February 1, 2010

Ms. Kirstin Walli
Board Secretary
Ontario Energy Board
P.O. Box 2319
2300 Yonge Street, 27th Floor
Toronto, ON M4P 1E4

Re: Chatham-Kent Hydro Inc. 2010 Cost of Service Application EB-2009-0261

Dear Ms. Walli:

Please find enclosed the Chatham-Kent Hydro Inc. responses to the Board Staff Technical Conference Interrogatories and Undertakings from the Technical Conference except for the Undertaking TCU 2 and 3 which will be provided on February 2, 2010.

These documents have been filed through RESS and the excel spreadsheet for Question 77 named "OEB_77_NAC.xlsm" which has been sent by email to the Board Secretary and Intervenors.

If you have further questions please do not hesitate to call.

Yours truly,

Cheryl Decaire
Co-ordinator of Regulatory and Rates
(519) 352-6300 ext 405
Email: cheryldecaire@ckenergy.com

CC: Dave Kenney, President of Chatham Kent Hydro
Chris Cowell, Chief Financial and Regulatory Officer

Chatham-Kent Hydro Inc.

EB-2009-0261

Responses to Second Round Board Staff Interrogatories

Question #70

Ref: Board staff IR # 5 – Capitalization and Work-in-Progress

In its response to Board staff interrogatory 5, C-K Hydro states that: "The capital programs are broken into small projects such that all amounts are put in service and are "used and useful" at the end of the fiscal year."

Please provide further explanation of how C-K Hydro applies this approach with respect to the following types of projects:

a) Construction of a major new distribution station or refurbishment/replacement of an existing distribution station, if the work extends beyond the fiscal year-end.

b) Acquisition of a major vehicle like a bucket truck or cable layer, where more than 12 months time may occur between ordering of the vehicle, receipt and customized installation of the specialized equipment.

c) Building out its network to service extensions to its service area for new services (e.g. new residential or industrial/commercial developments) that may not be built until a subsequent year.

Answer:

a) - c)

Please refer to Technical Conference Transcript of January 26, 2010 reference:
Page 65, Line 11 through to Page 66, Line 14

Question #71

Ref: Board staff IR # 9 and Energy Probe IR # 27 – Capital Contributions

a) Please provide 2009 actual capital contributions.

b) In light of 2009 capital contributions from January to November being around $330,000, and not much different from the annual average from 2004 to 2008, please indicate whether the 2010 estimate of $275,000 is still reasonable. If not, please provide an update. Please explain your response.

Answer:

a) Actual 2009 capital contributions are estimated to be $280,764. Rebates for subdivision developers were recorded in December, therefore reducing the amount previously reported at November 2009.

b) Yes the 2010 estimate is still reasonable because it is consistent with the 2009 capital contributions provided above and the average capital contributions over the last 6 years once one-time municipal projects are removed. Please see the table below:

Year	Actual Contributed Capital	Exclude One-time Municipal Projects	Adjusted Contributed Capital
2004	$557,404	$148,970	$408,434
2005	$118,720		$118,720
2006	$452,865		$452,865
2007	$213,142		$213,142
2008	$334,906	$178,172	$156,734
2009	$280,764		$280,764
Average for the six year period 2004 to 2009			$271,777
		Estimate used for 2010	$275,000
		Difference	$3,223

Question #72

Ref: Exhibit 3/Tab 2/Schedule 1/pg. 11
Exhibit 3/Tab 2/Schedule 1/Appendix A
Board staff IR # 13
Board staff IR #15 – Heating Degree Days and Cooling Degree Days

C-K Hydro did not answer the question posed in the interrogatory # 13. For its forecast, C-K Hydro indicates that it forecasted results through to the end of 2010 using a 12-month average for the prior year. Exhibit 2/Tab 3/Schedule 1/Appendix A indicates that the forecasts were developed on a monthly basis.

a) Please explain why and how you use the 12-month average to accurately estimate the HDD or CDD for any specific month (e.g., February) where the monthly average is expected to differ from the annual average because of seasonality.

b) Please explain exactly how the HDD and CDD monthly forecasts shown in Exhibit 3/Tab 2/Schedule 1/Appendix A for 2009 and 2010 were developed.

c) If the forecasts were developed as the average of prior actuals from 1998 to 2008, as described in the response to Board staff IR #15, doesn't this mean that the HDD and CDD are 11-year averages?

Answer:

a) The HDD and CDD for February 2009, for example, are calculated by taking the average of the values for the month of February in the 10 prior years. This process is repeated for each month using the averages of values from prior years for that particular month. February HDD and CDD for 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, and 2008 are averaged and used as the assumed HDD and CDD for February 2009 and so on. The calculated values for each month therefore reflect the typical values one would find in that month based on historical trends.

b) The 2009 heating and cooling degree day averages are based on 1999 to 2008 (10 year average) not 2002-2008, as was previously stated. The answer for Board staff question #15 intended to state 10 years, January 1999 to December 2008. Please note that this does not apply to January 2009 data as the actual cooling and heating degree day data was used as it was known at the time of the original calculation.

   The 2010 heating and cooling degree day averages are based on the prior 10 years averaged for the months January 2000 to December 2009 (February through December 2009 inputs were based on the forecast for 2009).

c) The prior years' data used was from January 1999 to December 2008. This would be 10 years of data.

Question #73

Ref: Board staff IR # 16 – Weather Normalization

Board staff interrogatory # 16 c) requested the load forecast excluding the manual adjustments for CDM and economic activity. The table shown in the response adjusts for both Weather Normalization and Economic Activity. Please provide the load forecast with weather normalization but excluding all manual adjustments as originally requested.

Answer:

CK Hydro's response to Board staff IR #16 had removed the "weather and economic sensitivity" consumption from the gross consumption. The weather and economic sensitivity does not include any "manual" adjustments that are being proposed in the Application.

The weather and economic activity is described in Exhibit 3, Tab 2, Schedule 1, Page 22, Line 5 to Page 23, Line 16. The reasons why CK Hydro has proposed the adjustment is more than just weather because if it was just weather and the majority of the difference was to be allocated to the residential class the resulting test year consumption would be unreasonably too low. Therefore, CK Hydro has proposed that the difference is weather and economic sensitivity and was allocated to all rate classes.

Since the weather and economic sensitivity does not include any manual adjustment CK Hydro's response to Board staff IR #16 is not required to be updated.

Question #74

Ref: Board Staff IR #12
Exhibit 3/Tab 2/ Schedule 1, p. 9-11 – System Load Regression Model

CK Hydro stated that percent variances of forecasted values to actual kWh revealed a cyclical variation in the error "hinting at a predictable unknown dependency". Furthermore, CK Hydro stated that an iterative process was used to develop a unitless value in the Seasonal Weighting Factor and the Industrial Weighting Factor.

a) Please confirm that the Seasonal Weighting Factor as well as the Industrial Production Weighting Factor are manual inputs to the regression analysis as distinct from outputs.

b) Please explain the process whereby the applicant developed the inputs for each for the weighting factors.

c) Please explain the applicant rationale for using a Seasonal Weighting Factor input of -0.75 for each April and 0.75 for each September.

d) Also, please explain the rationale for using an Industrial Production Weighting Factor input of 4 for each October and 3 for each May.

e) In the regression equation the co-efficient for the Seasonal Weighting Factor is 3,995,126.88, the co-efficient for the Industrial Production Weighting Factor is 754,856.91 and the co-efficient for the intercept variable is -816,023,640.11. Please provide reasons why these three variables should not form a single *unitless* value

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Answer:

a) These two weighting factors are manual inputs to the regression analysis. The values were chosen to optimize the ability of the resultant regression model to fit historical data. The better the fit to historical data, the better the model will be at predicting future values.

b) The weighting factors were developed through a lengthy iterative process, starting with an initial value of 0. The regression model was re-calculated repetitively using slightly higher or lower values for each weighting factor. At the end of each calculation the R^2 was noted and a determination was made on whether the R^2 (the goodness of fit) improved or not, due to the modifications. The process was repeated until R^2 peaked, at which point the model was assumed to be optimized.

c) The Seasonal Weighting Factor is assumed to be related to agricultural production and the corresponding processing industry. Each industry operates on schedules often unknown to LDC's and can only be surmised by their impact on kWh purchases. In this case, a lower Seasonal Weighting Factor for April, after the winter season, and a corresponding higher value in September, after a summer season, indicates that the original assumption about what the Seasonal

Weighting Factor represents is reasonable. The actual value of the weighting factor is immaterial and is accounted for in its corresponding coefficient.

d) These values were chosen based on an iterative methodology. The reason for each month having the value it has is determined in large measure by its subsequent impact on an improved R^2 value. High values in May and October would correspond with Spring and Fall industrial production typical in automotive industries, which tend to be higher in these months.

e) The intercept is not a coefficient in the sense of the other values listed as coefficients. The Intercept is an overall global adjustment to all values calculated using the regression model. The intercept is a natural outcome of the regression process. It factors into the resultant regression formula as follows:

kWh = Intercept + coefficient2 *Heating Degree Days + coefficient3*Cooling Degree Days

In light of the above, all three coefficients cannot be combined and still maintain the integrity of the model.

Adding together the Industrial Weighting and Seasonal Weighting factors results in a model with an R^2 of 89.8%, which is somewhat lower than the original forecast model. A lower R^2 value is indicative that the model is less effective at forecasting historical values and therefore less reliable in forecasting future values.

Question #75

Ref: Board Staff IR # 15 - Demand and Customer Count

Please provide 2009 Year-end demand (kWh and kW) and customer/connections counts by customer class. Please provide a variance analysis contrasting the 2009 actual against the bridge year forecast.

Answer:

The following tables provide the reconciliation between the 2009 actual consumption, weather normalized based upon CK Hydro's response to Energy Probe's question #75. The 2009 actual consumption and customers are moved into the rate classes that they are proposed in the Application.

Summary of Forecast Load based on 2009 Actual

	Residential	GS less	GS greater	Intermediate	Large Use	Unmetered	Streetlight	Sentinel	Standby	Total
KWH's	228,641,702	94,144,168	296,886,000	47,029,949	22,651,157		6,592,774	396,774		696,342,524
Unmetered Scatter from GS less		- 885,330				885,330				-
Large Use to Intermediate				22,651,157	-22,651,157					-
Intermediate to Standby				- 27,693,519					27,693,519	-
GS greater to Intermediate			- 94,862,609	94,862,609						-
										-
17 Customers kWh			- 2,024,118	- 14,585,346						- 16,609,464
Customer closing				- 3,383,398						- 3,383,398
Customer closing				- 4,403,725						- 4,403,725
Total	**228,641,702**	**93,258,838**	**199,999,273**	**114,477,727**	-	**885,330**	**6,592,774**	**396,774**	**27,693,519**	**671,945,937**
Weather Adjustment	4,229,740	1,798,008	4,097,100	3,850,979	0	114,955	7,369	20,633	618,986	**14,737,769**
Normalized	**232,871,442**	**95,056,846**	**204,096,373**	**118,328,706**	-	**1,000,285**	**6,600,143**	**417,407**	**28,312,505**	**686,683,706**
kW			866,534	118,553	77,988		19,516	1,098		1,083,689
Large Use to Intermediate				77,988	- 77,988					-
Intermediate to Standby				- 83,231					83,231	-
GS greater to Intermediate			- 277,480	277,480						-
17 Customers kW			- 7,183	- 31,151						- 38,334
Customer closing				- 12,398						- 12,398
Customer closing				- 13,956						- 13,956
Total	-	-	**581,871**	**333,285**	-	-	**19,516**	**1,098**	**83,231**	**1,019,001**

