



PO Box 815 ☒ Winnipeg Manitoba Canada ☒ R3C 2P4  
Street Location for DELIVERY: 3<sup>rd</sup> floor – 820 Taylor Avenue  
Telephone / N° de téléphone : (204) 474-3946 ☒ Fax / N° de télécopieur : (204) 474-4947  
pjramage@hydro.mb.ca

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April 12, 2007

Mr. G. Gaudreau  
The Manitoba Public Utilities Board  
400 - 330 Portage Avenue  
Winnipeg, Manitoba R3C 0C4

Dear Sir:

**RE: COST OF SERVICE METHODOLOGY REVIEW  
ORDER 117/06 DIRECTED AMENDMENTS TO PCOSS06**

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The attached Electric Cost of Service schedules are filed to comply with the directive in PUB Order 117/06 requiring Manitoba to re-file the results of the 2005/06 Prospective Cost of Service Study with modifications as directed in that Order. The Order dealt with Manitoba Hydro's Cost of Service Study ("COSS") Methodology and the PUB's review thereof. The Order gave general approval to the Corporation's recommended methodology. However, the Order also directed Manitoba Hydro to make some specific modifications to the Corporation's Recommended Method. Directed modifications are discussed below.

1. Manitoba Hydro was directed to utilize a single export class and allocate costs to that class in a manner comparable to the allocation of cost to domestic classes, plus assign certain costs directly against exports (Directive 1(a)).

The Corporation had proposed two export classes. Firm Exports would be allocated a share of all generation and transmission costs in the same way as domestic classes of service. Opportunity Exports would be assigned only the variable costs associated with these exports: thermal fuel, imports and water rentals. As directed, Manitoba Hydro has utilized a single export class in the attached COSS.

2. Trading desk, MAPP and MISO costs, thermal plant costs, water rental and power purchase costs that are directly attributable to export sales are to be directly assigned to the export class (Directive 1(b)). The allocation and/or assignment of these costs in Manitoba Hydro's Recommended Method was integrally linked to the existence of two export classes; hence a revised method of allocation and assignment is required to undertake revisions in accordance with Order 117/06.
  - a) Trading Desk, MAPP and MISO costs are directly assigned to the export class as an additional cost and are not specifically linked to any energy sales.
  - b) For thermal plant costs, the fuel cost related to operating the thermal plants, \$19.3 million, has been directly assigned to the export class. This represents an implied rate of 3.3 cents

per kW.h against 587 GW.h of exports. The remaining operating and maintenance costs as well as interest and depreciation expense associated with thermal generation, a total of \$69.3 million, is moved into the generation pool, to be shared by all classes of customer, including exports. Manitoba Hydro believes that this treatment, while not strictly reflecting cost causality, is the closest cost-causal interpretation consistent with the directive. All costs related to thermal generation, capital, operating/maintenance and fuel, are incurred to provide system reliability, which mostly benefits domestic customers. When prices in the export market are sufficiently high, it becomes economic to dispatch thermal stations, but they would not have been built, nor would the ongoing operating and maintenance costs be incurred just to facilitate occasional sales that are economic.

- c) Power purchase costs and energy are both assigned directly against exports. The 2005/06 Study forecast 2,010 GW.h of imports, the average cost of which is 3.35 cents per kW.h. Both the costs and the energy have been directly assigned to the export class.
3. In addition to the assignment or allocation of significant generation costs to exports, Order 117/06 also directs that certain other costs be specifically assigned to the export class: the revenue impacts of Uniform Rates and the costs of Demand Side Management (“DSM”) for Domestic customers (Directive 1(d)). With respect to DSM costs, Manitoba Hydro has interpreted the Order to mean that all DSM energy savings should be assumed to serve the export market. Accordingly, the \$17.8 million in forecast DSM expenditure and the associated 1,117 GW.h of annual energy savings associated with all DSM carried out to date, are applied to the export class. This provided a relatively low cost source of energy (1.59 cents per kW.h) to the export class.
4. Those exports deemed not to have been served by thermal generation, imports or DSM would, in keeping with directive 1(b) in the Order, share remaining generation pool costs, including water rentals (approximately 3.37 cents per kW.h) on the same basis as domestic customer classes, even though most of these export sales would be opportunity sales and not backed by the firm resources of the system. Export sales not deemed to have been met out of the specifically identified resources are 6,072 GW.h as shown below:

Total export energy, GW.h	9,786
Less exports served from imports	(2,010)
Less exports served from thermal	(587)
Less DSM savings facilitating exports	<u>(1,117)</u>
Exports served from generation pool, GW.h	6,072

Manitoba Hydro continues to be concerned that this approach to cost allocation against export sales is overly aggressive, again, because fixed costs of hydraulic generation are not incurred to support opportunity exports. In the early years of plant in-service new plants may allow for opportunity exports and thereby offset some of their fixed costs, as may all plant during years of higher than normal flows, but these cannot be taken to mean a cost causal relationship.

5. Order 117/06 also directed Manitoba Hydro utilize 12 SEP time periods in the allocation of generation related costs, versus only four as previously recommended by the Corporation.

With the exception of the direction to utilize 12 SEP time periods (which was supported by Manitoba Hydro and has very little impact on the Cost of Service Study results) the directed changes have a significant impact on the results of the COSS. This is because the directed methodology assigns a much larger portion of generation and transmission costs against exports which has the same effect as the previous methodology, in which cost allocation to the domestic rate classes limited the assignment of export revenues to only the generation and transmission functions.

