#### Board staff Interrogatories 2010 Electricity Distribution Rates Chatham-Kent Hydro Inc. ("CK Hydro") EB-2009-0261

## Administration

# 1. Ref: Exhibit 1/Tab 3/Schedule 1/Appendix F – Audited Financial Statements

Please file a copy of CK Hydro's 2007 Audited Financial statements.

### 2. Ref: Exhibit 1/Tab 2/Schedule4/Appendix E – Revenue Requirement Work Form ("RRWF")

Please file a copy of the RRWF in working Microsoft Excel format.

# 3. Ref: Notice of Application and Hearing and Letters of Comment

- a) Following publication of the Notice of Application and Hearing, has CK Hydro received any letters of comment?
- b) If so, please confirm whether a reply was sent from the Applicant to the customer. Also, please file any reply or replies with the Board.
- c) If CK Hydro did not send a reply to any letter of comment received, please explain why a response was not sent and confirm if and when CK Hydro intends on responding. Please file any subsequent responses with the Board.

# Rate Base

# 4. Ref: Exhibit 2/Tab 2/Schedule 1 – Construction Work in Progress

The continuity schedules for fixed assets provided in Tables 2-5 through 2-11 show no entries for "Work in Progress". Please provide a thorough explanation of CK Hydro's treatment of Construction Work in Progress ("CWIP").

# 5. Ref: Exhibit 2/Tab 3/ Schedule 3 – Capitalization Policy

Please provide details regarding CK Hydro's capitalization policy. In particular, please include in your explanation how CK Hydro treats capital expenditures that are not in-service ("used and useful") at the end of a fiscal year.

## Capital Expenditures

### 6. Ref: Exhibit 2/Tab 3/Schedule 2 - Capital Programs and Projects

In this Schedule, CK Hydro lays out its planned capital additions for 2009 and 2010. The size of the program increases by approximately 30% in 2010 from the 2009 level rising from \$4.2 million in 2009 to \$5.5 million in 2010.

- a) Please provide the breakdown for each 2006 through 2010 showing the total of capital expenditures that are "one-time programs" vs. "ongoing programs".
- b) Please discuss the extent to which CK Hydro considered a phased approach to its capital program and if a phased approach was considered, why it was not adopted. If a phased approach was not considered, please explain why not.
- c) Please provide an explanation on the measures that CK Hydro has taken or will undertake, e.g. use of tendering process and deploying the lowest bid contractor, negotiations with suppliers on purchase of material and equipment, etc. to execute capital program projects in the most costeffective way. Please file any evidence that demonstrates CK Hydro's effort in undertaking and implementing measures that would achieve cost savings for CK Hydro's capital programs.
- d) Please state why CK Hydro believes that it has the capacity to complete such a large capital program in 2010. In this context, please provide an update as to where the 2009 capital program stands on a completion basis as of September 30, 2009. Please also discuss whether or not CK Hydro anticipates having any carryover projects from 2009 and if so what their impact would be in 2010.

### 7. Ref: Exhibit 2/Tab 3/ Schedule 2, p. 44-45 – Fleet and Vehicles

CK Hydro states that "Chatham-Kent Hydro replaces the fleet on ongoing basis. The replacement period varies based on the type of truck: Pickup and Van 6-8 years, bucket truck 7-10 years, heavy trucks 12-15 years". CK Hydro estimates capital expenditures of \$780,000 in the 2010 test year from \$362,593 in the 2009 bridge year, which is an increase of 115%.

- a) Please explain CK Hydro's vehicle budgeting process in further detail and provide a list of vehicles to be purchased in 2010.
- b) Please provide CK Hydro's level of capital expenditures on vehicle replacement for the 2004 to 2009 period.
- c) Please provide any quantitative analyses that were undertaken that support the proposed 2009 and 2010 level of expenditures on vehicle replacements.
- d) Please provide a summary of the RFP process results leading to the 2009 and 2010 budgeted vehicle replacement amounts including the competing

bids that were considered and how they were scored to determine the winning bidder.

# 8. Ref: Exhibit 1/ Tab 3/ Schedule 2, p. 61

This project describes the re-surfacing of a rear yard, which includes the application of new asphalt and three cement pads. CK Hydro states that by "pouring three separate cement pads for the storage of transformers the area will be able to hold up better in the summer heat". CK Hydro further states that "once all the work has been completed it will greatly reduce Chatham-Kent Hydro's yearly costs on preventative maintenance. With proper routine maintenance the asphalt exceed another twenty years of life cycle." Please provide further explanation of the justification for this project with respect to costs and timing for 2010, and the cost reductions that CK Hydro expects.

# 9. Ref: Exhibit 2/Tab2/Schedule 1

CK Hydro has forecast capital contributions of \$275,000 for the 2010 test year. This is a decrease of \$177,865 over 2006 actual. Please provide further explanation that would explain this decrease.

# 10. Ref: Exhibit 1/Tab 2/Schedule 1/pg. 2

CK Hydro states that it has selected AMI, SCADA and GIS systems that are the "backbones" of a smart grid that will improve reliable communication and control devices that will enable peak reduction and encourage renewable generation connections.

- a) Please provide further explanation for the above statement, including examples..
- b) Is CK Hydro aware of any applications under RESOP/FIT or Micro-Fit for distributed or renewable generation within CK Hydro's service area?

# Asset Management

# 11. Ref: Exhibit 2/ Tab 3/ Schedule 2 and Exhibit 2/ Tab 4/ Schedule 1

Asset management consists of processes and systems that help evaluate, prioritize, and select the distributor's maintenance and capital plans to maximize the benefits to its customers and shareholder.

For the purpose of providing the information regarding its maintenance and capital plans for this interrogatory, CK Hydro should use its identified materiality threshold items.

With respect to CK Hydro's 2010 capital plans:

- a) Please provide a list of criteria and rationale that CK Hydro has utilized in the prioritization and selection of its 2010 capital projects.
- b) Please complete the following Table 8 and provide a ranking and description of the capital projects using the threshold test that is outlined above. Please note that a rating of "1" is the highest priority, rating "2" is the second highest priority, rating "3" is the third highest priority etc. Please use additional rows, if necessary.
- c) Please explain and file with the Board evidence with respect to how the priorities of these projects are determined using the criteria identified in part "a", e.g. asset condition study, system planning, regulatory compliance, etc.

Priority Ranking	Project Name	Description of Project	Type of Program	Capital Investmen t (\$)	Discretionary Or Non- discretionary	Start Date of Project	Date In Service	Rationale for Priority Selection
ו כ								
3	e.g. New 27.6 kV	This project is to build a new U/G feeder from Station ABC	Addition of a new asset	\$	Non- discretionary	June 09	Dec. 09	To relieve the overloading of the existing underground feeders and meet the load growth of x% forecasted in the next y years.
4								
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### Table 8 – 2009 Capital Projects

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#### Notes:

Type of program can be replacement, rehabilitation, or upgrade of an existing asset, or an addition of a new asset.

