

Board Staff Interrogatories
2013 Electricity Distribution Cost of Service Application
Brantford Power Inc.
EB-2012-0109
September 25, 2013

Exhibit 1 – General

1-Staff-1

Updated Revenue Requirement Work Form

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

1-Staff-2

Updated Cost Allocation Study

Upon completing responses to all interrogatories from Board staff and intervenors, please provide a corrected Cost Allocation study with any corrections or adjustments that the applicant wishes to make to the amounts in the previous version of the Cost Allocation model. Please include documentation of the corrections and adjustments, such as a reference to an interrogatory response or any explanatory note.

1-Staff-3

Updated Appendix 2-W – Bill Impacts

Upon completing responses to all interrogatories from Board staff and intervenors, please provide an updated Appendix 2-W for all classes at the typical consumption/demand levels (i.e. 800 kWh for Residential, 2,000 kWh for General Service Less Than 50 kW).

Exhibit 2 – Rate Base

2-Staff-4

Ref: E2, T2, S3, p5

Ref: E2, T3, S2, App 2-A

In the first reference above, BPI has partially explained its 2012 Bridge Year variance through the purchase of a cube van for \$325k. Vehicle replacements for 2012 as shown in Appendix 2-A and capital project descriptions appear to be \$123,836.

- a) Please explain the purchase price of \$325k for this vehicle.

- b) Please provide an explanation for the remaining difference between the \$325k cost of the vehicle and the \$124k shown in Appendix 2-A.

2-Staff-5

Ref: E2, T3, S2, p2

Ref: App 2-A

Ref: Asset Management Plan

Board staff notes that BPI has adjusted its Appendix 2-A to calculate the miscellaneous line as the difference between the total and subtotal amounts for each year in the table. The model provided to applicants includes the miscellaneous line as an input. Board staff further notes that the formula entered on line 33 of the model deducts the total on line 36 from the subtotal on line 32, resulting in negative miscellaneous amounts for the years 2013, 2012 and 2009.

- a) Please confirm that the miscellaneous amounts in 2009, 2012 and 2013 should be positive amounts based on the project information provided in the table, and that the miscellaneous amounts in 2008, 2010 and 2011 would be negative.
- b) Please explain the negative spending amounts for 2008, 2010 and 2011.
- c) Please provide a breakdown of the miscellaneous spending in 2012 of \$897,460.
- d) Please confirm that BPI's planned capital spending is \$3,440,160, consistent with BPI's Asset Management Plan.
- e) If necessary, please provide a corrected Appendix 2-A.

2-Staff-6

Ref: E2, T3, S2, p2

Ref: E2, T3, S2, p9

App-2-A

BPI explains its decline in capital spending in 2011 as having been the result of no conversion projects occurring in that year. Board staff notes that no conversion projects are described or included in Appendix 2-A for 2010, 2011, 2012 or 2013. BPI's increased spending in 2012 is described as "a return to a normal level" of capital spending.

- a) When was BPI's conversion project completed?
- b) Did BPI undertake any conversion projects in 2010? If so, where have they been included in BPI's capital projects evidence?
- c) If no conversion projects were undertaken in 2010, please explain the decrease in spending in 2011.
- d) Does BPI consider its conversion to be an exceptional project or business as usual?

- e) Please explain BPI's description of its 2012 spending level as a return to normal if conversions are exceptional.

2-Staff-7

Ref: E2, T3, S2 Appendix 2-A Capital Projects Table – Pole Replacement

BPI has indicated various amounts from 2008 to 2013 for pole replacements as follows: \$471.4k for 2008, \$512.3k for 2009, \$1,537.5k for 2010, \$1,469k for 2011 and \$1,096k for 2012. Board staff notes that the pole replacement budget for 2013 is \$390k, based on the asset management plan.

- a) Please explain the variability in this expense type from 2008 to 2012.

2-Staff-8

Ref: E2, T3, S5, Appendix C

Ref: Appendix 2-A

Board staff notes that BPI's asset management plan shows a spending level pattern as follows:

- 2014 – increase 52%
- 2015 – increase 16%
- 2016 – increase 11%
- 2017 – decrease 28%

Board staff notes a similar pattern in the historical information, showing higher spending in the years between cost of service applications, culminating in a reduction of 34% between 2012 and 2013.

- a) Please describe BPI's approach to address the pace of capital spending.
- b) Please explain how BPI's asset management plan addresses the pace of capital spending.

2-Staff-9

Ref: E2, T3, S6, p2, Table 2.21

Board staff notes that the service quality indicators for telephone accessibility have trended down since 2008, from 80% to 54% in 2013. BPI has explained the below standard SQI in 2012 as the result of vacancies at the time of employee transfers from the City of Brantford.

- a) Please provide an explanation for this decline in service quality since 2008.

- b) Please explain the steps BPI proposes to take to reverse the decline in service quality.

