



FOR GENERATIONS

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September 16, 2009

Ms. Erica M. Hamilton
Commission Secretary
British Columbia Utilities Commission
Sixth Floor – 900 Howe Street
Vancouver, BC V6Z 2N3

Dear Ms. Hamilton:

RE:

**British Columbia Utilities Commission (BCUC)
British Columbia Hydro and Power Authority (BC Hydro)
F2005/F2006 Revenue Requirements Application
BCUC Decision: October 29, 2004; Directive 69 (page 201)
(AMENDED pursuant to 2006 Integrated Electricity Plan and
2006 Long Term Acquisition Plan
BCUC Decision: May 11, 2006; Directive 16 (page 145-146))**

Attached is BC Hydro's semi-annual filing of the Report on Demand-Side Management Activities for the twelve months ending March 31, 2009.

For further information please contact Lyle McClelland at 604-623-4306.

Yours sincerely,

A handwritten signature in black ink, appearing to read "J. Sofield", written in a cursive style.

Joanna Sofield
Chief Regulatory Officer

Enclosure (1)



Report on Demand-Side Management Activities for Fiscal 2009

September 11, 2009

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1. Introduction

This BC Hydro semi-annual report to the British Columbia Utilities Commission (BCUC) on demand side management (DSM) activities responds to Directive 69 from the BCUC decision on BC Hydro's F2005/F2006 Revenue Requirements Application (F05/F06 RRA) and to Directive 16 from the BCUC decision on BC Hydro's 2006 Integrated Electricity Plan and Long Term Acquisition Plan (2006 IEP/LTAP). The report provides information on DSM expenditures, electricity savings, plan performance, and portfolio-level activities during fiscal 2009 (F2009), or the twelve months ending March 31, 2009.

Directive 69 directed BC Hydro "to provide information to the Commission for on-going review of Power Smart performance through:

- Executive Summaries of milestone evaluation reports and full final evaluation reports for each program.
- Semi-annual reports on DSM activities which, amongst others, will include:
 - detailed breakdown of OMA expenses related to support activities carried out within the Power Smart group and in other departments that support Power Smart organization;
 - detailed description of the functions of portfolio level costs and how these costs are allocated to programs;
 - summaries of the overall performance of Power Smart with reference to program objectives; and
 - variances of fiscal year budgeted and actual deferred capital expenditures and explanation of variances."

Directive 16 directed BC Hydro "to continue to file reports on DSM performance as described in Directive 69 included in Order No. G-96-04 and to file its Semi Annual Demand Side Management Reports in the same format as the June 2005 Report with the following enhancements: Provide annual and cumulative totals since program inception;

- (1) Express these values on a per unit basis; and
- (2) Provide the benefit to cost ratios for the three DSM tests."

BC Hydro is filing evaluation reports as a separate package. This report addresses the balance of Directives 69 and 16 with one exception: since a detailed description of the functions of portfolio level costs is available in BC Hydro's 2008 Long Term Acquisition Plan (LTAP), it is not repeated in this report.¹

In the July 27, 2009 BCUC decision on BC Hydro's 2008 Long Term Acquisition Plan, Directive 38 directed BC Hydro "to include metrics for each initiative, achievements in relation to milestones, and description of past or planned mitigation measures where warranted. These mitigation measures should include shifting program resources and alternative supply options for each program. Ongoing DSM performance reporting should demonstrate how BC Hydro is continuously pursuing DSM and that specific programs are cost-effective."

¹ BC Hydro 2008 LTAP, Exhibit B-1-1, Appendix K, p. 183 of 213.

The development work necessary to include these reporting elements is underway, but is not available for this semi-annual report. Reporting on the Directive 38 elements will be included starting with the first annual report for the year ending March 31, 2010.

2. Expenditures and Electricity Savings in F2009

BC Hydro's DSM expenditures² in F2009 totalled \$107.3 million while incremental DSM electricity savings totalled 468 GWh/year. This was \$22.5 million below and 1 GWh/year above the DSM Plan in BC Hydro's 2008 LTAP. Table 1 presents planned and actual DSM expenditures and incremental electricity savings in F2009.

The DSM expenditure categories presented in Tables 1 and 2 align with those in BC Hydro's DSM plans.

