EXHIBIT 6 - REVENUE DEFICIENCY/SUFFICIENCY

EB-2014-0080

Table of Contents

Calculation of Revenue Requirement

Ex.6/Tab 1/Sch.1 - Determination of Net Utility Income

The current rates are based on Board approved rates effective May 1, 2013 through an IRM proceeding (EB-2013-0135). Existing revenues based on existing Board approved rates, which are used in calculating utility income, are comprised of distribution revenue and exclude pass-thru charges such as LV Charges and Transmission Charges.

Details on existing and projected distribution revenue at existing rates are presented in Exhibit 3, Tab 1 and replicated below. Other revenues are presented in Ex.3/Tab 4 shows distribution revenues at 2014 Actual and Test Year volumes. Table 6.1 below shows distribution revenues at proposed 2015 volumes.

Table 6.1 - Distribution Revenues at Current Rates – 2015 Volumes

2015 Test Year

	Test Year Projected Revenue from Existing Variable Charges							
Customer Class Name	**Variable Distribution Rate**	**per**	**Test Year Volume**	**Gross Variable Revenue**	**Transform. Allowance Rate**	**Transform. Allowance kW's**	**Transform. Allowance $'s**	**Net Variable Revenue**
Residential	$0.0160	kWh	24,347,981	389,568	($0.45)		0	389,568
General Service < 50 kW	$0.0067	kWh	11,155,291	74,740	($0.45)		0	74,740
General Service > 50 to 1499 kW	$2.3213	kW	64,865	150,572	($0.45)	17,580	-7,911	142,661
Intermediate	$1.0215	kW	60,980	62,291	($0.45)	61,760	-27,792	34,499
Sentinel Lighting	$3.1198	kW	70	217	($0.45)		0	217
Street Lighting	$2.2937	kW	4,565	10,471	($0.45)		0	10,471
Total Variable Revenue			**35,633,752**	**687,859**		**79,340**	**-35,703**	**652,156**

2015 Test Year

	Test Year Projected Revenue from Existing Fixed Charges							
Customer Class Name	**Fixed Rate**	**Customers (Connections)**	**Fixed Charge Revenue**	**Variable Revenue**	**TOTAL**	**% Fixed Revenue**	**% Variable Revenue**	**% Total Revenue**
Residential	$9.1900	2,272	250,508	389,568	640,076	39.14%	60.86%	56.35%
General Service < 50 kW	$19.7600	464	110,093	74,740	184,833	59.56%	40.44%	16.27%
General Service > 50 to 1499 kW	$54.8200	41	26,971	142,661	169,632	15.90%	84.10%	14.93%
Intermediate	$223.0100	2	5,352	34,499	39,851	13.43%	86.57%	3.51%
Sentinel Lighting	$7.0900	15	1,276	217	1,493	85.48%	14.52%	0.13%
Street Lighting	$7.8800	947	89,570	10,471	100,041	89.53%	10.47%	8.81%
Total Fixed Revenue		**3,741**	**483,771**	**652,156**	**1,135,927**			

Variance Analysis

	2014 Actual to 2015 Variance			
Customer Class Name	**2014**	**2015**	**Variance**	**% change**
Residential	$655,194.18	$640,076.12	-15,118	-2.31%
General Service < 50 kW	$182,688.56	$184,833.40	2,145	1.17%
General Service > 50 to 1499 kW	$175,087.90	$169,632.29	-5,456	-3.12%
Intermediate	$41,574.69	$39,851.34	-1,723	-4.15%
Sentinel Lighting	$1,670.99	$1,493.03	-178	-10.65%
Street Lighting	$115,066.84	$100,040.58	-15,026	-13.06%
Total Fixed Revenue	**1,171,283**	**1,135,927**	**-35,356**	-3.02%

Ex.6/Tab 1/Sch.2 at the next section provide details and derivation of the revenue requirement and its particulars.