Exhibit 3 – Operating Revenue

3-Staff-10

Ref: Exhibit 3/Tab 2/Schedule 1 – Estimated Regression Model

Board staff has prepared the following summary of the estimated regression model that BPI has used in its Application to estimate the base load forecast, before adjustment for 2012 and 2013 CDM program impacts:

Variable	Description	Estimated Coefficient	t-Statistic
Intercept	Constant term	(53,960,036.90)	(5.46)
Heating Degree Days (HDD)	Heating Degree Days at Lester B. Pearson Airport	15,963.03	14.90
Cooling Degree Days (CDD)	Cooling Degree Days at Lester B. Pearson Airport	110,374.36	19.19
Number of Days in the Month	Number of calendar days in the month	1,909,211.10	8.01
Real Ontario GDP	Chained GDP in constant 1997 \$ for the Province of Ontario	549,023.30	10.59
April	Binary indicator variable for month of April	(4,364,938.90)	(6.47)
May	Binary indicator variable for the month of May	(3,385,062.27)	(4.63)
October	Binary indicator variable for the month of October	(2,029,353.76)	(2.81)
Negative Impact Variable	CDM variable constructed based on OPA reports for CDM program impacts from 2006 onwards; 0 prior to 2006	(5.71)	(15.55)

The regression statistics indicate that the included variables have estimated coefficients that are statistically significant at a 95% confidence level and that have the correct signs, as appropriate.

- Please confirm or correct the above summary table.
- What other variables were tried in the model, and why were these variables rejected in favour of the proposed model?
- The number of days in the month would, in part, also correlate with the number of working days in the month and hence economic activity, although when the month starts and the number of weekend days in the month would add some variability to this. HDD and CDD would also, in large part, also reflect seasonal impacts. The inclusion of binary variables for each of the months of April, May and October, and all with statistically significant and negative coefficients

suggests that there are some seasonal (spring and fall saddle period) impacts not being accounted for by the HDD and CDD and days in the month.

- i. How and why did BPI decide to test and then include binary monthly variables for these three months?
 - ii. Does the need for and significance of these variables not suggest that there are other factors, or other form of model misspecification, in the base model specification omitting these variables?
- d) BPI describes the Negative Impact variable as follows: “The Negative Impact Variable grows each month at a constant value over the year. The negative impact variable not only reflects the impact of CDM on the load forecast but it also reflects the impact of economic conditions within the service area.” A review of the sheets of the load forecast Excel spreadsheet indicates that the Negative Impact Variable corresponds with the CDM variable, a constructed variable that interpolates in a linear method the net annualized CDM savings of OPA-sponsored programs for BPI. The variable is zero to December 2005 but then increases in a linear fashion each year. Please provide for BPI’s view that economic conditions in BPI’s service territory are correlated with the constructed CDM variable.

3-Staff-11

Ref: Exhibit 3/Tab 1/Schedule 4 – “Negative Trend” Variable

BPI has included a Negative Trend variable in its estimated regression equation, with the estimated coefficient of the CDM variable being -5.71. The data for the CDM/Negative Impact variable are contained in tab “CDM Activity” of the load forecast excel spreadsheet.

Analysis of the spreadsheet indicates that a linear interpolation was used to interpolate the monthly values to sum to the reported annual OPA savings in each year. As a starting example, the 2005 CDM savings per the OPA reports are 2,666,105 kWh in 2005. Board staff notes that, as documented in the OPA reports, the reported annualized savings for the year are estimated as if all programs were in effect the full year from January 1 to December 31.

New CDM programs are implemented at various times in the year and hence will not have the full impact in the first year of implementation. In recent Decisions, the Board has approved the application of the half-year rule as an approximation to measure the real impact of CDM programs in their initial year.

For example, the actual impact of 2005 CDM programs on 2005 consumption should be $2,666,105/2 = 1,333,053$ kWh. The monthly values in 2005 should be linearly interpolated from 0 such that the sum would equal the 1,333,053 kWh.

For 2006, the full annualized persistence of 2005 programs (i.e., 2,666,105 kWh) would be assumed, and the incremental annualized savings for 2006 should be divided by 2 to reflect the half-year impact of the 2006 CDM programs in the first year, 2006.