Rate Class	Residential	General Service less	General Service Greater	Intermediate	Large Use	Unmetered Scattered	Streetlight	Sentinel light	Standby
No customers 2009	28,463	3,160	405	3	2				
Large use to Intermediate				2	- 2				
GS greater to standby			- 1						1
Unmetered Scattered		- 58				58			
GS greater to Intermediate			- 19	15					
Customer closing				- 1					
Customer closing				- 1					
Total Customers	**28,463**	**3,102**	**385**	**18**	-	**58**	-	-	**1**
No connections 2009							10,679	340	
Unmetered Scattered						194			
Totals Connections	-	-	-	-	-	**194**	**10,679**	**340**	-

Total	**28,463**	**3,102**	**385**	**18**	-	**194**	**10,679**	**340**	**1**

Weather and economic sensitivity adjustment in Application

	Residential	General Service less	General Service Greater	Intermediate	Large Use	Unmetered Scattered	Streetlight	Sentinel light	Standby	
	28.7%	12.2%	27.8%	26.1%		0.8%	0.1%	0.1%	4.2%	100.00%
EP IR #75	4,229,740	1,798,008	4,097,100	3,850,979	-	114,955	7,369	20,633	618,986	14,737,769
										14,737,769

Actual Normalized	Residential	GS < 50 kW	GS > 50 kW	Intermediate	Large Use	Unmetered	Streetlight	Sentinel	Standby	Total
kWh's	232,871,442	95,056,846	204,096,373	118,328,706	-	1,000,285	6,600,143	417,407	28,312,505	686,683,706
kW	-	-	581,871	333,285	-	-	19,516	1,098	83,231	1,019,001
No customes 2009	28,463	3,102	385	18	-	194	10,679	340	1	43,182

Bridge Year	Residential	GS < 50 kW	GS > 50 kW	Intermediate	Large Use	Unmetered	Streetlight	Sentinel	Standby	Total
kWh's	210,541,450	92,173,911	201,283,895	123,176,932		1,049,188	6,025,655	362,105	32,208,089	666,821,225
kW			502,112	322,877			18,432	1,079	83,730	928,230
No customes 2009	28,574	3,067	415	25		194	10,715	335	1	43,326

Actual to Bridge Year

Difference	Residential	GS < 50 kW	GS > 50 kW	Intermediate	Large Use	Unmetered	Streetlight	Sentinel	Standby	Total
kWh's	22,329,991.7	2,882,934.8	2,812,477.8	(4,848,226.0)	-	(48,903.4)	574,487.9	55,301.9	(3,895,583.7)	19,862,481.0
kW			79,759.2	10,408.3	-	-	1,084.0	19.0	(499.5)	90,771.0
No customes 2009	(111.0)	35.0	(30.0)	(7.0)	-	-	(36.0)	5.0	-	(144.0)

Question #76

Ref: Board Staff IR #14 and EP IR #34d) – Load forecast, historic data

In the first reference CK Hydro stated that the load forecast was based on data from 2002 to 2008. In the second reference CK Hydro stated that consumption in 2007 and 2008 does not reflected CDM in both the historical data and regression analysis.

a) Please confirm that CDM refers to the kWh reduction in consumption due to CDM.

b) How was the reduction in consumption due to CDM excluded from the actual 2007 and 2008 data? And what were the actual kWh that were excluded?

Answer:

a) Yes, CDM refers to the kWh reduction in consumption due to CDM.

b) There was not an adjustment or reduction on the 2007 and 2008 actual data for CDM.

CK Hydro's concern is that since the CDM reductions were significant that they would not have been fully reflected in the regression analysis and be totally reflected in the 2010 forecast. Therefore CK Hydro is proposing the CDM manual adjustment.

The regression analysis reflects historical years from 2000 to 2008. Since CDM is not addressed directly in the analysis, the impact of CDM is being averaged over the historical years. As a result, the full impact of CDM in 2007 and 2008 will not be reflected in the resulting equation from the regression analysis and a manual adjustment is needed to reflect the full impact.

Question #77

Ref: Board Staff IR# 12, Energy Probe IR# 30 and VECC IR# 11 – Load forecast - NAC

Please provide a load forecast for 2009 and 2010 using the normalized average consumption ("NAC") approach. Please provide all calculations in working Microsoft Excel spreadsheets.

Answer:

The forecasted kWh using the NAC method is:

2009 898,822,031
2010 934,029,239

Please see the included spreadsheet titled "OEB_77_NAC.xlsm" for live data.

Question #78

Ref: Board staff IR# 23 – Regulatory Costs

a) In addition to LEAP, please provide other examples of the increased regulatory activities that CK Hydro is referring to that result in increased regulatory expenses of $101,190.

b) Please provide a breakdown of costs included in regulatory expenses for existing regulatory requirements and each new regulatory activity that CK Hydro estimates that it must engage in 2010.

c) Please provide an explanation of how CK Hydro has forecasted the expenses for new regulatory activities.

d) Given that LEAP has been delayed/postponed, does CK Hydro see the need to update its forecasted 2010 regulatory expenses?
   i. If not please explain, why not.
   ii. If yes, please provide, with explanation, an estimate.

e) Given the delay or postponement of LEAP, what treatment of any costs does CK Hydro suggest as being appropriate?

Answer:

a) - e)

Please refer to Technical Conference Transcript of January 26, 2010 reference:
Page 66, Line 15 through to Page 67, Line 28
Page 69, Line 22 through to Page 71, Line 4

Additional Comments
Other proceedings and activities that are at different stages at the Board that will require CK Hydro to participate, monitor and implement operational and reporting changes are;

EB-2009-0423	Alignment of rate year with fiscal year for electricity distributors
	Changes to the RRR filing dates
EB-2009-0349	Rate protection and the determination of direct benefits under Ontario Regulation 330/09
EB-2009-0152	The regulatory treatment of Infrastructure Investments for Ontario's electricity transmitters and distributors
EB-2009-0397	Filing requirements: Distribution system plans under the Green Energy Act
EB-2009-0411	Distributor owned generation
EB-2008-0104	International financial reporting standards consultation
EB-20080381	PILs combined proceeding regarding account 1562, deferred payment-in-lieu of taxes
	Green Energy Initiatives

The proceedings and activities listed above are the ones that are known at this time. The Ontario Electricity Industry continues to change and evolve such that there will always be many more proceedings and activities that will be initiated each year.

Question #79

Ref: Board staff IR # 24 – Monthly Billing

a) Other than LEAP, for what other reasons is CK Hydro anticipating a move to monthly billing?

b) What, if any, cost savings or other benefits are there expected from a move to monthly billing?

c) Have these cost savings or benefits been reflected in CK Hydro's application? If not, please explain. If so, please provide examples, with explanation.

Answer:

a) - c)

Please refer to Technical Conference Transcript of January 26, 2010 reference:
Page 68, Line 1 through to Page 69, Line 21

Additional Comments

Additional benefit to the customers for moving to monthly billing is that it promotes conservation. By customers receiving their bills more frequently it increases their awareness of their electricity usage and many times it will create conservation behaviour.

Question #80

Ref: Ref: Board staff IR # 26 – Additional Staff

The amended Exhibit 4/Tab 2/Schedule 6, page 4 is showing a newly added FTE for Manager of Connections. Please provide further explanation of the need for this position.

Answer:

Please refer to Technical Conference Transcript of January 26, 2010 reference:
Page 71, Line 6 through to Page 72, Line 27

Additional Comments

The Manager of Connections is required to further develop asset management and coordinate and oversee connections of fit/Microfit to the Chatham-Kent Hydro grid. Descriptions of the primary duties are defined below:

POSITION FUNCTION:

The Manager of Connections will liaise with and assist the Director of Engineering and Technical Services and the Manager of Operations and Customers in areas of policy planning, job planning, and budget planning.

The primary roles will be to enhance the asset management plan, ensure the system is designed to meet future needs, oversee the connection of new loads including FIT/Microfit connections, and prepare department budget and meet SQI and budget targets

DUTIES/RESPONSIBILITIES:

General

- Shall oversee the New Connections including the Fit/Microfit connections
- Liaise with the Director of Eng and Tech Services in the enhancement of the Asset Management Plan including the long-range planning of utility capacity and reliability.
- Liaise with Customers primarily in the area of Fit/Microfit and larger loads
- Communicate and provide guidance to the utilities' customers in establishing utilities' service requirements and efficient usage and outside consultants working on major programs.
- Monitor utility compliance with Provincial regulations; makes recommendations and may develop and implement procedures for compliance.

- Shall prepare frequent reports when required to the President, Board of Directors and other Managers on the goals and progress of the programs.

- Shall set appropriate quality assurance standards and take corrective measures to ensure that standards are met.

- Shall assist in ensuring projects are completed within budget, with a report on variances

The chart below further clarifies and corrects the answer to Board Staff Questions 25, 26 and 80, and Energy Probe Question 84 in reference to Exhibit 6/Tab1/Schedule 1 page 3 and Exhibit 4/Tab2/Schedule 6 page 3 and 4.

CK Hydro's 2009 Actual FTE and Estimated Year end Staff FTE Verses 2010 Staffing Requirements

Staff Positions	Actual 2009 FTE	2009 Y/E FTE in Application	2010 Proposed FTE	2009 /2010 Variance Explanation
Power Line Maintainers	14	15	14	Vacancy created in 2009 due to 1 FTE transferred to Stores.
Power Line Apprentices	2	2	4	Hire 2 additional Apprentices in 2010
Meter Techs	4	4	5	Hire an additional Meter Tech in 2010
Engineering and Control Techs	6	6	7	Hire 1 additional Eng Tech in 2010
Stores/ Purchasing	2	2	2	No Change
Administration	2	2	2	No Change
Management	6	7	9	Hire 1 New Power Line Supervisor and fill vacancy with 1 Manager of Connections in 2010 *
President	1	1	1	No Change
Total	37	39	44	

* 1 Management position in 2010 is not an addition but is filling a vacancy

The 6 new positions in 2010 are to address succession planning and workload.
(Exhibit 4/Tab2/Schedule 6 page 1-4)

Question #81

Ref: Board Staff IR # 27 – IFRS Costs

The interrogatory asked for a detailed breakdown and accounting treatment of costs related to IFRS. In its response, CK Hydro indicates that $185,700, out of the increase of $429,162 from 2008 to 2010, is identified as ongoing expenses allocated from its affiliate, CKUSI. One-time costs are stated to be tracked in a deferral account, but the amounts are not identified.

a) Please provide a detailed breakdown of the increase of the $429,162, including ongoing expenses for IFRS.

b) Please provide the one-time IFRS costs incurred to date that are recorded in the deferral account. Please identify the account being used.

Answer:

a) A reconciliation of the $429,162 increase in costs is as follows:

Restructuring, President of CK Utility Services (2009)	63,000
CFO reallocated from Regulatory Costs (2010)	40,000
CKE Board costs (2009)	30,000
EDA, S&P fees from Regulatory Costs (2009)	62,500
New accounting staff[1]	87,000
New financial system[2]	75,000
Legal, consulting and financial consultants[3]	70,000
Miscellaneous	1,662
Total	429,162

Notes:
(1) The new accounting staff is required for two reasons; assist in IFRS, to reduce overtime worked by non-union staff.
(2) new financial system was required to replace the system that was greater than 10 years old. The new system will ensure CK Hydro is IFRS compliant.
(3) Legal, consulting and consultants are moved from outside services.