By comparison to Manitoba Hydro's Recommended Method, Order 117/06 assigns an additional \$111.0 million in costs against export sales, calculated as follows:

DSM	\$17.8 million (new)
Trading Desk	\$9.1 million (new)
MAPP/MISO/NEB	\$3.5 million (additional)
Purchased Power	\$37.0 million (additional)
Thermal Costs	\$15.6 million (additional)
Allocated G & T (incl. Water rentals)	\$28.2 million (additional)
Total incremental charge against exports	\$111.0 million

These additional costs assigned or allocated to the single export class reduce net export revenue from \$285.9 million in the Corporation's Recommended Method to only \$174.9 million after application of the directives from Order 117/06.

Manitoba Hydro has modeled the results of the Prospective Cost of Service Study for 2005/06 to reflect the modifications directed in Order 117/06 as discussed above. Manitoba Hydro notes that Order 20/07, issued February 28, 2007, includes a directive requiring Manitoba Hydro incorporate the 2.25 % rate increase approved in Order 20/07 into the modeling of the Cost of Service results. Manitoba Hydro has incorporated the 2.25% into PCOSS06 to show the effects of this increase on the revenue cost coverage ratios ("RCC"). The impact of the increase approved in Order 20/07 does not have a material impact on the results, other than to reduce the RCC for Area and Roadway Lighting by almost two percentage points. Please note that the preceding table dealing with the incremental effect of Order 117/06 on net export revenues as well as the supporting PCOSS06 schedules attached, do not incorporate the interim rate increase. This was done to correspond and maintain comparability with Manitoba Hydro's recommended PCOSS06 as originally submitted.

As shown below, application of the directives in Order 117/06 (and 20/07) yields RCC results which, in some cases, appear to be closer to those of the previous method than to the method recommended by Manitoba Hydro during the proceeding. Also for comparison, the table shows the results obtained through the marginal cost information provided during the proceedings. It is noted that the marginal cost results are substantially at odds with Order 117/06 modeled results.

An additional result is also displayed to illustrate the effects on RCC's of the current deficiency in retained earnings relative to the target 75:25 debt/equity ratio. That is, because retained earnings are deficient by approximately \$600 million relative to the target, it is reasonable that RCC's should reflect this deficiency. The results of this scenario illustrate the need for steady, measured rate increases over time in order for the Corporation to meet its financial targets. As rate increases are implemented and retained earnings increase, RCC's will increase correspondingly. It is Manitoba Hydro's intention to incorporate the retained earnings deficiency scenarios in future Cost of Service Studies.

Customer Class	RCC MH Recommended	RCC Order 117/06 (and 20/07)	RCC Previous Method	RCC Marginal Cost PUB/MH I-1(d)	RCC Reflecting Retained Earnings Deficiency
Residential	96.9	94.1	92.2	83	61.1
GSS Non-Demand	107.6	107.6	103.3	90	71.1
GSS Demand	105.5	107.0	106.1	65	68.9
GSM	100.6	101.4	102.9	64	65.1
GSL 0 – 30 kV	90.2	91.4	94.0	57	58.1
GSL 30 – 100 kV	101.6	104.8	109.4	60	66.9
GSL > 100 kV	103.2	110.0	114.6	60	68.6
Area & Roadway Lighting	105.5	106.1	103.7	N/A	81.7

Manitoba Hydro notes that on page 5 of Order 117/06, the PUB indicated that it required Manitoba Hydro to model the results of its Order prior to confirming its direction with respect to Cost of Service methodology. In this regard Manitoba Hydro would appreciate confirmation that its understanding of Order 117/06 reflects the PUB's intent or alternatively would appreciate further direction from the PUB.

Yours truly,

**MANITOBA HYDRO LAW DEPARTMENT**

Per:

**PATRICIA J. RAMAGE**

Barrister & Solicitor

Att.

Manitoba Hydro  
Prospective Cost Of Service Study  
March 31, 2006  
Revenue Cost Coverage Analysis  
*MH Model of 117/06 Directives*  
**S U M M A R Y**

