account HST/OVAT contra account should have been a negative number to offset the HST/OVAT ITCs variance account. These accounts were not recorded in the trial balance on 2.1.7 because they net to zero as noted in the FAQs of December 2010:

``The offsetting entry will go to a new sub-account, which will be a contra account within Account 1592, PILs and Tax Variances for 2006 and Subsequent Years. For this purpose, the distributor would use "HST/OVAT Contra Account" of Account 1592 to record the offsetting entry to "Sub-account HST / OVAT Input Tax Credits (ITCs)".

For regulatory reporting purposes, this will have a zero net effect on reporting (i.e., the sub-account balance net of the balance in the contra account will result in a zero balance). Only the balance in "Sub-account HST / OVAT Input Tax Credits (ITCs)" should be reported for disposition of the account balance, except for purposes of reporting under the Electricity Reporting & Record Keeping Requirements, which should include both sub-accounts netting to zero. ``

### **Account 1521 – Special Purpose Charge Board Staff Interrogatory No. 3**

Ref: Application, page 4 – Manager's Summary

Ref: 2012 IRM3 Rate Generator Model – Sheet 9

A section of Sheet 9 - "2012 Cont. Sched.Def\_Var" of the 2012 IRM3 Rate Generator Model is reproduced below.

On page 4 of the Application, GSHi states that it is requesting disposition of Account 1521. GSHi states that the total disposition for Accounts 1521 and 1562 amounts to a credit of \$35, 516.

a) Please confirm GSHi's SPC assessment amount and provide a copy of the original SPC invoice.

b) Please complete the following table related to the SPC.

c) Under the "Transaction Debit / (Credit) during 2010 excluding interest and adjustments" column for account 1521 in the year 2010 in Sheet 9 of the 2012 IRM3 Rate Generator Model (see photo above), GSHi shows a credit of \$232,810. Under the "Other Adjustments during Q4 2010"

column of the same sheet for account 1521, GSHi shows a credit of \$138,090. Please clarify the nature of each of these transactions.

Response:

- a) *See attachment 3 for original invoice.*
- b) *See attachment 4 for the completed table.*
- c) *The EDDVAR spreadsheet did not allow for the showing of recoveries of the SPC during 2011. GSHi included those recoveries in the Q4 2010 Adjustments during Q4 2010" column so as not to overstate the residual amount requested for recovery in the IRM3 application for 2012. The total amount recovered at the time of filing the IRM3 (September 30, 2011) was \$370,900, which is reflected in the amounts \$232,810 and \$138,090 listed.*

**Smart Grid Rate Adder for Proposed Community Storage Project  
Board Staff Interrogatory No. 4**

Ref: Application, Appendix E – Page 2

Ref: Application, Appendix E – Page 31, 32

On page 2 of the demonstration project overview report, filed by GSHi in Appendix E of their application, GSHi states that they were approached in mid-May 2011 by S&C Electric regarding the proposed community energy storage (CES) demonstration project. GSHi stated that they have accepted S&C Electric's proposal to host the CES project under the condition that the Board approves recovery of GSHi's contribution of funds through a funding adder. On page 9 of the Smart Grid Fund Guidelines, found on page 31 Appendix E, the applications process for funding under the Smart Grid Fund is said to comprise of two stages: (i) the project overview submission stage and (ii) the Business Case Application stage.

Page 10 of the Smart Grid Fund Guidelines states that "only those applicants invited by the Ministry to submit a Business Case will be eligible to do so and move to stage two. There is no commitment by the Ministry to fund applications even if the Applicant passes the first stage of the application process."

- a) Please provide details regarding the current status of S&C Electric's application for the Smart Grid Fund. Please include a description of what stage of the application process S&C Electric and GSHi currently find themselves. Additionally, please provide best estimate timelines for the completion of application evaluation, if the process is not complete to date.

b) Has GSHi considered what actions it would take were the Board to approve the proposed Smart Grid rate adder and S&C Electric and GSHi's application were subsequently denied by the Ministry? Please describe the rationale for these proposed actions.

Response:

*(a) S&C has received information from the Ministry of Energy that their application has passed first review and is one of fifteen (15) projects that are subject to a final review. The project is currently under final review; S&C has had a visit from the MoE Auditor and the application will be accepted or rejected in due course. To be clear, this is S&C's application, GSHi has no part in the application to the Ministry except to act as a host LDC. The Ministry has given no firm timeline for a decision.*

*(b) GSHi has considered what action it would take were the Board to approve the proposed Smart Grid rate adder and S&C Electric's application were to be subsequently denied by the Ministry. GSHi is aware there is a deferral account already in place for Smart Grid and that a separate sub account would be set up to track funds received. It is our understanding is that we would be required to undergo a prudence review in the first cost of service application following the implementation of this adder. If in fact, the project is denied, the prudence review would likely result in termination of the adder and refund of the monies collected would be a credit rider in the COS application.*

## **Board Staff Interrogatory No. 5**

Ref: Filing Requirements: Distribution System Plans – Filing under Deemed Conditions of Licence – pages 19 and 20

Ref: Application, Appendix E – pages 11, 12 and 13

On pages 11 and 12 of Appendix E of the Application, GSHi provides information regarding their review of other demonstration projects that have been undertaken with CES technologies. On page 13, GSHi states that:

the MOE's Smart Grid Fund evaluation process ensures that the proposed project does not unnecessarily duplicate other ongoing or planned demonstration projects, thereby avoiding redundant demonstration projects.

The Board's *Filing Requirements for Distribution System Plans: Filing under Deemed Conditions of License* (EB-2009-0397), issued on March 25, 2010, state, among other things, that the following descriptive information should be provided for Smart Grid demonstration projects:

- ☐ a discussion of any joint participation agreements, information sharing arrangements and other efforts that the distributor has made to avoid undertaking projects that unnecessarily duplicate other ongoing or planned demonstration projects so as to avoid redundant demonstration projects; and
- ☐ a description of the formal evaluation that will be performed to assess the value of the projects. The evaluation should be suitable for sharing with other distributors.

On page 20, the Filing Requirements also state that "distributors must in all cases ensure that any information disclosure restrictions that cannot be avoided will not hinder meaningful reporting or replication of the results of the study or demonstration project.

- a) Has GSHi contacted any other distributors to determine if any similar projects are planned or under way that may not be seeking funding through the Smart Grid Fund?
- b) What avenues did GSHi use to investigate other pilot studies undertaken using similar storage units in similar applications and environments? What criteria did GSHi use to determine its review of other demonstration projects complete?
- c) Please outline the criteria and framework that will be used to evaluate this demonstration project.
- d) Please provide details regarding the reporting requirements for the Smart Grid Fund. Please outline any restrictions on the sharing of information with other distributors and the Board for the proposed project that arise from either approval from the Smart Grid Fund or any agreements with S&C Electric.

Response:

- (a) *As indicated in GSHI's answer to 5(b) below, GSHI has multiple lines of communication into the Smart Grid arena in Ontario and the United States. GSHI has not formally contacted other distributors to determine if similar projects are planned or underway that may not be seeking funding through the Smart Grid Fund.*
- (b) *Since the Green Energy Act was announced Greater Sudbury Hydro has been actively educating itself about and participating in the development of the Smart Grid. Through the following activities GSHI has become very familiar with the state of the Smart Grid in North America and many of the projects currently being undertaken. GSHI has used the conferences, committees, and organizations listed*

*below to investigate and research Smart Grid activities and other pilot studies being done in Ontario and other jurisdictions (most notably the United States) to ensure efforts are not being duplicated.*

### *International Research and Training*

*CEATI – GSHI joined CEATI in late 2009. The DALCM interest group routinely discussed Smart Grid issues and problems and has initiated a few research projects that GSHI co-sponsored. DALCM meetings regularly included Utility representatives from across Canada (Newfoundland Power, New Brunswick Power, Hydro Quebec, Hydro One, Manitoba Power SaskPower, Fortis Alberta, BC Hydro and others) and the United States (Southern Company, Duke Energy, San Diego Gas and Electric, and others) and occasionally representatives from Australia.*

*CEATI Mission Statement - The Centre for Energy Advancement through Technological Innovation (CEATI) is a user-driven organization committed to providing technology solutions to its electrical utility participants, who are brought together to collaborate and act jointly to advance the industry through the sharing and developing of practical and applicable knowledge.*

***CEATI International Inc.*** brings electrical utility industry professionals together, through focused interest groups and collaborative projects, to identify and address technical issues that are critical to their organizations. Participants can undertake projects that respond to their strategic goals at a fraction of the cost of doing so independently. The need for international breadth and inter-industry applicability in technology development is addressed through a practical, dynamic and cost effective program.

### *GSHI Participation*

- *Joined Distribution Asset Life Cycle Management (DALCM) interest group.*
- *Attended DALCM business meeting - February 2010.*
- *Attended DALCM business meeting and DALCM sponsored Distribution Planning Training (focused on integration of Renewable Generation into the Distribution System) – June 2010.*
- *Attended DALCM business meeting – October 2010.*
  - *Co-Sponsors of the following research*
    - *Nanotechnology with Utility Benefits*
    - *Solar Power Variability Impacts on the Distribution System*
    - *Impacts of Intermittent Distributed Generation on Distribution Systems*
- *Attended DALCM business meeting – February 2011.*
- *Attended DALCM business meeting and spoke at DALCM sponsored Technical Session entitled “Utility Training Requirements for the Smart Grid Evolution” – June 2011*

- *Joined Smart Grid Task Force in September 2011 – the Task Force then evolved into an interest group separate from DALCM.*
- *Joined the Smart Grid Task Force interest group in December 2011*

*IEEE – The GSHI Vice-President Distribution Electrical Systems has been a member of the IEEE Power & Energy Society (PES) since the mid 1970's.*

*IEEE is the world's largest professional association dedicated to advancing technological innovation and excellence for the benefit of humanity. IEEE and its members inspire a global community through IEEE's highly cited publications, conferences, technology standards, and professional and educational activities.*

*IEEE, pronounced "Eye-triple-E", stands for the Institute of Electrical and Electronics Engineers.*

- *Attended IEEE PES Transmission & Distribution (T&D) Conference in Calgary in July 2009 – Smart Grid was a major theme of a number of conference super sessions and workshops.*
- *Joined the group writing IEEE 2030.1 – “Guide for Electric-Sourced Transportation Infrastructure” in early 2010. Assigned to Task Force 2 and reassigned to Task Force 3.*
- *Attended IEEE PES General Meeting in New Orleans in April 2010- - Smart Grid was a major theme of a number of conference super sessions and workshops. Attended Smart Distribution technical sessions.*
- *Attended IEEE PES General Meeting in Detroit in July 2011 - Smart Grid was a major theme of a number of conference super sessions and workshops. Attended technical sessions and IEEE Smart Grid Training.*
  - *Joined the following IEEE Committees or Task Forces at the Detroit PES GM*
    - *Volt VAR task force.*
    - *Smart Distribution working group.*
    - *Distribution Management System Task Force.*

### *Canadian Research and Training*

*Natural Resources Canada (NRCAN) has formed the NRCAN Protection and Safety Study Group. the Group has representation from three provincial utilities, two relay manufacturers, three private consultants and two NRCAN staff members. The focus of*



*the Group is to address technical issues that are seen as obstacles to the interconnection of the alternate energy technologies to the grid.*