Ex.6/Tab 1/Sch.2 - Proposed Revenue Requirement

HPDC's revenue requirement represents the amount of money that a utility must receive from its customers to cover its costs, operating expenses, taxes, interest paid on debts owed to investors and, if applicable, a deemed return (profit).

The proposed Base Revenue Requirement, representing the revenue to be recovered from base distribution rates, is equal to the total Service Revenue Requirement, less Revenue Offsets derived from other revenue sources in 2014. Table 6.2 below presents HDPCL's proposed 2015 Revenue Requirement

Table 6.2 - Test Year Revenue Requirement

Particular	**IFRS**
	Test Year
OM&A Expenses	$1,058,023
Amortization Expense	$135,719
Total Distribution Expenses	$1,193,742
Regulated Return On Capital	$183,065
Grossed up PILs	$3,753
Service Revenue Requirement	**$1,380,561**
Less: Revenue Offsets	-$229,503
Base Revenue Requirement	**$1,151,058**

Ex.6/Tab 1/Sch.3 - Statement of Rate Base

Table 6.3 - Statement of Rate Base

Particulars	Capitalization Ratio		Cost Rate	Return
	(%)	($)	(%)	($)
Debt				
Long-term Debt	56.00%	$1,582,632	4.77%	$75,492
Short-term Debt	4.00%	$113,045	2.16%	$2,442
Total Debt	60.00%	$1,695,678	4.60%	$77,933
Equity				
Common Equity	40.00%	$1,130,452	9.30%	$105,132
Preferred Shares	0.00%	$ -	0.00%	$ -
Total Equity	40.00%	$1,130,452	9.30%	$105,132
Total	100.00%	$2,826,129	6.48%	$183,065

Ex.6/Tab 1/Sch.4 - Actual Utility Return on Rate Base;

Table 6.4 - Return on Rate Base

Return	
Deemed Interest Expense	$77,933
Return on Deemed Equity	$105,132
Total	$183,065

Ex.6/Tab 1/Sch.5 - Requested and Indicated Rate of Return;

The requested rate of return is **6.48%** as per the OEB prescribed Cost of Capital Parameters. The Indicated Rate of Return is calculated as **6.48%.** Details of the calculation can be found at Tab 2 of this exhibit in Table 6.7 - Calculation of Revenue Deficiency or Surplus.

Ex.6/Tab 1/Sch.6 - Utility Income at Proposed Revenue Requirement

Table 6.5 - Utility Income under proposed Revenue Requirement

Operating Revenues:	
Distribution Revenue (at Proposed Rates)	$1,151,058
Other Revenue	$229,503
Total Operating Revenues	$1,380,561
Operating Expenses:	
OM+A Expenses	$1,058,023
Depreciation/Amortization	$135,719
Property taxes	$ -
Capital taxes	$ -
Other expense	$ -
Subtotal (lines 4 to 8)	$1,193,742
Deemed Interest Expense	$77,933
Total Expenses (lines 9 to 10)	$1,271,676
Utility income before income taxes	$108,885
Income taxes (grossed-up)	$3,753
Utility net income	$105,132

Ex.6/Tab 1/Sch.7 - Revenue Requirement Trend

Table 6.6 below presents HDPCL's Revenue Requirement trend starting from the 2010 Board Approved all the way to the 2015 proposed Revenue Requirement.

Table 6.6 – Trend in Revenue Requirement

Particular	2010BA	2010	2011	2012	2013	2014	2015
OM&A Expenses	$923,677	$819,557	$866,798	$821,055	$849,223	$971,015	$1,058,023
Amortization Expense	$108,336	$99,904	$95,574	$112,512	$78,078	$84,332	$135,719
Total Distribution Expenses	$1,032,013	$919,460	$962,372	$933,567	$927,301	$1,055,346	$1,193,742
Regulated Return On Capital	$145,674	$136,433	$140,940	$150,915	$167,496	$164,311	$183,065
Grossed up PILs *	$11,106	$12,953	$12,953	$12,953	$12,953	$0	$3,753
Service Revenue Requirement	**$1,188,793**	**$1,068,846**	**$1,116,264**	**$1,097,434**	**$1,107,750**	**$1,219,657**	**$1,380,561**
Less: Revenue Offsets	-$68,907	-$193,636	-$171,809	-$214,890	-$212,002	-$258,466	-$229,503
Base Revenue Requirement	**$1,119,886**	**$875,210**	**$944,455**	**$882,544**	**$895,748**	**$961,192**	**$1,151,058**