Customer Class	(1) Total Cost w/o Consideration of Exports (\$000)	(2) Class Revenue (\$000)	(3) RCC % Assuming No Exports (2 ÷ 1)	(4) Reallocation of Costs to Exports Re: 117/06 (\$000)	(5) Net Export Revenue Re: 117/06 (\$000)	(6) Total Revenue (\$000) (2 + 5)	(7) Total Cost (\$000) (1 + 4)	(8) RCC % Current Rates (6 ÷ 7)
Residential	601,952	413,604	68.7%	(81,642)	76,104	489,708	520,310	94.1%
General Service - Small Non Demand	136,652	107,251	78.5%	(21,053)	16,908	124,160	115,599	107.4%
General Service - Small Demand	120,661	90,862	75.3%	(22,205)	14,401	105,262	98,456	106.9%
General Service - Medium	198,414	139,754	70.4%	(37,280)	23,568	163,323	161,134	101.4%
General Service - Large 0 - 30kV	95,983	59,106	61.6%	(18,943)	11,268	70,374	77,041	91.3%
General Service - Large 30-100kV*	38,495	26,974	70.1%	(8,488)	4,451	31,425	30,007	104.7%
General Service - Large >100kV*	225,918	158,829	70.3%	(58,265)	25,656	184,485	167,653	110.0%
*Includes Curtailment Customers								
SEP	2,535	2,496	98.5%	-	-	2,496	2,535	98.5%
Area & Roadway Lighting	19,613	19,297	98.4%	(851)	912	20,209	18,762	107.7%
<b>Total General Consumers</b>	<b>1,440,223</b>	<b>1,018,173</b>	<b>70.7%</b>	<b>(248,727)</b>	<b>173,268</b>	<b>1,191,441</b>	<b>1,191,496</b>	<b>100.0%</b>
Diesel	10,840	9,309	85.9%	0	1,585	10,895	10,840	100.5%
Export	123,777 <sup>1</sup>	547,358		248,727	(174,854)	372,505	372,505	100.0%
<b>Total System</b>	<b>1,574,840</b>	<b>1,574,840</b>	<b>100.0%</b>	<b>-</b>	<b>-</b>	<b>1,574,840</b>	<b>1,574,840</b>	<b>100.0%</b>

<sup>1</sup> **This initial allocation of costs assumes no exports and therefore all costs not variable with exports are allocated to domestic customers.** Variable costs associated with exports, therefore, have been withdrawn from the Generation and Transmission cost pool allocated to Domestic customers. Variable costs directly attributable to exports include Water Rentals (\$26 million), NEB/MAPP/MISO (\$6 million), Thermal Fuel (\$8 million), and Power Purchases (\$67 million). The Uniform Rates adjustment of \$16.7 million is also removed from the initial pool assigned to domestic customers.

Manitoba Hydro  
 Prospective Cost Of Service Study - March 31, 2006  
 Customer, Demand, Energy Cost Analysis  
*MH Model of 117/06 Directives*  
**SUMMARY**

Class	C U S T O M E R			D E M A N D				E N E R G Y		
	Cost (\$000)	Number of Customers	Unit Cost \$/Month	Cost (\$000)	% Recovery	Billable Demand MVA	Unit Cost \$/KVA	Cost (\$000)	Metered Energy mWh	Unit Cost ¢/kWh
Residential	96,396	452,273	17.76	178,299	0%	n/a	n/a	169,512	6,290,431	5.53 *
GS Small - Non Demand	19,767	54,660	30.14	37,055	0%	n/a	n/a	41,868	1,557,598	5.07 *
GS Small - Demand	3,961	6,120	53.94	35,548	39%	2,013	6.92	44,546	1,669,620	3.96
General Service - Medium	4,767	1,777	223.53	56,457	100%	7,965	7.09	76,342	2,879,317	2.65
General Service - Large <30kV	2,593	248	n/a	25,270	100%	3,511	7.94 *	37,909	1,449,913	2.61
General Service - Large 30-100kV	1,343	29	n/a	5,466	100%	1,597	4.26 *	18,747	767,993	2.44
General Service - Large >100kV	1,546	14	n/a	16,902	100%	8,340	2.21 *	123,549	5,123,753	2.41
SEP	330	33	834.11	448	0%	n/a	n/a	1,757	30,000	7.35 *
Area & Roadway Lighting	13,633	147,290	7.71	2,167	0%	n/a	n/a	2,050	95,793	4.40 *
<b>Total</b>	<b>144,336</b>	<b>662,444</b>		<b>357,612</b>		<b>23,426</b>		<b>516,280</b>	<b>19,864,418</b>	

\* - includes recovery of demand costs

Manitoba Hydro  
 Prospective Cost Of Service Study - March 31, 2006  
 Functional Breakdown  
*MH Model of 117/06 Directives*  
**S U M M A R Y**

Class	Total Cost (\$000)	Generation		Transmission		Subtransmission		Distribution Cust Service		Distribution Plant Cost	
		Cost (\$000)	%	Cost (\$000)	%	Cost (\$000)	%	Cost (\$000)	%	Cost (\$000)	%
Residential	444,207	171,318	38.6%	44,532	10.0%	32,836	7.4%	42,564	9.6%	152,956	34.4%
General Service - Small Non Demand	98,691	42,280	42.8%	10,150	10.3%	6,794	6.9%	10,892	11.0%	28,574	29.0%
General Service - Small Demand	84,055	44,974	53.5%	10,549	12.5%	6,393	7.6%	1,420	1.7%	20,721	24.7%
General Service - Medium	137,566	77,095	56.0%	18,569	13.5%	9,560	6.9%	3,686	2.7%	28,656	20.8%
General Service - Large <30kV	65,772	38,254	58.2%	8,489	12.9%	4,762	7.2%	2,325	3.5%	11,943	18.2%
General Service - Large 30-100kV	25,556	18,470	72.3%	3,626	14.2%	2,116	8.3%	1,290	5.0%	53	0.2%
General Service - Large >100kV	141,996	116,753	82.2%	23,698	16.7%	0	0.0%	1,519	1.1%	26	0.0%
SEP	2,535	1,757	69.3%	448	17.7%	0	0.0%	299	11.8%	32	1.3%
Area & Roadway Lighting	17,850	2,300	12.9%	362	2.0%	537	3.0%	557	3.1%	14,094	79.0%
<b>Total General Consumers</b>	<b>1,018,228</b>	<b>513,200</b>	<b>50.4%</b>	<b>120,422</b>	<b>11.8%</b>	<b>62,998</b>	<b>6.2%</b>	<b>64,552</b>	<b>6.3%</b>	<b>257,056</b>	<b>25.2%</b>