- *GSHI joined Natural Resources Canada (NRCan) Protection and Safety Study Group in March 2010. By mid -2010 the group had expanded to include representatives from New Brunswick Power, IREQ-Hydro Quebec, Hydro One, Greater Sudbury Hydro, and BC Hydro.*
  - *Presented at NR Canada sponsored workshop “Distribution Grid Codes with High Penetration PV” in Mississauga on January 18th 2011.*
- *GSHI was asked by Natural Resources Canada (NRCan) to join a High Penetration Photovoltaic (PV) Research Group in July 2011*
  - *The group will set R&D priorities related to high penetration PV.*
  - *Includes access to the International Energy Agency – Photovoltaic Power System Programme (IES\_PVPS).*
- *High Penetration Photovoltaic (PV) Research Group members include:*
  - *Utilities - Hydro One, Greater Sudbury Hydro, Bluewater Power, IREQ – Hydro Quebec, Toronto Hydro.*
  - *Cyme – makers of distribution system engineering analysis software.*
  - *Inverter Manufacturers – Schneider, GE, Bofiglioliusa*
  - *Concordia university*
  - *CANSIA*

#### *Ontario Research and Training*

*Utilities Standard Forum (USF) – Greater Sudbury Hydro joined in 2005. USF is the collaboration of 49 Ontario Utilities to produce Distribution Standards in response to Ontario Regulation 22/04. Members Utilities tend to be small to medium LDCs but the membership serves over 1 million Ontario Customers. The group also tackles many other technical issues, including but not limited to Smart Grid.*

*Greater Sudbury Hydro holds the position of Chair on the Smart Grid Committee. The Smart Grid Committee was formed in 2010 to provide member Utilities with technical direction on implementing the Smart Grid in Ontario.*

#### *Other Groups, Meetings and Conferences*

*IESO Stakeholder SE91 – Participant*

*CANSIA FiT Meeting*

*Electromobility Canada – member*

*EDA EDIST Conference – 2009, 2010, 2011*

*EDA Niagara Grand Metering Workshop*

*EDA NE/NW Joint Fall Conference – 2010, 2011*

*EDA Smart Grid Planning Approaches Seminar – July 2010*

*EDA Annual general Meeting – 2010, 2011*

*EDA Enercom Conference 2010*

*EDA Northeast District Engineering/Operations Workshop*

*EDA Canadian Utility Equipment Exposition - 2010*  
*Hydro One Large Users Conference*  
*Hydro One LDC Fit MicroFIT Working Group*  
*International Sensus Users Group Conference – Nashville – November 2011*  
*Smart Grid Interoperability Conference – Speaker – June 2011*  
*Distributech – San Diego – February 2011*  
*EUSA – Member of Board of Directors – July 2009 to December 2010*  
*Electrical Safety Authority – Utility Advisory Committee*

*(c) With the aid of S&C's CES units, it is Sudbury Hydro's goal to design, operate and integrate an IEEE 1547.4 compliant "Microgrid" into the existing distribution system. IEEE 1547.4 was just issued on July 20, 2011. A so-called "Microgrid" is a segregated zone created by the disconnection of real customer loads from the normal bulk supply system. In a Microgrid, local storage and generation sources, such as photovoltaics, wind or storage units provide the necessary energy to those customer loads currently disconnected from their normal supply. Success of this demonstration project will be measured on the ability to separate customer loads from the distribution system, sustain and re-integrate those customer loads into the distribution system in a safe, repeatable, operationally efficient manner. Customer loads that are capable of being separated into, and fed from, a Microgrid enjoy superior service reliability when compared to a customer load that is solely dependent on the availability of the bulk supply system and its ability to supply energy.*

*(d) S&C will not make public any commercially sensitive or proprietary information. S&C has thus far not presented GSHI with any non-disclosure agreement that might indicate the breadth of S&C's definition of commercially sensitive or proprietary information and the Ministry web site does not give any indication of the public disclosure parameters embedded in the Smart Grid Fund. However, a discussion with a representative of the MoE revealed that the Ministry expects full public disclosure of all learning from the Smart Grid Fund Demonstration Projects within the bounds that commercially sensitive and proprietary information would not be made public. It is certainly the goal of GSHI to share as much information as possible with both the Board and the Ontario LDC community.*

## **Board Staff Interrogatory No. 6**

Ref: Application, Appendix E - pages 17, 20, 21 and 22

Pages 20, 21 and 22 of Appendix E outline the budget for the proposed CES project including a break-down of the funds to be provided by S&C Electric, through the Smart Grid Fund and the proposed Smart Grid rate adder.

Installation	Sudbury Hydro	32	11,000.00		352,000.00
	New total			1009	\$ 833,550.00
	6 X 1 Φ Units	6	\$ 7,783.33	224	\$ 46,700.00
	Regulators	3	\$ 22,666.67	56	\$ 68,000.00
	Intellirupters	4	\$ 66,000.00	56	\$ 264,000.00
	St. Francis School	1	\$ 100,000.00	130	\$ 100,000.00
	City Yard	1	\$ 99,000.00	130	\$ 99,000.00
	1010 Lorne	1	\$ 128,000.00	195	\$ 128,000.00
	SMS Rents	1	\$ 112,250.00	130	\$ 112,250.00
	Harrison Drive secondary 120/240V	2	\$ 7,800.00	88	\$ 15,600.00

a) The reproduced section from page 20 of Appendix E of the Application shows the expected monetary contributions from the Smart Grid Fund, S&C Electric and GSHi. Please explain the rationale for the cost split provided.

b) The snapshot from page 21 shows a breakdown of the installation expenditures included in the project budget. Please provide further details regarding each of the items shown including the extent of the work to be performed at each site listed.

c) The snapshot from page 21 shows a sample breakdown of one of the categories presented in the cost breakdowns provided on pages 21 and 22 of Appendix E of the Application. Please clarify the nature of the costs in the coloured cells shown for each category (e.g. the \$352,000.00 amount shown in the snapshot above). Please explain why these total differ from the “New total” row provided for each cost category.

d) On page 22 of Appendix E of the Application, GSHi indicates an expected annual expenditure of \$10,000 for an “Annual Security Audit.” Please provide further details regarding the nature and extent of the planned security audit. Please indicate who will be performing the audit. Please indicate what efforts GSHi will undertake to ensure the privacy of any customer data collected as part of this project.

e) Please specify a time horizon for the overall demonstration project. Does work involving GSHi staff coincide with the overall project start date? If not, please indicate at which points in the time horizon provided that GSHi staff will be working on the proposed project.

Response:

- a) *The cost split follows the Smart Grid Fund (SGF) guidelines. All LDC costs are excluded from S&C's application to the SFG and the cost split that S&C has proposed to the Ministry has not been explained to GSHI. The LDC's costs for this project is the subject of this Smart Grid Rate application.*
- b) *Sometimes when you stand too close to the blackboard you cannot see what is apparent to others. GSHI apologizes for this confusing presentation. What is not apparent is that the first line, highlighted in green, is the S&C per unit estimate of the cost to Sudbury Hydro to install each CES unit. It would include such things as transportation, testing each unit upon arrival at GSHI, storage, handling, installation, further testing upon installation, performing engineering studies to calculate input parameters for the CES Hub controller, specialized third party engineering studies such as stability studies as recommended in IEEE 1547.4, engagement of expert third parties to develop commissioning criteria and final acceptance criteria, training, trouble shooting, commissioning, and final acceptance.*

*The next line is designated "New Total" and is the sum of the lines that follow and does not include the \$352,000 highlighted in green. The sum of the "New Total" plus the \$352,000 is the total requested capital amount.*

*"6 X 1Φ Units" -- An estimate has been generated for six single phase transformer locations on the 14F2 feeder where GSHI plans to install a CES unit. This estimate reflects both the material and labour costs associated with the installation of six fibreglass bases, the necessary conduit, secondary conductor, and grounding.*

*"Regulators" -- Included in the estimate are the costs to install three voltage regulators to be placed near the Centennial station.*

*"Intellirupters" -- Included in the estimate are the costs to install four intellirupters that will be installed at key points along the 14F2 feeder.*

*"St. Francis School" -- At the transformer feeding St. Francis School, GSHI plans to install three CES units. The estimate encompasses the installation of suitable foundations, the relocation of the existing transformer, the installation of necessary concrete products, conduit, primary and secondary conductor, grounding, fencing, as well as the costs associated with any restorations that may be required.*

*"City Yard" -- At the transformer feeding the City Yard, GSHI plans to install six CES units. The estimate encompasses the installation of suitable foundations, the relocation of the existing transformer, the installation of necessary concrete products, conduit, primary and secondary conductor, grounding, fencing, as well as the costs associated with any restorations that may be required.*

*“1010 Lorne” -- At the transformer feeding 1010 Lorne St., GSHI plans to install nine CES units. The estimate encompasses the installation of suitable foundations, the relocation of the existing transformer, the installation of dry core transformers, the installation of necessary concrete products, conduit, primary and secondary conductor, grounding, fencing, as well as the costs associated with any restorations that may be required.*

*“SMS Rents” -- At the transformer feeding SMS Rents, GSHI plans to install six CES units. The estimate encompasses the installation of suitable foundations, the relocation of the existing transformer, the installation of necessary concrete products, conduit, primary and secondary conductor, grounding, fencing, as well as the costs associated with any restorations that may be required.*

*“Harrison Drive secondary 120/240V” -- Along Harrison Drive, two CES units will be installed on the transformer feeding a residential secondary bus that will where an extremely high penetration of PV generation is expected. The estimate encompasses the installation of two fiberglass bases, the installation of necessary conduit, secondary conductor, grounding, as well as the costs associated with any restorations that may be required.*

- c) *Sometimes when you stand too close to the blackboard you cannot see what is apparent to others. GSHI apologizes for this confusing presentation. What is not apparent is that the first line, highlighted in green, is the S&C per unit estimate of the cost to Sudbury Hydro to install each CES unit. It would include such things as transportation, testing each unit upon arrival at GSHI, storage, handling, installation, further testing upon installation, performing engineering studies to calculate input parameters for the CES Hub controller, specialized third party engineering studies such as stability studies as recommended in IEEE 1547.4, engagement of expert third parties to develop commissioning criteria, final acceptance criteria and framework for evaluation of the project, trouble shooting, commissioning, and final acceptance.*

*The next line is designated “New Total” and is the sum of the lines that follow and does not include the \$352,000 highlighted in green. The sum of the “New Total” plus the \$352,000 is the total requested capital amount.*

- d) *The \$10,000 is an estimate, maybe even a guesstimate, of the cost to fulfill the reasonable expectation that customer data will be identified and kept secure. After the demonstration project approval has been received from the MoE and the OEB approved Smart Grid Rate Adder is in place GSHI plans to engage the services of third party experts to develop criteria and oversee the installation of the data gathering requirements from a security perspective. The requirements would be based on GSHI’s experience with AMI security audits and the Ontario Privacy Commissioners “Privacy by Design”.*

- e) *It is our understanding that the Ministry's Smart Grid Fund rules require that the demonstration project be completed within two years of approval. The project will not begin until MoE approval is received and the Smart Grid rate Adder is in place. Work involving GSHI staff will coincide with the overall project start date.*

## **Board Staff Interrogatory No. 7**

Ref: Application, Appendix E – page 11

On page 11 of Appendix E of the Application, GSHi lists four possible barriers to implementation should the demonstration prove successful: (i) cost, (ii) forward compatibility, (iii) human machine interface (HMI) and (iv) the requirement that a distributor possess a SCADA system.