Non-discretionary – a "must do" project or related directly to the core infrastructure (e.g. stations, feeders, etc.), or the need for which is determined beyond the control of the Applicant, e.g. regulatory or Government initiatives.

Discretionary – the need is determined at the discretion of the Applicant and the program can be deferred.

Some programs may have the same priority ranking.

#### **Customer and Load Forecast**

#### 12. Ref: Exhibit 3/Tab 2/Schedule 1 - System Load Regression Model

On page 4, CK Hydro states that "the result of the regression analysis produces an equation that predict the purchases based on the explanatory variables including: weather (heating and cooling degree days), economic output (GDP growth), and industrial production weighting factor, population, unemployment rate, Median age and calendar variables. On page 11 the applicant provided the equation resulting from the multifactor regression model.

- a) Please provide a rationale for using the filed multivariate regression model to develop the load forecast, given that the estimated model includes a negative, although statistically insignificant, co-efficient for the economic variable (GDP) which is unintuitive.
- b) CK Hydro states that the Seasonal Weighting Factor is a unitless value determined by an iterative process to maximize the R<sup>2</sup> value of the

regression analysis. Please provide further explanations of how this variable was developed. Elaborate on the value of the Seasonal Weighting Factor as an explanatory variable.

- c) CK Hydro states that the Industrial Production Weighting Factor is a unitless value that captures economical industrial demands and production cycles on a more global scale that was determined via an iterative process. Please explain in detail how this variable was developed. Elaborate on the value and interpretation of the Industrial Production Weighting Factor as an explanatory variable.
- d) Please describe what alternative modelling efforts, such as alternative econometric model forms or additional variables, were examined by CK Hydro to improve the system load regression model.
- e) Please provide further explanation of why CK Hydro believes that the multivariate regression modelling approach used is reasonable from both a theoretical and an applied sense, and is preferable to other approaches.

# 13. Ref: Exhibit 3/ Tab 2/ Schedule 1/pg. 11 – Weather Normalization

CK Hydro indicates that Heating Degree Days (HDD) and Cooling Degree Days (CDD) were forecasted using the previous 12 month average. Please provide further explanation how HDD and CDD were developed.

# 14. Ref: Exhibit 3/Tab 2/Schedule 1/pg. 3 – Weather Normalization

CK Hydro states that it uses the 6 year average HDD and CDD in the Regression Model. Please indicate the specific years used, and the basis for selecting this approach.

## 15. Ref: Exhibit 3/ Tab 2/ Schedule 1/pg. 6 – Customer/Connection Forecast

CK Hydro states that "that billed kWhs from 2002 to 2008 are weather actual and 2009 and 2010 are weather normalized. Chatham-Kent Hydro currently does not have a process to adjust weather actual data to a weather normal basis. However, based on the process outlined in this Exhibit, a process to forecast energy on a weather normalized basis has been developed and used in this Application".

Please explain in detail how this process was developed. Elaborate on the value used to weather normalize the load forecast.

# 16. Ref: Exhibit 3/ Tab 2/ Schedule 1, p. 24, Table 3-23 – Load Forecast

In Table 3-23 CK Hydro has provided a load forecast following adjustments for weather and economic sensitive rate classes as well as manual adjustments (economic slowdown and CDM).

- a) Please provide further explanation as to the necessity of two further economic adjustments after the regression model has already accounted for various economic and seasonal variables.
- b) Please provide a load forecast excluding the weather normalization step on the final load forecast.
- c) Please provide a load forecast excluding the manual adjustments noted above.

# 17. Ref: Exhibit 3/ Tab 2/ Schedule 1, p. 21 – Average Usage per customer/connection

In Table 3-18 CK Hydro provided non-normalized forecast annual usage per customer/connection. Board staff has calculated Forecast Annual kWh Usage per Customer/Connection based on the normalized load forecast and customer forecast provided by CK Hydro, see below:

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	Residential	GS < 50 kW	GS 50-999 kW	Intermediate	Streetlights	(Sentinel Light	Unmetered	Standby	
2002	9,031	34,385	853,124	9,398,975	825	1261	4,587	30,542,407	
2003	8,805	34,469	766,687	9,498,905	771	1040	4,587	27,611,150	
2004	8,755	34,783	749,028	11,182,576	753	1219	4,587	31,347,945	
2005	9,020	33,585	678,456	11,339,203	727	1172	4,587	37,615,872	
2006	8,453	32,784	604,998	11,129,006	630	1190	4,587	36,900,476	
2007	8,315	32,202	606,275	10,831,341	634	1164	5,496	37,331,496	
2008	8,174	32,262	573,731	8,578,391	615	1134	5,440	51,354,780	
2009 (B) (WN)	7,368	30,053	485,021	4,927,077	562	1053	5,408	32,208,089	
2010 (T) (WN)	6,965	28,612	434,723	4,813,976	516	998	5,370	31,031,687	

#### Historical and Forecast Annual kWh Usage per Customer/Connection

- a) Please confirm that the annual forecast usage per customer/connection for the 2009 bridge year and the 2010 test year shown in the table above are correct.
- b) If yes, please provide an explanation as to what ongoing change(s) account(s) for the reduction in average consumption per customer/connection in each customer class. Where possible, please provide additional support for the explanation of the reduced consumption.
- c) If no, please provide a forecast annual consumption per customer/connection taking the weather-normalization process into consideration.

#### 18. Ref: Exhibit 3/Tab 2/Schedule 1/p. 27 – Summary of Forecast Data

CK Hydro has provided a summary of forecast data including historical data for the past 5 years. Board staff notes that CK Hydro has shown zero load for the Large User class for the past 5 years, while CK Hydro has listed load in the Intermediate class being proposed.

a) Given that the applicant is requesting to eliminate the Large User class and establish a new Intermediate class for 2010, please confirm

whether CK Hydro has shown the historical data for the Large Use for the proposed Intermediate class.

b) Please explain whether the historical Large Use data is comparable to the estimated Intermediate class, taking into account both changes in customer numbers as well as consumption reductions for the remaining customers in the proposed Intermediate class.

