Board Staff Interrogatories

Greater Sudbury Hydro Inc.

EB-2012-0126

The following are Board staff interrogatories in the application for 2013 distribution rates of Greater Sudbury Hydro Inc. ("GSHI"), EB-2012-0126.

Exhibit 1 – Administration

Response to Letters of Comment

1 Staff 1

Following publication of the Notice of Application, the Board received one letter of comment. Please indicate if a reply was sent from the applicant to the author of the letter. If so, please file that reply with the Board. Please ensure that the author's contact information except for the name is redacted. If not confirmed, please explain why a response was not sent and indicate if the applicant intends to respond.

Updates.

1 staff 2

Please update the application accordingly:

A. Upon completing your responses to all interrogatories from Board staff and intervenors, please provide an updated RRWF with any corrections or adjustments that the applicant wishes to make to the amounts in the previous version of the RRWF included in the middle column. Please include supporting documentation of the corrections and adjustments, such as a reference to an interrogatory response or an explanatory note.

B. Upon completing responses to all interrogatories from Board staff and intervenors, please provide an updated Appendix 2-W for all classes at the typical consumption / demand levels (i.e. 800 kWh for residential, 2,000 kWh for GS<50).

C. Upon completing responses to all interrogatories, please identify any adjustments to the proposed service revenue requirement that the applicant wishes to make relative to the original application.

Exhibit 2 – Rate Base

Asset Management Plan

2 Staff 3

References: Exhibit 2 Tab 4 Schedule 3 Capital Asset Management Plan
Exhibit 2 Tab 4, Schedule 2, Summary of Capital Expenditures
Appendix 2-A Capital Projects Table

GSHI submitted its Capital Asset Management Plan ("CAMP") dated October 30, 2012. The CAMP covers a period of ten years from the fiscal year beginning on January 1, 2013 until the year ending December 2022, with a heavier focus on the first five years.

A. Has GSHI's Board of Director's approved the CAMP?

B. If the CAMP has not been approved by the Board of Directors, what guarantees can GSHI provide to the Board that this will be the guiding policy until GSHI's next rate rebasing application?

C. How did GSHI assess the condition of its assets prior to October, 30, 2012?

D. Is the CAMP integrated into the 2013 CAPEX and CAPEX estimates for the subsequent years, 2014, 2015, 2016 and 2017?

In the CAMP, GSHI listed in Table 1.1 Year 1 Optimal Condition-Based Replacement Plan assets needing immediate attention.

E. Please provide another column, or other columns, for each year that the assets will be replaced with the estimated costs.

F. Please state in which Project Name in GSHI's Summary of Capital Expenditures the 2013 CAMP items are budgeted.

CAPEX

2 Staff 4

Reference: Exhibit 2 Tab 4, Schedule 2, Summary of Capital Expenditures

The following address CAPEX items found in the Summary of Capital Expenditures.

Meters

GSHI states: "Prior to smart meter implementation, this account was for the re-verification of meter samples. 2010 was our mass roll-out, thus deferring sample testing for the next five years." GSHI also states in Exhibit 9 Tab 4 Schedule 1 pages 5-6: "Greater Sudbury has installed 99.6% of smart meters for the residential and General Service < 50 kW ("GS<50") rate classes." It also states that "Greater Sudbury expects to complete the final few installations outstanding early in the new year." However, GSHI has budgeted $105,878 for 2012 and $100,000 for 2013.

A. With new smart meters installed please state the purpose of the budgeted amounts;

B. If the budgeted amounts are for any purpose other than re-verification, please state the purpose of the account; and

C. Please explain why the budgeted amounts are greater for the periods after an omnibus deployment of new smart meters, rather than the actuals for the 2009 – 2011 deployment period.

Emergency Plant Replacement and Failed Transformers

The following table summarizes the historical actuals and the 2012 Budget and 2013 Forecast in GSHI's Application:

Emergency Plant Replacement and Failed Transformers

		2007	2008	2009	2010	2011	2012	2013
1	Emergency P&E	$233,140	$266,113	$141,201	$164,765	$344,283	$378,215	$126,227
2	Failed Transformers	$370,336	$44,869	$182,213	$451,953	$151,333	$267,362	$130,737
		$603,476	$310,982	$323,414	$616,718	$495,616	$645,577	$256,964

D. Please describe the development of the 2013 expenses for the above budgeted emergency costs. In particular, GSHI should comment on why the amount is the lowest in the past six years.

Building

GSHI has forecast a CAPEX of $966,000 for the Project Building. The table at Appendix 2-A Capital Projects breaks this down:

Lighting Conversion	$110,064
Geothermal Energy System	$615,221
Fuel Conversion	$208,000
Other Miscellaneous	$32,715
Sub-Total	$966,000

E. Please provide details of the four components itemized in the table.

F. Please provide the rationale with supporting documentation and analysis supporting the decisions to make the lighting and fuel conversions and to invest in a geothermal energy system.

Vehicles

GSHI has forecast $1,118,450 in 2013 for new vehicles. Board staff notes that typically, GSHI's expenditures have been about half this amount.

G. Please itemize and justify the need, setting out the age, engine hours, and physical condition for each of the replaced vehicles.

H. Please state why GSHI has not considered prioritizing these vehicle replacements over future fiscal periods.

Trends

GSHI's CAPEX for 2013 is significantly higher than in previous years, and the CAMP indicates that future CAPEX is needed to continue to improve the system. GSHI is, and has been, required to make investments to meet government policy. Board staff is interested in the trends in GSHI's CAPEX to identify the various impacts of the different programmes over the 2009 to 2015 period. The following table would be of assistance. In recognizing that going forward indirect

overheads are not allowed, Board staff would like an estimate of the historical indirect overheads to be removed. The first four items in the table are the Project Investment Categories used by GSHI in the Summary of Capital Expenditures. Item 5 is the gross CAPEX estimated for each year. Items 6-9 are the different programmes that are exogenous to traditional planning. Item 11 is the net CAPEX after mandatory items are removed.

I. Please complete the following table; and

J. Please state the estimated percentage used to remove indirect overheads prior to 2013.

		2009	2010	2011	2012	2013	2014	2015
1	Statutory Requirements							
2	Plant Renewal							
3	New Connsections							
4	Plant Enhancements							
5	Sub Total (lines 1-4)							
6	Indirect Overheads							
7	Green Energy Plan							
8	CAMP Projects							
9	Smart Meters							
10	Sub Total (lines 6-9)							
11	Net (line 5-10)							

K. If GSHI is of the view that a modification(s) to the table would be helpful, GSHI may make such modification(s), and is to provide an explanation for each modification.

2009 CIS Project Cancellation

2 staff 5

Reference: Exhibit 2 Tab 3 Schedule 1

In comparing the 2009 Board approved gross assets to the 2009 actual gross assets, GSHI stated that it chose to not proceed with the implementation of the SAP CIS system and acquired the Harris NorthStar billing software.

A. Please state the total investment of the abandoned SAP system?

B. What regulatory accounting treatment did GSHI apply to the asset and depreciation accounts in writing off the SAP system?

C. Since the decision for abandonment of the SAP system was based on the fact that it was not being designed to meet the needs of GSHI, was any financial action taken against the developer? If not why not?

D. What is the total cost of the Harris NorthStar as a fully functional and operating billing system?

Green Energy Plan

GSHI's Green Energy Plan is filed as Exhibit 2 Tab 2 Schedule 5 and is supported by the Basic Plan to Enable Bill 150 The Green Energy and Economy Act ("GSHI's GEP") found at in Exhibit 2 Tab 2 Schedule 5 Attachment 1. GSHI has also filed the OPA Letter of Comment in Exhibit 2 Tab 2 Schedule 5 Attachment 1 Appendix D, which is found at page 42 of GSHI's GEP.