While describing issues related to forward compatibility, GSHi states:

The technology uses the proprietary S&C Intellicom Smart Grid Communication system and its protocol to communicate with the S&C proprietary HUB Controller. Until an open communication architecture is employed, all users of this technology are locked in to a single vendor.

- a) Has GSHi investigated the technologies of any other vendors prior to agreeing to partner with S&C Electric? Did any of the other vendors provide similar technologies with more open communication architectures? If so, are there any elements of S&C Electric's products that warranted their selection over a more forward compatible solution?
- b) Please provide details regarding any involvement, on the part of S&C Electric, in the ongoing development of communication architectures with industry associations/organizations.
- c) At the end of the demonstration project, does GSHi intend to scale-up the project? If any scale-up is planned, how does GSHi intend to address the barriers mentioned on page 11 of Appendix E? If a scalability study has been undertaken, please file the findings with the Board.
- d) Please indicate which entity will retain ownership of the 32 CES units and related hardware at the end of the proposed project..

### Response:

- (a) *GSHI was unaware of any other vendors who had energy storage technology similar to the S&C technology prior to agreeing to partner with S&C. GSHI did not seek to be involved in the Ministry of Energy's Smart Grid Plan, but rather was approached*

*by a vendor who needed a willing LDC host. GSHI is willing to host the project, subject to approval of the Smart Grid Rate Adder.*

*(b) GSHI has contacted S&C to request an answer to this question. No response has been received to date.*

*(c) GSHI's interpretation of the term "scale-up" would be that the project elements would be expanded to other locations on the GSHI distribution system. There are no plans to scale-up at this time.*

*(d) GSHI will retain ownership of the CES units at the end of the project.*

### **Lost Revenue Adjustment Claim Board Staff Interrogatory No. 8**

Ref: Application, Manager's Summary – Page 5

Greater Sudbury notes that it had previously applied for LRAM recoveries for 2005 to 2007 Third Tranche CDM programs in its 2009 CoS application. Greater Sudbury further notes that after revisions to the submission, it received approval for some funding. The current submission includes an incremental claim for the Third Tranche CDM programs.

a) Please confirm that the LRAM amount in this application was not included in Greater Sudbury's past LRAM claim.

#### **Responses:**

a) GSHI submits that savings achieved from its 2005 to 2007 third tranche CDM programs have been erroneously included in this application. GSHI further submits that it erroneously omitted energy savings from the 2007 OPA CDM programs. At the time of filing its last LRAM application included in its 2009 CoS application, GSHI had not received final 2007 OPA program results from the OPA.

Combined these errors have changed the LRAM claim in this application from \$328,086 to \$329,030 including carrying charges. Detailed changes can be found in the revised tables included in GSHI's response to VECC interrogatory 2(b).

**Board Staff Interrogatory No. 9**

Ref: Application, Appendix D

Greater Sudbury notes that it is requesting recovery of its LRAM savings resulting from Third Tranche CDM programs implemented in 2005 to 2007 and OPA CDM programs implemented in 2007 to 2010 for the years 2008 to 2010, for a total LRAM claim of \$328,086, including carrying charges.

- a) Please confirm that Greater Sudbury used final 2010 program evaluation results from the OPA to calculate its LRAM amount.
- b) If Greater Sudbury did not use final 2010 program evaluation results from the OPA, please explain why and update the LRAM amount accordingly.
- c) Please confirm when Greater Sudbury's last load forecast was approved by the Board.
- d) Please identify the CDM savings that were included in Greater Sudbury's last Board approved load forecast for CDM programs deployed from 2005 to 2010 inclusive.

**Response:**

- a) GSHI's 2012 IRM 3 Application OEB-2011-0169 was filed with the Board on September 30, 2011, thus, the OPA's Final 2010 CDM Summary Results released on September 16, 2011 were used in the original LRAM calculation. GSHI confirms that it has revised its current LRAM claim to include the OPA's Final 2010 CDM Detailed Results released November 15, 2011. GSHI is filing this spreadsheet in addition to this response. The revised LRAM claim in this application has changed from \$328,086 to \$329,030 including carrying charges.
- b) GSHI confirms that it used final 2010 program evaluation results provided by the OPA on November 15<sup>th</sup> 2011 to calculate its revised LRAM amount.
- c) GSHI confirms that the last load forecast approved by the Board was included its 2009 Cost of Service Application (EB-2008-0230).



- d) In its 2009 Cost of Service Application (EB-2008-0230) GSHI included CDM savings based on estimated savings from its 2005 to 2007 programs. GSHI submits that CDM savings achieved from its third tranche CDM programs have been erroneously included in this application. The revised tables included in GSHI's response to VECC interrogatory 2(b) provide an update to the LRAM claim included in this application, which exclude savings achieved from its third tranche CDM programs. The LRAM claim including carrying charges has been adjusted from \$328,086 to \$329,030.

## **Disposition of Account 1562 – Greater Sudbury**

### **Board Staff Interrogatory No.10**

#### 2001 PILs Proxy amount

The PILs amount calculated in the 2001 PILs proxy is \$531,380. However the 2001 amount approved in the 2002 Board Decision is \$347,986 (2001 PILs, \$122,913 plus the adjustment 2001 deferred PILs amount, \$225,073).

- a) Please explain the reason for the variance. Did Greater Sudbury receive an amended decision?

#### Response:

*Greater Sudbury Hydro does not have record of an amended decision, however, we do have correspondence indicating we received a letter correcting the amount of the approved 2001 PILs proxy to \$531,380. We cannot find this letter nor could OEB staff find correspondence relating to the 2002 approved rates which included the 2001 PILs amounts.*

*Our original PILs Proxy submission was revised by Board staff and provided back to us. The 2001 PILs proxy that Board staff completed and provided to us shows a proxy amount of \$531,380. This is what we enclosed with our 2012 rate application. This is also the amount on sheet 6. "2001 PILs Def Acct Adder Calc" of our 2002 Distribution Rate Adjustment filing. If we follow the calculations through to sheet 16. "Final 2002 Rate Schedule", these values do in fact correspond with the actual Board order for rates.*

*Based on this evidence we are confident the correct proxy amount is the \$531,380 and not the \$347,986 as noted in the Board interrogatory despite the fact the approved order states the 2001 PILs proxy of \$122,913 was adjusted upwards by \$225,073 resulting in a proxy amount of \$347,986.*

#### Unmetered Scattered Load (USL)

Unmetered scattered load (USL) is not listed as one of the components of the billing and recovery in the spreadsheet Appendix 1a –GSH-PILS billed 20020501-20060403.xls, although the 2002, 2004, and 2005 Board decisions include USL as one of the rate categories. USL was to be billed using the GS<50kW rate which included PILs fixed and variable charge slivers.

b) Please explain why the USL connections and energy (kWhs) and the associated rate slivers classified under GS<50kW rate class were not used in the calculation of PILs recoveries from ratepayers.

Response:

*The category labelled 'NM' in the spreadsheet Appendix 1a represents non-metered or unmetered scattered load. It should have read as USL. The USL class was in fact billed using the GS<50kW rate.*

PILs Billed

The PILs billed spreadsheet Appendix 1a –GSH-PILS billed 20020501-20060403.xls, is missing customer counts, PILs slivers, kWh, fixed rates and variable rates (for 2001-2005). Please provide the information for all years in a table similar to the format used by Bluewater Power in its Continuity schedule spreadsheet: BluewaterPower\_Continuity Schedule\_Disposition\_1562 Balance.xls (worksheet C1.1 2002 PILs Recovered) EB-2011-0153.

Response:

*Please refer to Appendix 1 - GSHI & WNESL PILs continuity - recalcs 20120110 for a revised calculation based on an updated table similar to the format used by Bluewater Power. This updated table is Attachment 5 entitled GSH Inc - PILs reconciliation - continuity schedule.*

*In the updated spreadsheet Appendix 1 we have slightly modified the figures in column C of the sheet entitled GSHI Continuity as well as WNESL Continuity. The revised figures reflect a more accurate billing cutoff of volumes in the time periods specified in the PILs reconciliation continuity schedule. As a result, carrying charges were impacted slightly. The final revised liability for Greater Sudbury Hydro as of April 30, 2012 is adjusted to \$29,326 payable back to customers as compared to the original submission which reported a liability of \$60,047. Greater Sudbury Hydro does not wish to modify the original figure as the methodology for the original calculation is still deemed reasonable.*

c) In the 2002 worksheet, Greater Sudbury Hydro used an effective date of May 1, 2002 but the 2002 Board decision states an effective date of March 31, 2002 please explain.

Response:

*Greater Sudbury Hydro only implemented the rate change effective May 1, 2002 despite the fact the Board decision had a different effective date. With the market opening May 1, 2002 and significant changes being made to the billing systems it is believed the decision was made to incorporate only one rate change to minimize customer impact.*

d) How did Greater Sudbury Hydro treat the implementation date of rate change at April 1, 2006 with respect to unbilled consumption at that date?

Response:

*Greater Sudbury Hydro processed a rate change effective May 1, 2006 which effectively removed the PILs proxy components. Customers billed after May 1, 2006 but with consumption prior to May 1, 2006 were billed the PILs component on the basis of the rate for the PILs being effective right up to and including April 30, 2006. With the lag in billing, customers were actually billed into the months of June and July. Our continuity working paper was presented on the basis of 'accrual' versus 'cash' reporting so the continuity working paper stops at the end of April 2006.*

e) Please explain the acronym NM used in Cell A23 in the 'Summary by year' worksheet.

Response:

*Please also refer to the response in item (b) of this question. In Greater Sudbury Hydro's internal working papers the term 'NM' was used to refer to non-metered consumption. This is the same as 'USL - unmetered scattered load'.*

f) In the 1562 continuity GSHi worksheet, the collection amounts for 2004 (\$1,739,604) and 2005 (\$1,875,283) are significantly lower in comparison to collections from 2003 (\$2,130,506). Please explain the reason behind the declining collections after 2003.

Response:

*The 2002 and 2003 years both included the 2001 PILs proxy as well as the 2002 PILs proxy. The combined proxy for the 2003 billing year was \$531,380 + \$1,566,921 for a total of \$2,098,301. The 2001 component was removed as of April 1, 2004 so only \$132,845 was included in 2004 billing - a reduction of \$398,525 from the 2003 total proxy. Thus the decline in collections after 2003.*

## Interest Expense

Ref: Interest Portion of True-up – 2003, 2004, 2005 SIMPIL - TAXCALC

When the actual interest expense, as reflected in the financial statements and tax returns, exceeds the maximum deemed interest amount approved by the Board, the excess amount is subject to a claw-back penalty and is shown in sheet TAXCALC as an extra deduction in the true-up calculations.

For the tax years 2001 to 2005:

g) Did Greater Sudbury Hydro have interest expense related to liabilities other than debt that is disclosed as interest expense in its financial statements?

### Response:

*Greater Sudbury Hydro reported interest on deposits as well as interest on the future pension benefit liability in its financial statements for 2001 to 2005. This was in addition to interest on debt with the municipality. The interest on deposits was nominal.*

*The interest on future pension benefits is not an out of pocket interest expense. This amount along with the provision less actual pensioner benefit costs were treated as reconciling items on the tax returns. Future pension benefit costs are not recoverable in rates and as such were not included as part of the actual versus deemed interest expense calculations.*

h) Did Greater Sudbury Hydro net interest income against interest expense in deriving the amount it shows as interest expense in its financial statements and tax returns? If yes, please provide details to what the interest income relates.