As can be seen from the table above, the proposed revenue requirement for the test year is only marginally higher than the 2010 Cost of Service approved Revenue Requirement. The lower revenue requirement between 2010 and 2013 is mostly due to underspending on the capital assets, all of which is explained in detail in the distribution system plan in Exhibit 2. Year over year variances in OM&A are explained throughout Exhibit 4 and Revenue Offsets and explained in detail at Exhibit 3.

Note that since the utility does not calculate PILs on yearly basis, the utility used the Historical, 2014 Actual and Test year results from the PILs model submitted in conjunction with this application.

Deficiency or Surplus

Ex.6/Tab 2/Sch.1 - Calculation of Revenue Deficiency or Surplus

HPDC's net revenue deficiency under the proposed rates is $-36,923. This deficiency is calculated as the difference between the 2015 Test Year Revenue Requirement and the Forecast 2014 Test Year Revenue Requirement at the Applicant's 2013 approved distribution rates.

The Revenue Deficiency sheet presented at the next page is an excerpt from the Revenue Requirement Work Form. The drivers of the revenue deficiency are detailed in the section following the table.

Table 6.7 - Revenue Deficiency (RRWF)

Particulars	At Current Approved Rates	At Proposed Rates
Revenue Deficiency from Below		$36,923
Distribution Revenue	$1,128,337	$1,114,135
Other Operating Revenue Offsets - net	$229,503	$229,503
Total Revenue	$1,357,839	$1,380,561
Operating Expenses	$1,193,742	$1,193,742
Deemed Interest Expense	$77,933	$77,933
Total Cost and Expenses	$1,271,676	$1,271,676
Utility Income Before Income Taxes	$86,163	$108,885
Tax Adjustments to Accounting Income per 2013 PILs model	($7,251)	($7,251)
Taxable Income	$78,912	$101,634
Income Tax Rate	15.50%	15.50%
Income Tax on Taxable Income	$12,231	$15,753
Income Tax Credits	$ -	$ -
Utility Net Income	$73,932	$105,132
Utility Rate Base	$2,826,129	$2,826,129
Deemed Equity Portion of Rate Base	$1,130,452	$1,130,452
Income/(Equity Portion of Rate Base)	6.54%	9.30%
Target Return - Equity on Rate Base	9.30%	9.30%
Deficiency/Sufficiency in Return on Equity	-2.76%	0.00%
Indicated Rate of Return	5.37%	6.48%
Requested Rate of Return on Rate Base	6.48%	6.48%
Deficiency/Sufficiency in Rate of Return	-1.10%	0.00%
Target Return on Equity	$105,132	$105,132
Revenue Deficiency/(Sufficiency)	$31,200	($0)
Gross Revenue Deficiency/(Sufficiency)	$36,923	

Ex.6/Tab 2/Sch.2 - Causes of Revenue Deficiency or Surplus

HPDC's existing rates are based on the Board-approved rates in 2010 following a cost of service rate application, and adjustments to its base distribution rates in 2011-2014 under the Board's third Generation Incentive Regulation Mechanism.

As shown in Table of Revenue Deficit at the previous section, the Revenue Deficiency is determined to be $-36,923. The deficiency is due to the increase in the rate base and OM&A.

