

August 31, 2010

### **Delivered by Courier and Filed Electronically via RESS**

Ms. Kirsten Walli Board Secretary Ontario Energy Board 2300 Yonge Street 26th Floor, Box 2319 Toronto, ON M4P 1E4

Dear Ms. Walli

Re: PowerStream Inc. (OEB Electricity Distributor Licence ED-2004-0420)
2010 Smart Meter Cost Recovery Application – Board File No. EB-2010-0209
Responses to VECC Interrogatories

Accompanying this letter, please find PowerStream Inc.'s ("PowerStream's") public responses to the VECC interrogatories in this matter. Please note that detailed responses to Interrogatories 7 through 9 are being filed in confidence pursuant to the Board's *Practice Direction on Confidential Filings*, for the reasons set out in PowerStream's public response to Interrogatory No.7. PowerStream's responses to Board Staff interrogatories were filed electronically earlier this afternoon.

PowerStream is prepared to provide copies of the responses to parties' counsel and experts or consultants provided that they have executed the Board's form of Declaration and Undertaking with respect to confidentiality and that they comply with the Practice Direction, subject to PowerStream's right to object to the Board's acceptance of a Declaration and Undertaking from any person. Because it is in receipt of executed Declarations and Undertakings from counsel and the consultant to VECC, PowerStream will be providing copies of the confidential responses to those individuals by courier. In keeping with the requirements of the Practice Direction, PowerStream is filing confidential unredacted versions of the responses under separate cover, in a sealed envelope marked "Confidential". We anticipate that they will be delivered to you by Wednesday, September 1, 2010.

If you have any questions, please do not hesitate to contact the undersigned.

Yours truly,

Original Signed by Tom Barrett

Tom Barrett Manager, Rate Applications

Encls.

cc: Mr. Colin A. Macdonald, PowerStream Inc.

Mr. James C. Sidlofsky, Borden Ladner Gervais LLP

**IN THE MATTER OF** the *Ontario Energy Board Act,* 1998, S.O. 1998, c. 15, (Schedule B);

**AND IN THE MATTER OF** an application by PowerStream Inc. for an order or orders approving or fixing a just and reasonable distribution rates related to Smart Meter deployment, to be effective November 1, 2010.

PowerStream Inc. ("PowerStream") Responses to VECC Interrogatories

Part I - PUBLIC Material

**Delivered August 31, 2010** 

#### **VECC Question #1**

References: i) OEB Guideline G-2008-0002:

- ii) OEB Filing Requirements for Smart Meter Investment Plans, October 26, 2006
- a) Confirm that Guideline G-2008-0002 has not superseded the Filing Requirements for Smart Meter Investment Plans, October 26, 2006
- b) Confirm that paragraph 7 of the Filing Requirements specifies that
  - 7. Specifically, and in as much detail as possible, please provide the following information for your planned implementation of the SMIP:
    - the number of meters installed by class and by year, both in absolute terms and as a percentage of the class;
    - the capital expenditures and amortization by class and by year;
    - the operating expenses by class and by year;
    - the effect of the SMIP on the level of the allowance for PILs.
- c) Has PowerStream kept records by class as required and are accounts 1556 and 1555 segregated by rate class? Please elaborate.

# Response

- a) PowerStream is unable to confirm this. The two documents appear to serve different purposes.
- b) PowerStream confirms that the above excerpt is taken from the Filing Requirements for Smart Meter Investment Plans, October 26, 2006.

EB-2010-0209
PowerStream Inc. ("PowerStream")
2010 Smart Meter Cost Recovery Application
Responses to VECC IRs
Part I - PUBLIC Material
Page 2 of 23
Filed: August 31, 2010

c) PowerStream has recorded Smart Meter costs in accounts 1555 and 1556 as per the Board's guidance in the Accounting Procedures Handbook; related Frequently Asked Questions; and Guideline G-2008-0002 (Smart Meter Funding and Cost Recovery). Those guidelines do not require that costs be segregated by rate class.

PowerStream tracks the smart meter funding adder collected by rate class. Please see PowerStream's response to Board Staff IR #3 for a discussion of costs by rate class.

EB-2010-0209
PowerStream Inc. ("PowerStream")
2010 Smart Meter Cost Recovery Application
Responses to VECC IRs
Part I - PUBLIC Material
Page 3 of 23
Filed: August 31, 2010

### **VECC Question #2**

References: PowerStream. SM Cost Recovery Application Page 15/16 and Tables1-3

<u>Preamble</u>: PowerStream installed 53,262 smart meters in 2008 and 84,094 smart meters in 2009 in its South rate zone. In this Application, PowerStream seeks recovery of the revenue requirement in respect of the 137,356 smart meters with a capital cost of \$18.9 million installed in 2008 and 2009 in the PowerStream South rate zone.

- a) Provide a breakdown of Residential and Commercial meter installations in 2008, 2009 and forecast 2010
- b) Provide by year Support/details of the 2008-2009 and forecast 2010 Residential Class SM Unit costs (procurement and installation separately)
- c) Provide by year support/details of the 2008-2009 actual and forecast 2010 *Residential Class* SM AMI, communications and back office costs (procurement and installation)
- d) Provide by year support/details of the 2008-2009 and forecast 2010 *Commercial Class* SM <u>Unit costs</u> (procurement and installation separately)
- e) Provide by year support/details of the 2008-2009 actual and forecast 2010 Commercial Class SM AMI, communications and back office costs (procurement and installation)
- f) Provide a schedule that gives a breakdown of the 2008 and 2009 Capital Costs between the Residential and GS<50kw classes. Reconcile to Table 2
- g) Provide a breakdown of the O&M costs for meters installed in 2008 and 2009 between the Residential, GS<50kw classes. Reconcile to Table 3
- h) Were/are any SM installed in other classes? If so provide details of costs, if any, to be recovered
- i) Provide the details of the balances and the amounts to be disposed of in Accounts 1555 and 1556 **by class.** Include the carrying cost calculation(s)

### Response

a) The following table shows actual smart meter installations for 2008 and 2009 and planned installations for 2010, for the PowerStream South rate zone.

**Table VECC 2-1: Smart Meter Deployment by Customer Class** 

	Residential	GS<50 kW	Total
2008 Actual	53,262	ı	53,262
2009 Actual	81,481	2,613	84,094
Sub-total	134,743	2,613	137,356
2010 Planned	9,500	21,000	30,500
Total	144,243	23,613	167,856

b) The table below shows the procurement cost of the smart meters broken down by rate class and year, and the unit costs.

Table VECC 2-2: Smart Meter Procurement Costs

\$000	Re	sidential	GS	S<50 kW	Total
2008 Actual	\$	4,622	\$	-	\$ 4,622
2009 Actual	\$	8,303	\$	1,642	\$ 9,946
Sub-total	\$	12,926	\$	1,642	\$ 14,568
2010 Planned	\$	1,033	\$	13,199	\$ 14,233
Total	\$	13,959	\$	14,842	\$ 28,801
\$ per meter	Re	sidential	GS	S<50 kW	
2008 Actual	\$	86.79	\$	-	
2009 Actual	\$	101.90	\$	628.56	
2010 Planned	\$	108.76	\$	628.54	

Actual cost per meter was quite low in 2008 as a result of very favourable US dollar exchange rates.

In 2009, less favourable exchange rates and an annual price escalation increased the cost of meters. Costs were also higher in 2009 for consulting, contract negotiations and preparation of new contracts for installation which have been included in procurement costs.

The estimated 2010 meter cost is based on an annual price escalation and a less favourable US dollar exchange rate than the exchange rate in 2009.

The table below shows the installation cost of the smart meters broken down by rate class, year and the unit costs.

**Table VECC 2-3: Smart Meter Installation Costs** 

\$000	Res	Residential		<50 kW	Γotal
2008 Actual	\$	1,039	\$	-	\$ 1,039
2009 Actual	\$	1,603	\$	141	\$ 1,744
Sub-total	\$	2,643	\$	141	\$ 2,784
2010 Planned	\$	162	\$	1,230	\$ 1,393
Total	\$	2,805	\$	1,372	\$ 4,177
\$ per meter	Res	idential	GS	<50 kW	
2008 Actual	\$	19.51	\$	-	
2009 Actual	\$	19.68	\$	54.00	
2010 Planned	\$	17.09	\$	58.59	
Average	\$	19.45	\$	58.08	

The estimated installation rate for 2010 reflects only the contracted price of a standard swap of a smart meter for a conventional meter. There is no provision in the estimate for extra cost involved with Murray Jensen meter base repair work. The higher actual costs in 2009 are reflective of this additional repair work.

c) The table below shows the communications cost of the smart meters broken down by rate class and year.

**Table VECC 2-4: Smart Meter Communications Cost** 

\$000	Res	Residential GS<50		Residential GS<50 kW To		GS<50 kW		otal
2008 Actual	\$	388	\$	8	\$	396		
2009 Actual	\$	-	\$	-	\$	-		
Sub-total	\$	388	\$	8	\$	396		
2010 Planned	\$	149	\$	3	\$	152		
Total	\$	537	\$	10	\$	548		

These are costs for the radio towers that collect data from the meters. These costs have been allocated between the rate classes based on the number of smart meters for each class. The functions performed by these assets do not differ by rate class.

The table below shows the "back office" cost of the smart meters broken down by rate class and year.

Table VECC 2-5: Smart Meter "Back Office" Costs

\$000	Res	Residential		GS<50 kW		Γotal
2008 Actual	\$	416	\$	8	\$	424
2009 Actual	\$	691	\$	13	\$	705
Sub-total	\$	1,107	\$	21	\$	1,129
2010 Planned	\$	232	\$	4	\$	236
Total	\$	1,339	\$	26	\$	1,365

PowerStream has included the following costs in the category of "back office" costs: AMI hardware (other than meters and radio towers), software design and development costs related to AMI, MDM/R, customer billing system (CIS) interfaces and time of use billing. These costs have been allocated between the rate classes based on the number of smart meters for each class.

- d) See part b above.
- e) See part c above.
- f) The following table shows the 2008 and 2009 capital cost by rate class.

Table VECC 2-6: 2008 and 2009 Capital Cost by Rate Class

\$000	Res	sidential	GS<50 kW		GS<50 kW		Total
Meter	\$	12,926	\$	1,642	\$ 14,568		
Installation	\$	2,643	\$	141	\$ 2,784		
Communications	\$	388	\$	8	\$ 396		
Back office	\$	1,107	\$	21	\$ 1,129		
Total	\$	17,063	\$	1,813	\$ 18,876		

The total of this table agrees with table 2 as filed.

g) The following table shows the 2008 and 2009 OM&A by rate class.

Table VECC 2-7: 2008 and 2009 OM&A by Rate Class

	Residential	GS<50 kW	Total
Maintenance	\$ 71,638	\$ 2,297	\$ 73,935
Wide Area Network	\$ 530,804	\$ 5,976	\$ 536,780
Business Process Redesign	\$ 50,742	\$ 984	\$ 51,726
Customer Communication	\$ 345,623	\$ 7,655	\$ 353,278
Change Management	\$ -	\$ -	\$ -
Administration Cost	\$ 142,806	\$ 2,670	\$ 145,476
Other AMI Expenses	\$ 1,057,353	\$ 7,389	\$ 1,064,742
Total	\$ 2,198,966	\$ 26,971	\$ 2,225,937

Maintenance costs are for fixing or replacing smart meters that are not working properly and parts for meter base repairs when installing smart meters on Murray Jensen meter bases.

Wide area network is the cost of operating the advanced metering infrastructure network. See the response to VECC IR#7 for additional information.

Customer communications consists of customer information packages, brochures, door hangers and other materials used to communicate with customers regarding upcoming smart meter installation, smart meter information and time of use billing information.

Administration Cost consists of staff training and incremental call centre cost for smart meter inquiries.

Other AMI expenses consists mainly of monthly third party charges for an operational data store which is used to ensure that meters are functioning correctly and providing the necessary information that will be required for the Provincial MDM/R. This system is essential for PowerStream to efficiently and successfully meet the deadlines for getting smart meters onto the Provincial MDM/R and TOU billing.

These costs have been allocated between the rate classes based on the number of smart meters for each class. The total of this table agrees with table 3 as filed.

h) PowerStream South has not installed smart meters for any rate classes other than residential and GS<50 kW. At this time, PowerStream has no plans to install smart meters for other rate classes.

EB-2010-0209
PowerStream Inc. ("PowerStream")
2010 Smart Meter Cost Recovery Application
Responses to VECC IRs
Part I - PUBLIC Material
Page 8 of 23
Filed: August 31, 2010

i) As indicated in the response to VECC IR #1 c) above, PowerStream does not keep these accounts broken down by rate class. The allocation of these amounts to the customer classes is discussed in the response to Board Staff IR# 8. Carrying charges calculated on accounts 1555 and 1556 are not used in the calculation of the amounts for disposition and are not relevant. These carrying charge amounts are reversed when recognizing the approved amounts. The actual interest charged or credited to customers is calculated in the Actual Smart Meter Cost Recovery modelsee PowerStream's response to VECC IR #3.

### **VECC Question #3**

#### References:

- i) PowerStream. SM Cost Recovery Application Page 19-20 Tables 4, 5
- ii) Appendix 2
- a) Provide a Copy of OEB Worksheets that calculate the net fixed assets, revenue requirement and SM Actual cost recovery rate rider for 2008 an 2009 costs by rate class (Residential, GS<50kw) Reconcile with Table 4 and Table 7
- b) Provide a Copy of OEB Worksheets that calculate the revenue requirement and Disposition rate rider <u>by rate class</u> (Residential, GS<50kw). Reconcile with Table 5 and Table 7

### Response

a) In response to this question, PowerStream has prepared the attached Appendix 1: Actual Smart Meter Cost Recovery – Residential Class and Appendix 2: Actual Smart Meter Cost Recovery – GS<50 kW Class. Details of the net fixed assets, revenue requirement and rate rider calculations are in these Appendices. The resulting revenue requirement and rate rider amounts are summarized in the table below.

Table VECC 3-1: SM Actual Cost Recovery Rate Rider ("True-up") Calculated by Rate Class

	Total	Residential	GS<50 KW
Revenue Requirement 2008	\$1,650,280	\$ 1,648,353	\$ 1,927
Revenue Requirement 2009	\$3,004,305	\$ 2,846,094	\$ 158,211
Revenue Requirement 2010 (to Oct 31/10)	\$3,442,955	\$ 3,074,998	\$ 367,957
Revenue Requirement Total	\$8,097,540	\$ 7,569,445	\$ 528,095
Smart Meter Rate Adder	(\$6,379,090)	\$ (5,756,543)	\$ (622,547)
Carrying Cost	(\$34,413)	\$ (24,968)	\$ (9,445)
Smart Meter True-up	\$1,684,037	\$1,787,934	(\$103,897)
Metered Customers	243,761	219,943	23,818
Rate Rider to Recover Smart Meter Costs	\$ 1.15	\$ 1.35	\$ (0.73)
Recovery period November 1, 2010 to April 30, 2011			

EB-2010-0209
PowerStream Inc. ("PowerStream")
2010 Smart Meter Cost Recovery Application
Responses to VECC IRs
Part I - PUBLIC Material
Page 10 of 23

Filed: August 31, 2010

The next table compares the total from the table above to the results of the model filed and shown in Table 4 of the Application.