Investment Costs

2 Staff 6

Reference: Exhibit 2, Tab 5 Schedule 5 Page 1

At line 20, GSHI states: "Greater Sudbury has included $284,913 in its capital budget for purposes of facilitating renewable connections." Please provide an itemized breakdown of the $284,913.

Community Energy Storage ("CES")

2 Staff 7

Reference: GSHI's GEP page 2

Board staff would like clarification on the purpose of CES, and the need for technology that GSHI states is not yet commercially available.

A. Please provide technical information on the CES devices proposed for acquisition starting in 2013 e.g. pamphlets, papers, design concepts, articles etc.

B. What existing technology does the CES intend to improve?

C. Why aren't more conventional technological solutions proposed?

D. Please state the expected total annual capital expenditures for only the CES over the next five years.

E. Please provide a cost benefits study supporting the decision to use CES.

Distribution Management System ("DMS")

2 Staff 8

Reference: GSHI's GEP page 2

Board staff seeks clarification of the DMS plan.

A. Please provide the purpose of and a description of the proposed DMS, including its functions, components and operation.

B. Why is remote control required, rather than automatic local control?

C. Does the DMS require personnel in attendance, or is it a centralized automatic system?

D. Did GSHI consider using conventional technology, in whole or in part, to resolve local voltage problems, such as capacitors, regulating transformers etc.? If GSHI did, please explain why it chose DMS over more conventional solutions. If GSHI did not consider using conventional technology, please explain.

E. GSHI states that the DMS will cost $250,000. In what year does GSHI plan to purchase the DMS?

Monitoring, Control and Transfer Trips

2 Staff 9

Reference: GSHI's GEP page 3 Table 1

Board staff seeks clarification on GSHI's plan to install two Monitoring, Control and Transfer Trips per year over the next five years at a cost of $50,000 per year starting in 2013.

A. Please state the specific need(s)/project(s) for Monitoring, Control and Transfer Trip facilities for 2013 and beyond if known?

B. Are these need(s)/project(s) existing facilities? If not when are they planned?

C. Please state specifically what will be monitored, and what will be controlled.

D. Is the control local or remote?

E. Would it be appropriate to refer to the "transfer trip" and "DMS Software Maintenance Fees", shown in Table 1 on page 3 and also on page 22 as Smart Grid expenditures?

Renewable Generation Forecast

2 Staff 10

Reference: GSHI's GEP

GSHI has forecast the kW of renewable generation which is expected to be required to be connected, and then determined the requirement for CES units. GSHI has determined the proportion of costs which should be recovered from the Province and from the Distributor.

A. Is GSHI seeking the Board's approval for only the first year or the full five year plan presented on pages 21 and 22?

B. On Page 15 Sec 4.3, GSHI states that in Table 6 they have doubled the actual data for kW added in each quarter for the period from 2010Q4 to account for the constraint on Martindale. In order to assess the sensitivity of the data to this adjustment:

   1. Please repeat the table based on the actual data, without adjustment; and
   2. Please add the results to figure 2 and provide an additional column in Table 7 showing the forecast without the adjustment.

C. Board staff notes that GSHI states at the top of page 19: "Small FIT projects … **may** create problems… and **may** be delayed … if the engineering analysis software fails to identify the problem" (emphasis

added). Board staff also notes that another example of the high uncertainty that seems apparent is at page 18 in the first paragraph: "… will result in issues that (i) cannot be foreseen…or (iii) will require expensive solutions that are unproven." In Appendix B of GSHI's GEP, the Utilities Standards Forum's "Implications of the FIT Review" at page 2, last paragraph, it states that "The ability for FIT projects to connect is very difficult to predict." Would GSHI concur that the forecasting seems quite speculative, and that a full five year plan may not warrant Board approval at this time?

D. Section 4.5 "Planned Developments to Enable Renewable Embedded Generation Connections" found at page 18 states that the solution is CES.

   1. Has GSHI defined this investment as "Renewable Energy Investment" and therefore eligible for classification for provincial benefits equal to 94%, based on the standardized approach found in the Board's *Decision with Reasons Hydro One Networks Inc. EB-2009-0096, April 9, 2010*?.
   2. Please confirm that this approach is used in the tables on page 21 and 22.

E. On page 19, second last paragraph, GSHI calculates that 5% of 70 MW, at an average of 7.5 kW per microFIT installation, represents about 333 microFIT installations.

   1. Is the calculation not: 5%x70 = 3.5MW or 3500kW?
   2. If so wouldn't the installation count be 466 (3500 kW/7.5kw per installation=466 installations)?
   3. If 466 is the correct answer, would this change the budget timeline significantly?
   4. Please provide a revised budget if appropriate.

F. Please name the x-axis found in Figure 2, page 16.

G. In Figure 2 on page 16 there are 10 data points, whereas in Table 6 there are 8. Board staff would like GSHI to explain the discrepancy.

H. In section 4.8 on page 22, "Mitigation of Sustained Localized High Voltages" lists a capital expenditure of $500,000 for 2014 whereas Table 8 on page 20 appears to suggest that the "Installed Cost Estimate to Nearest CES increment" would be $250,000 for Q4 in 2014. Board staff would like GSHI to explain the discrepancy.

Research

2 Staff 11

Reference: GSHI's GEP

The Board does not intend that Research be included in GEA activity. At section 4.8, the Budget indicates OM&A amounts for "Smart Grid Education and Training", and in Appendix C on page 40 are listed activities in which GSHI staff have participated. It is noted that some of the listed items includes research activity. Please confirm that Research Activity is not included in the OM&A costs listed in the section 4.8 Budget table on page 22.

OPA Letter

2 Staff 12

Reference: GSHI's GEP Appendix D

Board staff is seeking clarification of FIT applications received or anticipated to be received and GSHI's view on comments made in the OPA letter regarding forecast FIT applications:

A. Please complete the following table and reconcile it with Table 7 on page 17 of the GEP (Forecast Renewable Generation Assuming Polynomial Regression):

Category	OPA Letter	GHSI Application	Comment
FIT	4 CAE projects total 0.8 MW		
FIT2.0	4 CAR projects 11 CAE projects Total 38 MW		
uFIT	41 connected total 0.3 MW 108 requested total 1 MW		

B. Please provide GHSI's response to, or comment on, the statement in the OPA letter that

   1. " … some of the concerns raised in Section 4.5 of GSHI's GEA Plan related to unforeseen FIT and microFIT connection could be mitigated.:" (2nd paragraph p2/3);
   2. "It is the OPA's understanding that Hydro One has plans to address these constraints". (Upstream Transmission Constraints, middle of p2/3); and
   3. "… the renewable generation forecast in section 4.3 of GSHI's GEA plan may be somewhat high." (conclusion, p3/3).

Exhibit 3 Forecast

Load Forecasting

3 Staff 13

Reference: Exhibit 3 Tab 1 Schedule 2 page 1 – Load Forecasting

On page 1 of this Exhibit, GSHI states that the load forecast for the regression model was developed using a regression range of 2007 to 2011, which would correspond to a period of 60 months. Please explain why the regression range was restricted to the 5 most recent years of actuals.

3 Staff 14

Reference: Exhibit 3 Tab 1 Schedule 2 Attachment 1 – Load Forecasting

On page 1 of Exhibit 3/Tab 1/Schedule 2/Attachment 1 (the "Elenchus Report"), GSHI states that separate regression models are developed for each of Residential, GS < 50 kW and GS > 50 kW.

Does the dependent variable (kWh retail consumption) for each class correspond with the measured consumption in each calendar month? If not, please provide a detailed description of how the monthly consumption is constructed for each class.

3 Staff 15

Reference: Exhibit 3 Tab 1 Schedule 2 Attachment 1 – Residential Load Forecast Model

A summary analysis of the Residential load forecast regression model is documented on pages 2-4 of the Elenchus Report.

