Attention: Kirsten Walli, November 15, 2018

Board Secretary,
Ontario Energy Board
Via E-mail and Filed via RESS

RE: Brantford Power Inc. (BPI) IRM Rate Application OEB Case No. EB-2018-0020
Responses to Supplementary Interrogatories

Dear Ms. Walli,

On November 2, 2018 the OEB issued its Procedural Order #2 in the above-mentioned case. In accordance with this Procedural Order, BPI is submitting its attached responses to the supplementary interrogatories submitted by OEB Staff and by SEC.

The responses have been filed via RESS are being sent to all intervenors of record via email. Two hard copies of these interrogatory responses will be sent via courier to the OEB.

Sincerely,

Original Signed by

Oana Stefan
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Cc:
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Pre-Amble

In concurrence with the OEB's Procedural Order 2, BPI wishes to ensure a clear and accurate record with respect to the adjustments to DVA accounts. As a result, BPI has provided some supplemental materials in the hopes of providing further clarification. This includes two additional versions of the Rate Generator model in the response to Staff S4 a) which show further scenarios than those requested by OEB Staff for illustrative purposes. These two models show: the scenario where all the possible ODS related corrections are made; and where none of the ODS corrections are made. The table provided below is meant to outline all of the ODS adjustments which could be made at a detailed level. The two additional models and the attached table should enable readers to illustrate the impact to the DVA balances at December 31, 2017 of any combination of the ODS adjustments.

BPI has provided the table below, which is also included in excel format as **Supplementary IR - Attachment A,** which outlines all of the correct potential ODS related adjustments- broken out into the following:

- Principal vs. interest adjustments;
- Year of Settlement Correction- 2015 vs 2016;
- IESO Settlement Adjustment vs. RPP Settlement Remapping Adjustment.

All of these detailed adjustments together outline the adjustments necessary between a scenario where no ODS related adjustmets are made (Attachment Suppl. IR- G) and one where all the applicable ODS related adjustments are made (Attachment Suppl. IR- F). The excel model in Attachment Suppl. IR-A can be used to verify the adjustments required for any combination of possible ODS adjustments.

Reconciliation of 2015,2016 and 2017 Account 1588 and 1589 Balances With and Without Detailed ODS Adjustments

Closing Principal - no ODS Related adjustments ties to the additional model filed as "Staff-S4 a.vi.Brantford_2019-IRM-Rate-Generator-Model - all ODS adjustments removed-Illustration purposes only"

Closing Principal - With ODS Related adjustments ties to the additional model filed as "Staff-S4 a.v.Brantford_2019-IRM-Rate-Generator-Model"

Account 1588	**Principal**			**Interest**			Total Balance			
Year adjustment was made in DVA Schedule	**2015**	**2016**	**2017**	**2015**	**2016**	**2017**	**2015**	**2016**	**2017**	**Add 2018 Projected Interest at 1.8625% (for total claim)**
Closing Balance - no ODS Related adjustments (model vi)	**(2,822,569)**	**(913,956)**	**(165,995)**	**(23,457)**	**(10,576)**	16,700	**(2,846,026)**	**(924,532)**	**(149,295)**	**(152,387)**
Prior Year Adjustments carried forward		*365,324*	*369,299*		*4,417*	*23,006*		***369,742***	***392,305***	
2015 ODS Data Correction - Remapping	645,208			11,968	21,292	23,227	**657,176**	**21,292**	**23,227**	
2015 ODS Data Correction - IESO Settlement	(279,884)			(7,550)			**(287,434)**	-	-	
2016 ODS Data Correction - Remapping		(371,340)			(9,191)	(13,368)	-	**(380,531)**	**(13,368)**	
2016 ODS Data Correction - IESO Settlement		375,315			6,488		-	**381,802**	-	
Total Principal Adjustments	365,324	3,975	-	4,417	18,589	9,859	**369,742**	**392,305**	**402,164**	
Closing Balance - With ODS Related adjustments	**(2,457,245)**	**(544,657)**	**203,304**	**(19,040)**	**12,430**	**49,565**	**(2,476,284)**	**(532,227)**	**252,869**	**256,656**

Account 1589	**Principal**			**Interest**			**Total Balance**			
Year adjustment was made in DVA Schedule	**2015**	**2016**	**2017**	**2015**	**2016**	**2017**	**2015**	**2016**	**2017**	**Add 2018 Projected Interest at 1.8625% (for total claim)**
Closing Balance - no ODS Related adjustments (model vi)	**3,175,024**	**(217,273)**	**(1,548,199)**	**25,619**	**16,783**	**(23,764)**	**3,200,643**	**(200,490)**	**(1,571,963)**	**(1,600,798)**
Prior Year Adjustments carried forward		*(645,208)*	*(273,868)*		*(11,968)*	*(24,069)*		***(657,176)***	***(297,937)***	
2015 ODS Data Correction - Remapping	(645,208)			(11,968)	(21,292)	(23,227)	**(657,176)**	**(21,292)**	**(23,227)**	
2016 ODS Data Correction - Remapping		371,340			9,191	13,368	-	**380,531**	**13,368**	
Total Principal Adjustments	(645,208)	371,340	-	(11,968)	(12,101)	(9,859)	**(657,176)**	**(297,937)**	**(307,796)**	
Closing Balance - With ODS Related adjustments	**2,529,816**	**(491,141)**	**(1,822,067)**	**13,651**	**(7,286)**	**(57,692)**	**2,543,467**	**(498,427)**	**(1,879,759)**	**(1,913,695)**

calculation cell.

Adjustments related to 2015 ODS data correction

Staff-S1

Ref: Staff-1 c and Staff-2 b i (quantum of 2015 and 2016 adjustment)

Pre-amble

Brantford Power initially stated that it included the proposed adjustments to OEB-approved 2015 balances to mitigate customer bill impacts for the majority of RPP customers. In response to Staff-2 b i, Brantford Power confirmed that the 2015 adjustment should in fact be a collection of $365,324 from RPP customers.

Brantford Power withdrew its request for making adjustments to 2015 approved balances in its response to OEB staff interrogatory 1 c, as the bill impact to RPP customers was no longer favourable to the majority of customers.

Questions

a. In response to OEB staff interrogatory 1c, please clarify whether the 2015 adjustment of $365,324 is the sum of two amounts: 1) debit amount of $645,208 from 2015 RPP/Non-RPP proportions and 2) credit amount of $279,884 to correct for 2015 IESO settlements, as an amount owing from the IESO.
b. Given that the 2015 transactions for account 1588 of ($1,546,522) was a credit number, CT142 would likely be a debit because RPP settlements is designed to reduce this amount. Since you have shown a credit amount of $279,884, please confirm whether you received money from the IESO or paid back to the IESO.
c. Please confirm that the 2015 RPP settlement with the IESO was calculated correctly, as the $279,884 is a credit amount as are the 2015 transactions.
d. Please confirm that the 2016 RPP settlement with the IESO was calculated correctly, as the $375,315 related to CT142 is a debit amount as are the 2016 transactions of debit $632,566.
e. Please confirm the following:
    i. Brantford Power originally made the retroactive adjustment only because it thought it would be in the customers' favour.
    ii. As it is now not in the customers' favour, Brantford Power withdrew its request.
    iii. If Brantford Power had known that the adjustment was not in the favour of customers to begin with, Brantford Power would not have requested to correct the account balances that it knew were incorrect.

BPI Response:

a. BPI confirms that the 2015 principal adjustment of $365,324 in account 1588 is the sum of the corrected debit amount of $645,208 from 2015 ODS data error – remapping RPP/Non-RPP proportions and the original credit amount of $(279,884) to correct the 2015 IESO settlement portion. The table below is to summarize.

Table Staff S1-A:1588 Principal Impact of 2015 ODS Data Correction

	1558 impact	
2015- ODS Data error- Remapping RPP-Non RPP Split	$ 645,208	(corrected from initial Appl.)
2015- ODS Data error- IESO Settlement	$ (279,884)	
Total impact of 2015 ODS Error on 1588	**$ 365,324**	

b. BPI received the 2015 amount of$(279,884) from the IESO as a credit on the February 2018 IESO invoice. Please refer to **Table Staff S1-B** for a reconciliation of the credit amount. Depending on the direction of the pricing differential between spot market wholesale price per kWh and the applicable TOU rate at a given time, a correction which reduces the number of kWh can have the effect of a credit or debit correction requirement to settlements with the IESO.

c. The settlement with the IESO was calculated correctly. The majority of the difference related to July 2015 On Peak consumption. The original true up and submission used On Peak consumption of 11,637,590 kWh priced at wholesale spot price of 10.31 cents per kWh and billed at the retail On Peak rate of 16.10 cents per kWh to return $674,166 to the IESO. The revised On Peak consumption based on actual billings was 6,839,095 kWh. Based on the above pricing, the settlement with the IESO should have been $396,189 paid to the IESO. BPI had overpaid the IESO $277,977 for the On Peak July 2015 settlement with the IESO. Other small differences account for the remaining $1,907 difference owing from the IESO. Table Staff S1-B below depicts this calculation in a table format.