### 19. Ref: Exhibit 3/Tab 2/Schedule 1/pp. 18-19

Based on the customer/connection data provided by CK Hydro in tables 3-13 and 3-15, Board staff has calculated the following growth rates:

Customers/conn	ections								
	Residential	GS < 50 kW	GS 50-999 kW	Intermediate	Streetlights	Sentinel Lights	Unmetered	Standby	Total
2002	28,087	3,282	376	18	10,465	402	193	1	42,824
2003	28,204	3,278	360	20	10,465	402	193	1	42,923
2004	28,200	3,233	360	20	10,465	361	193	1	42,833
2005	28,303	3,186	386	21	10,465	353	193	1	42,908
2006	28,347	3,140	399	21	10,570	346	193	1	43,017
2007	28,391	3,132	405	20	10,510	347	195	1	43,001
2008	28,504	3,097	409	22	10,679	344	194	1	43,250
2009 (B) (WN)	28,574	3,067	415	25	10,715	335	194	1	43,326
2010 (T) (WN)	28,644	3,038	421	28	10,751	327	194	1	43,403
Average annual growth rates									
2002 to 2008	0.21%	-0.83%	1.21%	2.91%	0.29%	-2.20%	0.07%	0.00%	0.14%
2008 to 2010	0.49%	-1.91%	2.93%	27.27%	0.67%	-4.94%	0.00%	0.00%	0.35%
2008 to 2009	0.2%	-1.0%	1.5%	13.6%	0.3%	-2.6%	0.0%	0.0%	0.2%
2009 to 2010	0.2%	-0.9%	1.4%	12.0%	0.3%	-2.4%	0.0%	0.0%	0.2%

Please confirm the growth rates shown above, and reconcile with the geometric mean approach used by CK Hydro shown in table 3-14. In the alternative, please provide, with explanation, CK Hydro's calculated geometric growth rates.

#### **Operating Revenues**

### 20. Ref: Specific Service Charges and Conditions of Service

CK Hydro has its Conditions of Services posted on its website at <u>http://www.chatham-</u> <u>kent.ca/cityBundle\_services/downloadsService/downloadfiles/c44d4c0c-e63f-</u> 4bfd-8f63-c192920a40d9\_Microsoft%20Word%20-%20ConditionsOfService.pdf.

- a) Please confirm that CK Hydro is not proposing changes to its existing Board-approved Specific Service Charges. In the alternative, please identify the Specific Service Charges that CK Hydro is proposing (either new or changed), and provide support for the proposal.
- b) Please confirm that the Conditions and Services in the above link is CK Hydro's current version of its Conditions of Service. If not, please provide a version of the current version.

c) Please confirm that there are no rates and charges documented in CK Hydro's current Conditions of Service that are not documented on CK Hydro's proposed Board-approved Tariff of Rates and Charges. If there are charges that should be included on the Tariff of Rates and Charges, please identify and explain these. If necessary, please provide an updated proposed Tariff of Rates and Charges as documented in **Exhibit 8**.

### Other Distribution Revenue

# 21. Ref: Exhibit 3/Tab 3/Schedule 1/pp. 2-3 – Late Payment Charges

Table 3-27, Summary of Other Distribution Revenue shows revenue from Late Payment charges of \$170,000 and \$188,861 for the 2009 bridge year and the 2010 test year respectively. Table 3-28 – Other Distribution Revenue Account Breakdown, shows no revenue from Late Payment Charges for the years 2009 and 2010. Please reconcile these two tables.

# 22. Ref: Exhibit 3/Tab 3/Schedule 1/pg. 4 – Account 4405 Interest and Dividend Income

CK Hydro shows a decline in interest and dividend income of 86% from 2006 actual to 2010 test year. CK Hydro recorded no income in Intercompany Ioan interest, Interest on overpayment of PILs, Interest Income – Transition cost and Interest Income/Expenses RSVA for the 2009 bridge or 2010 test years. Please provide further explanation as to the absence of revenues for these sub-accounts in the 2009 bridge and 2010 test years.

# **Operating Expenses**

### 23. Ref: Exhibit 4/ Tab 2/ Schedule 4 – LEAP

On page 12 of this exhibit, CK Hydro states that Regulatory Expenses has increased by \$101,190 over the 2009 Test Year. CK Hydro has cited costs related to managing the regulatory changes for LEAP as a component of this expense. However CK Hydro does not identify which portion of this increase is related to a LEAP program.

- a) Please clearly identify any cost in CK Hydro's 2010 budget associated with the Low-income Energy Assistance Program ("LEAP").
- b) Identify whether these programs have been newly established or whether funds are being applied to existing programs.

## 24. Ref: Exhibit 4/Tab 2/Schedule 4/Appendix D – Monthly Billing

On page 2 of this Exhibit, CK Hydro provides a breakdown of the cost involved in the move to monthly billing. CK Hydro has stated that the cost will be \$142,381 per year. It is unclear if there are any one time costs associated with this move.

- a) Please confirm whether these added staffing positions are within CK Hydro. If not, please provide further explanation.
- b) CK Hydro has identified the need for four additional positions to administer a monthly billing process. Please provide further information on these staffing requirements, and, if applicable, any costs allocated to CK Hydro from CKUSI.
- c) Please provide further explanation whether these costs are ongoing in full, or whether a portion of these costs is considered one time.
- d) Please identify if any employees are dedicated to the LEAP program either in full or partially. If so, please provide further details.

### Employee Compensation

# 25. Ref: Exhibit 6/Tab 1/Schedule 1, p.3 and Exhibit 4/Tab 2/Schedule 6, pp. 3-4

On page 3, CK Hydro lists its 2009 FTE level as 38, but shows 39 FTEs for 2009 on page 4, line 7.

- a) Please confirm CK Hydro's expected 2009 FTE estimate.
- b) Please indicate CK Hydro's current FTE count in 2009 year-to-date.

# 26. Ref: Exhibit 6/ Tab 1/ Schedule 1, p.3 and Exhibit 4/ Tab 2/ Schedule 4, p. 4 – Additional staff

In the first reference CK Hydro states that it requires five new staff members in 2010 to ensure that CK Hydro has enough qualified linepersons and meter technicians. In the second reference, under 2010 cost drivers, CK Hydro lists 6 additional staff members (+ \$300,000).

- a) Please clarify CK Hydro's expectations for additions to staff in 2010.
- b) Please indicate when in the 2010 year the new staff are expected to be added, and further explain how this is reflected in the 2010 test year labour costs.

## Regulatory Costs

# 27, Ref: Exhibit 4/Tab 2/Schedule 4, p. 4 – Management Salaries and Expenses

CK Hydro is showing a variance of \$429,162 between 2008 Actual and the 2010 Test year. CK Hydro states that the increase in expense is caused by the requirements of meeting the International Financial Reporting Standards (IFRS) such that more staff time is required to meet the financial reporting requirements.

- a) Please provide a breakdown of IRFS cost in terms of incremental, capital and on-going cost.
- b) Please provide a detailed explanation as to the accounting treatment of each of these costs.