**2006 PROSPECTIVE COST OF SERVICE**  
**Fiscal Year Ending March 31, 2006**  
**Functionalization of Depreciation Costs**  
*MH Model of 117/06 Directives*

SCC	Depreciation	Generation	Transmission	Subtransmission	Distribution Plant	Customer Service	Ancillary Services	Diesel	Street Lighting	Exports
Research & Development	41,095	41,095								
Generation External Marketing	72,089	-								72,089
Common Generation Costs	15,767,619	7,745,271					-			8,022,348
Generating Station Costs	7,252,746	7,252,746					-			-
Other Generation Related Costs	168,336	168,336								
Dedicated Gen. Facilities	7,421,082	7,421,082					-	-	-	-
Hydraulic Generating Stations	44,089,703	44,089,703					-			
Other Hydraulic Generation Related Costs	13,266,897	13,266,897					-			
Hydraulic Generation Costs	57,356,600	57,356,600					-			
Thermal Generating Station	17,546,913	17,546,913					-	-	-	-
Non-Dedicated Gen. Facilities	74,903,513	74,903,513					-			-
Generation Facilities Costs	82,324,595	82,324,595					-			-
Purchased Power/Export Costs	-	-								-
<b>Generation Facilities &amp; Costs</b>	<b>98,092,214</b>	<b>90,069,865</b>					-			<b>8,022,348</b>
Research & Development	99,394	25,553	62,896	10,945						
Transmission External Marketing	25,517	-	-	-						25,517
Common Trans. Costs/Revenues	3,534,845	25,553	2,462,373	428,503			592,900			25,517
Generation Switching Stations	2,030,773	-	2,030,773							
HVDC & Collector Facilities	49,502,573	25,202,575	24,299,998							
Networked AC Facilities	7,378,537	-	7,378,537							
Generation Access Transmission	58,911,883	25,202,575	33,709,309							
Regional Networked Trans.	7,303,487	-	7,215,019				88,468			
Future Transmission Line ROW	11,615	-	11,615							
Transmission Common	1,085,942	-	1,090,872	(16,064)	-	-	11,134			
<b>Transmission Facilities/Costs</b>	<b>70,847,772</b>	<b>25,228,127</b>	<b>44,489,188</b>	<b>412,439</b>			<b>692,502</b>			<b>25,517</b>
Common Subtransmission Costs	2,148,681	-	-	2,148,681						
<b>Subtrans. Facilities &amp; Costs</b>	<b>16,507,933</b>	<b>-</b>	<b>-</b>	<b>14,407,360</b>	<b>2,100,573</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Dist. Facilities &amp; Costs</b>	<b>83,305,292</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>80,670,920</b>	<b>236,611</b>	<b>-</b>	<b>-</b>	<b>2,397,761</b>	<b>-</b>
<b>Customer Service Costs</b>	<b>6,967,461</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>6,967,461</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Isolated Diesel Facilities</b>	<b>6,733,714</b>	<b>1,144,980</b>	<b>-</b>	<b>-</b>	<b>1,671,021</b>	<b>-</b>	<b>-</b>	<b>3,917,713</b>	<b>-</b>	<b>-</b>
<b>Communication &amp; Control System</b>	<b>8,228,422</b>	<b>1,894,627</b>	<b>1,907,647</b>	<b>357,222</b>	<b>3,576,338</b>	<b>-</b>	<b>492,588</b>	<b>-</b>	<b>-</b>	<b>-</b>
	<b>290,682,808</b>	<b>118,337,600</b>	<b>46,396,835</b>	<b>15,177,021</b>	<b>88,018,851</b>	<b>7,204,072</b>	<b>1,185,090</b>	<b>3,917,713</b>	<b>2,397,761</b>	<b>8,047,865</b>



**2006 PROSPECTIVE COST OF SERVICE**  
**Fiscal Year Ending March 31, 2006**  
**Functionalization of Operating Costs**  
*MH Model of 11/06 Directives*