Table Staff S1-B: Reconciliation of Original July 2015 IESO Submission and Restated IESO Submission with Corrected kWh

Original Submission - July 2015		
original kWh		11,637,590
Spot price (cents) paid to IESO		10.31
TOU price (cents) collected from customers		16.1
Price difference (cents)		5.79
True up needed ($)- owed to IESO	$	674,166
Corrected Submission - July 2015		
CORRECTED kwh		6,839,095
Spot price (cents) paid to IESO		10.31
TOU price (cents) collected from customers		16.1
Price difference (cents)		5.79
True up needed ($) -owed to IESO	$	396,189
Total 2015 Correction		
July 2015 Difference (correction)- to be refunded from IESO	$	277,977
Additional corrections	$	1,907
Total 2015 Adjustment - amount owing from IESO	**$**	**279,884**

d. The settlement with the IESO was calculated correctly. The majority of the TOU $375,315 difference owed to the IESO is related to July 2016 Off Peak consumption. The original true up and submission used Off Peak consumption of 35,489,178 kWh priced at spot price of 10.81 cents per kWh and billed at 8.70 cents per kWh to recover $750,068 from the IESO. The revised Off Peak consumption based on actual billings was 23,405,724 kWh. Based on the above pricing, the settlement with the IESO should have been $494,683 from the IESO. BPI had over-recovered $255,385 from the IESO for the Off Peak July 2016 settlement. Similarly calculated offsetting differences from the other eleven months in 2016 (both positive and negative) account for the remaining $119,930 difference.

Reconciliation of Original July 2016 IESO Submission and Restated IESO Submission with Corrected kWh

Original Submission - July 2016		
original kWh		35,489,178
Spot price (cents) paid to IESO		10.81
TOU price (cents) collected from customers		8.7
Price difference (cents)		-2.11
True up needed ($)- owed from IESO	$	750,068
Corrected Submission - July 2016		
CORRECTED kwh		23,405,724
Spot price (cents) paid to IESO		10.81
TOU price (cents) collected from customers		8.7
Price difference (cents)		-2.11
True up needed ($) -owed from IESO	$	494,683
Total 2015 Correction		
July 2015 Difference (correction)- to be refunded from IESO	$	255,385
Additional corrections	$	119,930
Total 2015 Adjustment - amount owing to IESO	**$**	**375,315**

e.i. BPI made the retroactive adjustment for multiple reasons which are detailed below in the response to subsection (iii) of this Interrogatory. The primary reason was to correct the submission with the IESO and within BPI's DVA balances; however BPI believed the retroactive adjustment would be considered by the OEB because it was to the benefit of customers. To be clear, the adjustment being in the favour of customers was not the only reason for requesting the correction (again please see subsection (iii). for a listing of the reasons).

e. ii. BPI has withdrawn its request on the basis that most customers, who fall into the RPP category, will not benefit from the adjustment. The 2015 adjustment is still a net benefit when considering the full customer base, however it is expected to have an increasing impact on RPP customers' bills and a decreasing impact on Non-RPP customers' bills. RPP customers make up the majority of BPI's customer base. Board Staff's reminder of the level of precedents related to retroactive adjustments also factored into BPI's decision to withdraw its request.

iii. BPI cannot confirm this would have been the case. When it made the request for the adjustment, BPI considered multiple factors including the following, not all of which have equivalent weighting:

•the need to correct the previous settlements with the IESO now known to have been based on erroneous data; (in favour of making the correction)

•the impact to customers of making the correction (on a net basis: the (279k) was considered to be owed to customers as a whole); (in favour of making the correction); and

• An acknowledgement of OEB case precedents which did not allow retroactive rate-making. (against making the correction).

Staff-S2

Ref: Staff-1 c (2015 and 2016 settlement amount with IESO); 2019 IRM Rate Generator Model – DVA Continuity Schedule (2015 and 2016 corrections)

Pre-amble

In response to previous OEB staff interrogatory, Staff-1c, OEB staff understands that Brantford Power is requesting the approval to return ($279,884) related to 2015 settlement amounts to the IESO plus associated interest.

In the associated DVA continuity schedule, there is a 2015 related debit settlement correction with the IESO of $279,884 recorded within the 2017 net transactions. However, the 2015 credit settlement correction is not shown as an adjustment in the DVA continuity schedule.

Questions

a. If the OEB were to allow retroactive adjustments, please provide Brantford Power's rationale for including retroactive adjustment to 2015 commodity variance account amounts for the OEB's consideration.
b. Please indicate what amount regarding CT142 relating to 2015 is included in transactions in 2017. Please indicate whether it was a debit or credit, and what year the transaction went through the G/L and when did it appear on the IESO invoice.
c. If $279,884 is proposed to be returned to the IESO (which is now recorded as a debit amount included as a reversing entry in 2017 transactions), please confirm whether the original 2017 transactions amount was already lowered by the credit amount of $279,884.
d. If the above is not confirmed, please itemize the original entries made (to adjust in the relevant DVA continuity schedules) in 2017 relating to the 2015 principal and interest related adjustments.
e. Please indicate what amount regarding CT142 relating to 2016 is included in transactions in 2017. Please indicate whether it was a debit or credit, and what year the transaction went through the G/L and when did it appear on the IESO invoice.
f. Please itemize the subsequent transactions/adjustments relating to the 2015 principal adjustments. Which year and which column did you make the adjustments/reversals? Which year is this CT142 regarding corrections in the transactions column of the DVA continuity schedule?

g. Please itemize the subsequent transactions/adjustments relating to the 2016 principal adjustments. Which year and which column did you make the adjustments/reversals? Which year is this CT142 regarding corrections in the transactions column of the DVA continuity schedule?

BPI Response:

a. As outlined in the original application, and in the response to Staff-S1 e)iii) above, BPI's primary rationale for including the retroactive adjustment to the 2015 commodity accounts was to correct the 2015 settlement with the IESO, correct the Group 1 DVA balances and to ultimately return the amounts in question to the appropriate BPI customers.

b. A credit amount of $(279,884) related to the correction to 2015 RPP Settlements for IESO charge type 1142(RPP Settlement Amount, which corresponds to USOA account 1588) was included on BPI's February 2018 IESO bill.

BPI recorded the credit owing from the IESO related to 2015 RPP Settlements in the 2017 G/L.

This amount was NOT included with the 2017 transactions in tab 4- Continuity Schedule as BPI showed it in the 2015 adjustments column. The transactions in 2017 of ($798,434) already excludes the adjustment related to 2015 and represents the 2017 related transactions only. Please see the response to section (f) below for further detail.

Table S2-A : 2017 Transactions in Account 1588

2017 G/L Transactions - Acct 1588 Princ.	**Value**	
Opening 2017 GL- Acct 1588	$ (913,956)	*A*
Closing 2017 GL- Acct 1588	$ (70,437)	*B*
2017 GL Activity in Acct 1588-Princ.	**$ 843,519**	*C=B-A*
Remove 2017 OEB Approved DVA Disposition	$ 1,546,522	*D*
2017 Activity excluding Dispositions	$ (703,003)	*E=C-D*
remove 2015 adj for Settlement with IESO included in activity	$ 279,884	*F*
remove 2016 adj for Settlement with IESO included in activity	$ (375,315)	*G*
Regular Activity excluding Disposition and Prior Period Adjustments	$ (798,434)	*H=E+F+G*
	(cell BD28)	

c. BPI confirms, as shown above, the $(279,884) related to 2015 in the DVA schedule was already removed in the DVA schedule compared to the 2017 transactions recorded in the GL.

d. BPI has confirmed the above.

e. BPI recorded the debit amount of $375,315 owing to the IESO related to the 2016 RPP Settlements (CT 142, USOA 1588) in 2017 in its G/L. This amount was paid to the IESO via a debit entry on the February 2018 IESO invoice. In the DVA schedule, this amount was shown in the adjustments to 1588 in 2016 and was excluded from the transactions in 2017.

f. Below is a chart which identifies how the adjustments to add the 2015 corrections are made in the continuity schedule filed on October 18 with the corresponding G/L adjustments and timing.

Table Staff-S2 B: Principal Adjustments Related to 2015

Principal Adjustment Column	Description of Adjustment	1588	1589	Total	Year Adjustment made in G/L	Subsequent Adjustment
AL-Principal Adjustments for 2015	ODS Data Correction - Remapping GA/CoP	$ 645,208	$(645,208)	$ -	2018	Made in GL in 2018 - activity not shown in current continuity schedule
AL-Principal Adjustments for 2015	ODS Data Correction - IESO settlement	$ (279,884)	$ -	$(279,884)	2017	The correction$(279,884) was orginally recorded in 2017. Therefore an offsetting amount of $279,884 was debited in cell **BD28-2017 transactions.**
Sub-total 2015		**$ 365,324**	**$(645,208)**	**$(279,884)**		

Below is an itemized list of the changes made in cell BD28 (1588 transactions during 2017) for account 1588 in the continuity schedule, this shows the correction amounts for both 2015 and 2016 which were recorded in 2017 but pertained to previous years' activity. The initial balance below reflects all activity in 2017, the ending balance reflects only the transactions which pertained to 2017 and excludes transactions related to prior year corrections.

Table Staff S2-C: 2017 Transactions in 1588

	Transactions Debit / (Credit) during 2017	
2017 Transactions including IESO Settlement Adjustments	(703,003.40)	
2015 Adjustment - moved to 2015	279,884.00	
2016 Adjustment - moved to 2016	(375,315.00)	
Ending	(798,434.40)	Cell BD28 - 1588

To confirm the amount of (798,434) in cell BD28 represents the total 2017 transactions for account 1588. Should either the 2015 or 2016 ODS adjustments (or both sets) be removed in the OEB's decision, BPI believes the 1588 2017 transactions should still total $(798,434) as the adjustments with the IESO would then be reversed.

g. Below is a chart which identifies where the transactions for the 2016 adjustments are made in the continuity schedule.