Table VECC 3-2: SM True-up: Filed Compared to Table VECC 3-1

		able 4 filed		VECC #3 a	Diffe	erence
Revenue Requirement 2008	\$1	,650,030	\$1,	650,280		(\$250)
Revenue Requirement 2009	\$3	,004,081	\$3,	004,305	\$	(224)
Revenue Requirement 2010 (to Oct 31/10)	\$3	,442,964	\$3,	442,955	\$	9
Revenue Requirement Total	\$8	,097,075	\$8,	097,540	\$	(465)
Smart Meter Rate Adder	(\$7,	509,327)	(\$6,3	379,090)	\$ (1	,130,237)
Carrying Cost	(	\$38,680)	(9	34,413)	\$	(4,267)
Smart Meter True-up	Ç	\$549,067	\$1,	684,037	\$ (1	,134,970)
Metered Customers		249,715		243,761		5,954
Rate Rider to Recover Smart Meter Costs	\$	0.37	\$	1.15	\$	(0.78)
Recovery period November 1, 2010 to April 30, 2011						

The significant differences, seen in the "Smart Meter Rate Adder" and "Carrying Cost" lines of Table VECC 3-2, are due to the exclusion of the smart meter funding adder collected from the GS>50 kW and Large Use customers. These amounts were included when this was calculated on an overall basis but excluded when calculated on a class by class basis.

If the Actual Smart Meter Cost Recovery model is to be prepared on a rate class basis, it would follow logically that models be prepared for the GS>50 kW and Large Use classes also. These classes have contributed smart meter funding adder amounts totaling \$1.1 million in the period January 2008 to April 2010. Since smart meters are not being installed for these classes, presumably no costs would be allocated and the "true-up" would return the amounts collected plus carrying costs thereon.

The reconciliation with Table 7 is discussed in part (b) of this question below.

b) It is the same OEB Worksheets, specifically the Actual Smart Meter Cost Recovery Model, that are used to calculate both the "Smart Meter Actual Cost" disposition rate rider and the Smart Meter rate rider as explained below.

The summary on the first page of the model is used to calculate the "Smart Meter True-up" amount used to determine the Smart Meter Actual Cost Recovery disposition rate rider. For 2010, this shows ten months of revenue requirement,

EB-2010-0209
PowerStream Inc. ("PowerStream")
2010 Smart Meter Cost Recovery Application
Responses to VECC IRs
Part I - PUBLIC Material
Page 11 of 23
Filed: August 31, 2010

representing the revenue requirement earned from January 1, 2010 to October 31, 2010 which is appropriate for this purpose.

The annual revenue requirement for 2010 is found on sheet 2 ("Revenue Requirement") and this is what is used to calculate the Smart Meter rate rider that will be in effect until replaced by new cost of service rates.

In response to part (a) of this question, models were prepared that separately calculate the revenue requirement for the Residential and GS<50 kW rate classes ("VECC 3a Models"). The following table summarizes these class specific models in the format of Table 5 of the filing.

**Table VECC 3-3: SM Revenue Requirement Calculated by Class** 

Rate Base	Total	Residential		G	S<50 KW
Net Fixed Assets	\$ 16,941,145	\$	15,253,192	\$	1,687,953
Working Capital Allowance	\$ 179,746	\$	154,460	\$	25,286
Total	\$ 17,120,891	\$	15,407,652	\$	1,713,239
			_		
Revenue Requirement					
Short Term Interest	\$ 14,177	\$	12,758	\$	1,419
Long Term Interest	\$ 564,715	\$	508,206	\$	56,509
Return on Equity	\$ 674,563	\$	607,061	\$	67,502
OM&A	\$ 1,198,300	\$	1,029,730	\$	168,570
Amortization	\$ 1,416,244	\$	1,292,312	\$	123,932
Grossed-up PILs	\$ 263,546	\$	239,930	\$	23,616
Total	\$ 4,131,545	\$	3,689,997	\$	441,548

The following table compares the total of the class specific revenue requirements to the revenue requirement in Table 5 of the filing.

EB-2010-0209
PowerStream Inc. ("PowerStream")
2010 Smart Meter Cost Recovery Application
Responses to VECC IRs
Part I - PUBLIC Material
Page 12 of 23

Filed: August 31, 2010

Table VECC 3-4: SM Revenue Requirement Comparison – As Filed to VECC Table 3-3

Rate Base	T	able 5 Filed	VE	VECC 3a Total		ference
Net Fixed Assets	\$	16,941,365	\$	16,941,145	\$	220
Working Capital Allowance	\$	179,745	\$	179,746	-\$	1
Total	\$	17,121,110	\$	17,120,891	\$	219
						_
Revenue Requirement						
Short Term Interest	\$	14,176	\$	14,177	\$	(1)
Long Term Interest	\$	564,723	\$	564,715	\$	8
Return on Equity	\$	674,572	\$	674,563	\$	9
OM&A	\$	1,198,300	\$	1,198,300	\$	-
Amortization	\$	1,416,245	\$	1,416,244	\$	1
Grossed-up PILs	\$	263,541	\$	263,546	\$	(5)
Total	\$	4,131,557	\$	4,131,545	\$	12

The sum of the VECC 3a Models is the same as the totals in Table 5 of the Application with some very minor differences.

The table below compares the results taken from the models by rate class to the results in Table 7 of the Application, for the Residential rate class.

Table VECC 3-5: Residential Class Rate Rider Comparison

Residential Class	Ta	able 7 filed	VE	CC 3a model
Customers		219,943		219,943
Revenue requirement	\$	3,836,220	\$	3,689,997
Monthly Charge	\$	1.45	\$	1.40

The difference between the rate rider as filed and the rate rider calculated in response to this IR is due to the difference in revenue requirement allocated to the Residential class. PowerStream's method of allocation is described in its response to Board Staff IR #8.

The table below compares the results taken from the models by rate class to the results in Table 7 of the Application, for the GS<50 kW rate class.

EB-2010-0209
PowerStream Inc. ("PowerStream")
2010 Smart Meter Cost Recovery Application
Responses to VECC IRs
Part I - PUBLIC Material
Page 13 of 23

Filed: August 31, 2010

# Table VECC 3-6: GS<50 kW Class Rate Rider Comparison

GS<50 kW Class	Ta	ble 7 filed	VEC	C 3b model
Customers		23,818		23,818
Revenue requirement	\$	295,337	\$	441,548
Monthly Charge	\$	1.03	\$	1.54

The difference between the rate rider as filed and the rate rider calculated in response to this IR is due to the difference in revenue requirement allocated to the GS<50 kW class. PowerStream's method of allocation is described in its response to Board Staff IR # 8.

The following table shows reconciles the total revenue requirement in Table 7 of the Application with the rate class specific model revenue requirements.

Table VECC 3-6: Revenue Requirement Comparison

Revenue requirement	Ta	able 7 filed	VE	CC 3a model
Residential Class	\$	3,836,220	\$	3,689,997
GS<50 kW Class	\$	295,337	\$	441,548
Total	\$	4,131,557	\$	4,131,545

On an overall basis, there is a minor difference of \$12. The differences, in the amounts allocated to the different rate classes, are due to the allocation methodology used by PowerStream, explained in the response to Board Staff IR #8, and the allocation resulting from running separate Actual Smart Meter Cost Recovery models by rate class.

# **VECC Question #4**

References: i) PowerStream. SM Cost Recovery Application Page 21-22

ii) Appendix 2-Page 2

<u>Preamble:</u> PowerStream proposes to allocate the revenue requirement of \$4.1 million between the Residential and the GS< 50 kW customer classes which received the meters covered by the disposition rate rider.

- Return allocated based on the capital costs of the meters installed for each class;
- OM&A allocated based on the number of meters installed for each class;
- PILs allocated based on the revenue requirement allocated to each class before PILs.
- a) Provide a calculation of the allocated revenue requirement per customer for residential and GS<50 kW classes. Reconcile this with the answer to VECC Question 3 part b)

### Response

a) The tables below take the data from the answer to VECC IR #3(b) and show this as allocated revenue per customer.

Table VECC 4-1: Revenue Requirement per Customer Comparison

Residential Class	Ta	able 7 filed	VECC 3b model			
Customers		219,943		219,943		
Revenue requirement	\$	3,836,220	\$	3,689,997		
Revenue requirement /customer	\$	17.44	\$	16.78		

GS<50 kW Class	Та	ble 7 filed	ed VECC 3b m				
Customers		23,818		23,818			
Revenue requirement	\$	295,337	\$	441,548			
Revenue requirement /customer	\$	12.40	\$	18.54			

The differences are due to the different allocation methodologies as discussed in the response to VECC IR #3 above.

EB-2010-0209
PowerStream Inc. ("PowerStream")
2010 Smart Meter Cost Recovery Application
Responses to VECC IRs
Part I - PUBLIC Material
Page 15 of 23
Filed: August 31, 2010

### **VECC Question #5**

References: i) PowerStream. SM Cost Recovery Application Pages 10 and 23,

ii) Appendix 3-Page 2

Preamble: In 2010 PowerStream plans to install another 100,500 smart meters, at a total cost of approximately \$26.8 million, for both the South and North rate zones. This includes most of the more complex and costly general service/commercial smart meter replacements. These will be addressed in a future rate application.

- a) Provide a cash flow projection for PowerStream (South and North) showing SM rate adder revenue and SM expenditures by Class per Month for the 2008, 2009 Actuals and forecast 2010 (and if applicable 2011) rate years,
- b) Reconcile the 2008 and 2009 cash flows with the Actual Cost Recovery rate riders for each class for 2008 and 2009 costs
- c) Compare the forecast surplus/deficit for each class in 2010 (and if appropriate 2011) to the proposed aggregate (residential and GS<50 kW) \$0.50 /metered customer per month

#### Response

- a) As discussed in the response to VECC IR #1(c), PowerStream's system does not provide SM expenditure by Class per Month for the 2008 and 2009 actual costs. The SM Funding adder collected is recorded by rate class. See the response to Board Staff IR# 9(a). For 2010 see the response to part c of this question below.
- b) The Board-developed Actual Smart Meter Cost Recovery Model effectively deals with the cash flow aspects by calculating interest monthly on the net of the SM funding adder collected and the revenue requirement on SM expenditures. In the response to VECC IR #4(a) above, this is set out by class and compared to the proposed rate riders as filed.
- c) PowerStream has prepared Smart Meter Rate Calculation models to calculate a SM funding adder for 2010, for each of the Residential and GS<50 kW rate classes. See Appendix 3 for the Smart Meter Rate Calculation Model – Residential Class and Appendix 4 for the Smart Meter Rate Calculation Model – GS<50 kW Class.</p>

The results of these models are summarized in Table 5-1 below, under the column "VECC 5c Models, and compared with the Updated 2010 Smart Meter Funding Adder as filed.

EB-2010-0209
PowerStream Inc. ("PowerStream")
2010 Smart Meter Cost Recovery Application
Responses to VECC IRs
Part I - PUBLIC Material
Page 16 of 23
Filed: August 31, 2010

# **Table VECC 5-1: Smart Meter Funding Adder by Rate Class**

Rate Class	As	filed	 CC 5c dels
Residential	\$	0.50	\$ 0.15
GS<50 kW	\$	0.50	\$ 3.83
GS>50 kW	\$	0.50	\$ -
Large Use	\$	0.50	\$ -

### **VECC Question #6**

Reference: PowerStream. SM Cost Recovery Application Page 23,

- a) Based on the responses to questions regarding calculation of costs, revenue requirements and rate riders by rate class, provide a version of Table 8 that shows the changes resulting from these responses, and
- b) Compare these amounts to the original Table 8 as filed
- c) Update as necessary the Bill Impacts in Appendix 5

### Response

a) For purposes of responding to this question, PowerStream has prepared the following table showing the results of the calculations by rate class in the same format as Table 8 of the Application. PowerStream has also prepared the tables of rate riders and bill impacts set out in response to parts (b) and (c) below. PowerStream notes that the calculation of the SM Funding Adder and the SM Actual Cost Recovery rate rider on a rate class basis is a departure from the Board's treatment of smart meter costs in PowerStream's 2009 EDR proceeding and the past practice of allocating the SM funding adder across all metered customers.

Table VECC 6-1: Rate Riders Calculated by Rate Class Summary

Rate Riders Calculated per VECC IRs	В	efore	After	C	hange
SM Funding Adder -Residential	\$	1.81	\$ 0.15	\$	(1.66)
SM Funding Adder - GS < 50 kW	\$	1.81	\$ 3.83	\$	2.02
SM Funding Adder - GS > 50 kW	\$	1.81	\$ -	\$	(1.81)
SM Funding Adder - Large Use	\$	1.81	\$ -	\$	(1.81)
SM Actual Cost Recovery-Residential			\$ 1.35	\$	1.35
SM Actual Cost Recovery- GS<50 kW			\$ (0.73)	\$	(0.73)
SM Actual Cost Recovery- GS>50 kW			\$ -	\$	-
SM Actual Cost Recovery- Large Use	\$	-	\$ -	\$	-
Smart Meter Disposition - Residential	\$	-	\$ 1.40	\$	1.40
Smart Meter Disposition - GS<50kW	\$	-	\$ 1.54	\$	1.54
Total Change					
Total Change - Residential	\$	1.81	\$ 2.90	\$	1.09
Total Change - GS<50kW	\$	1.81	\$ 4.64	\$	2.83
Total Change - Other metered customers	\$	1.81	\$ -	\$	(1.81)

b) The table below compares the proposed smart meter rate riders in the Application to those in Table VECC 6-1 above.

Table VECC 6-2: Comparison Smart Meter Rate Riders

Monthly SM Rate Riders	Δ	s filed	٧	ECC 6a	Dif	ference
SM Funding Adder -Residential	\$	0.50	\$	0.15	\$	(0.35)
SM Funding Adder - GS < 50 kW	\$	0.50	\$	3.83	\$	3.33
SM Funding Adder - GS > 50 kW	\$	0.50	\$	-	\$	(0.50)
SM Funding Adder - Large Use	\$	0.50	\$	-	\$	(0.50)
SM Actual Cost Recovery-Residential	\$	0.37	\$	1.35	\$	0.98
SM Actual Cost Recovery- GS<50 kW	\$	0.37	\$	(0.73)	\$	(1.10)
SM Actual Cost Recovery- GS>50 kW	\$	0.37	\$	-	\$	(0.37)
SM Actual Cost Recovery- Large Use	\$	0.37	\$	-	\$	(0.37)
Smart Meter Disposition - Residential	\$	1.45	\$	1.40	\$	(0.05)
Smart Meter Disposition - GS<50kW	\$	1.03	\$	1.54	\$	0.51
Total of Monthly SM Rate Riders						
Residential	\$	2.32	\$	2.90	\$	0.58
GS<50 kW	\$	1.90	\$	4.64	\$	2.74
Other metered customers	\$	0.87	\$	-	\$	(0.87)
Total Change from Current SM Rate Riders						
Total Change - Residential	\$	0.51	\$	1.09	\$	0.58
Total Change - GS<50kW	\$	0.09	\$	2.83	\$	2.74
Total Change - Other metered customers	\$	(0.94)	\$	(1.81)	\$	(0.87)

Table VECC 6-2 illustrates that the calculation of these rate riders on a rate class basis results in an increase in the total smart meter rate riders for both the Residential and GS<50 kW classes with a decrease for GS>50 kW and Large Use classes. The decrease for the GS>50 kW and Large Use class would be even greater if SM Actual Cost Recovery rate riders are calculated for these classes as discussed in the response to VECC IR#3(a).

Under the VECC IR#6 scenario, total monthly SM rate riders for the Residential class are higher by \$0.58 compared to the riders proposed in the Application. This difference consists of a decrease of \$0.35 in the SM Funding Adder, an increase of \$0.98 in the SM Actual Cost Recovery rate rider and a decrease of \$0.05 in the Smart Meter Disposition rate rider.

EB-2010-0209
PowerStream Inc. ("PowerStream")
2010 Smart Meter Cost Recovery Application
Responses to VECC IRs
Part I - PUBLIC Material
Page 19 of 23
Filed: August 31, 2010

c) The following table compares the bill impacts as per the Application with the bill impacts using the rate riders from Table VECC 6-2, column "VECC 6a" resulting from the calculation by rate class of each rate rider.

