



Dennis Swanson
Director, Regulatory Affairs

FortisBC Inc.
Suite 100 - 1975 Springfield Road
Kelowna, BC V1Y 7V7
Ph: (250) 717-0890
Fax: 1-866-335-6295
electricity.regulatory.affairs@fortisbc.com
www.fortisbc.com

October 21, 2011

Via Email
Original via mail

Ms. Alanna Gillis
Acting Commission Secretary
BC Utilities Commission
Sixth Floor, 900 Howe Street, Box 250
Vancouver, BC V6Z 2N3

Dear Ms. Gillis:

Re: *FortisBC Inc. 2012 – 2013 Revenue Requirements Application and 2012 Integrated System Plan – Errata 3*

FortisBC Inc. (FortisBC or the Company) provides the following errata to its 2012 – 2013 Revenue Requirements Application and 2012 Integrated System Plan and Responses to Information Request No. 1. Replacement pages are attached.

Errata to 2012 – 2013 Capital Expenditure Plan (Tab 6 of 2012 – 2013 Revenue Requirements Application)

- 1 FortisBC 2012 -2013 Revenue Requirements Application, Tab 6 2012 – 2013 Capital Expenditure Plan, Section 3.2.1 Transmission Line Condition Assessment, page 43, Table 3.2.1 (a)
“538” should read “438”**
- 2 FortisBC 2012 -2013 Revenue Requirements Application, Tab 6 2012 – 2013 Capital Expenditure Plan, Section 3.2.1 Transmission Line Condition Assessment, page 43, Table 3.2.1 (c)
“522” should read “491”**
- 3 FortisBC 2012 -2013 Revenue Requirements Application, Tab 6 2012 – 2013 Capital Expenditure Plan, Section 3.2.2 Transmission Line Rehabilitation, page 45, Table 3.2.2 (b)
“2,621” should read “2,463”**

4 FortisBC 2012 -2013 Revenue Requirements Application, Tab 6 2012 – 2013 Capital Expenditure Plan, Section 3.2.3 Transmission Line Urgent Repair, page 46, Table 3.2.3

“594” should read “508”

“620” should read “558”

Errata to 2012 Integrated System Plan – 2012 Long Term Capital Plan

1 FortisBC 2012 Long Term Capital Plan, Section 2.9.1 Transmission Line Condition Assessment, Page 129, Table 2.9.1

“522” should read “491”

2 FortisBC 2012 Long Term Capital Plan, Section 2.9.2 Transmission Line Rehabilitation, Page 129, Table 2.9.2

“2,621” should read “2,463”

3 FortisBC 2012 Long Term Capital Plan, Section 2.9.3 Transmission Line Urgent Repair, Page 130, Table 2.9.3

“594” should read “508”

“620” should read “558”

“616” should read “554”

“622” should read “570”

“661” should read “586”

“11,543” should read “10,400”

Errata to FortisBC Responses to Information Request No. 1

1 FortisBC Responses to BCUC Information Request No. 1, page 421, Table BCUC IR1 242.1 Long Run Marginal Cost

LRMC of \$84.94, “6% real” should read “8% nominal”

2 FortisBC Responses to BCSEA Information Request No. 1, page 4, Q4.2

“BCUC” should read “BCSEA”

3 FortisBC Responses to Celgar Information Request No. 1, page 15, Q4.8

“64.1” should read “6.14”

4 FortisBC Responses to Celgar Information Request No. 1, page 17, Q6.5

“64.1” should read “6.14”

If further information is required, please contact the undersigned at (250) 717-0890.

Sincerely,

A handwritten signature in black ink, appearing to be 'DS', with a long horizontal flourish extending to the right.