Table Staff S2-D: Principal Adjustments Related to 2016

Principal Adjustment Column	Description of Adjustment	1588	1589	Total	Year Adjustment made in G/L	Subsequent Adjustment
AV-Principal Adjustment for 2016	ODS Data Correction - Remapping GA/CoP	$ (371,340)	$ 371,340	$ -	2018	Made in GL in 2018 - activity not shown in current continuity schedule
AV-Principal Adjustment for 2016	ODS Data Correction - IESO settlement	$ 375,315	$ -	$ 375,315	2017	The correction$375,315 was orginally recorded in 2017. Therefore an offsetting amount of $(375,315) was credited in cell **BD28-2017 transactions.**
Sub-total 2016		**$ 3,975**	**$ 371,340**	**$ 375,315**		

Staff-S3

Ref: Staff-5 (interest adjustments from 2015 and 2016 ODS data errors); 2019 IRM Rate Generator Model – DVA Continuity Schedule (recording of interest adjustment)

Pre-amble

OEB staff observes that interest adjustments related to the ODS data errors were included in 2015, 2016 and 2017 in the DVA continuity schedule. Since the corrections were made in 2017 and 2018, OEB staff believes the utility was not out-of-pocket in past periods.

Questions

a. Please explain the appropriateness of claiming interest on the 2015 and 2016 principal corrections to 2015 and 2016, when the corrections weren't recorded in Brantford Power's General Ledger until the end of 2017/early 2018 respectively.
b. Please itemize the interest corrections made for each of the periods relating to the 2015 & 2016 in a table (similar to that provided in Table Staff-5 a.1) and then update the DVA Continuity Schedule to eliminate interest on amounts related to 2015 and 2016 that were not recorded until end of 2017/early 2018.

BPI Response:

a. Although the corrections were not made until the end of 2017/early 2018, BPI felt the DVA accounts should have reflected the balances that would have resulted had the corrections been made in the month that they related to. BPI was not out-of-pocket in past periods, however the ODS Data Correction – Remapping between 1588 and 1589 would have resulted in the interest adjustment being split differently between the customer classes.

BPI agrees that it would be more appropriate to remove the retroactive interest adjustments made for the following reasons:

- The majority of the interest adjustment relating to remapping between 1588 and 1589 would have related to the 2015 Correction, which has since been removed from BPI's application.
- The ODS Data Correction – Settlement correction with IESO would not have resulted in any interest paid to/from the IESO and as a result BPI was not out of pocket.

b. Table S3-A below details the interest adjustments related to each of the years, and each set of ODS corrections, as well has how these interest adjustments have been reflected in the DVA schedule filed on October 18 (please note, this model assumed the 2015 adjustments are not made).

Please refer to the model submitted in subsection iv of the response to Staff-S4a). This model reflects the elimination the interest amounts, excludes the 2015 adjustment, and assumes no disposition of Group 1 DVAs.

Staff S3-A: Summary of Interest Adjustments

ODS DATA CORRECTION - REMAPPING BETWEEN 1588 AND 1589				
2015 Interest Adjustments				
Acct	**2015**	**2016**	**2017**	**Total**
1588	11,967.59	21,291.84	23,227.47	56,486.90
1589	(11,967.59)	(21,291.84)	(23,227.47)	(56,486.90)
2016 Interest Adjustments				
Acct	**2015**	**2016**	**2017**	**Total**
1588	-	(9,190.82)	(13,368.30)	(22,559.12)
1589	-	9,190.82	13,368.30	22,559.12

ODS DATA CORRECTION- TOU SETTLEMENT CORRECTION WITH IESO				
2015 Interest Adjustments				
Acct	**2015**	**2016**	**2017**	**Total**
1588	(1,112.92)	(3,078.72)	(3,358.59)	(7,550.23)
1589	-	-	-	-
2016 Interest Adjustments				
Acct	**2015**	**2016**	**2017**	**Total**
1588	-	1,983.94	4,503.78	6,487.72
1589	-	-	-	-

TOTAL INTEREST ADJUSTMENTS				
Acct	**2015**	**2016**	**2017**	**Total**
1588	10,854.67	11,006.24	11,004.36	32,865.27
1589	(11,967.59)	(12,101.02)	(9,859.17)	(33,927.78)

Amounts not reflected in model filed with the interrogatories as the 2015 corrections were removed

(9,190.82)+6,487.72= (2,703) amount removed from Cell BA28, the interest adjustments during 2016 for 1588. These interest amounts relate to the 2016 ODS data corrections

9,190.82 was removed from cell BA29, the interest adjustments during 2016 for 1589, this interest amount related to the 2016 remapping correction

(13,368) was removed from cell BK28 the interest adjustments during 2017 for 1588. This was the 2017 interest portion of the remapping ODS data correction

13,368 was removed from cell BK29 the interest adjustments during 2017 for 1589. This was the 2017 interest portion of the remapping ODS data correction

Staff-S4

Ref: Table in Response 4d of Appendix A; Staff-2 b

a. Please file four updated 2019 Rate Generator models including any adjustments to DVA continuity schedules showing the impact on Group 1 DVA balances for the following scenarios:

   i. An updated DVA continuity schedule incorporating the 2015 corrections originally proposed in this proceeding, including the elimination of interest amounts indicated in OEB Staff S3 above, as applicable. This version of the model should dispose of all Group 1 DVAs.
   ii. The same model as in i. above but with no disposition of Group 1 DVAs.
   iii. An updated DVA continuity schedule whereby the 2015 corrections originally proposed have been completely eliminated from all affected years, including the elimination of interest amounts indicated in OEB Staff S3 above, as applicable. This version of the model should dispose of all Group 1 DVAs.
   iv. The same model as in iii. above but with no disposition of Group 1 DVAs.

b. For scenarios i. and iii. above, please provide updated tables showing the impact on RPP and non-RPP (as submitted with response 4d of Appendix A).

BPI Response:

a. BPI has included the attached models, in response to this Supplementary IR:

I. **Attachment Suppl.IR- B**: Staff-S4 a.i.Brantford_2019-IRM-Rate-Generator-Model
II. **Attachment Suppl.IR- C:** Staff-S4 a.ii.Brantford_2019-IRM-Rate-Generator-Model- NO DVA DSP
III. **Attachment Suppl.IR-D:** Staff-S4 a.iii.Brantford_2019-IRM-Rate-Generator-Model-2015 adjustments removed
IV. **Attachment Suppl.IR- E:** Staff-S4 a.iv.Brantford_2019-IRM-Rate-Generator-Model-2015 adjustments removed- NO DVA DSP

Given that BPI accepts that no interest amounts should be applied to the period during which BPI was not out of pocket for the corrections with the IESO, BPI believes the model provided in response to subsection iv. represents its current proposal for the outcome of this IRM.

In preparing these four scenarios BPI realized that there has been no model filed on the record which includes the corrected 2015 adjustments and corresponding interest. For clarity BPI has included that as the following model. The model includes a DVA disposition in order to demonstrate what the resultant rate riders would be.

V. **Attachment Suppl.IR- F:** *Staff-S4 a.v.Brantford_2019-IRM-Rate-Generator-Model*

In all of the attached models, the interest has been removed. Table Staff S4-A shows how the interest adjustments detailed in Table Staff S3-A maps to the interest adjustments made in the DVA schedule included with model V.

Table Staff S4-A: Mapping of Interest Adjustments in DVA Schedule

Interest	2015	2016	2017
IESO	(7,550.23)	6,487.72	
Remapping (2015 correction)	11,967.59	21,291.84	23,227.47
Remapping (2016 correction)		(9,190.82)	(13,368.30)
1588	**4,417.36**	**18,588.74**	**9,859.17**
Remapping (2015 correction)	(11,967.59)	(21,291.84)	(23,227.47)
Remapping (2016 correction)		9,190.82	13,368.30
1589	**(11,967.59)**	**(12,101.02)**	**(9,859.17)**

These amounts were removed from all of the amended models in responses i to iv.

BPI has also attached a version of the model with no ODS adjustments as version VI. The mode includes DVA disposition in order to demonstrate what the resultant rate riders would be.

VI. **Attachment Suppl.IR- G:** *Staff-S4 a.v.i. Brantford_2019 –IRM-Rate-Generator-Model- all ODS adjustments removed-Illustration purposes only*

b. Below is the updated table in Response 4d of Appendix A which includes the correct 2015 corrections and excludes the related interest amounts in both 2015 and 2016 corresponding with model i.

Table Staff S4-B: Summary of Adjustments Made – Including 2015 and 2016 ODS Adjustments, Excluding Interest

Principal Adjustment Column	Description of Adjustment	1588	1589	Total	Year Adjustment made in G/L
AL-Principal Adjustments for 2015	ODS Data Correction - Remapping GA/CoP	$ 645,208	$(645,208)	$ -	2018
AL-Principal Adjustments for 2015	ODS Data Correction - IESO settlement	$ (279,884)	$ -	$(279,884)	2017
Sub-total 2015		**$ 365,324**	**$(645,208)**	**$(279,884)**	
AV-Principal Adjustment for 2016	ODS Data Correction - Remapping GA/CoP	$ (371,340)	$ 371,340	$ -	2018
AV-Principal Adjustment for 2016	ODS Data Correction - IESO settlement	$ 375,315	$ -	$ 375,315	2017
Sub-total 2016		**$ 3,975**	**$ 371,340**	**$ 375,315**	
BF-Principal Adjustments for 2017	December 2017 True up	$ (127)	$ (537)	$ (664)	2018
Sub-total 2017		**$ (127)**	**$ (537)**	**$ (664)**	
Total of all adjustments to Principal		**$ 369,172**	**$(274,405)**	**$ 94,767**	

Below is the updated table in Response 4d of Appendix A reflecting the changes made in the response to S4 a. iii. and excludes the 2015 corrections as well as the interest amounts pertaining to both 2015 and 2016.