## 28. Ref: Exhibit 4/Tab 2/ Schedule 3, p. 5, – Regulatory Costs

In its Regulatory Cost Schedule CK Hydro provides a cost breakdown including on-going as well as one-time regulatory expenses. CK Hydro has included onetime costs of \$70,000 associated with the preparation of the 2010 rate application for recovery in this application. Please state the utility's proposal on how it intends to recover the "One-time" costs as part of its 2010 rate application. Does it propose that these be recovered as a one time cost, or amortized over a period of four years (i.e. 2010 rebasing plus three years of IRM adjustments)?

### Corporate Cost Allocation

# 29. Ref: Exhibit 4/Tab 2/Schedule 5, Table 4-14, 4-15 and 4-16 – Affiliate Services

CK Hydro states that Chatham-Kent Utility Services (CKUS) provides information technology, billing, collection, administration, financial and regulatory services to CK Hydro. CKUS provides services worth \$3.7 million to CK Hydro in 2010.

CK Hydro further states that it currently performs streetlight maintenance for the Municipality of Chatham-Kent. CK Hydro is also involved in Sentinel Light rentals to third party customers. CK Hydro provides certain services to the Municipality of Chatham-Kent in respect of these activities. Actual cost including labour, labour burdens, stores material and burden, along with vehicle costs are charged to CK Hydro. In addition, Billings to the Municipality of Chatham-Kent include a 10% profit mark up.

In Table 4-14, CK Hydro provides some information on the allocators for costs allocated between CK Hydro and affiliated companies.

a) With reference to the referenced tables, please provide a detailed explanation as to how costs for the above mentioned services are

allocated, including identification of all allocators and the basis for the chosen allocator for each service.

- b) Has CK Hydro conducted a shared service/corporate cost allocation study? If so, please provide a copy of the study to the Board.
- c) If not, please provide an explanation why such a study has not been conducted.
- d) Has CK Hydro or CKUSI had an independent 3<sup>"</sup> party review regarding the costing of these affiliate services charged to CK Hydro?

## 30. Ref: Exhibit 4/Tab 2/Schedule 5, p. 1

CK Hydro states that as a result of recent changes to the Affiliate Relationship Code, CK Hydro is reviewing its provision of services to the Municipality of Chatham-Kent in respect of Street Light Maintenance and Sentinel Lights.

Please provide further information as to the kind of review the Applicant will undertake in response to recent changes to the Affiliate Relationship Code.

### Depreciation

### 31. Ref: Exhibit 4/Tab 2/Schedule 7

In this Exhibit, CK Hydro documents its policy for depreciating/amortizing capital assets. CK Hydro states:

- Chatham-Kent Hydro uses the pooling of assets for all fixed assets with the exception of Computer Equipment/Software, Automotive Equipment, Furniture & Equipment, Communication Equipment, and Capital Tools. Amortization is calculated on a straight line basis over the estimated remaining useful life of the assets at the end of the previous year; plus:
- Normally a full year's amortization is taken on capital additions during the current year. For this rate application Chatham-Kent Hydro used the half year rule for calculating depreciation expense for the 2010 Test Year.

CK Hydro has provided its calculations of depreciation expense in Tables 4-23 to 4-27 for the 2006, 2007 and 2008 actuals, 2009 Bridge and 2010 Test years.

Section 2.5.6 of the Filing Requirements states that the following information is required for Depreciation/Amortization/Depletion:

• The applicant must provide details for Depreciation, Amortization and Depletion by asset group for the Historical, Bridge and Test Years, including asset amount and rate of depreciation. This should tie back to the accumulated depreciation expense continuity schedule under Rate Base.

- The applicant must provide a statement as to whether it adheres to the Board's guidelines on amortization/depreciation rates (Appendix B of the 2006 Electricity Distribution Rate Handbook). If not, the applicant must summarize the differences from the handbook, and indicate whether these have been previously reviewed and approved by the Board (if so, file relevant references).
- Where the applicant is proposing new or changed depreciation/amortization rates, supporting documentation, preferably a depreciation study, must be provided.
- The applicant must provide a copy of depreciation/amortization policy, if available. If not, the applicant should state that such a policy does not exist, or explain why it is not available.

Analysis of the data in Tables 4-23 to 4-27 indicates that CK Hydro's methodology for calculating depreciation expense may depart from that in Appendix B of the 2006 Electricity Distribution Handbook.

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.

For other accounts, there are similar changes from year to year on the estimated remaining life of assets.

- a) Please confirm whether CK adheres to the Board's guidelines on Amortization/Depreciation as documented in Appendix B of the 2006 Electricity Distribution Rate Handbook. If not, please explain fully CK Hydro's adopted amortization/depreciation approach and its reasons for preferring this method.
- b) Please explain how CK Hydro determines the useful remaining life of assets each year. If CK Hydro has conducted depreciation studies to support the economic lives used for various assets and asset classes, please file copies of the most recent one(s).
- c) Please indicate how CK Hydro determines that assets have been fully depreciated/amortized under this process of estimating remaining life. When an asset becomes fully depreciated or amortized, please explain the accounting treatment used.

# PILs

### 32. Ref: Exhibit 4/Tab 2/Schedule 6/pg. 4 and Exhibit 4/Tab 3/Schedule 1 – Apprenticeship Training Tax Credit

CK Hydro expects to hire 2 apprentices are part of its workforce succession and to meet new business requirements.

- a) Please confirm whether the forecasted corporate income taxes for 2010 includes any amount for the Apprenticeship Training Tax Credit.
- b) If CK Hydro is forecasting no ATTC in the 2010 test year, please provide an explanation.

# Cost of Capital

# 33. Ref: Exhibit 5/Tab 2/Schedule 1/Appendix A and Section 2.6.2 of the Filing Requirements

- a) In accordance with section 2.6.2, please provide a copy of the existing note with the Municipality of Chatham-Kent.
- b) It is stated that the existing note has no repayment terms but is callable by the Municipality. Can CK Hydro negotiate repayment with the Municipality of Chatham-Kent? Has it done so in the past? If so, what has (have) been the outcome(s)?

# 34. Ref: Exhibit 5/Tab 2/Schedule 1/Appendix A – New Long-term Debt

CK Hydro indicates that it plans on incurring new Long-term Debt, of \$1,000,000 in 2009 and \$2,000,000 in 2010. CK Hydro states that the new debt is to come from its shareholder, Chatham-Kent Energy, and is to consist of the following terms:

- Interest rate paid will be the interest rate allowed in distribution rates and approved by the OEB
- There will be no set repayment terms
- Callable at the discretion of Chatham-Kent Energy.
- a) Please indicate the status of the new debt that CK Hydro plans to incur in 2009. Please provide a copy of the debt instrument if it is in existence.
- b) Please indicate the status of the debt that CK Hydro plans to incur in 2010. Please indicate when in 2010 CK Hydro expects that the debt will be actualized.
- c) For the new debt in 2009 and 2010 please indicate the projects and assets for which the debt financing is to be incurred. Please also provide the expected economic lives of the assets being financed.

