

FortisBC Inc.
2005 Revenue Requirements Application,
2005-2024 System Development Plan and 2005 Resource Plan

60.0 Reference: Main Application, Volume 1, Tab 10.2, page 25-26

Q60.1 To what does FortisBC attribute the decline in Call Centre performance from 2002 to 2003?

A60.1 When Customer Service was relocated to Calgary in October 2002, staffing levels were estimated without the benefit of call centre staffing data since there was none in existence in the BC operation at the time of the relocation. This led to an under-representation of the number of customer requests and the contact center being under-staffed. At the same time, a call centre which is located outside the Company's service territory also means that staff there are not familiar with customers' local service issues and likely cannot provide the effective service response that customers expect.

Q60.2 What specific actions, if any, were undertaken in 2004 that lead to the improvement in performance?

A60.2 During 2003 the primary focus was to gather and analyze historical data looking to identify trends in call volume and then match these trends to staffing levels. Once appropriate service levels were achieved in September of 2003 this formula was used to forecast staffing levels in 2004. Overall service levels were maintained in 2004.

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61.0 Reference: Main Application, Volume 1, Tab 10.2, page 28

Q61.1 How does FortisBC plan to finalize its list of factors/indicators considered important to customers?

A61.1 FortisBC intends to use information collected through the following methods to identify the factors / indicators customers consider important:

- Call Center Statistics
- Customer Satisfaction Survey
- Letters from Customers
- Feedback from Employees who Serve Customers
- Feedback from Employees who are Customers
- BCUC Inquiries

Q61.2 Does FortisBC have any plans to solicit input directly from customers as to what the key indicators are/should be?

A61.2 FortisBC intends to continue using the established methods of collecting both direct and indirect feedback from customers described in question 61.1 on what customers feel is important.

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62.0 Reference: Main Application, Volume 1, Tab 10.3, page 11

Q62.1 Please provide a breakdown of the 2005 Shared Services costs presented in Table 10.3.2.2.3B between:

- **Those that are for part of the year, as FortisBC transitions during 2005 to a stand-alone utility, versus**
- **Those that are likely to continue after 2005.**

A62.1 A breakdown of the 2005 Shared Services indicating those that are required in 2005 and those likely to continue after 2005 is provided in the following table.

	Shared Services in 2005	Likely to continue beyond 2005
Customer Call Center	X	
Shared Use Asset Lease	X	
Meter Shop	X	X
Information Technology	X	X
Other Shared Employees	X	

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63.0 Reference: Main Application, Volume 2, page 4

Q63.1 Are there any other categories, besides Safety, where the rating of the project can trigger a “mandatory” classification?

A63.1 Mandatory projects are primarily safety oriented although contractual obligations (see BCUC – 101.3) and equipment concerns can also create mandatory projects.

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64.0 Reference: Main Application, Volume 2, page 10

Q64.1 Please indicate if any of the “significant bulk system deficiencies in the 1998 Master Plan” are still outstanding.

A64.1 There are no bulk system deficiencies outstanding from the 1998 Master Plan. The Kelowna area Upgrade and South Okanagan Reinforcement project are scheduled for completion in 2005.

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65.0 Reference: Main Application, Volume 2, Appendix C, page 1

Q65.1 Please provide annual historical capital expenditures for the same categories for the period 1999 through 2003.

A65.1

CATEGORY	Capital Expenditures (net of CIAC)				
	1999	2000	2001	2002	2003
	(\$000's)				
TRANSMISSION AND STATIONS	8,874	7,964	16,798	47,137	37,403
Transmission and Stations Growth	3,130	3,659	11,913	38,831	31,934
Transmission and Stations Sustaining	5,744	4,305	4,885	8,306	5,469
Stations Sustaining					
DISTRIBUTION	9,159	10,910	10,010	11,985	10,756
Distribution Growth	5,111	6,293	4,277	4,315	4,976
Distribution Sustaining	4,048	4,617	5,733	7,670	5,780
TELECOM, SCADA, P&C	348	209	26	0	0
Telecom Growth	15	0	0	0	0
Telecom Sustaining	333	209	26	0	0
TOTAL T&D CAPITAL	18,381	19,083	26,834	59,122	48,159

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66.0 Reference: Main Application, Volume 2, Appendix C, page 6

Q66.1 Please provide a schedule listing the T&D projects in the order of priority shown on page 6 and for each project provide:

- **The priority weighting**
- **The year the project is to be initiated under the Plan**
- **The year the project is to be completed under the Plan**
- **The total cost of the project.**

A66.1 All projects included in the System Development Plan have a priority rating as shown on pages 6 & 7 of Appendix C. The year scheduled and costs of all projects are listed on pages 2-5 of Appendix C.