Table Staff S4-C: Summary of Adjustments Made – Excluding 2015 ODS Adjustments, Excluding Interest

Principal Adjustment Column	Description of Adjustment	1588	1589	Total	Year Adjustment made in G/L
AL-Principal Adjustments for 2015	ODS Data Correction - Remapping GA/CoP	$ -	$ -	$ -	2018
AL-Principal Adjustments for 2015	ODS Data Correction - IESO settlement	$ -	$ -	$ -	2017
Sub-total 2015		**$ -**	**$ -**	**$ -**	
AV-Principal Adjustment for 2016	ODS Data Correction - Remapping GA/CoP	$ (371,340)	$ 371,340	$ -	2018
AV-Principal Adjustment for 2016	ODS Data Correction - IESO settlement	$ 375,315	$ -	$ 375,315	2017
Sub-total 2016		**$ 3,975**	**$ 371,340**	**$ 375,315**	
BF-Principal Adjustments for 2017	December 2017 True up	$ (127)	$ (537)	$ (664)	2018
Sub-total 2017		**$ (127)**	**$ (537)**	**$ (664)**	
Total of all adjustments to Principal		**$ 3,848**	**$ 370,803**	**$ 374,651**	

Staff-S5

Ref: SEC-4 (bill impacts)

For each of the four scenarios from Staff-S4 i. – iv above, please provide an updated bill impact table.

BPI Response:

Below are the updated bill impact tables for each of the four scenarios from Staff-S4 i – iv. Again, all of the tables below exclude interest adjustments related to the ODS corrections:

Table Staff S5-A: Version I Bill Impacts for RPP and non-RPP Customers-Including 2015 Correction, Including Group 1 DVA Disp.

Version i - 2015 Adjustments included	Bill Impacts	
	RPP	Non-RPP
RESIDENTIAL SERVICE CLASSIFICATION	$ (0.89)	$ (4.59)
GENERAL SERVICE LESS THAN 50 KW SERVICE CLASSIFICATION	$ (1.18)	$ (11.05)
GENERAL SERVICE 50 to 4,999 kW SERVICE CLASSIFICATION	$ (145.08)	$ (676.18)
EMBEDDED DISTRIBUTOR SERVICE CLASSIFICATION	$ 4,054.01	$ 4,054.01
SENTINEL LIGHTING SERVICE CLASSIFICATION	$ (0.27)	$ (0.55)
STREET LIGHTING SERVICE CLASSIFICATION	$ (810.53)	$(4,113.97)
UNMETERED SCATTERED LOAD SERVICE CLASSIFICATION	$ (0.31)	$ (0.31)
STANDBY POWER SERVICE CLASSIFICATION	$ -	$ -
RESIDENTIAL SERVICE CLASSIFICATION	$ 1.63	$ 0.34

Table Staff S5-B: Version II Bill Impacts for RPP and non-RPP Customers- Including 2015 Correction., No Group 1 DVA Disposition

Version ii - 2015 Adjustments included - No DVA DISP	Bill Impacts	
	RPP	Non-RPP
RESIDENTIAL SERVICE CLASSIFICATION	$ 0.29	$ 0.29
GENERAL SERVICE LESS THAN 50 KW SERVICE CLASSIFICATION	$ 1.76	$ 1.76
GENERAL SERVICE 50 to 4,999 kW SERVICE CLASSIFICATION	$ 2.55	$ 2.55
EMBEDDED DISTRIBUTOR SERVICE CLASSIFICATION	$ 318.23	$ 318.23
SENTINEL LIGHTING SERVICE CLASSIFICATION	$ 0.25	$ 0.25
STREET LIGHTING SERVICE CLASSIFICATION	$ 185.68	$ 185.68
UNMETERED SCATTERED LOAD SERVICE CLASSIFICATION	$ 0.23	$ 0.23
STANDBY POWER SERVICE CLASSIFICATION	$ -	$ -
RESIDENTIAL SERVICE CLASSIFICATION	$ 2.04	$ 2.04

Table Staff S5-C: Version III Bill Impacts for RPP and non-RPP Customers- Excluding 2015 Correction, Including Group 1 DVA Disposition.

Version iii - 2015 Adjustments excluded	Bill Impacts	
	RPP	Non-RPP
RESIDENTIAL SERVICE CLASSIFICATION	$ (1.20)	$ (3.56)
GENERAL SERVICE LESS THAN 50 KW SERVICE CLASSIFICATION	$ (2.23)	$ (8.53)
GENERAL SERVICE 50 to 4,999 kW SERVICE CLASSIFICATION	$ (188.27)	$ (527.27)
EMBEDDED DISTRIBUTOR SERVICE CLASSIFICATION	$ 4,054.01	$ 4,054.01
SENTINEL LIGHTING SERVICE CLASSIFICATION	$ (0.42)	$ (0.61)
STREET LIGHTING SERVICE CLASSIFICATION	$(1,104.24)	$(3,212.82)
UNMETERED SCATTERED LOAD SERVICE CLASSIFICATION	$ 0.43	$ (0.43)
STANDBY POWER SERVICE CLASSIFICATION	$ -	$ -
RESIDENTIAL SERVICE CLASSIFICATION	$ 1.52	$ 0.70

Table Staff S5-D: Version IV Bill Impacts for RPP and non-RPP Customers – Excluding 2015 Correction, Excluding Group 1 DVA Disposition

Version iv - 2015 Adjustments excluded - No DVA DISP	Bill Impacts	
	RPP	Non-RPP
RESIDENTIAL SERVICE CLASSIFICATION	$ 0.29	$ 0.29
GENERAL SERVICE LESS THAN 50 KW SERVICE CLASSIFICATION	$ 1.76	$ 1.76
GENERAL SERVICE 50 to 4,999 kW SERVICE CLASSIFICATION	$ 2.55	$ 2.55
EMBEDDED DISTRIBUTOR SERVICE CLASSIFICATION	$ 318.23	$ 318.23
SENTINEL LIGHTING SERVICE CLASSIFICATION	$ 0.25	$ 0.25
STREET LIGHTING SERVICE CLASSIFICATION	$ 185.68	$ 185.68
UNMETERED SCATTERED LOAD SERVICE CLASSIFICATION	$ 0.23	$ 0.23
STANDBY POWER SERVICE CLASSIFICATION	$ -	$ -
RESIDENTIAL SERVICE CLASSIFICATION	$ 2.04	$ 2.04

Staff-S6

Ref: Staff-2 b

Due to the material changes made to the application, please prepare a reconciliation to explain the variances between RRR and 2017 year-end balances, similar to Table 1.5.6-H provided in the application.

BPI Response:

The following table provides a reconciliation of the RRR balances and the 2017 year end balances as provided in the currently proposed DVA continuity schedule submitted in the response to Staff S4 a.i.v.

This version of the model excludes interest adjustments on the ODS corrections, and the impact of the 2015 ODS correction. As the IESO settlement portion of the ODS corrections was included in the RRR filings, the 2015 ODS data correction credit received from IESO needs to be reversed from the balance, resulting in a debit reconciling item.

Table Staff S6: Reconciliation of Balances in 1588 and 1589 to 2017 RRR Filing

	1588			1589			Both Accounts-
	Principal	Interest	Total	Principal	Interest	Total	Total
Balance At December 31, 2017 per RRR	**$ (70,437)**	**$ 15,637**	**$ (54,800)**	**$ (1,547,663)**	**$ (23,764)**	**$ (1,571,427)**	**$ (1,626,227)**
Reconciling Items							
Additional Billing true ups for 2017 not accrued in 2017.	$ (127)	$ -	$ (127)	$ (537)	$ -	$ (537)	$ (664)
2015 ODS Data Correction- Settlement accrued during 2017 and to be returned to IESO in 2018	$ 279,884	$ 7,550	$ 287,434		$ -	$ -	$ 287,434
2016 ODS Data Correction booked in 2017-remove associated interest		$ (6,488)	$ (6,488)		$ -	$ -	$ (6,488)
2016 ODS Data Correction- Remapping of Power Purchases during 2018- excluding any interest adjustment	$ (371,340)	$ -	$ (371,340)	$ 371,340	$ -	$ 371,340	$ -
Revised RRR Balance including adjustments	**$ (162,020)**	**$ 16,699**	**$ (145,321)**	**$ (1,176,860)**	**$ (23,764)**	**$ (1,200,624)**	**$ (1,345,944)**
Ending Balances as per DVA Continuity Schedule	**$ (162,020)**	**$ 16,700**	**$ (145,320)**	**$ (1,176,858)**	**$ (23,764)**	**$ (1,200,622)**	**$ (1,345,942)**
Unexplained Variance (rounding)	$ 0	$ (1)	$ (1)	$ (2)	$ (0)	$ (2)	$ (2)

SEC-5

[SEC-3] In SEC-3, BPI was asked to provide a table showing the impact to each customer class, separated by RPP and non-RPP customers, of the (then) proposed adjustment to the 2015 balances. In the tables provided BPI has have double counted the impact of the Account 1588 adjustment by making that entire adjustment again against the non-RPP customers, where in reality only a portion of the account is actually allocated to non-RPP customers.

a. If this is correct, please revise the table.
b. If the response to SEC-4 was also calculated on a similar basis, please revise that table.
c. If any updates to the 2015 balances are made as a result of the supplementary interrogatories responses, please provide revised versions of tables requested in part (a) and (b).