**Table VECC 6-3: Bill Impact Comparison** 

Monthly Bill Impacts	Α	s filed	VE	CC 6-2
Residential \$ increase (decrease)	\$	0.58	\$	1.23
Residential % increase (decrease)		0.50%		1.15%
GS<50kW \$ increase (decrease)	\$	0.10	\$	3.20
GS<50 kW % increase (decrease)		0.04%		1.18%

EB-2010-0209
PowerStream Inc. ("PowerStream")
2010 Smart Meter Cost Recovery Application
Responses to VECC IRs
Part I - PUBLIC Material
Page 20 of 23

Filed: August 31, 2010

### **VECC Question #7**

# Reference: KMI-Sensus Supply Contract and Pricing Schedule

- a) Confirm that Powerstream Contracted with KMI-Sensus under Option 2. If not please elaborate/explain
- b) Provide a schedule that translates the costs shown in the pricing schedule to the numbers of residential and commercial meters and the AMCD capital costs filed in the current application for 2008 and 2009.
- c) Provide a Schedule that translates the pricing shown in the pricing schedule to the AMI and other costs filed for 2008 and 2009
- d) Provide the changes to pricing for 2010 (north and south) for KMI-Sensus Meter supply and services

### Response

The response to this question is being filed in confidence.

VECC IRs #7, #8 and #9 relate to the contractual relationships between PowerStream and Sensus, Honeywell and Olameter, respectively, and to the pricing of their products and services for PowerStream.

Sensus, Honeywell and Olameter are corporations which are engaged in competitive businesses. The disclosure of the pricing information requested in these questions could reasonably be expected to prejudice the economic interests of, significantly prejudice the competitive positions of, cause undue financial loss to, and be injurious to the financial interests of Sensus, Honeywell and Olameter, respectively, since it would enable their competitors to ascertain the scope and pricing of services provided by these companies. In response to inquiries from PowerStream, all of these companies have requested that this information be kept confidential.

The Board's Practice Direction on Confidential Filings (the "Practice Direction") recognizes that these are among the factors that the Board will take into consideration when addressing the confidentiality of filings. They are also addressed in section 17(1) of the *Freedom of Information and Protection of Privacy Act* ("FIPPA"), and the Practice Direction notes (at Appendix C of the Practice Direction) that third party information as described in subsection 17(1) of FIPPA is among the types of information previously assessed or maintained by the Board as confidential. This approach is also consistent with the Board's treatment of commercially sensitive smart meter-related documents in the Combined Smart Meter Proceeding, and with the approach approved by the Board

EB-2010-0209
PowerStream Inc. ("PowerStream")
2010 Smart Meter Cost Recovery Application
Responses to VECC IRs
Part I - PUBLIC Material
Page 21 of 23
Filed: August 31, 2010

in respect of certain agreements between PowerStream and each of these companies in the current proceeding.

Accordingly, PowerStream requests that these responses be kept confidential. PowerStream is prepared to provide copies of the responses to parties' counsel and experts or consultants provided that they have executed the Board's form of Declaration and Undertaking with respect to confidentiality and that they comply with the Practice Direction, subject to PowerStream's right to object to the Board's acceptance of a Declaration and Undertaking from any person. Because it is in receipt of executed Declarations and Undertakings from counsel and the consultant to VECC [PowerStream will be providing copies of the confidential responses to those individuals by courier. In keeping with the requirements of the Practice Direction, PowerStream is filing confidential unredacted versions of the responses under separate cover, in a sealed envelope marked "Confidential".

EB-2010-0209
PowerStream Inc. ("PowerStream")
2010 Smart Meter Cost Recovery Application
Responses to VECC IRs
Part I - PUBLIC Material
Page 22 of 23
Filed: August 31, 2010

### **VECC Question #8**

# Reference: Honeywell contract and pricing schedule

- a) Confirm that Honeywell was contracted to install 36,000 meters from January 2008 to June 30, 2008. If not clarify for how many meters and over what period
- b) Specify how many residential meters and commercial meters were actually installed by Honeywell in Powerstream South and for which costs recovery is now sought.
- c) Provide a schedule that translates the costs shown in the pricing schedule to the numbers of residential and commercial meters and the capital costs filed in the current application for 2008 and 2009.

## Response

The response to this question is being filed in confidence for the reasons set out in response to VECC IR #7.

EB-2010-0209
PowerStream Inc. ("PowerStream")
2010 Smart Meter Cost Recovery Application
Responses to VECC IRs
Part I - PUBLIC Material
Page 23 of 23

Filed: August 31, 2010

# **VECC Question #9**

# **Reference: Olameter Contract and Pricing Schedule**

- a) Confirm that Olameter has been contracted to install meters Starting in July 2008. Clarify for how many residential and commercial meters and over what period
- b) Specify how many residential meters and commercial meters were actually installed by Olameter in Powerstream South in 2008 and 2009 and for which cost recovery is sought.
- c) Provide a schedule that translates the costs shown in the Olameter pricing schedule to the numbers of residential and commercial meters and the capital and operating costs filed in the current application for 2008 and 2009.
- d) Is Olameter contracted for 2010 (North and South and if so what differences are there in pricing of the Olameter services?

### Response

The response to this question is being filed in confidence for the reasons set out in response to VECC IR #7.

# **Actual Smart Meter Cost Recovery Model - Residential Class**

Rate Rider to Recover Actual Smart Meter	•
Revenue Requirement 2008	\$1,648,353 \$2,846,094
Revenue Requirement 2009	· · · · · · · · · · · · · · · · · · ·
Revenue Requirement 2010 (to Oct 31/10)  Revenue Requirement Total	\$3,074,998 <b>\$7,569,445</b>
Revenue Requirement Total	\$7,5 <del>09,44</del> 5
Smart Meter Rate Adder	(\$5,756,543)
Carrying Cost	(\$24,968)
Smart Meter True-up	\$1,787,934
Residential Customers	219,943
Rate Rider to Recover Smart Meter Costs	\$ 1.35
Recovery period November 1, 2010 to April 30, 2011	
2010 Addition to Rate Base (Smart Meters In Fixed Assets	installed in 2008 and 2009)
Smart Meters	\$16,481,836
Computer Software	\$580,570
·	\$17,062,406
Accumulated Depreciation	
Smart Meters	(\$959,795)
Computer Software	(\$203,262)
	(\$1,163,058)
Addition to Net Fixed Assets	\$15,899,348
2009 Amortization Expense	
Smart Meters	\$754,595
Computer Software	\$150,012
Computer Conward	\$904,607
	φυστ,υστ
2010 Amortization Expense	
Smart Meters	\$1,098,789
Computer Software	\$193,523
	\$1,292,312

# PowerStream Inc. Actual Smart Meter Cost Recovery Model - Residential Class

# **Incremental Revenue Requirement Calculation**

	2	800		2009			2010				
Net Fixed Assets		\$	3,108,532		\$	11,058,206		\$	15,253,192	1	
OM&A	\$1,116,199			\$1,082,767			\$1,029,730				
Working Capital Allowance	15%	\$	167,430	15%	\$	162,415	15%	\$	154,460	_	
Rate Base		\$	3,275,962	_	\$	11,220,621		\$	15,407,652	_	
Deemed ST Debt	0%	\$	-	4%	\$	448,825	4%	\$	616,306		
Deemed LT Debt	60%	\$	1,965,577	56%	\$	6,283,548	56%	\$	8,628,285		
Deemed Equity	40%	\$	1,310,385	40%	\$	4,488,249	40%	\$	6,163,061		
ST Interest	0.00%	\$	-	1.33%	\$	5,969	2.07%	\$	12,758		
LT Interest	6.16%	\$	121,080	5.89%	\$	370,101	5.89%	\$	508,206		
ROE	9.00%	\$	117,935	8.01%	\$	359,509	9.85%	\$	607,061	_	
		\$	239,014	_	\$	735,579		\$	1,128,025	_	
OM&A		\$	1,116,199		\$	1,082,767		\$	1,029,730	2	
Amortization		\$	258,451		\$	904,607		\$	1,292,312		
Grossed-up PILs		\$	34,689		\$	123,141		\$	239,930		
				_						_	
Revenue Requirement		\$	1,648,353	_	\$	2,846,094	•	\$	3,689,997	_	

# **NOTES**

- 1. Average assets for 2010 excludes 2010 additions as only considering meters installed up to Dec 31/09.
- 2. OM&A costs for meters installed in 2008 and 2009 total \$2,198,966 as per response to VECC IR 2g only Estimated costs for 2010 allocated on the basis of the number of meters for each class.
- 3. Actual costs up to Dec 31/07 were cleared in 2009 EDR and added to rate base (EB-2008-0244) and are excluded.

# PowerStream Inc. Actual Smart Meter Cost Recovery Model - Residential Class

Filed: August 31, 2010 EB-2010-0209 PowerStream Inc 2010 Smart Meter Cost Recovery VECC IRRs Appendix 1 Page 3 of 7

# **PILs Calculation**

	2008			2009		2010
INCOME TAX	Actual			Actual		Forecasted
Net Income	\$	117,935	\$	359,509	\$	607,061
Amortization	\$	258,451	\$	904,607	\$	1,292,312
CCA	-\$	334,104 -	-\$	1,085,010	-\$	1,389,414
Change in taxable income	\$	42,282	\$	179,106	\$	509,960
Tax Rate		33.50%		33.00%		31.00%
Income Taxes Payable	\$	14,164	\$	59,105	\$	158,088
ONTARIO CAPITAL TAX						
Closing Net Fixed Assets	\$	5,950,813	\$	15,522,041	\$	14,423,252
Less: Exemption	\$	-	\$	-	\$	-
Deemed Taxable Capital	\$	5,950,813	\$	15,522,041	\$	14,423,252
Ontario Capital Tax Rate		0.225%		0.225%		0.075%
Net Amount (Taxable Capital x Rate)	\$	13,389	\$	34,925	\$	10,817

# **Gross Up**

•		PILs Payable		PILs Payable		PILs Payable	
Change in Income Taxes Payable	\$	14,164	\$	59,105	\$	158,088	
Change in OCT	\$	13,389	\$	34,925	\$	10,817	
PIL's	\$	27,554	\$	94,030	\$	168,905	
		Gross Up		Gross Up	Gross Up		
		33.50%	33.00%			31.00%	
	<u> </u>	rossed Up PILs	G	rossed Up PILs	Gı	rossed Up PILs	
Change in Income Taxes Payable	\$	21,300	\$	88,216	\$	229,112	
Change in OCT	\$	13,389	\$	34,925	\$	10,817	
PIL's	\$	34,689	\$	123,141	\$	239,930	

# PowerStream Inc. **Actual Smart Meter Cost Recovery Model - Residential Class**

Filed: August 31, 2010 EB-2010-0209 PowerStream Inc 2010 Smart Meter Cost Recovery VECC IRRs Appendix 1 Page 4 of 7

# **Average Net Fixed Assets**

_		2008			2009	2010		
Net Fixed Assets - meters			Actual		Actual	Forecasted		
Opening Capital Investment		\$	-	\$	6,156,013	\$	16,481,836	
Capital Investment		\$	6,156,013	\$				
Closing Capital Investment		\$	6,156,013	\$		\$	16,481,836	
Opening Accumulated Amortization		\$		\$	205,200	\$	959,795	
Amortization Year One	15 years		205,200	\$	344,194	\$	-	
Amortization Thereafter	10 youro	\$	-	\$	410,401	\$	1,098,789	
Closing Accumulated Amortization		\$	205,200	\$	959,795	\$	2,058,584	
0		•		•	<b>5.050.040</b>	•	45 500 044	
Opening Net Fixed Assets		\$		\$	5,950,813		15,522,041	
Closing Net Fixed Assets		\$	5,950,813	\$			14,423,252	
Average Net Fixed Assets		\$	2,975,406	\$	10,736,427	Ф	14,972,646	
			2008		2009		2010	
Net Fixed Assets - software			Actual		Actual	I	Forecasted	
Opening Capital Investment		\$	-	\$	319,502	\$	580,570	
Capital Investment		\$	319,502	\$	261,068			
Closing Capital Investment		\$	319,502	\$	580,570	\$	580,570	
Opening Accumulated Amortization		\$		\$	53,250	\$	203,262	
Amortization Year One	3 years	\$	53,250	\$	43,511	\$	-	
Amortization Thereafter	o youro	\$	-	\$	106,501	\$	193,523	
Closing Accumulated Amortization		\$	53,250	\$	203,262	\$	396,786	
		•		_		•		
Opening Net Fixed Assets		\$	-	\$	266,252	\$	377,308	
Closing Net Fixed Assets		<u>\$</u>	266,252	\$	377,308	\$	183,784	
Average Net Fixed Assets		\$	133,126	\$	321,780	\$	280,546	
Totals								
Average Net Fixed Assets		\$	3,108,532	\$	11,058,206	\$	15,253,192	
Amorization Expense		\$	258,451	\$	904,607	\$	1,292,312	
Capital Investment		\$	6,475,515	\$	10,586,891	\$	-	

# PowerStream Inc. Actual Smart Meter Cost Recovery Model - Residential Class For PILs Calculation

Filed: August 31, 2010 EB-2010-0209 PowerStream Inc 2010 Smart Meter Cost Recovery VECC IRRs Appendix 1 Page 5 of 7

UCC		F	2008 Forecasted	2009 Forecasted			2010 Forecasted
Opening UCC		\$	-	\$	5,909,772	\$	15,349,781
Capital Additions		\$	6,156,013	\$	10,325,823	\$	-
UCC Before Half Year Rule		\$	6,156,013	\$	16,235,595	\$	15,349,781
Half Year Rule (1/2 Additions - Disposals)		\$	3,078,007	\$	5,162,912	\$	-
Reduced UCC		\$	3,078,007	\$	11,072,684	\$	15,349,781
CCA Rate Class	47						
CCA Rate	8%						
CCA		\$	246,241	\$	885,815	\$	1,227,982
Closing UCC		\$	5,909,772	\$	15,349,781	\$	14,121,798

UCC		2008		2009		2010	
		Fo	orecasted	F	orecasted	F	orecasted
Opening UCC		\$	-	\$	231,639	\$	293,512
Capital Additions		\$	319,502	\$	261,068	\$	-
UCC Before Half Year Rule		\$	319,502	\$	492,707	\$	293,512
Half Year Rule (1/2 Additions - Disposals)		\$	159,751	\$	130,534	\$	-
Reduced UCC		\$	159,751	\$	362,173	\$	293,512
CCA Rate Class	50						
CCA Rate	55%						
CCA		\$	87,863	\$	199,195	\$	161,432
Closing UCC		\$	231,639	\$	293,512	\$	132,080
				•			
Total CCA		\$	334,104	\$	1,085,010	\$	1,389,414

# Actual Smart Meter Cost Recovery Model - Residential Class 10 Smart Meter Cost Recovery VECC IRRs Appendix 1 Page 6 of 7

Table Staff 16-1: Account 1555 Smart Meter Capital and Offset Account – Principal