Dennis Swanson
Director, Regulatory Affairs

1 **Table 3.2.1 (a) - 2012 Transmission Line Condition Assessment Projects**

Line	Location	Poles
9	Warfield Terminal Station to Cascade	88
10	Warfield Terminal Station to Cascade	88
11E	Warfield to Grand Forks	542
19	South Slocan to Valhalla	438
48	Kettle Valley to Bentley	431

2 **Table 3.2.1 (b) - 2013 Transmission Line Condition Assessment Projects**

Line	Location	Poles
6	Brilliant - Ootischenia -Blueberry - Castlegar - Zellstoff Celgar	356
18	Waneta to Beaver Park	99
26	Brilliant - Ootischenia -Blueberry - Castlegar - Zellstoff Celgar	353
32	Crawford Bay to Lambert	747

3 The following table shows the actual expenditures for the transmission line condition
4 assessment project from 2007 to 2010 as well as the forecast expenditures for 2011 and the
5 plan for 2012 and 2013. The estimates for 2012 and 2013 are derived by applying a total
6 cost required to assess the structure (based on historical information and contractual
7 agreements) to the number of transmission poles being assessed. This number is then
8 adjusted for inflation and overhead loading.

9 **Table 3.2.1 (c) - Transmission Line Condition Assessment Expenditures**

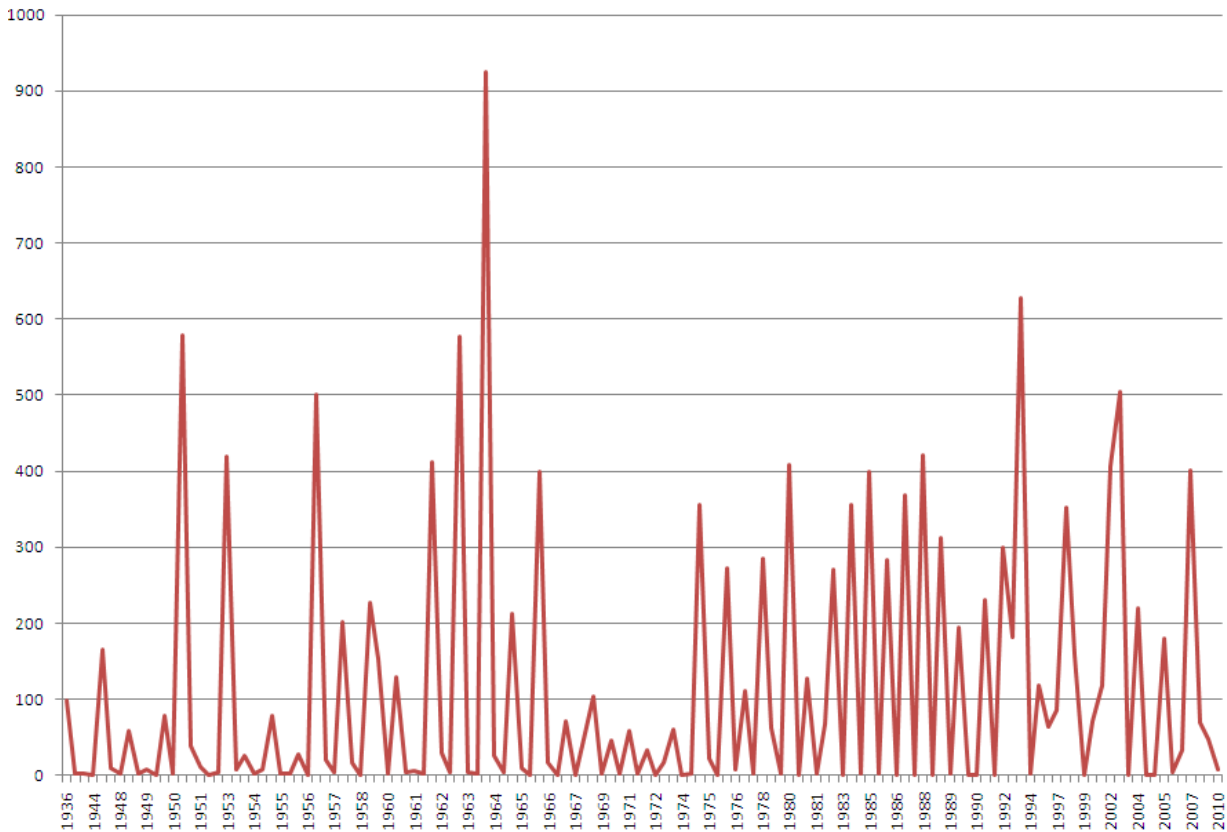
2007	2008	2009	2010	2011	2012	2013
Actual				Forecast	Requested	
(\$000s)						
152	639	413	343	469	491	485