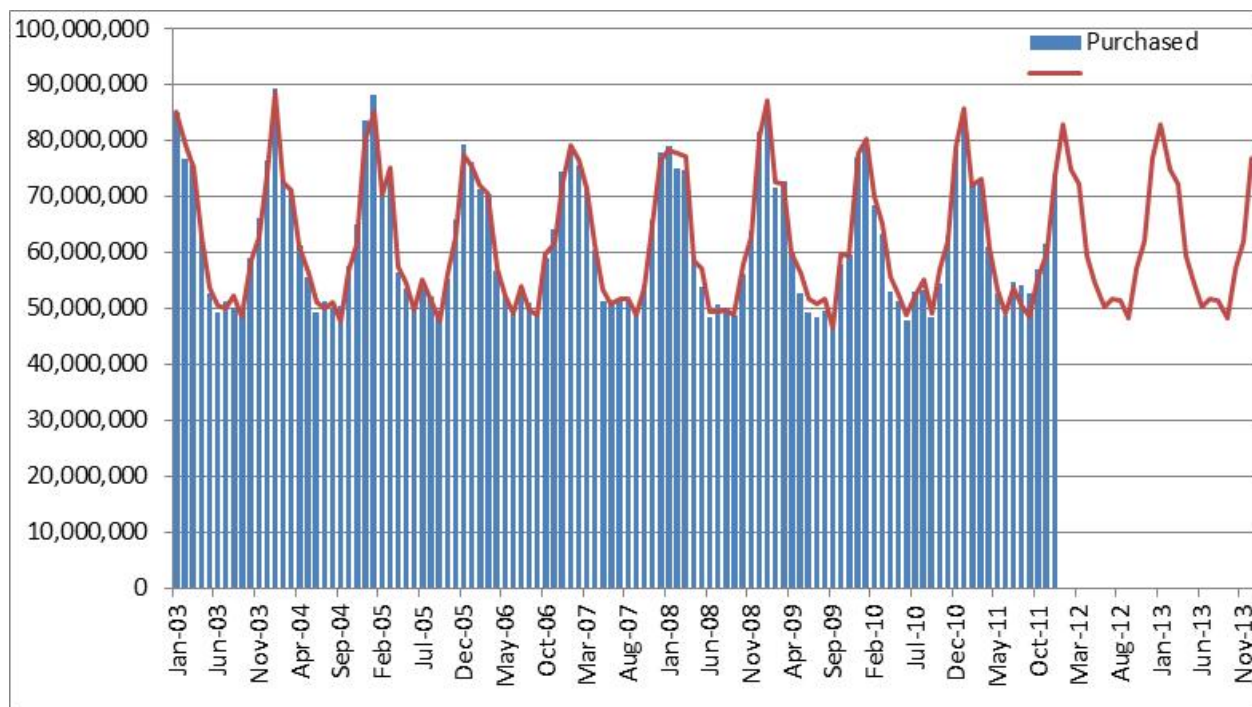
- Please prepare a CDM activity variable that reflects the half-year rule impact of CDM programs in the first year.
- Please re-run the regression model with this variable. Provide all regression statistics in the standard Microsoft Excel regression output format, and provide the regression model, including the construction of the CDM variable in this format.
- Please provide PBI's views on the reasonableness of the estimated CDM coefficient being greater than unity in absolute value.
- Please provide KWHI's views of the reasonableness of multiplying the persistence of 2011 CDM programs on the 2013 forecast by the CDM coefficient.

3-Staff-12

Ref: Exhibit 3/Tab 2/Schedule 1/page 10

On page 10 of this exhibit, BPI has provide a graph showing the actual and predicted values for the regression model based on annual data.

- As the regression model is based on monthly data, please file a version of the graph of actuals versus fitted based on the monthly results in a format similar to that shown below.



- b) Please provide the Mean Absolute Percentage Error of the model based on the monthly residuals.
- c) Please provide a) and b) based on the model estimated in response to 3-Staff-1 b).

3-Staff-13

Ref: Exhibit 3/Tab 2/Schedule 1/Table 3.15

- a) Please provide a copy of the final 2012 OPA report for BPI, if available.
- b) Please provide an updated of Table 3.15 based on final CDM savings for 2012 as reported by the OPA for BPI's service territory.

Exhibit 4 – Operating Costs

4-Staff-14

Ref: E4, T1, S1, p1

Board staff notes that Table 4.1 contains a reconciling item to its financial statements of “OM&A contra account adjustment” for 2010 and 2011 of \$373,781 and \$315,364, respectively.

- a) Please explain this adjustment.
- b) Does this contra account continue beyond 2011?

4-Staff-15

Ref: E4, T2, S1, p1

BPI states that its OM&A expenditures for 2013 are the result of a business planning and work prioritization process that ensures that the most appropriate, cost effective solutions are put in place.

- a) Please explain the criteria or strategy used to determine which solutions are the most appropriate and cost effective.
- b) Please provide an example of an OM&A expenditure where this prioritization process was applied, including competing priorities and alternative solutions considered.

4-Staff-16

Ref: E1, T2, S2, p1

Ref: E4, T2, S1, p1

BPI states that budget requests must be consistent with the financial parameters expected over a five year period.

- a) Please provide the financial parameters for the 5 year period underlying the 2013 budget.

4-Staff-17

Ref: E4, T2, S2, p1

BPI states that its customer responsiveness and system reliability are monitored continually to ensure that its maintenance strategy is effective.

- a) Please describe the methodology by which customer responsiveness and system reliability are monitored.
- b) Please describe the reporting mechanism for the monitoring results. To whom are the results reported and how often?
- c) What mechanisms are in place to ensure that the monitoring results are acted upon?

