

# **SECTION F**

NEWFOUNDLAND & LABRADOR HYDRO

## 2004 CAPITAL EXPENDITURES - OVERVIEW

FOR THE QUARTER ENDING JUNE 30, 2004

(\$,000)

	Expenditures Prior To 2004	PUB Approved Budget 2004	2004 Expenditures To June 30	Expected Remaining Expenditures 2004	Expected Total Expenditures 2004	Var. from Approved to Expected Expenditures
GENERATION	191	4,049	1,160	2,897	4,057	8
TRANSMISSION & RURAL OPERATIONS	1,159	11,999	3,126	8,976	12,102	244
GENERAL PROPERTIES	2,633	11,350	1,808	6,654	8,968	(2,382)
ALLOWANCE FOR UNFORESEEN EVENTS	0	1,000	0	1,000	1,000	0
PROJECTS APPROVED BY PUB	62	2,703	648	1,797	2,445	0
NEW PROJECTS LESS THAN \$50,000 APPROVED BY HYDRO	18	189	44	149	193	4
<b>TOTAL CAPITAL BUDGET</b>	<b>4,063</b>	<b>31,290</b>	<b>6,786</b>	<b>21,473</b>	<b>28,765</b>	<b>(2,126)</b>
Approved PU 29 (2003)		27,316				
Approved PU 5 (2004)		1,534				
Approved PU 13 (2004)		303				
Approved PU 16 (2004)		465				
Approved PU 28 (2004)		258				
Carryover Projects		1,255				
New Projects Under \$ 50,000 Approved by Hydro		159				
<b>Revised TOTAL CAPITAL BUDGET</b>		<b>31,290</b>				

**NEWFOUNDLAND & LABRADOR HYDRO****2004 CAPITAL EXPENDITURES - OVERVIEW**

FOR THE QUARTER ENDING JUNE 30, 2004

(\$,000)

	Expenditures Prior To 2004	PUB Approved Budget 2004	2004 Expenditures To June 30	Expected Remaining Expenditures 2004	Expected Total Expenditures 2004	Var. from Approved to Expected Expenditures	
<b>GENERATION</b>							
<b>HYDRO PLANTS</b>							
Construction Projects	191	1,474	451	1,036	1,487	13	3
Tools & Equipment	0	194	126	63	189	(5)	3
<b>THERMAL PLANT</b>							
Construction Projects	0	2,281	582	1,699	2,281	0	3
Property Additions	0	78	1	77	78	0	3
Tools & Equipment	0	22	0	22	22	0	3
<b>TOTAL GENERATION</b>	<b>191</b>	<b>4,049</b>	<b>1,160</b>	<b>2,897</b>	<b>4,057</b>	<b>8</b>	
<b>TRANSMISSION &amp; RURAL OPERATIONS</b>							
<b>TRANSMISSION</b>	<b>401</b>	<b>3,926</b>	<b>318</b>	<b>4,216</b>	<b>4,534</b>	<b>608</b>	<b>4</b>
<b>SYSTEM PERFORMANCE &amp; PROTECTION</b>	<b>0</b>	<b>303</b>	<b>103</b>	<b>203</b>	<b>306</b>	<b>3</b>	<b>4</b>
<b>TERMINALS</b>	<b>165</b>	<b>1,690</b>	<b>194</b>	<b>1,355</b>	<b>1,549</b>	<b>0</b>	<b>4</b>
<b>DISTRIBUTION</b>	<b>0</b>	<b>5,153</b>	<b>2,063</b>	<b>2,816</b>	<b>4,879</b>	<b>(274)</b>	<b>5</b>
<b>GENERATION</b>	<b>593</b>	<b>238</b>	<b>94</b>	<b>124</b>	<b>218</b>	<b>(20)</b>	<b>5</b>
<b>GENERAL</b>							
Metering	0	104	15	90	105	1	5
Properties	0	49	3	46	49	0	5
Tools & Equipment	0	536	336	126	462	(74)	5
<b>TOTAL TRANSMISSION &amp; RURAL OPERATIONS</b>	<b>1,159</b>	<b>11,999</b>	<b>3,126</b>	<b>8,976</b>	<b>12,102</b>	<b>244</b>	
<b>GENERAL PROPERTIES</b>							
<b>INFORMATION SYSTEMS &amp; TELECOMMUNICATIONS</b>	<b>1,495</b>	<b>8,512</b>	<b>964</b>	<b>4,701</b>	<b>6,171</b>	<b>(2,341)</b>	<b>6</b>
<b>ADMINISTRATIVE</b>	<b>1,138</b>	<b>2,838</b>	<b>844</b>	<b>1,953</b>	<b>2,797</b>	<b>(41)</b>	<b>6</b>
<b>TOTAL GENERAL PROPERTIES</b>	<b>2,633</b>	<b>11,350</b>	<b>1,808</b>	<b>6,654</b>	<b>8,968</b>	<b>(2,382)</b>	
<b>ALLOWANCE FOR UNFORESEEN EVENTS</b>	<b>0</b>	<b>1,000</b>	<b>0</b>	<b>1,000</b>	<b>1,000</b>	<b>0</b>	<b>8</b>
<b>PROJECTS APPROVED BY PUB</b>	<b>62</b>	<b>2,703</b>	<b>648</b>	<b>1,797</b>	<b>2,445</b>	<b>0</b>	<b>8</b>
<b>PROJECTS APPROVED FOR LESS THAN \$50,000</b>	<b>18</b>	<b>189</b>	<b>44</b>	<b>149</b>	<b>193</b>	<b>4</b>	<b>8</b>
<b>TOTAL CAPITAL BUDGET</b>	<b>4,063</b>	<b>31,290</b>	<b>6,786</b>	<b>21,473</b>	<b>28,765</b>	<b>(2,126)</b>	