### Response:

*Greater Sudbury Hydro Inc does not net interest income against interest expense. The exception was recognition of carrying charges on the RSVA accounts in 2005 - month to month the entry could have been expense in one case and revenue in another and the entries were all netted to revenue. This was corrected following an audit by OEB staff. Back in 2005 our RSVA balances were reported on a cash versus accrual basis so for the most part balances were all in a receivable position thus generating revenue versus expense entries.*

i) Did Greater Sudbury Hydro include interest expense on customer security deposits in interest expense for purposes of the interest true up

calculation?

Response:

*Greater Sudbury Hydro only included interest on the promissory note for purposes of the interest true-up calculation.*

*Deposit interest not included in the interest true-up calculation*

2001	NIL
2002	\$28,411.11
2003	\$ 1,848.54
2004	\$ 1,957.02
2005	\$24,737.49

j) Did Greater Sudbury Hydro include interest income on customer security deposits in the disclosed amount of interest expense in its financial statements and tax returns?

Response:

*Greater Sudbury Hydro reported interest on security deposits on its financial statements and tax returns for 2001 through 2005 in the amounts noted above in item (i).*

k) Did Greater Sudbury Hydro include interest expense on IESO prudentials in interest expense?

Response:

*No, Greater Sudbury Hydro did not include interest on IESO prudentials as part of its interest expense. These costs were reflected in 'administration - regulatory'.*

l) Did Greater Sudbury Hydro include interest carrying charges on regulatory assets or liabilities in interest expense?

Response:

*No, Greater Sudbury Hydro Inc did not include interest carrying charges on regulatory assets/liabilities in interest expense.*

m) Did Greater Sudbury Hydro include the amortization of debt issue costs, debt discounts or debt premiums in interest expense? If the

answer is yes, did GSH also include the difference between the accounting and tax amortization amounts in the interest true-up calculations? Please explain.

Response:

*Greater Sudbury Hydro had no such costs.*

n) Did Greater Sudbury Hydro deduct capitalized interest in deriving the interest expense disclosed in its financial statements? If the answer is yes, did GSH add back the capitalized interest to the actual interest expense amount for purposes of the interest true-up calculations? Please explain.

Response:

*Greater Sudbury Hydro Inc did not capitalize interest expense.*

o) Please provide Greater Sudbury Hydro's views on which types of interest income and interest expense should be included in the excess interest true-up calculations.

Response:

*Greater Sudbury Hydro's understanding was that only the interest on long term debt or promissory notes would be included in the true-up calculation. The inclusion of interest on customer deposits only became apparent to us in rate years subsequent to 2005.*

p) Please provide a table for the years 2001 to 2005 that shows all of the components of Greater Sudbury Hydro's interest expense and the amount associated with each type of interest.

Response

Interest Expense	2001	2002	2003	2004	2005
Interest on promissory note	\$ 3,531,660.18	\$ 3,531,660.18	\$ 3,531,660.18	\$ 3,531,660.18	\$ 3,531,660.18
Interest on future pension benefits	\$ 390,453.00	\$ 405,432.79	\$ 423,312.31	\$ 491,652.60	\$ 514,058.47
Interest on customer deposits	\$ -	\$ 28,411.11	\$ 1,848.54	\$ 1,957.02	\$ 24,737.49
Subtotal	<u>\$ 390,453.00</u>	<u>\$ 433,843.90</u>	<u>\$ 425,160.85</u>	<u>\$ 493,609.62</u>	<u>\$ 538,795.96</u>
total Interest Expense	<u>\$ 3,922,113.18</u>	<u>\$ 3,965,504.08</u>	<u>\$ 3,956,821.03</u>	<u>\$ 4,025,269.80</u>	<u>\$ 4,070,456.14</u>

As reported on audited financial statements

### 1562 Disposition

q) Please confirm the balance Greater Sudbury wishes to repay to its customers as at April 30, 2012.

### Response

*Greater Sudbury Hydro has a reported balance of \$60,047 that it wishes to repay to customers as at April 30, 2012.*

### **Disposition of Account 1562 – West Nipissing Board Staff Interrogatory No. 11**

### Unmetered Scattered Load (USL)

Unmetered scattered load (USL) is not listed as one of the components of the billing and recovery in the spreadsheet West Nipissing-Summary of PILS billed 20020501-20060403.xls, although the 2002, 2004, and 2005 Board decisions include USL as one of the rate categories. USL was to be billed using the GS<50kW rate which included PILs fixed and variable charge slivers.

a) Please explain why the USL connections and energy (kWhs) and the associated rate slivers classified under GS<50kW rate class were not used in the calculation of PILs recoveries from ratepayers.

### Response

*West Nipissing did have approved rates for the USL rate category but this rate class was not included as a rate class on the PILs spreadsheets. West Nipissing had no*

*customers billed under the USL rate class. There were one or two flat rate accounts that were billed as though they were GS<50 customers and the rates were the same for the USL and the GS<50kW classes.*

### PILs Billed

The PILs billed spreadsheet West Nipissing-Summary of PILS billed 20020501-20060403.xls, is missing customer counts, PILs slivers, kWh, fixed rates and variable rates (for 2001-2005). Please provide the information for all years in a table similar to the format used by Bluewater Power in its Continuity schedule spreadsheet: BluewaterPower\_Continuity Schedule\_Disposition\_1562 Balance.xls (worksheet C1.1 2002 PILs Recovered) EB-2011-0153.

### Response

*Please refer to Appendix 1 - GSHI & WNESL PILs continuity - recalcs 20120110 for a revised calculation based on an updated table similar to the format used by Bluewater Power. Also refer to the newly requested table - Attachment 6 entitled WNESL - PILs reconciliation - continuity schedule.*

*In the updated spreadsheet Appendix 1 we have slightly modified the figures in column C of the sheet entitled GSHI Continuity as well as WNESL Continuity. The revised figures reflect a more accurate billing cutoff of volumes in the time periods specified in the PILs reconciliation continuity schedule. As a result, carrying charges were impacted slightly. A correction was made to amounts billed as well due to a formulaic error and the revised amount billed was \$80,429 as compared to \$76,306 originally reported. The final revised receivable balance for West Nipissing Energy as of April 30, 2012 is adjusted to \$9,837 receivable from customers as compared to the original submission which reported a receivable of \$14,668. Greater Sudbury Hydro does not wish to modify the original figure as the methodology for the original calculation is still deemed reasonable. The error correction is not material and offsets the correction not taken for the Greater Sudbury Hydro revised calculation.*

b) In the 2002 worksheet, West Nipissing Energy used an effective date of May 1, 2002 but the 2002 Board decision states an effective date of March 31, 2002 please explain.

### Response

*West Nipissing Energy only implemented the rate change effective May 1, 2002 despite the fact the Board decision had a different effective date. With the market opening May 1, 2002 and significant changes being made to the billing systems it is believed the decision was made to incorporate only one rate change to minimize customer impact.*



*More recent rate orders have had an effective date stated that is different from the implementation date. This may have also been the case.*

c) How did West Nipissing Energy deal with the implementation date of rate change at April 1, 2006 with respect to unbilled consumption at that date?

Response

*West Nipissing Energy processed a rate change effective May 1, 2006 which effectively removed the PILs proxy components. Customers billed after May 1, 2006 but with consumption prior to May 1, 2006 were billed the PILs component on the basis of the rate for the PILs being effective right up to and including April 30, 2006. With the lag in billing, customers were actually billed into the months of June and July. Our continuity working paper was presented on the basis of 'accrual' versus 'cash' reporting so the continuity working paper stops at the end of April 2006.*

d) In the 1562 continuity WNESL worksheet, the collection amounts for 2004 (\$16,926) and 2005 (\$12,383) are significantly lower in comparison to collections from 2003 (\$25,775). Please explain the reason behind the declining collections after 2003.

*The 2002 and 2003 years both included the 2001 PILs proxy as well as the 2002 PILs proxy. The combined proxy for the 2003 billing year was \$10,335 + \$16,207 for a total of \$26,542. The 2001 component was removed as of April 1, 2004 so only \$2,584 was included in 2004 billing - a reduction of \$7,751 from the 2003 total proxy. Thus the decline in collections after 2003.*

Interest Expense

Ref: Interest Portion of True-up – 2003, 2004, 2005 SIMPIL - TAXCALC

When the actual interest expense, as reflected in the financial statements and tax returns, exceeds the maximum deemed interest amount approved by the Board, the excess amount is subject to a claw-back penalty and is shown in sheet TAXCALC as an extra deduction in the true-up calculations.

For the tax years 2001 to 2005:

e) Did West Nipissing Energy have interest expense related to liabilities other than debt that is disclosed as interest expense in its financial statements?

Response

No.

f) Did West Nipissing Energy net interest income against interest expense in deriving the amount it shows as interest expense in its financial statements and tax returns? If yes, please provide details to what the interest income relates.

Response

No.

g) Did West Nipissing Energy include interest expense on customer security deposits in interest expense for purposes of the interest trueup calculation?

Response

No.

h) Did West Nipissing Energy include interest income on customer security deposits in the disclosed amount of interest expense in its financial statements and tax returns?

Response

*The only interest related to customer deposits and it was not separately disclosed as interest expense on the financial statements or tax returns.*

i) Did West Nipissing Energy include interest expense on IESO prudentials in interest expense?

Response

No.

j) Did West Nipissing Energy include interest carrying charges on regulatory assets or liabilities in interest expense?

Response

No.

k) Did West Nipissing Energy include the amortization of debt issue costs, debt discounts or debt premiums in interest expense? If the answer is yes, did Nipissing also include the difference between the accounting and tax amortization amounts in the interest true-up calculations? Please explain.

Response

*No. West Nipissing Energy had no such costs.*

l) Did West Nipissing Energy deduct capitalized interest in deriving the interest expense disclosed in its financial statements? If the answer is yes, did Nipissing add back the capitalized interest to the actual interest expense amount for purposes of the interest true-up calculations? Please explain.

Response

*No*

m) Please provide West Nipissing Energy's views on which types of interest income and interest expense should be included in the excess interest true-up calculations.

Response

*West Nipissing Energy's views were that none of its interest income or expense should be included in the excess interest true-up calculations. West Nipissing Energy's long term interest was non-interest bearing so there was no excess calculation for this item.*

n) Please provide a table for the years 2001 to 2005 that shows all of the components of West Nipissing Energy's interest expense and the amount associated with each type of interest.

Response

*Customer deposit interest*

2001	<i>unable to locate</i>
2002	<i>\$1,265.48</i>
2003	<i>\$2,278.09</i>
2004	<i>\$1,600.51</i>
2005	<i>\$1,373.07</i>

1562 Disposition

o) Please confirm the balance West Nipissing Energy wishes to recover from its customers as of April 30, 2012.