² Comprising all DSM-related deferred operating and specific capital expenditures and operating expenditures that are relevant for DSM cost-effectiveness, such as those related to rate structures. Other DSM operating expenditures are presented in Table 6 of this report.

Table 1 Expenditures and Incremental Electricity Savings in F2009

	Expenditures ¹ (\$000)				Incremental Electricity Savings (GWh/yr)			
	Plan ²	Actual ³	Variance	%	Plan ²	Actual	Variance	%
Codes and Standards⁴								
Residential	-	-	-	-	8	4	(4)	(49%)
Commercial	-	-	-	-	0	-	(0)	(100%)
<u>Industrial</u>	-	-	-	-	-	-	-	n/a
Total Codes and Standards	-	-	-	-	9	4	(5)	(51%)
Rate Structures								
Residential	5,370	3,688	(1,682)	(31%)	70	94	24	34%
Commercial	3,560	2,593	(967)	(27%)	-	-	-	n/a
<u>Industrial</u>	1,000	610	(390)	(39%)	- ⁵	- ⁵	-	n/a
Total Rate Structures	9,930	6,891	(3,039)	(31%)	70	94	24	n/a
Energy Efficiency Programs								
Residential Sector								
Behaviour	8,690	1,351	(7,339)	(84%)	3	2	(1)	(42%)
Voltage Optimization	5,150	3,165	(1,985)	(39%)	16	4	(12)	(78%)
Lighting	2,620	2,525	(95)	(4%)	6	14	8	119%
Sustainable Community	870	-	(870)	(100%)	0	0	-	-
Refrigerator Buy-Back	4,290	4,950	660	15%	17	19	2	11%
Low Income	3,680	1,339	(2,341)	(64%)	4	2	(2)	(46%)
New Home	1,250	1,519	269	22%	4	7	3	70%
Appliances and Electronics	4,170	5,460	1,290	31%	3	5	2	75%
Renovation Rebate	1,420	1,193	(227)	(16%)	4	5	0	12%
<u>Sector Enabling Activities</u>	1,280	1,897	617	48%	-	-	-	-
Sector Total	33,420	23,401	(10,019)	(30%)	58	57	(0)	(1%)
Commercial Sector								
Power Smart Partners	14,030	17,726	3,696	26%	29	37	8	28%
Product Incentive	11,700	7,920	(3,780)	(32%)	50	63	14	28%
High Performance Buildings	4,150	3,721	(429)	(10%)	6	9	3	54%
Voltage Optimization	1,720	1,055	(665)	(39%)	5	1	(4)	(77%)
Sustainable Community	220	-	(220)	(100%)	-	-	-	-
<u>Sector Enabling Activities</u>	1,600	2,100	500	31%	-	-	-	-
Sector Total	33,420	32,523	(897)	(3%)	89	111	21	24%
Industrial Sector								
Mechanical Pulping	-	-	-	-	-	-	-	-
Power Smart Partner - Transmission	12,760	6,443	(6,317)	(50%)	229 ⁶	189 ⁶	(40)	(18%)
Power Smart Partner - Distribution	8,020	5,963	(2,057)	(26%)	11	12	1	13%
New Plant Design	1,290	729	(561)	(43%)	0	1	0	67%
<u>Sector Enabling Activities</u>	1,100	1,283	183	17%	-	-	-	-
Sector Total	23,170	14,418	(8,752)	(38%)	240	202	(38)	(16%)
Total EE Programs	90,010	70,342	(19,668)	(22%)	387	370	(18)	(5%)
Load Displacement Programs								
Residential	-	-	-	-	-	-	-	-
Commercial	-	-	-	-	-	-	-	-
Industrial	-	-	-	-	-	-	-	-
Total LD Programs	-	-	-	-	-	-	-	-
Total Programs (EE+LD)	90,010	70,342	(19,668)	(22%)	387	370	(18)	(5%)
Portfolio Level Activities								
Public Awareness & Education	8,300	8,469	169	2%	-	-	-	-
Community Engagement	7,000	7,749	749	11%	-	-	-	-
Technology Innovation	1,200	1,418	218	18%	-	-	-	-
Codes & Standards Support	1,960	1,295	(665)	(34%)	-	-	-	-
Information Technology	2,330	1,875	(455)	(20%)	-	-	-	-
<u>Indirect & Portfolio Enabling</u>	9,100	9,290	190	2%	-	-	-	-
Total Portfolio Level	29,890	30,095	205	1%	-	-	-	-
Total DSM	129,830	107,328	(22,502)	(17%)	467	468	1	0%

Note: Numbers are rounded.