See Table below- Capital Plan Sorted by Priority

Project Priority T&D sorted

T&D Project Description	Priority	Weighting	Mandatory	Safety			Restoration Time hours			Thermal Capacity (overloads)			System Effect of Failure			Voltage Related			Public Impact Number of Customers		
				High	Medium	Low	> 8	4 to 8	< 4	> 25%	0 to 25%	0	High	Med	Low	<110V	<115V	N/A	>2000	<1000	<500
FAULT LEVEL REDUCTION	H	112	x			x			x			x		x		x		x		x	
NEW 18L BREAKER AT WANETA	H	111	x			x			x			x		x		x		x		x	
GROUND GRID UPGRADES	H	110	x		x							x				x		x		x	
CMMS	H	103	x									x				x		x		x	
NARAMATA REHABILITATION	H	29		x			x				x				x		x			x	
11 LINE REHABILITATION	H	28		x			x				x			x				x		x	
72 LINE REHABILITATION	H	28			x		x				x			x			x		x		
KETTLE VALLEY DISTRIBUTION SOURCE	H	26		x			x				x				x			x		x	
GRAND FORKS DISTRIBUTION SOURCE	H	25		x			x				x				x			x			x
PCB PROGRAM	H	25		x			x				x						x		x		
CRESTON DIST FEEDER UPGRADES RELATED TO LAMBERT	H	24		x						x					x			x		x	
KETTLE VALLEY VOLTAGE CONVERSION	H	24		x					x						x			x		x	
HOLLYWOOD CAPACITY INCREASE	H	23				x	x				x				x			x		x	
GRAND FORKS AREA VOLTAGE CONVERSIONS	H	23				x	x				x				x			x		x	
NEW LAMBERT 230/63 kV TRANSFORMER & 230 kV RING BUS	H	21			x				x			x			x			x			x
BIG WHITE 138 kV LINE & SUBSTATION	H	20		x			x						x			x			x		x
74 LINE REHABILITATION	H	20		x					x					x				x		x	
BOUNDARY AREA STATION CONVERSIONS	H	20			x		x				x				x			x		x	
CASTLEGAR SUB CAPACITY INCREASE	H	20			x		x				x				x			x		x	
CRAWFORD BAY CAPACITY INC. & GND. BNK. FEED BALDY & ANARCHIST @ 25 kV FROM ROCK CREEK & CONVERT BALDY TO 25 kV	H	19		x			x								x			x			x
56 LINE REHABILITATION	H	19		x					x						x			x		x	
18 LINE REHABILITATION	H	19		x					x						x					x	
3 PHASE 4.4KM 1&2PHASE OSO2	H	19				x	x				x						x		x		
73 LINE REHABILITATION	H	19				x	x						x				x		x		
51, 51A LINE REHABILITATION	H	19				x	x								x			x		x	
SOK PROJECT (VASEUX LAKE TERMINAL)	M	18		x											x			x		x	
BRAELOCH (SW) DISTRIBUTION SOURCE	M	18				x	x								x			x		x	
RECREATION CAPACITY INCREASE	M	18				x	x								x			x		x	
OK MISSION CAPACITY INCREASE	M	18				x	x								x			x		x	
FAULT LOCATING INACCESSIBLE LINES	M	18				x	x								x			x		x	
9, 10, LINE REHABILITATION GFT - CHR	M	18				x	x								x			x		x	
25 LINE REHABILITATION	M	18				x	x								x			x		x	
PRINCETON TRANSFORMER REPLACEMENTS	M	17		x											x			x		x	
30 LINE REHABILITATION	M	17		x											x			x		x	
29 LINE REHABILITATION	M	17				x	x								x			x		x	
42 LINE REHABILITATION	M	17				x	x								x			x		x	
KELOWNA AREA UPGRADE	M	16				x									x			x		x	
DOUBLE CIRCUIT 230 kV VAS TO RGA	M	16				x									x			x		x	
230/161/138 BENTLEY TERMINAL	M	16				x									x			x		x	
T3 VAS (500/230 kV)	M	16				x	x								x			x		x	
DUC1-SEX1 477 TIE	M	16				x	x								x			x		x	
OKM5-OKM4 TIE, EXTD TO SPRINGFIELD RD	M	16				x	x								x			x		x	
43 LINE AND 43AL REHABILITATION WORK	M	16				x	x											x		x	
NEW GLE6 FEEDER(50L U/B HIGH RD-CLIFTON)	M	15		x											x			x		x	
DGB2-OKM3 TIE, REBUILD 4.5 KM TO 477	M	15				x									x			x		x	
53 LINE REHABILITATION	M	15				x									x			x		x	
26 LINE REHABILITATION	M	15				x									x			x		x	
27 LINE REHABILITATION	M	15				x									x			x		x	
28 LINE REHABILITATION	M	15				x									x			x		x	
REPLACE CRAWFORD BAY T1	M	15				x									x			x		x	
SLOCAN - NEW DENVER 63KV LOOP	M	15				x									x			x		x	
RETERMINATE LEE FEEDERS AT NEW N. KELOWNA SUBSTATION	M	15				x									x			x		x	