Response

*West Nipissing Energy has a reported balance of \$14,668 that it wishes to recover from its customers as at April 30, 2012.*

Greater Sudbury Hydro Inc  
Variance in account 1590

2.1.7			EDDVAR		Difference/Explanation	
<b>2009</b>						
Account	Amount		Account	Amount	Difference	Explanation
1590 -	97,988.34	principle/interest	1590 -	97,989.00	0.66	rounding
						We had just received approval for disposition per rate order EB 2008-0230 dated January 19,2010. this was to be recovered over two years ending April 30, 2011. As per EDDVARR instructions, we are not to include account in spreadsheet while is is being recovered.
1595 -	2,591,261.21	principle/interest	1595	-	-	2,591,261.21
	- 2,689,249.55			- 97,989.00	-	2,591,260.55
<b>2010</b>						
Account	Amount		Account	Amount	Difference	
1590 -	1,180,950.00	principle/interest	1590 -	110,245.00	-	1,070,705.00
1595	272,378.00	principle/interest	1595	-	-	272,378.00
	- 908,572.00				-	798,327.00
<b>2010 correct account groupings:</b>						
1590 -	110,245.00	principle/interest	1590 -	110,245.00	-	this would be the correct grouping.
1595 -	798,329.00	principle/interest	1595	-	-	798,329.00
	- 908,574.00			- 110,245.00	-	798,329.00
						Again, we are not including 1595 as per instructio

Greater Sudbury Hydro Inc  
EB 2011-0169  
Special Purpose Charge reconciliation to 2.1.7

	Total Sum of billed_co	Total Sum of billed_amt
category		
G1	129,228,302.50	\$35,487.77
G2	27,890,349.34	\$7,611.99
G3	144,894,234.23	\$36,891.24
G4	118,587,925.05	\$31,028.17
G7	3,123,712.55	\$894.36
G8	32,409,973.83	\$9,251.25
NM	2,019,366.48	\$603.33
R1	384,823,454.82	\$112,808.35
SL	355,038.31	\$114.03
ST	7,724,728.02	\$2,252.74
Z2	1,203,278.22	\$335.26
Z3	10,050,326.91	\$2,646.52
Z4	3,700,843.14	\$909.80
Z8	2,586,947.10	\$753.42
Grand Total	868,598,480.50	\$241,588.23

(old billing system) Add: CIS Infinity	347,127,804.86	\$129,311.81
Total billed	1,215,726,285.36	\$370,900.04
Amount of SPC paid		-\$378,888.00
balance to be recovered as of Sept 23, 2011		-\$7,987.96
Balance at December 31, 2010		\$147,796.00
**** Amount recovered in 2011		\$139,808.04
Carrying Charges to Decembe 31, 2010		-\$1,718.00
Difference from 2.1.7		<b>\$138,090.04</b>

\*\*\* 2011 columns are greyed out. We put the amount collected in 2011 in the Q4 of 2010 to correctly affect the amount to be recovered in the 2012 IRM3

Ontario Energy  
Board  
P.O. Box 2319  
26th. Floor  
2300 Yonge Street  
Toronto ON M4P 1E4  
Telephone: 416- 481-1967  
Facsimile: 416- 440-7656  
Toll free: 1-888-632-6273

Commission de l'énergie  
de l'Ontario  
C.P. 2319  
26e étage  
2300, rue Yonge  
Toronto ON M4P 1E4  
Téléphone: 416- 481-1967  
Télécopieur: 416- 440-7656  
Numéro sans frais: 1-888-632-6273



**VIA EMAIL AND MAIL**

April 16, 2010

**TO: Licensed Electricity Distributors**

**RE: Revised Invoice - "Special Purpose Charge" Assessment under Section 26.1 of the Ontario Energy Board Act, 1998 for Ministry of Energy and Infrastructure Conservation and Renewable Energy Program Costs**

The Ontario Energy Board recently sent distributors an invoice reflecting the assessment under Section 26.1 of the Ontario Energy Board Act. That invoice, dated April 15, 2010, is in error and should be disregarded. The attached invoice, dated April 16, 2010, is the correct version.

We apologize for any confusion caused by this error.

Any questions regarding the attached revised invoice, other than in relation to payment, should be directed to the Market Operations Hotline at 416-440-7604 or by e-mail at [market.operations@oeb.gov.on.ca](mailto:market.operations@oeb.gov.on.ca). The Board's toll free number is 1-888-632-6273.

Yours truly,

*Original signed by*

Kirsten Walli  
Board Secretary

Attachments: Revised Invoice - Assessment for Ministry of Energy and Infrastructure

**Revised Invoice**  
Ministry of Energy and Infrastructure  
Conservation and Renewable Energy Program Costs

**To:** Greater Sudbury Hydro Inc.  
500 Regent Street  
Sudbury, ON P3E 4P1  
Attn: Stanly Pawlowicz, VP Corporate Services

**Item Description:**

Assessment for Ministry of Energy and Infrastructure Conservation and Renewable Energy Program Costs.

Quote-part pour les coûts des programme de conservation et d'énergie renouvelable du ministère de l'Énergie et de l'Infrastructure.

Customer No./No du client 472783
Customer Site No./ N° d'emplacement du client 1061061
Invoice Date/Date de la facture  April 16, 2010
Invoice No./ N° de la facture 50025
Due Date/ Date d'échéance  July 30, 2010
Payment Amount/ Montant remis  CAD \$ 378,888

*Questions related to the remittance should be directed to the Non-Tax Revenue Management Branch Contact Centre at 1-877-535-0554 or Fax (416) 326-5177. Les questions concernant la remise doivent être posées à l'InfoCentre de la Direction de la gestion des revenus non fiscaux au 1 877 535-0554 ou par télécopieur au 416 326-5177.*

*This assessment was calculated by the Ontario Energy Board, 2300 Yonge St. 27<sup>th</sup> Floor, P.O. Box 2319, Toronto, ON M4P 1E4. Questions related to the invoice should be directed to the Market Operations Hotline 416-440-7604. La présente quote-part a été fixée par la Commission de l'énergie de l'Ontario, 2300, rue Yonge, 27<sup>e</sup> étage, case postale 2319, Toronto (Ontario) M4P 1E4. Les questions relatives à la facture doivent être posées au service de téléassistance du service Activités du marché : 416 440-7604.*

*Payments are to be made to the Minister of Finance not the Ontario Energy Board.  
Les paiements doivent être faits au ministre des Finances et non à la Commission de l'énergie de l'Ontario.*

-----  
Detach here/ Détacher ici



Ministry of Finance/Ministère des Finances  
Payment Processing Centre/Centre de traitement des paiements  
33 King St. West/33 rue King Ouest  
PO Box 647/CP 647  
Oshawa, ON L1H 8X3

Please detach and return this portion with your payment in the enclosed envelope. Make your cheque or money order payable to the Minister of Finance. Veuillez détacher et retourner cette partie avec votre remise dans l'enveloppe ci-jointe. Libellez votre chèque ou votre mandat à l'ordre du ministre des Finances.

Greater Sudbury Hydro Inc.  
500 Regent Street  
Sudbury, ON P3E 4P1  
Attn: Stanly Pawlowicz, VP Corporate Services

Customer No. / N° du client 472783
Customer Site No./ N° d'emplacement du client 1061061
Invoice No./ N° de la facture 50025
Payment Amount / Montant remis CAD \$ .

45 AR 50025



Greater Sudbury Hydro Inc.  
EB2011-0169  
Special Purpose Charge Reconciliation  
Interrogatory response - Question 3(b)

SPC Assessment (prinicipal balance	Amount recovered from customers in 2010	Carrying Charges for 2010	Decemb er 31, 2010 Yearend Principal Balance	December 31, 2010 Year end Carrying Charges Balance	Amount recovered from customers in 2011	Carrying Charges for 2011	Forecasted December 31, 2011 Year End Principal Balance	Forecasted December 31,2011 year end carrying charges balance	Carrying Charges for 2012 (Jan 1 - April 30, 2012)	Total Disposition (Principal and Interest)
378,888.00	- 148,141.38	1,717.78	230,746.62	1,717.78	- 222,758.62	118.08	7,988.00	1,835.86	39.14	9,863.00

per Eddvar	7,988.00	1,875.00	9,863.00
difference	0.00	0.00	0.00

Greater Sudbury Hydro Inc  
EB-2011-0169  
Board Staff Interrogatory No. 11 PILs Billed Summary  
2002 PILs

Rate Class	Fixed Metric	Pils Rate 2001 A	PILs Rate 2002 B	Total PILs Rate C + A + B	Monthly Service Charge	Cust/Conn Billed 2002 D	PILs Recovered E = C * D * 8
Residential	Customer	0.4595	1.355	1.8145	13.68	39,098.61	\$ 567,555.36
General Service Less Than 50 kW	Customer	1.4806	4.366	5.84655	20.26	3,664.36	\$ 171,390.73
General Service 50 kW to 4,000 kW	Customer	16.8201	49.5986	66.41874	177.96	458.64	\$ 243,697.52
Unmetered Scattered Load	Connection	1.4806	4.366	5.84655	20.26	260.06	\$ 12,163.40
Sentinel Lighting	Connection	0.023	0.0677	0.09075	0.67	418.81	\$ 304.06
Street Lighting	Connection	0.0111	0.0327	0.0438	.68/.17	19,655.14	\$ 6,887.16
						<u>63,555.61</u>	<u>\$ 1,001,998.23</u>

Rate Class	Vol Metric	Pils Rate 2001 A	PILs Rate 2002 B	Total PILs Rate C + A + B	Monthly kWh/kW Charge	Cust/Conn Billed 2002 D	PILs Recovered E = C * D
Residential	kWh	\$ 0.00024	0.000704	\$ 0.00094	0.0073	256,929,212.04	\$ 242,284.25
General Service Less Than 50 kW	kWh	0.000179	0.000528	\$ 0.00071	0.0137	93,425,471.99	\$ 66,051.81
General Service 50 kW to 4,000 kW	kW	0.045124	0.133059	\$ 0.17818	3.5598	604,651.56	\$ 107,738.63
Unmetered Scattered Load	kWh	0.000179	0.000528	\$ 0.00071	0.0137	1,350,106.39	\$ 954.53
Sentinel Lighting	kW	0.03663	0.108014	\$ 0.14464	1.518	832.97	\$ 120.48
Street Lighting	kW	0.020746	0.061176	\$ 0.08192	1.9973/.4694	14,518.41	\$ 1,189.38
						<u>352,324,793.36</u>	<u>\$ 418,339.07</u>
							<u>\$ 1,420,337.30</u>

Greater Sudbury Hydro Inc  
EB-2011-0169  
Board Staff Interrogatory No. 11 PILs Billed Summary  
2003 PILs

Rate Class	Fixed Metric	Pils Rate 2001 A	PILs Rate 2002 B	Total PILs Rate C + A + B	Monthly Service Charge	Cust/Conn Billed 2003 D	PILs Recovered E = C * D * 12
Residential	Customer	0.4595	1.355	1.8145	13.68	39,098.61	\$ 851,333.03
General Service Less Than 50 kW	Customer	1.4806	4.366	5.84655	20.26	3,664.36	\$ 257,086.10
General Service 50 kW to 4,000 kW	Customer	16.8201	49.5986	66.41874	177.96	458.64	\$ 365,546.27
Unmetered Scattered Load	Connection	1.4806	4.366	5.84655	20.26	260.06	\$ 18,245.10
Sentinel Lighting	Connection	0.023	0.0677	0.09075	0.67	418.81	\$ 456.09
Street Lighting	Connection	0.0111	0.0327	0.0438	.68/.17	19,655.14	\$ 10,330.74
						<u>63,555.61</u>	<u>\$ 1,502,997.34</u>