BPI Response:

a. Upon review, this is correct, the balance of the adjustment to 1588 should have been split between the RPP and non-RPP customers. BPI has provided the revision as well as supporting calculations in Table SEC 5-A below.

As account 1588 is allocated on the basis of non-WMP kWh, BPI has provided the table below which allocates the balance of 1588 between RPP and non RPP customer groups for each customer class on the basis of the non-WMP kWh in each class.

Table SEC 5-A: RPP and Non RPP Impacts of the 2015 Adjustments

Customer Class	Total Metered kWh non WMP	Non RPP, non WMP Metered kWh	RPP non WMP Metered kWh		
RESIDENTIAL SERVICE CLASSIFICATION	273,448,641	12,531,416	260,917,225		
GENERAL SERVICE LESS THAN 50 KW SERVICE CLASSIFICATION	96,495,542	13,372,120	83,123,422		
GENERAL SERVICE 50 to 4,999 kW SERVICE CLASSIFICATION	513,281,236	475,257,077	38,024,159		
EMBEDDED DISTRIBUTOR SERVICE CLASSIFICATION	0	0	0		
SENTINEL LIGHTING SERVICE CLASSIFICATION	186,503	7,131	179,372		
STREET LIGHTING SERVICE CLASSIFICATION	7,324,649	7,324,649	0		
UNMETERED SCATTERED LOAD SERVICE CLASSIFICATION	1,524,181	0	1,524,181		
STANDBY POWER SERVICE CLASSIFICATION	0	0	0		
	892,260,750	508,492,393	383,768,359		

Customer Class	Total Metered kWh non WMP	Non RPP, non WMP Metered kWh	RPP non WMP Metered kWh		
RESIDENTIAL SERVICE CLASSIFICATION	31%	1%	29%		
GENERAL SERVICE LESS THAN 50 KW SERVICE CLASSIFICATION	11%	1%	9%		
GENERAL SERVICE 50 to 4,999 kW SERVICE CLASSIFICATION	58%	53%	4%		
EMBEDDED DISTRIBUTOR SERVICE CLASSIFICATION	0%	0%	0%		
SENTINEL LIGHTING SERVICE CLASSIFICATION	0%	0%	0%		
STREET LIGHTING SERVICE CLASSIFICATION	1%	1%	0%		
UNMETERED SCATTERED LOAD SERVICE CLASSIFICATION	0%	0%	0%		
STANDBY POWER SERVICE CLASSIFICATION	0%	0%	0%		
	100%	57%	43%		
1588 Impact	$ 421,065.00				
1589 Impact	$ (713,712.00)				
	Non-RPP 1588 Impact	**RPP Impact- 1588**	**Non RPP 1589 Impact**	**Total RPP Impact**	**Total Non RPP Impact**
RESIDENTIAL SERVICE CLASSIFICATION	$ 5,913.68	$ 123,128.93	$ (17,588.90)	**$ 123,128.93**	**$ (11,675.22)**
GENERAL SERVICE LESS THAN 50 KW SERVICE CLASSIFICATION	$ 6,310.41	$ 39,226.61	$ (18,768.90)	**$ 39,226.61**	**$ (12,458.49)**
GENERAL SERVICE 50 to 4,999 kW SERVICE CLASSIFICATION	$ 224,277.62	$ 17,943.91	$ (667,063.43)	**$ 17,943.91**	**$ (442,785.80)**
EMBEDDED DISTRIBUTOR SERVICE CLASSIFICATION	$ -	$ -	$ -	**$ -**	**$ -**
SENTINEL LIGHTING SERVICE CLASSIFICATION	$ 3.37	$ 84.65	$ (10.01)	**$ 84.65**	**$ (6.64)**
STREET LIGHTING SERVICE CLASSIFICATION	$ 3,456.56	$ -	$ (10,280.76)	**$ -**	**$ (6,824.20)**
UNMETERED SCATTERED LOAD SERVICE CLASSIFICATION	$ -	$ 719.27	$ -	**$ 719.27**	**$ -**
STANDBY POWER SERVICE CLASSIFICATION	$ -	$ -	$ -	**$ -**	**$ -**
	$ 239,961.64	$ 181,103.36	$ (713,712.00)	**$ 181,103.36**	**$ (473,750.36)**

b. The response to SEC-4 was not calculated on the same basis, but rather on the basis of the bill impacts and the rate riders calculated in the DVA model (which would correctly reflect the split of 1588 between RPP and non-RPP customers). Therefore no correction is necessary.

c. The following table SEC 5-B shows the final calculation updated to reflect the impact of the 2015 ODS adjustment excluding interest.

Table SEC 5-B: RPP and Non RPP Impacts of the 2015 Adjustments –Excluding Interest Adjustments

Updated Tables to remove Interest Adjustments on ODS Corrections					
	1588	1589			
Including 2015 Adjustment - No Interest (Staff S4 a.i)	$ 223,790	$ (1,879,767)			
Excluding 2015 Adjustment - No Interest (Staff S4 a.iii)	$ (148,338)	$ (1,222,542)			
Difference	$ 372,128	$ (657,225)			
	Non-RPP 1588 Impact	RPP Impact- 1588	Non RPP 1589 Impact	Total RPP Impact	Total Non RPP Impact
RESIDENTIAL SERVICE CLASSIFICATION	$ 5,226.38	$ 108,818.64	$ (16,196.82)	**$ 108,818.64**	**$ (10,970.44)**
GENERAL SERVICE LESS THAN 50 KW SERVICE CLASSIFICATION	$ 5,577.00	$ 34,667.62	$ (17,283.43)	**$ 34,667.62**	**$ (11,706.43)**
GENERAL SERVICE 50 to 4,999 kW SERVICE CLASSIFICATION	$ 198,211.64	$ 15,858.43	$ (614,268.45)	**$ 15,858.43**	**$ (416,056.81)**
EMBEDDED DISTRIBUTOR SERVICE CLASSIFICATION	$ -	$ -	$ -	**$ -**	**$ -**
SENTINEL LIGHTING SERVICE CLASSIFICATION	$ 2.97	$ 74.81	$ (9.22)	**$ 74.81**	**$ (6.24)**
STREET LIGHTING SERVICE CLASSIFICATION	$ 3,054.83	$ -	$ (9,467.09)	**$ -**	**$ (6,412.26)**
UNMETERED SCATTERED LOAD SERVICE CLASSIFICATION	$ -	$ 635.68	$ -	**$ 635.68**	**$ -**
STANDBY POWER SERVICE CLASSIFICATION	$ -	$ -	$ -	**$ -**	**$ -**
	$ 212,072.82	$ 160,055.18	$ (657,225.00)	**$ 160,055.18**	**$ (445,152.18)**

Tables SEC 5-C and SEC 5-D below show the impact of including the 2015 ODS adjustments on RPP and non-RPP customer bill impacts, if interest is excluded. These tables correspond with the responses provided in the response to Staff-S5, comparing the scenarios in the models Staff-S4 a.i (**Suppl. IR Att. B**) and Staff-S4 a.iii (**Suppl. IR Att.D**) .

Table SEC 5-C: Impact to RPP Customers of Including 2015 ODS Adjustments- Excluding Interest

	RPP Customer Bill Impact		
	2015 Adj. Excluded (v.iii)	2015 Adj Included (v.i)	Difference
RESIDENTIAL SERVICE CLASSIFICATION	$ (1.20)	$ (0.89)	$ 0.31
GENERAL SERVICE LESS THAN 50 KW SERVICE CLASSIFICATI	$ (2.23)	$ (1.18)	$ 1.05
GENERAL SERVICE 50 to 4,999 kW SERVICE CLASSIFICATION	$ (188.27)	$ (145.08)	$ 43.19
EMBEDDED DISTRIBUTOR SERVICE CLASSIFICATION	$ 4,054.01	$ 4,054.01	$ -
SENTINEL LIGHTING SERVICE CLASSIFICATION	$ (0.42)	$ (0.27)	$ 0.15
STREET LIGHTING SERVICE CLASSIFICATION	$ (1,104.24)	$ (810.53)	$ 293.71
UNMETERED SCATTERED LOAD SERVICE CLASSIFICATION	$ 0.43	$ (0.31)	$ (0.74)
STANDBY POWER SERVICE CLASSIFICATION	$ -	$ -	$ -
RESIDENTIAL SERVICE CLASSIFICATION	$ 1.52	$ 1.63	$ 0.11

Table SEC 5-D Impact to Non- RPP Customers of Including 2015 ODS Adjustments- Excluding Interest

	Non RPP Customer Bill Impact		
	2015 Adj. Excluded (v.iii)	2015 Adj Included (v.i)	Difference
RESIDENTIAL SERVICE CLASSIFICATION	$ (3.56)	$ (4.59)	$ (1.03)
GENERAL SERVICE LESS THAN 50 KW SERVICE CLASSIFICATI	$ (8.53)	$ (11.05)	$ (2.52)
GENERAL SERVICE 50 to 4,999 kW SERVICE CLASSIFICATION	$ (527.27)	$ (676.18)	$ (148.91)
EMBEDDED DISTRIBUTOR SERVICE CLASSIFICATION	$ 4,054.01	$ 4,054.01	$ -
SENTINEL LIGHTING SERVICE CLASSIFICATION	$ (0.61)	$ (0.55)	$ 0.06
STREET LIGHTING SERVICE CLASSIFICATION	$ (3,212.82)	$ (4,113.97)	$ (901.15)
UNMETERED SCATTERED LOAD SERVICE CLASSIFICATION	$ (0.43)	$ (0.31)	$ 0.12
STANDBY POWER SERVICE CLASSIFICATION	$ -	$ -	$ -
RESIDENTIAL SERVICE CLASSIFICATION	$ 0.70	$ 0.34	$ (0.36)

SEC-6

[Staff-1, SEC-2] In response to Staff-1(d) and SEC-2, BPI responded to a interrogatory about the IESO submission error, stating in part" "In the process of completing the Global Adjustment Variance Account reconciliation for the first time during its 2018 IRM application, BPI examined the original input data for the calculations, including the ODS meter data. In doing so, BPI identified unexpectedly high consumption records for individual customers which looked anomalous. BPI confirmed these meter readings were anomalous and as a result, recalculated its IESO submissions for 2015 and 2016 on assumed more appropriate values for the anomalous entries".

a. Where these customers billed based on this erroneous ODS meter data?
b. If the answer to part (a) is yes, how many customers were affected and in what classes?
c. Please explain in detail the services ODS provides to BPI.
d. Please explain why the Applicant requires a third-party provider to provide it with meter data.
e. What is the annual cost incurred by BPI for these services provided by ODS.
f. Please provide a copy of the KPMG review reference in SEC-2.