The ongoing IFRS costs would be 50% of the new staff and the new financial system; therefore, it would be $81,000.

b) The total costs recorded to date in the deferral account number 1508 are as follows:

CFO - allocation of time spent, travel and training	45,000
Accounting staff - allocation of time spent, travel and training	41,012
Temporary staff	25,000
Consultant	15,000
Total	126,012

Question #82

70. Ref: Board staff IRs # 28 and 52, and SEC IR # 13 – Regulatory Costs

In the response to Board staff IR # 28, CK Hydro estimates $120,000 for legal and $80,000 for consulting costs related to this application. In the response to SEC IR # 13, CK Hydro documents $160,000 as costs to Borden Ladner Gervais for consulting work on this 2010 rate application. The response to SEC # 13 b) also indicates that this includes approximately $50,000 in costs for work performed and billed in 2009.

a) Please confirm that the reference to the response to Board staff IR # 23 indicated in the response to SEC IR # 13 should instead be to Board staff IR # 28.

b) The response to Board staff IR # 28 refers to $200,000 of legal and consulting costs for this application, absent an oral hearing, while SEC IR # 13 documents $160,000. Please reconcile these responses.

c) In the response to Board staff IR # 52, CK Hydro documents $10,326 as being 2008 costs for the preparation of this 2010 application which CK Hydro recorded in deferral account 1508, but which recovery is being sought in this application as part of the recovery of the 2010 application costs to be recovered over four years. Please explain whether any of the 2008 costs currently in account 1508 are for services provided by outside parties. If so, are these costs reflected in the amounts referred to in the responses to Board staff IR # 28 and/or SEC IR # 13.

d) Please provide further explanation of the legal and consulting services that CK Hydro requires associated with the preparation and processing of this 2010 rate application.

Answer:

a) Yes, the reference to the response to Board staff IR # 23 should be to Board staff IR #28.

b) Please refer to CK Hydro's response to Energy Probe question #82 (2nd round of interrogatories).

c) The majority of the costs are consultant costs and are included in the responses to Board staff interrogatory #28 and SEC IR # 13.

d) CK Hydro prepared the application with in house staff with the assistance of legal and consulting services. Some of the areas that CK Hydro required services are;

- Preparation of financial models and templates.
- Assistance on preparing and interpreting regression analysis.
- LRAM and SSM review and calculations.
- Review, legal and regulatory, of evidence and interrogatory responses.
- Tax review for the PILs calculation.
- Attendance at Board proceedings by legal and regulatory consultants relating to the application.

Question #83

Ref: Ref: Board staff IR # 30 – Streetlighting Maintenance

In light of the changes to section 2.2.4 of the ARC and the response to Board staff IR #30, please provide further information on whether the streetlighting maintenance contract between CK Hydro and the Municipality of Chatham-Kent will continue. If the agreement is continued, would there be changes in the forecasted revenues received for the 2010 test year for streetlighting maintenance services provided to the Municipality of Chatham-Kent. Please explain your response in detail.

Answer:

Please refer to Technical Conference Transcript of January 26, 2010 reference:
Page 73, Line 1 through to Page 73, Line 21

Question #84

Ref: Exhibit 5 and Board staff IRs # 33 and 34 – Long-term Debt

At Exhibit 5/Tab 1/Schedule 1 of its original application, CK Hydro discusses it existing debt:

"The current rate of 7.04% is being paid on the existing Long Term Debt ($23,523,326) with the Municipality of Chatham-Kent, the major shareholder of Chatham-Kent Energy. In the Cost of Capital Report the OEB determined "that for embedded debt the rate approved in prior Board decisions shall be maintained for the life of each active instrument, unless a new rate is negotiated, in which case it will be treated as new debt". Chatham-Kent Hydro has not renegotiated the interest rate on the current Long Term Debt and it is callable at the discretion of the Municipality of Chatham-Kent."

In response to Board Staff IR # 33 a), CK Hydro provided a copy of the existing Promissory Note with the Municipality of Chatham-Kent. The Note is dated November 1, 2009.

a) Please provide copies of all previous versions of Promissory Notes that the current note has replaced. Please explain all changes to the terms and conditions that have been negotiated in each replacement note.

b) Please explain why the debt arrangement between CK Hydro and the Municipality of Chatham-Kent at the time of application was replaced by the November 1, 2009 note.

c) The Report of the Board on the Cost of Capital for Ontario's Regulated Utilities ("the Cost of Capital Report") issued on December 11, 2009 states the following under section 4.4.1, regarding the treatment of long-term debt:

> "The Board recognizes that there is still a need for the deemed long-term debt rate, however its usage should become more limited in application. The Board wishes to reiterate that the onus is on the distributor that is making an application for rates to document the actual amount and cost of embedded long-term debt and, in a forward test year, forecast the amount and cost of new long-term debt to be obtained during the test year to support the reasonableness of the respective debt rates and terms.
> …
> **The deemed long-term debt rate will act as a proxy or ceiling for what would be considered to be a market-based rate by the Board in certain circumstances.** These circumstances include:
>
> - For affiliate debt (i.e., debt held by an affiliated party as defined by the Ontario Business Corporations Act, 1990) with a fixed rate, the deemed long-term debt rate at the time of issuance will be used as a ceiling on the rate allowed for that debt.
>
> - For debt that has a variable rate, the deemed long-term debt rate will be a ceiling on the rate allowed for that debt. This applies whether the debt holder is an affiliate or a third-party.

- The deemed long-term debt rate will be used where an electricity distribution utility has no actual debt.

- For debt that is callable on demand (within the test year period), the deemed long-term debt rate will be a ceiling on the rate allowed for that debt. Debt that is callable, but not within the period to the end of the test year, will have its debt cost considered as if it is not callable; that is the debt cost will be treated in accordance with other guidelines pertaining to actual, affiliated or variable-rate debt.

- A Board panel will determine the debt treatment, including the rate allowed based on the record before it and considering the Board's policy (these Guidelines) and practice. The onus will be on the utility to establish the need for and prudence of its actual and forecasted debt, including the cost of such debt." [pp. 52-54, Emphasis in original]

  i) In light of the recently issued Cost of Capital Report, please provide CK Hydro's views, with reasons, on the debt raise proposed for the November 1, 2009 Promissory Note with the Municipality of Chatham-Kent.

  ii) In response to Board staff IR #34, CK Hydro states that it has not sought alternative arrangements for the new debt, and that the forecasted debt for 2009 had not been issued at the time of the interrogatory responses, on December 23, 2009.

    a. Please confirm whether the new debt for 2009 was issued. If not, does CK Hydro expect that its debt forecasted for 2010 will be increased as a result of this deferment?

    b. Please provide further explanation of why CK Hydro has not sought alternative sources of debt financing from, for example, commercial financial institutions or from Infrastructure Ontario, for smart meter and other new and forecasted investments for the new 2009 and 2010 debt.

    c. In light of the new guidelines in the Cost of Capital Report, please provide CK Hydro's views, with reasons, on the appropriate treatment and debt rate for the forecasted debt.

Answer:

a) - b)

Please refer to Technical Conference Transcript of January 26, 2010 reference:
Page 20, Line 10 through to Page 25, Line 1

c)

i) As stated at the Technical Conference (see Page 20, Line 10 through Page 25, Line 1 of the Transcript), the Promissory Note dated November 1, 2009 is a reflection of the debt arrangement with the municipality as it has been since corporatization. The proposed debt raise is consistent with the changed economic and financial conditions which are reflected in the components of the deemed long-term debt rate estimate i.e. 30-year Government of Canada bond yield forecast and the average spread between an A-rated Canadian utility bond yield and the 30-year Government of Canada bond yield.

ii)

a) No new debt was issued in 2009. CK Hydro does not expect the debt forecasted for 2010 to increase as a result of the fact that new debt was not issued in 2009.

b) CK Hydro has not sought alternative sources of debt financing as there is sufficient capital available from its parent company.

c) The deemed long-term debt rate would apply to both the current and forecasted debt. Although the Board has stated that the usage of the deemed long-term debt rate should become more limited in application, it does recognize that the relatively short period of time since corporatization of electricity distribution and the presence of significant amounts of affiliate debt, necessitate the continued use and publication of a deemed long-term debt rate.

As noted in The Report of the Board on the Cost of Capital for Ontario's Regulated Utilities:

"the Board recognizes a deemed long-term debt rate continues to be required and this rate will be determined and published by the Board. The deemed long-term debt rate will act as a proxy or ceiling for what would be considered to be a market based rate by the Board in certain circumstances."

These circumstances include instances when the debt is callable on demand within the test period. Since both the existing and planned debt will be callable within 2010, the deemed long-term debt rate would apply. CK Hydro believes that the deemed rate is a reasonable proxy for a market rate as it is based on market indicators as described above in c) i).

Question #85

Ref: Board staff IR# 46 and 47- Tariff Sheet

Appendix J, referred to in the responses to Board staff IRs 46 and 47, contains an updated proposed tariff schedule. Unfortunately, the format splits the charges on different pages to the tariff elements. Please re-file Appendix J aligning the rates with the tariff elements.

Answer:

See Appendix A

For further clarification, the standby class will be charged demand and the standby charge using the same process that CK Hydro has used in the past which is as follows:

- Contracted demand will be agreed to based upon the maximum demand that the customer will take.
- The monthly demand to be charged will be the actual demand from the meter read multiplied the distribution volumetric rate.
- The standby charge for the facilities that CK Hydro is required to have available and on standby for the customers will also be billed. The quantity billed for the standby demand will be determined by subtracting the actual billed from the maximum demand times the standby charge.

An example of how the billed demand and standby demand will be charged is as follows:

	kW	Rate	$
Contract Demand	10,000		
Actual Demand	7,000	$ 3.84	$26,880.00
Standby Demand	3,000	$ 1.35	$ 4,050.00
			$30,930.00

Question #86

Ref: Board staff IR # 49 – Account 1525

In response to Board staff IR # 49 e), CK Hydro states that "the additional cost of $34,508.77 is related to Smart Meter OM&A costs, and these are before the Board in a separate application."

a) Please identify the separate application referred to.

b) Please confirm that CK Hydro's accounting records and its RRR filings with the Board have been updated to reflect the removal of this amount from account 1525.

Answer:

a) Please refer to Technical Conference Transcript of January 26, 2010 reference:
Page 44, Line 19 through to Page 44, Line 28

b) In the Technical Conference it was mistakenly stated that CK Hydro had not updated its RRR filing to reflect the removal of this amount from account 1525. We have since been able to confirm that the accounting records and RRR filings have in fact been updated to reflect these corrections.

Question #87

Ref: Board staff IR # 52 – Regulatory Assets

Elsewhere in the application (for example, see the response to Board staff IR # 51 b)), CK Hydro indicates the materiality threshold as being $79,126. In the response to Board staff IR # 52, CK Hydro documents costs with principals of $13,888 for 2008 ESA fees, $10,326 for 2008 costs related to the current 2010 rate application, and $6,730 for 2005 and 2006 costs related to load data research.

a) CK Hydro has proposed that the 2008 costs related to the 2010 application, along with the estimates for 2009 and 2010, be recoverable over four years. Please provide specific details of the work done in 2008 specifically for the 2010 rate application. How is this work separable from and incremental to what CK Hydro would be doing for its normal course of business (i.e., budget planning)? Also, please explain why CK Hydro believes that these costs are exogenous ("beyond the ability of management to control"). Does not CK Hydro's management have the ability to control the quantum and timing of such costs, at least in part?

b) The Board's Decision with Reasons on the Recovery of Regulatory Assets – Phase 2, considered under Board File Nos. RP-2004-0117, RP-2004-0118, RP-2004-0100, RP-2004-0069, and RP-2004-0064 (the "Regulatory Assets Decision") was issued on December 9, 2004. Para. 7.0.3 of the Decision states:

> In its January 15, 2003 Filing Guidelines, the Board determined that the materiality criterion should be applied on a period basis, rather than on an annual basis as provided for in APH480. However, the materiality test is still to be applied to the various transition cost initiatives as listed in APH480, on an ungrouped or segregated basis. APH480 states that the aggregation of costs that belong in a different category of activity is not permitted in order to meet the materiality (and causality) criteria in the [2000 Distribution Rate Handbook].