Project Priority T&D sorted

T&D Project Description	Priority	Weighting	Mandatory	Safety			Restoration Time hours			Thermal Capacity (overloads)			System Effect of Failure			Voltage Related			Public Impact Number of Customers		
				High	Medium	Low	> 8	4 to 8	< 4	> 25%	0 to 25%	0	High	Med	Low	<110V	<115V	N/A	>2000	<1000	<500
TRAIL-OLIVER HIGH CAPACITY COMMUNICATIONS	M	15			X			X				X		X				X	X		
32 LINE REHABILITATION	M	14				X					X				X	X		X			X
19 LINE REHABILITATION	M	14			X			X			X			X	X			X	X		
20 LINE REHABILITATION	M	14			X			X			X			X				X	X		
21 - 24 LINE REHABILITATION	M	14			X			X			X			X				X	X		
10/12 MVA MOBILE UPGRADE	M	14			X			X			X			X				X	X		
KOOTENAY MOBILE STATION	M	14			X			X			X			X				X	X		
COF, CRA, WES AND BULK OIL BRKR																					
REPLACEMENT	M	14			X			X			X			X				X	X		
WEST OSOYOOS TRANSFORMER REHAB	M	14			X			X			X			X				X	X		
PINE STREET T1 REHAB , 44L BREAKERS,																					
SWITCHES	M	14			X			X			X			X				X	X		
YMIR UPGRADE	M	13				X			X									X			X
PASSMORE FEEDER2 UPGRADE	M	13			X			X			X							X	X		
PROTECTION UPGRADES	M	13				X		X			X			X				X	X		
230 kV VASEUX TO BENTLEY	M	13			X				X		X		X	X				X	X		
KELOWNA SHUNTS & SVC	M	13				X			X		X		X				X		X		
QUAIL DEVELOPMENT LOOPFEED	M	13				X			X		X						X		X		
CLOSE 138 kV LOOPS KELOWNA	M	13			X				X		X		X					X	X		
CONVERT EXISTING OLIVER TO 138/63/13 kV																					
DISTRIBUTION SOURCE STATION	M	12		X											X						
REPLACE COFFEE CREEK T2	M	12		X											X						
PLAYMOR - TARRYS FEEDER UPGRADE	M	12				X			X		X						X		X		
SMALL CAPACITY IMPROVEMENTS (UNFORSEEN																					
PRIMARY & SECONDARY VOLTAGE PROBLEMS,																					
NEW OPERATIONAL SWITCHES)	M	12				X			X		X						X		X		
GLENMERRY UNDERGROUND	M	12				X			X		X						X		X		
DISTRIBUTION SUBSTATION AUTOMATION,																					
METERING AND COMMUNICATIONS		12				X			X		X		X				X		X		
DILWORTH DEVELOPMENT LOOPFEED	M	12			X			X			X						X		X		
SWITCH ADDITIONS	M	12			X			X			X						X		X		
6A LINE REHABILITATION	M	12			X			X			X						X		X		
CAPACITOR AT COFFEE CREEK	M	12			X			X			X						X		X		
CAPACITOR AT KASLC	M	12			X			X			X						X		X		
COMPLETE GLE5-SEX2 TIE ADD N.O.	M	12			X			X			X						X		X		
SUMMERLAND 63kV BACKUP	M	12			X			X			X						X		X		
KELOWNA GENERAL FEEDER PROTECTION	M	12			X			X			X						X		X		
WEB1 VOLTAGE REGULATOR	M	12			X			X			X						X		X		
PATTERSON 25 kV FEED	M	12			X			X			X						X		X		
NEW FEEDER N.KELOWNA SUBSTATION	M	12			X			X			X						X		X		
FUTURE KELOWNA DISTRIBUTION UPGRADES	M	12			X			X			X						X		X		
NEW FEEDER D/C OSO4 ACROSS CAUSEWAY TO																					
EAST OSOYOOS + BREAKER	M	11			X			X			X				X			X			X
FUTURE YEAR REHABILITATION AND CONDITION																					
ASSESSMENTS	M	11				X		X			X						X		X		
STATION MINOR PLANNED WORK	M	11				X		X			X						X		X		
STATION UNFORESEEN REPAIRS	M	11				X		X			X						X		X		
COFFEE CREEK T3 REPLACEMENT	L	10		X																	
MCKINLEY LANDING CAPACITY UPGRADE(#2 TO																					
477) FED FROM SEX3	L	10		X																	
HOL1-DGB3/LEE2 TIE	L	10		X																	
ELLISON DISTRIBUTION SOURCE	L	10				X			X		X		X	X		X		X			
BLACK MOUNTAIN DISTRIBUTION SOURCE	L	10				X		X			X		X	X		X		X			
KEREMEOS FEEDER	L	10			X			X			X						X		X		
NEW EAST OSOYOOS SOURCE	L	9				X		X		X			X	X		X		X			X
SUBSTATION CONDITION ASSESSMENT	L	9				X		X		X							X		X		
KASLO SUB UPGRADE	L	7				X		X		X			X	X		X		X		X	