BPI Response:

a. No, these customers were not billed on the erroneous ODS meter data. Data used for billing purposes by Brantford Power undergoes a strict set of verification processes which are designed to identify, isolate and correct for such erroneous entries.

b. Not applicable as the answer to part (a) was no.

c. The Smart Meter Operational Data Store (ODS) and Meter Data Management System provides a variety of analysis and editing tools to support a broad spectrum of BPI activities including: meter management; billing request management; pre-MDM/R billing process; and outage management. Savage Data Systems provides BPI with its ODS services. Although only the latest version of the data is actually displayed, multiple versions are maintained in the database.

This system provides all of BPI's MDM/R reports and additional Savage Data Systems (SDS) reports in an easy to use format.

The ODS query used by BPI in its initial TOU settlements with the IESO provides BPI with raw meter data on a calendar month basis for all smart meters. The monthly consumption is detailed by On Peak, Mid Peak and Off Peak by customer number.

Further explanations of the functionality provided in the ODS are outlined below.

Dashboard

The application provides a dashboard that displays the following service levels;

- Percent of hourly intervals captured in previous 24 hours
- Percent of register readings captured in previous 24 hours
- Percent of all readings (register, and interval) captured in 72 hours

- Percent of all readings (register, and interval) captured in previous 30 days
- Percent of meters communicated within previous 24 hours
- Status of the billing schedule by cycle

The dashboard displays all operational data indicators as reported by the Advanced Metering Control Centre (AMCC) with user defined caution and warning levels.

Outage Management

BPI currently uses last gasp signal from its smart meters in the ODS in order to determine meter status, which identifies outages.

BPI has utilized the functionalities in the ODS to create automated notifications during outages which have geographical indicators. These automated alarms are useful in outage management and in the effective communication of outages to the customers.

BPI is currently exploring further opportunities using the ODS for outage management purposes including adding more alarms during outages, enabling auto pinging of meters to improve the refresh rate of meter statuses, utilization of the ODS feature to create a manual ping for those meters that need to provide refresh status, optimization of mapping layers display, and the potential utilization of GPS coordinates of service trucks on ODS display.

BPI is focused on getting the best possible value out of its ODS system.

Reports

The application analyzes the interval data and register readings and produce the following reports on a daily basis:

- Daily Reads Status Report
- Excessive Missing Reads Report
- Interim Read Validation Failure Report
- Missing Reads Detail Report
- Daily Data Collection Report
- Interim AMCC Data Collection Summary Exception Report
- Interim AMCC Data Collection Detailed Exception Report
- Zero Consumption Report
- Final Read Validation Failure Report
- Final AMCC Data Collection Summary Exception Report
- Final AMCC Data Collection Detailed Exception Report

The application performs validation on the interval consumptions and produce the following

reports daily:

- Interim Validation Failure Detailed Report
  - Interim Estimation Failure Detailed Report
  - Missing Interval Aging Report
  - VEE Summary Report
  - Final Validation Failure Detailed Report
  - Final Estimation Failure Detailed Report

Following the receipt of a billing request file the application analyzes the consumptions and produce the following reports:

- Billing Delivery Summary Report
- Unauthorized Usage Report
- Re-Billing Report
- Billing Delivery Detail Report
- Data Aggregation Contributors Report
- Billing No Reads Report

Meter Data Management

As part of its internal processing functionality the application performs or allows the following activities:

- estimation of all missing intervals
- edit of missing intervals or incorrect values
- graphing of displayed data
- graphing of aggregated data
- aggregation by common point
- maintain and display data in all versions presented
- allow drill down to interval data for review or editing
- provides queries to allow predetermined views of stored data

Specialized Reports:

Additionally, the application provides the following key specialized reports:

Meter Statistics Report - Lists all meters from the synch files and their interval statistics for 24 hours, 72 hours and 30 days as well as register reads. Gives you an idea of each meter's health; includes the install date.

Meter Install Count - Total number of meters that have been installed via the synch file. This includes meters synced with both the provincial sync and manual sync.

Multiple Meter Installs - Lists all SDP ID's that have more than 1 meter attached to them.

Suspect Estimates from MDM/R - Lists meters with the following Suspect Estimates- Zero Estimates, Un-scaled, Sum Check issues and High Demand estimates.

Suspect Meter - Shows how many times a meter shows up on a number of specified reports within the past 60 days.

d. As noted above, BPI uses the various functionalities in the ODS to access its smart meter data in formats and reports that are useful and tailored to match the operating needs of the utility, ranging from billing verification requirements to outage management requirements. Raw smart meter data requires extensive re-formatting, processing and the creation of linkages to the billing system in order to be useful. The ODS provides this processing for BPI.

e. BPI spends roughly $85,000 per year on ODS services from Savage Data Systems.

f. The KPMG review is included as **Supplementary IR Attachment H**.

SEC-7

For each rate class, please provide a breakdown of the number of RPP and Non-RPP customers.

BPI Response:

The chart below provides a breakdown of the number of RPP and Non-RPP customers for each rate class.

Table SEC 7-: RPP and Non RPP Customer Count by Rate Class

Rate Class Breakdown (as at Dec 31, 2017)	RPP	Non-RPP	Total Customers
Residential	34,875	1,474	36,349
General Service < 50 kW	2,623	192	2,815
General Service > 50 kW	94	364	458
Embedded Distributor	-	1	1
Unmetered Scattered Loads	425	-	425
Streetlight Connections	-	5,771	5,771
Sentinel Light Connections LDC	502	3	505
TOTAL	**38,519**	**7,805**	**46,324**

Supplementary Interrogatory Attachment A

Reconciliation of 2015, 2016 and 2017 Account 1588 and 1589 Balances With and Without Detailed ODS Adjustments (excel)

Reconciliation of 2015,2016 and 2017 Account 1588 and 1589 Balances With and Without Detailed ODS Adjustments

Closing Principal - no ODS Related adjustments ties to the additional model filed as "Staff-S4 a.vi.Brantford_2019-IRM-Rate-Generator-Model - all ODS adjustments removed-Illustration purposes only"
Closing Principal - With ODS Related adjustments ties to the additional model filed as "Staff-S4 a.v.Brantford_2019-IRM-Rate-Generator-Model"

Account 1588	**Principal**			**Interest**			Total Balance			
Year adjustment was made in DVA Schedule	**2015**	**2016**	**2017**	**2015**	**2016**	**2017**	**2015**	**2016**	**2017**	**Add 2018 Projected Interest at 1.8625% (for total claim)**
Closing Balance - no ODS Related adjustments (model vi)	**(2,822,569)**	**(913,956)**	**(165,995)**	**(23,457)**	**(10,576)**	16,700	**(2,846,026)**	**(924,532)**	**(149,295)**	**(152,387)**
Prior Year Adjustments carried forward		*365,324*	*369,299*		*4,417*	*23,006*		***369,742***	***392,305***	
2015 ODS Data Correction - Remapping	645,208			11,968	21,292	23,227	**657,176**	**21,292**	**23,227**	
2015 ODS Data Correction - IESO Settlement	(279,884)			(7,550)			**(287,434)**	-	-	
2016 ODS Data Correction - Remapping		(371,340)			(9,191)	(13,368)	-	**(380,531)**	**(13,368)**	
2016 ODS Data Correction - IESO Settlement		375,315			6,488		-	**381,802**	-	
Total Principal Adjustments	365,324	3,975	-	4,417	18,589	9,859	**369,742**	**392,305**	**402,164**	
Closing Balance - With ODS Related adjustments	**(2,457,245)**	**(544,657)**	**203,304**	**(19,040)**	**12,430**	**49,565**	**(2,476,284)**	**(532,227)**	**252,869**	**256,656**