A. The summary statistics state that the regression range is from 2006:02 to 2011:12 (i.e. February 2006 to December 2011). Please confirm the range and reconcile this with the statement in Exhibit 3 Tab 1 Schedule 2 that the regression range was from 2007 to 2011.

B. Why was January 2006 omitted from the regression range?

C. Was a CDM variable tried with this equation? If so please define the variable, its source and method of construction, if applicable. In addition, please provide a summary of the results and describe why the CDM variable was omitted from the proposed equation.

D. The economic variable in the proposed model is the change in employment in the GSHI area, lagged by one month. Why was this variable chosen? What alternative variables were tried, and why were these rejected?

E. The change in full time employment lagged by one month measures a rate of change. There is no variable in the equation that measures market size, in terms of either population or overall economic activity. However, with the large negative magnitude of the intercept and the large and positive coefficient on the number of days in the month, it appears that the latter variable is the main explanatory variable for Residential consumption. What measures of market size were tried, and why were these omitted from the proposed model?

F. On page 4, in Table 2, the Elenchus Report documents a Mean Absolute Percentage Error (“MAPE”) of 1.0% based on the annual results. Please provide the MAPE based on the monthly data used in the regression model.

3 Staff 16

Reference: Exhibit 3 Tab 1 Schedule 2 Attachment 1 – GS < 50 kW Load Forecast Model

A summary analysis of the GS < 50 kW load forecast regression model is documented on pages 4-5 of the Elenchus Report.

A. The summary statistics state that the regression range is from 2006:02 to 2011:12 (i.e. February 2006 to December 2011). Please confirm the range and reconcile this with the statement in Exhibit 3 Tab 1 Schedule 2 that the regression range was from 2007 to 2011.

B. Why was January 2006 omitted from the regression range?

C. Was a CDM variable tried with this equation? If so please define the variable, it source and method of construction if applicable. Please provide a summary of the results and describe why the CDM variable was omitted from the proposed equation.

D. The economic variable in the proposed model is the change in employment in the GSHI area, lagged by one month. Why was this variable chosen? What alternative variables were tried, and why were these rejected?

E. The change in full time employment lagged by one month measures a rate of change. There is no variable in the equation that measures market size, in terms of either population or overall economic activity. What measures of market size were tried, and why were these omitted from the proposed model?

F. On page 5, in Table 4, the Elenchus Report documents a Mean Absolute Percentage Error ("MAPE") of 1.0% based on the annual results. Please provide the MAPE based on the monthly data used in the regression model.

3 Staff 17

Reference: Exhibit 3 Tab 1 Schedule 2 Attachment 1 – GS > 50 kW Load Forecast Model

A summary analysis of the GS > 50 kW load forecast regression model is documented on pages 5-7 of the Elenchus Report.

A. The summary statistics state that the regression range is from 2006:02 to 2011:12 (i.e. February 2006 to December 2011). Please confirm the range and reconcile this with the statement in Exhibit 3 Tab 1 Schedule 2 that the regression range was from 2007 to 2011.

B. Why was January 2006 omitted from the regression range?

C. Was a CDM variable tried with this equation? If so please define the variable, it source and method of construction if applicable. Please provide a summary of the results and describe why the CDM variable was omitted from the proposed equation.

D. The economic variable in the proposed model is the change in employment in the GSHI area, lagged by one month. Why was this variable chosen? The Elenchus Report states the importance of the MUSH ("Municipal, Universities, Schools and Hospitals") as a component of this class. Please explain how employment is a good indicator for the MUSH component of this class? What alternative variables were tried, and why were these rejected?

E. The change in full time employment lagged by one month measures a rate of change. There is no variable in the equation that measures market size, in terms of either population or overall economic activity. What measures of market size were tried, and why were these omitted from the proposed model?

F. On pages 5-6 of the Elenchus Report, it is stated that two binary variables are included to reflect "high" and "low" demand in specific months, and attributes these to characteristics of the GS > 50 kW class in GSHI 's service territory. The "low" binary flag variable is described as being 1 for June and October, and 0 other, while the "high" binary variable is described as being 1 for December and February. A review of the variables in the filed Excel spreadsheet "GSHI_APPL_Load_Forecast_Data_20121109.xls" confirms that GS50HighD binary variable is 1 for December and February and 0 otherwise. However, the GS50LowD binary variable is being defined as 1 for January, May and September, and 0 otherwise.

G. Please confirm the definition of the GS50LowD variable.

H. Given that December and February are defined as being "high" demand months (i.e., demand is materially higher than would otherwise be explained by other regressor variables), why is it reasonable that the intervening month of January, also during the winter heating period, would have materially lower demand than would be explained by other regressor variables)?

I. Please explain how the suitability of these variables was determined through the regression analysis.

J. On page 7, in Table 6, the Elenchus Report documents a Mean Absolute Percentage Error ("MAPE") of 1.3% based on the annual results. Please provide the MAPE based on the monthly data used in the regression model.

3 Staff 18

Reference: Exhibit 3 Tab 1 Schedule 2 Attachment 1 – Load Forecast

Table 8 of the Elenchus Report provides the forecasts of Ontario employment from select major Canadian banks and used to develop the forecasted GSHI employment for the months in 2012 and 2013.

A. Please describe how the forecasted values for 2012 and 2013 for FTE_Sud were developed on a monthly basis using this data.

B. If available, what is the actual GSHI area full time employment by month for 2012?

3 Staff 19

Reference: Exhibit 3 Tab 1 Schedule 2 Attachment 1 and

Exhibit 3 Tab 1 Schedule 3 – Load Forecast and CDM – Unmetered Scattered Load

On page 10 of the Elenchus Report, it is stated:

> *"The City has also been converting traffic lights to LED units for the past several years. Since traffic lights comprise a significant portion of the USL class consumption, USL kWh consumption and average use per connection has been declining. No change in the number of USL connections is expected for 2013, but the usage*

for traffic lights will continue to decline as the LED conversion continues."

On page 2 of Exhibit 3 Tab 1 Schedule 3, it is stated:

"Greater Sudbury does not expect CDM reductions for the unmetered classes (i.e., USL and Sentinel) and they have been excluded from the allocation of the 2014 target."

Please explain why no CDM reductions on either a gross or net basis are expected for the USL class given the ongoing LED conversion of traffic signals.

3 Staff 20

Reference: Exhibit 3 Tab 1 Schedule 3 – Load Forecast and CDM Adjustment

A. Please confirm whether GSHI has taken into account the impacts of 2011 CDM programs in its adjustment for the CDM impact.

B. 2011 CDM programs would have an impact on 2011 consumption and demand, which is part of the regression range for the Residential, GS < 50 kW and GS > 50 kW load forecast models. As such, these programs would have impacted on the 2011 actuals, although the specific impact would depend on the timing of the 2011 programs. Consequently, the 2011 CDM programs would have had some impact on the estimated regression models and hence on the base load forecasts prior to any CDM adjustment. If the 2011 CDM programs were not taken into account in the CDM adjustment, other than as part of the 30% target, please explain the rationale for this approach.

3 Staff 21

Reference: Exhibit 3/Tab 1/Schedule 3/Attachment 1 – Load Forecast and CDM Adjustment

A. Are the data shown in Exhibit 3 Tab 1 Schedule 3 Attachment 1 "net" or "gross". "Gross" refers to the aggregate estimated impact of the OPA program and includes "free riders", "free drivers", spillover, etc., while "net" refers solely to the uptake of OPA-approved programs by electricity consumers solely as a result of the OPA-approved program offering?

B. Please provide an update of Exhibit 3/Tab 1/Schedule 3/Attachment 1 reflecting the final OPA results for GSHI for 2011.