				Closing
				Balance
	Opening		Revenue	(excluding
Month	Balance	SM Adder	Requirement	Stranded)
Jan-08	0	(248,094)	137,363	(110,731)
Feb-08	(110,731)	(104,731)	137,363	(78,099)
Mar-08	(78,099)	(152,619)	137,363	(93,356)
Apr-08	(93,356)	(154,623)	137,363	(110,616)
May-08	(110,616)	(244,333)	137,363	(217,586)
Jun-08	(217,586)	(242,871)	137,363	(323,094)
Jul-08	(323,094)	(258,523)	137,363	(444,255)
Aug-08	(444,255)	(255,783)	137,363	(562,675)
Sep-08	(562,675)	(251,416)	137,363	(676,728)
Oct-08	(676,728)	(271,001)	137,363	(810,366)
Nov-08	(810,366)	(252,466)	137,363	(925,470)
Dec-08	(925,470)	(264,339)	137,363	(1,052,446)
Jan-09	(1,052,446)	(266,973)	237,174	(1,082,244)
Feb-09	(1,082,244)	(241,643)	237,174	(1,086,713)
Mar-09	(1,086,713)	(269,672)	237,174	(1,119,210)
Apr-09	(1,119,210)	(249,917)	237,174	(1,131,953)
May-09	(1,131,953)	(266,216)	237,174	(1,160,994)
Jun-09	(1,160,994)	(308,367)	237,174	(1,232,187)
Jul-09	(1,232,187)	(267,198)	237,174	(1,262,210)
Aug-09	(1,262,210)	(267,887)	237,174	(1,292,923)
Sep-09	(1,292,923)	(225,039)	237,174	(1,280,787)
Oct-09	(1,280,787)	(232,526)	237,174	(1,276,139)
Nov-09	(1,276,139)	(225,757)	237,174	(1,264,721)
Dec-09	(1,264,721)	(234,549)	237,174	(1,262,096)
Jan-10	(1,262,096)		307,500	(954,596)
Feb-10	(954,596)		307,500	(647,096)
Mar-10	(647,096)		307,500	(339,597)
Apr-10	(339,597)		307,500	(32,097)
May-10	(32,097)		307,500	275,403
Jun-10	275,403		307,500	582,903
Jul-10	582,903		307,500	890,402
Aug-10	890,402		307,500	1,197,902
Sep-10	1,197,902		307,500	1,505,402
Oct-10	1,505,402		307,500	1,812,902
Total		(5,756,543)	7,569,445	1,812,902
2008		(2,700,799)	1,648,353	
2009		(3,055,744)	2,846,094	
2010	,	0	3,074,998	
	,	(5,756,543)	7,569,445	

# **Actual Smart Meter Cost Recovery Model - Residential Class**

Table Staff 16-2: Account 1555 – Interest

	0-2. Account	1000	1		
	Opening				
	Balance				
	(excluding				
Month	Stranded)	Days	Rate	Interest	To Date
Jan-08	0	31	5.14%	0	0
Feb-08	(110,731)	28	5.14%	(437)	(437)
Mar-08	(78,099)	31	5.14%	(341)	(778)
Apr-08	(93,356)	30	4.08%	(313)	(1,091)
May-08	(110,616)	31	4.08%	(383)	(1,474)
Jun-08	(217,586)	30	4.08%	(730)	(2,204)
Jul-08	(323,094)	31	3.35%	(919)	(3,123)
Aug-08	(444,255)	31	3.35%	(1,264)	(4,387)
Sep-08	(562,675)	30	3.35%	(1,549)	(5,936)
Oct-08	(676,728)	31	3.35%	(1,925)	(7,862)
Nov-08	(810,366)	30	3.35%	(2,231)	(10,093)
Dec-08	(925,470)	31	3.35%	(2,633)	(12,726)
Jan-09	(1,052,446)	31	2.4500%	(2,190)	(14,916)
Feb-09	(1,082,244)	28	2.4500%	(2,034)	(16,950)
Mar-09	(1,086,713)	31	2.4500%	(2,261)	(19,211)
Apr-09	(1,119,210)	30	1.0000%	(920)	(20,131)
May-09	(1,131,953)	31	1.0000%	(961)	(21,093)
Jun-09	(1,160,994)	30	1.0000%	(954)	(22,047)
Jul-09	(1,232,187)	31	0.5500%	(576)	(22,622)
Aug-09	(1,262,210)	31	0.5500%	(590)	(23,212)
Sep-09	(1,292,923)	30	0.5500%	(584)	(23,796)
Oct-09	(1,280,787)	31	0.5500%	(598)	(24,395)
Nov-09	(1,276,139)	30	0.5500%	(577)	(24,972)
Dec-09	(1,264,721)	31	0.5500%	(591)	(25,562)
Jan-10	(1,262,096)	31	0.5500%	(590)	(26,152)
Feb-10	(954,596)	28	0.5500%	(403)	(26,555)
Mar-10	(647,096)	31	0.5500%	(302)	(26,857)
Apr-10	(339,597)	30	0.5500%	(154)	(27,010)
May-10	(32,097)	31	0.5500%	(15)	(27,025)
Jun-10	275,403	30	0.5500%	124	(26,901)
Jul-10	582,903	31	0.5500%	272	(26,629)
Aug-10	890,402	31	0.5500%	416	(26,213)
Sep-10	1,197,902	30	0.5500%	542	(25,671)
Oct-10	1,505,402	31	0.5500%	703	(24,968)

# Actual Smart Meter Cost Recovery Model - GS < 50 kW Class

Rate Rider to Recover Actual Smart Meter	Costs to December 31, 200
Revenue Requirement 2008	\$1,927
Revenue Requirement 2009	\$158,211
Revenue Requirement 2010 (to Oct 31/10)	\$367,957
Revenue Requirement Total	\$528,095
Smart Meter Rate Adder	(\$622,547)
Carrying Cost	(\$9,445)
Smart Meter True-up	(\$103,897)
Residential Customers	23,818
Rate Rider to Recover Smart Meter Costs	(0.73)
Recovery period November 1, 2010 to April 30, 2011	, ,
2010 Addition to Rate Base (Smart Meters I	installed in 2008 and 2009)
<u>Fixed Assets</u> Smart Meters	\$1,802,692
Computer Software	\$1,802,092
Computer Conware	\$1,813,951
Accumulated Depreciation	Ψ1,010,001
Smart Meters	(\$60,090)
Computer Software	(\$3,942)
·	(\$64,032)
Addition to Net Fixed Assets	\$1,749,919
2009 Amortization Expense	
Smart Meters	\$60,090
Computer Software	\$2,909
	\$62,999
2010 Amortization Expense	
Smart Meters	\$120,179
Computer Software	\$3,753
	\$123,932

# PowerStream Inc. Actual Smart Meter Cost Recovery Model - GS < 50 kW Class

# **Incremental Revenue Requirement Calculation**

	2	800			2	009		2010				Notes
Net Fixed Assets		\$	2,582			\$	877,541			\$	1,687,953	1
OM&A	\$ 984			\$	25,987			\$	168,570	)		
Working Capital Allowance	15%	\$	148		15%	\$	3,898		15%	\$	25,286	
Rate Base		\$	2,729	•		\$	881,439	•		\$	1,713,239	_
D 107 D 14	00/	•			407	•	0= 0=0		407	•		
Deemed ST Debt	0%	\$	- 		4%	\$	35,258		4%	\$	68,530	
Deemed LT Debt	60%	\$	1,638		56%	\$	493,606		56%	\$	959,414	
Deemed Equity	40%	\$	1,092		40%	\$	352,576		40%	\$	685,295	
ST Interest	0.00%	\$	-		1.33%	\$	469		2.07%	\$	1,419	
LT Interest	6.16%	\$	101		5.89%	\$	29,073		5.89%	\$	56,509	
ROE	9.00%	\$	98		8.01%	\$	28,241		9.85%	\$	67,502	
		\$	199			\$	57,784			\$	125,430	_
OM&A		\$	984			\$	25,987			\$	168,570	2
Amortization		\$	1,033			\$	62,999			\$	123,932	
Grossed-up PILs		-\$	289			\$	11,442			\$	23,616	
Revenue Requirement		\$	1,927	•		\$	158,211			\$	441,548	_

# **NOTES**

- 1. Average assets for 2010 excludes 2010 additions as only considering meters installed up to Dec 31/09.
- 2. OM&A costs for meters installed in 2008 and 2009 only, costs for meters installed in 2010 are excluded and continue to be deferred in account 1556.
- 3. Actual costs up to Dec 31/07 were cleared in 2009 EDR and added to rate base (EB-2008-0244) and are excluded.

# PowerStream Inc. Actual Smart Meter Cost Recovery Model - GS < 50 kW Class

Filed: August 31, 2010 EB-2010-0209 PowerStream Inc 2010 Smart Meter Cost Recovery VECC IRRs Appendix 2 Page 3 of 7

# **PILs Calculation**

		2008		2009		2010
INCOME TAX	Actual			Actual		Forecasted
Net Income	\$	98	\$	28,241	\$	67,502
Amortization	\$	1,033	\$	62,999	\$	123,932
CCA	-\$	1,704	-\$	75,971	-\$	141,577
Change in taxable income	-\$	573	\$	15,270	\$	49,857
Tax Rate		33.50%		33.00%		31.00%
Income Taxes Payable	-\$	192	\$	5,039	\$	15,456
ONTARIO CAPITAL TAX						
Closing Net Fixed Assets	\$	-	\$	1,742,602	\$	1,622,423
Less: Exemption	\$	-	\$	-	\$	-
Deemed Taxable Capital	\$	-	\$	1,742,602	\$	1,622,423
Ontario Capital Tax Rate		0.225%		0.225%	•	0.075%
Net Amount (Taxable Capital x Rate)	\$	-	\$	3,921	\$	1,217

# **Gross Up**

•	PILs Payable PILs Payable					PILs Payable				
Change in Income Taxes Payable	-\$	192	\$	5,039	\$	15,456				
Change in OCT	\$	-	\$	3,921	\$	1,217				
PIL's	-\$	192	\$	8,960	\$	16,672				
						_				
	Gross Up			Gross Up	Gross Up					
		33.50%		33.00%		31.00%				
	Gro	ssed Up PILs	Gı	rossed Up PILs	Gr	ossed Up PILs				
Change in Income Taxes Payable	-\$	289	\$	7,521	\$	22,399				
Change in OCT	\$	-	\$	3,921	\$	1,217				
PIL's	-\$	289	\$	11,442	\$	23,616				

# PowerStream Inc. Actual Smart Meter Cost Recovery Model - GS < 50 kW Class

Filed: August 31, 2010 EB-2010-0209 PowerStream Inc 2010 Smart Meter Cost Recovery VECC IRRs Appendix 2 Page 4 of 7

# **Average Net Fixed Assets**

		2008	2009			2010
Net Fixed Assets - meters		Actual		Actual	F	orecasted
Opening Capital Investment		\$ -	\$	-	\$	1,802,692
Capital Investment		\$ -	\$	1,802,692		
Closing Capital Investment		\$ -	\$	1,802,692	\$	1,802,692
Opening Accumulated Amortization		\$ -	\$	-	\$	60,090
Amortization Year One	15 years	\$ -	\$	60,090	\$	-
Amortization Thereafter		\$ -	\$	-	\$	120,179
Closing Accumulated Amortization		\$ -	\$	60,090	\$	180,269
Opening Net Fixed Assets		\$ -	\$	-	\$	1,742,602
Closing Net Fixed Assets		\$ -	\$	1,742,602	\$	1,622,423
Average Net Fixed Assets		\$ -	\$	871,301	\$	1,682,513
		2008		2009		2010
Net Fixed Assets - software		Actual		Actual	F	orecasted
Opening Capital Investment		\$ -	\$	6,196	\$	11,259
Capital Investment		\$ 6,196	\$	5,063		
Closing Capital Investment		\$ 6,196	\$	11,259	\$	11,259
Opening Accumulated Amortization		\$ -	\$	1,033	\$	3,942
Amortization Year One	3 years	\$ 1,033	\$	844	\$	-
Amortization Thereafter		\$ -	\$	2,065	\$	3,753
Closing Accumulated Amortization		\$ 1,033	\$	3,942	\$	7,695
Opening Net Fixed Assets		\$ -	\$	5,163	\$	7,317
Closing Net Fixed Assets		\$ 5,163	\$	7,317	\$	3,564
Average Net Fixed Assets		\$ 2,582	\$	6,240	\$	5,441
Totals						
Totals Average Net Fixed Assets		\$ 2,582	\$	877,541	\$	1,687,953
		\$ 2,582 1,033	\$	877,541 62,999	\$	1,687,953 123,932

# PowerStream Inc. Actual Smart Meter Cost Recovery Model - GS < 50 kW Class For PILs Calculation

Filed: August 31, 2010 EB-2010-0209 PowerStream Inc 2010 Smart Meter Cost Recovery VECC IRRs Appendix 2 Page 5 of 7

UCC		2008 Forecasted		2009 Forecasted		F	2010 orecasted
Opening UCC		\$	-	\$	-	\$	1,730,584
Capital Additions		\$	-	\$	1,802,692	\$	-
UCC Before Half Year Rule		\$	-	\$	1,802,692	\$	1,730,584
Half Year Rule (1/2 Additions - Disposals)		\$	-	\$	901,346	\$	-
Reduced UCC		\$	-	\$	901,346	\$	1,730,584
CCA Rate Class	47						
CCA Rate	8%						
CCA		\$	-	\$	72,108	\$	138,447
Closing UCC		\$	-	\$	1,730,584	\$	1,592,138

CC			2008 ecasted	2009 Forecasted		2010 Forecasted	
		FUI	ecasieu	FU	recasteu	г	necasieu
Opening UCC		\$	-	\$	4,492	\$	5,692
Capital Additions		\$	6,196	\$	5,063	\$	-
UCC Before Half Year Rule		\$	6,196	\$	9,555	\$	5,692
Half Year Rule (1/2 Additions - Disposals)		\$	3,098	\$	2,532	\$	-
Reduced UCC		\$	3,098	\$	7,024	\$	5,692
CCA Rate Class	50						
CCA Rate	55%						
CCA		\$	1,704	\$	3,863	\$	3,131
Closing UCC		\$	4,492	\$	5,692	\$	2,561
Total CCA		\$	1,704	\$	75,971	\$	141,577

Filed: August 31, 2010 EB-2010-0209 PowerStream Inc 2010 Smart Meter Cost Recovery VECC IRRs Appendix 2 Page 6 of 7

Table Staff 16-1: Account 1555 Smart Meter Capital and Offset Account – Principal

	d Offset Account			Closing
				Balance
	Opening		Revenue	(excluding
Month	Balance	SM Adder		•
Jan-08	0	(21,486)	161	(21,325)
Feb-08	(21,325)	(14,438)	161	(35,603)
Mar-08	(35,603)	(16,864)	161	(52,306)
Apr-08	(52,306)	(17,014)	161	(69,160)
May-08	(69,160)	(26,123)	161	(95,122)
Jun-08	(95,122)	(27,136)	161	(122,097)
Jul-08	(122,097)	(28,262)	161	(150,199)
Aug-08	(150,199)	(27,916)	161	(177,954)
Sep-08	(177,954)	(26,669)	161	(204,463)
Oct-08	(204,463)	(30,333)	161	(234,635)
Nov-08	(234,635)	(27,530)	161	(262,004)
Dec-08	(262,004)	(28,667)	161	(290,511)
Jan-09	(290,511)	(29,046)	13,184	(306,373)
Feb-09	(306,373)	(26,136)	13,184	(319,324)
Mar-09	(319,324)	(28,350)	13,184	(334,490)
Apr-09	(334,490)	(27,753)	13,184	(349,059)
May-09	(349,059)	(28,897)	13,184	(364,772)
Jun-09	(364,772)	(32,584)	13,184	(384,171)
Jul-09	(384,171)	(28,972)	13,184	(399,959)
Aug-09	(399,959)	(29,169)	13,184	(415,944)
Sep-09	(415,944)	(24,398)	13,184	(427,157)
Oct-09	(427,157)	(24,977)	13,184	(438,950)
Nov-09	(438,950)	(24,636)	13,184	(450,402)
Dec-09	(450,402)	(25,191)	13,184	(462,409)
Jan-10	(462,409)		36,796	(425,613)
Feb-10	(425,613)		36,796	(388,817)
Mar-10	(388,817)		36,796	(352,022)
Apr-10	(352,022)		36,796	(315,226)
May-10	(315,226)		36,796	(278,430)
Jun-10	(278,430)		36,796	(241,634)
Jul-10	(241,634)		36,796	(204,839)
Aug-10	(204,839)		36,796	(168,043)
Sep-10	(168,043)		36,796	(131,247)
Oct-10	(131,247)		36,796	(94,452)
Total		(622,547)	528,095	(94,452)
2008		(292,438)	1,927	
2009		(330,109)	158,211	
2010		0	367,957	
	,	(622,547)	528,095	ı

