

August 26, 2010

Via Email
Original via mail

Ms. Erica M. Hamilton
Commission Secretary
BC Utilities Commission
Sixth Floor, 900 Howe Street, Box 250
Vancouver, BC V6Z 2N3

Dear Ms. Hamilton:

Re: *FortisBC Inc. Application for Approval of the 2011 Capital Expenditure Plan – Project No. 3698603*

FortisBC provides the following errata to its 2011 Capital Expenditure Plan Application. Replacement pages are attached.

- 1. 2011 Capital Expenditure Plan Application, Page 18, Line 7**
“repairing the brakes” should read “replacing the entire brake assembly”
- 2. 2011 Capital Expenditure Plan Application, Page 68, Line 22**
“\$500” should read “\$1,000”
- 3. 2011 Capital Expenditure Plan Application, Page 72, Table 7.1**
Residential TRC Benefit/Cost Ratio of “1.8” should read “1.9”
General Service TRC Benefit/Cost Ratio of “2.7” should read “2.8”
Subtotal Programs TRC Benefit/Cost Ratio of “2.4” should read “2.5”
Total TRC Benefit/Cost Ratio of “2.2” should read “2.3”
- 4. 2011 Capital Expenditure Plan Application, Page 73, Table 7.2**
Appliances TRC Benefit/Cost Ratio of “1.4” should read “3.0”
Total TRC Benefit/Cost Ratio of “1.8” should read “1.9”

5. **2011 Capital Expenditure Plan Application, Page 73, Table 7.3**
Municipal TRC Benefit/Cost Ratio of “3.9” should read “4.0”
Total TRC Benefit/Cost Ratio of “2.7” should read “2.8”

6. **2011 Capital Expenditure Plan Application, Appendix 3 (2011 Demand Side Management Plan), Page 21, Table 3.2.1**
Appliances TRC Ratio of “1.4” should read “3.0”
Residential Total TRC Ratio of “1.8” should read “1.9”

7. **2011 Capital Expenditure Plan Application, Appendix 3 (2011 Demand Side Management Plan), Page 22, Table 3.2.2**
Municipal TRC Ratio of “3.9” should read “4.0”
General Service Total TRC Ratio of “2.7” should read “2.8”

8. **2011 Capital Expenditure Plan Application, Appendix 3 (2011 Demand Side Management Plan), Page 24, Table 3.3.1**
Residential TRC B/C Ratio of “1.8” should read “1.9”
General Service TRC B/C Ratio of “2.7” should read “2.8”
Programs sub-total TRC B/C Ratio of “2.4” should read “2.5”
Total Expenditure TRC B/C Ratio of “2.2” should read “2.3”

9. **Appendix D (Conservation and Demand Potential Review) to the 2011 Demand Side Management Plan (Appendix 3 to the 2011 Capital Expenditure Plan), Page 127, Table 69**
The unit of measurement “MWh” in the Table 69 title should read “GWh”

Sincerely,



Dennis Swanson
Director, Regulatory Affairs

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**Table 2.2
All Plants Minor Sustaining Capital**

1		2011	2012	Total
2		(\$000s)		
3	All Plants Power House Crane Brakes	231		231
4	UBO Extension Power House Crane Upgrade	241		241
5	Projects Under \$150,000	485		485
6	Total	957		957

All Plants Power House Crane Brakes

The All Plants Power House Crane Brakes project is required as the existing brakes have recently been slipping under heavy loads, imposing a risk to employee safety. The project consists of replacing the entire brake assembly on the main and auxiliary hooks at all four powerhouse cranes at the FBC plants.

Upper Bonnington Extension Power House Crane Upgrade

The Upper Bonnington Extension Power House Crane Upgrade project involves the installation of new equipment primarily to meet WorkSafe BC Occupational Health and Safety Regulation Part 14.2. The Upper Bonnington Crane, which is of the same vintage as those previously upgraded at the Lower Bonnington, Corra Linn, and South Slocan plants, has deficiencies in various crane functions and also extensive wear from past usage. Following an assessment of the crane, it is expected that the project will include components similar to those performed on the previously upgraded cranes, such as adding bridge and trolley mechanical end stops and adding upper and lower travel limit switches on both hooks and may involve replacing the load display system, programmable logic controller and drive modifications, auxiliary hooks, non-destructive testing inspections, runway alignment and block sheave guards.