C. Please provide a table showing the "net" and "gross" CDM results by year, and including the estimated persistence over time up to and including the 2013 test year, similar to the following:

Year	OPA 2006-2011 Final CDM Results (Gross) (a)	OPA 2006-2011 Final CDM Results (Net) (b)	Difference (c) = (a) – (b)	% Difference of Net (d) = (c) / (b)
2006				
2007				
2008				
2009				
2010				
2011				
2012				
2012				

3 Staff 21

Reference: Exhibit 3/Tab 1/Schedule 3 – Load Forecast and CDM Adjustment

GSHI has proposed to use a CDM target of 30% as the CDM adjustment for the 2013 load forecast amount to take into account the persistence of 2011 and 2012 CDM programs, and the impact of 2013 CDM programs on 2013 demand (consumption, measured in kWh).

An alternative approach, given that final 2011 CDM results are available for GSHI as reported by the OPA, is to take into account the 2011 results and their persistence, and then to assume an equal increment for each of 2012, 2013, and 2014 so as to achieve GSHI's CDM target of 43.7 MWh.

Based on GSHI's actual 2011 OPA results, please fill out a table similar to the following (taken from Thunder Bay Hydro Electricity Distribution Inc.'s 2013 rates application EB-2012-0167:

Table 3-2.22: Schedule to Achieve 4 Year kWh CDM Target

4 Year 2011 to 2014 kWh target					
47,380,000					
	2011	2012	2013	2014	Total
2011 Programs	4.6%	4.6%	4.6%	4.3%	17.9%
2012 Programs		13.7%	13.7%	13.7%	41.0%
2013 Programs			13.7%	13.7%	27.4%
2014 Programs				13.7%	13.7%
	4.6%	18.2%	31.9%	45.3%	100.0%
kWh					
2011 Programs	2,157,479	2,157,479	2,157,479	2,031,020	8,503,456
2012 Programs		6,479,424	6,479,424	6,479,424	19,438,272
2013 Programs			6,479,424	6,479,424	12,958,848
2014 Programs				6,479,424	6,479,424
	2,157,479	8,636,903	15,116,327	21,469,292	47,380,000

3 Staff 22

Reference: Exhibit 3 Tab 1 Schedule 3 – Load Forecast and CDM Adjustment

Board staff understands that the results as reported by the OPA are “annualized” (i.e. assume that all CDM programs, including the current year’s program, are in effect for the full year, from January 1 to December 31). While the full year effect for persistence of prior year CDM programs would be in place for the full year, CDM programs implemented in a given year would not have the full impact in the first year, due to timing.

The measured “full year” results, as measured by the OPA, will be used for the basis of the LRAMVA amount. However, the “full year” results in the first year of a CDM program, will overstate the actual results unless the program was implemented on January 1 of that year.

In the absence of any other information, a “half-year” rule (i.e. assuming that half of the incremental impact of programs introduced in a year is actually realized in the calendar year of introduction) may be a proxy for the actual impact, ignoring all other factors (i.e. seasonality).

A. Please provide GSHI’s understanding of the results as published by the OPA (i.e. are the full year or do they only reflect the period that a CDM program in in place in its first year).

B. If a “half-year” rule is used to account for the fact that 2013 CDM programs will not have a full year impact on 2013 actual consumption, please provide GSHI’s perspective that the adjustment for the 2012 and

2013 CDM programs on 2013 demand would be estimated as “N” kWh X 1.5 (reflecting full year impact of 2012 CDM and half-year impact of 2013 CDM on 2013) X (1 + g), where N is the number of kWh of incremental CDM savings needed in each of 2012, 2013 and 2014, as determined in the preceding Board staff interrogatory, and g is the “net” to “gross” conversion factor for 2013 as calculated in the response to part C of 3-Staff-20.

C. While the above is to adjust the load forecast which is on an “actual” year basis, the LRAMVA is based on the measured OPA results reported on a full year basis. Please confirm that the LRAMVA threshold would continue to be based on the “full year” CDM results of M (i.e. persistence of 2011 CDM) + N X 2 (i.e. persistence of 2012 and impact of 2013 CDM) results. In this case, “M” would be the persistence of 2011 CDM programs on 2013 consumption as reported on a “net” basis in the final 2011 CDM results for GSHI.

Other Revenue

3 Staff 23

Reference: Appendix 2-F

Board staff is interested in the revenues from the MicroFIT charge.

A. Please provide the forecasted revenues from MicroFIT and in which line item it is forecast and show the calculation.

Exhibit 4 – Operating Costs

Corporate Re-organization and Transfer Pricing Study

4 Staff 24

References: Exhibit 1Exhibit 1 Tab 1 Schedule 11

Exhibit 1 Tab 1, Schedule 11 Attachment 1 Review of Transfer Pricing and Intra-Company Cost Allocations with Respect to Greater Sudbury.

In its *Greater Sudbury Hydro Inc. Decision and Order, December 1, 2009, EB-2008-0230,* the Board recognized that GSHI was addressing some outstanding

Affiliate Relationships Code issues, which might result in corporate reorganization. It also recognized that GSHI had some transfer pricing problems and directed GSHI to prepare an appropriate transfer pricing study reflecting any corporate reorganization through an independent third party, which was to be completed by Dec 31, 2011. GSHI has responded by re-organizing itself and commissioning BDR for the Review of Transfer Pricing and Intra-Company Cost Allocations with Respect to Greater Sudbury Hydro Study (the "Transfer Pricing Study") filed in the Application.

At page 30, BDR states:

> *"At present, fees are charged to Greater Sudbury by Agilis for some, but not all of these services. Management advised BDR that where a fee is paid by Greater Sudbury (for example for the use of fibre strands belonging to Agilis), the fee is at or below the fees charged by Agilis for similar services to its arms-length customers, and is therefore at or below a market based rate.*

B. Please state the services provided by Agilis to GSHI that are fee based, providing both the fee charged to GSAHI and the fee charged to arms lengths customers of Agilis.

C. Please state the services to GSHI by Agilis that are free.

BDR also states on page 30:

> *"Agilis also occupies space (934 square meters out of 3,500 square meters in total) at a Greater Sudbury substation, for which no rent is paid. The space used by Agilis is also used by Greater Sudbury. Use by Agilis compensated through services provided at no charge. Agilis also pays for building improvements as required, and directly through separate metering for electricity consumed."*

D. Please provide a financial analysis supporting the reasonableness of providing free facilities to Agilis. The analysis should include: an estimate of the costs of the free services provided by Agilis based on market rates for the free services Agilis provides; and an estimate, substantiated with market rates, of the fair market value for renting 934 sq. meters of floor space that would at a minimum meet the needs of Agilis.

In discussing the issue of not allocating overhead costs that vary by employees, such as payroll or HR to employees in allocable functions (such as finance), BDR state on page 32:

> *"In order to determine whether such a refinement should be pursued, management computed a reallocation of human resource and risk management costs. The impact was to reduce the allocation to Greater Sudbury by $17,000 or one half of one percent of its portion of allocated costs. Management therefore concluded that this approach did not result in a material change in the allocations, sufficient to justify the additional effort on a continuing basis."*

E. Please show the derivation of the $17,000.

BDR state at page 33 that it considered the allocation of the costs of the CEO based on maintaining time sheets appropriate. Board staff is of the opinion that not all business can be isolated by the time being purely for one company or the other, such as reviewing matters of insurance, post-retirement benefits, and proposed labour settlements

F. Please explain the accounting and allocation of time for the CEO on such common matters.

Regarding Procurement and Stores Services:

G. Please list the components of the costs and the estimated 2013 costs for this category.

H. Please explain why average time spent on procuring, stocking and issuing, and average floor space used are not more appropriate allocation factors.

Regarding Risk Management, BDR states that management considers programmes for employee safety to be higher for employees involved with the electricity system than affiliates. However, BDR commented on the allocation of 50% to GSHI, and the remainder to other affiliates to be simplified, and that BDR recommends that where possible, costs be separated.