10 **3.2.2 TRANSMISSION LINE REHABILITATION**

11 The rehabilitation project for transmission lines involve expenditures for stubbing poles,
12 replacement of poles, cross-arms, guy wires, as well as replacing other defects identified for
13 rehabilitation in the previous year's assessments. This project is required to address public
14 and employee safety issues, environmental concerns and maintain reliable electrical service
15 to FortisBC customers. In 2012 and 2013 the Company will undertake rehabilitation of the
16 transmission lines assessed in 2011 and 2012 respectively. Table 3.2.2 (a) below outlines
17 the transmission lines scheduled to be rehabilitated in 2012. Table 3.2.1 (a) above outlines
18 the lines that will be rehabilitated in 2013 following completion of the necessary
19 assessments in 2012.

1

Figure 3.2.2 - Transmission Poles vs. Pole Vintage



2

3 In order to complete rehabilitation work in the year immediately following the condition
 4 assessment patrol, the estimates for this budget are not based on actual field assessed data
 5 as the Company would need condition assessment data in 2010/2011 for the rehab work
 6 requesting to be done in 2012/2013. Rather, the estimates for this budget are based on
 7 historical information of costs on a per pole basis, adjusted for inflation and changes to
 8 overhead loading, and knowledge of the transmission lines being assessed. The following
 9 table shows the actual expenditures for the transmission line rehabilitation program for the
 10 years 2007 to 2010 as well as the forecast amount for 2011 and plan for 2012 and 2013.

11

Table 3.2.2 (b) - Transmission Line Rehabilitation Expenditures

2007	2008	2009	2010	2011	2012	2013
Actual				Forecast	Requested	
(\$000s)						
1,051	1,329	1,441	1,905	1,604	3,372	2,463

1 **3.2.3 TRANSMISSION LINE URGENT REPAIRS**

2 The Urgent Repairs project is required to replace component failures or components that
3 are in poor condition and in danger of immediate failure on the transmission system due to
4 weather, defective equipment, animal intrusions, vandalism, abnormal operating conditions,
5 vehicle collisions or other unexpected reasons that can cause outages or present risks, and
6 must be addressed in an expedient manner. The project is required to address public and
7 employee safety issues, address environmental concerns and maintain reliable service to
8 FortisBC customers.

9 The planned expenditures for this program are based on a three-year rolling average of
10 historical expenditures from 2008 to 2010, adjusted for inflation and changes to overhead
11 loadings. The three-year rolling average method is used to derive this budget as FortisBC
12 cannot foresee the range of dynamic variables in the future that would affect this budget.
13 Using historical spending patterns to predict the basis of upcoming years' budgets is the
14 most logical approach from FortisBC's perspective. The following table shows the actual
15 expenditures for the years 2007 to 2010 as well as the forecast for 2011 and plan for 2012
16 and 2013.

17 **Table 3.2.3 - Transmission Line Urgent Repairs Expenditures**

2007	2008	2009	2010	2011	2012	2013
Actual				Forecast	Requested	
(\$000s)						
514	362	526	487	491	508	558

18 **3.2.4 RIGHT OF WAY EASEMENTS**

19 This project is required for acquiring rights of way and easements for existing transmission
20 facilities that cross over private property in trespass. Easements for new projects are
21 obtained as part of the new project and are not included in this estimate. Expenditures for
22 this budget will also address access issues with respect to existing rights of way. Many of
23 the transmission lines, when initially constructed, did not have formal road access to
24 sections of the right of way. Access is required for operation and maintenance of these lines.