4-Staff-18

Ref: E4, T2, S3, pgs 17, 22

BPI has identified an increase in transformer inventory as a cost driver for changes between 2009 and 2010, as well as between 2011 and 2012.

- a) Please explain why transformer inventory has been categorized as an OM&A cost, rather than a capital cost.
- b) If transformer inventory is a capital cost, please provide an explanation for the \$152k OM&A increase in 2010 and \$202k in 2012.

4-Staff-19

Ref: E4, T2, S3, Appendix 2-J

BPI has included a cost driver in 2012 of \$217k for amounts owed in relation to a retirement.

- a) Please explain the components of this retirement amount.
- b) Are similar payments made to all retirees?
- c) If so, please provide a forecast of expected retirements over 5 years and estimates of amounts to be paid over that period.

4-Staff-20

Ref: E4, T2, S5, p4

Ref: Appendix 2-K

BPI's Appendix 2-K includes a mix of actual and assumed FTEEs to calculate employee costs.

- a) Please provide a revised Appendix 2-K that removes all estimates of services provided and only includes BPI employees for the years 2008 actual to 2013 test year.
- b) In the above requested table, please ensure that salary, wages, benefits and overtime amounts reflect only the amounts paid to BPI employees, and do not reflect amounts paid to service providers.
- c) For the 2012 bridge year, please include the transferred employees on a prorated basis (I.e. 20 FTEEs from April 1 = $20 (9/12) = 15$).
- d) In a separate table, please provide average base wages, overtime, incentive pay and benefits both on a pre- and post-transfer basis, using the same FTEE categories as contained in Appendix 2-K.
- e) Please provide the following information on year-end headcount for BPI employees:

	2011 Year End	2012 Transfers	Add/Delete 2012	Add/Delete 2013	Planned 2013 Year End
Operations and Maintenance					
Metering and Settlement					
Engineering and Construction					
Customer Services					
CDM					
Finance Support					
Regulatory and Administration					

- f) Please provide the evidence reference describing each add/delete (other than transfers) shown in the table above. If the additions have not been described in the evidence, please provide a separate description.

4-Staff-21

Ref: E4, T1, S1, p5

BPI states that although CDM employees are included in the FTEE count, these costs are not recovered in rates.

- a) How are the CDM employee costs recovered?

4-Staff-22

Ref: E4, T2, S5, p4

Ref: E4, T2, S6, Appendix B

BPI states that it is unable to identify the resources used to deliver services, nor the amount of time spent to provide the services for the years 2008 to 2012. BPI states that with the new SSA Agreement effective January 1, 2013, this information has improved.

- a) Please indicate the specific provisions in the January 1, 2013 SSA Agreement that will provide BPI with better information about resource inputs to services purchased from its affiliate.
- b) Please describe the methodology proposed by BPI to assess the reasonableness of the cost and level of services under the new agreement.

4-Staff-23

Ref: E4, T2, S5, p14

BPI has described the change in compensation for its union employees on pps 12-14. The final statement of this description states that the annual economic adjustment for non-union employees for 2012 was 1.25%.

- a) Please provide the annual adjustment for union employees for 2012.

4-Staff-24

Ref: E4, T2, S5, p17

BPI states that it is currently in negotiation with IBEW and is not in a position to discuss the economic adjustment for 2013.

- a) What is the economic adjustment for 2013 for CUPE?
- b) Is BPI in a position to provide that adjustment for IBEW at this time? If so, what is the adjustment?

4-Staff-25

Ref: E4, T2, S6, p7

BPI shows an unexplained variance of \$81,360 for legal services in Table 4.32.

- a) Please provide an explanation for this variance.

4-Staff-26

Ref: E4, T3, S1, p1

Ref: E6, T1, S1, p3

BPI's Exhibit 4 does not contain a discussion of property taxes, although the Revenue Deficiency determination shows an increase of 136% between 2012 and 2013.

- a) Please explain the increase in property taxes between 2012 and 2013.

LRAM

4-Staff-27

Ref: E4, T4, S1, p 2 of 2, Table 4.52

Ref: Appendix G, LRAM Third Party Report, Page 3

Ref: Guideline for Electricity Distributor Conservation and Demand Management (EB-2012-0003)

LRAM for pre-2011 CDM Activities:

BPI has requested approval of an LRAM amount of \$118,455.70 related to the persistence in 2011 of its 2006-2010 CDM Programs. BPI further notes that it should also be eligible for the 2006-2010 program persistence into 2012 and 2013 as well, but has only requested the persisting 2011 LRAM amount at this time to adhere to the Board's direction to refrain from prematurely requesting recovery of future year LRAM amounts.

The Board's CDM Guidelines state at Section 13.6 that "lost revenues are only accruable until new rates (based on a new revenue requirement and load forecast) are set by the Board, as the CDM savings would be assumed to be incorporated in the load forecast at that time.