¹ Including all DSM-related deferred operating and specific capital expenditures and operating expenditures that are relevant for DSM cost-effectiveness.

² Plan figures are from BC Hydro's 2008 LTAP.

³ To align with the DSM Plan activities and expenditures presented in BC Hydro's 2008 LTAP, which cover the years F2008 forward, these figures do not include \$10.7 million in incentive refunds received in F2009 relating to DSM program activity before F2008.

⁴ Expenditures for Codes and Standards Support are reported under Portfolio Level Activities.

⁵ A combined estimate of savings from both the Transmission Service Rate and Power Smart Partner – Transmission program is presented below in the Power Smart Partner-Transmission program line. Upon an evaluation of F2009 energy savings from the Transmission Service Rate and Power Smart Partner-Transmission program, BC Hydro will assess reporting separate estimates of savings from each initiative.

⁶ Includes estimated electricity savings resulting from the Transmission Service Rate.

The following are explanations for the above variances:

Codes and Standards	
Residential	Electricity savings were below plan due to a delay in the federal government's introduction of a regulation for ceiling fans. The regulation was enacted in December 2008 and the first stage of the regulation will take effect in 2010.
Commercial	Electricity savings were below plan due to a delay in the federal government's introduction of a regulation for ice-cube makers and commercial clothes washers. The regulation was expected to take effect in early 2008 but instead took effect in December 2008.
Industrial	No new industrial codes and standards savings were planned.
Rate Structures	
Residential	Expenditures were below plan due to fewer than planned telephone calls from customers in response to the introduction of the Residential Inclining Block (RIB) rate and the postponement of selected communication activities. Electricity savings were above plan due to differences between the assumed rate structure and that approved by the BCUC and between forecast and actual residential load.
Commercial	Expenditures were below plan because F2009 activities involved in restructuring the Large General Service rate, which covers the Commercial and Industrial sectors, cost less than planned.
Industrial	Expenditures were below plan because F2009 activities involved in restructuring the Large General Service rate, which covers the Commercial and Industrial sectors, cost less than planned and due to later than planned hiring of staff.
Energy Efficiency Programs	
Residential Sector	
Behaviour	Expenditures and electricity savings were below plan due to program development taking longer than anticipated and the initial deployment of In-Home Displays as part of the Smart Metering and Infrastructure program not occurring as planned in F2009.
Voltage Optimization	Expenditures were below plan due to the implementation of voltage optimization taking longer than planned and due to human resource constraints, now resolved, resulting in further delays. Electricity savings were below plan due to unanticipated BCTC work preventing voltage optimization systems from operating. The BCTC work has since concluded and voltage optimization has resumed.
Lighting	Expenditures were approximately on plan. Electricity savings were above plan due to higher than planned program activity as a result of BC Hydro securing the participation of more retail partners and a greater share of CFL multi-packs.
Sustainable Community	Expenditures were below plan as internal resource constraints, now resolved, resulted in a delay in launching the program. No savings were planned.
Refrigerator Buy-Back	Electricity savings and expenditures were above plan due to higher than planned program participation as a result of a strong response to advertising and cross-promotions with other programs.
Low Income	Expenditures and electricity savings were lower than planned due to delays in launching the audit and retrofit element of the program as a result of privacy issues. This element of the program is expected to launch in F2010.