I. Of the total costs estimated to be transferred to affiliates for 2013, what percentage of the total costs is for Risk Management?

J. Of the total costs estimated to be transferred to GSHI for 2013, what percentage of the total costs is for Risk Management?

BDR states on page 57, when assessing the allocations of vehicle costs:

> *"BDR recommends that rate of return be included in the cost base for rates charged to affiliates for vehicle usage. BDR also recommends that allocated vehicle usage costs is a reasonable basis for allocation of building costs for the garage."*

K. Please state GSHI's position with respect to BDR's recommendations.

Business Process Improvement and System Integration Project & Customer Survey Report

4-Staff 25

Reference: Exhibit 4 Tab 1 Schedule 1 Attachment 2 Business Process Improvement and System Integration Project

Exhibit 1 Tab 2 Schedule 1 Attachment 1 July 2012 Customer Survey Report

GSHI states that it is looking to improve its business systems and processes through implementing the "Business Process Improvement and System Integration Project" (the "BPI/SI Project") to ensure that the operation is conducted in a manner that provides the greatest value to its Customers and Shareholder.

A. Is GSHI planning to be assisted by a consulting service(s) specializing in in business process improvement/re-engineering?

B. If consultants are planned, what are the annual costs over the life of the project by year?

C. If GSHI is not employing consultants, what assurances can GSHI provide the Board that GSHI will be incorporating the most efficient and effective processes given the rapid change in technology that prevails in the business world?

GSHI commissioned the July 2012 Customer Survey Report (the "Customer Survey"). On page 3 of the Customer Survey it states that a total of 400

completed interviews were conducted. It also states that the margin of error for this 1,000-person survey is +/- 4.9%, 19/20 times.

D. What size was the sample, (400, 1,000)?

E. If the sample was not 1,000, please state the sample size and the level of confidence and reliability of the study.

The sample shows varying degrees of customer satisfaction/opinion as percentages for four performance areas surveyed; (i) Rates vs. Outages; (ii) Conservation; (iii) Customer Service – Importance; and (iv) Capital and Maintenance Spending.

F. Are the results of the Customer Survey to be considered as inputs to the business improvement in the BPI/SI Project?

G. Using the Customer Survey as a starting point for improvement for the four performance areas surveyed, please explain any targets that GSHI has set for improvement to customer satisfaction/opinions.

Staffing and Compensation

4 Staff 26

References: Exhibit 5 tab 4 Schedule 1
Appendix 2-K Employee Costs

GSHI, in footnote 2 of Appendix 2-K, states that a calculation error in determining total compensation was found resulting in benefits being counted in Salary & Wages as well as recorded in Benefits. This resulted in double counting in total compensation. GSHI also states that the total compensation capitalized was also calculated incorrectly in 2009 and has been corrected in Appendix 2-K.

A. Board staff would like clarity on the error for capitalized employee costs. Was the error totally from the double counting of benefits? If not please explain the error.

Board staff has produced the following table from the data provided in Appendix 2-K. Line 4 represents the actual excess revenue collected in rates for each year from 2009 to 2012. Line 5 represents the excess built into rate base, from which an over collection of return occurred. Board staff was unable to adjust for the

variances in levels of employees, which is considered a controllable costs that the utility manages.

Impact of 2009 Comensation Calculation Errors and Customer Count Variance

		Col. 1	*Col. 2*	*Col. 3*	*Col. 4*	*Col. 5*	*Col. 6*	*Col. 7*
		Last Rebasing Year (2009 Board-Approved)	**LRY Board Approved Adjusted2**	**Last Rebasing Year (2009 Actuals)**	**2010 Actuals**	**2011 Actuals**	**2012 Bridge Year**	**Total Excess over BAP**
1	Total Compensation	11,252,993	9,277,161	9,484,255	9,471,925	10,083,730	9,821,486	
2	Total Compensation Capitalized	3,291,810	1,922,860	1,773,437	2,061,401	2,212,462	2,933,496	
3	Total Compensation Charged to OM&A	7,961,183	7,354,301	7,710,818	7,410,524	7,871,268	6,887,991	
4	BAP OM&A as Excess over Actual			250,365	550,659	89,915	1,073,192	1,964,131
5	BAP Rate Base as Excess over Actual			1,518,373	1,230,409	1,079,348	358,314	4,186,445

B. Please confirm that the table is correct.

C. Please normalize the 2009 – 2012 total actual compensation for the actual approved FTE's in the 2009 test year, and recalculate the table on a FTE normalized bases.

D. Based on C. please calculate the tax adjusted earnings on the excess of FTE benefits capitalized as built into the 2009 distribution rates when compared to that in the actual FTE benefits. The half year rule will apply.

Normalized OM&A Expenses

4 Staff 27

Reference: Exhibit 4 Tab 1 Schedule 1

Exhibit 4 Tab 1 Schedule 1 Attachment 1 Normalized OM&A Expenses 2009-2013

Over the past 4 years, and in the test year, GSHI incurred a number of expense items that were not in the costs of service underpinning its 2009 distribution rates. GSHI on Attachment 1 has adjusted for these items to better reflect the trends on the items included in current rates.

A. Please itemize the components and their costs that comprise the lines: Monthly Electric Billing (No Water); and Smart Meter Expense.

GSHI states that they are losing economies of scale due to the loss of water billing service that is provided to the City of Sudbury. GSHI also state, however, that the loss is offset due to going to monthly billing, and management's efforts to reduce overtime.

B. Please provide an impact of the increase in expenses arising from monthly billings and actions to reduce overtime, offset by an estimate of cost reductions due to the economies of scale if water billing continued in 2013. Please state any assumptions that might need to be made.

Depreciation

4 Staff 28

References: Exhibit 4 Tab 1 Schedule 1
Exhibit 4 Tab 1 Schedule 1Attachment 1 Asset Depreciation Study based on the Kinectrics Report to the OEB
Appendix 2-C series for CGAAP

GSHI reviewed its Typical Useful Life ("TUL") for each asset group and has filed its report Asset Depreciation Study based on the Kinectrics Report to the OEB (the "Depreciation Study"). This study assessed the current assets and compared them to the *Asset Depreciation Study for the Ontario Energy Board, July 8, 2010* (the "Kinectrics Report") in order to develop TULs specific to GSHI's assets. Regarding the Depreciation Study:

A. Board staff would like the following acronyms defined:

4. HTE; and
5. MS

B. For Subtransmission and Primary O/H Conductors and Devices GSHI states:

> *"GSHI's experience is that conductor is changed when the poles are replaced. This normally occurs because it is impractical or unsafe to move the live conductor from the existing line to the*

new line. However to be compliant with the Kinetrics report the initial IFRS life will be deemed to be 50 years."

Board staff also notes that for Secondary O/H Conductors and Devices GSHI states:

"GSHI's experience is that conductor is changed when the poles are replaced. This normally occurs because it is impractical or unsafe to move the live conductor from the existing line to the new line. On this basis GSHI deems the normal life of conductor to be 40 years."

1. Please explain the change in philosophy for Secondary O/H Conductors as compared to that for subtransmission and primary matching of TOUs for poles and conductors.
2. Board staff accepts the logic that the conductors are replaced when poles are replaced in a replacement programme. Please explain the accounting treatment for retiring the assets after 40 years, while the asset is being depreciated over 50 years that would be used to recover any stranded depreciation.

Board staff is also concerned about miss-matches in TULs for O/H Conductor Devices and Poles.

3. Are these devices retired when a pole line is replaced?

C. For Underground Conduits and Underground Conductors and Devices for both Subtransmission and Primary use, conduits are estimated to have a 50 year TUL, and Conductors and Devices 40 years. Please explain if both conduits and the conductors and devices associated with the conduits are retired at the same time, as in overhead lines.