- a) Please discuss if BPI's 2013 load forecast will incorporate persisting CDM effects from 2006-2010 CDM Programs.
- b) Please discuss why BPI feels it is appropriate to recover 2013 persisting LRAM amounts from 2006-2010 CDM Programs given the Board's direction to incorporate these amounts in the load forecast at the time of rebasing.

4-Staff-28

Ref: E4, T4, S1, p 2 of 2, Updated August 14, 2013 Ref: Appendix G, LRAM Third Party Report, Pages 4-6

LRAMVA for 2011-2014 CDM Activities:

BPI has requested approval of its 2011 LRAMVA amount of \$35,846.19 which represents the lost revenues associated with its 2011 CDM Programs. BPI has not requested approval of LRAMVA amounts associated with 2012 CDM Programs at this time as these amounts are only estimates.

- a) Please confirm that BPI is only requesting approval of \$35,846.91 which represents the LRAMVA amount for its 2011 CDM Programs in 2011.
- b) Please confirm that BPI's net savings totals from which its 2011 LRAMVA amount was derived are 4,515,479 kWh and 1,230 kW. If BPI used different net savings amounts to calculate its 2011 LRAMVA amount, please discuss the rationale for doing so and provide the inputs that went into this calculation.
- c) Please confirm that BPI is requesting recovery of its LRAMVA amount over a one-year period, similar to its LRAM amount discussed above.

Exhibit 5 – Cost of Capital

5-Staff-29

Ref: E5, T1, S1

Ref: E5, T1, S2, Appendix A – Affiliated Debt

Under Affiliated Debt under Exhibit 5/Tab 1/Schedule 1, BPI states:

BPI holds a Promissory Note with City of Brantford for \$24,189,168 signed January 27, 2011, at an annual rate of 5.87%, renewable every 5 years. Per the Report of the Board on Cost of Capital (EB-2009-0084), released December 11 2009, BPI submits that this note is non-callable affiliated debt, attracting historic deemed debt rates rather than the Board's current debt rate.

The *Report of the Board on the Cost of Capital for Ontario's Regulated Utilities*, issued December 11, 2009, allows for the Board's deemed long term debt to act as a ceiling on the allowed rate for affiliated debt at the time of issuance.¹

On November 15, 2010, the Board issued updated Cost of Capital parameters for rates effective January 1, 2011. The letter is accessible at http://www.ontarioenergyboard.ca/OEB/ Documents/2011EDR/Ltr_Jan1st_Cost_of_Capital_Parameters_20101115.pdf . The deemed Long-term debt rate as of January 1, 2011 is 5.48%.

¹ *Report of the Board on the Cost of Capital for Ontario's Regulated Utilities*, December 11, 2009, page 53

- a) Please explain why BPI believes that the affiliated debt, signed on January 27, 2011 should attract the 5.87% rate rather than the 5.48% deemed long-term debt rate as issued by the Board effective January 1, 2011.

Exhibit 8 – Rate Design

8-Staff-30

Ref: E8, T1, Appendix B – RTSR Workform

Board staff notes that BPI has prepared its RTSR Workform using 2012 UTRs and Sub-Transmission rates.

On December 20, 2012 the Board issued its Rate Order for Hydro One Transmission (EB-2012-0031) which adjusted the UTRs effective January 1, 2013, as shown in the following table:

2013 Uniform Transmission Rates

Network Service Rate	\$3.63 per kW
<u>Connection Service Rates</u>	
Line Connection Service Rate	\$0.75 per kW
Transformation Connection Service Rate	\$1.85 per kW

The Board also approved new rates for Hydro One Sub-Transmission class RTSRs effective January 1, 2013 (EB-2012-0136), as shown in the following table.

2013 Sub-Transmission RTSRs

Network Service Rate	\$3.18 per kW
<u>Connection Service Rates</u>	
Line Connection Service Rate	\$0.70 per kW
Transformation Connection Service Rate	\$1.63 per kW

- a) Please complete a new RTSR workform using the UTRs and Sub-Transmission rates in effect for 2013.

Exhibit 9 – Deferral and Variance Accounts

9-Staff-31

Réf: Ex9, T2, Sch1, page 10-11, Account 1582

BPI is seeking recovery of the December 31, 2012 balance in Account 1582 in the amount of \$353,252.

BPI states that totals for 2002-2004 would have been included in the 2006 EDR recovered amount in 1580. However, since BPI reallocated these amounts from Account 1580 to Account 1582, BPI reduced future recoveries of Account 1580 balances.

The Board ordered final disposition of all of the BPI deferral and variance account balances in its 2006 EDR, and Accounts 1580 and 1582 were disposed of on a final basis.

- a) Did BPI obtain Board approval to reallocate balances from the accounts that were disposed of on final basis?
- b) Please confirm that the amount reallocated from Account 1580 to 1582 that was already disposed of on final basis was a debit of \$211,246.13 (total of the amounts for the years 2002, 2003, and 2004, shown on page 11)
- c) Please provide alternative rate rider calculations after removing the \$211,246.13 and all related carrying charges from Account 1582.