Rate Class	Vol Metric	Pils Rate 2001 A	PILs Rate 2002 B	Total PILs Rate C + A + B	Monthly kWh/kW Charge	Cust/Conn Billed 2003 D	PILs Recovered E = C * D
Residential	kWh	\$ 0.00024	0.000704	\$ 0.00094	0.0073	385,393,818.06	\$ 363,426.37
General Service Less Than 50 kW	kWh	0.000179	0.000528	\$ 0.00071	0.0137	140,138,207.98	\$ 99,077.71
General Service 50 kW to 4,000 kW	kW	0.045124	0.133059	\$ 0.17818	3.5598	906,977.35	\$ 161,607.94
Unmetered Scattered Load	kWh	0.000179	0.000528	\$ 0.00071	0.0137	2,025,159.58	\$ 1,431.79
Sentinel Lighting	kW	0.03663	0.108014	\$ 0.14464	1.518	1,249.45	\$ 180.73
Street Lighting	kW	0.020746	0.061176	\$ 0.08192	1.9973/.4694	21,777.62	\$ 1,784.07
						<u>528,487,190.04</u>	<u>\$ 627,508.61</u>
							<u>\$ 2,130,505.95</u>

Greater Sudbury Hydro Inc  
EB-2011-0169  
Board Staff Interrogatory No. 11 PiLs Billed Summary  
Jan - March 2004 PiLs

Rate Class	Fixed Metric	PiLs Rate 2001 A	PiLs Rate 2002 B	Total PiLs Rate C + A + B	Monthly Service Charge	Cust/Conn Billed 2002 D	PiLs Recovered E = C * D * 3
Residential	Customer	0.4595	1.355	1.8145	13.68	39,098.61	\$ 212,833.26
General Service Less Than 50 kW	Customer	1.4806	4.366	5.84655	20.26	3,664.36	\$ 64,271.52
General Service 50 kW to 4,000 kW	Customer	16.8201	49.5986	66.41874	177.96	458.64	\$ 91,386.57
Unmetered Scattered Load	Connection	1.4806	4.366	5.84655	20.26	260.06	\$ 4,561.28
Sentinel Lighting	Connection	0.023	0.0677	0.09075	0.67	418.81	\$ 114.02
Street Lighting	Connection	0.0111	0.0327	0.0438	.68/.17	19,655.14	\$ 2,582.69
						<u>63,555.61</u>	<u>\$ 375,749.33</u>

Rate Class	Vol Metric	PiLs Rate 2001 A	PiLs Rate 2002 B	Total PiLs Rate C + A + B	Monthly kWh/kW Charge	Cust/Conn Billed 2002 D	PiLs Recovered E = C * D
Residential	kWh	\$ 0.00024	0.000704	\$ 0.00094	0.0073	96,348,454.52	\$ 90,856.59
General Service Less Than 50 kW	kWh	0.000179	0.000528	\$ 0.00071	0.0137	35,034,552.00	\$ 24,769.43
General Service 50 kW to 4,000 kW	kW	0.045124	0.133059	\$ 0.17818	3.5598	226,744.34	\$ 40,401.99
Unmetered Scattered Load	kWh	0.000179	0.000528	\$ 0.00071	0.0137	506,289.90	\$ 357.95
Sentinel Lighting	kW	0.03663	0.108014	\$ 0.14464	1.518	312.36	\$ 45.18
Street Lighting	kW	0.020746	0.061176	\$ 0.08192	1.9973/.4694	5,444.40	\$ 446.02
						<u>132,121,797.51</u>	<u>\$ 156,877.15</u>
							<u>\$ 532,626.49</u>

2002	\$ 1,420,337.30
2003	\$ 2,130,505.95
2004	<u>\$ 532,626.49</u>
	<u>\$ 4,083,469.73</u>

Greater Sudbury Hydro Inc  
EB-2011-0169  
Board Staff Interrogatory No. 11 PiLs Billed Summary  
April - December 2004 PiLs

Rate Class	Vol Metric	PiLs Rate 2004 B	Monthly kWh/kW Charge	Monthly kWh/kW Charge D	PiLs Recovered E = C * D
Residential	kWh	0.002483	0.0075	168,852,635.00	\$ 419,261.09
General Service Less Than 50 kW	kWh	0.002206	0.0144	70,787,559.06	\$ 156,157.36
General Service 50 kW to 4,000 kW	kW	0.417083	3.5967	493,347.16	\$ 205,766.71
Unmetered Scattered Load	kWh	0.002206	0.0144	167,912.07	\$ 370.41
Sentinel Lighting	kW	0.414798	1.9592	1,477.30	\$ 612.78
Street Lighting	kW	0.158995	2.1517/.6229	14,373.19	\$ 2,285.27
				<u>240,317,303.78</u>	<u>\$ 784,453.62</u>

Greater Sudbury Hydro Inc  
EB-2011-0169  
Board Staff Interrogatory No. 11 PiLs Billed Summary  
Jan- March 2005 PiLs

Rate Class	Vol Metric	PiLs Rate 2004 B	Monthly kWh/kW Charge	Monthly kWh/kW Charge D	PiLs Recovered E = C * D
Residential	kWh	0.002483	0.0075	210,268,240.91	\$ 522,096.04
General Service Less Than 50 kW	kWh	0.002206	0.0144	64,223,857.85	\$ 141,677.83
General Service 50 kW to 4,000 kW	kW	0.417083	3.5967	374,527.82	\$ 156,209.19
Unmetered Scattered Load	kWh	0.002206	0.0144	1,746,894.00	\$ 3,853.65
Sentinel Lighting	kW	0.414798	1.9592 -	323.59	-\$ 134.22
Street Lighting	kW	0.158995	2.1517/.6229	7,214.13	\$ 1,147.01
				<u>276,620,411.12</u>	<u>\$ 824,849.49</u>

Greater Sudbury Hydro Inc  
EB-2011-0169  
Board Staff Interrogatory No. 11 PILs Billed Summary  
April - December 2005

Rate Class	Vol Metric	PILs Rate 2005 B	Monthly kWh/kW Charge	Monthly kWh/kW Charge D	PILs Recovered E = C * D
Residential	kWh	0.003	0.0107	190,597,653.33	\$ 571,792.96
General Service Less Than 50 kW	kWh	0.0024	0.0162	81,350,908.35	\$ 195,242.18
General Service 50 kW to 4,000 kW	kW	0.5598	3.8359	549,869.95	\$ 307,817.20
Unmetered Scattered Load	kWh	0.0024	0.0162	1,396,829.16	\$ 3,352.39
Sentinel Lighting	kW	0.4702	2.224	831.62	\$ 391.03
Street Lighting	kW	0.1491	1.5571/0.292	14,396.64	\$ 2,146.54
				<u>273,910,489.05</u>	<u>\$ 1,080,742.29</u>

Greater Sudbury Hydro Inc  
EB-2011-0169  
Board Staff Interrogatory No. 11 PILs Billed Summary  
Jan - April 2006 PILs

Rate Class	Vol Metric	PILs Rate 2005 B	Monthly kWh/kW Charge	Monthly kWh/kW Charge D	PILs Recovered E = C * D
Residential	kWh	0.003	0.0107	212,125,200.00	\$ 636,375.60
General Service Less Than 50 kW	kWh	0.0024	0.0162	65,916,777.90	\$ 158,200.47
General Service 50 kW to 4,000 kW	kW	0.5598	3.8359	443,984.19	\$ 248,542.61
Unmetered Scattered Load	kWh	0.0024	0.0162	882,543.47	\$ 2,118.21
Sentinel Lighting	kW	0.4702	2.224	587.14	\$ 276.14
Street Lighting	kW	0.1491	1.5571/0.292	9,049.25	\$ 1,349.23
				<u>279,378,141.95</u>	<u>\$ 1,046,862.26</u>



Greater Sudbury Hydro Inc  
EB-2011-0169  
Board Staff Interrogatory No. 11 PiLs Billed Summary  
PiLs Recovery

Rate Class	Fixed Metric	PiLs Recovered Mar to Dec 2002	PiLs Recovered Jan to Dec 2003	PiLs Recovered Jan to Mar 2004	PiLs Recovered Apr to Dec 2004	PiLs Recovered Jan to Mar 2005	PiLs Recovered Apr to Dec 2005	PiLs Recovered Jan to Apr 2006	PiLs Recovered Total
Residential	Customer	\$ 567,555	\$ 851,333	\$ 212,833	\$ -	\$ -	\$ -	\$ -	\$ 1,631,722
General Service Less Than 50 kW	Customer	\$ 171,391	\$ 257,086	\$ 64,272	\$ -	\$ -	\$ -	\$ -	\$ 492,748
General Service 50 kW to 4,000 kW	Customer	\$ 243,698	\$ 365,546	\$ 91,387	\$ -	\$ -	\$ -	\$ -	\$ 700,630
Unmetered Scattered Load	Connection	\$ 12,163	\$ 18,245	\$ 4,561	\$ -	\$ -	\$ -	\$ -	\$ 34,970
Sentinel Lighting	Connection	\$ 304	\$ 456	\$ 114	\$ -	\$ -	\$ -	\$ -	\$ 874
Street Lighting	Connection	\$ 6,887	\$ 10,331	\$ 2,583	\$ -	\$ -	\$ -	\$ -	\$ 19,801
		<u>\$ 1,001,998</u>	<u>\$ 1,502,997</u>	<u>\$ 375,749</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 2,880,745</u>

Rate Class	Vol Metric	PiLs Recovered Mar to Dec 2002	PiLs Recovered Jan to Dec 2003	PiLs Recovered Jan to Mar 2004	PiLs Recovered Apr to Dec 2004	PiLs Recovered Jan to Mar 2005	PiLs Recovered Apr to Dec 2005	PiLs Recovered Jan to Apr 2006	PiLs Recovered Total
Residential	kWh	\$ 242,284	\$ 363,426	\$ 90,857	\$ 419,261	\$ 522,096	\$ 571,793	\$ 636,376	\$ 2,846,093
General Service Less Than 50 kW	kWh	\$ 66,052	\$ 99,078	\$ 24,769	\$ 156,157	\$ 141,678	\$ 195,242	\$ 158,200	\$ 841,177
General Service 50 kW to 4,000 kW	kW	\$ 107,739	\$ 161,608	\$ 40,402	\$ 205,767	\$ 156,209	\$ 307,817	\$ 248,543	\$ 1,228,084
Unmetered Scattered Load	kWh	\$ 955	\$ 1,432	\$ 358	\$ 370	\$ 3,854	\$ 3,352	\$ 2,118	\$ 12,439
Sentinel Lighting	kW	\$ 120	\$ 181	\$ 45	\$ 613	\$ 134	\$ 391	\$ 276	\$ 1,492
Street Lighting	kW	\$ 1,189	\$ 1,784	\$ 446	\$ 2,285	\$ 1,147	\$ 2,147	\$ 1,349	\$ 10,348
		<u>\$ 418,339</u>	<u>\$ 627,509</u>	<u>\$ 156,877</u>	<u>\$ 784,454</u>	<u>\$ 824,849</u>	<u>\$ 1,080,742</u>	<u>\$ 1,046,862</u>	<u>\$ 4,939,633</u>