# PowerStream Inc.

# Actual Smart Meter Cost Recovery Model - GS < 50 kW Class

Table Staff 16-2: Account 1555 – Interest

	Opening	1000 111101			
	Balance				
	(excluding				
Month		Days	Rate	Interest	To Date
Jan-08	0	31	5.14%	0	0
Feb-08	(21,325)	28	5.14%	(84)	(84)
Mar-08	\	31	5.14%	(155)	(240)
Apr-08	(52,306)	30	4.08%	(175)	(415)
May-08	(69,160)	31	4.08%	(240)	(655)
Jun-08		30	4.08%	(319)	(974)
Jul-08	(122,097)	31	3.35%	(347)	(1,321)
Aug-08	(150,199)	31	3.35%	(427)	(1,748)
Sep-08	(177,954)	30	3.35%	(490)	(2,238)
Oct-08	(204,463)	31	3.35%	(582)	(2,820)
Nov-08	(234,635)	30	3.35%	(646)	(3,466)
Dec-08	(262,004)	31	3.35%	(745)	(4,212)
Jan-09	(290,511)	31	2.4500%	(605)	(4,816)
Feb-09	(306,373)	28	2.4500%	(576)	(5,392)
Mar-09	(319,324)	31	2.4500%	(664)	(6,056)
Apr-09	(334,490)	30	1.0000%	(275)	(6,331)
May-09	(349,059)	31	1.0000%	(296)	(6,628)
Jun-09	(364,772)	30	1.0000%	(300)	(6,927)
Jul-09	(384,171)	31	0.5500%	(179)	(7,107)
Aug-09		31	0.5500%	(187)	(7,294)
Sep-09	(415,944)	30	0.5500%	(188)	(7,482)
Oct-09	(427,157)	31	0.5500%	(200)	(7,681)
Nov-09	(438,950)	30	0.5500%	(198)	(7,880)
Dec-09	(450,402)	31	0.5500%	(210)	(8,090)
Jan-10	(462,409)	31	0.5500%	(216)	(8,306)
Feb-10	(425,613)	28	0.5500%	(180)	(8,486)
Mar-10	(388,817)	31	0.5500%	(182)	(8,667)
Apr-10	(352,022)	30	0.5500%	(159)	(8,826)
May-10	(315,226)	31	0.5500%	(147)	(8,974)
Jun-10	· · · /	30	0.5500%	(126)	(9,100)
Jul-10	(241,634)	31	0.5500%	(113)	(9,212)
Aug-10	· · · /	31	0.5500%	(96)	(9,308)
Sep-10		30	0.5500%	(76)	(9,384)
Oct-10	(131,247)	31	0.5500%	(61)	(9,445)

# SMART METER RATE CALCULATION MODEL - RESIDENTIAL CLASS Page 1 of 10

## **Sheet 1** Utility Information Sheet

<u>Legend:</u>	Input Cell	Pull-Down Menu Option	Output Cell
	From Another Sheet		To Another Sheet

Please note that this model uses MACROS. Before starting, please ensure that macros have been enabled.

Name of LDC:	PowerStream Inc.			
Licence Number:	ED-2004-0420	Smart 1	Meter Grouping:	Listed
	EB-2010-0209			
		EDR 2009 EB Number:	EB-2008-0244	
Date of Submission:	June 11, 2010	Revision:		
Version:	1.0	_	•	
Contact Information				
Name:	Tom Barrett			
Title:	Manager, Rates			
Phone Number:	905.532.4640		Ī	
E-Mail Address:	tom.barrett.powerstream.ca			

Filed: August 31, 2010 EB-2010-0209 PowerStream Inc 2010 Smart Meter Cost Recovery VECC IRRs Appendix 3 Page 2 of 10

## PowerStream Inc. EB-2010-0209 Friday, June 11, 2010

## **Sheet 2. Smart Meter Capital Cost and Operational Expense Data**

Smart Meter Unit Installation Plan:					
assume calendar year installation  Planned number of Residential smart meters to be installed - includes new services		2008 Actual	2009 Fcst	2010 Fcst 9,500	Total 9,50
				9,500	9,50
Planned number of General Service Less Than 50 kW smart meters - includes new services					
Planned number of General Service Greater Than 50 kW smart meters - includes new services					-
Planned Meter Installation		-	-	9,500	9,50
Accumulative Planned Meter Installations Completed before January 1, 2011		-	-	9,500	
Capital Costs					
1.1 ADVANCED METERING COMMUNICATION DEVICE (AMCD)					
THE ADVANCED METERING COMMISSION DEVICE (AMOD)	Asset Type	2008 Actual	2009 Fcst	2010 Fcst	Total
1.1.1 Smart Meter	Smart Meter			\$ 1,033,244 \$	1,033,24
may include new meters and modules, etc.		2008 Actual	2009 Fcst	2010 Fcst	Total
1.1.2 Installation Cost may include socket kits plus shipping, labour, benefits, vehicle, etc.	Smart Meter			\$ 162,407	162,40
		2008 Actual	2009 Fcst	2010 Fcst	Total
1.1.3a Workforce Automation Hardware may include fieldworker handhelds, barcode hardware, etc.	Comp. Hard.			\$	-
	Comm. Soft	2008 Actual	2009 Fcst	2010 Fcst \$	Total
1.1.3b Workforce Automation Software may include fieldworker handhelds, barcode hardware, etc.	Comp. Soft.			Φ	-
Total Advanced Metering Communication Device (AMCD)		\$ -	\$ -	\$ 1,195,651 \$	1,195,65
1.2 ADVANCED METERING REGIONAL COLLECTOR (AMRC) (inclu	ides LAN)				
1.2.1 Collectors	Smart Meter	2008 Actual	2009 Fcst	2010 Fcst \$ 47,438 \$	Total 47,43
12.1 99160013	Omart Meter				•
1.2.2 Repeaters	Smart Meter	2008 Forecast	2009	2010	Total -
may include radio licence, etc.		2000 Faranat	2000	2010	Tatal
1.2.3 Installation	Smart Meter	2008 Forecast	2009	2010	Total -
may include meter seals and rings, collector computer hardware, etc.					
Total Advanced Metering Regional Collector (AMRC) (includes LAN)		<u> </u>	\$ -	\$ 47,438 \$	47,43
1.3 ADVANCED METERING CONTROL COMPUTER (AMCC)					
1.3.1 Computer Hardware	Comp. Hard.	2008 Actual	2009 Fcst	2010 Fcst \$	Total -
		2008 Actual	2009 Fcst	2010 Fcst	Total
1.3.2 Computer Software	Comp. Soft.	2000 / lotadi	2000 1 000	\$	-
<u>-</u> 00pate. 00a.e					
		2008 Actual	2009 Fcst	2010 Fcst	Total
1.3.3 Computer Software Licence & Installation (includes hardware & software)  may include AS/400 disc space, backup & recovery computer, UPS, etc	Comp. Soft.	2008 Actual	2009 Fcst	2010 Fcst \$	Total -

Filed: August 31, 2010 EB-2010-0209 PowerStream Inc 2010 Smart Meter Cost Recovery VECC IRRs Appendix 3 Page 3 of 10

## PowerStream Inc. EB-2010-0209 Friday, June 11, 2010

211449,0411011,2010

## **Sheet 2. Smart Meter Capital Cost and Operational Expense Data**

1.4 WIDE AREA NETWORK (WAN) 1.4.1 Activation Fees	Comp. Soft.	2008 Actual		2009 Fcst	2	010 Fcst \$	Total -
Total Wide Area Network (WAN)		\$	- \$	-	\$	- \$	-
1.5 OTHER AMI CAPITAL COSTS RELATED TO MINIMUM FUNC 1.5.1 Customer equipment (including repair of damaged equipment)	TIONALITY Comp. Hard.	2008 Actual		2009 Fcst		010 Fcst \$	Total -
1.5.2 AMI Interface to CIS	Comp. Soft.	2008 Actual		2009 Fcst	\$	73,508 \$	Total 73,508
1.5.3 Professional Fees	Comp. Hard.	2008 Actual		2009 Fcst	2	010 Fcst \$	Total -
1.5.4 Integration	Comp. Hard.	2008 Actual		2009 Fcst	2	010 Fcst \$	Total -
1.5.5 Program Management	Comp. Hard.	2008 Actual		2009 Fcst	2	010 Fcst \$	Total -
1.5.6 Other AMI Capital	Comp. Hard.	2008 Actual		2009 Fcst	2	010 Fcst \$	Total -
Total Other AMI Capital Costs Related To Minimum Functionality		\$	- \$	-	\$	73,508 \$	73,508
Total Capital Costs		\$	- \$	_	\$	1,316,597 \$	1,316,597
		<u> </u>				1,010,000	
O M & A  2.1 ADVANCED METERING COMMUNICATION DEVICE (AMCD)  2.1.1 Maintenance		2008 Actual		2009 Fcst	·	010 Fcst 1,374 \$	Total 1,374
O M & A 2.1 ADVANCED METERING COMMUNICATION DEVICE (AMCD)		-	- \$	2009 Fcst	·	.010 Fcst	
O M & A 2.1 ADVANCED METERING COMMUNICATION DEVICE (AMCD) 2.1.1 Maintenance may include mater reverification costs, etc.	ncludes LAN)	2008 Actual			\$	010 Fcst 1,374 \$	1,374
O M & A  2.1 ADVANCED METERING COMMUNICATION DEVICE (AMCD)  2.1.1 Maintenance may include meter reverification costs, etc. Total Incremental AMI Operation Expenses  2.2 ADVANCED METERING REGIONAL COLLECTOR (AMRC) (in	ncludes LAN)	2008 Actual			\$	010 Fcst 1,374 \$ 1,374 \$	1,374 1,374 Total
O M & A 2.1 ADVANCED METERING COMMUNICATION DEVICE (AMCD) 2.1.1 Maintenance may include meter reveilication costs, etc. Total Incremental AMI Operation Expenses 2.2 ADVANCED METERING REGIONAL COLLECTOR (AMRC) (in 2.2.1 Maintenance	ncludes LAN)	2008 Actual	- \$	2009 Fcst	\$	010 Fcst 1,374 \$ 1,374 \$ 010 Fcst 26,715 \$	1,374  1,374  Total 26,715
O M & A  2.1 ADVANCED METERING COMMUNICATION DEVICE (AMCD)  2.1.1 Maintenance may include meter reverification costs, etc. Total Incremental AMI Operation Expenses  2.2 ADVANCED METERING REGIONAL COLLECTOR (AMRC) (in 2.2.1 Maintenance  Total Advanced Metering Regional Collector (AMRC) (includes LAN)  2.3 ADVANCED METERING CONTROL COMPUTER (AMCC)  2.3.1 Hardware Maintenance	ncludes LAN)	2008 Actual \$ 2008 Actual	- \$	2009 Fcst	\$	010 Fcst 1,374 \$ 1,374 \$ 010 Fcst 26,715 \$ 010 Fcst	1,374  1,374  Total 26,715
O M & A  2.1 ADVANCED METERING COMMUNICATION DEVICE (AMCD)  2.1.1 Maintenance may include meter reverification costs, etc. Total Incremental AMI Operation Expenses  2.2 ADVANCED METERING REGIONAL COLLECTOR (AMRC) (in 2.2.1 Maintenance  Total Advanced Metering Regional Collector (AMRC) (includes LAN)  2.3 ADVANCED METERING CONTROL COMPUTER (AMCC)  2.3.1 Hardware Maintenance may include server support, etc  2.3.2 Software Maintenance	ncludes LAN)	2008 Actual \$ 2008 Actual \$ 2008 Actual	- \$	2009 Fcst	\$	010 Fcst 1,374 \$ 1,374 \$ 010 Fcst 26,715 \$ 010 Fcst \$	1,374  1,374  Total 26,715
O M & A  2.1 ADVANCED METERING COMMUNICATION DEVICE (AMCD)  2.1.1 Maintenance may include meter reverification costs, etc. Total Incremental AMI Operation Expenses  2.2 ADVANCED METERING REGIONAL COLLECTOR (AMRC) (in 2.2.1 Maintenance  Total Advanced Metering Regional Collector (AMRC) (includes LAN)  2.3 ADVANCED METERING CONTROL COMPUTER (AMCC)  2.3.1 Hardware Maintenance may include server support, etc  2.3.2 Software Maintenance may include maintenance support, etc.	ncludes LAN)	2008 Actual  \$ 2008 Actual  \$ 2008 Actual	- \$	2009 Fcst - 2009 Fcst	\$	010 Fcst 1,374 \$ 1,374 \$  010 Fcst 26,715 \$  010 Fcst \$  - \$	1,374  1,374  Total 26,715  Total
O M & A  2.1 ADVANCED METERING COMMUNICATION DEVICE (AMCD)  2.1.1 Maintenance may include meter reverification costs, etc. Total Incremental AMI Operation Expenses  2.2 ADVANCED METERING REGIONAL COLLECTOR (AMRC) (includes LAN)  2.3 ADVANCED METERING CONTROL COMPUTER (AMCC)  2.3.1 Hardware Maintenance may include server support, etc.  2.3.2 Software Maintenance may include maintenance support, etc. Total Advanced Metering Control Computer (AMCC)	ncludes LAN)	2008 Actual \$ 2008 Actual \$ 2008 Actual	- \$	2009 Fcst - 2009 Fcst	\$	010 Fcst 1,374 \$ 1,374 \$  010 Fcst 26,715 \$  010 Fcst \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	1,374  1,374  Total 26,715  Total -

Filed: August 31, 2010 EB-2010-0209 PowerStream Inc 2010 Smart Meter Cost Recovery VECC IRRs Appendix 3 Page 4 of 10

## **Sheet 2. Smart Meter Capital Cost and Operational Expense Data**

2.5 OTHER AMI OM&A COSTS RELATED TO MINIMUM FUNCTIONALITY

2.5.1 Business Process Redesign	
2.5.2 Customer Communication may include project communication. etc.	
2.5.3 Program Management	
2.5.4 Change Management may include training, etc.	
2.5.5 Administration Cost	
2.5.6 Other AMI Expenses	
Total 2.5 Other AMI OM&A Costs Related To Minimum Functionality	
Total O M & A Costs	

\$		\$		\$ 295,067	\$	295,067
\$	•	\$	-	\$ 266,977	\$	266,977
				 01,001	J ~	0.,00
2008 A	ctuai	200	9 Fcst	\$ 2010 Fcst 57,381	s	Total 57,381
0000		000	0.5	0040 5	-	T. ( )
2000 F	otaai	200	70 1 031	20101030	\$	-
2008 A	ctual	200	9 Fcst	2010 Fcst		Total
		·	•	\$ 6,700	\$	6,70
2008 A	ctual	200	9 Fcst	2010 Fcst		Total
					\$	-
2008 A	ctual	200	9 Fcst	2010 Fcst		Total
				\$ 198,429	\$	198,42
2008 A	ctual	200	9 Fcst	2010 Fcst		Total
				\$ 4,467	\$	4,46
2008 A	ctuai	200	9 Fcst	2010 Fcst		Total