Account 1589	**Principal**			**Interest**			**Total Balance**			
Year adjustment was made in DVA Schedule	**2015**	**2016**	**2017**	**2015**	**2016**	**2017**	**2015**	**2016**	**2017**	**Add 2018 Projected Interest at 1.8625% (for total claim)**
Closing Balance - no ODS Related adjustments (model vi)	**3,175,024**	**(217,273)**	**(1,548,199)**	**25,619**	**16,783**	**(23,764)**	**3,200,643**	**(200,490)**	**(1,571,963)**	**(1,600,798)**
Prior Year Adjustments carried forward		*(645,208)*	*(273,868)*		*(11,968)*	*(24,069)*		***(657,176)***	***(297,937)***	
2015 ODS Data Correction - Remapping	(645,208)			(11,968)	(21,292)	(23,227)	**(657,176)**	**(21,292)**	**(23,227)**	
2016 ODS Data Correction - Remapping		371,340			9,191	13,368	-	**380,531**	**13,368**	
Total Principal Adjustments	(645,208)	371,340	-	(11,968)	(12,101)	(9,859)	**(657,176)**	**(297,937)**	**(307,796)**	
Closing Balance - With ODS Related adjustments	**2,529,816**	**(491,141)**	**(1,822,067)**	**13,651**	**(7,286)**	**(57,692)**	**2,543,467**	**(498,427)**	**(1,879,759)**	**(1,913,695)**

calculation cell.
Adjustments related to 2015 ODS data correction

Supplementary Interrogatory Attachment B

Staff-S4 a.i.Brantford_2019-IRM-Rate-Generator-Model (excel only)

Supplementary Interrogatory Attachment C

Staff-S4 a.ii.Brantford_2019-IRM-Rate-Generator-Model- NO DVA DSP (excel only)

Supplementary Interrogatory Attachment D

Staff-S4 a.iii.Brantford_2019-IRM-Rate-Generator-Model-2015 adjustments removed (excel only)

Supplementary Interrogatory Attachment E

Staff-S4 a.iv.Brantford_2019-IRM-Rate-Generator-Model-2015 adjustments removed- NO DVA DSP (excel only)

Supplementary Interrogatory Attachment F

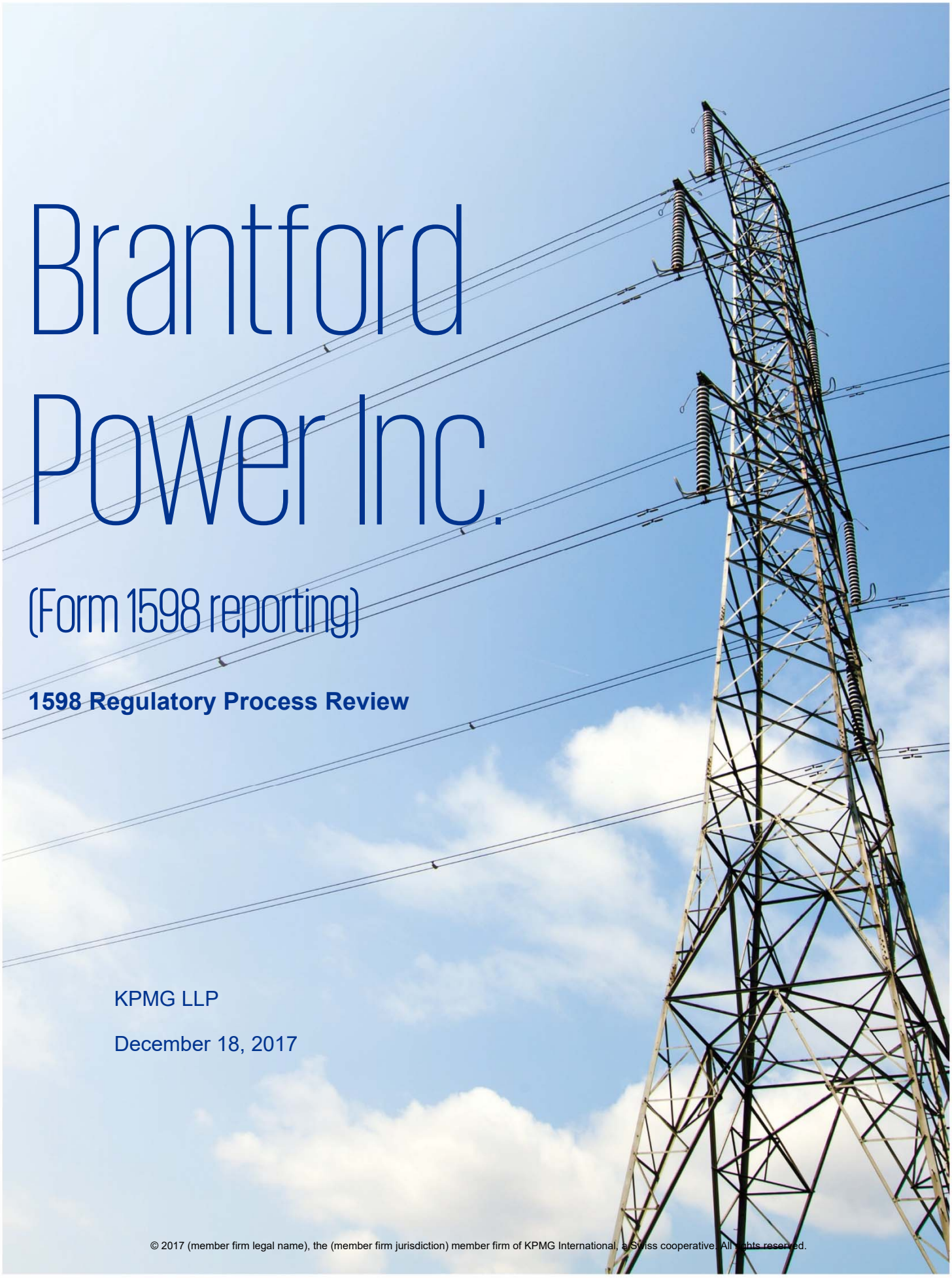
Staff-S4 a.v.Brantford_2019-IRM-Rate-Generator-Model (excel only)

Supplementary Interrogatory Attachment G

Staff-S4 a.v.i. Brantford_2019 –IRM-Rate-Generator-Model- all ODS adjustments removed-Illustration purposes only (excel only)

Supplementary Interrogatory Attachment H

BPI 1598 Process Review KPMG Report



Brantford Power Inc.

(Form 1598 reporting)

1598 Regulatory Process Review

KPMG LLP

December 18, 2017

Brantford Power Inc.
1598 Process Review
December 2017

1 Scope and Limitations of Work Performed

- This report, its entire contents, findings and recommendations are confidential and are intended for Brantford Power Inc's (the Entity or BPI) internal use only and may not be distributed, made available or relied on by other parties without KPMG LLP's (KPMG) written consent. We acknowledge that you may provide our report to the Ontario Energy Board as part of a future rate filing. Our report is subject to the terms and conditions in our contract with the Entity dated October 23, 2017. KPMG assumes no responsibility or liability for costs, damages, expenses or losses by anyone as a result of approved or unapproved circulation, reproduction or reliance on this report.
- In gathering information during our engagement, we relied solely on the information provided by the individuals being interviewed and, while we undertook steps to validate the information through further discussions with management, we did not independently verify or audit the information.
- KPMG did not perform an audit on the data; therefore, this presentation does not constitute an expression of opinion on the accuracy of the information presented. KPMG did not perform an audit on any of the data received from the Entity. As such, this report does not constitute an expression of audit opinion on the accuracy or achievability of the information presented.
- It must be recognized that it is not possible to predict future events with complete accuracy, or anticipate all potential future circumstances. As such, actual results achieved for the implementation of any opportunities for improvement discussed in this document will vary from the information presented, and the variations may be material.
- The scope of our engagement was by design, limited, and therefore all findings and recommendations should be considered in the context of the project contract, project approach, and our limited review. In this capacity, we were not acting as auditors and accordingly our work did not result in the expression of an opinion on financial or other information. We have relied on information and representations of management for the completeness of the information provided.
- The Entity and its senior management are responsible for any decisions to implement any changes as a result of this review, and for considering the impact of such changes. In performing our procedures, we acted solely as facilitators to assist the Entity in identifying opportunities for improvement for your organization. Any decisions made about the Entity's processes, controls, and systems will be made by the Entity, and the ultimate responsibility for these decisions will remain with the Entity.

2 Executive Summary

Your needs

As a due diligence exercise, you wanted to review and confirm the appropriateness of your processes and identify process improvements that could be implemented to strengthen your processes.

What were we engaged to do?

KPMG was engaged to review your existing processes and procedures related to Form 1598 reporting including the methodology used to quantify the amounts reported to the Independent Electrical System Operator (IESO).

What did we find?

The work performed during this engagement resulted in noting the following areas that are done well and areas for improvement. The areas we have identified for improvement are common with many other distribution companies that we have reviewed.

Areas that were done well:

1. Knowledgeable staff administer the regulatory process
2. Well thought out excel methodology is employed

Areas for improvement:

1. Data integrity checks are limited and not documented
2. Cross-training of staff
3. Independent review of data
4. Timely completion of quarterly true-ups

3 Our Approach

Our approach consisted of four phases as outlined in our engagement letter as follows:

Project Initiation

- Confirm the project scope
- Confirm project deliverables and timelines
- Validate our approach and work plan
- Discuss the availability and requirements of resources
- Confirm the protocols on project progress reporting and review findings and deliverables
- Identify participants in the project

The Current State Understanding

- Review the existing process and methodology and proposed revisions to gain an understanding of the existing process and methodology
- Walkthrough spreadsheets and methodology

Analysis

- Analysis of the current process
- Identify the points, calculations, estimates and assumptions in the regulatory process where there is a risk of error
- Identify deficiencies in internal controls
- Develop recommendations to address the gaps in internal control

Final Report

- Review the results of our work
- Prepare a final report to present to management

4 Current State, Findings & Conclusions

Findings and Conclusions:

This section of the report summarizes input from the Entity's Regulatory and Finance staff. We have set out our observations with the implications to the Entity. We have identified the gaps in internal control and opportunities for improvement and potential risks along with our recommendations. Where applicable we have identified best practices.