SCC	Operating	Generation	Transmission	Subtransmission	Distribution Plant	Customer Service	Ancillary Services	Diesel	Street Lighting	Exports
Research & Development	1,342,469	1,342,469								
Generation External Marketing	2,354,972	-								2,354,972
Common Generation Costs	24,734,506	15,951,979					-			8,782,527
Generating Station Costs	36,995,480	36,995,480					-			-
Other Generation Related Costs	361,215	361,215	-	-	-	-	-	-	-	-
Dedicated Gen. Facilities	37,356,696	37,356,696					-	-	-	-
Hydraulic Generating Stations	125,317,262	125,317,262					-			
Other Hydraulic Generation Related Costs	17,328,740	17,328,740					-			
Hydraulic Generation Costs	142,646,002	142,646,002					-			
Thermal Generating Station	39,448,232	20,172,232					-			19,276,000
Non-Dedicated Gen. Facilities	182,094,235	162,818,235					-			19,276,000
Generation Facilities Costs	219,450,930	200,174,930					-	-	-	19,276,000
Purchased Power/Export Costs	68,561,379	-								68,561,379
<b>Generation Facilities &amp; Costs</b>	<b>312,746,816</b>	<b>216,126,910</b>					-	-	-	<b>96,619,906</b>
Research & Development	1,663,781	834,741	686,751	142,289						
Transmission External Marketing	4,822,483	-	-	-						4,822,483
Common Trans. Costs/Revenues	22,001,665	834,741	13,111,209	2,965,169			268,063			4,822,483
Generation Switching Stations	6,951,823	-	6,951,823							
HVDC & Collector Facilities	26,950,528	16,213,988	10,736,539							
Networked AC Facilities	2,684,849	-	2,684,849							
Generation Access Transmission	36,587,200	16,213,988	20,373,212							
Regional Networked Trans.	944,529	-	944,529							
Future Transmission Line ROW	-	-	-							
Transmission Common	10,824,466	-	10,329,890	410,905			83,671			
<b>Transmission Facilities/Costs</b>	<b>70,357,860</b>	<b>17,048,729</b>	<b>44,758,840</b>	<b>3,376,073</b>			<b>351,734</b>			<b>4,822,483</b>
Common Subtransmission Costs	7,384,030	-	-	7,384,030						
<b>Subtrans. Facilities &amp; Costs</b>	<b>24,984,537</b>	<b>-</b>	<b>-</b>	<b>19,172,083</b>	<b>5,812,454</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Dist. Facilities &amp; Costs</b>	<b>56,784,578</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>49,750,549</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>7,034,029</b>	<b>-</b>
<b>Customer Service Costs</b>	<b>67,115,334</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>67,115,334</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Isolated Diesel Facilities</b>	<b>4,311,993</b>	<b>17,478</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>4,294,516</b>	<b>-</b>	<b>-</b>
<b>Communication &amp; Control System</b>	<b>3,720,249</b>	<b>2,474,906</b>	<b>404,255</b>	<b>173,397</b>	<b>556,072</b>	<b>-</b>	<b>111,620</b>	<b>-</b>	<b>-</b>	<b>-</b>
	<b>546,844,166</b>	<b>237,923,779</b>	<b>47,063,728</b>	<b>23,355,368</b>	<b>58,151,670</b>	<b>67,115,334</b>	<b>463,354</b>	<b>4,294,516</b>	<b>7,034,029</b>	<b>101,442,389</b>



2005/2006 Prospective Cost of Service Study  
 Prospective Peak Load Responsibility Report  
 Seasonal Coincident Peaks (2 CP) - Top 50 Peaks (at Generation)  
**MH Model of 11/06 Directives**

	Forcast Total Energy @ Generation (E10)	Avg % of Yearly Energy	Winter			Avg % of Yearly Energy	SUMMER			D14
			Estimated Seasonal Energy	Seasonal CP LF	Estimated Seasonal Demand		Estimated Seasonal Energy	Seasonal CP LF	Estimated Seasonal Demand	2CP Estimated Demand
Non-Demand	1,813,871,233	57%	1,039,348,217		294,698	43%	774,523,016		245,473	270,086
Demand	1,951,644,664	57%	1,110,485,814		313,468	43%	841,158,850		250,281	281,874
Subtotal Zones 1, 2 & 3	3,765,515,897		2,149,834,030		608,166		1,615,681,867		495,754	551,960
Seasonal	5,647,152	20%	1,152,019		163	80%	3,781,000		527	345
Water Heating	7,321,407	50%	3,631,418		789	50%	3,689,989		788	788
Total G.S.S.	3,778,484,456		2,154,617,467		609,118		1,623,152,856		497,069	553,093
General Service - Medium										
Zone 1	2,210,309,498	53%	1,172,495,199	83.1%	324,842	47%	1,037,814,299	68.5%	343,234	334,038
Zone 2	657,589,798	53%	348,829,375	84.5%	95,020	47%	308,760,423	70.5%	99,147	97,084
Zone 3	474,040,039	53%	251,462,372	85.6%	67,625	47%	222,577,667	80.6%	62,526	65,076
Total G.S.- Medium	3,341,939,335		1,772,786,947		487,488		1,569,152,388		504,908	496,198
General Service - Large										
0 - 30 Kv										
Zone 1	952,570,880	51%	486,175,492	88.8%	126,063	49%	466,395,388	78.4%	134,730	130,397
Zone 2	387,138,012	51%	197,588,460	88.1%	51,647	49%	189,549,552	77.5%	55,392	53,519
Zone 3	331,089,685	51%	168,982,376	89.8%	43,309	49%	162,107,309	86.3%	42,527	42,918
Total 0 - 30	1,670,798,577		852,746,328		221,019		818,052,249		232,649	226,834
30 - 100 Kv	613,006,266	51%	312,716,586	98.5%	73,114	49%	300,289,680	104.0%	65,410	69,262
30 - 100 Kv - Curtailed Cust	244,651,158	51%	125,016,742	98.5%	29,229	49%	119,634,416	104.0%	26,059	27,644
Over 100 Kv	2,870,344,020	53%	1,535,170,736	97.5%	362,648	47%	1,335,173,284	101.4%	298,116	330,382
Over 100 Kv - Curtailed Cust	2,790,918,667	51%	1,418,327,216	108.4%	301,313	49%	1,372,591,451	102.1%	304,400	302,856
Total G.S.- Large	8,189,718,688		4,243,977,608		987,323		3,945,741,080		926,634	956,978
Street Lighting	112,203,906	58%	65,347,333	86.7%	17,361	42%	46,856,573	0.0%	-	8,680
Total - Street Lighting	112,203,906		65,347,333		17,361		46,856,573		-	8,680
Total - General Consumers	22,850,478,677		12,900,935,781		3,603,914		9,947,383,031		2,805,951	3,204,933
Extra Provincial	9,786,000,000	41%	3,963,330,000	84.1%	1,084,604	60%	5,822,670,000	77.2%	1,709,059	1,396,832
Integrated System	32,636,478,677		16,864,265,781		4,688,518		15,770,053,031		4,515,011	4,601,764