- d) Please provide an explanation for the expected debt arrangements between CK Hydro and CK Energy for the new debt in 2009 and 2010. In particular, please explain how these terms reflect prudent and armslength commercial arrangements that balance to cost to ratepayers and financial risk to CK Hydro and its shareholder. Why are there no maturity date or repayment terms or fixed rates for these notes?
- e) What alternative debt financing arrangements has CK Hydro considered for the new debt financing.

# 35. Ref: Exhibit 5/Tab 1/Schedule 1 and Exhibit 5/Tab 1/Schedule 2 – Actual Capital Structure and Actual Rate of Return

In **Exhibit 5/Tab 1/Schedule 1**, CK Hydro states: "Exhibit 5, Tab 1, Schedule 2 details Chatham-Kent Hydro's rate base, deemed debt/equity ratios, deemed rate of return, **actual debt/equity ratios and actual rates of return** for 2006 Board Approved, 2006 Actual, [2007 Actual], 2008 Actual, 2009 Bridge Year Forecast, and 2010 Test Year Forecast." [Emphasis added.]

Examination of the tables shown in **Exhibit 5/Tab 1/Schedule 2** indicates that the information is for the deemed capital structures.

- a) Please provide similar tables for 2006, 2007, 2008 actuals, and with 2009 and 2010 forecasts for CK Hydro's actual capital structure.
- b) Please provide CK Hydro's actual (achieved) rate of return on capital and actual (achieved) return on equity for each of 2006, 2007 and 2008 actuals.

### **Cost Allocation**

### 36. Ref: Exhibit 7/Tab 1/Schedule 2/Appendix C – 2010 Cost Allocation Model

Please provide a copy of the 2010 Cost Allocation model (Run 2, without Transformer Allowance), as provided in Appendix C, in working Microsoft Excel format.

# 37. Ref: Exhibit 7/Tab 1/Schedule 2 – Intermediate Customer Class

Section 2.5 of the Board's *Distribution System Code* (the DSC) pertains to Frequency and Notice of Customer Reclassification and Notice of kVA Billing. In particular, sections 2.5.2, 2.5.3, 2.5.4, and 2.5.5 state the conditions for reviewing and reclassifying non-residential customers.

a) Please confirm that CK Hydro has complied with section 2.5 of the DSC to propose reclassification of the Large Use customers to the proposed Intermediate class. Please provide support for this.

- b) In the alternative, please explain the basis on which CK Hydro has determined that reclassification of these customers is necessary and appropriate.
- c) CK Hydro is proposing to eliminate its existing Large Use rate class. In the event that a new customer comes that would be classified as a Large User, or a proposed Intermediate class customer increases its demand such that it should be reclassified as a Large User in accordance with the DSC, please describe how CK Hydro proposes to establish appropriate rates for the class.

### 38. Ref: Exhibit 7/Tab 1/Schedule 2/Appendix C – 2010 Cost Allocation Model

Class revenues would generally be equal to the revenue at current approved rates, all prorated by a uniform factor to yield the total distribution revenue requested.

- a) Please include an explanation of which current rate is assumed for customers affected by re-classification
- b) Please file Sheet O1 of a version of Cost Allocation model for Test Year Revenues that would represent current Revenue-to-Cost ratios.

## 39. Ref: Exhibit 7/ Tab 1/ Schedule 2 – Standby class

CK Hydro proposes new a Standby class for a customer which was previously in the Time of Use class and was charged a standby rate.

CK Hydro's current Board-approved Tariff of Rates and Charges, as approved in the Decision and Order on Board file number EB-2008-0155, currently includes a rate for Standby Power approved on an Interim Basis.

- a) Please confirm with explanation whether CK Hydro is proposing to continue with its existing Standby Power rate approved on an interim basis. If there are any changes, please explain and support the proposal.
- b) Please provide further detailed discussion of why there is a need to establish this customer in a separate Standby Rate class. Is CK Hydro proposing that this new Standby Class be approved on an interim or final basis? Please explain.
- c) The revenue-to-cost (R/C) ratios shown in tables 7-7 and 7-5 range from an initial ratio of 30.7%; 33.0% when adjusted for the Transformer Ownership Allowance to a proposed R/C ratio of 55.29%. Please provide further detailed discussion of how initial R/C ratios were established and why the R/C ratios for this class are, initially, so low. What assumptions or allocators has CK Hydro made that factor into these low R/C ratios?

### 40. Ref: Exhibit 7/ Tab 1/Schedule 1/Tables 7-5 and 7-7 – Residential

In **Table 7-7**, the R/C ratio shown for the Residential customer class ranges from 98.9% for the initial Cost Allocation Study, 100.06% when adjusted for the Transformer Allowance and 98.12% for the updated 2010 Cost Allocation Study.

Please provide further explanation of why CK Hydro is proposing to move rates for this class to an R/C ratio below 100%.

# 41. Ref: Exhibit 7/ Tab 1/Schedule 2, Table 7-5 and 7-7 – Intermediate Class

In **Table 7-5 and 7-7**, the R/C ratios shown for the Intermediate customer class ranges from 92.7% for the initial Cost Allocation Study, 245.40% when adjusted for the Transformer Allowance and 133.6% for the updated 2010 Cost Allocation Study.

- a) The upper limit of the Board approved target range for this rate class is 180%. Please provide further explanation as to why CK Hydro is proposing to move well below the upper limit of the target range in rebasing rates for this class considering the high R/C ratio starting point.
- b) Please include a detailed discussion on how the reclassification of customers from other classes to this class is factored into CK Hydro's proposed R/C ratio for this class. How, if it has, has CK Hydro determined "winners" and "losers" due to reclassification to the proposed Intermediate class?
- c) What assumptions or allocators has CK Hydro made that factor into the R/C ratios for the Intermediate class, particularly for the 2006 studies, where there was no such class?

# 42. Ref: Exhibit 7/Tab 1/Schedule 2, Table 7-5 and 7-7 – Streetlighting

In **Tables 7-5 and 7-7**, the R/C ratio shown for the Streetlight customer class ranges from 44.0% for the initial Cost Allocation Study, 44.34% when adjusted for the Transformer Allowance and 94.22% for the updated 2010 Cost Allocation Study.