1 crews. The Company-owned Benvoulin Road site accommodates Kelowna Network Operations
2 and Fleet Maintenance. Neither site is large enough to accommodate both groups.

3 Having two operations sites in Kelowna results in inefficient disbursement of material to crews,
4 disjointed operations among Planning and Construction and Maintenance crews, lost
5 productivity due to travel between sites in heavy traffic, and lost efficiencies in utilization of
6 administrative functions.

7 FortisBC is requesting approval of expenditures of \$0.489 million in 2011 for a review of
8 existing owned sites and development of alternative building and site plans.

9 **FURNITURE AND FIXTURES**

10 This project is required for the replacement of deteriorated furniture and the
11 addition/modification of furniture to accommodate changing needs within the organization.

12 In 2003, the Company undertook an inventory of furniture at all sites. At that time the condition
13 of the furniture was assessed placing it in one of 3 categories (disposal, poor and good). Using
14 this process together with the Company's Environment, Health and Safety Standard 108,
15 (Section 2.2) "Monitoring the Work Environment", the capital requirements are upgraded each
16 year. Typically chairs are replaced every five years and workstations are reviewed for
17 functionality every eight to ten years. The estimated expenditure for this project is \$0.176
18 million in 2011.

19 **TOOLS AND EQUIPMENT**

20 This project involves the purchase of tools and equipment necessary to construct, operate, and
21 maintain the generation, transmission, and distribution system. This budget covers all capital
22 expenditures for tools and equipment in excess of \$1,000 and includes replacement tools that
23 have reached the end of their service life and additional tools that are more appropriate for the
24 various trades from an ergonomic and/or safety perspective.

25 The estimated expenditure for this project is \$0.601 million in 2011.

26 **PCB ENVIRONMENTAL COMPLIANCE**

27 FortisBC established a Polychlorinated Biphenyls ("PCB") testing program in response to
28 Environment Canada's review of PCB regulations and release of a draft regulation in 2002.

1 (b) to take demand-side measures and to conserve energy, including the objective of the
 2 authority reducing its expected increase in demand for electricity by the year 2020
 3 by at least 66%.

4 These projects facilitate the Policy Actions contained in the Energy Plan, in particular Policy
 5 Actions:

6 (2) ensure a coordinated approach to conservation and efficiency is actively pursued in
 7 British Columbia; and

8 (3) encourage utilities to pursue cost effective and competitive demand side
 9 management opportunities.

10 The 2011 DSM Plan was also developed in the context of the DSM Regulation, as discussed in
 11 the plan document attached as Appendix 3.

12 Table 7.1 below shows the proposed 2011 DSM energy savings, expenditures (nominal and net
 13 of tax), and Benefit/Cost Ratios by program sector or component.

14 **Table 7.1**
 15 **2011 Demand Side Management Plan**

1	Sector/Component	Savings	Cost	TRC
2		MWh	(\$000s)	Benefit/Cost
3	Residential	16,422	3,636	1.8
4	General Service	13,940	2,118	2.8
5	Industrial	9,360	613	4.8
6	Subtotal Programs	39,722	6,367	2.5
7	Supporting Initiatives		725	
8	Planning and Evaluation		750	
9	Total	39,722	7,842	2.3
10	Income Tax Impact		(2,078)	
11	Total (Net of Tax)		5,764	

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 17 The following tables illustrate the Residential General Service and Industrial Programs and
 18 include energy savings, program costs, Total Resource Cost (“TRC”), and status of the program
 19 components compared to existing programs.

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**Table 7.2
Residential Programs**

1		Savings	Cost	TRC	Status
2		MWh	(\$000s)	Benefit/Cost	
3	Building Envelope	5,460	1,379	1.7	Enhanced
4	Heat Pumps	3,397	694	1.4	Enhanced
5	Lighting	3,420	438	2.4	Enhanced
6	New Home	105	54	1.4	Enhanced
7	Appliances	680	245	3.0	New
8	Electronics	180	49	4.8	New
9	Water heating	960	162	2.1	New
10	Low Income	540	305	3.0	Enhanced
11	Behavioural	1,680	310	6.8	Enhanced
12	Total	16,422	3,636	1.9	

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**Table 7.3
General Service Programs**

1		Savings	Cost	TRC	Status
2		MWh	(\$000s)	Benefit/Cost	
3	Lighting	7,130	1,080	2.4	Enhanced
4	Street Lighting				New
5	Building Improvement	3,010	572	2.8	Enhanced
6	Weatherization				
7	Building envelope				
8	Refrigeration				
9	HVAC				
10	Pumps and fans				
11	Compressed air				
12	Computers	240	34	2.6	Enhanced
13	Servers/Networks				New
14	Municipal	3,560	432	4.0	Enhanced
15	Wastewater				
16	Irrigation				
17	Total	13,940	2,118	2.8	

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1 administration costs are based on the existing 2010 approved expenditures, prudently escalated, with the
 2 addition of staffing required to administer the higher level of program participation.