9-Staff-32

Re: E9, T2, S5 – Request for Accounting Order for IFRS Impacts

BPI is requesting two deferral accounts effective January 1, 2014, as follows:

- Deferral Sub-Account “Impact of Gains or Losses on Disposition of Property Plant and Equipment of Account 1508 – Other Regulatory Assets
- Deferral Sub-Account “Other Post-Employment Benefits of Account 1508 – Other Regulatory Assets

Deferral Sub-Account “Impact of Gains or Losses on Disposition of Property Plant and Equipment of Account 1508 – Other Regulatory Assets

On page 23 of the Addendum to Report of the Board (EB-2008-0408) Implementing International Financial Reporting Standards in an Incentive Rate Mechanism Environment, dated June 13, 2011 it states:

At the first cost of service application after the transition, a utility will be expected to provide a forecast of asset useful lives, and gains and losses from retirements, as part of its application.

- a) Given that BPI has not yet transitioned to IFRS, and its application is based on CGAAP, please provide the rationale for this account.

- b) Has BPI done an analysis of the historical gains and losses from early retirements? If so, how material are the annual amounts?
- c) What is the regulatory precedent for the proposed Deferral Sub-Account “Impact of Gains or Losses on Disposition of Property Plant and Equipment of Account 1508 – Other Regulatory Assets?”
- d) Please provide justification for this account demonstrating the probability of significant volatility or PP&E derecognition expense. Please comment on addressing this expense through a Z factor application during the IRM period.

Deferral Sub-Account “Other Post-Employment Benefits of Account 1508 – Other Regulatory Assets

On page 15 of the Addendum to Report of the Board (EB-2008-0408) Implementing International Financial Reporting Standards in an Incentive Rate Mechanism Environment, dated June 13, 2011 it states:

The Board will not approve the creation of a generic account for IFRS related impacts on P&OPEB accounts occurring at the date of transition. As acknowledged by the CLD, the impacts are anticipated to be significant for only a few large utilities. The option remains for the utilities to seek an individual account if they can demonstrate the likelihood of a large cost impact upon transition to IFRS.

- e) Given that BPI has not yet transitioned to IFRS, and its application is based on CGAAP, please provide the rationale for this account.
- f) Please comment on addressing this expense through a Z factor application during the IRM period.

9-Staff-33

Ref: E9, T3, S1, Table 9.16 – Costs per Smart Meter

- a) Do the costs per smart meter, by type, shown in Table 9.16 include the installation costs, or are these solely the meter purchase price?

9-Staff-34

Ref: E9, T3, S1 – Beyond Minimum Functionality Costs

On page 2 of the exhibit, BPI states that it has not incurred any capital or OM&A costs for capabilities that exceed minimum functionality. The Smart Meter Model shows no “Beyond Minimum Functionality” costs.

On page 8 of the exhibit, under Time-of-Use billing, BPI documents that it transitioned to TOU billing in late 2011, with bills received by customers after December 15, 2011 being on a TOU basis. BPI notes that a communication package was sent to customers in October 2011 in preparation of TOU implementation.

As documented in *Guideline G-2011-0001 – Smart Meter Funding and Cost Recovery – Final Disposition* (“Guideline G-2011-0001”), issued December 15, 2011, and in the Smart Meter Model, costs for TOU implementation are “beyond minimum functionality”. Capital costs are recorded under 1.6.3, and OM&A costs are recorded under 2.5.2 on sheet 2 of the Smart Meter Model.

- a) Please provide the costs for TOU implementation by year.
- b) Are these costs included in the deferred revenue requirement for smart meter costs? If not, how has BPI recovered, or is BPI proposing to recover, these costs?

9-Staff-35

Ref: Smart Meter Model Ver. 3.0, Sheet 3- Cost of Capital

BPI has the following inputs for the cost of capital parameters on sheet 3 of its Smart Meter Model:

	2006	2007	2008	2009	2010	2011	2012	2013
Cost of Capital								
Capital Structure¹								
Deemed Short-term Debt Capitalization			4.0%	4.0%	4.0%	4.0%	4.0%	4.0%
Deemed Long-term Debt Capitalization	56.0%	56.0%	56.0%	56.0%	56.0%	56.0%	56.0%	56.0%
Deemed Equity Capitalization	44.0%	44.0%	40.0%	40.0%	40.0%	40.0%	40.0%	40.0%
Preferred Shares	0.0%							
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Cost of Capital Parameters								
Deemed Short-term Debt Rate			4.47%	1.33%	2.07%	2.46%	2.46%	2.08%
Long-term Debt Rate (actual/embedded/deemed) ²	5.80%	5.80%	6.10%	7.62%	5.87%	5.32%	5.32%	4.03%
Target Return on Equity (ROE)	9.0%	9.00%	8.57%	8.01%	9.85%	9.58%	9.58%	8.93%
Return on Preferred Shares								
WACC	7.21%	7.21%	7.02%	7.52%	7.31%	6.91%	6.91%	5.91%