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WESTMINSTER T1 REPLACE	L	7				x			x			x			x	x			x		x
TROUT CREEK T1 REHAB	L	7				x			x			x			x	x			x		x
WATERFORD UPGRADE	L	6				x			x			x			x	x					x
HOL1-OKM1 TIE ALONG KLO RD	L	6				x			x			x							x		
LEE2-HOL5 TIE, ADD N.O.	L	6				x			x			x							x		
25 kV TIE TO ANARCHIST/BRIDESVILLE	L	6				x			x			x							x		
MCKINLEY TO CLIFTON TIE	L	6				x			x			x							x		
HUTH REBUILD AS 63 kV RING BUS	L	5				x			x			x				x					x

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67.0 Reference: Main Application, Volume 2, Appendix D, page 3

Q67.1 Please discuss the extent to which FortisBC relies on contract labour to handle the additional work associated with unanticipated failures as opposed to maintaining staff on hand to address respond to such possibilities.

A67.1 FortisBC's reliance on contract labour for unanticipated failures is dependent on the magnitude and type of failure experienced. The company's staffing plan is to optimize the staff for the steady state operations, maintenance and construction associated with maintaining reliable service. Our dispatch of resources in response to failures is as follows:

- 1) For local isolated events (e.g. tree contact on line, switch failure) our internal operations crews are dispatched given their in depth knowledge of the system and customer impact,
- 2) For larger events (e.g. snow storm), the internal operations crews are augmented with our internal construction resources, and
- 3) For long sustained outages that require reconstruction, contract resources are used to supplement the internal operations and construction crews. As well FortisBC has mutual aid agreements with other Utilities to provide additional resources in the event of a major system wide event.

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68.0 Reference: Main Application, Volume 2, Appendix D, page 5-6

68.1 Please provide the results of any analyses FortisBC has undertaken to determine the annual level of maintenance expense that would be required to implement the RCM Strategy and how it compares with current (i.e., 2004 or 2005) expenditure levels?

A68.1 FortisBC plans to adopt & implement the basic principles associated with Reliability Centered Maintenance. This will result in a condition-based maintenance strategy that accounts for equipment criticality. FortisBC does not plan to implement a fully integrated and automated process often associated with RCM. The company does not believe the costs associated with a large scale integrated RCM process would best meet the customer's expectations.

Implementation of the strategy may increase or decrease future levels of maintenance expense on an annual basis; dependent on the condition of the equipment, current maintenance levels and the maintenance requirements of the large amounts of new equipment being installed as a result of our major capital program. This condition based maintenance strategy will optimize the overall performance and life of the asset and minimize costs over the long term. What the customer will pay for will be the optimum amount of maintenance that results in a safe & reliable system. Also see the response to BCUC IR Q161.

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69.0 Reference: Main Application, Volume 2, Appendix D, pages 25-31

Q69.1 Are the various actions set out in Tables 5.1 through 5.4 and others discussed in the text all included in the capital expenditure program set out in Volume 2? If not, please provide a schedule setting out which actions are not being addressed in accordance with the suggested timeframes.

A69.1 All of the equipment discussed in the appendix has been addressed in the System Development Plan. The projects have been adjusted to ensure they are coordinated with the growth driven work and system upgrades. The condition based sustaining capital is risk managed to ensure the system is safe and maintained in cost effective manner.