25 The planned expenditures for this program are based on a three-year rolling average of
26 historical expenditures from 2008 to 2010, adjusted for inflation and changes to overhead
27 loading. The three-year rolling average method is used to derive this budget as FortisBC
28 cannot foresee the range of dynamic variables in the future that would affect this budget.

1 below ground level on all the poles. The condition assessment is aimed at the above ground
 2 portion of the pole and reviews the condition of the pole top, anchoring/guying, cross-arms,
 3 insulators and other hardware items. Any items which do not pass inspection during the
 4 condition assessment are documented and identified for correction in the following year's
 5 rehabilitation budget.

6 The detailed methods and criteria applied in the assessment program are further described
 7 in Appendix G. The program cost forecasts are derived by applying a total cost required to
 8 assess the structure (based on historical information and contractual agreements) to the
 9 number of transmission poles being assessed. This number is then adjusted for inflation and
 10 overhead loading. The costs of performing condition assessments vary from line to line
 11 depending upon factors including the length of line segment being addressed, the proportion
 12 of the line requiring treatment, and the terrain. These factors are taken into consideration
 13 when calculating the forecast expenditures.

14 The program is managed in an eight-year cycle to help levelize both budgets and resource
 15 requirements. The condition assessment and test and treat programs are intended to review
 16 a complete set of transmission lines within the given assessment year. The eight-year cycle
 17 is driven by the chemical treatment applied to the wood poles; this chemical is only effective
 18 in preventing rot for approximately eight years.

19 **Table 2.9.1 - Transmission Line Condition Assessment**

Year	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017-31
	(\$000s)										
Cost	152	639	413	343	469	491	485	480	547	543	10,216

20 **2.9.2 TRANSMISSION LINE REHABILITATION**

21 The specific rehabilitation projects for various transmission lines involve expenditures for
 22 structural stabilization of the defects identified for rehabilitation in previous years'
 23 assessments. Included in the scope of work is stubbing of poles, replacement of cross-arms
 24 and poles, insulator changes and guy wire changes.

25 This project is required to address public and employee safety issues, environmental
 26 concerns and to maintain reliable service to FortisBC customers.

27 **Table 2.9.2 - Transmission Line Rehabilitation**

Year	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017-31
	(\$000s)										
Cost	1,051	1,329	1,441	1,905	1,604	3,372	2,463	2,509	2,424	2,820	50,158

1 **2.9.3 TRANSMISSION LINE URGENT REPAIR**

2 The Urgent Repairs project is required to replace transmission line facilities that fail in-
 3 service due to severe weather, vandalism or other unexpected reasons. The project is
 4 required to address public and employee safety issues, environmental concerns and to
 5 maintain reliable service to FortisBC customers.

6 **Table 2.9.3 - Transmission Line Urgent Repair**

Year	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017-31
	(\$000s)										
Cost	514	362	526	487	491	508	558	554	570	586	10,400

7 **2.9.4 TRANSMISSION LINE RIGHT OF WAY EASEMENTS**

8 This program is required to acquire outstanding rights of way or non-easement land rights
 9 for transmission and distribution lines that are in trespass. Many of the transmission lines
 10 have no or limited access to sections of the right of way. Access is required for the operation
 11 and maintenance of these lines. This program has historically been used to obtain
 12 easements to address existing trespass situations. Easements for new projects are obtained
 13 as part of the new project and are not included in this program.