2005/2006 Prospective Cost of Service Study  
 Prospective Peak Load Responsibility Report  
 12 Period Marginal Cost Weighted Energy  
 MH Model of 11/06 Directives

	Spring			Summer			Fall			Winter			Total	Wtged Energy/1000
	Peak	Shoulder	Off Peak	Peak	Shoulder	Off Peak	Peak	Shoulder	Off Peak	Peak	Shoulder	Off Peak		
Residential Zone 1	82,622,095	155,595,358	89,999,873	169,141,539	301,412,545	148,548,115	107,928,030	205,176,803	120,353,286	293,859,301	512,331,239	355,097,874	2,542,066,057	5,229,085
Residential Zone 2	79,032,912	148,836,145	86,090,191	161,793,867	288,318,892	142,095,041	103,239,532	196,263,724	115,125,023	281,093,769	490,075,074	339,672,078	2,431,636,249	5,001,929
Residential Zone 3	76,797,539	144,626,453	83,655,210	157,217,677	280,164,059	138,076,014	100,319,497	190,712,586	111,868,818	273,143,291	476,213,753	330,064,768	2,362,859,664	4,860,454
Res FRWH Zone 1	1,613,759	1,594,548	1,594,548	1,613,759	1,594,548	1,594,548	1,613,759	1,594,548	1,594,548	1,613,759	1,594,548	1,594,548	19,211,419	38,600
Res FRWH Zone 2	90,171	89,097	89,097	90,171	89,097	89,097	90,171	89,097	89,097	90,171	89,097	89,097	1,073,460	2,157
Res FRWH Zone 3	5,262	5,199	5,199	5,262	5,199	5,199	5,262	5,199	5,199	5,262	5,199	5,199	62,638	126
Res Seasonal Zone 2	-	-	-	18,472,870	17,929,550	17,929,550	-	-	-	-	-	-	54,331,971	115,616
Res Seasonal Zone 3	-	-	-	5,742,884	5,573,975	5,573,975	-	-	-	-	-	-	16,890,834	35,943
GS Small Non-Demand Zone 1	28,869,227	50,748,619	29,652,999	68,869,773	99,335,349	57,817,604	32,717,279	59,213,904	35,998,167	81,392,240	138,689,605	93,497,842	776,802,607	1,605,235
GS Small Non-Demand Zone 2	23,828,851	41,888,245	24,475,781	56,845,565	81,992,052	47,723,032	27,005,058	48,875,547	29,713,124	67,181,691	114,475,315	77,173,735	641,177,995	1,324,972
GS Small Non-Demand Zone 3	14,712,948	25,863,588	15,112,391	35,098,875	50,625,389	29,466,235	16,674,074	30,177,846	18,346,150	41,480,841	70,681,940	47,650,354	395,890,631	818,094
GSS FRWH Zone 1	558,549	551,899	551,899	558,549	551,899	551,899	558,549	551,899	551,899	558,549	551,899	551,899	6,649,390	13,360
GSS FRWH Zone 2	54,109	53,465	53,465	54,109	53,465	53,465	54,109	53,465	53,465	54,109	53,465	53,465	644,151	1,294
GSS FRWH Zone 3	2,341	2,313	2,313	2,341	2,313	2,313	2,341	2,313	2,313	2,341	2,313	2,313	27,866	56
GSS Seasonal Zone 2	-	-	-	1,114,936	1,082,144	1,082,144	-	-	-	-	-	-	3,279,223	6,978
GS Small Non-Demand Seasonal	-	-	-	805,096	781,417	781,417	-	-	-	-	-	-	2,367,929	5,039
GS Small Demand Zone 1	30,134,923	52,368,683	31,123,077	63,324,793	103,291,639	60,039,168	34,629,583	61,808,193	37,805,992	84,240,835	140,917,188	92,018,238	791,702,310	1,629,300
GS Small Demand Zone 2	26,993,521	46,909,532	27,878,665	56,723,527	92,524,046	53,780,410	31,019,637	55,365,024	33,864,922	75,459,185	126,227,335	82,425,836	709,171,639	1,459,454
GS Small Demand Zone 3	17,157,890	29,817,102	17,720,513	36,055,171	58,811,052	34,184,438	19,717,009	35,191,666	21,525,558	47,964,116	80,233,872	52,392,328	450,770,715	927,673
GS Medium Zone 1	89,664,086	150,535,509	91,032,895	199,079,287	313,510,197	186,165,428	95,499,386	166,508,097	102,268,523	216,933,451	361,315,004	237,797,636	2,210,309,498	4,552,511
GS Medium Zone 2	26,675,987	44,785,861	27,083,222	59,228,135	93,272,506	55,386,129	28,412,049	49,537,871	30,425,937	64,539,932	107,494,928	70,747,241	657,589,798	1,354,419
GS Medium Zone 3	19,230,052	32,285,007	19,523,617	42,696,081	67,237,817	39,926,475	20,481,536	35,710,612	21,933,297	46,525,223	77,490,405	50,999,917	474,040,039	976,367
GS Large 750-30kV Zone 1	41,117,812	66,974,939	43,661,592	86,842,176	136,913,538	89,640,476	41,102,255	70,052,425	45,937,471	89,267,958	143,122,641	97,937,597	952,570,880	1,948,741
GS Large 750-30kV Zone 2	16,710,849	27,219,544	17,744,676	35,293,864	55,643,560	36,431,132	16,704,526	28,470,277	18,669,625	36,279,736	58,167,026	39,803,197	387,138,012	791,995
GS Large 750-30kV Zone 3	14,291,517	23,278,805	15,175,671	30,184,157	47,587,703	31,156,776	14,286,110	24,348,461	15,966,710	31,027,298	49,745,831	34,040,646	331,089,685	677,333
GS Large 30-100kV	20,100,974	39,425,220	29,904,236	43,651,442	81,132,406	64,572,705	23,792,372	47,565,496	36,472,437	53,258,401	97,810,980	75,319,596	613,006,266	1,208,115
GS Large 30-100kV Curtailable	8,022,310	15,734,628	11,934,798	17,421,316	32,379,991	25,771,004	9,495,550	18,983,417	14,556,171	21,255,459	39,036,419	30,060,095	244,651,158	482,159
GS Large > 100kV	111,918,411	210,551,018	164,944,327	192,429,439	351,982,445	278,289,984	114,048,914	220,171,924	170,133,665	250,068,576	450,444,875	355,360,441	2,870,344,020	5,657,760
GS >100kV Curtailable	104,521,478	197,564,577	154,075,395	199,688,807	401,528,036	313,480,038	103,918,496	206,177,535	155,871,723	221,881,179	410,625,581	321,585,823	2,790,918,667	5,481,900
Streetslights Z1	33,531	2,732,759	6,572,034	251,481	5,113,445	13,529,672	2,112,440	3,973,398	8,181,512	5,012,853	8,466,523	15,809,766	71,789,413	118,283
Streetslights Z2	13,623	1,110,299	2,670,166	102,175	2,077,553	5,497,001	858,268	1,614,361	3,324,085	2,036,683	3,439,883	6,423,385	29,167,481	48,057
Streetslights Z3	5,253	428,132	1,029,619	39,399	801,107	2,119,650	330,949	622,499	1,281,771	785,347	1,326,423	2,476,864	11,247,013	18,531
Totals	834,779,978	1,511,576,546	993,357,467	1,740,438,519	2,973,318,933	1,881,360,131	946,616,740	1,758,818,187	1,151,920,487	2,287,011,553	3,960,628,361	2,810,651,777	22,850,478,678	46,391,536
Exports	172,635,941	204,989,783	6,913,232	866,515,927	1,369,373,169	321,371,335	367,134,090	644,490,811	243,695,252	520,543,258	960,757,600	393,579,603	6,072,000,000	13,281,951
12 Period Weightings	2.684	1.917	1.380	3.114	2.240	1.000	2.229	1.577	1.084	3.286	1.972	1.588		