Rate Class

Residential	\$ 809,840	\$ 1,214,759	\$ 303,690	\$ 419,261	\$ 522,096	\$ 571,793	\$ 636,376	\$ 4,477,815
General Service Less Than 50 kW	\$ 237,443	\$ 356,164	\$ 89,041	\$ 156,157	\$ 141,678	\$ 195,242	\$ 158,200	\$ 1,333,925
General Service 50 kW to 4,000 kW	\$ 351,436	\$ 527,154	\$ 131,789	\$ 205,767	\$ 156,209	\$ 307,817	\$ 248,543	\$ 1,928,715
Unmetered Scattered Load	\$ 13,118	\$ 19,677	\$ 4,919	\$ 370	\$ 3,854	\$ 3,352	\$ 2,118	\$ 47,409
Sentinel Lighting	\$ 425	\$ 637	\$ 159	\$ 613	\$ 134	\$ 391	\$ 276	\$ 2,366
Street Lighting	\$ 8,077	\$ 12,115	\$ 3,029	\$ 2,285	\$ 1,147	\$ 2,147	\$ 1,349	\$ 30,148
	<u>\$ 1,420,337</u>	<u>\$ 2,130,506</u>	<u>\$ 532,626</u>	<u>\$ 784,454</u>	<u>\$ 824,849</u>	<u>\$ 1,080,742</u>	<u>\$ 1,046,862</u>	<u>\$ 7,820,377</u>

Greater Sudbury Hydro Inc  
EB-2011-0169  
Board Staff Interrogatory No. 11 PiLs Billed Summary  
PiLs by year

Rate Class	Fixed Metric	PiLs Recovered 2002	PiLs Recovered 2003	PiLs Recovered 2004	PiLs Recovered 2005	PiLs Recovered 2006	PiLs Recovered Total
Residential	Customer	\$ 567,555	\$ 851,333	\$ 212,833	\$ -	\$ -	\$ 1,631,722
General Service Less Than 50 kW	Customer	\$ 171,391	\$ 257,086	\$ 64,272	\$ -	\$ -	\$ 492,748
General Service 50 kW to 4,000 kW	Customer	\$ 243,698	\$ 365,546	\$ 91,387	\$ -	\$ -	\$ 700,630
Unmetered Scattered Load	Connection	\$ 12,163	\$ 18,245	\$ 4,561	\$ -	\$ -	\$ 34,970
Sentinel Lighting	Connection	\$ 304	\$ 456	\$ 114	\$ -	\$ -	\$ 874
Street Lighting	Connection	\$ 6,887	\$ 10,331	\$ 2,583	\$ -	\$ -	\$ 19,801
		<u>\$ 1,001,998</u>	<u>\$ 1,502,997</u>	<u>\$ 375,749</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 2,880,745</u>

Rate Class	Vol Metric	PiLs Recovered Mar to Dec 2002	PiLs Recovered Jan to Dec 2003	PiLs Recovered Jan to Mar 2004	PiLs Recovered Apr to Dec 2005	PiLs Recovered Jan to Apr 2006	PiLs Recovered Total
Residential	kWh	\$ 242,284	\$ 363,426	\$ 510,118	\$ 1,093,889	\$ 636,376	\$ 2,846,093
General Service Less Than 50 kW	kWh	\$ 66,052	\$ 99,078	\$ 180,927	\$ 336,920	\$ 158,200	\$ 841,177
General Service 50 kW to 4,000 kW	kW	\$ 107,739	\$ 161,608	\$ 246,169	\$ 464,026	\$ 248,543	\$ 1,228,084
Unmetered Scattered Load	kWh	\$ 955	\$ 1,432	\$ 728	\$ 7,206	\$ 2,118	\$ 12,439
Sentinel Lighting	kW	\$ 120	\$ 181	\$ 658	\$ 257	\$ 276	\$ 1,492
Street Lighting	kW	\$ 1,189	\$ 1,784	\$ 2,731	\$ 3,294	\$ 1,349	\$ 10,348
		<u>\$ 418,339</u>	<u>\$ 627,509</u>	<u>\$ 941,331</u>	<u>\$ 1,905,592</u>	<u>\$ 1,046,862</u>	<u>\$ 4,939,633</u>

Rate Class		PiLs Recovered Mar to Dec 2002	PiLs Recovered Jan to Dec 2003	PiLs Recovered Jan to Mar 2004	PiLs Recovered Apr to Dec 2005	PiLs Recovered Jan to Apr 2006	PiLs Recovered Total
Residential		\$ 809,840	\$ 1,214,759	\$ 722,951	\$ 1,093,889	\$ 636,376	\$ 4,477,815
General Service Less Than 50 kW		\$ 237,443	\$ 356,164	\$ 245,198	\$ 336,920	\$ 158,200	\$ 1,333,925
General Service 50 kW to 4,000 kW		\$ 351,436	\$ 527,154	\$ 337,555	\$ 464,026	\$ 248,543	\$ 1,928,715
Unmetered Scattered Load		\$ 13,118	\$ 19,677	\$ 5,290	\$ 7,206	\$ 2,118	\$ 47,409
Sentinel Lighting		\$ 425	\$ 637	\$ 772	\$ 257	\$ 276	\$ 2,366
Street Lighting		\$ 8,077	\$ 12,115	\$ 5,314	\$ 3,294	\$ 1,349	\$ 30,148
		<u>\$ 1,420,337</u>	<u>\$ 2,130,506</u>	<u>\$ 1,317,080</u>	<u>\$ 1,905,592</u>	<u>\$ 1,046,862</u>	<u>\$ 7,820,377</u>

## 2002 PILs

Rate Class	Fixed Metric	Pils Rate 2001 A	PILs Rate 2002 B	Total PILs Rate C + A + B	Monthly Service Charge	Cust/Conn Billed 2002 D	PILs Recovered E = C * D * 8
Residential	Customer	0.1466	0.2299	0.3765	12.71	2,055.00	\$ 6,190.06
General Service Less Than 50 kW	Customer	0.1661	0.2605	0.4266	13.10	260.00	\$ 886.13
General Service 50 kW to 4,000 kW	Customer	0.4934	0.7738	1.2672	33.97	27.00	\$ 272.82
Unmetered Scattered Load	Connection	0.1661	0.2605	0.4266	13.10	-	\$ -
Sentinel Lighting	Connection	0.0000	0.0000	0	-	-	\$ -
Street Lighting	Connection	0.0112	0.0176	0.0288	1.09	714.00	\$ 164.45
						<u>3,056.00</u>	<u>\$ 7,513.46</u>

Rate Class	Vol Metric	Pils Rate 2001 A	PILs Rate 2002 B	Total PILs Rate C + A + B	Monthly kWh/kW Charge	Volume Billed 2002 D	PILs Recovered E = C * D
Residential	kWh	0.000111	0.000174	\$ 0.00029	0.0094	11,037,495.58	\$ 3,145.69
General Service Less Than 50 kW	kWh	0.000128	0.000201	\$ 0.00033	0.0115	4,273,452.65	\$ 1,405.97
General Service 50 kW to 4,000 kW	kW	0.007897	0.012384	\$ 0.02028	0.7417	26,766.07	\$ 542.84
Unmetered Scattered Load	kWh	0.000128	0.000201	\$ 0.00033	0.0015	-	\$ -
Sentinel Lighting	kW	0.119267	0.18703	\$ 0.30630	10.2528	59.56	\$ 18.24
Street Lighting	kW	0.037392	0.058637	\$ 0.09603	2.4932	1,035.88	\$ 99.47
						<u>15,338,809.74</u>	<u>\$ 5,212.21</u>
							<u>\$ 12,725.67</u>

\$ 12,164.59 reported

2003 PILs

Rate Class	Fixed Metric	Pils Rate 2001 A	PILs Rate 2002 B	Total PILs Rate C + A + B	Monthly Service Charge	Cust/Conn Billed 2003 D	PILs Recovered E = C * D * 8
Residential	Customer	0.1466	0.2299	0.3765	12.71	2,713.00	\$ 12,258.71
General Service Less Than 50 kW	Customer	0.1661	0.2605	0.4266	13.10	322.00	\$ 1,651.65
General Service 50 kW to 4,000 kW	Customer	0.4934	0.7738	1.2672	33.97	33.00	\$ 508.15
Unmetered Scattered Load	Connection	0.1661	0.2605	0.4266	13.10	-	\$ -
Sentinel Lighting	Connection	0.0000	0.0000	0	-	-	\$ -
Street Lighting	Connection	0.0112	0.0176	0.0288	1.09	815.00	\$ 281.49
						<u>3,883.00</u>	<u>\$ 14,699.99</u>

Rate Class	Vol Metric	Pils Rate 2001 A	PILs Rate 2002 B	Total PILs Rate C + A + B	Monthly kWh/kW Charge	Volume Billed 2003 D	PILs Recovered E = C * D
Residential	kWh	0.000111	0.000174	\$ 0.00029	0.0094	28,233,557.00	\$ 8,046.56
General Service Less Than 50 kW	kWh	0.000128	0.000201	\$ 0.00033	0.0115	8,901,653.38	\$ 2,928.64
General Service 50 kW to 4,000 kW	kW	0.007897	0.012384	\$ 0.02028	0.7417	53,441.71	\$ 1,083.85
Unmetered Scattered Load	kWh	0.000128	0.000201	\$ 0.00033	0.0015	-	\$ -
Sentinel Lighting	kW	0.119267	0.18703	\$ 0.30630	10.2528	91.16	\$ 27.92
Street Lighting	kW	0.037392	0.058637	\$ 0.09603	2.4932	1,772.36	\$ 170.20
						<u>37,190,515.61</u>	<u>\$ 12,257.18</u>
							<u>\$ 26,957.17</u>

\$ 25,845.40 reported

## Jan - Mar 2004 PILs

Rate Class	Fixed Metric	Pils Rate 2001 A	PILs Rate 2002 B	Total PILs Rate C + A + B	Monthly Service Charge	Cust/Conn Billed 2004 D	PILs Recovered E = C * D * 8
Residential	Customer	0.1466	0.2299	0.3765	12.71	4,487.00	\$ 5,068.49
General Service Less Than 50 kW	Customer	0.1661	0.2605	0.4266	13.10	482.00	\$ 616.26
General Service 50 kW to 4,000 kW	Customer	0.4934	0.7738	1.2672	33.97	35.00	\$ 132.74
Unmetered Scattered Load	Connection	0.1661	0.2605	0.4266	13.10	-	\$ -
Sentinel Lighting	Connection	0.0000	0.0000	0	-	-	\$ -
Street Lighting	Connection	0.0112	0.0176	0.0288	1.09	815.00	\$ 70.66
						<u>5,819.00</u>	<u>\$ 5,888.14</u>

Rate Class	Vol Metric	Pils Rate 2001 A	PILs Rate 2002 B	Total PILs Rate C + A + B	Monthly kWh/kW Charge	Volume Billed 2004 D	PILs Recovered E = C * D
Residential	kWh	0.000111	0.000174	\$ 0.00029	0.0094	14,982,623.13	\$ 4,270.05
General Service Less Than 50 kW	kWh	0.000128	0.000201	\$ 0.00033	0.0115	3,578,332.52	\$ 1,177.27
General Service 50 kW to 4,000 kW	kW	0.007897	0.012384	\$ 0.02028	0.7417	20,504.72	\$ 415.86
Unmetered Scattered Load	kWh	0.000128	0.000201	\$ 0.00033	0.0015	-	\$ -
Sentinel Lighting	kW	0.119267	0.18703	\$ 0.30630	10.2528	36.02	\$ 11.03
Street Lighting	kW	0.037392	0.058637	\$ 0.09603	2.4932	591.03	\$ 56.76
						<u>18,582,087.42</u>	<u>\$ 5,930.96</u>
						<u>\$ 11,819.11</u>	<u>\$ 11,392.22 reported</u>