New Home	Expenditures were below plan due to lower than anticipated program participation due to a slowdown in new housing starts. Electricity savings were above plan due to the mix of program participants including more electrically heated customers than planned.
Appliances and Electronics	Expenditures and electricity savings were above plan due to a higher than anticipated customer response to the program offer.
Renovation Rebate	Expenditures and electricity savings were higher than planned due to higher than planned program participation as a result of strong contractor and energy advisor interest in the program.
Sector Enabling Activities	Expenditures were above plan due to higher than anticipated costs associated with strategy development intended to increase the effectiveness of residential programs.
Commercial/ Government Sector	
Power Smart Partner	Expenditures were above plan due to changes to the program offer and communication strategy and the launch of new program components as well as higher than planned participation in response to these changes. Electricity savings were above plan due to this increase in participation.
Product Incentive	Expenditures were below plan as the mix of technologies selected by program participants resulted in fewer incentive costs than planned. Electricity savings were above plan due to higher than planned participation in response to a changed program offer, application process and communication strategy.
High Performance Buildings	Expenditures were below plan due to the projects selected by program participants resulting in less incentive costs than planned and internal resource constraints, now resolved, resulting in the delay of some planned activities. Electricity savings were above plan due to more projects reaching completion than planned.
Voltage Optimization	See Residential Sector.
Sustainable Community	See Residential Sector.
Sector Enabling Activities	Expenditures were above plan due to higher than anticipated costs associated with strategy development intended to increase the effectiveness of commercial programs.
Industrial Sector	
Mechanical Pulping	The program is currently embedded within the Power Smart Partner – Transmission program. Mechanical Pulping costs and savings will be accounted for separately in future years.
Power Smart Partner – Transmission	Expenditures were below plan due to lower than planned program participation, in part due to economic conditions. Electricity savings were below plan due to selected customers reducing their level of self-generation as a result of economic conditions. This incremental self-generation came online in F2008 in response to the Transmission Service Rate and Power Smart Partner – Transmission program support and its reduction in F2009 factors into the calculation of net incremental electricity savings in F2009.
Power Smart Partner – Distribution	Expenditures were below plan due to some energy savings requiring fewer incentives than planned and a longer than expected lag between project initiation and completion when incentive payments are paid. Electricity savings were slightly above plan due to a higher than expected volume of savings from selected projects.
New Plant Design	Expenditures were below plan due to human resource constraints, now resolved, reducing the volume of program marketing activities, which led to a lower volume of studies than planned. Electricity savings were above plan due to a selection of projects completing faster than anticipated.

Sector Enabling Activities	Expenditures were above plan due to higher than anticipated costs associated with strategy development intended to increase the effectiveness of industrial programs.
Energy Efficiency Programs Total	Expenditures were below plan largely due to lower than planned costs in six programs: Behaviour, Power Smart Partner – Transmission, Product Incentive, Low Income, Voltage Optimization and Power Smart Partner – Distribution. Electricity savings were approximately on plan.
Load Displacement	No expenditures or savings were planned.
Portfolio Level Costs	
Public Awareness & Education	Expenditures were approximately on plan.
Community Engagement	Expenditures were above plan due to higher than anticipated communication costs associated with the Power Smart Leaders initiative.
Technology Innovation	Expenditures were above plan due to the need for more resources than anticipated to support Technology Innovation projects, such as engineering and measurement and verification.
Codes and Standards Support	Expenditures were below plan due to BC Hydro leveraging greater than planned co-funding from other utilities and governments for standards development work by the Canadian Standards Association and less than planned labour and consulting costs.
Information Technology	Expenditures were below plan due to two projects planned for F2009 being shifted to F2010. The first project was delayed to capture synergies with another related project and the second, a project involving a number of external partners, is awaiting the completion of partnership agreements before moving to implementation.
Indirect and Portfolio Enabling Activities	Expenditures were approximately on plan.
Total DSM	Expenditures were below plan due to lower than planned costs for rate structures and energy efficiency programs. Electricity savings were on plan.

3. Expenditures to Date

BC Hydro's DSM expenditures from F2008 through F2009 totalled \$176.5 million. Table 2 presents DSM expenditures from F2008 to F2009.