3 The measure benefits are based on unit savings and measure life, sourced from the CDPR report,
 4 multiplied by the avoided power purchase costs provided in the assumptions section 5.0 of the 2011
 5 DSM Plan.

6 The CDPR report excludes from program achievable savings all known (provincial and federal) Codes
 7 and Standards through the appropriate UEC (unit energy consumption) – for products regulated
 8 beforehand, or by modification of the ramp rates for affected measures – for products to be regulated in
 9 the future.

10 **3.2 Plan Overview**

11 The 2011 DSM Plan portfolio includes programs for the residential, general service, industrial and
 12 irrigation sectors and is intended to capture potential savings identified in the CDPR. It also includes new
 13 programs that have been specified as part of the DSM Regulations issued in November 2008 pursuant to
 14 the UCA as described above.

15 The following tables illustrate the Residential General Service and Industrial Programs and include kWh
 16 savings, the program costs, the TRC, and status of the program components.

17 **Table 3.2.1: Residential Programs in the 2011 DSM Plan**

Residential Programs				
Program Description	MWh	Cost (\$000s)	TRC	Status
Building Envelope	5,460	1,379	1.7	Enhanced
Heat Pumps	3,397	694	1.4	Enhanced
Lighting	3,420	438	2.4	Enhanced
New Home	105	54	1.4	Enhanced
Appliances	680	245	3.0	New
Electronics	180	49	4.8	New
Water heating	960	162	2.1	New
Low Income	540	305	3.0	Enhanced
Behavioural	1,680	310	6.8	Enhanced
Residential Total	16,422	3,636	1.9	

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Table 3.2.2: General Service Programs in the 2011 DSM Plan

General Service Programs				
Program Description	MWh saved	Cost (\$000s)	TRC	Status
Lighting Street Lighting	7,130	1080	2.4	Enhanced New
Building Improvement Weatherization Building envelope Refrigeration HVAC Pumps and fans Compressed air	3,010	572	2.8	Enhanced
Computers Servers/Networks	240	34	2.6	Enhanced New
Municipal Wastewater Irrigation	3,560	432	4.0	Enhanced
General Service Total	13,940	2,118	2.8	

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Table 3.2.3: Industrial Programs in the 2011 DSM Plan

Industrial Efficiency Programs				
Program Description	MWh saved	Cost (\$000s)	TRC	Status
Integrated Building Optimization	80	10	0.5	New
Industrial Efficiency Lighting Pumps and fans Refrigeration Motor rewinds Compressed air Information systems	9,280	603	5.2	Enhanced
Industrial Total	9,360	613	4.8	

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4 In addition, the 2011 Plan includes several components which will complement and support the incentive-
5 based programs listed above.

3.3 Planning and Evaluation

(a) This component of the DSM budget includes provisions for the programs manager, technical and reporting staff, as well as external expertise and facilitating the DSM Advisory Committee. Additional management, planning and evaluation of the escalated DSM activities are required to properly plan and control the proposed DSM expenditures and ensure the increased resource acquisition goals are prudently met.

(b) The Company filed a Monitoring & Evaluation (M&E) plan in 2008, for the 3-year period 2009-2011 inclusive. This plan is critical to ensure that the increased program expenditures will yield the savings expected and that the programs are operating effectively. To that end, a newly-hired M&E analyst will provide timely review of pilot initiatives before they are scaled up, and provide oversight of external M&E consulting reports on existing programs.

Table 9 shows all 2011 Plan costs and associated electrical savings.