The Board’s Decision EB-2007-0698 in BPI’s 2008 cost of service application approved the following cost of capital parameters:

Capital Component	% of Total Capital Structure	Cost (%)
Short-term Debt	4.0	4.47
Long-term Debt	49.3	6.04
Common Equity	46.7	8.57
Total	100.0	

For the purposes of calculating the deferred revenue requirement on smart meters, the Board-approved cost of capital rates from BPI’s last cost of service application should apply until this application for 2013 rates. The capital structure evolved to the current 56% long-term debt, 4% short-term debt and 40% equity through the k-factor and would have been completed by 2010. However, the starting point in 2006 for a utility of BPI’s size was 50% debt and 50% equity.

- a) Please confirm the cost of capital parameters approved for BPI in its 2006 EDR application considered under RP-2005-0020/EB-2005-0342.

- b) Please make the necessary corrections to the smart meter model to incorporate the approved capital structure and cost of capital.

9-Staff-36

Ref: Smart Meter Model Ver. 3.0, Sheet 3 – Tax Rates

BPI has shown the following rates for taxes/PILs for calculated the deferred revenue requirement for smart meters:

	2006	2007	2008	2009	2010	2011	2012	2013
Taxes/PILs								
Aggregate Corporate Income Tax Rate	36.12%	36.12%	33.50%	33.00%	31.00%	28.25%	26.50%	26.50%
Capital Tax (until July 1st, 2010)	0.30%	0.225%	0.225%	0.225%	0.075%	0.00%	0.00%	0.00%

- a) Please confirm that these rates correspond with the aggregate Federal and Ontario Corporate Income Tax rates underpinning rates for each year.
- b) Please update the smart meter model if required.

9-Staff-37

Ref: Smart Meter Model, Ver. 3.0, Sheets 2 and 8A – OM&A Expenses

- a) BPI documents \$314,199 in OM&A expenses from 2006 to 2013 on sheet 2 of the Smart Meter Model, but documents \$272,199 on sheet 8A. Please reconcile these numbers.
- b) Please explain why BPI only shows depreciation expenses for December 2010 and December 2011 on sheet 8A.

9-Staff-38

Ref: Smart Meter Model, Ver. 3.0 – Sheet 9

Board staff notes that BPI has not selected either of sheet 8A (cell C35) or sheet 8B (cell C37) for purposes of including the interest on OM&A and depreciation expense for calculating the deferred smart meter revenue requirement. Board staff further notes that Sheet 8A is preferable as it is based on more detailed monthly data and calculations, but sheet 8B is a reasonable proxy.

- a) Please select one of the two sheets through the drop-down list in cells C35 or C37.

9-Staff-39

Ref: E9, T3, S1, Table 9.21

Ref: Appendix D – Smart Meter Model – Sheet 10A

BPI calculates the following Smart Meter Disposition Riders (“SMDRs”): (\$0.19)/month for Residential and (\$0.77)/month for GS < 50 kW customers, both to be credited over a period of four years.

Board staff notes that historically customers in all metered customers paid a common Smart Meter Funding Adder ("SMFA") and the higher average costs per meter for GS customers relative to Residential customers means that the deferred revenue requirement should be higher also for GS customers. This would appear to indicate that the SMDR for the Residential class should be less than that for the GS < 50 kW class.

A review of sheet 10A indicates that BPI has allocated the SMFA revenues based on the capital-weighted meter costs. In previous Board Decisions, the Board approved an allocation of SMFA revenues based on customer numbers, with the SMFA revenues for metered customer classes that did not receive smart meters (e.g. GS > 50 kW) allocated equally between the classes that did receive the smart meters (Residential and GS < 50 kW, in BPI's case).

- a) Please update the Smart Meter Model for an allocation of SMFA revenues based on customer numbers and to reflect any other corrections made in response to other interrogatories by Board staff and intervenors. Please file any corrected Smart Meter Model and proposed SMDRs; the Smart Meter Model should also be filed in working Microsoft Excel format.

Stranded Meters

9-Staff-40

Ref: Exhibit 9/Tab 4/Schedule 1 – Stranded Meters

BPI documents its proposal for the Stranded Meter Rate Rider ("SMRR") in this exhibit. Table 9.22 documents the net book value of conventional Residential and GS < 50 kW meters stranded through replacement by smart meters, and Table 9.23 documents the calculation of the proposed SMRRs.

Board staff has replicated Table 9.22 following, including calculating the gross book value ("GBV") and NBV per meter, based on the 38,128 smart meters installed for Residential and GS < 50 kW customers. This shows a GBV of \$138.34 per stranded conventional meter and a NBV remaining to be recovered averaging \$84.90.