D. For Substation Equipment, GSHI states that tap changers and metal clad switch gear will last the additional 5 years beyond the report's recommended TUL of 40 years.

1. Are tap changers salvaged and re-used when a substation is replaced?
2. Are tap changers separately grouped and depreciated?
3. If not, how is GSHI applying the longer TUL?

E. For Overhead Transformers, GSHI states for its own local condition that this asset class shall have a TUL of 45 years. However, GSHI also states that in order to be compliant with the Kinectrics report the initial IFRS life will be deemed to be 50 years. Please explain the accounting treatment for retiring the assets after 45 years, while the asset is being depreciated over 50 years.

F. Please reconcile the asset types described and analysed on the Depreciation report with Appendix 2-CG.

PILs

4 Staff 29

Reference: Exhibit 4, Tab 8, Schedule 1, Attachment 4 – Income Tax/ PILs Workform for 2013 Filers

Filing Requirements For Electricity Transmission and Distribution Applications, EB-2006-0170, June 28, 2012, pages 33-34

PILs Combined Proceeding regarding Account 1562, Deferred Payments in Lieu of Taxes, Settlement Agreement, EB-2008-0381, Issue #4

As per Exhibit 4 Tab 8 Schedule 1 Attachment 4 – Income Tax/ PILs Workform for 2013 Filers, the calculation of the Taxable Income for the Test Year includes a deduction of $472,936 for a "regulatory asset variance".

Pages 33 and 34 of the Filing Requirements For Electricity Transmission and Distribution Applications, EB-2006-0170, June 28, 2012, state the following:

> *"Regulatory assets (and regulatory liabilities) should generally be excluded from PILs calculations both when they were created, and when they were collected, regardless of the actual tax treatment accorded those amounts. "*

In addition, as per EB-2008-0381, PILs Combined Proceeding regarding Account 1562, Deferred Payments in Lieu of Taxes, the Board accepted the Settlement

Agreement for Issue #4. Complete Settlement for Issue #4 was reached as follows:

> *"The Parties agree that regulatory assets should be excluded from PILs calculations both when they are created, and when they are collected, regardless of the actual tax treatment accorded those amounts."*

The $472,936 deduction to the 2013 taxable income represents regulatory assets and regulatory liabilities. Regulatory assets and regulatory liabilities should be excluded from PILs calculations. Please update the PILs evidence and other related evidence to exclude this amount from all calculations of regulatory taxable income and all PILs calculations.

Exhibit 5 – Cost of Capital

5 Staff 30

Reference: Exhibit 5 Tab 1 Schedule 1
Appendix 2- OB; and
Appendix 2 OA

GSHI states that it expects to borrow and additional $4,000,000 required for operating funds in the 2013 Test Year to offset capital expenditures over the next four years. It has deemed the rate to be 4.41%.

A. Has GSHI negotiated an actual rate?

B. If GSHI has not set a rate with a lender, what is GSHI's expectations that he rate would be?

C. Please update Appendix 2 OB and Appendix 2 OA for the expected rate.

Exhibit 7 – Cost Allocation

Meter Reading

7 Staff 31

References: Worksheets I3 'Trial Balance Data' and E2 'Allocators'

In GSHI's previous rebasing, Account 5310 Meter Reading Expense was $205,128, and was allocated approximately 75% to Residential, 15% to GS<50 kW and 10% to GS>50 kW. In the current cost allocation model, Account 5310 is $29,200 and is allocated entirely to GS>50 kW class.

A. Which account is now used to record the expense of getting data from meters of Residential and GS<50 kW customers, and how is that account allocated to classes?

Primary and Secondary Distribution Assets

7 Staff 32

References: Worksheets I4 'Break Out Assets' and I6.2 'Customer Data'

A. How does GSHI define primary and secondary assets for the purpose of breaking out assets in these two categories (worksheet I4, column D)

B. With respect to underground conduit and conductor, the information provided shows that 25% of conduit is secondary but 0% of conductor is secondary. Is there more up-to-date information that could be provided on this apparent inconsistency?

C. Please confirm the information in worksheet I6.2 that approximately 1400 customers in the GS < 50 kW class are served from distribution lines defined as primary.

Exhibit 8 Rate Design

Street Lighting Rate Design

8 Staff 33

Reference Exhibit 8 2 1 Tables 5 - 10

In Table 5, column C, the proposed revenue from the fixed charge to Street Lighting is $443,562. In Table 7, column B, the proposed revenue from the fixed charge is $603,414.

A. Using the forecast number of connections at 9,578 and applying the formula in Table 5, Board staff derived a monthly charge of $3.86 in place of the proposed amount $5.25. Please confirm that this calculation is correct, or provide an explanation of how the proposed amount of $5.25 was derived in Table 5.

B. If the amount $5.25 is not confirmed in part a, please provide an explanation for the proposed Street Lighting charge in Table 6 and the corresponding revenue in column B of Table 7.

C. Please confirm that the rows for Sentinel Lighting and Street Lighting have been interchanged in Tables 8, 9 and 10.

D. Please make such changes as may be necessary to the proposed tariff and impact calculations in Exhibit 8 – 4 – 2 – Attachment 2.

Retail Transmission Service Rates

8 Staff 34

Reference: Exhibit 8 3 1

A. Please update Table 1 for the Uniform Transmission Rates that effective January 1, 2013, per Board Order EB-2012-0031

B. Please update Table 2 for the Hydro One Networks Retail Transmission Rates effective January 1, 2013, per Board Rate Order EB-2012-0136, p. 21, including any rate riders that may apply to GSHI during 2013.

C. Please provide an updated version of the RTSR model (Exhibit 8 – 3 -1 - Attachment 1) and of Table 4 (GSHI's proposed Retail Transmission Service Rates).

Total Loss Factor

8 Staff 35

Reference: Exhibit 8 3 6 Attachment 1

A. Does the Supply Facilities Loss Factor reflect losses in the host distributors LV facilities, or only in the transmission providers transformer stations?

B. Noting that there appears to be a downward trend in GSHI's distribution loss factor, and that it decreased from 1.048 in 2010 to 1.047 in 2011, please explain why GSHI is not proposing a total loss factor in the test year that would be lower than the 5-year average?

Bill Impacts

Reference: Exhibit 8 4 2 Attachment 2

Please provide a Bill Impact Calculation for Sentinel Lighting.

Exhibit 9 – Deferral and Variance Accounts

Depreciation and Capitalization Policies

9 Staff 36

Reference: Exhibit 2 Table 2 Schedule 3 Depreciation Policy, Page **1**

In its application, GSHI stated that,

> *"International Accounting Standard 16 'Property, Plant and Equipment' ("IAS 16") requires each part of an item of PP&E with a cost that is significant in relation to the total cost of the item to be depreciated separately. It also requires that entities perform a review of its useful lives, depreciation methods, and residual values on an annual basis. "*

GSHI has, through internal analysis, determined the new components of its assets and reviewed useful lives. Both were accomplished by reference to the Depreciation Study for Use by Electricity Distributors (EB-2010-0178) (the "Kinectrics Report") and our Asset Assessment Report.

Please confirm if GSHI has applied IFRS IAS 16 for the calculation of depreciation expenses related to the 2013 test year.

9 Staff 37

Reference: Exhibit 2 Table 2 Schedule 4 Page 2
Exhibit 4, Table 7, Schedule 1, Attachment 4, Appendix 2-CG (2013 Depreciation and Amortization Expense) and
Appendix 2 (2013 Fixed Asset Continuity Schedule-CGAAP)

In its application, GSHI stated that,

For ratemaking purposes in the 2013 test year, the net unamortized balance of Account 2440 will be included with property, plant and equipment and treated as an offset to rate base. The amortization of Account 2440 will be included as an offset to depreciation expense as shown in OEB Appendix 2-CG 'Depreciation and Amortization Expense' in Exhibit 4, Tab 7, Schedule 1, Attachment 4.