Table 3.3.1: Summary of 2011 DSM Plan

Summary of 2011 Plan			
Sector/Component	Savings (MWh)	Budget (\$000s)	TRC B/C
Residential	16,422	3,636	1.9
General Service	13,940	2,118	2.8
Industrial	9,360	613	4.8
Programs sub-total	39,722	6,367	2.5
Supporting Initiatives		725	
Planning & Evaluation		750	
Total Expenditure	39,722	7,842	2.3

3.4 Programs

Based on the aforementioned criteria and local market knowledge, program components were developed. The following briefly outlines a description of each incentive program and the primary delivery mechanisms to be deployed. All programs are new or enhanced in 2011, as described in Tables 3.2.1, 3.2.2 and 3.2.3.

Combined CDM Potential Summary

Table 68 summarizes the energy efficiency savings potential for all sectors. The savings estimates below are for program achievable potential (savings from codes and standards are excluded). Also, savings from fuel switching measures, behavioural measures, and customer-owned renewable projects are reported separately in subsequent tables. Through energy efficiency measures, FortisBC can expect to meet 14.7 percent of the forecasted 2030 load. These estimates indicate that, given the load forecast assumptions, FortisBC could meet 59 percent of load growth with program achievable potential energy efficiency resources across all sectors.

Table 68
Comparison End-Use Forecast with Energy Efficiency Potential Estimates

	2008 Base Year Consumption (GWh)	2030 Forecast Consumption (GWh)	Energy Efficiency Program Achievable Potential (GWh)	% of 2030 Load
Residential	1,720	2,247	369	16.4%
Commercial	1,033	1,456	173	11.9%
Industrial	207	207	28	13.4%
Lighting	14	14	4	28.8%
Irrigation	52	52	11	20.8%
Total	3,026	3,976	585	14.7%

Table 69 illustrates energy efficiency potential summarized above in five-year increments. Note that street lighting potential is included in the commercial sector potential

Table 69
Program Achievable Potential, GWh

	2011	2015	2020	2025	2030
Residential	19	94	192	281	369
Commercial ⁽¹⁾	10	53	107	142	177
Industrial	1	8	18	23	28
Irrigation	1	3	5	8	11
Total	30	158	322	453	585

(1) Includes street lighting potential

Figure 51 illustrates the potential given in the tables above. The majority of the potential is from the residential sector, which is not surprising since residential customers consume 57 percent of total load.

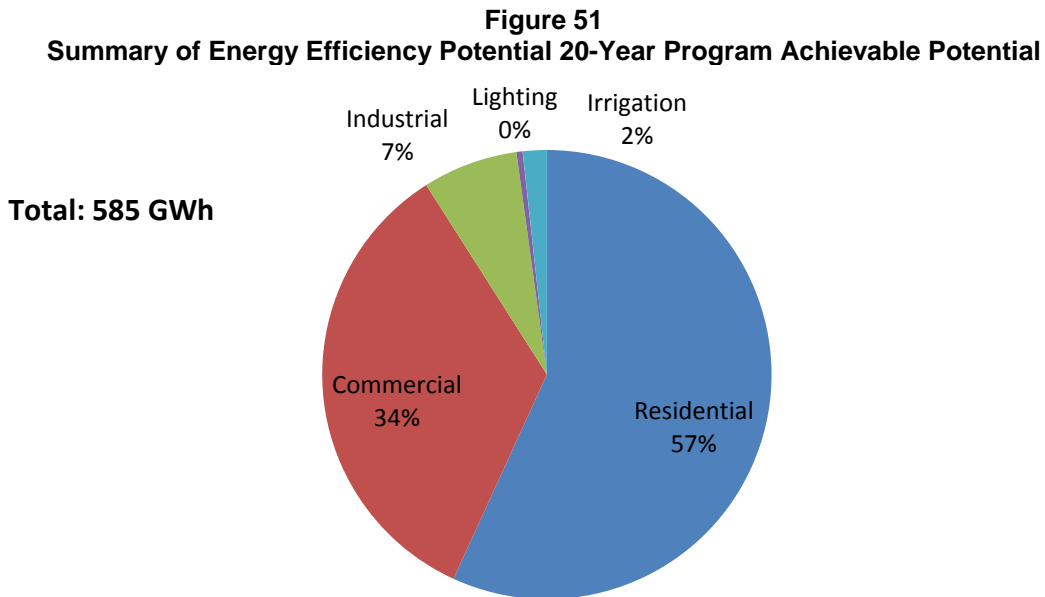


Figure 52 illustrates the supply curve for energy efficiency potential across all sectors.