Para. 7.0.18 states:

> However, Hydro One included certain market ready costs on the basis that they met the materiality test overall, when in fact they do not meet the test [referred to in para. 7.0.3] established in the Guidelines. We reiterate that the Guidelines are extremely important in ensuring efficiency, effectiveness, transparency and fairness, especially in a sector that involves so many regulated entities. Deviations from the Guidelines may be warranted and permitted by the Board if there is demonstrated uniqueness or special circumstances. The Board has shown flexibility in accepting some deviations in this case, but these are for presentation (e.g. Billed vs. Accrual) or clarification (e.g. interest rate, application of interest), not to reward deviations that are favourable to the Applicants, without adequate justification.

Please provide CK Hydro's views on how the ESA fees and 2005-6 Load Research costs meet the criterion of materiality on an individual basis in accordance with the Board's findings in the Regulatory Assets Decision.

Answer:

a) CK Hydro began the process of preparing the 2010 cost of service application in late 2008. The expenditures incurred were for work with the consultant on regression analysis, review of finance models and the application template. These expenditures were directly related to the application and were not included in any normal budgeting or operation process.

CK Hydro's reference to the costs "being out of management to control" refers to the fact that these costs could not be avoided. CK Hydro does have some control and influence as to the quantum of the expenditures.

b) The expenditures incurred for the load data study with Hydro One is above the materiality threshold of $79,126. These expenditures were incurred to file a cost allocation study which was required by the Board and these expenditures were not in the rates.

The ESA fees, while they do not meet the materiality threshold, they are expenditures that were not included in the rates in 2005 and were a new regulatory requirement.

Question #88

Ref: Board staff IR # 53 – Account 1550

In the response to Board staff IR # 53, CK Hydro states that: "The reason for the amount changing from the debit balance to credit balance is because some of the cost was put under the low voltage charge, and it should have been under the transmission charge account."

a) Please confirm that CK Hydro's accounting records and its RRR filings with the Board have been updated to reflect these corrections.

b) Please provide a new rate rider with the amended numbers for account 1550.

Answer:

a) Yes, CK Hydro's accounting records and RRR filings have been updated to reflect these corrections.

b) A new rate rider is not required, as the adjustment was made in November 2007 and therefore is already reflected in the account and the RRR filings.

Question #89

Ref: Board staff IR # 51 – Account 1572

CK is requesting to dispose of $103,209 for account 1572 – Extraordinary Event Costs. In its response to Board staff IR # 51, CK Hydro stated that these costs are related to retiree costs from Jan. 2005 to April 2006, and that these costs were not in rates at that time. Also, the balances up to Dec. 31, 2004 were recovered in the 2006 EDR process.

According to the 2000 EDR Handbook, "For extraordinary event related costs, the revenue or expense must be clearly outside of the base upon which rates are derived."

a) Are there retiree-related costs ongoing costs? If they are ongoing, they would not qualify as extraordinary event costs; in such case, what is CK Hydro's rationale for recording these costs in this account?

b) Did CK Hydro previously receive Board approval to record these amounts in this variance account? If so, please provide details.

c) Has CK Hydro included these costs as part of its 2010 forecasted OM&A in its current application?

Answer:

a) These costs were not included in rates prior to the 2006 rate application. For the period Jan 2005 – April 01, 2006, these costs were recorded in account 1572, which was also used for this same purpose in the 2006 rate application.

b) Similar costs were approved in the 2006 rate application for the period ending Dec 31, 2004.

c) These retiree costs are included in the 2010 OM&A forecast.

Question #90

Ref: Board Staff IR #54 – Account 1570

a) Please explain the reason for a new prudential review being required of CK Hydro to meet IESO prudential requirements in 2005.

b) Please provide any approval or direction by the Board for CK Hydro to record the costs of the 2005 prudential review in Account 1570.

c) Article 220 of the Accounting Procedures Handbook states:

> **1570 Qualifying Transition Costs**
>
> A. When authorized or directed by the Board, this account shall be used to record transition costs that meet the four qualifying criteria established in the 2000 Electricity Distribution Rate Handbook.
>
> …
>
> E. Entries to this account, other than carrying charges, shall cease on the electricity market opening (i.e., May 1, 2002), unless otherwise authorized by the Board. Amounts approved on a final basis for recovery in rates shall be credited to this account. The offsetting entry shall be to account 1590, Recovery of Regulatory Asset Balances.

Please explain how the costs for the 2005 prudential review qualify under Article 220 of the APH, and satisfy also the exogeneity and materiality criteria for qualifying costs

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Answer:

a) To keep the credit rating current and valid with Standard and Poors, an annual review was required. The review done in 2004 was only valid for one year.

b) Account 1570 was used in 2004 for this purpose and approved in the 2006 rate application.

c) No other account was available for these specific costs, so CK Hydro used the same account used in the 2006 rate application.

Question #91

Ref: Board staff IR # 56 – Account 1588, Global Adjustment Sub-account

a) If CK Hydro were to establish a separate rate rider to dispose of the balance of the Power (Global Adjustment) sub-account of account 1588, please provide CK Hydro's views as to whether this rate rider would be applicable to MUSH ("Municipalities, Universities, Schools and Hospitals") sector customers.

b) Does CK Hydro have the capability in its billing system of applying a rate rider that would only apply to non-RPP customers?

c) If the answer to a) is in the negative, does CK Hydro have the capability in its billing system to exclude MUSH sector customers to which the separate rate rider for the disposition of the account 1588 subaccount Power (Global Adjustment) balance would apply?

Answer:

Please refer to Technical Conference Transcript of January 26, 2010 reference:
Page 47, Line 2 through to Page 47, Line 8
Page 63, Line 8 through to Page 64, Line 6

Additional Comments

a) The rate rider should not be applicable to the MUSH sector customers as they were not included in the non-RPP customer group that accumulated the balance in the 1588 GA balance.

b) The billing system used by CK Hydro does have the ability to apply a separate rate rider to the non-RPP customers.

c) CK Hydro's billing system can exclude the MUSH sector from being charged the GA rate rider that would be charged to the non-RPP customers.

Question #92

Ref: Board staff IR # 59 – Smart Meter – Other

In response to part a), CK Hydro indicates that the meters for GS > 50 kW customers are "apartment buildings that will use the smart meter technology for meter reading."

a) Please provide further details on the meters involved. Are the apartment customers bulk-metered or suite-metered? Please explain how these customers will use "smart meter technology for meter reading".

b) Part c) of the response indicates that the average capital cost per meter for the GS > 50 kW customers is $697.21. Please provide further explanation of the increased costs for these meters relative to CK Hydro's documented costs for residential and GS < 50 kW smart meters.

c) In part b) of the response, CK Hydro states that the GS > 50 kW meters are not within the scope of O.Reg. 425/06 and that they should be included in general capital. In the combined smart meter proceeding conducted under file number EB-2007-0063 and in Toronto Hydro-Electric System Limited's 2008-9 Cost of Service rate application conducted under Board file number EB-2007-0680, costs for "smart meters" outside of the residential and GS < 50 kW classes were considered and approved as being "beyond minimum functionality". All customers, including the affected GS > 50 kW customers, have been paying the smart meter funding adders and rate riders since May 1, 2006. Why does CK Hydro consider that these costs should now be considered in general capital rather than considered as part of the smart meter deployment? What are the implications of treating these costs in general capital rather than as smart meter costs for which review and disposition is being sought in this application?

Answer:

Please refer to Technical Conference Transcript of January 26, 2010 reference:
Page 47, Line 9 through to Page 51, Line 17

Additional Comments
At the Technical Conference CK Hydro stated that the smart meter evidence had been updated to remove the smart meter expenditures relating to the General Service > 50 kW class; in fact, this did not happen.

a) These are bulk metered apartment buildings that would be in the General Service >50KW rate class. In the original IR this was used as an example only for this customer class.

b) The meters in the General Service <50 KW and Residential rate category are a combination single and poly phase that have a lower value and are less labour intensive to install. In the General Service >50KW rate category all meters are poly phase that have a higher meter cost as well as more labour intensive, bringing the per meter cost up to $697.21.

c) Upon further review of the Toronto Hydro-Electric System Limited's applications, and since the General Service > 50 kW class has been paying the smart meter adder, CK Hydro does not

believe that an update to the smart meter evidence is required in Exhibit 9, Tab 2. CK Hydro no longer believes that the smart meter expenditures for the General Service > 50 kW class should be reviewed in the general capital program but rather in the smart meter review.

Question #93

Ref: Exhibit 9/Tab 2/Schedule 1/Table 9-10
Board staff IR # 62 – Smart Meters and Cost Allocation

Table 9-10 shows that CK Hydro solely deployed residential smart meters in 2006 and 2007. These residential smart meter costs have been reviewed and approved in prior applications, and CK Hydro states that these smart meter costs are incorporated in the rate base in the 2010 Cost Allocation study. The response to Board staff IR # 62 also indicates that smart meter costs post-2007, for which most of the meters and costs would be for GS < 50 kW and GS > 50 kW customers, are not approved and not incorporated in the 2010 Cost Allocation study. What, if any, implications are there for including the residential smart meter costs in the fixed assets for the 2010 cost allocation study but not including any smart meter costs for other classes, specifically with respect to the allocation of common costs amongst rate classes?

Answer:

Residential smart meters were included in the regular meters account 1860 for purposes of the cost allocation. The implication of the above is that a portion of the residential smart meters costs were allocated to other meter classes. This allocation would include a portion of the common costs which is appropriate as all meter classes will benefit from the common costs.

Question #94

Ref: Board Staff IR #37c) – Intermediate Class

In response to IR #37c CK Hydro implies that in the event that a new customer as a Large User enters its service area CK Hydro "would propose that the customer continue to pay the rates of the Intermediate class until such time as another cost allocation study …This typically would occur at the time of the next rebasing/cost of service rate application." However, section 2.5.1 of the DSC states that:

> A distributor shall, at least once in each calendar year, review each non-residential customer's rate classification to determine whether, based on the rate classification requirements set out in the distributor's rate order, the customer should be assigned to a different rate class. Subject to section 2.5.3, other than at the request of the non-residential customer a distributor may not change a non-residential customer's rate classification more than once in any calendar year.

Please explain CK Hydro's rationale for proposing to treat any new or reclassified Large User as Intermediate class until its next rebasing, rather than proposing a Large Use rate applicable to the customer at the time that it should be (re)classified as a Large Use customer

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Answer:

Please refer to Technical Conference Transcript of January 26, 2010 reference:
Page 79, Line 4 through to Page 81, Line 18

Additional comments

At the Technical Conference CK Hydro reported that the plan is to rate rebasing will be done in 2014, the timing of the rate rebasing may change due depending upon the economic conditions and any other un foreseen activities that would have an impact on CK Hydro's ability to maintain a safe and reliable distribution system and their ability to earn a reasonable return.

Question #95

Ref: Board Staff IR #39 - Standby class

In the response to Board Staff IR #39a) CK Hydro seems to refer to a customer that has a generation capacity of 3,800 kW. In part b) of the interrogatory response, CK Hydro refers to a new standby customer class that would pertain only to this one specific customer.

a) Are part a) and part b) referring to the same customer? If yes, please explain the need for a separate standby class as well as a standby rate on an interim basis in further detail.

b) If no, please provide an overview of the customers to which a standby rate applies. What rate would be applied to new customers that own generation?

c) What fixed/variable rate is currently charged to the proposed standby customer/s?

d) Please provide further justification for a fixed charge of $6099.12, which is significantly above the MSC ceiling amount.

Answer:

a) - b)

Please refer to Technical Conference Transcript of January 26, 2010 reference:
Page 26, Line 6 through to Page 40, Line 17
Page 73, Line 21 through to Page 74, Line 21

c) The rates charged to the customer that is being proposed to move to the new standby class are:

Fixed Charge	$4,705.58
Variable Charge	$2.36 per kW
Standby Charge	$1.35 per kW

d) CK Hydro has proposed a fixed charge of $6,099.12 which is higher than the ceiling rate as a rate mitigation measure. If CK Hydro charged the fixed charge that is the ceiling the customer impact would be above the 10% threshold.