The regulatory process is supported extensively with excel spreadsheets and knowledge of these spreadsheets is limited to one or two individuals. The use of spreadsheets without robust spreadsheet protocols and policies puts the Entity at risk of error. Limiting the knowledge to mainly two people increases the risk of loss of this knowledge. There are two main spreadsheets supporting the regulatory process:

- 1598 spreadsheets
- Monthly Billings by Read Date

Legend:

Findings in this section of the report have been categorized under the following headings:

1. Spreadsheet rigor and controls
2. Data Integrity
3. Best practices

Findings & Recommendations – Spreadsheet Rigour

Current State – 1598 Process	Current Impact and Recommendations
• An excel workbook is used to quantify and support the amounts reported in regulatory filings to the IESO. • The spreadsheet is complex and made up of a number of tabs and contains inputs from a number of sources. • The spreadsheet is stored on the server, which is accessible by all finance staff. • The cells within the spreadsheet that contain qualitative or quantitative information which do not change on a monthly basis are not protected. • Data is manually copied and pasted between spreadsheets used in the 1598 process.	There is an increase in the risk of error in regulatory filings since the spreadsheets are not currently protected. Formula cells, both qualitative and quantitative are not locked to prevent inadvertent changes. We recommend : • A spreadsheet protocol be developed for spreadsheets used to support the amounts in regulatory filings • Such protocol should include: ▪ Locked cells for formulae ▪ Standardized colored cell for input cells ▪ A formal process for review and sign-off of changes to spreadsheets formulae and/or logic ▪ Formal sign-off procedures for review of spreadsheets prior to filing ▪ Lockdown of final version of spreadsheet after filing is complete (prevents historic data loss) • Considering including all of the spreadsheets in the same workbook and link the amounts via formulae
• The FIT contract spreadsheet compares actual price (HOEP) to contract price and the difference is inputted into the spreadsheet via the copy and paste function in excel. • The preparer subsequently reviews the data, however there is no review by someone independent of the preparer.	The preparer's familiarity with the spreadsheet and the data entered increases the risk that an error in the spreadsheet could be undetected. We recommend: • Manual data entered be checked by an individual other than the preparer. Color coding data entry cells will facilitate such a review.
• There are currently no formal instructions or procedures established for completion of the 1598 process, including how to complete the spreadsheets	It is important to have written procedures established to ensure the spreadsheets and the entire process is completed consistently and correctly each month. We recommend developing instructions for the use of the 1598 spreadsheet and documenting the process for performing the tasks that lead to the submission.

Findings & Recommendations - Spreadsheet Rigour continued

Current State – 1598 Reconciliation Process	Current Impact and Recommendations
• On a month by month basis, the previous month's spreadsheet is used and previous month's data is zeroed out and the 1598 submission process is started again.	There is a risk that not all cells will be zeroed out and critical formulae deleted inadvertently. The transition to a new month should be automated so that the manual copying of the spreadsheet is not necessary. We suggest creating a 12 month workbook for the year which serves as a template for each month's submission. The current month's submission can then be inputted and uploaded to the IESO website. Alternatively, you could develop a master template for the spreadsheet which is used fresh each month. This process will reduce the risk of including prior month's data in the current month's submission, and will also prevent inadvertently removing data which should not be removed.
• There is no formal process in place to review and approve changes to the logic or formulae in the spreadsheet • There is a risk that over time the spreadsheet logic will become compromised	• We recommend that a policy and procedures be developed for the review and management of changes to the spreadsheet formulae. Such policy should include a requirement that all changes made to spreadsheet formulae must be formally approved by a second individual. This will reduce the risk that errors in the formulae go undetected and result incorrect and inaccurate information submitted to the IESO. • Spreadsheets should be reviewed on a regular basis (eg. Annually and whenever revised) to ensure that it still does what it is supposed to do and does it correctly. This review should be formally documented and signed off.

Findings & Recommendations – Data Integrity

Current State – 1598 Reconciliation Process	Current Impact and Recommendations
• The review of the spreadsheet, specifically the manual data inputted, is often checked by the preparer. An independent and second individual often does not review on a consistent or timely basis.	The preparer's familiarity with the spreadsheet and the data entered increases the risk that an error in the spreadsheet could be undetected. We recommend: • Manual data entered be checked by an individual other than the preparer. Color coding data entry cells will facilitate such a review. • Consistently involving a second person to review all aspects of the spreadsheet will have the primary benefit of identifying any errors in the spreadsheet prior to submission and a secondary benefit of familiarizing a second individual with the process and spreadsheet. Segregating all manual data entry in a separate tab in the spreadsheet and linking the cells to the appropriate formulae will increase the efficiency of such a review.
• The spreadsheet relies upon data downloaded from the Kinetiq system for identifying all generation companies on a monthly basis. There is currently no formal process in place to identify any new generation entities that should be incorporated into the spreadsheet.	There is a risk of error in the IESO filing and within the regulatory accounts if new generation entities and the corresponding KWHs is not appropriately factored into the formulae. We recommend a formal process be established to ensure the Metering Settlement department communicates to the Finance and Regulatory departments all new generation entities once they are known.

Findings & Recommendations – Data Integrity continued

Current State – 1598 Reconciliation Process	Current Impact and Recommendations
• Time-of-use date is received from Savage and is subsequently converted through Macro, which is an internally developed report. This report determines whether the customer is classified as residential or commercial. Therefore the report from Savage has pre-determined characteristics that allow for the classification. Further, the data from Savage is not used for billing and thus could and has resulted in discrepancies between amounts billed to customers and recorded in the spreadsheet.	As the time-of-use data is derived from a pre-determined report, Finance should review reports used on a periodic basis to ensure reports are providing all the information required to ensure the data entered into the spreadsheet is complete and accurate. We understand that MDMR data is now used as a result of the discrepancies that were found in the Savage reports. This has resulted in an improvement in the process and more reliable data.
• This macro was tested to ensure it was operating as intended several years ago.	We recommend that the macro be tested periodically (i.e. annually) to ensure it is operating appropriately in order to prevent errors in the 1598 reconciliation.
• Interval meter consumption is used to determine the consumption for Tier 1 and 2. • Billing data is used but there is a one month lag between the usage and when the customer is billed. • Some customers are billed based on the spot price but do not have an interval meter.	• This timing difference between usage and billing will result in an incorrect estimate of Tier 1 and 2 usage. • Non-interval spot rate customers are excluded from the consumption estimate for Tier 1 and 2 usage. • These errors will be corrected on true up. • The process should be reviewed to ensure that all customers billed at spot price are included.
• Charge type #147 is allocated between RPP and non-RPP without regard for Class A customers.	This method will result in an inaccurate allocation between RPP and non-RPP customers. Any difference will be corrected in the true-up calculation. It is better to reduce total KWH for Class A consumption and calculate the percentage split between RPP and non-RPP customers. This percentage split can be used to allocate Charge type 147 between the RPP and non-RPP customers.

Findings & Recommendations – Data Integrity continued

Current State – 1598 Reconciliation Process	Current Impact and Recommendations
• Some informal data integrity checks are performed on certain data in the spreadsheet but these checks are not documented or noted as tasks to be performed.	Data integrity checks should be automated in the spreadsheet. For example; An "If" statement could be used to check whether the IESO is owed money or owes money TOU consumption could be compared to total energy purchased less interval meter consumption multiplied by the actual percentage of TOU consumption billed to total consumption billed
• Form 1598 true-ups have been calculated and included in the spreadsheet on an approximately quarterly basis. The plan is to perform the true-up monthly.	True-ups should be performed on a more regular basis in accordance with the planned frequency. This will ensure the submission to the IESO is complete and accurate and that true-ups are not inadvertently overlooked in subsequent months or done after a final disposition of the RSVA accounts.
• For the purposes of IESO submission, the Entity uses the 2nd estimate for the global adjustment. This is adjusted to the final global adjustment when the true-up is performed.	Since the global adjustment experiences significant swings between the final and 1st and 2nd estimates, the global adjustment true up should be performed on a monthly basis.
• Staff completing the 1598 filing are very familiar with the process and the spreadsheet but there are no instructions on the process.	A set of instructions or process notes should be developed and inserted as an instructions tab in the 1598 spreadsheet so that someone new can take on the filing with confidence.
• Majority of the IESO submission process and underlying support is prepared and reviewed by one or two staff members and thus, the knowledge of the preparation of the spreadsheet is centralized.	There is a risk of loss of knowledge and expertise if these individuals transition to a new role within the Company, leave the Company, or are absent due to injury, illness or personal care. We recommend that other individuals be identified for cross training on the spreadsheet and the IESO submissions. After training is complete, the individuals should rotate preparation of the spreadsheet to ensure everyone stays abreast of new developments and retains the required information.

Findings & Recommendations – Best Practices continued

Best Practices in Regulatory Communication
• Standing agenda item for regulatory updates to the Board of Directors and management team meetings • Regulatory changes tied in to the Enterprise Risk Management (ERM) framework • Regulatory risk is a specific risk category in the ERM framework • Risk assessment and reporting to board and senior management team includes financial, operational, compliance and personnel components including training • One individual in the organization is given responsibility for providing updates on regulatory change • Changes impacting a specific department are communicated directly with the department • Input is sought from directors regarding their direct reports who should be informed of a particular change

5 Contacts

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