- a) The lower Board approved target range for the Streetlight class is 70%. Please provide further explanation why CK Hydro is proposing to move above the lower boundary to 94.22% in rebasing rates for this class.
- b) What assumptions or allocator has CK Hydro made/used that factor into these R/C ratios?

### 43. Ref: Exhibit 7/Tab 1/ Schedule 2, Table 7-5 and 7-7 – Unmetered Scattered Load

In **Table 7-5 and 7-7**, the R/C ratio shown for the Unmetered Scattered Load customer class ranges from 293.0% for the initial Cost Allocation Study, to 52.10% in the 2010 Cost Allocation study adjusted for the Transformer Allowance. CK Hydro is proposing an R/C ratio of 94.16% for this class.

- a) The lower Board approved target range for the USL class is 80%. Please provide further explanation why CK Hydro is proposing to move above the lower boundary to 94.16% in rebasing rates for this class.
- b) What assumptions or allocator has CK Hydro made/used that factor into these R/C ratios?

# 44. Ref: Exhibit 8/Tab 1/Schedule 1/pp. 4-7 - Fixed/variable split

On page 5, CK Hydro recommends that the fixed charge be equal to the ceiling amount allowed in the Cost Allocation model with some exceptions. CK Hydro is proposing fixed charges that are lower than the ceiling amount for the street light and sentinel light class.

- a) Please explain the impact of the reclassification of the various classes on the fixed/variable charges.
- b) Please provide further detailed explanations why the applicant feels that the ceiling amounts should not be applied to the street light and the sentinel light class.
- c) Please provide a scenario and subsequent bill impact calculations where the ceiling amounts are applied to these two classes.

# 45. Ref: Exhibit 8/Tab 1/Schedule 1, p. 4-7 and - Fixed/variable split

Please provide an explanation why rates above the ceiling amounts were used in the bill impact calculations for the GS<50 kW and the GS >50 kW customer class. Please reconcile the rates used for bill impact calculations with the proposed fixed distribution charges shown in Table 8-7.

# Rate Design

## 46. Ref: Exhibit 8/ Tab1/Schedule 9 and Exhibit 8/ Tab 1/Schedule 11/ Appendix A – General Service Less Than 50 kW

The first reference refers to the rates shown in the Schedule of Proposed rates and Charges, which shows a service charge of \$33.74. The bill impact calculations shown in Appendix A use a monthly service charge of \$34.43.

- a) Please indicate which monthly service charge for the General Service Less than 50 kW customer class CK Hydro is proposing in this application.
- b) If necessary, please update the application evidence to reflect the correct proposed monthly service charge for this class.

### 47. Ref: Exhibit 8/ Tab1/ Schedule 9 and Exhibit 8/ Tab 1/ Schedule 11/ Appendix A – General Service 50 to 999kW

The first reference refers to the rates shown in the Schedule of Proposed rates and Charges, which shows a service charge of \$97.46. The bill impact calculations shown in Appendix A use a monthly service charge of \$98.15.

- a) Please indicate which monthly service charge for the General Service 50 999 kW customer class CK Hydro is proposing in this application.
- b) If necessary, please update the application evidence to reflect the correct proposed monthly service charge for this class.

# 48. Ref: Exhibit 8/ Tab 1/ Schedule 11, Appendix A – Unmetered Scattered Load

The bill impact calculations for Unmetered Scattered Load shows a monthly service charge amount of \$194.33.

- a) Please explain how CK Hydro estimated this charge.
- b) Is this charge per customer or connection? If per customer, please provide the number of connections of each USL customer.
- c) If necessary, please update the application evidence.

# Deferral and Variance Accounts

# 49. Ref: Exhibit 9/Tab 1/Schedule 2 – Account 1525

CK Hydro is requesting the disposition of the balance (principal and interest as of December 31, 2008 of \$28,692 plus interest to April 30, 2010 of \$472). The balance reported by CK Hydro to the Board under the annual RRR filing 2.1.7 does not agree with the submitted amount of \$28,692.

- a) The amount reported in the continuity schedule in the above exhibit for account 1525 is \$27,418.10 for principal plus \$1,274.10 interest in 2008. Please provide the amount reported to the Board for account 1525 in Chatham-Kent's 2008 annual filing pursuant to RRR 2.1.7.
- b) Please identify the components of any difference between the amount reported in a) and the amount filed in Exhibit 9/Tab 1/Schedule 2.
- c) Please explain each component of any difference identified in b). Please identify and provide an explanation for which other accounts now contain any such difference, by component.

- d) Please state which amount (the amount in a) above or the amount in Exhibit 9/Tab 1/Schedule 2 is reflected in Chatham-Kent's most recent audited financial statements.
- e) Please state which value should be relied upon in this proceeding, and, if different from the value reported in the 2008 audited financial statements, explain why the Board should rely on such a different value.

### 50. Ref: Exhibit 9/Tab 1/Schedule 1 – Account 1525

According to the description of this account on page 4, lines 5 to 8: "This account includes all debits not provided for elsewhere. Specifically, Customer Information System expenses with respect to Ontario Price Credit (OPC) rebate cheques are tracked in this account. The OPC related costs were incurred by the distributors in 2002, and the balances in this account for all distributors (including Chatham Kent) were dispositioned in 2006 EDR proceedings."

- a) Please explain why is there still a balance showing in account 1525, since the balance as of December 2004 was reviewed and disposed of in CK Hydro's 2006 EDR application (Board File Number RP-2005-0020/EB-2005-0350?
- b) Has CK Hydro recorded any costs other than OPC-related costs, in account 1525 other costs? If so, please identify what these costs are, when they were recorded, and what these costs pertain to.
- c) Please identify the instructions from a Board Decision, Order, or other document, or other regulatory precedent that CK Hydro is relying on for recording in account 1525 costs not related to the OPC.

# 51. Ref: Exhibit 9/Tab 1/Schedule 2 – Account 1572

CK Hydro is requesting approval for the disposition of a balance of \$103,209, calculated as \$93,463 principal as of December 31, 2008 plus interest to April 30, 2010.

- a) Please identify the events which give rise to the claimed costs.
- b) Please provide evidence that the amounts recorded in this account relate to extraordinary event costs that meet the qualifying criteria established in the Board's 3<sup>rd</sup> generation IRM report. Specifically, provide evidence that the extraordinary event related costs recorded are clearly outside of the base upon which rates were derived, and meet the materiality, inability of management to control, prudence, and causation tests as which the Board uses to assess such cost claims.

### 52. Ref: Exhibit 9/Tab 1/Schedule 3 – Account 1508

For this account, CK Hydro shows a total of four sub-accounts that have amounts in them. Two of these sub-accounts are labelled "Other".