Question #96

Ref: Board Staff IR #38
Exhibit 7/ Tab 1/ Schedule 2, Appendix A – Cost Allocation

In response to Board staff IR # 38 b), CK Hydro provided sheet O1 of the cost allocation model.

a) Please confirm that the provided sheet O1 of the cost allocation model represents the proposed Revenue-to-cost Ratios.

b) Please provide the same sheet that would represent current Revenue-to-Cost ratios as requested in IR # 38 b).

c) Please provide a detailed explanation for the increase in the Revenue Requirement for Standby Power of $363,930 over 2006, (i.e. is the increase due an increase in load or customers, etc.?)

Answer:

a) Yes, the provided sheet O1 represents the proposed Revenue-to-cost Ratios.

Also, please refer to Technical Conference Transcript of January 26, 2010 reference:
Page 35, Line 24 through to Page 36, Line 5

b) The revenue-to-cost ratios being requested are found at Exhibit 7, Tab 1, Schedule 2, Appendix C.

c) The increase in the revenue requirement for the standby class is driven by three factors:

- The total expenses to be allocated to all rate classes have increased and the stand-by class' share is approximately $100,000.
- The demand allocation increased as the standby class has a higher % of the total demand. This was caused by the other classes' demand being significantly reduced by the economic downturn which has not impacted the customer in the standby class.
- The allocation of the distribution and administration costs has increased due to the standby class having a higher percentage of the consumption in 2010 compared to 2006. This was caused by the other rate classes consuming significantly fewer kWh's due to the economic downturn.

Question #97

Ref: Board Staff IR #39 – 43
Exhibit 7/ Tab 1/Schedule 2, Table 7-7 – Revenue to Cost Ratios

Please confirm that the following table represents the current and proposed Revenue-to-Cost ratios accurately. If not please update the table to represent the most recent proposal.

Revenue to Cost Ratio

	Existing Ratios	**Proposed Ratios**	**Board Target Range**
	Application Exhibit 7/ Table 7-7	**2010**	
Customer Class	%		
	1	**2**	**3**
Residential	100.06	98.12	85-115
GS< 50 kW	107.38	105.26	80-120
Gs 50-999 kW	63.32	101.92	80-180
Intermediate 50 - 4999 kW	245.4	133.6	80-180
Standby Power	32.86	55.29	70-120

Answer:

Yes, these are the current and proposed Revenue-to-Cost ratios.

Question #98

Ref: Board Staff IR #45 – Fixed/Variable Split

Please confirm that the fixed/variable splits laid out in the table below accurately represent CK Hydro's application and updates.

	F/V Split	**Res**	**GS < 50**	**GS > 50**	**Intermediate**	**Street Light**	**Sentinel**	**USL**	**Standby**
Current	Fixed	61.50	60.20	57.10	67.80	54.10	84.40	60.70	25.10
	Variable	38.50	39.80	42.90	32.20	45.90	15.60	39.30	74.90
Proposed	Fixed	78.60%	57.00%	19.60%	20.00%	54.10%	84.40%	75.90%	20.00%
	Variable	21.40%	43.00%	80.40%	80.00%	45.90%	15.60%	24.10%	80.00%

Answer:

Yes, the fixed/variable splits laid out in the table accurately represent CK Hydro's application and updates.

Question #99

Ref: Board Staff IR #66 – LRAM/SSM

Please expand on how CK Hydro differentiates its Smart Meter Pilot Program from that of other distributors' Smart Meter Programs that have been or are being initiated due to the Provincial Government's mandate to roll-out the technology.

Answer:

CK Hydro was one of the first utilities to fully deploy smart meters. In addition to the installation of the technology, the company has spent a considerable amount on education and awareness between 2005 and 2007. The combined marketing budget for customer awareness ($118,053) and smart meter education ($74,107) equates to approximately $6 per customer. This does not include OPA funding that began in 2008.

The majority of the communications programs were targeted at residential customers including radio and print media support for the "Turn it Off, Turn it Down, Trade it In" campaign, which provided a new conservation tip for every month of the calendar year. Beyond the traditional bill inserts, the company created an entire multi-faceted campaign to support the message including:

- Radio ads supported by bi-weekly interviews with CK Hydro staff
- Street signs
- Flags for various sites around the community
- A Community calendar distributed free to every household that provides helpful hints and conservation ideas

All these elements were supported by a large local launch event. The finding of the IESO research indicated that customer awareness of smart meters and time-of-use pricing was considerable, which further supports the value of this campaign. The report specifically identified that CK Hydro successfully used many different media outlets to support our program.

In a community the size of The Municipality of Chatham-Kent, a strong local campaign has proved very effective in both raising awareness and creating a culture of conservation.

Question #100

Ref: Board Staff IR#66 – LRAM/SSM

Please provide examples of other jurisdictions that have rolled out Smart Meters and have approved either one of, or both, LRAM and SSM amounts related to Smart Meters.

Answer:

There are a number of jurisdictions in the U.S. that have rolled out smart meters and have LRAM mechanism for energy efficiency and conservation programs. Our review of the practices in these jurisdictions suggests that many regulators are currently investigating how to address the revenue shortfall associated with smart grid plans that have a large deployment of smart meters.

Both Indiana and Pennsylvania have smart meters and LRAM, and are currently reviewing methodologies for recovering lost revenue.

The Indiana Administrative Code provides guidelines for demand-side cost recovery by electric utilities, as well as lost revenue recovery and demand-side management incentives. There is a proceeding underway for a petition by Duke Energy Indiana before the Indiana Utility Regulatory Commission, exploring an alternative regulatory plan to recoup smart grid costs, which includes the recovery of lost revenues as a part of a tracking mechanism.

Pennsylvania regulators have specifically acknowledged that revenue will decline as a result of the installation of smart meters and the smart grid. According to the current regulation, utilities are allowed recovery of lost or decreased revenues due to reduced electricity consumption or shifting energy demand as a result of the use of smart meter technologies. It does not, however, specify the approach to be employed, but both LRAM and decoupling are being considered.

Other jurisdictions, including California, have dealt with the lost revenue issue by way of decoupling. Under the decoupling approach, the utility's revenue and profitability are separated from sales volume which removes barriers to promoting conservation and energy efficiency. In a rate case, the utility determines how much revenue it requires to cover its expenses and sets an electric rate which is expected to produce that level. To the extent that the utility has, in fact, received too little (too much) the error is corrected through a surcharge (rebate). A similar solution has also been proposed to address revenue deficiencies created as a result of a smart meter project in Michigan.

In California the current "decoupling plus" program is a revenue decoupling program combined with performance incentives for meeting or exceeding energy efficiency targets (performance-based rates). Decoupling revenues from throughput can be achieved through application of demand rates; this option was previously identified in a Board staff discussion paper on distribution rate design.

Question #101

Ref: Board Staff IR#68 – LRAM/SSM

In CK Hydro's CDM Plan, dated January 13, 2005, it shows that both a Customer Awareness Program and Smart Meter Pilot Program would be offered with budgets of $110,000 and $325,000 respectively. It is unclear how the LRAM and SSM Claims of $347,010.21 and $181,266, respectively, for Smart Meters are divided amongst these two programs. Please provide a detailed division of LRAM Claims for each of these programs.

Answer:

CK Hydro is not differentiating the LRAM and SSM Claim between the Customer Awareness Program and Smart Meter Program.

The report provided by Navigant and Navigator, while they focused on Smart Meters, they also recognized that the extensive Customer Awareness Program contributed to the conservation by the customers.

The 4% conservation that is being applied for LRAM and SSM is a reservation amount and is very reasonable for the following reasons:

- Smart Meter studies show that a 4% reduction in consumption is achievable, concluded in the Brattle Group report in evidence.

  We also know that the study by Ottawa Hydro and the Board found results of 6% for Smart Meters and TOU prices.

  Navigator found through their study of CK Hydro customers that customers believed they were in TOU prices and therefore changed their consumption behaviour.

- CK Hydro in their CDM plan filed with the Board had targeted a 5% reduction in consumption. The 5% target was set based upon a report that was referenced in the plan, by South Darby, at the Environmental Change Institute, University of Oxford, "Making it obvious; designing feedback into energy consumption".

Since CK Hydro was extremely successful in deploying Smart Meters, making customers aware of conservation and promoting a conservation culture, the customers reduced their consumption by 8% and were 5% better than comparable LDCs.

Question #102

Ref: Board Staff IR#68 – LRAM/SSM

In CK Hydro's CDM Plan, dated January 13, 2005, CK Hydro indicates that a reduction in energy consumption of 5% by 2007 due to a customer awareness program is achievable. Please report whether CK Hydro observed such a reduction in energy consumption due to its Customer Awareness Program, and if so, whether this reduction is in addition to the 4% reduction claimed for the smart meter program.

Answer:

Board Staff IR #66 – LRAM/SSM identifies the initiatives undertaken to raise awareness for smart meters and CDM at CK Hydro. The Navigant report indicates an 8% energy savings throughout the CK Hydro service territory. Subsequent research conducted on behalf of the IESO identified that CK Hydro customers changed their behaviour and consumption as if they were actually being billed time-of-use rates. This reduction in demand was driven by customers' perceptions of the link between TOU rates and smart meters.

The 4% reduction claimed reflects a conservative application (50%) of the total impact of information programs designed to raise awareness of conservation options on customers' overall demand for electricity. Reductions in demand that are linked directly to other CDM programs (based on technologies installed) are captured through program results and the related evaluation efforts.

Question #103

Ref: Energy Probe IR #16
Exhibit 2/Tab 3/Schedule 2/pg. 36 – Load Transfer Projects

CK Hydro stated that approximately 50% of the 9 projects related to Hydro One Load Transfers (E2/T3/S2, p. 36) will be completed by year end.

a) Please provide a list of remaining projects including the new projected completion date.

b) Are any of the remaining projects currently under construction?

c) If yes, why are these projects not considered Construction Work in Progress?

Answer:

a) CK Hydro has three remaining Long Term Load Transfers to complete. The following chart includes the four customers remaining to be transferred. The new projected completion date is 2011.

Town	Customer Type
BLENHEIM	Residential
BLENHEIM	Residential
TILBURY	General Service
WHEATLEY	Residential

b) None of these remaining projects are currently under construction.

c) N/A

Question #104

Ref: Energy Probe IR # 19 – Other Distribution Revenues

In Response to EP IR #19 CK Hydro stated that "Revenue related to sale of vehicles being replaced is recorded by CK Hydro as Other Distribution Revenue in account 4360."

a) Please confirm that the sale of vehicles is recorded as a gain from disposal rather than a loss. If yes, please explain why a gain on disposal is recorded in account 4360 rather than account 4355.

b) Please provide a breakdown of amounts recorded in account 4360.

Answer:

a) Please refer to Technical Conference Transcript of January 26, 2010 reference:
Page 60, Line 26 through to Page 61, Line 15

b) Please see the table below for a breakdown of amounts recorded in account 4360.

	Year			
	2006	2007	2008	2009
Surplus Vehicles	$49,767	$41,200	$21,287	$11,683
Surplus Office Eqpt/Tools	-	-$434	-	-
Surplus Building	$80,956	$22,318	$14,435	-

Question #105

Ref: Energy Probe IR # 20 – Capital Expenditures

In the b) part of the interrogatory response, CK Hydro states:

> "The significant increase in the 2010 capital equipment is due to the purchase of new primary cable fault locating equipment. This equipment failed at the end of 2008 at a time that was too late for inclusion in the 2009 capital equipment budget. Operations staff has been fortunate enough to locate primary cable faults in 2009, however they cannot continue to jeopardize system reliability."