Table 2 Expenditures since F2008¹

\$000	F2008 ²	F2009	Total
Rate Structures			
Residential	1,164	3,688	4,852
Commercial	44	2,593	2,637
Industrial	269	610	879
Total Rate Structures	1,477	6,891	8,368
Energy Efficiency Programs			
Residential Sector			
Behaviour	-	1,351	1,351
Voltage Optimization	2,011	3,165	5,177
Lighting	3,007	2,525	5,532
Sustainable Community	-	-	-
Refrigerator Buy-Back	4,014	4,950	8,964
Low Income	113	1,339	1,452
New Home	1,431	1,519	2,950
Appliances and Electronics	1,035	5,460	6,495
Renovation Rebate	549	1,193	1,742
<u>Sector Enabling Activities</u>	<u>2,229</u>	<u>1,897</u>	<u>4,126</u>
Sector Total	14,389	23,401	37,790
Commercial Sector			
Power Smart Partners	10,723	17,726	28,450
Product Incentive	2,842	7,920	10,762
High Performance Buildings	2,163	3,721	5,884
Voltage Optimization	670	1,055	1,726
Sustainable Community	-	-	-
Sector Enabling Activities	1,374	2,100	3,474
Sector Total	17,773	32,523	50,295
Industrial Sector			
Mechanical Pulping	-	-	-
Power Smart Partner - Transmission	8,223	6,443	14,666
Power Smart Partner - Distribution	1,351	5,963	7,314
New Plant Design	310	729	1,038
<u>Sector Enabling Activities</u>	<u>1,219</u>	<u>1,283</u>	<u>2,502</u>
Sector Total	11,103	14,418	25,521
Total EE Programs	43,264	70,342	113,606
Load Displacement Programs			
Residential	-	-	-
Commercial	-	-	-
Industrial	-	-	-
Total LD Programs	-	-	-
Total Programs (EE+LD)	43,264	70,342	113,606
Portfolio Level Activities			
Public Awareness & Education	11,295	8,469	19,763
Community Engagement	-	7,749	7,749
Technology Innovation	-	1,418	1,418
Codes & Standards Support	377	1,295	1,672
Information Technology	1,520	1,875	3,395
<u>Indirect & Portfolio Enabling</u>	<u>11,231</u>	<u>9,290</u>	<u>20,521</u>
Total	24,422	30,095	54,518
Total DSM	69,163	107,328	176,491

Note: Numbers are rounded.

¹ Comprising all DSM deferred operating and specific capital expenditures and operating expenditures that are relevant for DSM cost-effectiveness

² These expenditures differ slightly from the F2008 actual expenditures presented in BC Hydro's Report on Demand Side Management for F2008 due to the inclusion of expenditures for Rate Structures and Voltage Optimization in order to align with DSM expenditures presented in BC Hydro's 2008 LTAP. Also, to align with those same expenditures, which cover the years F2008 forward, these figures do not include \$10.7 million in incentive refunds received in F2009 relating to DSM program activity before F2008.

4. Plan Performance

BC Hydro's DSM electricity savings since F2008 totalled 983 GWh/year at March 31, 2009, representing 9 per cent of BC Hydro's F2020 target of 10,606 GWh/year in BC Hydro's 2008 LTAP. Table 3 presents these figures by codes and standards, rate structures and programs.³

Table 3 Cumulative Electricity Savings at March 31, 2009¹

GWh/year	Cumulative Electricity Savings at March 31, 2009	F2020 Target	% of F2020 Target
Codes and Standards			
Residential	4	2,763	0%
Commercial	0	500	0%
<u>Industrial</u>	<u>0</u>	<u>106</u>	<u>0%</u>
Total Codes and Standards	4	3,369	0%
Rate Structures			
Residential	94	978	10%
Commercial	0	387	0%
<u>Industrial</u>	<u>0</u> ²	<u>727</u>	<u>0%</u>
Total Rate Structures	94	2,092	4%
Energy Efficiency Programs			
Residential Sector			
Behaviour	3	309	1%
Voltage Optimization	4	231	2%
Lighting	85	148	57%
Sustainable Community	0	114	0%
Refrigerator Buy-Back	47	91	52%
Low Income	2	73	3%
New Home	15	35	43%
Appliances and Electronics	5	35	15%
<u>Renovation Rebate</u>	<u>8</u>	<u>23</u>	<u>36%</u>
Sector Total	169	1059	16%
Commercial Sector			
Power Smart Partners	66	666	10%
Product Incentive	92	448	21%
High Performance Buildings	12	238	5%
Voltage Optimization	1	77	2%
<u>Sustainable Community</u>	<u>0</u>	<u>28</u>	<u>0%</u>
Sector Total	172	1457	12%
Industrial Sector			
Mechanical Pulping	0	941	0%
Power Smart Partner - Transmission	518 ³	742	70%
Power Smart Partner - Distribution	25	698	4%
<u>New Plant Design</u>	<u>1</u>	<u>118</u>	<u>1%</u>
Sector Total	544	2499	22%
Total EE Programs	885	5016	18%
Load Displacement Programs			
Residential	0	11	0%
Commercial	0	25	0%
<u>Industrial</u>	<u>0</u>	<u>93</u>	<u>0%</u>
Total LD Programs	0	129	0%
Total Programs (EE+LD)	885	5,146	17%
Total DSM	983	10,606	9%

Note: Numbers are rounded.