Table 9.22: Stranded Asset Values

Year	Gross Asset Value	Accumulated Amortization	Contributed Capital	Net Asset	Proceeds on Disposition	Residual Net Book Value
2006				\$ -		\$ -
2007				\$ -		\$ -
2008				\$ -		\$ -
2009	\$ 953,530	-\$ 359,800		\$ 593,730		\$ 593,730
2010	\$ 3,978,550	-\$ 1,521,728		\$ 2,456,822	-\$ 3,781	\$ 2,453,041
2011	\$ 342,720	-\$ 150,854		\$ 191,866	-\$ 1,446	\$ 190,420
2012				\$ -		\$ -
	\$ 5,274,800	-\$ 2,032,382	\$ -	\$ 3,242,418	-\$ 5,227	\$ 3,237,191

Number of Smart Meters Installed (from Table 9.23)

38,128

Cost per Stranded Conventional Meter

Gross Book Value

\$ 138.34

Net Book Value

\$ 84.90

Board staff is also attaching a copy of sheet I7.1 – Meter Capital Costs from the Cost Allocation Model filed in BPI's 2008 cost of service application EB-2007-0698.

Sheet I7.1 documents a Residential GBV average cost of \$57.58, a GS < 50 kW GBV per meter of \$178.38 and an average GBV per meter for all meter customer classes of \$95.51. Board staff notes that BPI is proposing to recover a remaining NBV from Residential customers of \$85 per meter, which is higher than the original GBV of \$57.58 for Residential customer meters.

- Please confirm that the attached sheet I7.1 corresponds with the Cost Allocation model from BPI's 2009 cost of service rates application. In the alternative, please provide a copy of sheet I7.1 from the correct Cost Allocation model.
- Please explain how BPI has derived the costs shown in Table 9.22. In particular, why are the costs significantly higher than the capital-weighted meter costs per meter for the Residential customer class and for all installed meters?

BPI documents that stranded conventional meters continued to be tracked in Account 1860 and depreciation expense recorded, and that the amounts were transferred to the sub-account of Account 1555 Smart Meter Capital Costs in 2012. Table 9.22 shows entries for the years 2009 to 2011, but no entries for 2012. It is not clear how BPI has tracked the depreciation expense, including that recovered in rates in 2012.

- c) Please explain how BPI did the accounting for tracking the GBV, accumulated depreciation and depreciation expense for the stranded conventional meters.
- d) Please provide an asset continuity schedule from 2008 to 2013 that documents how BPI separated the asset values and accumulated depreciation for the stranded conventional meters from wholesale and GS > 50 kW meters also recorded in Account 1860 – Meters.

9-Staff-41

Ref: E9, T4, S1 – Stranded Meters

In *Guideline G-2011-0001: Smart Meter Funding and Cost Recovery – Final Disposition* (“Guideline G-2011-0001”), issued December 15, 2011, the Board states its expectation that proposals for the SMRR would reflect an allocation of the stranded meter costs reflecting the net book value of the conventional meters stranded by replacement by smart meters. In Section 3.7, page 22, of Guideline G-2011-0001, the Board states:

The distributor should determine and support its proposed allocation, based on the principles of cost causality and practicality. The stranded meter NBV should be recovered through rate riders for applicable customer classes. A distributor must outline the manner in which it intends to allocate the stranded meter costs to the applicable customer rate classes and the rationale for the selected approach. If a distributor has recorded the NBV of the stranded meters by customer class, it should propose class-specific rate riders for each applicable class (Residential, GS < 50 kW and any other classes approved by the Board for smart meter deployment). If the NBV is not known on a class-specific basis, a distributor should propose an allocation between the affected metered customer classes and support its proposal.

In Table 9.23, BPI documents its proposed SMRRs. It appears that the NBV of stranded meters is allocated based on the number of smart meters installed in each of the Residential and GS < 50 kW classes, and then the allocated amounts are recovered by the average number of Residential and GS < 50 kW customers forecasted in the 2013 test year.

Board staff observes that this is equivalent to an unweighted allocation, whereby no differences in the capital costs of meters installed in each class is taken into account. In particular, the higher prices of polyphase meters, which are more prevalent for GS customer classes, are not taken into account.

- a) Please explain the rationale for BPI’s proposed allocation.
- b) Based on the information provided in the response to 9-Staff-47 and Sheet I7.1 from BPI’s 2008 Cost of Service application, please clearly document the

methodology for allocating the costs between the classes. Where available, spreadsheets for documenting the data and calculations should be provided in working Microsoft Excel format.

- c) BPI's application is for a 2013 test year. However, BPI filed its application on July 17, 2013 and has proposed an effective date of November 1, 2013. In the meantime, BPI continues to recover the return of capital (i.e., depreciation expense) and return on capital of stranded conventional meters in its current approved distribution rates. Please provide a variation on the response to b), above, assuming recovery of the SMRR beginning January 1, 2014, and recovery of depreciation expense of conventional meters for the full year 2013.