Equipment can fail at any time, and for many reasons, even beyond the ability of the utility's management and staff to control. However, given the failure of this equipment, and despite the fact that the failure was after the 2009 capital budget was set, what reasons were there for CK Hydro to defer purchase until 2010? Could CK Hydro not have decided to re-prioritize purchases, or to incur the purchase if it was prudent to maintain system reliability and operate the network safely?

Answer:

Please refer to Technical Conference Transcript of January 26, 2010 reference:
Page 81, Line 22 through to Page 83, Line 2

Additional Comments

As stated in Energy Probe IR #20, the Primary Fault Locating Equipment was not budgeted for 2009, as the 2009 budget was already in place. Rather than re-prioritize the 2009 budget, a contingency plan was put in place to locate cable faults that could not be located with the present equipment.

Question #106

Ref: Board Staff IRR #6
Energy Probe IR # 22
Exhibit 2/Tab 3/Schedule 2, p. 56 – 320 Queen Street and Green Data Centre

In the response to Energy Probe IR # 22, CK Hydro states that the proposed Green Data Centre building, to be located at 320 Queen St. will be owned by its affiliate CKUSI, and that no adjacent land has been purchased. However, CK Hydro also stated that 320 Queen Street is owned by CK Hydro and no cost associated with the Green Data Centre will be included in rate base. In response to Board staff IR #6 CK Hydro stated that the property purchase (for land adjacent to the property at 320 Queen St.) will be the only project that will carry over to 2010.

a) Please elaborate on the location and related cost of the new building.

b) How will property-related costs like property taxes, water and sewage, insurance, etc. associated with this new building at 320 Queen St. allocated between CK Hydro and CKUSI?

c) Will CKUSI compensate CK Hydro for the rental and/or usage of this land/location at 320 Queen Street on which the Green Data Centre is built? Please explain your response.

d) Please provide further justification for the purchase of land adjacent to the property at 320 Queen St., including a description of the intended land use.

Answer:

Please refer to Technical Conference Transcript of January 26, 2010 reference:
Page 53, Line 6 through to Page 57, Line 3

Additional Comments

a) CK Utility Services' data centre is located in the parking lot located in the south west portion of CK Hydro's existing campus. The data centre utilizes 7,200 sq ft. of the total campus space of 237,707 sq. ft. Please see response to Energy Probe IR #71.

b) All incremental property related costs, including property taxes, water and sewage, insurance, electricity etc. will be paid for by CK Utility Services.

c) Yes, CK Utility Services will compensate CK Hydro for the usage of this land. CK Utility Services will be allocated and charged its proportional share of all existing costs for the land.

d) CK Hydro is purchasing the land for operational and safety reasons. Operationally, the land will be utilized for expansion, training, safe and secure storage of equipment and stock, and a safer secondary exit for vehicles avoiding residential areas.

Below is an aerial view of 320 Queen Street, the Green Data Centre, and the proposed CN property purchase.

CK Hydro Main Building - Site Map

Existing CK Hydro Property

Green Data Center

CN Property

Question #107

Ref: Energy Probe IR # 30, VECC IR #10 – Load Forecast

a) Please confirm that the following table provides an accurate depiction of the load forecast scenarios provided by CK Hydro in its Cost of Service application as well as in response to EP IR #30 and VECC IR #10.

b) Please provide the total forecast kWh purchases for 2009 and 2010 excluding Weighting Factors, Ontario GDP and Median Age.

	Forecast kWh Purchases				
	per Application	per VECC IRR #10h	per EP IRR#30	per EP IRR#30	per EP IRR#30
		No GDP/No Median Age	No GDP	No GDP/ No Median Age/ Ontario Unemployment Rate	No Weighting Factor/ No GDP/ No Median Age
Year					
2009	802,584,558	864,727,907	798,251,338	832,854,583	
2010	776,861,807	851,684,437	773,713,048	855,491,335	

Answer:

a) This table is an accurate Representation of the values previously submitted.

b) Please see the table below.

Year	Forecast kWh Purchases				
	per Application	per VECC IRR #10h	per EP IRR#30	per EP IRR#30	per EP IRR#30
		No GDP/No Median Age	No GDP	No GDP/ No Median Age/ Ontario Unemployment Rate	No Weighting Factor/ No GDP/ No Median Age
2009	802,584,558	864,727,907	798,251,338	832,854,583	862,798,993
2010	776,861,807	851,684,437	773,713,048	855,491,335	850,981,631

Question #108

Ref: Energy Probe IR # 33 – Load Forecast, Regression Model

In response to Energy Probe IR # 33 c), where CK Hydro was asked to re-estimate the regression equation using historical kWh data without the kWh identified in table 3-11 and subsequently to provide the forecasted consumption for 2009 and 2010 in part d) of the interrogatory response, CK Hydro provided an overview over the historical kWh for customers affected by the closures and slow-down in CK Hydro's service area. However, no regression equation based on that data has been provided.

Please provide the regression equation that formed the basis for forecasted consumption as requested by Energy Probe.

Answer:

Please see below:

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.965942206
R Square	0.933044346
Adjusted R Square	0.924901091
Standard Error	1738318.321
Observations	84

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	9	3.12E+15	3.46E+14	114.5788	9.2E-40
Residual	74	2.24E+14	3.02E+12		
Total	83	3.34E+15			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*
Intercept	-362118736.4	1.49E+08	-2.43646	0.017238	-6.6E+08	-6.6E+07

Heating Degree Days	21272.45784	1768.014	12.03184	4.32E-19	17749.61	24795.3
Cooling Degree Days	121153.1968	6147.91	19.7064	3.64E-31	108903.2	133403.2
Peakhours	50669.44779	12300.51	4.119297	9.79E-05	26160.15	75178.74
Seasonal WF	4006222.838	454737.9	8.809961	3.8E-13	3100138	4912308
Industrial WF	439405.0615	259823.1	1.69117	0.095012	-78303.8	957114
Population	4264.556811	1515.664	2.813656	0.00627	1244.53	7284.583
Unemployment Rate	-589402.9712	261327.6	-2.25542	0.027064	-1110110	-68696.3
GDP	-371859.9759	369714.6	-1.0058	0.317788	-1108532	364812.4
Median Age	-124764.631	737578.8	-0.16915	0.866137	-1594422	1344893

Question #109

Ref: Energy Probe IRs # 44 and 45 – Late Payment Charges

In the response to Energy Probe IR # 45 c), CK Hydro shows 2009 Bridge year and 2010 Test Year amounts for Late Payment Charges of $170,000 and $188,000, respectively. In the response to Energy Probe IR # 44, CK Hydro documents Late Payment Charges for January to October 2009 as being $192,478, well above the annual estimate of $170,000.

a) Please provide 2009 Year-end Late Payment Charges, even if the amounts are not yet audited.

b) Given that the 2009 actual late payment charges will be above the bridge year forecast, please provide CK Hydro's views on whether the 2010 test year forecast should be updated. If CK Hydro believes that the 2010 test year forecast should be updated, please provide an update with explanation.

Answer:

a) The unaudited 2009 late payment charges are approximately $230,000.

b) CK Hydro believes that the 2010 test year forecast of late payment charges is reasonable and should not be updated. Late payment charges in 2010 will be less than in 2009 due to the impact of monthly billing. Late payment charges are generally 1.5% per month on the outstanding amount. The move to monthly billing will effectively cut the outstanding amount in half for many customers thus reducing the resulting charge for late payments.

Question #110

Ref: SEC IR #3
Exhibit 4/Tab 2/Schedule 4/pp. 1-5

a) The response to SEC IR # 3 lists new staff as a cost driver of $150,000 in addition to OM&A Activities of $470,000, which includes the costs (wages, salaries, etc.) of new staff. In Exhibit 4/Tab 2/Schedule 4/pg. 4, CK Hydro listed additional staff as a cost driver of $300,000 in 2010 and 2 apprentices hired in 2009 as a cost driver of $80,000. Please reconcile the incremental costs for new staff as documented in these two references.

b) In the response to SEC IR # 3, CK Hydro states that miscellaneous activities are a cost driver of ($208,438), while Table 4-8 in the Application shows miscellaneous cost drivers of $256. Please reconcile the incremental costs labelled as Miscellaneous as documented in these two references.

c) Please provide a variation of Table 4-8 showing all individual cost drivers as requested in SEC IR# 3.

Answer:

a) - c) Please see updated Table 4-8 below.

	2006	2007	2008	2009	2010
Opening Expense	5,906,099	5,137,513	5,279,175	5,679,177	5,826,150
Compensation in O&M	1,331,649	1,252,596	1,361,213	1,308,755	1,531,321
Net Operating Expenses	4,574,450	3,884,917	3,917,962	4,370,422	4,294,829
Inflation	4.0%	1.8%	2.3%	0.5%	1.4%
Opening Expenses	5,906,099	5,137,513	5,279,175	5,679,177	5,826,150
Salary Change in Year	75,000	(79,100)	108,600	(52,500)	(157,400)
New staff - 2010	-	-	-	-	300,000
New staff - 2009	-	-	-	-	80,000
General Inflation	185,900	68,400	92,500	21,700	63,300
O&M activities	(46,700)	97,400	79,900	(118,500)	238,200
Billing and Collecting activities	(147,300)	(127,100)	105,300	149,500	224,900
Community relations activities	(700)	69,500	(41,800)	(12,600)	14,800
Administrative activities	(834,900)	112,600	55,600	159,400	213,200
Miscellaneous activities	114	(38)	(98)	(27)	(38)
Ending Expenses	5,137,513	5,279,175	5,679,177	5,826,150	6,803,112

Question #111

Ref: SEC IR # 5 – OM&A Cost Drivers

In the response to SEC IR # 5, CK Hydro has provided further elaboration on the drivers of OM&A costs and whether these are one-time or permanent (i.e., ongoing). Most of the cost drivers identified for 2009 and 2010 are identified as permanent. What ongoing or permanent productivity improvements has CK Hydro identified with these drivers of costs, and how are these reflected in the 2009 and 2010 bridge and test year forecasts as efficiencies or cost savings?

Answer:

Please refer to Technical Conference Transcript of January 26, 2010 reference:
Page 83, Line 2 through to Page 86, Line 3

Additional Comments

CK Hydro is a low cost LDC and has been ranked as a "superior" LDC in the Board's cost comparator reports and analysis.

Some of the activities that CK Hydro has undertaken to find efficiencies are as follows:

- Participate in a joint LDC purchasing group that has provided savings in purchasing of transformers and other materials
- The smart meter solution is low cost as the method for the communication is wireless which does not incur third party charges; the smart meter solution is able to use the current meter population which has reduced stranded meter costs
- The implementation and utilization of the GIS and AMI systems has resulted in lower costs per activity in several areas. More calls and activity can be cleared from the office rather than dispatching a crew to the site. Two examples of this are:
    - Cable locates – cost per locate in 2007 was $33, 2008 was $30 and 2009 was $29
    - Emergency callouts – cost per emergency call in 2007 was $427, 2008 was $348 and 2009 was $306.

All of the efficiencies identified are reflected in the 2009 and 2010 forecast OM&A costs.

Question #112

Ref: SEC IR #11 – Billing and Collecting Charges from CKUSI

Please explain how any productivity gains or cost savings, other than savings in meter reading, are accounted for in the information provided in the response to SEC IR # 11. Please identify specific examples, if possible.

Answer:

Some of the costs savings and efficiencies for billing and collecting services from CK Utility Services that are reflected in the 2010 test year costs are:

- Wholesale settlement contract was renegotiated in 2009 with a 40% reduction
- The monthly billing additional costs are reduced by one full time employee for synergies
- The Customer Information System has been upgraded which will allow for time-of-use billing to be implemented without an increase in staff on a permanent basis
- CK Utility Services has invested in an Integrated Voice Recognition ("IVR") phone system upgrade. This system has allowed for phone calls to be made after hours to customers which has reduced the postage costs by approximately $10,000 since fewer letters are sent to customers.