¹ Table 3 does not present annual incremental electricity savings because, over time, the sum of incremental electricity savings will not equal the cumulative total due to some previous savings retiring in light of persistence. To avoid confusion and in order to manage the volume of data in the report, annual incremental electricity savings are not presented here. Annual Electricity savings for prior years are available in Table 1 of previous reports.

² A combined estimate of savings from both the Transmission Service Rate and Power Smart Partner – Transmission program is presented below in the Power Smart Partner-Transmission program line. Upon an evaluation of F2009 energy savings from the Transmission Service Rate and Power Smart Partner-Transmission program, BC Hydro will assess reporting separate estimates of savings from each initiative.

³ Includes estimated electricity savings resulting from the Transmission Service Rate.

³ Table 3 does not reflect the reduction in planned DSM savings presented in the Evidentiary Update to the 2008 LTAP because the Update only contained a new estimate of the DSM Plan's total savings.

The DSM electricity savings presented in Table 3 have been achieved at an average utility cost of 1.9 cents/kWh. Table 4 presents the levelized utility cost of actual DSM electricity savings achieved from F2008 through F2009. Selected programs have relatively high utility costs due to initial ramp up costs and/or lags between program costs and electricity savings coming online.

Table 4 Utility Cost of Electricity Savings: F2008 to F2009

	Levelized Utility Cost (cents/kWh)
Rate Structures	
Residential	1.0
Commercial	n/a
<u>Industrial¹</u>	<u>n/a</u>
Total Rate Structures	1.2
Energy Efficiency Programs	
Residential Sector	
Behaviour	3.5
Voltage Optimization	10.9
Lighting	1.5
Sustainable Community	n/a
Refrigerator Buy-Back	3.3
Low Income	7.2
New Home	2.4
Appliances and Electronics	12.2
<u>Renovation Rebate</u>	<u>2.7</u>
Sector Total	3.0
Commercial Sector	
Power Smart Partners	4.6
Product Incentive	2.5
High Performance Buildings	5.0
Voltage Optimization	10.6
Sustainable Community	<u>n/a</u>
Sector Total	3.9
Industrial Sector	
Mechanical Pulping	n/a
Power Smart Partner - Transmission ²	0.6
Power Smart Partner - Distribution	3.8
<u>New Plant Design</u>	<u>18.6</u>
Sector Total	0.8
Total EE Programs	2.0
Load Displacement Programs	
Residential	n/a
Commercial	n/a
<u>Industrial</u>	<u>n/a</u>
Total LD Programs	n/a
Total Programs (EE+LD)	2.0
Total DSM	1.9

¹ A combined estimate of the levelized utility cost for both the Transmission Service Rate and Power Smart Partner – Transmission program is presented below in the Power Smart Partner-Transmission program line. Upon an evaluation of F2009 energy savings from the Transmission Service Rate and Power Smart Partner-Transmission program, BC Hydro will assess reporting separate levelized utility costs for each initiative.

² The levelized utility cost of the Power Smart Partner – Transmission program includes estimated electricity savings resulting from the Transmission Service Rate.

The DSM electricity savings presented in Table 3 have been substantially lower cost than new electricity supply, with an All Ratepayers Test benefit-cost ratio of 2.3. Table 5 presents benefit cost ratios of actual DSM electricity savings achieved from F2008 through F2009.