Board staff notes that the net unamortized balance of Account 2440 was not included in Appendix 2-B (2013 Fixed Asset Continuity Schedule-CGAAP) and amortization of Account 2440 has not been included as an offset to depreciation expense in Appendix Depreciation and Amortization Expense.

Please confirm that GSHI is referring to Account 1995, Contributions and Grants rather than Account 2440, Deferred Revenues. Otherwise, please make the necessary adjustment and re-file Appendix 2-CG with the Board.

Deferral/Variance Account

Continuity Workform

9 Staff 38

Reference: Exhibit 9 Tab 1 Schedule 5 Attachment 2 Deferral/Variance Account Workform for 2013 Filers, Continuity Schedule for Deferral/Variance Accounts, Page 44

As per Exhibit 9, Tab 1, Schedule 5, Attachment 2 – Deferral/Variance Account Workform for 2013 Filers, the Continuity Schedule for Deferral/Variance Accounts includes entries to account 1595 for Board approved disposition in 2009 ($2,863,639 principal in Column AU and -$272,378 carrying charges in Column AZ) but does not include the off-setting entries.

A. Please explain why GSHI has not completed the off-setting entries to Account 1595 for accounts 1508, 1525, 1550, 1580, 1584, 1586, 1588 and 1590 in the continuity schedule in both Column AU and Column AZ. If off-setting entries are completed, please indicate where they are reflected.

B. Please update the continuity schedule evidence and other related evidence where appropriate.

Misalignment of Accounts

9 Staff 39

Reference: Exhibit 9 Tab 1 Schedule 2 Page 4 of 8

In its application, GSHI stated,

Group 1 Accounts: Variance between RRR vs. 2011 Audited Balances

"GSHi confirmed that the balances proposed for disposition before forecasted interest match the 2011 audited financial statements with the exception of accounts 1590 and 1595. When entering the general ledger balances for accounts 1590 and 1595 in the 2.1.7 RRR filing, there was a misalignment of accounts which directly offset one another as noted in the "Variance vs

2011 balances" column in the Deferral/Variance Account Workform."

Please explain why there was a misalignment of accounts.

Rider Calculation

9 Staff 40

Reference: Exhibit 9 Tab 1 Schedule 5 Attachment 2, Deferral/Variance Account Workform for 2013 Filers, Page 56

A. Please explain what the allocators are for Group 2 accounts.

B. Please explain how the rates were determined using the allocators for Group 2 accounts.

Account 1574: Deferred Rate Impact Amounts

9 Staff 41

Reference: Exhibit 9 Tab 1 Schedule 2 Page 6 of 8

EB-2008-0230 2009 GSHI Cost of Service Decision

Ref: Exhibit 1, Tab 1, Schedule 11, Attachment 1, Review of Transfer Pricing Methodologies and Intra-Company Cost Allocations with Respect to GSHI

The EB-2008-0230 decision elaborated on the matter of the allocation of the costs of the billing system to the City for water billing. This decision stated that "at issue is that approximately 21% of the billing costs are paid by the City of Sudbury for water billing."

The Board stated that "to the extent that the allocation study shows that the current allocation of approximately 21% is incorrect, this variance account will allow the Board to order a clearance of the portion of this variance account in favour of ratepayers to a maximum of 50% of the total billing costs. The allocation study may well show that an allocation of less than 50% is appropriate: in that case the variance account would be cleared to ratepayers only in proportion to the amount supported by the allocation study."

The Review of Transfer Pricing Methodologies and Intra-Company Cost Allocations with Respect to GSHI (the "Transfer Pricing Study"), along with resulting calculations for a more appropriate cost sharing methodology, was submitted as part of the Cost of Service application. Based on the revised methodology using 2012 budget numbers for the evaluation, a reasonable cost sharing resulted in 67.54% of the costs for Billing and Collection to be borne by the electricity component and 33.91% to be borne by the water component."

GSHI noted that the 2009 total budget costs were revised to $3,398,094 and the difference between the required costs to be borne by the City and the actual amounts passed on resulted in an annual shortfall of $355,072.

The Annual shortfall of ($355,072) is calculated as follows;

$ 1,148,799	the annual amount allocated to water
Less: $793,727	the annual amount received from the City
$355,072	the annual shortfall

$(355,072)	the annual shortfall
Divided by: 12	12 months
$(29,589)	accrued principal balance (per month over 46 months, from July 1, 2009 to April 30, 2013.)

($29,589)	accrued principal balance
Multiplied by: 46	46 months (from July 1, 2009 to April 30, 2013.)
($1,361,110)	principal balance
Add: $20,000	50% transfer pricing study
Add: $(36,154)	carrying charges
$(1,377,264)	the proposed amount to be returned to customers in Account 1574

A. Please explain the derivation of the 67.54% and compare it to the 61.4% found in Table 3.1, page 40 of the transfer pricing study.

B. Has GSHI's external auditors reviewed the revised balance of ($1,377,264) to be refunded to the customers?

   1. Does the external auditor agree with the revised amount of operating the billing system of $3,388,094 and revised allocations of 67% to electricity and 34% to water? Please explain.
   2. Does the external auditor agree with the revised monthly principal accrual amount of ($29,589)? Please explain.
   3. Please provide any communication/documentation between the external auditor and GSHI on this matter.

C. The following assumptions were made in the Analysis of Shared Service Costs

   Assumptions - 60/40 split on costs to the City based on analysis of calls

   Assumptions - 50/50 split on costs to the City for billing based on meter numbers

   Assumptions - 75/25 split on costs to the City for business analyst and supervisor

   1. Please explain why the splits are assumed constant for the period of 2009 to 2012.
   2. Does GSHI envision different splits for 2013 and beyond due to any changes such as full deployment of the smart meter program in 2012 or other changes in the assumptions to calculate the splits? If so, what are the drivers that can change or affect the allocators?

D. Please confirm GSHI will not record any amounts in this account after the Board cleared the account.

IFRS Transition Costs

9 Staff 42

Reference: Exhibit 9. Tab 2, Schedule 1, Page 1 of 2

In its application, GSHI stated,

"GSHi has not completed its IFRS transition period. GSHi will be taking the additional IFRS deferral granted on September 2012 by the Accounting Standards Board and therefore will be adopting IFRS on 11 January 1, 2014."

A. Please explain why the Board should approve recovery of GSHI's IFRS transition costs in this proceeding when GSHI's adoption of IFRS will occur in 2014.

B. Please state which elements of the project remain outstanding as at January 1, 2013 and indicate what percentage of the IFRS transition project has been completed as at December 31, 2012.

C. GSHI has stated that the principal balance in Account 1508 representing IFRS transition costs is $125,919 and includes a forecast to December 31, 2012. Please update the principal balance with associated carrying charges, if necessary, with actual costs incurred to December 31, 2012 and also update any other related evidence where appropriate.

Tax Savings

9 Staff 43

Reference: Exhibit 9, Tab 1, Schedule 4, Page 3 of 5

Filing Requirements for Electricity Transmission and Distribution Applications last revised on June 28, 2012

Accounting Procedures Handbook, FAQ December 2010

Regarding the APH FAQ December 2010, GSHI stated,

"The answer to Question 4 indicates that any savings on capital purchases subsequent to July 1, 2010 will be reflected in the cost when these assets are included in rate base at the next cost of service application. GSHi agrees that any savings in cost due to the elimination of PST will automatically flow to ratepayers at that time and there are no incremental savings to be recorded in Account 1592."

The answer to Question indicates that, for any period before the rebasing that occurs after July 1, 2010, the PST savings would be included in the annual depreciation of the capital items. GSHi disagrees with this assertion.