**NEWFOUNDLAND & LABRADOR HYDRO  
GENERATION  
2004 CAPITAL EXPENDITURES - DETAIL  
FOR THE QUARTER ENDING JUNE 30, 2004  
(\$,000)**

PROJECT DESCRIPTION	Expenditures Prior To 2004	PUB Approved Budget 2004	2004 Expenditures To June 30	Expected Remaining Expenditures 2004	Expected Total Expenditures 2004	Var. from Approved to Expected Expenditures	Variance Explanation Reference
<b>HYDRO PLANTS</b>							
<b>CONSTRUCTION PROJECTS</b>							
Replace Vibration/Data System - Bay D'Espoir	179	18	19	0	19	1	
Replace Unit 7 Exciter - Bay D'Espoir	10	760	195	565	760	0	
Replace Gate Hoist No. 2 - Ebbegunbaeg Control Structure	2	513	42	471	513	0	
Upgrade Controls Spherical Valve #3 - Bay D' Espoir		183	195	0	195	12	
<b>TOTAL CONSTRUCTION PROJECTS</b>	<b>191</b>	<b>1,474</b>	<b>451</b>	<b>1,036</b>	<b>1,487</b>	<b>13</b>	
<b>TOOLS &amp; EQUIPMENT</b>							
Replace Loader/Backhoe - Bay d'Espoir	0	124	119	0	119	(5)	
Purchase & Replace Tools & Equipment Less than \$50,000	0	70	7	63	70	0	
<b>TOTAL TOOLS &amp; EQUIPMENT</b>	<b>0</b>	<b>194</b>	<b>126</b>	<b>63</b>	<b>189</b>	<b>(5)</b>	
<b>THERMAL PLANT</b>							
<b>CONSTRUCTION PROJECTS</b>							
Upgrade Control System - Holyrood		1,553	570	983	1,553	0	
Purch/Inst Ambient Monitoring System Enhancement		728	12	716	728	0	
<b>TOTAL CONSTRUCTION PROJECTS</b>	<b>0</b>	<b>2,281</b>	<b>582</b>	<b>1,699</b>	<b>2,281</b>	<b>0</b>	
<b>PROPERTY ADDITIONS</b>							
Upgrade Civil Structures - Holyrood		78	1	77	78	0	
<b>TOTAL PROPERTY ADDITIONS</b>	<b>0</b>	<b>78</b>	<b>1</b>	<b>77</b>	<b>78</b>	<b>0</b>	
<b>TOOLS &amp; EQUIPMENT</b>							
Purchase & Replace Tools & Equipment Less than \$50,000	0	22	0	22	22	0	
<b>TOTAL TOOLS &amp; EQUIPMENT</b>	<b>0</b>	<b>22</b>	<b>0</b>	<b>22</b>	<b>22</b>	<b>0</b>	
<b>TOTAL GENERATION</b>	<b>191</b>	<b>4,049</b>	<b>1,160</b>	<b>2,897</b>	<b>4,057</b>	<b>8</b>	