Table 5 Benefit-Cost Ratios of Electricity Savings: F2008 to F2009

	Benefit Cost Ratios		
	Utility Test	All Ratepayers Test	Non Participant Test ⁴
Rate Structures			
Residential	10.7	10.7	1.0
Commercial	n/a	n/a	n/a
Industrial ¹	<u>n/a</u>	<u>n/a</u>	<u>n/a</u>
Total Rate Structures	9.1	9.1	1.0
Energy Efficiency Programs			
Residential Sector			
Behaviour	3.2	3.2	1.0
Voltage Optimization	1.0	1.0	0.6
Lighting	8.1	3.5	1.3
Sustainable Community	n/a	n/a	n/a
Refrigerator Buy-Back	3.1	3.6	0.9
Low Income ²	1.7	1.5	0.8
New Home	4.1	1.0	1.0
Appliances and Electronics	0.8	2.3	0.5
<u>Renovation Rebate</u>	<u>4.1</u>	<u>1.3</u>	<u>0.9</u>
Sector Total	3.8	2.3	1.0
Commercial Sector			
Power Smart Partners	2.3	2.2	0.8
Product Incentive	4.2	2.5	1.0
High Performance Buildings	2.1	1.4	0.9
Voltage Optimization	1.0	1.0	0.6
<u>Sustainable Community</u>	<u>n/a</u>	<u>n/a</u>	<u>n/a</u>
Sector Total	2.7	2.1	0.8
Industrial Sector			
Mechanical Pulping	n/a	n/a	n/a
Power Smart Partner - Transmission ³	17.5	1.9	1.5
Power Smart Partner - Distribution	2.8	1.8	0.9
<u>New Plant Design</u>	<u>0.6</u>	<u>0.6</u>	<u>0.5</u>
Sector Total	12.2	1.9	1.4
Total EE Programs	5.3	2.0	1.1
Load Displacement Programs			
Residential	n/a	n/a	n/a
Commercial	n/a	n/a	n/a
Industrial	n/a	n/a	n/a
Total LD Programs	n/a	n/a	n/a
Total Programs (EE+LD)	5.3	2.0	1.1
Total DSM	5.7	2.3	1.1

¹ A combined view of the benefit cost ratios from both the Transmission Service Rate and Power Smart Partner – Transmission program is presented below in the Power Smart Partner-Transmission program line. Upon an evaluation of F2009 energy savings from the Transmission Service Rate and Power Smart Partner-Transmission program, BC Hydro will assess reporting separate benefit cost ratios for each initiative.

² The All Ratepayers Test benefit-cost ratio for the Low Income program includes a 30 per cent adder to program benefits, in keeping with the 2008 DSM regulation (Ministerial Order M 271).

³ The benefit cost ratios of the Power Smart Partner – Transmission program includes estimated of electricity savings resulting from the Transmission Service Rate.

⁴ While the 2008 DSM regulation precludes the use of the Non Participant Test in determining cost-effectiveness of a demand-side measure, this benefit cost ratio is included in the table consistent with Directive 16 from the BCUC decision on BC Hydro's 2006 IEP/LTAP.

5. Operating Expenditures in F2009

BC Hydro's DSM operating expenditures in F2009 totalled \$2.5 million.⁴ Table 6 presents DSM operating expenditures in F2009.

Table 6 Operating Expenditures in F2009 (\$ 000)

ABS Services	156
Building and Equipment	160
External Recoveries	(24)
Internal Services Received	59
Labour	1,948
Materials	23
Other	2
Services	158
Total	2,482

6. Allocation of Portfolio-Level Costs to Programs⁵

This section describes how portfolio-level costs are allocated to programs for the purpose of cost test calculations. In keeping with Directive 61 from the BCUC decision on the F05/F06 RRA, for the purposes of this report portfolio-level costs are allocated to DSM programs and rate structures based on their share of DSM electricity savings in F2018, excluding codes and standards savings. For example, rate structures and programs are forecast to save roughly 6,554 GWh/year in F2018, so a program that is forecast to save 65 GWh/year in F2018 represents one per cent of the total. In turn, one per cent of portfolio-level costs would be allocated to that program in each year.

⁴ DSM operating expenditures relevant for DSM cost-effectiveness, such as those related to rate structures, are reported in Table 1 and not included here.

⁵ Previous reports provided a description of the functions of portfolio level costs. However since this description is available in BC Hydro's 2008 LTAP (Exhibit B-1-1, Appendix K, p. 183 of 213), it is not repeated in this report.