Question #113

Ref: SEC IR #12
Exhibit 4/Tab 2/Schedule 4, p. 5 – Corporate Cost Allocation

a) Please provide a corporate cost allocation for all general financial services listed in the response to SEC IR #12 a).

b) Please confirm that the new financial system is a cost of $75,000 instead of $7,500 as shown in the response to SEC IR # 12 a).

Answer:

a) The following table provides the corporate cost allocation for the general financial services listed in SEC IR #12 a):

		CK Hydro's Allocation
2006 Charges	1,322,305	65%
Inflation	79,300	65%
New financial system[1]	75,000	70%
New document management system[1]	20,000	70%
Enhanced network security[2]	40,000	80%
Additional accounting staff[3]	160,700	70%
Allocation of CFO[4]	40,000	100%
Retiree benefit costs[5]	48,000	100%
Miscellaneous items	34,876	70%
2010 Charges	1,820,181	67%

Notes
(1) The new financial system and document management system are shared with all corporations
(2) The network security is at 320 Queen St, there will be no allocation to Middlesex Power Distribution, therefore CK Hydro is allocated a higher percentage
(3) The accounting and regulatory positions will be allocated to all corporations
(4) More time is spent on CK Hydro, overall the CFO is allocated 70% to CK Hydro
(5) These are the costs for CK Hydro's retirees therefore 100% of these costs are allocated

b) Yes. Also, please refer to Technical Conference Transcript of January 26, 2010 reference: Page 57, Line 4 through to Line 24

Question #114

Ref: VECC IR #4 – Vehicles and Fleet

Appendices C and D to the VECC IR responses indicate the new vehicle purchases and the vehicles being replaced and disposed of. Appendix D indicates that the vintages of the replaced vehicles to 1999 or earlier, before CK Hydro was amalgamated and incorporated from the former MEUs. CK Hydro has been amalgamated and incorporated for around 10 years by now. One expected benefit of amalgamation would be to take advantage of economies of scale. While individual MEUs prior to restructuring might have had overlap in number and type of vehicles, over time it would be reasonable for CK Hydro to implement productivity gains through increased use of fewer vehicles over its service territory and removing duplicates. The response to VECC IR # 4 indicates a reduction from 14 to 13 bucket trucks to 2010.

a) Please provide further explanation of the need for and expenditures on this type of vehicle as documented in the response.

b) All of the vehicles referenced in the response to VECC IR # 4 and Appendices C and D are for bucket trucks and one forestry boom truck. These would primarily be used for servicing aerial infrastructure, including streetlights. Undergrounding of infrastructure would decrease the need for these vehicles. Please provide the percentage of CK Hydro's network (in circuit km.) that is underground and whether this has been increasing over time.

Answer:

a) CK Hydro only has 2 double bucket trucks. One is a 55 foot truck, and the one being replaced is a 65 foot truck. One extended boom (84 foot) bucket truck is required to reach the higher multi-circuit poles which is being installed now to accommodate modern designs and to provide a safer working environment for the employees. Clearances between feeders and 3rd party attachments have been lengthened to meet Electrical Safety Authority standards. The 84 foot bucket also includes an elevator on the lower boom which permits this vehicle to be used in high traffic situations making it safer and less obtrusive to the public. This will improve the safe working environment for the employees and the public and enhance the ability to work on live voltages thus improving reliability and efficiency.

b) The percentage of circuits that are underground is 22%. As the chart below demonstrates that the increase in overhead and underground circuits is proportional.

Year	Kms. overhead circuits	Kms. underground circuits	Percentage of underground circuits
2003	**745**	**220**	**22%**
2004	**745**	**220**	**22%**
2005	**783**	**224**	**22%**
2006	**784**	**214**	**21.5%**
2007	**782**	**214**	**21.5%**
2008	**796**	**226**	**22%**

Question #115

Ref: Ref: Board staff IR # 31 – Depreciation Expense

In the preamble to Board staff IR # 31, Board staff noted:

> As one example, Board staff notes that, on Table 4-26, for account 1555 – Smart Meters, CK Hydro lists a gross book value of assets of $4,210,814, and a depreciation expense in the year of $375,787, based on an estimated remaining life of 11 years. For 2010, for the same account and with no additions or disposals from account 1555, CK Hydro shows the same gross book value for smart meters of $4,210,814, but a depreciation expense of $331,925 based on an estimated remaining life of 13 years. The change in the "straight line" depreciation expense from 2009 to 2010 is due solely to the change in the estimated remaining life – which has increased even though the assets have aged by one year.

In its response to that Board staff interrogatory, CK Hydro explained that it was following the Board's general amortization/depreciation policies as documented in the2006 Electricity Distribution Rate Handbook, but that it made adjustments for major repairs and for small capital items.

In the example cited by Board staff above, there are no additions or removals from smart meter gross assets from 2009 to 2010, but CK Hydro has changed, and in fact increased, the remaining useful life of the assets in this class.

a) What is the full expected life that CK Hydro uses for smart meters?

b) Please explain fully the reasons for the change in the remaining useful life from 2009 to 2010 in the cited example.

Answer:

a) The full expected useful life that CK Hydro uses for smart meters is 15 years.

b) The estimated remaining life of the smart meters is incorrect in the referenced tables. The remaining useful life in 2009 and 2010 should have been 14 years and 13 years, respectively.

   Please see the table below for a reconciliation of Table 2-14 to Tables 4-23 through 4-27.

Accumulated Depreciation at Dec 2006 per Table 2-14	$	18,088,598
Table 4-24 Depreciation Expense for 2007	$	3,315,639
Plus 2007 Accumulated Depreciation related to Transportation Equipment Table 2-8	$	203,305
Less 2007 Accumulated Deprecation taken out due to disposals Table 2-8	-$	141,457
Reconciled to Accumulated Depreciation at Dec 2007 per table 2-14	$	21,466,085
Table 4-25 Depreciation Expense for 2008	$	3,595,770
Plus 2008 Accumulated Depreciation related to Transportation Equipment Table 2-9	$	214,588
Less 2008 Accumulated Deprecation taken out due to disposals Table 2-9	-$	36,029
Reconciled to Accumulated Depreciation at Dec 2008 per table 2-14	$	25,240,414
Table 4-26 Depreciation Expense for 2009	$	3,701,765
Plus 2009 Accumulated Depreciation related to Transportation Equipment Table 2-10	$	245,048
Less 2009 Accumulated Deprecation taken out due to disposals Table 2-10	$	-
Reconciled to Accumulated Depreciation at Dec 2009 per table 2-14	$	29,187,227
Table 4-27 Depreciation Expense for 2010	$	3,815,361
Plus 2010 Accumulated Depreciation related to Transportation Equipment Table 2-11	$	303,916
Less 2009 Accumulated Deprecation taken out due to disposals Table 2-10	$	-
Reconciled to Accumulated Depreciation at Dec 2010 per table 2-14	$	33,306,504

Appendix A

Appendix A

Tariff Sheet

Residential		
Service Charge	$	18.81
Smart Meter Disposition Rider - effective until April 30, 2012	$	0.45
Distribution Volumetric Rate	$/kWh	0.0085
Low Voltage Distribution Rate	$/kWh	0.0003
Deferral and Variance Account Rider	$/kWh	0.0002
LRAM/SSM Rider	$/kWh	0.0000
Retail Transmission Rate – Network Service Rate	$/kWh	0.0047
Retail Transmission Rate – Line and Transformation Connection Service Rate	$/kWh	0.0043
Wholesale Market Service Rate	$/kWh	0.0052
Rural Rate Protection Charge	$/kWh	0.0013
Standard Supply Service – Administrative Charge (if applicable)	$	0.2500
General Service Less Than 50 kW		
Service Charge	$	34.43
Smart Meter Disposition Rider - effective until April 30, 2012	$	0.45
Distribution Volumetric Rate	$/kWh	0.0107
Low Voltage Distribution Rate	$/kWh	0.0003
Deferral and Variance Account Rider	$/kWh	(0.0007)
LRAM/SSM Rider	$/kWh	0.0000
Retail Transmission Rate – Network Service Rate	$/kWh	0.0042
Retail Transmission Rate – Line and Transformation Connection Service Rate	$/kWh	0.0039
Wholesale Market Service Rate	$/kWh	0.0052
Rural Rate Protection Charge	$/kWh	0.0013
Standard Supply Service – Administrative Charge (if applicable)	$	0.2500
General Service 50 to 999 kW		
Service Charge	$	98.15
Smart Meter Disposition Rider - effective until April 30, 2012	$	0.45
Distribution Volumetric Rate	$/kW	4.7091
Low Voltage Distribution Rate	$/kW	0.1377
Deferral and Variance Account Rider	$/kWh	(0.6859)
LRAM/SSM Rider	$/kWh	0.0000
Retail Transmission Rate – Network Service Rate	$/kW	1.7495
Retail Transmission Rate – Line and Transformation Connection Service Rate	$/kW	1.5439
Retail Transmission Rate – Network Service Rate – Interval Metered	$/kW	1.8642
Retail Transmission Rate – Line and Transformation Connection Service Rate – Interval Metered	$/kW	1.6909
Wholesale Market Service Rate	$/kWh	0.0052
Rural Rate Protection Charge	$/kWh	0.0013
Standard Supply Service – Administrative Charge (if applicable)	$	0.2500
General Service Intermediate - 1,000 to 4,999 kW		
Service Charge	$	796.52
Smart Meter Disposition Rider - effective until April 30, 2012	$	0.45
Distribution Volumetric Rate	$/kW	3.5829
Low Voltage Distribution Rate	$/kW	0.1505
Deferral and Variance Account Rider	$/kWh	(0.3825)

LRAM/SSM Rider	$/kWh	0.0000
Retail Transmission Rate – Network Service Rate	$/kW	1.8642
Retail Transmission Rate – Line and Transformation Connection Service Rate	$/kW	1.6909
Wholesale Market Service Rate	$/kWh	0.0052
Rural Rate Protection Charge	$/kWh	0.0013
Standard Supply Service – Administrative Charge (if applicable)	$	0.2500
Standby Power		
Service Charge	$	6,099.81
Smart Meter Disposition Rider - effective until April 30, 2012	$	0.45
Distribution Volumetric Rate	$/kW	3.8455
Low Voltage Distribution Rate	$/kW	0.1505
Deferral and Variance Account Rider	$/kWh	(0.6702)
LRAM/SSM Rider	$/kWh	0.0000
Retail Transmission Rate – Network Service Rate	$/kW	1.8642
Retail Transmission Rate – Line and Transformation Connection Service Rate	$/kW	1.6909
Wholesale Market Service Rate	$/kWh	0.0052
Rural Rate Protection Charge	$/kWh	0.0013
Standard Supply Service – Administrative Charge (if applicable)	$	0.2500
Standby Charge – for a month where standby power is not provided. The charge is applied to the contracted amount (e.g. nameplate rating of generation facility).	$/kW	1.3500
Unmetered Scattered Load		
Service Charge (per connection)	**$**	9.06
Distribution Volumetric Rate	$/kWh	0.0064
Low Voltage Distribution Rate	$/kWh	0.0003
Deferral and Variance Account Rider	$/kWh	(0.0015)
Retail Transmission Rate – Network Service Rate	$/kWh	0.0042
Retail Transmission Rate – Line and Transformation Connection Service Rate	$/kWh	0.0039
Wholesale Market Service Rate	$/kWh	0.0052
Rural Rate Protection Charge	$/kWh	0.0013
Standard Supply Service – Administrative Charge (if applicable)	$	0.2500
Sentinel Lighting		
Service Charge (per connection)	**$**	7.88
Distribution Volumetric Rate	$/kW	5.7266
Low Voltage Distribution Rate	$/kW	0.0982
Deferral and Variance Account Rider	$/kW	0.3111
Retail Transmission Rate – Network Service Rate	$/kW	1.3289
Retail Transmission Rate – Line and Transformation Connection Service Rate	$/kW	1.2171
Wholesale Market Service Rate	$/kWh	0.0052
Rural Rate Protection Charge	$/kWh	0.0010
Standard Supply Service – Administrative Charge (if applicable)	$	0.2500
Street Lighting		
Service Charge (per connection)	**$**	1.23
Distribution Volumetric Rate	$/kW	7.9163
Low Voltage Distribution Rate	$/kW	0.0454
Deferral and Variance Account Rider	$/kW	(0.8041)
Retail Transmission Rate – Network Service Rate	$/kW	1.3193
Retail Transmission Rate – Line and Transformation Connection Service Rate	$/kW	1.1926