14 **Table 2.9.4 - Transmission Line Right of Way Easements**

Year	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017-31
	(\$000s)										
Cost	170	135	235	118	358	400	400	416	423	440	7,754

15 **2.9.5 TRANSMISSION LINE REBUILD**

16 The Ten Year Transmission Rebuild Plan found in Appendix F, includes transmission
 17 rebuilds that are focused on the replacement of:

- 18 • Previously inspected “red tagged” structures and cross-arms;
- 19 • Stubbed poles that have deteriorated enough at the pole tops and cross-arms to
 20 justify complete replacement; and
- 21 • Correction of circuit spacing issues, and improved anchoring where needed.

22 The plan identifies seven 63 kV transmission lines located in the Kootenay region requiring
 23 significant rehabilitation/rebuild. As well, there are two transmission reconfiguration projects
 24 required in the Kootenay region. These line rebuild and reconfiguration projects have been
 25 assessed consistent with the criteria of the Transmission Rehabilitation program and require
 26 a large amount of pole replacements and upgrading.



FortisBC Inc. (FortisBC or the Company) Application for 2012 – 2013 Revenue Requirements and Review of 2012 Integrated System Plan	Submission Date: October 21, 2011
Response to British Columbia Utilities Commission (BCUC or the Commission) Information Request (IR) No. 1 – Errata 3	Updated Page 421

1

Table BCUC IR1 242.1 Long Run Marginal Cost

Reference	Definition	Value
FortisBC RIB Application - Exhibit B8 Q7.1, 7.2	Marginal Cost (defined as Short Term Avoided Costs over 2012 to 2015 period (based on primarily avoided 3808 Energy Purchases with minor amount of market purchases and surplus sales)	\$38.04 /MWh (energy only)
FortisBC 2012 Resource Plan – Appendix B: Midgard 2011 FortisBC Energy and Capacity Market Assessment	LRMC (define as the cost to acquire additional power through market purchases where the existing resources are insufficient to meet load requirements).	\$84.94/MWh (8% nominal)
FortisBC 2012 Resource Plan – Appendix C: Midgard Resource Option Report	LRMC New Construction – Similkameen UEC	\$97/MWh (6% real)
FortisBC 2012 Resource Plan – Appendix B: Midgard 2011 FortisBC Energy and Capacity Market Assessment	BC New Resources Market Energy	\$111.96/MWh (8% nominal)
Clean Power Call RFP– Report on the RFP Process – August 3, 2010	BCH LRMC (Clean Power Call) Delivered to LML	\$124.30/MWh (8% Nominal)
Clean Power Call Request For Proposals – Report on the RFP Process – August 3, 2010	BCH LRMC (Clean Power Call) Plantgate	\$111.3/MWh (8% Nominal)

2
3



FortisBC Inc. (FortisBC or the Company) Application for 2012 – 2013 Revenue Requirements and Review of 2012 Integrated System Plan	Submission Date: October 21, 2011
Response to BC Sustainable Energy Association and Sierra Club of British Columbia (BCSEA) Information Request (IR) No. 1 – Errata 3	Updated Page 4

1 **4.0 Reference: Exhibit B-1-2, 2012 DSM Plan, 2.1 Planning Principles**

2
3 “2. The DSM Plan will be cost effective by including only those measures, with the
4 exception of prescribed measures, which have a TRC Benefit Cost ratio greater than
5 unity on a portfolio basis”;

6
7 4.1 Please confirm that the FortisBC Energy Utilities in their 2012-2013 Revenue
8 Requirements Application are proposing to use a Societal Test rather than the
9 Total Resource Cost (TRC) test as the primary benefit- cost test for demand-side
10 management programs. Please elaborate if necessary.

11 **Response:**

12 Confirmed. The FortisBC (electric) DSM program portfolio is sufficiently robust without the use
13 of the Societal Cost Test due to the use of the long-term marginal supply cost in the TRC
14 calculation as mandated in the DSM Regulation. The long-term marginal supply cost, which
15 incorporates the cost of the BC Hydro call for clean power, is currently about twice the current
16 FortisBC marginal supply cost. This creates a larger avoided power purchase benefit and
17 therefore increases the TRC.