2005/2006 Prospective Cost of Service Study  
Prospective Peak Load Responsibility Report  
Export Energy Provided by Hydraulic Resources  
***MH Model of 117/06 Directives***

Export Energy	9,786,000
Purchased Power	(2,010,000)
Thermal	(587,000)
DSM	<u>(1,117,000)</u>
Hydraulic	<u><u>6,072,000</u></u>

Prospective Cost Of Service Study  
 March 31, 2006  
***MH Model of 117/06 Directives***  
 Direct Costs Assigned to Export Class  
 (x 1,000)

<b>Generation</b>	<b>Interest</b>	<b>Depreciation</b>	<b>Operating</b>	<b>Total</b>
Cost of Uniform Rates Reduction	16,708			16,708
Cost of DSM	10,048	7,754		17,801
'Trading Desk' Costs		269	8,783	9,051
NEB Costs		-	1,227	1,227
Purchased Power			67,334	67,334
Thermal Costs			19,276	19,276
<b>Total Direct Costs</b>	<b>\$ 26,756</b>	<b>\$ 8,022</b>	<b>\$ 96,620</b>	<b>\$ 131,398</b>

<b>Transmission</b>	<b>Interest</b>	<b>Depreciation</b>	<b>Operating</b>	<b>Total</b>
MAPP/MISO/NERC costs		26	4,822	4,848
<b>Total Direct Costs</b>	<b>\$ -</b>	<b>\$ 26</b>	<b>\$ 4,822</b>	<b>\$ 4,848</b>

Prospective Cost Of Service Study  
 March 31, 2006  
**MH Model of 117/06 Directives**  
 Classified Costs by Allocation Table