Wholesale Market Service Rate	$/kWh	0.0052
Rural Rate Protection Charge	$/kWh	0.0010
Standard Supply Service – Administrative Charge (if applicable)	$	0.2500
Specific Service Charges		
Customer Administration		
Arrears certificate	**$**	15.00
Statement of Account	**$**	15.00
Easement letter	**$**	15.00
Credit reference/credit check (plus credit agency costs)	**$**	15.00
Returned cheque charge (plus bank charges)	**$**	15.00
Account set up charge/change of occupancy charge	**$**	30.00
Meter dispute charge plus Measurement Canada fees (if meter found correct)	**$**	30.00
Non-Payment of Account		
Late Payment – per month	%	1.50
Late Payment – per annum	%	19.56
Disconnect/Reconnect Charge – At Meter During Regular Hours	$	65.00
Temporary service install & remove – overhead – no transformer	$	500.00
Temporary service install & remove – overhead – with transformer	$	1,000.00
Specific charge for access to the power poles – per pole/year	$	22.35
Switching for company maintenance – Charge based on Time and Materials	$	
Allowances		
Transformer Allowance for Ownership – per kW of billing demand/month	**$**/kW	(0.60)
Primary Metering Allowance for transformer losses - applied to measured demand and energy	%	(1.00)

Retail Service Charges (if applicable)	**Metric**	**Current**
Retail Service Charges refer to services provided by a distributor to retailers or customers related to the supply of competitive electricity		
One-time charge, per retailer, to establish the service agreement between the distributor and the retailer	$	100.00
Monthly Fixed Charge, per retailer	$	20.00
Monthly Variance Charge, per customer, per retailer	$/cust.	0.50
Distributor-consolidated billing charge, per customer, per retailer	$/cust.	0.30
Retailer-consolidated billing credit, per customer, per retailer	$/cust.	0.30
Service Transaction Requests (STR)		
Request fee, per request, applied to the requesting party		0.25
Processing fee, per request, applied to the requesting party		0.30
Request for customer information as outlined in Section 10.6.3 and Chapter 11 of the Retail Settlement Code directly to retailers and customers, if not delivered electronically through the Electronic Business Transaction (EBT) system, applied to the requesting party		
Up to twice a year		no charge
More than twice a year, per request (plus incremental delivery costs)	$	2.00

LOSS FACTORS

Total Loss Factor – Secondary Metered Customer < 5,000 kW	1.0443
Total Loss Factor – Secondary Metered Customer > 5,000 kW	1.0430
Total Loss Factor – Primary Metered Customer < 5,000 kW	1.0339
Total Loss Factor – Primary Metered Customer > 5,000 kW	1.0141

Chatham-Kent Hydro Inc.

EB-2009-0261

Response to Technical Conference Undertaking #1

TCU-1

Question #74

Ref: Energy Probe Interrogatory # 33 & VECC Interrogatory # 11 (c)

Please provide a reconciliation of the volume decrease of 98,631,273 kWh shown in Table 3-11 that is supposed to be based on the average of 2002 through 2007 with the figures provided in the table in response to VECC # 11 (c).

Answer:

The following is a calculation of the volume adjustment for the customers shut down/slow downs:

Customers Closed	kWh 2002	kWh 2003	kWh 2004	kWh 2005	kWh 2006	kWh 2007	kWh 2008	kWh 2009		Average	Loss Factor	Total Reduction
Customer 1	403,172	422,786	524,297	596,924	551,865	365,194	110,354			424,942	1.04430	443,767
Customer 2	8,387,497	9,666,377	10,630,289	9,375,866	8,611,997	8,349,700	1,640,564			8,094,613	1.04430	8,453,204
Customer 3					873,482	1,238,559	1,205,390			473,919	1.04430	494,913
Customer 4A	1,272,827	1,686,539	2,048,210	1,965,327	1,861,937	1,230,644	229,921			1,470,772	1.04430	1,535,927
Customer 4B	2,518,374	2,426,834	2,673,598	2,920,363	2,579,471	2,962,591	795,929			2,411,023	1.04430	2,517,831
Customer 4C							175,268			175,268	1.04430	183,032
Customer 5 A							182,178			182,178	1.04430	190,248
Customer 5B	1,507,558	1,478,077	1,486,239	1,189,871	1,163,800	1,125,106	774,571	49,000		1,253,460	1.04430	1,308,988
Customer 6	1,644,275	1,510,683	937,874	851,863	508,437	103,025	38,948			799,301	1.04430	834,710
Customer 7	19,942,541	18,027,053	20,547,731	21,115,019	18,212,698	16,541,416	7,386,752			17,396,173	1.04430	18,166,823
Customer 8	12,184,699	12,569,904	14,524,643	15,083,516	15,133,425	15,999,793	13,839,060			14,190,720	1.04430	14,819,369
Customer 9	512,986	488,255	504,455	542,129	810,282	1,333,920	1,489,965			811,713	1.04430	847,672
Customer 10	554,617	646,015	659,012	736,621	595,804	373,151	228,414			541,948	1.04430	565,956
Customer 11						302,290	319,251			310,771	1.04430	324,538
Customer 12	25,161,314	23,641,653	29,010,762	33,258,177	38,553,008	35,525,700	32,138,492			31,041,301	1.04430	32,416,430
Customer 13	11,212,351	11,061,956	10,756,803	10,486,887	9,764,304	8,224,414	7,713,829	1,574,194		9,888,649	1.04430	10,326,716
	85,302,211	83,626,132	94,303,913	98,122,563	99,220,510	93,675,503	68,268,886	1,623,194		89,466,749		93,430,126

Customers Slow down	kWh 2002	kWh 2003	kWh 2004	kWh 2005	kWh 2006	kWh 2007	kWh 2008	3 months kWh 2009	Annual kWh 2009	Average	kWh 2009	Difference	Loss Factor	Total Reduction
Customer 14	1,514,327	1,638,819	1,674,923	1,602,715	1,667,528	1,672,583	1,484,123	318,812	1,275,246	1,607,860	1,275,246	332,614	1.04430	347,348
Customer 15	1,215,754	551,296	945,617	1,538,355	1,551,310	1,260,169	760,122	30,154	120,614	1,117,518	120,614	996,903	1.04430	1,041,066
Customer 16	6,336,860	5,830,261	5,488,683	5,130,362	4,679,530	4,378,973	4,030,531	1,008,470	4,033,882	5,125,029	4,033,882	1,091,147	1.04430	1,139,485
	9,066,941	8,020,376	8,109,223	8,271,432	7,898,368	7,311,725	6,274,776	1,357,436	5,429,742	7,850,406	5,429,742	2,420,664		2,527,899

Customers Slow down	kWh 2002	kWh 2003	kWh 2004	kWh 2005	kWh 2006	kWh 2007	kWh 2008	kWh 2009	kWh 2009	Average	1/2 LOAD	Difference	Loss Factor	Total Reduction
Customer 17 A	1,384,684	1,274,637	1,162,243	1,328,009	1,192,084	1,257,656	1,243,208	477,432	1,909,728	1,263,217	631,609	631,609	1.04430	659,589
Customer 17 B	2,625,493	1,701,609	1,709,772	1,775,701	1,699,640	2,039,137	2,457,518	609,354	2,437,416	2,001,267	1,000,634	1,000,634	1.04430	1,044,962
Customer 17 C	2,099,604	1,927,653	1,871,142	1,904,421	1,822,146	1,708,076	1,653,422	332,946	1,331,784	1,855,209	927,605	927,605	1.04430	968,697
	6,109,782	4,903,899	4,743,157	5,008,130	4,713,870	5,004,869	5,354,149	1,419,732	5,678,928	5,119,694	2,559,847	2,559,847		2,673,248

Final Load Adjustment

	Average Usage	Loss Factor	Final Adjustment
Customers Closed 2008 - Decrease Load	89,466,749	1.04430	93,430,126
Customers Slow Down - Decrease Load	2,420,664	1.04430	2,527,899
Customer Slow Down Wheels - Decrease Load	2,559,847	1.04430	2,673,248
	94,447,260		98,631,274

Chatham-Kent Hydro Inc.

EB-2009-0261

Response to Technical Conference Undertaking #4

TCU-4

Answer Energy Probe question # 76:

Ref: Energy Probe Interrogatory # 34 (d)

The response indicates that CDM that took place in 2007 and 2008 is not reflected in the historical data or the regression analysis. Please indicate how the historical data was altered to remove the actual CDM impacts in 2007 and 2008.

Answer:

The historical data was not altered to remove the actual CDM impacts in 2007 and 2008. The regression analysis reflects historical years from 2000 to 2008. Since CDM is not addressed directly in the analysis, the impact of CDM is being averaged over the historical years. As a result, the full impact of CDM in 2007 and 2008 will not be adequately reflected in the resulting equation from the regression analysis and a manual adjustment is needed to reflect the full impact on 2010 consumption.

Chatham-Kent Hydro Inc.

EB-2009-0261

Response to Technical Conference Undertaking #5

TCU-5

Provide a revised forecast including a CDM flag.

Answer:

The CDM flag is an incrementing value starting in January 2006. Its purpose is to identify a CDM effect in the general population. January 2006 is approximately when Chatham-Kent Hydro started to actively promote CDM initiatives (especially for the residential class) as a means of curtailing consumption.

The revised forecast for 2009 and 2010 is:

2009 788,467,517
2010 763,794,413

The corresponding regression statistics are:

SUMMARY OUTPUT

Regression Statistics	
Multiple R	96.43%
R Square	92.99%
Adjusted R Square	92.03%
Standard Error	1,811,900.065
Observations	84

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	10	3.17813E+15	3.18E+14	96.8061	5.41929E-38
Residual	73	2.39658E+14	3.28E+12		
Total	83	3.41778E+15			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*
Intercept	(516,401,759)	314,017,661	(1.64)	0	(1,142,238,045)	109,434,527
Heating Degree Days	20,859	1,843	11.32	0	17,186	24,531
Cooling Degree Days	123,041	6,439	19.11	0	110,209	135,874
Peakhours	35,982	12,897	2.79	0	10,278	61,686
Seasonal WF	3,942,417	476,416	8.28	0	2,992,922	4,891,913
Industrial Production WF	749,748	270,861	2.77	0	209,922	1,289,574
Population	5,410	3,261	1.66	0	(1,089)	11,909
Unemployment Rate	(434,004)	321,838	(1.35)	0	(1,075,427)	207,419
GDP	239,507	516,408	0.46	1	(789,693)	1,268,706
CDM	(887,917)	809,453	(1.10)	0	(2,501,155)	725,320
Median Age	(1,099,201)	826,318	(1.33)	0	(2,746,050)	547,649

Please note that the GDP co-efficient is positive and the CDM coefficient is negative as one would expect.