18
19
20 4.2 Why is FortisBC Inc. in the 2012 DSM Plan not proposing to use a Societal Test
21 for DSM programs?

22 **Response:**

23 Please see the response to BCSEA IR1 Q4.1.

24
25
26 4.3 Does FBC intend to explore using a Societal Test for DSM programs in the
27 future?

28 **Response:**

29 FortisBC is not considering a change to its cost effectiveness test at this time, but FortisBC is
30 aware that the provincial government is considering changes to the DSM Regulation and will
31 comply with any changes to the Regulation.

32
33



FortisBC Inc. (FortisBC or the Company) Application for 2012 – 2013 Revenue Requirements and Review of 2012 Integrated System Plan	Submission Date: October 21, 2011
Response to Zellstoff Celgar Limited Partnership (Celgar) Information Request (IR) No. 1 – Errata 3	Updated Page 15

1 4.8 Are the FortisBC programs and financial incentives to be paid to customers
2 increasing or decreasing with the use of \$104.32 instead of \$154.15 for the
3 avoided supply cost? Is the gap between the financial incentives paid to
4 customers by BC Hydro and by FortisBC increasing over time? Please explain?

5
6 **Response:**

7 A change in the avoided supply cost does not directly impact the DSM incentives paid to
8 customers, but can result in a cap to the DSM incentive as described in the response to Celgar
9 IR1 Q6.14. FortisBC cannot comment on whether a gap exists, or if a gap exists whether it is
10 increasing or decreasing, between FortisBC and BC Hydro industrial DSM incentives.

11
12

13 **5.0 Reference: EES Conservation and Demand Potential Review, p. 11**

14 “FortisBC has been active in helping their customers become more energy efficiency
15 [efficient] through their PowerSense program since 1989.”

16 5.1 Please comment on all activities in the past year and activities that are planned
17 for the test period that have been or will be undertaken by FortisBC to assist
18 Celgar to achieve energy efficiency?

19

20 **Response:**

21 There are no DSM activities underway in the current year, nor planned in the test period. Until
22 the current regulatory proceedings involving Celgar and FortisBC are resolved, it is unclear
23 whether, or the extent to which, DSM incentives can be paid by FortisBC to Celgar.

24
25

26 **6.0 Reference: 2012-2013 Capital Expenditure Plan, p. 124, Table 7.3, and p. 125,**
27 **Section 7.3.2**

28 “FortisBC will offer customized assistance and financial incentives for industrial
29 customers to achieve increased efficiency. This will include free initial assessment of
30 energy use, and where a more detailed assessment is required, 50 percent of an
31 approved study’s costs. FortisBC also will provide rebates towards the incremental cost
32 of efficiency measures compared to standard “baseline” construction (the rebate
33 entitlement is based on estimated annual kWh savings, with the maximum rebate
34 calculated to achieve a two-year payback on incremental cost).”



FortisBC Inc. (FortisBC or the Company) Application for 2012 – 2013 Revenue Requirements and Review of 2012 Integrated System Plan	Submission Date: October 21, 2011
Response to Zellstoff Celgar Limited Partnership (Celgar) Information Request (IR) No. 1 – Errata 3	Updated Page 17

1 to incent customers to reduce consumption in order to enable higher electricity sales. The
2 fundamental premise behind the DSM program is to cost-effectively conserve energy.

3
4

5 6.5 What is the maximum amount that FortisBC provides to an industrial customer
6 for study costs beyond the free assessment?

7 **Response:**

8 The DSM incentive cap information is provided in the response to Celgar IR1 Q6.14.

9
10

11 6.6 What is the maximum amount that BC Hydro provides to an industrial customer
12 for study costs?

13

14 **Response:**

15 The table below is a summary of BC Hydro guidelines (published on BC Hydro's web-site) for
16 funding of industrial studies. As indicated in the table, the maximum funding for Plant-Wide
17 Audits is \$40,000, for End-Use Assessments \$5,000. For other types of studies no maximums
18 are provided.