**Sheet 3. LDC Assumptions and Data** 

Filed: August 31, 2010 EB-2010-0209 PowerStream Inc 2010 Smart Meter Cost Recovery VECC IRRs Appendix 3 Page 5 of 10

### Assumptions:

Smart meter incremental operating expenses

Total Smart Meter Capital Costs per meter

- 1. Planned meter installations occur evenly through the year.
- Year assumed January to December
   Amortization is straight line and has half year rule applied in first year

o. Amortization to straight line and has half year rate applied in mot year		
2009 EDR Data Information  Deemed Debt (from 2009 PowerStream EDR)  Deemed Equity (from 2009 PowerStream EDR)  Weighted Debt Rate (from 2009 PowerStream EDR)  Proposed ROE (from 2009 PowerStream EDR)  Weighted Average Cost of Capital  Working Capital Allowance %  2009 EDR Total Metered Customers  Residential  General Service Less Than 50 kW  Other Metered Customers	60% 40% 5.59% 8.01% 6.56% 15.00%	
Sum of Residential, General Service, and Large User	218,157	
Smart Meter Rate Adders 2006 EDR Smart Meter Rate Adder 2007 EDR Smart Meter Rate Adder 2008 EDR Smart Meter Rate Adder 2009 EDR Smart Meter Rate Adder 2010 EDR Smart Meter Rate Adder	Residential GS and LU \$ 0.27 \$ 0.27 \$ 0.73 \$ 0.73 \$ 1.21 \$ 1.21 \$ 1.04 \$ 1.04 \$ -	
2009 EDR Tax Rate Corporate Income Tax Rate (from 2009 PowerStream EDR)	33.00%	
Capital Data: Smart Meter Computer Hardware Computer Software Tools & Equipment Other Equipment Total Capital Costs	2008 Actual   2009 Fcst   2010 Fcst   Total	8
LDC Amortization Policy: Smart Meter Amortization Rate Enter Amortization Policy Computer Hardware Amortization Rate Enter Amortization Policy Computer Software Amortization Rate Enter Amortization Policy Tools & Equipment Amortization Rate Enter Amortization Policy Other Equipment Amortization Rate Enter Amortization Policy	Amortization CCA Class CCA Rate  15 Years 47 8 %  5 Years 45 45 %  3 Years 45 45 %  10 Years 8 20 %	
Operating Expense Data: 2.1 Advanced Metering Communication Device (AMCD) 2.2 Advanced Metering Regional Collector (AMRC) (includes LAN) 2.3 Advanced Metering Control Computer (AMCC) 2.4 Wide Area Network (WAN) 2.5 Other AMI OM&A Costs Related To Minimum Functionality Total O M & A Costs	2008 Actual   2009 Fcst   2010 Fcst   Total	5 7_
Per Meter Cost Split: Smart meter including installation Computer Hardware Costs Computer Software Costs Tools & Equipment Other Equipment	Per Meter         Installed         Investment         % of Invest           \$ 130.85         9,500         \$ 1,243,089         77%           \$ -         9,500         \$ -         0%           \$ 7.74         9,500         \$ 73,508         5%           \$ -         9,500         \$ -         0%           \$ -         9,500         \$ -         0%           \$ -         9,500         \$ -         0%           \$ -         9,500         \$ -         0%	

31.06 169.65

9,500 \$

295,067

\$ 1,611,664

18% 100%

Filed: August 31, 2010 EB-2010-0209 PowerStream Inc 2010 Smart Meter Cost Recovery VECC IRRs Appendix 3 Page 6 of 10

# **Smart Meter Average Net Fixed Assets**

Sheet 6. SM Avg Net Fixed Assets &UCC

Net Fixed Assets - Smart Meters	20	08 Actual	al 2009 Fcst		2010
Opening Capital Investment	\$	-	\$	-	\$ 
Capital Investment (3. LDC Assumptions and Data)	\$	-	\$	-	\$ 1,243,089.00
Closing Capital Investment	\$	-	\$	-	\$ 1,243,089.00
Opening Accumulated Amortization	\$	-	\$	-	\$ 
Amortization Year 1 (15 Years Straight Line)	\$	-	\$	-	\$ 41,436.30
Closing Accumulated Amortization	\$	-	\$	-	\$ 41,436.30
Opening Net Fixed Assets	\$	-	\$	-	\$ -
Closing Net Fixed Assets	\$	-	\$	-	\$ 1,201,652.70
Average Net Fixed Assets	\$	-	\$	-	\$ 600,826.35
Net Fixed Assets - Computer Hardware	20	08 Actual		2009 Fcst	2010
Opening Capital Investment	\$	-	\$	-	\$ 
Capital Investment (3. LDC Assumptions and Data)	\$	-	\$	-	\$ -
Closing Capital Investment	\$	-	\$	-	\$ -
Opening Accumulated Amortization	\$	-	\$	-	\$ -
Amortization Year 1 (5 Years Straight Line)	\$	-	\$	-	\$ -
Closing Accumulated Amortization	\$	-	\$	-	\$ -
Opening Net Fixed Assets	\$	-	\$	-	\$ 
Closing Net Fixed Assets	\$	-	\$	-	\$ -
Average Net Fixed Assets	\$	-	\$	-	\$ -
Net Fixed Assets - Computer Software	20	08 Actual		2009 Fcst	2010
Opening Capital Investment	\$	-	\$	-	\$ -
Capital Investment (3. LDC Assumptions and Data)	\$	-	\$	-	\$ 73,508.00
Closing Capital Investment	\$	-	\$	-	\$ 73,508.00
Opening Accumulated Amortization	\$	-	\$	-	\$ -
Amortization Year 1 (3 Years Straight Line)	\$	-	\$	-	\$ 12,251.33
Closing Accumulated Amortization	\$	-	\$	-	\$ 12,251.33
Opening Net Fixed Assets	\$	-	\$	-	\$ <u> </u>
Closing Net Fixed Assets	\$	-	\$	-	\$ 61,256.67
Average Net Fixed Assets	\$	-	\$	-	\$ 30,628.33

Filed: August 31, 2010 EB-2010-0209 PowerStream Inc 2010 Smart Meter Cost Recovery VECC IRRs Appendix 3 Page 7 of 10

## Sheet 6. SM Avg Net Fixed Assets &UCC

Net Fixed Assets - Tools & Equipment	2008	2008 Actual		2009 Fcst		2010	
Opening Capital Investment	\$	-	\$	-	\$	-	
Capital Investment (3. LDC Assumptions and Data)	\$	_	\$	-	\$	_	
Closing Capital Investment	\$	-	\$	-	\$	-	
Opening Accumulated Amortization	\$	-	\$	-	\$	-	
Amortization Year 1 (10 Years Straight Line)	\$	-	\$		\$	-	
Closing Accumulated Amortization	\$	-	\$	-	\$	-	
Opening Net Fixed Assets	\$	-	\$	-	\$	-	
Closing Net Fixed Assets	\$	_	\$	-	\$	-	
			\$		\$	_	
Average Net Fixed Assets	\$	-	Ф		φ		
Average Net Fixed Assets  Net Fixed Assets - Other Equipment	2008	3 Actual	Ť	9 Fcst	Φ	2010	
Net Fixed Assets - Other Equipment	2008	3 Actual	Ť	99 Fcst	\$	2010	
Net Fixed Assets - Other Equipment  Depening Capital Investment	2008		200	- -		2010	
Net Fixed Assets - Other Equipment  Opening Capital Investment Capital Investment (3. LDC Assumptions and Data)	\$ 2008 \$ \$ \$		200	- - -	\$	2010	
Net Fixed Assets - Other Equipment  Opening Capital Investment Capital Investment (3. LDC Assumptions and Data)  Closing Capital Investment	\$ \$ \$		200 \$ \$	99 Fcst	\$	2010	
Net Fixed Assets - Other Equipment  Opening Capital Investment Capital Investment (3. LDC Assumptions and Data)  Closing Capital Investment  Opening Accumulated Amortization	\$ 2008 \$ \$ \$ \$ \$ \$	- - -	200 \$ \$ \$	-	\$ \$ \$	2010 - - -	
Net Fixed Assets - Other Equipment  Dening Capital Investment Capital Investment (3. LDC Assumptions and Data)  Closing Capital Investment  Dening Accumulated Amortization  Amortization Year 1 (10 Years Straight Line)	\$ \$ \$	- - -	200 \$ \$ \$	-	\$ \$ \$	2010	
·	\$ \$ \$	- - -	200 \$ \$ \$ \$	-	\$ \$ \$ \$	2010	
Net Fixed Assets - Other Equipment  Opening Capital Investment Capital Investment (3. LDC Assumptions and Data)  Closing Capital Investment  Opening Accumulated Amortization Amortization Year 1 (10 Years Straight Line)  Closing Accumulated Amortization	\$ \$ \$		200 \$ \$ \$ \$ \$ \$	-	\$ \$ \$ \$ \$ \$ \$ \$	2010	

Filed: August 31, 2010 EB-2010-0209 PowerStream Inc 2010 Smart Meter Cost Recovery VECC IRRs Appendix 3 Page 8 of 10

## For PILs Calculation

Sheet 6. SM Avg Net Fixed Assets &UCC

### **UCC - Smart Meters**

CCA Class 47 (8%)	2008 Actual 2009 Fcst		2010		
Opening UCC	\$	- \$	-	\$	-
Capital Additions	\$	- \$	-	\$	1,243,089.00
UCC Before Half Year Rule	\$	- \$	-	\$	1,243,089.00
Half Year Rule (1/2 Additions - Disposals)	\$	- \$	-	\$	621,544.50
Reduced UCC	\$	- \$	-	\$	621,544.50
CCA Rate Class 47		8.0%	8.0%		8.0%
CCA	\$	- \$	-	\$	49,723.56
Closing UCC	\$	- \$	-	\$	1,193,365.44
			•		

### **UCC - Computer Equipment**

CCA Class 45 (45%)	200	8 Actual	2009 Fcst		2010
Opening LICC	Φ	¢		•	
Opening UCC	\$	- 7	<u> </u>	Þ	
Capital Additions Computer Hardware	\$	- \$	-	\$	-
Capital Additions Computer Software	\$	- \$	-	\$	73,508.00
UCC Before Half Year Rule	\$	- \$	-	\$	73,508.00
Half Year Rule (1/2 Additions - Disposals)	\$	- \$	-	\$	36,754.00
Reduced UCC	\$	- \$	-	\$	36,754.00
CCA Rate Class 45		45%	45%	6	45%
CCA	\$	- \$	-	\$	16,539.30
Closing UCC	\$	- \$	-	\$	56.968.70

## **UCC - General Equipment**

CCA Class 8 (20%)	

Opening UCC
Capital Additions Tools & Equipment
Capital Additions Other Equipment
UCC Before Half Year Rule
Half Year Rule (1/2 Additions - Disposals)
Reduced UCC
CCA Rate Class 8
CCA
Closing UCC

2008 Actual	2009 Fcst		2010	
\$ -	\$ -	\$		-
\$ -	\$ -	\$		-
\$ -	\$ -	\$		-
\$ -	\$ -	\$		-
\$ -	\$ -	\$		-
\$ -	\$ -	\$		-
20%	20%	)		20%
\$ -	\$ -	\$		-
\$ -	\$ -	\$		-

Filed: August 31, 2010 EB-2010-0209 PowerStream Inc 2010 Smart Meter Cost Recovery VECC IRRs Appendix 3 Page 9 of 10

## **Smart Meter Rate Calculation**

#### Average Asset Values

Net Fixed Assets Smart Meters Net Fixed Assets Computer Hardware Net Fixed Assets Computer Software Net Fixed Assets Tools & Equipment Net Fixed Assets Other Equipment Total Net Fixed Assets

#### **Working Capital**

Operation Expense Working Capital 15 %

#### Smart Meters included in Rate Base

#### Return on Rate Base

Deemed Debt (3. LDC Assumptions and Data)
Deemed Equity (3. LDC Assumptions and Data)

Weighted Debt Rate (3. LDC Assumptions and Data)
Proposed ROE (3. LDC Assumptions and Data)
Return on Rate Base

#### Operating Expenses

Incremental Operating Expenses (3. LDC Assumptions and Data)

#### **Amortization Expenses**

Amortization Expenses - Smart Meters
Amortization Expenses - Computer Hardware
Amortization Expenses - Computer Software
Amortization Expenses - Tools & Equipment
Amortization Expenses - Other Equipment
Total Amortization Expenses

#### Revenue Requirement Before PILs

#### **Calculation of Taxable Income**

Incremental Operating Expenses
Depreciation Expenses
Interest Expense
Taxable Income For PILs

## Grossed up PILs (5. PILs)

Revenue Requirement Before PILs Grossed up PILs (5. PILs) Revenue Requirement for Smart Meters

### 2010 Smart Meter Rate Adder

Revenue Requirement for Smart Meters 2009 EDR Total Metered Customers (3. LDC Assumptions and Data) Annualized amount required per metered customer Number of months in year

2010 Smart Meter Rate Adder

2008 Actual	2009 Forecast	2010
\$ - \$ - \$ - \$ - \$ - \$ - \$ -	\$ - \$ - \$ - \$ - \$ - \$ - \$ -	\$ 600,826 \$ - \$ 30,628 \$ - \$ - \$ 631,455 \$ 631,455
\$ - \$ - \$ - <u>\$</u>	\$ - \$ - \$ - <u>\$</u> -	\$ 295,067 \$ 44,260 \$ 44,260 \$ 675,715
60% \$ - 40% <u>\$ -</u> 5.59% \$ -	60% \$ - 40% <u>\$ -</u> 5.59% \$ -	60% \$ 405,429 40% \$ 270,286 \$ 675,715 5.59% \$ 22,647
8.01% \$ - \$ -	8.01% <u>\$ -</u> <u>\$ -</u> \$ -	8.01% \$ 21,650 \$ 44,297 \$ 44,297
\$ -	\$ -	\$ 295,06
\$ - \$ - \$ - \$ - \$ -	\$ - \$ - \$ - \$ - \$ -	\$ 41,436 \$ - \$ 12,251 \$ - \$ -
\$ -	\$ -	\$ 53,688
\$ -	\$ -	\$ 393,05
\$ - \$ - <u>\$</u> -	\$ - \$ - \$	-\$ 295,066 -\$ 53,686 -\$ 22,641 \$ 21,650
<u>\$ -</u>	\$ -	
\$ -	\$ -	\$ 5,024
\$ - \$ - \$ -	\$ - \$ - \$ -	\$ 393,05' \$ 5,02' <b>\$ 398,07</b>
		\$ 398,075 \$ 218,157 \$ 1.82 12 \$ 0.18

Filed: August 31, 2010 EB-2010-0209 PowerStream Inc 2010 Smart Meter Cost Recovery VECC IRRs Appendix 3 Page 10 of 10

5,024

PowerStream Inc. EB-2010-0209 Friday, June 11, 2010 Sheet 5. PILs

# **PILs Calculation**

PIL's

		2007 Actual		2008 Actual		2009		2010
INCOME TAX								
Net Income	\$	-	\$	-	\$	-	\$	21,650
Amortization	\$	-	\$	-	\$	-	\$	53,688
CCA - Class 47 (8%) Smart Meters	\$	-	\$	-	\$	-	-\$	49,724
CCA - Class 45 (45%) Computers	\$	-	\$	-	\$	-	-\$	16,539
CCA - Class 8 (20%) Other Equipment	<u>\$</u> \$	-	\$	-	\$	-	\$	-
Change in taxable income	\$	-	\$	-	\$	-	\$	9,075
Tax Rate (3. LDC Assumptions and Data)		33.50%		33.50%		33.00%		31.00%
Income Taxes Payable	\$	-	\$	-	\$	-	\$	2,813
ONTARIO CAPITAL TAX								
Smart Meters	\$	-	\$	-	\$	_	\$	1,201,653
Computer Hardware	\$	-	\$	-	\$	_	\$	- · · · · · · · · -
Computer Software	\$	-	\$	-	\$	_	\$	61,257
Tools & Equipment	\$	-	\$	-	\$	_	\$	· -
Other Equipment		-	\$	-	\$	_	\$	-
Rate Base	\$	-	\$	-	\$	-	\$	1,262,909
Less: Exemption	\$	-	\$	-	\$	-	\$	-
Deemed Taxable Capital	\$ \$ \$	-	\$	-	\$	-	\$	1,262,909
Ontario Capital Tax Rate		0.285%		0.225%		0.225%		0.150%
Net Amount (Taxable Capital x Rate)	\$	-	\$	-	\$	-	\$	947
Gross Up	DILe	Payable	DII	s Payable	DII	s Payable	DII (	s Payable
Change in Income Taxes Payable	t ILS	-	\$	.s r ayable	\$	s rayable	\$	2,813
Change in OCT	φ	_	\$		\$	_	\$	2,813 947
PIL's	\$	-	\$	-	\$	-	\$	3,760
	<u> </u>							
		Gross Up		Gross Up		Gross Up		Gross Up
		33.50%		33.50%		33.00%		31.00%
	Gro	ssed Up PILs	G	rossed Up PILs	G	rossed Up PILs	Gı	rossed Up PILs
Change in Income Taxes Payable	\$	-	\$	-	\$	-	\$	4,077
Change in OCT	\$	-	\$	-	\$	-	\$	947
			-		-		_	

## SMART METER RATE CALCULATION MODEL - GS <50 KW CLASS

Page 1 of 10

## **Sheet 1** Utility Information Sheet

Legend:	Input Cell	Pull-Down Menu Option	Output Cell
	From Another Sheet		To Another Sheet

Please note that this model uses MACROS. Before starting, please ensure that macros have been enabled.