A. As per Section 2.12.2 of Filling Requirements, please provide the analysis following the APH FAQ Q4, i.e. using 2009 capital additions as a proxy to calculate the PST savings on depreciation related to capital additions from July 1, 2010 to April 30, 2013.

B. After completing this analysis, please provide an updated balance in Account 1592 PILs and Tax Variance for 2006 and Subsequent Years - Sub-Account HST/OVAT Input Tax Credits (ITCs) and also update any other related evidence where appropriate.

Smart Meters

9 Staff 44

Reference: Exhibit 9 Tab 4 Application for Final Disposal of Smart Meters

Smart Meter Model for Electricity Distributors, Version 3.0

Unit Costs

GSHI has provided unit costs in Table 2.1 for the period ending December 31, 2012.

A. Does GSHI have final costs for the smart meter undertaking? Please update if final costs are available.

B. If there are costs associated with the GS>50 installations, please separate the costs from Table 2.1.

Meter Bases

GSHI state that the labour associated with the repair of this customer owned equipment was capitalized to account 1555 and the parts and material were expensed to account 1556.

C. Were the material costs accounted separately in a sub account of 1556?

D. Please provide the total costs for replaced meter bases and the number replaced.

Security Audit

GSHI stated that in November 2009, the Information and Privacy Commissioner identified areas of concern to be addressed in the area of smart meter and smart grid devices. GSHI state that they collaborated with other utilities to investigate the security issues.

E. GSHI has known about security problems since 2009. What is the schedule to correct the security risk problems?

F. Why has it taken so long to address the security problems?

G. What is the estimated cost, and in what year will this expense be made?

Tab 3 Cost of Service Parameters

GSHI has provided the cost of service parameters in Tab 3 of the Smart Meter Model for Electricity Distributors, Version 3.0 (the SM Model"). Board staff would like confirmation that the factors in Tab 3 are those underpinning the distribution rates:

H. Please review and confirm or correct the short term debt rate for 2009.

I. Please review and confirm or correct the long term debt rate for 2010 – 2012.

J. Please review and confirm or correct that the tax rates are those approved by the Board.

K. Please review and confirm or correct the CCA rates for computer equipment and software.

Tab 8 Funding Adder revenues

GSHI has recorded revenues to August 2012, while the funding adder of $1.94 ended April 30, 2012 on Tab 8 of the SM Model.

L. Please explain the apparent disconnect between the cessation of billing the smart meter funding adder and the continued revenues. If updating is required, please update the SM Model.

Tab 9 OPEX Interest Monthly

GSHI stopped recording OM&A expenses in October 2012 on Tab 9 of the SM Model.

M. Please explain why GSHI has not claimed for a full year of OM&A expenses? If updating is required, please update the SM Model.

LRAM

LRAM for pre-2011 CDM Approved Programs:

9 Staff 45

Reference: Exhibit 9, Tab 3, Schedule 1, Pages 1-2
Exhibit 9, Tab 3, Schedule 1, Attachment 2
Guidelines for Electricity Distributor Conservation and Demand Management (EB-2012-0003), Section 13: LRAM

GSHI has requested recovery of an LRAM amount for lost revenues in 2011 that come from two sets of CDM programs; persisting lost revenues from 2010 OPA CDM programs in 2011 ($24,960); and, persisting lost revenues in 2011 from incremental CDM programs that were approved in GSHI's *Custom Programs Conservation and Demand Management Plan For the Period 2008 to 2010 EB-2008-0147* but not delivered until 2010 ($7,533). GSHI has also requested approval for lost revenues in 2011 from its incremental CDM programs that were approved in 2008 but not delivered until 2011 ($14,390). The total LRAM amount GSHI has requested is $46,903, not including carrying charges. GSHI has requested recovery over a four-year period.

GSHI has also included a request for approval of $2,516 in total carrying charges associated with the entirety of its lost revenue request, inclusive of both LRAM amounts and LRAMVA amounts.

Board staff notes that section 13.6 of the *Guidelines for Electricity Distributor Conservation and Demand Management EB-2012*-0003 (the "2012 CDM Guidelines") states that it is the Board's expectation that LRAM for pre-2011 CDM activities would be completed with the 2012 rate applications, outside of persisting historical CDM impacts realized after 2010, for those distributors whose load forecast has not been updated as part of a cost of service application.

A. Please confirm the scope of GSHI's LRAM request is for persisting lost revenues from 2010 OPA CDM programs in 2011, persisting lost revenues in 2011 from incremental CDM programs that were approved in EB-2008-0147 but not delivered until 2010, and lost revenues in 2011 from incremental CDM programs approved in EB-2008-0147 but not delivered until 2011. If this is not accurate, please provide a detailed explanation of the savings and lost revenues that make up the LRAM request.

B. If the answer to (a) is yes, please provide supporting evidence for the persisting lost revenues in 2012 from 2010 OPA CDM programs and 2010 and 2011 incrementally funded CDM programs. Please provide the supporting evidence in the same manner as has been provided in the Elenchus LRAM/LRAMVA report for the persisting lost revenues of 2010 OPA CDM programs in 2011.

C. If the answer to (a) is no, please confirm that GSHI permanently foregoes the opportunity to recover the persisting lost revenues from 2010 OPA and 2010 and 2011 incrementally funded CDM programs in 2012.

D. Please provide a detailed status of GSHI's incremental CDM programs approved in EB-2008-0147.

E. Please provide with explanatory details the full evaluation GSHI conducted on its incremental CDM programs approved in EB-2008-0147 for savings that took place in 2010 and 2011. Please include both the gross and net savings and lost revenues calculations for all of GSHI's incremental CDM programs approved in EB-2008-0147.

F. Please provide separate carrying charges for LRAM and LRAMVA amounts. LRAM amounts should only include lost revenues from programs approved prior to 2011 (i.e. 2010 OPA Programs, GSHI Custom Programs approved in EB-2008-0147). LRAMVA amounts should only include lost revenues from programs that contribute towards GSHI's CDM targets (i.e. 2011 OPA programs).

G. Please provide separate rate riders specific to GSHI's requested LRAM amount for persisting lost revenues from 2010 OPA CDM programs and

2010 and 2011 incrementally funded CDM programs in 2011 (and 2012 if GSHI updates its application based on the interrogatories above). Do not include any LRAMVA amounts associated with 2011 OPA CDM programs in the LRAM rate riders.

LRAMVA for 2011 CDM Programs that contribute toward GSHI's CDM Targets

9 Staff 46

Reference: Guidelines for Electricity Distributor Conservation and Demand Management (EB-2012-0003), Section 13: LRAM

Chapter 2 of the Filing Requirements for Electricity Transmission and Distribution Applications, Last Revised on June 28, 2012, Section 2.7.10: CDM Costs

Exhibit 9, Tab 3, Schedule 1, Attachment 2

GSHI is requesting recovery of an LRAMVA amount for 2011 lost revenues from 2011 OPA CDM programs in the total amount of $44,498, not including carrying charges. GSHI has requested recovery over a four-year period.

GSHI is also requesting recovery of $2,516 in carrying charges associated with its total lost revenue claim, inclusive of both LRAM amounts ($46,903) and LRAMVA amounts ($44,498) up to and including April 2013.

A. Please provide separate carrying charges for LRAM and LRAMVA amounts. LRAM amounts should only include lost revenues from programs approved prior to 2011 (i.e. 2010 OPA Programs, GSHI Custom Programs approved in EB-2008-0147). LRAMVA amounts should only include lost revenues from programs that contribute towards GSHI's CDM targets (i.e. 2011 OPA programs). Please break these out by class.

B. Please provide separate rate riders for GSHI's LRAMVA amount associated with only 2011 OPA CDM programs. Do not include any LRAM amounts for persisting 2010 OPA CDM programs or 2010/2011 incrementally funded CDM programs in the LRAMVA rate riders. Please break these out by class.