- a) Please provide descriptions of the costs that have been recorded in the two sub-accounts labelled "Other".
- b) Please provide regulatory precedent for recording these type(s) of costs in sub-accounts of account 1508.
- c) Please indicate when CK Hydro requested and received Board approval to record these amounts in account 1508. In the alternative, please explain why these costs are being recorded in account 1508.

## 53. Ref: Exhibit 9/ab 1/Schedule 3 – Account 1550

Please explain why the interest in the account is showing as a debit amount while the principal is a credit amount.

## 54. Ref: Exhibit 9/Tab 1/Schedule 3 – Account 1570

CK Hydro is applying to for review and disposition of the principal amount as of December 31, 2008 of \$13,100 plus interest to April 30, 2010.

New entries in this account ceased on the opening of the electricity market on May 1, 2002 unless otherwise authorized by the Board. Also, in their 2006 EDR rate applications, the balances in this account were reviewed and disposed of, for all distributors including CK Hydro.

- a) Please explain why there is still a balance showing for this account.
- b) Please provide a detailed description of the amounts recorded in this account, including when these amounts were recorded.
- c) Please indicate when CK Hydro requested and received Board approval to record these amounts in account 1570. In the alternative, please explain why these costs are being recorded in account 1570.

### 55. Ref: Exhibit 9 – Account 1588

On October 15, 2009, the Board's Regulatory Audit & Accounting group issued a bulletin related to Regulatory Accounting & Reporting of Account 1588 RSVA Power and Account 1588 RSVA Power Sub-account Global Adjustment. Please confirm whether or not C&ND Hydro plans on making any changes to its filing with respect to Account 1588.

### 56. Ref: Exhibit 9 – Account 1588 – Sub-account Global Adjustment

- a) Please identify separately, the balance associated with the Global Adjustment sub-account in Account 1588 Power, as of December 31, 2008 for the principal balance and April 30, 2010 for carrying charges.
- b) Please confirm that the GA principal balance proposed for disposition is based on the procedures identified by the Accounting Procedures Handbook.
- c) Please provide an allocation of the December 31, 2008 balance of the GA sub-account (plus interest to April 30, 2010) based on the 2008 kWhs for non-RPP customers.
- d) Please calculate a separate rate rider for the recovery of the proposed GA balance using the allocated amounts in part 3 and the 2010 non-RPP consumption data (kWh or kW as applicable) as the billing determinant.
- e) Please discuss whether CK Hydro's billing system is capable of applying a separate GA rate rider to non-RPP customers effective May 1, 2010.

### Smart Meters

### 57. Ref: Exhibit 9/Tab 2/Schedule 1/Appendix A – Smart Meters

- a) Please provide a copy in Microsoft Excel format, and showing all inputs and calculations of CK Hydro's smart meter model that has been filed in Adobe pdf format under a claim of confidentiality.
- b) Please provide CK Hydro's views, with reasons, as to whether the smart meter model should be updated at the time of the Board's Decision to reflect updated Cost of Capital parameters and other relevant parameters.

### 58. Ref: Exhibit 9/Tab 2/Schedule 1/pg. 7/II. 9-14 – Stranded Meter Costs

CK Hydro is proposing recovery of stranded meter costs of \$126,000.

- a) Please provide further details, including source data and calculations, for CK Hydro's proposed stranded meter costs. Please indicate whether these costs are audited.
- b) How has CK Hydro disposed of stranded meters? Are the above costs net of any net revenues received for sale of disposed conventional meters?
- c) Please confirm whether this is the totality of stranded meter costs associated with CK Hydro's smart meter programme. If CK Hydro expects that there will be additional stranded meter costs, please provide an estimate and description of these costs expected in the future.

# 59. Ref: Exhibit 9/Tab 2/Schedule 1/pg. 8/Table 9-10

In this table, CK Hydro shows, under "Other", 112 smart meters deployed in 2008, 144 meters deployed or to be deployed in 2009, 100 meters to be deployed in 2010 and 94 more to be deployed in 2011 or later. These smart meters are for other than the Residential or General Service < 50 kW classes.

- a) Please define what is in the "Other" category.
- b) Please indicate whether these smart meters are beyond Minimum Functionality as defined in O. Reg. 425/06.
- c) If these smart meters are for beyond minimum functionality, please provide further information on these smart meters, and the associated costs in aggregate and on a per meter basis.
- d) Has CK Hydro had costs for these meters reviewed and approved by the Board in a prior application?

### 60. Exhibit 9/Tab 2/Schedule 1/Appendix B – Smart Meter Model

Please provide the spreadsheets shown in Appendix B in Microsoft Excel format, showing all data inputs and calculations.

### 61. Exhibit 9/Tab 2/Schedule 1/pp. 10-11 – Smart Meter Permanent Rate

CK Hydro is proposing an amount of \$0.18/month per metered customer and describes this as a permanent smart meter rate adder.

- a) Please indicate where this rate adder is shown in the tariff of proposed rates shown in **Exhibit 8/Tab 1/Schedule 9**.
- b) The smart meter model in Exhibit 9/Tab 1/Schedule 2/Appendix B (page 685 of the Adobe pdf version of the application) shows the \$0.18 as recovering the incremental revenue requirement over a period of 12 months to recover the amount of \$69,952 from 32,132 metered customers.
  - i) Please explain why the model uses 2006 EDR customer counts. Would not updated customer counts be more accurate to reflect the amounts recovered and hence as the denominator for determining the rate rider?
  - ii) If the \$69,952 is to be recovered over one year, why is CK Hydro proposing this as a permanent smart meter rider?

# 62. Exhibit 9/Tab 2/Schedule 1

CK Hydro has had audited costs for smart meters deployed to December 31, 2007 reviewed and approved by the Board, and is proposing that audited costs for smart meters installed in 2008 be reviewed and approved of in this application.

- a) Please explain how the costs for smart meters installed to the end of 2007 are reflected in the 2010 Cost Allocation study.
- b) Please explain how the costs for smart meters installed in 2008 and proposed for approval are reflected in the 2010 Cost Allocation study.

# LRAM/SSM

# 63. Ref: Exhibit 1/page 30 and Exhibit 10/Tab 1/Schedule 2 – Proposed Deferral of LRAM and SSM to 2011

In this application, CK Hydro is seeking approval of amounts for LRAM of \$569,637 (covering the period 2005 to 2009) and SSM of \$204,557 totalling \$774,194. CK Hydro has proposed that recoveries be from the customer classes that have directly benefited from the programmes associated with the LRAM and SSM. The affected customer classes are: Residential, GS < 50 kW and Streetlighting.

CK Hydro has summarized its proposed rate riders for May 1, 2011 to recover the estimated LRAM and SSM amounts in Table 10-1.