Name of LDC:	PowerStream Inc.			
Licence Number:	ED-2004-0420	Smart	Meter Grouping:	Listed
	EB-2010-0209	]		
		EDR 2009 EB Number:	EB-2008-0244	
Date of Submission:	June 11, 2010	Revision:		
Version:	1.0			
Contact Information			_	
Name:	Tom Barrett			
Title:	Manager, Rates		J	
Phone Number:	905.532.4640			
E-Mail Address:	tom barrett powerstream ca		1	

Filed: August 31, 2010 EB-2010-0209 PowerStream Inc 2010 Smart Meter Cost Recovery VECC IRRs Appendix 4 Page 2 of 10

## PowerStream Inc. EB-2010-0209 Friday, June 11, 2010

## **Sheet 2. Smart Meter Capital Cost and Operational Expense Data**

Smart Meter Unit Installation Plan:					
assume calendar year installation Planned number of Residential smart meters to be installed - includes new services		2008 Actual	2009 Fcst	2010 Fcst	Total -
Planned number of General Service Less Than 50 kW smart meters - includes new services				21,000	
Planned number of General Service Greater Than 50 kW smart meters - includes new services					
Planned Meter Installation			_	21,000	21,00
Accumulative Planned Meter Installations Completed before January 1, 2011			-	21,000	21,00
Capital Costs					
1.1 ADVANCED METERING COMMUNICATION DEVICE (AMCD)					
1.1.1 Smart Meter	Asset Type Smart Meter	2008 Actual	2009 Fcst	2010 Fcst \$ 13,199,361 \$	Total 13,199,36
may include new meters and modules, etc.		2008 Actual	2009 Fcst	2010 Fcst	Total
1.1.2 Installation Cost	Smart Meter	2006 Actual	2009 1 CSt	\$ 1,230,393 \$	1,230,39
may include socket kits plus shipping, labour, benefits, vehicle, etc.		2008 Actual	2009 Fcst	2010 Fcst	Total
1.1.3a Workforce Automation Hardware may include fieldworker handhelds, barcode hardware, etc.	Comp. Hard.			\$	-
1.1.3b Workforce Automation Software	Comp. Soft.	2008 Actual	2009 Fcst	2010 Fcst \$	Total -
may include fieldworker handhelds, barcode hardware, etc.  Total Advanced Metering Communication Device (AMCD)		\$ -	\$ -	\$ 14,429,754 \$	14,429,75
1.2 ADVANCED METERING REGIONAL COLLECTOR (AMRC) (incl	udes LAN)				
1.2.1 Collectors	Smart Meter	2008 Actual	2009 Fcst	2010 Fcst \$ 104,862 \$	Total 104,86
1.2.1 Collectors	Smart weter				•
	0	2008 Forecast	2009	2010	Total
1.2.2 Repeaters	Smart Meter			\$	-
1.2.2 Repeaters may include radio licence, etc.	Smart Meter	2008 Forecast	2009	<u> </u>	- Total
may include radio licence, etc.  1.2.3 Installation	Smart Meter	2008 Forecast	2009	2010	Total
may include radio licence, etc.		2008 Forecast	2009	2010	Total - 104,86
may include radio licence, etc.  1.2.3 Installation may include meter seals and rings, collector computer hardware, etc.				2010 \$	-
may include radio licence, etc.  1.2.3 Installation may include meter seals and rings, collector computer hardware, etc.  Total Advanced Metering Regional Collector (AMRC) (includes LAN)				2010 \$	-
may include radio licence, etc.  1.2.3 Installation may include meter seals and rings, collector computer hardware, etc.  Total Advanced Metering Regional Collector (AMRC) (includes LAN)  1.3 ADVANCED METERING CONTROL COMPUTER (AMCC)	Smart Meter			2010 \$	-
may include radio licence, etc.  1.2.3 Installation may include meter seals and rings, collector computer hardware, etc.  Total Advanced Metering Regional Collector (AMRC) (includes LAN)		\$ -	\$ -	2010 \$ \$ 104,862 \$  2010 Fcst \$	- 104,86 Total -
may include radio licence, etc.  1.2.3 Installation may include meter seals and rings, collector computer hardware, etc.  Total Advanced Metering Regional Collector (AMRC) (includes LAN)  1.3 ADVANCED METERING CONTROL COMPUTER (AMCC)	Smart Meter	\$ -	\$ -	2010 \$ \$ 104,862 \$	104,86
may include radio licence, etc.  1.2.3 Installation may include meter seals and rings, collector computer hardware, etc.  Total Advanced Metering Regional Collector (AMRC) (includes LAN)  1.3 ADVANCED METERING CONTROL COMPUTER (AMCC)  1.3.1 Computer Hardware	Smart Meter  Comp. Hard.	\$ -	\$ -	2010 \$ \$ 104,862 \$ 2010 Fcst	104,86 Total -

Filed: August 31, 2010 EB-2010-0209 PowerStream Inc 2010 Smart Meter Cost Recovery VECC IRRs Appendix 4 Page 3 of 10

## PowerStream Inc. EB-2010-0209

Friday, June 11, 2010

## **Sheet 2. Smart Meter Capital Cost and Operational Expense Data**

1.4 WIDE AREA NETWORK (WAN) 1.4.1 Activation Fees	Comp. Soft.	2008 Ad	etual	2009 Fcst		2010 Fcst	\$	Total -
Total Wide Area Network (WAN)		\$	- \$	-	\$	-	\$	-
1.5 OTHER AMI CAPITAL COSTS RELATED TO MINIMUM FUNC 1.5.1 Customer equipment (including repair of damaged equipment)	CTIONALITY Comp. Hard.	2008 Ad		2009 Fcst		2010 Fcst	\$	Total -
1.5.2 AMI Interface to CIS	Comp. Soft.	2008 Ad	tual	2009 Fcst	\$	2010 Fcst 162,492	\$	Total 162,492
1.5.3 Professional Fees	Comp. Hard.	2008 Ad	etual	2009 Fcst		2010 Fcst	\$	Total -
1.5.4 Integration	Comp. Hard.	2008 A	tual	2009 Fcst		2010 Fcst	\$	Total -
1.5.5 Program Management	Comp. Hard.	2008 A	ctual	2009 Fcst		2010 Fcst	\$	Total -
1.5.6 Other AMI Capital	Comp. Hard.	2008 Ad	ctual	2009 Fcst		2010 Fcst	\$	Total -
Total Other AMI Capital Costs Related To Minimum Functionality		\$	- \$	-	\$	162,492	\$	162,492
Total Capital Costs		\$	- S	-	\$	14,697,108	\$	14,697,108
. otal ouplia. otolo		<u> </u>		<u> </u>		,,		
O M & A  2.1 ADVANCED METERING COMMUNICATION DEVICE (AMCD)  2.1.1 Maintenance	)	2008 Ac	,	2009 Fcst	\$	2010 Fcst	\$	Total 226
O M & A 2.1 ADVANCED METERING COMMUNICATION DEVICE (AMCD)	•	·	,	2009 Fcst	\$	2010 Fcst		
O M & A 2.1 ADVANCED METERING COMMUNICATION DEVICE (AMCD) 2.1.1 Maintenance may include meter reverification costs, etc.		2008 Ad	tual - \$	2009 Fcst		2010 Fcst 226	\$	226
O M & A 2.1 ADVANCED METERING COMMUNICATION DEVICE (AMCD) 2.1.1 Maintenance may include meter reverification costs, etc. Total Incremental AMI Operation Expenses 2.2 ADVANCED METERING REGIONAL COLLECTOR (AMRC) (in		2008 Ac	tual - \$	2009 Fcst		2010 Fcst 226 226 2010 Fcst	<b>\$</b>	226 226 Total
O M & A 2.1 ADVANCED METERING COMMUNICATION DEVICE (AMCD) 2.1.1 Maintenance may include meter reverification costs, etc. Total Incremental AMI Operation Expenses 2.2 ADVANCED METERING REGIONAL COLLECTOR (AMRC) (iii) 2.2.1 Maintenance		2008 Ac	- \$	2009 Fcst	\$	2010 Fcst 226 226 2010 Fcst 4,385	<b>\$</b>	226  226  Total 4,385
O M & A  2.1 ADVANCED METERING COMMUNICATION DEVICE (AMCD)  2.1.1 Maintenance may include meter reverification costs, etc. Total Incremental AMI Operation Expenses  2.2 ADVANCED METERING REGIONAL COLLECTOR (AMRC) (includes LAN)  2.3 ADVANCED METERING CONTROL COMPUTER (AMCC)		2008 Ac	- \$	2009 Fcst	\$	2010 Fcst 226 226 2010 Fcst 4,385 4,385	\$ \$	Total 4,385
O M & A  2.1 ADVANCED METERING COMMUNICATION DEVICE (AMCD)  2.1.1 Maintenance may include meter reverification costs, etc. Total Incremental AMI Operation Expenses  2.2 ADVANCED METERING REGIONAL COLLECTOR (AMRC) (includes LAN)  2.3 ADVANCED METERING CONTROL COMPUTER (AMCC)  2.3.1 Hardware Maintenance may include server support, etc  2.3.2 Software Maintenance		2008 Ac	- \$	2009 Fcst  2009 Fcst  2009 Fcst	\$	2010 Fcst 226 226 2010 Fcst 4,385 4,385	\$ \$	Total 4,385
O M & A  2.1 ADVANCED METERING COMMUNICATION DEVICE (AMCD)  2.1.1 Maintenance may include meter reverification costs, etc. Total Incremental AMI Operation Expenses  2.2 ADVANCED METERING REGIONAL COLLECTOR (AMRC) (includes LAN)  2.3 ADVANCED METERING CONTROL COMPUTER (AMCC)  2.3.1 Hardware Maintenance may include server support, etc  2.3.2 Software Maintenance may include maintenance support, etc.  Total Advanced Metering Control Computer (AMCC)  2.4 WIDE AREA NETWORK (WAN)		2008 Ac	- \$ ctual - \$ ctual - \$	2009 Fcst  2009 Fcst  2009 Fcst	\$ \$	2010 Fcst 226 2010 Fcst 4,385 4,385 2010 Fcst	\$ \$ \$ \$ \$ \$	Total 4,385
O M & A  2.1 ADVANCED METERING COMMUNICATION DEVICE (AMCD)  2.1.1 Maintenance may include meter reverification costs, etc. Total Incremental AMI Operation Expenses  2.2 ADVANCED METERING REGIONAL COLLECTOR (AMRC) (includes LAN)  2.3 ADVANCED METERING CONTROL COMPUTER (AMCC)  2.3.1 Hardware Maintenance may include server support, etc.  2.3.2 Software Maintenance may include maintenance support, etc. Total Advanced Metering Control Computer (AMCC)		2008 Ac	- \$ ctual - \$ ctual - \$	2009 Fcst  2009 Fcst  2009 Fcst	\$ \$	2010 Fcst 226 2010 Fcst 4,385 4,385	\$ \$ \$ \$	Total 4,385  Total

Filed: August 31, 2010 EB-2010-0209 PowerStream Inc 2010 Smart Meter Cost Recovery VECC IRRs Appendix 4 Page 4 of 10

## **Sheet 2. Smart Meter Capital Cost and Operational Expense Data**

2.5 OTHER AMI OM&A COSTS RELATED TO MINIMUM FUNCTIONALITY

2.5	5.1 Business Process Redesign
	5.2 Customer Communication  by include project communication. etc.
2.5	5.3 Program Management
	5.4 Change Management sy include training, etc.
2.5	5.5 Administration Cost
2.5	5.6 Other AMI Expenses
То	otal 2.5 Other AMI OM&A Costs Related To Minimum Functionality
Tota	al O M & A Costs

2008 Actual	2009 Fcst	2010 Fcst		Total
		\$ 733	\$	733
2008 Actual	2009 Fcst	2010 Fcst \$ 32,571	<b>1</b> \$	Total 32,571
2008 Actual	2009 Fcst	2010 Fcst	]\$	Total -
2008 Actual	2009 Fcst	2010 Fcst \$ 1,100	<b>-</b>	Total 1,100
2008 Actual	2009 Fcst	2010 Fcst	•	Total
2008 Actual	2009 Fcst	2010 Fcst	<b>-</b>	- Total
		\$ 9,419	\$	9,419
\$ -	\$ -	\$ 43,823	\$	43,823
\$ -	\$ -	\$ 48,434	\$	48,434

**Sheet 3. LDC Assumptions and Data** 

Filed: August 31, 2010 EB-2010-0209 PowerStream Inc 2010 Smart Meter Cost Recovery VECC IRRs Appendix 4 Page 5 of 10

### Assumptions:

Smart meter incremental operating expenses

Total Smart Meter Capital Costs per meter

- 1. Planned meter installations occur evenly through the year.
- Year assumed January to December
   Amortization is straight line and has half year rule applied in first year