The proposed rate base for 2015 is $833K higher than the 2010 Board-approved amount, an increase of 42%. Based on a 6.48% overall cost of capital, the increase in the rate base drives an increase to the revenue requirement. The factors contributing to the change in the rate base are discussed in detail at Exhibit 2 but for the most part, are due to investments in the distribution system to follow the distribution system plan and the inclusion to smart meters into rate base.

The increased expense for Operations, Maintenance and Administration (OM&A) is another reason for the revenue deficiency. Projected OM&A for 2015 is $134K higher than the 2010 Board-approved amount, which represents an increase of 14%. The cost drivers underlying this increase are explained in Exhibit 4.

The major contributors of the deficiency are and a table comparing the specifics from 2010 Board Approved to 2015 Test Year is presented following the contributor below.

- Increase in OM&A of $134K from $923K in 2010 Board Approved to $1,058K in 2015.
- An increase in Average Net Fixed Assets of $601K from $819K in 2010 Board Approved to $1,420K in 2015.
- An increase in Working Capital of $209 from $1,173K in 2010 Board approved to $1,382K in 2015.
- A decrease in the Weighted Average Cost of Capital from 7.31% of 2010 Board approved to 6.48% in 2015.
- An increase in Depreciation Expenses of $28K from $108 of 2010 Board approved to $136K in 2015.
- A decrease in deemed PILs expense of $10K from 11K in the 2010 Board Approved value to $3,601 in 2015.

Table 6.8 – Comparison of Revenue Deficiency (RRWF)

Particulars (taken from RRWF- 8.Rev_Def_Suff)	2010 Board approved	2015 Proposed Rates	Difference
Revenue Deficiency from Below	$358,673	$36,923	-$321,750
Distribution Revenue	$754,171	$1,114,135	$359,964
Other Operating Revenue Offsets - net	$68,907	$229,503	$160,596
Total Revenue	$1,181,751	$1,380,561	$198,810
			$0
Operating Expenses	$1,032,013	$1,193,742	$161,729
Deemed Interest Expense	$67,158	$77,933	$10,775
Total Cost and Expenses	$1,099,171	$1,271,676	$172,505
Utility Income Before Income Taxes	$82,580	$108,885	$26,305
Tax Adjustments to Accounting	-$20,214	-$7,251	$12,963
Taxable Income	$62,366	$101,634	$39,268
Income Tax Rate	16.00%	15.50%	-$0
Income Tax on Taxable Income	$9,979	$15,753	$5,774
Income Tax Credits	-$7,041	$ -	$0
Utility Net Income	$71,474	$105,132	$33,658
Utility Rate Base	$1,992,810	$2,826,129	$833,319
Deemed Equity Portion of Rate Base	$797,124	$1,130,452	$333,328
Income/(Equity Portion of Rate Base)	8.97%	9.30%	$0
Target Return - Equity on Rate Base	9.85%	9.30%	-$0
Deficiency/Sufficiency in Return on Equity	-0.88%	0.00%	$0
			$0
Indicated Rate of Return	6.96%	6.48%	-$0
Requested Rate of Return on Rate Base	7.31%	6.48%	-$0
Deficiency/Sufficiency in Rate of Return	-0.35%	0.00%	$0
Target Return on Equity	$78,517	$105,132	$26,615

Ex.6/Tab 2/Sch.3 - Impact of implementation of IFRS on Revenue Deficiency or Surplus

The adoption of newly prescribed accounting policies has had a marginal impact on the allocation of the revenue requirement and determination of the rate base. The extension of the typical useful lives of HPDC's assets has caused the depreciation expense to decrease resulting in an increase in the value of the net fixed assets of the utility and ultimately an increase to the utility's rate base.

HPDC's OM&A has not been impacted by the policy which states that burdens which are longer eligible for capitalization have been removed from rate base and included as an operating expense since the utility has never capitalized administrative burdens on capital projects.

The decrease in depreciation and increase in operational costs have also had an impact on the PILs expense, reducing the amount by 80%.