Greater Sudbury Hydro Inc  
EB-2011-0169  
Board Staff Interrogatory No. 11 PILs Billed Summary  
WEST NIPissing ENERGY SERVICES CONTINUITY

Apr - Dec 2004 PILs

Rate Class	Vol Metric	PILs Rate 2004 B	Monthly kWh/kW Charge	Monthly kWh/kW Charge D	PILs Recovered E = C * D	
Residential	kWh	0.000454	0.0106	18,485,099.40	\$ 8,392.24	
General Service Less Than 50 kW	kWh	0.000319	0.0127	5,811,313.76	\$ 1,853.81	
General Service 50 kW to 4,000 kW	kW	0.020658	1.0717	35,333.16	\$ 729.91	
Unmetered Scattered Load	kWh	0.000319	0.0127	-	\$ -	
Sentinel Lighting	kW	0.193248	10.6634	68.58	\$ 13.25	
Street Lighting	kW	0.171537	2.9336	1,377.61	\$ 236.31	
				<u>24,333,192.51</u>	<u>\$ 11,225.52</u>	\$ 7,527.40 reported
						<u>\$ 2,954.95</u>
						<u>\$ 10,482.35</u>

Greater Sudbury Hydro Inc  
EB-2011-0169  
Board Staff Interrogatory No. 11 PILs Billed Summary  
WEST NIPISSING ENERGY SERVICES CONTINUITY

Jan - Mar 2005 PILs

Rate Class	Vol Metric	PILs Rate 2004 B	Monthly kWh/kW Charge	Monthly kWh/kW Charge D	PILs Recovered E = C * D	
Residential	kWh	0.000454	0.0106	9,754,313.37	\$ 4,428.46	
General Service Less Than 50 kW	kWh	0.000319	0.0127	2,463,839.75	\$ 785.96	
General Service 50 kW to 4,000 kW	kW	0.020658	1.0717	14,099.13	\$ 291.26	
Unmetered Scattered Load	kWh	0.000319	0.0127	-	\$ -	
Sentinel Lighting	kW	0.193248	10.6634	29.42	\$ 5.69	
Street Lighting	kW	0.171537	2.9336	514.28	\$ 88.22	
				<u>12,232,795.95</u>	<u>\$ 5,599.59</u>	\$ 5,302.64 reported

Greater Sudbury Hydro Inc  
EB-2011-0169  
Board Staff Interrogatory No. 11 PILs Billed Summary  
WEST NIPISSING ENERGY SERVICES CONTINUITY

Apr - Dec PILs

Rate Class	Vol Metric	PILs Rate 2005 B	Monthly kWh/kW Charge	Monthly kWh/kW Charge D	PILs Recovered E = C * D	
Residential	kWh	0.0003	11.62	18,897,602.68	\$ 5,669.28	
General Service Less Than 50 kW	kWh	0.0002	11.88	6,174,584.81	\$ 1,234.92	
General Service 50 kW to 4,000 kW	kW	0.0171	30.32	39,328.75	\$ 672.52	
Unmetered Scattered Load	kWh	0.0127	11.88	-	\$ -	
Sentinel Lighting	kW	0.1352	10.6696	84.67	\$ 11.45	
Street Lighting	kW	0.1137	3.2582	1,545.01	\$ 175.67	
				<u>25,113,145.92</u>	<u>\$ 7,763.83</u>	\$ 5,052.08 reported
						<u>\$ 2,027.79</u>
						<u>\$ 7,079.87</u>



Greater Sudbury Hydro Inc  
EB-2011-0169  
Board Staff Interrogatory No. 11 PILs Billed Summary  
WEST NIPISSING ENERGY SERVICES CONTINUITY

Jan - Apr 2006

Rate Class	Vol Metric	PILs Rate 2005 B	Monthly kWh/kW Charge	Monthly kWh/kW Charge D	PILs Recovered E = C * D	
Residential	kWh	0.0003	11.62	11,219,027.06	\$ 3,365.71	
General Service Less Than 50 kW	kWh	0.0002	11.88	2,973,643.83	\$ 594.73	
General Service 50 kW to 4,000 kW	kW	0.0171	30.32	17,248.73	\$ 294.95	
Unmetered Scattered Load	kWh	0.0127	11.88	-	\$ -	
Sentinel Lighting	kW	0.1352	10.6696	34.52	\$ 4.67	
Street Lighting	kW	0.1137	3.2582	690.03	\$ 78.46	
				<u>14,210,644.17</u>	<u>\$ 4,338.51</u>	\$ 4,038.89 reported

PILs Recovered Summary

Rate Class	Fixed Metric	PILs Recovered Mar to Dec 2002	PILs Recovered Jan to Dec 2003	PILs Recovered Jan to Mar 2004	PILs Recovered Apr to Dec 2004	PILs Recovered Jan to Mar 2005	PILs Recovered Apr to Dec 2005	PILs Recovered Jan to Apr 2006	PILs Recovered Total
Residential	Customer	\$ 6,190	\$ 12,259	\$ 5,068	\$ -	\$ -	\$ -	\$ -	\$ 23,517
General Service Less Than 50 kW	Customer	\$ 886	\$ 1,652	\$ 616	\$ -	\$ -	\$ -	\$ -	\$ 3,154
General Service 50 kW to 4,000 kW	Customer	\$ 273	\$ 508	\$ 133	\$ -	\$ -	\$ -	\$ -	\$ 914
Unmetered Scattered Load	Connection	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Sentinel Lighting	Connection	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Street Lighting	Connection	\$ 164	\$ 281	\$ 71	\$ -	\$ -	\$ -	\$ -	\$ 517
		\$ 7,513	\$ 14,700	\$ 5,888	\$ -	\$ -	\$ -	\$ -	\$ 28,102

Rate Class	Vol Metric	PILs Recovered Mar to Dec 2002	PILs Recovered Jan to Dec 2003	PILs Recovered Jan to Mar 2004	PILs Recovered Apr to Dec 2004	PILs Recovered Jan to Mar 2005	PILs Recovered Apr to Dec 2005	PILs Recovered Jan to Apr 2006	PILs Recovered Total
Residential	kWh	\$ 3,146	\$ 8,047	\$ 4,270	\$ 8,392	\$ 4,428	\$ 5,669	\$ 3,366	\$ 37,318
General Service Less Than 50 kW	kWh	\$ 1,406	\$ 2,929	\$ 1,177	\$ 1,854	\$ 786	\$ 1,235	\$ 595	\$ 9,981
General Service 50 kW to 4,000 kW	kW	\$ 543	\$ 1,084	\$ 416	\$ 730	\$ 291	\$ 673	\$ 295	\$ 4,031
Unmetered Scattered Load	kWh	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Sentinel Lighting	kW	\$ 18	\$ 28	\$ 11	\$ 13	\$ 6	\$ 11	\$ 5	\$ 92
Street Lighting	kW	\$ 99	\$ 170	\$ 57	\$ 236	\$ 88	\$ 176	\$ 78	\$ 905
		\$ 5,212	\$ 12,257	\$ 5,931	\$ 11,226	\$ 5,600	\$ 7,764	\$ 4,339	\$ 52,328

Rate Class

Residential	\$ 9,336	\$ 20,305	\$ 9,339	\$ 8,392	\$ 4,428	\$ 5,669	\$ 3,366	\$ 60,835
General Service Less Than 50 kW	\$ 2,292	\$ 4,580	\$ 1,794	\$ 1,854	\$ 786	\$ 1,235	\$ 595	\$ 13,135
General Service 50 kW to 4,000 kW	\$ 816	\$ 1,592	\$ 549	\$ 730	\$ 291	\$ 673	\$ 295	\$ 4,945
Unmetered Scattered Load	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Sentinel Lighting	\$ 18	\$ 28	\$ 11	\$ 13	\$ 6	\$ 11	\$ 5	\$ 92
Street Lighting	\$ 264	\$ 452	\$ 127	\$ 236	\$ 88	\$ 176	\$ 78	\$ 1,422
	\$ 12,726	\$ 26,957	\$ 11,819	\$ 11,226	\$ 5,600	\$ 7,764	\$ 4,339	\$ 80,429

original \$ 76,306

## PILs Recovered by Year

Rate Class	Fixed Metric	PILs Recovered 2002	PILs Recovered 2003	PILs Recovered 2004	PILs Recovered 2005	PILs Recovered 2006	PILs Recovered Total
Residential	Customer	\$ 6,190	\$ 12,259	\$ 5,068	\$ -	\$ -	\$ 23,517
General Service Less Than 50 kW	Customer	\$ 886	\$ 1,652	\$ 616	\$ -	\$ -	\$ 3,154
General Service 50 kW to 4,000 kW	Customer	\$ 273	\$ 508	\$ 133	\$ -	\$ -	\$ 914
Unmetered Scattered Load	Connection	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Sentinel Lighting	Connection	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Street Lighting	Connection	\$ 164	\$ 281	\$ 71	\$ -	\$ -	\$ 517
		<u>\$ 7,513</u>	<u>\$ 14,700</u>	<u>\$ 5,888</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 28,102</u>

Rate Class	Vol Metric	PILs Recovered Mar to Dec 2002	PILs Recovered Jan to Dec 2003	PILs Recovered Jan to Mar 2004	PILs Recovered Apr to Dec 2005	PILs Recovered Jan to Apr 2006	PILs Recovered Total
Residential	kWh	\$ 3,146	\$ 8,047	\$ 12,662	\$ 10,098	\$ 3,366	\$ 37,318
General Service Less Than 50 kW	kWh	\$ 1,406	\$ 2,929	\$ 3,031	\$ 2,021	\$ 595	\$ 9,981
General Service 50 kW to 4,000 kW	kW	\$ 543	\$ 1,084	\$ 1,146	\$ 964	\$ 295	\$ 4,031
Unmetered Scattered Load	kWh	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Sentinel Lighting	kW	\$ 18	\$ 28	\$ 24	\$ 17	\$ 5	\$ 92
Street Lighting	kW	\$ 99	\$ 170	\$ 293	\$ 264	\$ 78	\$ 905
		<u>\$ 5,212</u>	<u>\$ 12,257</u>	<u>\$ 17,156</u>	<u>\$ 13,363</u>	<u>\$ 4,339</u>	<u>\$ 52,328</u>

Rate Class		PILs Recovered Mar to Dec 2002	PILs Recovered Jan to Dec 2003	PILs Recovered Jan to Mar 2004	PILs Recovered Apr to Dec 2005	PILs Recovered Jan to Apr 2006	PILs Recovered Total
Residential		\$ 9,336	\$ 20,305	\$ 17,731	\$ 10,098	\$ 3,366	\$ 60,835
General Service Less Than 50 kW		\$ 2,292	\$ 4,580	\$ 3,647	\$ 2,021	\$ 595	\$ 13,135
General Service 50 kW to 4,000 kW		\$ 816	\$ 1,592	\$ 1,279	\$ 964	\$ 295	\$ 4,945
Unmetered Scattered Load		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Sentinel Lighting		\$ 18	\$ 28	\$ 24	\$ 17	\$ 5	\$ 92
Street Lighting		\$ 264	\$ 452	\$ 364	\$ 264	\$ 78	\$ 1,422
		<u>\$ 12,726</u>	<u>\$ 26,957</u>	<u>\$ 23,045</u>	<u>\$ 13,363</u>	<u>\$ 4,339</u>	<u>\$ 80,429</u>