,,													
2009 EDR Data Information Deemed Debt (from 2009 PowerStream EDR) Deemed Equity (from 2009 PowerStream EDR) Weighted bet Rate (from 2009 PowerStream EDR) Proposed ROE (from 2009 PowerStream EDR) Weighted Average Cost of Capital		60% 40% 5.59% 8.01% 6.56%											
Working Capital Allowance %		15.00%											
2009 EDR Total Metered Customers Residential General Service Less Than 50 kW Other Metered Customers		23,700											
Sum of Residential, General Service, and Large User		23,700											
Smart Meter Rate Adders	R	esidential			(	GS and LU							
2006 EDR Smart Meter Rate Adder	\$	0.27			\$	0.27							
2007 EDR Smart Meter Rate Adder	\$	0.73			\$	0.73							
2008 EDR Smart Meter Rate Adder	\$	1.21			\$	1.21							
2009 EDR Smart Meter Rate Adder	\$	1.04			\$	1.04							
2010 EDR Smart Meter Rate Adder	\$				\$	-							
2009 EDR Tax Rate Corporate Income Tax Rate (from 2009 PowerStream EDR)		33.00%											
Capital Data: Smart Meter Computer Hardware Computer Software Tools & Equipment Other Equipment Total Capital Costs	\$ \$ \$ \$ \$	- - - - -	\$ \$ \$ \$		\$ \$ \$ \$ \$	- - - - -	2008 Actual \$ - \$ - \$ - \$ - \$ - \$ -	20 \$ \$ \$ \$ \$	109 Fcst - - - - -	\$ \$ \$ \$ \$	010 Fcst 14,534,616 - 162,492 - - 14,697,108	\$ 1 \$ \$ \$	Total 4,534,616 - 162,492 - - - 4,697,108
LDC Amortization Policy: Smart Meter Amortization Rate Enter Amortization Policy Computer Hardware Amortization Rate Enter Amortization Policy Computer Software Amortization Rate Enter Amortization Policy Tools & Equipment Amortization Rate Enter Amortization Policy Other Equipment Amortization Rate Enter Amortization Policy		5 3 10	Years Years Years Years Years			CCA Class 47 45 45 8 8	45 45 20	% % %					
Operating Expense Data: 2.1 Advanced Metering Communication Device (AMCD) 2.2 Advanced Metering Regional Collector (AMRC) (includes LAN) 2.3 Advanced Metering Control Computer (AMCC) 2.4 Wide Area Network (WAN) 2.5 Other AMI OM&A Costs Related To Minimum Functionality Total O M & A Costs	\$ \$ \$ \$ \$ \$ \$	- - - - -	\$ \$ \$ \$ \$	-	\$ \$ \$ \$ \$	- - - - -	2008 Actual \$ - \$ - \$ - \$ - \$ - \$ -	20 \$ \$ \$ \$ \$	09 Fcst - - - - - -	\$ \$ \$ \$ \$	226 4,385 - - 43,823 48,434	\$ \$ \$ \$ \$ \$ \$ \$	Total  226 4,385 43,823 48,434
Per Meter Cost Split: Smart meter including installation Computer Hardware Costs Computer Software Costs Tools & Equipment Other Equipment	\$ \$ \$ \$ \$ \$	Per Meter 692.12 - 7.74 -		21,000 21,000	\$ \$ \$ \$ \$ \$	Investment 14,534,616 - 162,492 - - -	% of Inves 99% 0% 1% 0%						

21,000 \$

48,434

\$ 14,745,542

0% 100%

2.31 702.17

Filed: August 31, 2010 EB-2010-0209 PowerStream Inc 2010 Smart Meter Cost Recovery VECC IRRs Appendix 4 Page 6 of 10

# **Smart Meter Average Net Fixed Assets**

Sheet 6. SM Avg Net Fixed Assets &UCC

Net Fixed Assets - Smart Meters	2008	2008 Actual 2009 Fcst		2010	
Opening Capital Investment	\$	-	\$ -	\$ 	
Capital Investment (3. LDC Assumptions and Data)	\$		<del>\$</del> -	\$ 14,534,616.00	
Closing Capital Investment	\$		\$ -	\$ 14,534,616.00	
Opening Accumulated Amortization	\$	- :	\$ -	\$ 	
Amortization Year 1 (15 Years Straight Line)	\$		\$ -	\$ 484,487.20	
Closing Accumulated Amortization	\$	-	\$ -	\$ 484,487.20	
Opening Net Fixed Assets	\$	- ;	\$ -	\$ 	
Closing Net Fixed Assets	\$ \$ \$	-	\$ -	\$ 14,050,128.80	
Average Net Fixed Assets	\$	- :	-	\$ 7,025,064.40	
Net Fixed Assets - Computer Hardware	2008	3 Actual	2009 Fcst	2010	
Opening Capital Investment	\$	- :	\$ -	\$ 	
Capital Investment (3. LDC Assumptions and Data)	\$		<del>-</del>	\$ -	
Closing Capital Investment	\$		\$ -	\$ -	
Opening Accumulated Amortization	\$	- ;	\$ -	\$ 	
Amortization Year 1 (5 Years Straight Line)	\$	-	\$ -	\$ -	
Closing Accumulated Amortization	\$	-	\$ -	\$ -	
Opening Net Fixed Assets	\$	-	\$ -	\$ -	
Closing Net Fixed Assets	\$ \$ \$	- :	\$ -	\$ -	
Average Net Fixed Assets	\$	-	-	\$ -	
Net Fixed Assets - Computer Software	2008	3 Actual	2009 Fcst	2010	
Opening Capital Investment	\$	- :	\$ -	\$ 	
Capital Investment (3. LDC Assumptions and Data)	\$	-	\$ -	\$ 162,492.00	
Closing Capital Investment	\$	-	-	\$ 162,492.00	
Opening Accumulated Amortization	\$	- :	\$ -	\$ -	
Amortization Year 1 (3 Years Straight Line)	\$		\$ -	\$ 27,082.00	
Closing Accumulated Amortization	\$	- :	\$ -	\$ 27,082.00	
Opening Net Fixed Assets	\$		\$ -	\$ -	
Closing Net Fixed Assets	\$ \$		-	\$ 135,410.00	
Average Net Fixed Assets	\$	-	\$ -	\$ 67,705.00	

Filed: August 31, 2010 EB-2010-0209 PowerStream Inc 2010 Smart Meter Cost Recovery VECC IRRs Appendix 4 Page 7 of 10

## Sheet 6. SM Avg Net Fixed Assets &UCC

Net Fixed Assets - Tools & Equipment	2008	3 Actual	2009	2009 Fcst		2010		
Opening Capital Investment	\$	-	\$	-	\$	-		
Capital Investment (3. LDC Assumptions and Data)	\$	_	\$	-	\$	_		
Closing Capital Investment	\$	-	\$	-	\$	-		
Opening Accumulated Amortization	\$	-	\$	-	\$	-		
Amortization Year 1 (10 Years Straight Line)	\$	-	\$	-	\$	-		
Closing Accumulated Amortization	\$	-	\$	-	\$	-		
Opening Net Fixed Assets	\$	-	\$	-	\$	-		
Closing Net Fixed Assets	\$	_	\$	-	\$	-		
			•		\$			
Average Net Fixed Assets	\$	-	\$	-	Þ			
	2008	3 Actual	Ť	9 Fcst	\$	2010		
Average Net Fixed Assets Net Fixed Assets - Other Equipment	2008	3 Actual	Ť	9 Fcst	\$	2010		
Average Net Fixed Assets  Net Fixed Assets - Other Equipment  Opening Capital Investment	\$ 2008 \$ \$		200	9 Fcst -		2010		
Net Fixed Assets - Other Equipment  Opening Capital Investment Capital Investment (3. LDC Assumptions and Data)	\$ 2008 \$ \$ \$		2009	9 Fcst	\$	2010		
Average Net Fixed Assets  Net Fixed Assets - Other Equipment  Opening Capital Investment  Capital Investment (3. LDC Assumptions and Data)  Closing Capital Investment	\$ 2008		2009	9 Fcst	\$ \$	2010		
Average Net Fixed Assets  Net Fixed Assets - Other Equipment  Opening Capital Investment Capital Investment (3. LDC Assumptions and Data)  Closing Capital Investment  Opening Accumulated Amortization	\$ \$ \$	- - -	2009 \$ \$ \$	-	\$ \$ \$	2010		
Net Fixed Assets - Other Equipment  Dening Capital Investment Closing Capital Investment Closing Capital Investment  Dening Accumulated Amortization Control of the Capital Investment  Dening Accumulated Amortization Control of the Capital Investment  Dening Accumulated Amortization Control of the Capital Investment	\$ \$ \$	- - -	2009 \$ \$ \$	-	\$ \$ \$	2010		
Average Net Fixed Assets	\$ \$ \$	- - -	2009 \$ \$ \$ \$	-	\$ \$	2010		
Average Net Fixed Assets  Net Fixed Assets - Other Equipment  Opening Capital Investment Capital Investment (3. LDC Assumptions and Data)  Closing Capital Investment  Opening Accumulated Amortization  Amortization Year 1 (10 Years Straight Line)  Closing Accumulated Amortization	\$ \$ \$	- - -	2009 \$ \$ \$ \$ \$	-	\$ \$ \$	2010		

Filed: August 31, 2010 EB-2010-0209 PowerStream Inc 2010 Smart Meter Cost Recovery VECC IRRs Appendix 4 Page 8 of 10

## For PILs Calculation

Sheet 6. SM Avg Net Fixed Assets &UCC

### **UCC - Smart Meters**

CCA Class 47 (8%)	2008 Actual	2009 Fcst	2010
Opening UCC	\$ -	\$ -	\$ -
Capital Additions	\$ -	\$ -	\$ 14,534,616.00
UCC Before Half Year Rule	\$ -	\$ -	\$ 14,534,616.00
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ 7,267,308.00
Reduced UCC	\$ -	\$ -	\$ 7,267,308.00
CCA Rate Class 47	 8.0%	8.0%	8.0%
CCA	\$ -	\$ -	\$ 581,384.64
Closing UCC	\$ -	\$ -	\$ 13,953,231.36
		·	

## **UCC - Computer Equipment**

CCA Class 45 (45%)	2008	2009 Fcst		2010	
0	_			•	
Opening UCC	\$	- \$	•	\$	-
Capital Additions Computer Hardware	\$	- \$	-	\$	-
Capital Additions Computer Software	\$	- \$	-	\$	162,492.00
UCC Before Half Year Rule	\$	- \$	-	\$	162,492.00
Half Year Rule (1/2 Additions - Disposals)	\$	- \$	-	\$	81,246.00
Reduced UCC	\$	- \$	-	\$	81,246.00
CCA Rate Class 45		45%	45%	6	45%
CCA	\$	- \$	-	\$	36,560.70
Closing UCC	\$	- \$	-	\$	125.931.30

### UCC - General Equipment CCA Class 8 (20%)

Closing UCC

Opening UCC
Capital Additions Tools & Equipment
Capital Additions Other Equipment
UCC Before Half Year Rule
Half Year Rule (1/2 Additions - Disposals)
Reduced UCC
CCA Rate Class 8
CCA

200	2008 Actual 2009 Fcst					
\$	-	\$	=	\$		-
\$	-	\$	-	\$		-
\$	-	\$	-	\$		-
\$	-	\$	-	\$		-
\$	-	\$	-	\$		-
\$	-	\$	-	\$		-
	20%		20%			20%
\$	-	\$	-	\$		-
\$	-	\$	-	\$		-

Filed: August 31, 2010 EB-2010-0209 PowerStream Inc 2010 Smart Meter Cost Recovery VECC IRRs Appendix 4 Page 9 of 10

## **Smart Meter Rate Calculation**

#### Average Asset Values

Net Fixed Assets Smart Meters
Net Fixed Assets Computer Hardware
Net Fixed Assets Computer Software
Net Fixed Assets Tools & Equipment
Net Fixed Assets Other Equipment
Total Net Fixed Assets

#### **Working Capital**

Operation Expense Working Capital 15 %

#### Smart Meters included in Rate Base

#### Return on Rate Base

Deemed Debt (3. LDC Assumptions and Data)
Deemed Equity (3. LDC Assumptions and Data)

Weighted Debt Rate (3. LDC Assumptions and Data)
Proposed ROE (3. LDC Assumptions and Data)
Return on Rate Base

#### Operating Expenses

Incremental Operating Expenses (3. LDC Assumptions and Data)

#### **Amortization Expenses**

Amortization Expenses - Smart Meters
Amortization Expenses - Computer Hardware
Amortization Expenses - Computer Software
Amortization Expenses - Tools & Equipment
Amortization Expenses - Other Equipment
Total Amortization Expenses

#### Revenue Requirement Before PILs

#### **Calculation of Taxable Income**

Incremental Operating Expenses
Depreciation Expenses
Interest Expense

### Taxable Income For PILs

Grossed up PILs (5. PILs)

Revenue Requirement Before PILs Grossed up PILs (5. PILs)

**Revenue Requirement for Smart Meters** 

### 2010 Smart Meter Rate Adder

Revenue Requirement for Smart Meters 2009 EDR Total Metered Customers (3. LDC Assumptions and Data) Annualized amount required per metered customer Number of months in year

2010 Smart Meter Rate Adder

2008 Actual   2009 Forecast   2010	
\$ - \$ \\ \\$ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	
40%     \$ - \\ \$ -	
<u> </u>	465,450
\$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	48,434
\$ - \$ - \$ 484,487 \$ - \$ - \$ - \$ - \$ - \$ - \$ 27,082 \$ - \$ - \$ - \$ - \$ -	
\$ · · \$	511,56
<u>\$</u> - <u>\$</u>	1,025,45
\$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	48,434 511,569 237,969
\$ -	227,48
s - s	65,050
\$ - \$ - \$ - \$ -	1,025,453 65,050 <b>1,090,50</b> 3
\$ \$ \$	1,090,503 23,700 46.0
<u> </u>	12

Filed: August 31, 2010 EB-2010-0209 PowerStream Inc 2010 Smart Meter Cost Recovery VECC IRRs Appendix 4 Page 10 of 10

# PowerStream Inc. EB-2010-0209 Friday, June 11, 2010

**Sheet 5. PILs** 

# **PILs Calculation**

		2007 Actual		2008 Actual		2009		2010
INCOME TAX								
Net Income	\$	-	\$	-	\$	-	\$	227,485
Amortization	\$	-	\$	-	\$	-	\$	511,569
CCA - Class 47 (8%) Smart Meters	\$	-	\$	-	\$	-	-\$	581,385
CCA - Class 45 (45%) Computers	\$	-	\$	-	\$	-	-\$	36,561
CCA - Class 8 (20%) Other Equipment	\$	-	\$	-	\$	-	\$	-
Change in taxable income	\$	-	\$	-	\$	-	\$	121,109
Tax Rate (3. LDC Assumptions and Data)		33.50%		33.50%		33.00%		31.00%
Income Taxes Payable	\$	-	\$	-	\$	-	\$	37,544
ONTARIO CAPITAL TAX								
Smart Meters	\$	_	\$	-	\$	_	\$	14,050,129
Computer Hardware	\$	_	\$	_	\$	_	\$	· · · · -
Computer Software	\$	_	\$	_	\$	_	\$	135,410
Tools & Equipment	\$	_	\$	_	\$	_	\$	_
Other Equipment	\$	_	\$	_	\$	_	\$	_
Rate Base	<u>\$</u> \$	_	\$	-	\$	-	\$	14,185,539
Less: Exemption	\$	-	\$	-	\$	-	\$	-
Deemed Taxable Capital	\$	-	\$	-	\$	-	\$	14,185,539
Ontario Capital Tax Rate		0.285%	_	0.225%		0.225%		0.150%
Net Amount (Taxable Capital x Rate)	\$	-	\$	-	\$	-	\$	10,639
Gross Up								
	PILs	Payable		s Payable		s Payable		s Payable
Change in Income Taxes Payable	\$	-	\$	-	\$	-	\$	37,544
Change in OCT	\$	-	\$	-	\$	-	\$	10,639
PIL's	\$	-	\$	-	\$	-	\$	48,183
		Gross Up 33.50%		Gross Up 33.50%		Gross Up 33.00%		Gross Up 31.00%
	Gro	ssed Up PILs	G	rossed Up PILs	C	Grossed Up PILs	Gı	rossed Up PILs
Change in Income Taxes Payable	\$		\$		\$		\$	54,411
Change in OCT	\$	-	\$	-	\$	-	\$	10,639
PIL's	\$	-	\$	-	\$	-	\$	65,050