Further, CK Hydro has proposed to implement the LRAM and SSM rate riders for May 1, 2011 rates, for a period of three years.

- a) Please provide further explanation of the "rate mitigation" reason that CK Hydro discusses to support its proposal to defer implementation beyond the 2010 rate year that is the subject of this application.
- b) In Table 10-1, CK Hydro has used proposed demand for the 2010 year to determine the rate riders. Please provide CK Hydro's views on an alternative where, if the Board were to approve recovery beginning in 2011, the rate riders would be calculated based on 2011 forecasted billing determinants (kWh or kW).

# 64. Ref: Exhibit 10/Tab 1/Schedule 2/pp. 1-3

Chatham-Kent is seeking approval for recovery of \$569,637 related to the Lost Revenue Adjustment Mechanism ("LRAM") for Conservation and Demand Management ("CDM") programs it undertook between 2006-2009 and \$204,557 related to the Shared Savings Mechanism ("SSM") for CDM programs it undertook between 2006-2008.

- a) Please provide a complete list of the input assumptions used for all prescriptive measures within Chatham-Kent's total LRAM and SSM claim. Please include the source of the input assumption and the rationale for their use.
- b)Please confirm that Chatham-Kent has used the best available input assumptions at the time of the third party assessment when calculating its LRAM amount.

# 65. Ref: Exhibit 10/Tab 1/Schedule 1/Appendix A/pg. 8

Attachment A details the CDM load impacts by class and program for the years 2006-2009. In the Board's Guidelines for Electricity Distributor Conservation and Demand Management (the "Guidelines"), issued on March 28, 2008, section 9.2 outlines the information that is required when filing an application for an LRAM.

- (a) Please provide the gross kW and kWh impacts of each program and for each customer class.
- (b) Please provide the free rider rate applied to each program (both OPAfunded and funded through distribution rates). Where different activities within a program have different free rider rates, please provide the free rider rate for each activity.

# 66. Ref: Exhibit 10/Tab 1/Schedule 1/Appendix A/pp. 8-9

CK Hydro is seeking approval for both an LRAM and SSM claims related to Smart Meter installation from 2007-2009.

Section 6.1 of the Guidelines outlines the eligible programs a distributor may include in its SSM claim and states that the SSM is not available for utility-side expenditures.

- a) How much approved third tranche CDM funding has CK Hydro included in its rate base between 2006 and 2009? Please confirm the amounts included in each year separately.
- b) If CK Hydro has included any approved third tranche CDM funds in its rate base between 2006 and 2009, please confirm how much was dedicated to smart meter programs and discuss the rationale for its inclusion in rates.
- c) If CK Hydro has included approved third tranche CDM funds in rates base that were dedicated to smart meter programs, please discuss the appropriateness to earn an incentive for Smart Meters, given that it earns a return on the Smart Meters through rate base.
- d) Please indicate any legislation, Board policies or past decisions that CK Hydro is relying on to support its proposal.

# 67. Ref: Exhibit 10/Tab 1/Schedule 1/Appendix A/pages 4 and 8

In its report filed in Appendix A, Enerspectrum provides a summary on the reduction in consumption levels based on the education activities undertaken by CK Hydro surrounding smart meter installations and states:

EnerSpectrum Group believes that it is both consistent with the review of multiple TOU studies undertaken by Faruqui and Sergicil, and specifically the OEB's Smart Price Pilot, that a 4% reduction in energy consumption can be reasonably attributed to the 28,522 smart meters installed, combined with its customer education and awareness programs. Based on customer feedback, the education activities undertaken motivated them to behave as though they were already on TOU rates once a smart meter was installed. Therefore it is reasonable to attribute some savings for LRAM purposes to all smart meters installed. This attribution recognizes that the LDC was both an early promoter of conservation and implementer of smart meter technology. It is also reasonable to attribute the largest energy savings under TOU rates during peak demand periods when electricity prices also peak. However, the magnitude of the savings at peak load periods over different times of year are not known, so savings have been assumed to be distributed equally over a 24-hour period for the purpose of LRAM and SSM calculations. Although it appears to be an oversimplification, it is more prudent for the purposes of this evaluation.

The table on page 8 summarizes the estimated savings by programme.

- a) Did CK Hydro see a decrease in consumption for every customer who had a smart meter installed?
- b) Please provide details as to when the CDM programmes listed in the table on page 8 ran, and how each programme overlapped with CK Hydro's smart meter deployment.
- c) If a customer were to decide to behave as if they were on TOU rates and decides to attempt to reduce their consumption, please comment on whether this would motivate them and increase their probability of taking advantage of other CDM programmes being offered, such as refrigerator roundups or CFL light conversions. In such a situation, please provide CK Hydro's views on whether the savings attributed to smart meters may double count, at least in part, savings attributed to other CDM programmes occurring over this same period.
- d) The Enerspectrum analysis appears to be based on applying a 4% reduction due to smart meters and on the assumption that the smart meter conversion motivated CK Hydro customers to behave as if they were on

time-of-use rates, even though TOU rates will not be introduced until 2010, with the exception of the pilot study in 2005-6. Further, the pilot study in 2005-6 indicates that there was no apparent difference between the test and control groups, as noted in the Navigant study (**Exhibit 10/Tab 1/Schedule 2/Appendix C/page 2/bullet 2**). What other evidence about CK Hydro's customers' behaviour is CK Hydro relying on to support the assumption that a 4% reduction in consumption should be attributable solely to deployment of smart meters?

 e) Is CK Hydro aware of whether smart meter deployment by other Ontario distributors, and particularly distributors named in legislation, O. Reg. 427/06 and O. Reg. 428/06, and who have been deploying smart meters since 2006 and 2007, have seen similar consumer behaviour and consumption reductions?

## 68. Ref: Exhibit 10/Tab 1/Schedule 2/pp. 1-3

It is not clear whether CK Hydro is attributing the energy savings and associated revenue loss from smart meters to themselves, time-of-use pricing, or consumer education, or a combination of all three.

- a) Please confirm to what factor(s) CK Hydro is attributing the energy savings and associated revenue loss.
- b) How has CK Hydro measured and determined the individual contribution of each factor towards the energy savings and associated revenue loss?

### 69. Ref: Exhibit 10

Board staff is interested in CK Hydro's CDM expenditures. On March 28, 2005, CK Hydro received approval from the Board for its Conservation and Demand Management ("CDM") plan and accompanying budget of \$1,000,000.

- a) Please confirm that the total approved CDM plan budget of \$1,000,000 has been completely expended on the components of the plan.
- b) If the CDM budget has not been spent according to the plan, please indicate what of the plan remains, the related amounts, and discuss why the funding has not been exhausted. Also, please discuss how CK Hydro proposes to dispose of the approved funding.