Allocation				Interest	Depreciation	Operating	Misc. Rev	Total
Table	Function							
E12	Generation			426,135	118,076	237,397	(6,388)	775,220
D14	Generation - 2CP			-	-	-	8,180	8,180
				<u>426,135</u>	<u>118,076</u>	<u>237,397</u>	<u>1,792</u>	<u>783,400</u>
D14	Transmission - 2CP			106,816	47,477	47,422		201,715
				<u>106,816</u>	<u>47,477</u>	<u>47,422</u>	<u>-</u>	<u>201,715</u>
D21	Subtrans			5,841	15,177	23,355		44,373
D22	Subtrans	Stations		4,710	-			4,710
D23	Subtrans	Line		24,642	-			24,642
				<u>35,194</u>	<u>15,177</u>	<u>23,355</u>	<u>-</u>	<u>73,726</u>
D32	Dist. Plant	Stn		33,786	16,772	27,987		78,544
D34	Dist. Plant	Z1	Lines	16,835	12,744	6,918		36,497
D35	Dist. Plant	Z2	Lines	9,768	5,101	4,351		19,220
D36	Dist. Plant	Z3	Lines	23,711	18,624	1,862		44,197
D38	Dist. Plant	Z1	S/E	5,341	4,276	2,244		11,861
D39	Dist. Plant	Z2	S/E	3,056	998	887		4,942
D40	Dist. Plant	Z3	S/E	7,302	3,903	1,563		12,767
				<u>99,799</u>	<u>62,418</u>	<u>45,811</u>	<u>-</u>	<u>208,028</u>
C20	Dist. Plant			-				-
C21	Dist. Plant	Z1	Lines	10,650	8,496	4,612		23,758
C22	Dist. Plant	Z2	Lines	6,181	3,401	2,901		12,483
C23	Dist. Plant	Z3	Lines	15,109	12,416	1,242		28,767
C25	Dist. Plant	Z1	Services	2,260				2,260
C26	Dist. Plant	Z2	Services	1,293				1,293
C27	Dist. Plant	Z3	Services	2,062				2,062
C40	Dist. Plant	Meter Investment		3,106	1,525			4,631
C41	Dist. Plant	Meter Mtce.		-		3,586		3,586
				<u>40,661</u>	<u>25,838</u>	<u>12,340</u>	<u>-</u>	<u>78,839</u>
C10	Dist Serv	Cust Service - General		467	3,052	23,680	-	27,198
C11	Dist Serv	Cust Acct - Billings		449	1,766	20,544		22,760
C12	Dist Serv	Cust Acct - Collections		219	826	10,007		11,053
C13	Dist Serv	Marketing - R & D		45	115	1,395		1,555
C14	Dist Serv	Inspection		42	158	1,918		2,118
C15	Dist Serv	Meter Read		189	790	9,571		10,550
C30	Dist Serv	Hot Water Tank Program		-	260	-		260
				<u>1,411</u>	<u>6,967</u>	<u>67,115</u>	<u>-</u>	<u>75,494</u>
	Total Allocated Costs			710,016	275,952	433,441	1,792	1,421,201

Prospective Cost Of Service Study  
 March 31, 2006  
**MH Model of 117/06 Directives**  
 Classified Costs by Allocation Table

Allocation Table	Function		Interest	Depreciation	Operating	Misc. Rev	Total
<b>DIRECTS</b>							
C02	Generation	Diesel	2,405	3,721	3,911		10,037
E01	Generation	Export	26,756	8,022	96,620		131,398
			26,756	8,022	96,620	-	131,398
E01	Generation	SEP - GSM					
E01	Generation	Zone 2	517	140	281		939
E01	Generation	Zone 3	281	76	153		510
E01	Generation	SEP - GSL					
E01	Generation	Zone 3 (GSL 0 - 30kV)	170	46	92		308
			968	262	527	-	1,757
D01	Generation	DSM Direct Assignment - Demand					
D00	Generation	Curtailement (GSL 30-100)				(423)	(423)
D01	Generation	Curtailement (GSL > 100)				(7,757)	(7,757)
			-	-	-	(8,180)	(8,180)
E02	Transmission	Export	-	26	4,822		4,848
D04	Transmission	SEP - GSM					
D04	Transmission	Zone 2	127	56	56		239
D04	Transmission	Zone 3	69	31	31		130
D04	Transmission	SEP - GSL					
D04	Transmission	Zone 3 (GSL 0 - 30kV)	42	18	18		79
			237	105	105	-	448
C01	Distribution	Lighting	3,097	2,398	7,034		12,529
C01	Distribution	Diesel	223	196	383		803
			3,320	2,594	7,417	-	13,331
		Total Directs	33,685	14,731	113,403	(8,180)	153,639
	Total		743,701	290,683	546,844	(6,388)	1,574,840
	Generation		456,264	130,081	338,455	(6,388)	918,412
	Transmission		107,053	47,607	52,350	-	207,010
	Subtransmission		35,194	15,177	23,355	-	73,726
	Distribution Plant		143,780	90,850	65,569	-	300,198
	Distribution Services		1,411	6,967	67,115	-	75,494
			743,701	290,683	546,844	(6,388)	1,574,840
	Energy		453,859	126,360	334,544	(6,388)	908,375
	Demand		242,046	125,202	121,516	-	488,765
	Customer		47,796	39,121	90,784	-	177,701
			743,701	290,683	546,844	(6,388)	1,574,840