**NEWFOUNDLAND & LABRADOR HYDRO  
TRANSMISSION & RURAL OPERATIONS  
2004 CAPITAL EXPENDITURES - DETAIL  
FOR THE QUARTER ENDING JUNE 30, 2004**

(\$,000)

PROJECT DESCRIPTION	Expenditures Prior To 2004	PUB Approved Budget 2004	2004 Expenditures To June 30	Expected Remaining Expenditures 2004	Expected Total Expenditures 2004	Var. from Approved to Expected Expenditures	Variance Explanation Reference
<b>TRANSMISSION</b>							
Upgrade TL214 - (138kV Bottom Brook - Doyles)	401	2,546	284	2,870	3,154	608	NOTE 1
Replace Insulators TL233 - (230kV Buchans - Bottom Brook)		1,055	18	1,037	1,055	0	
Replace Wood Poles - Transmission		325	16	309	325	0	
<b>TOTAL TRANSMISSION</b>	<b>401</b>	<b>3,926</b>	<b>318</b>	<b>4,216</b>	<b>4,534</b>	<b>608</b>	
<b>SYSTEM PERFORMANCE &amp; PROTECTION</b>							
Purch/Install 138Kv Breaker Fail Protection Addition - Deer Lake/Sunnyside		150	25	125	150	0	
Replace Digital Fault Recorder - BDE		77	40	37	77	0	
Purchase and Install Remote Relay Data Acquisition Equipment		46	23	23	46	0	
Upgrade Breaker Controls - Western Avalon & Holyrood Terminal Stations		30	15	18	33	3	
<b>TOTAL SYSTEM PERFORMANCE &amp; PROTECTION</b>	<b>0</b>	<b>303</b>	<b>103</b>	<b>203</b>	<b>306</b>	<b>3</b>	
<b>TERMINALS</b>							
Purchase and Install Transformer Addition - Happy Valley Terminal Station	6	1,245	102	1,096	1,198	(47)	
Install Motor Drive Mechanisms on Disconnect Switches - West Coast		207	0	121	121	(86)	NOTE 2
Replace Instrument Transformers		77	37	40	77	0	
Replace Surge Arrestors		70	28	42	70	0	
Upgrade Breaker Controls - Sunnyside Terminal Station	18	15	7	0	7	(8)	
Replace Digital Fault Recorder - Holyrood Terminal Station	70	6	6	0	6	0	
Upgrade Station Services - Long Harbour TS	71	12	8	4	12	0	
Replace 125V Battery Banks - Bottom Brook and Holyrood Terminal Stations	0	58	6	52	58	0	
<b>TOTAL TERMINALS</b>	<b>165</b>	<b>1,690</b>	<b>194</b>	<b>1,355</b>	<b>1,549</b>	<b>(141)</b>	

**NEWFOUNDLAND & LABRADOR HYDRO  
TRANSMISSION & RURAL OPERATIONS  
2004 CAPITAL EXPENDITURES - DETAIL  
FOR THE QUARTER ENDING JUNE 30, 2004  
(\$,000)**

<b>PROJECT DESCRIPTION</b>	<b>Expenditures Prior To 2004</b>	<b>PUB Approved Budget 2004</b>	<b>2004 Expenditures To June 30</b>	<b>Expected Remaining Expenditures 2004</b>	<b>Expected Total Expenditures 2004</b>	<b>Var. from Approved to Expected Expenditures</b>	<b>Variance Explanation Reference</b>
<b><u>DISTRIBUTION</u></b>							
Service Extensions		1,558	714	844	1,558	0	
Distribution Upgrades		1,471	987	484	1,471	0	
Pole Replacements		993	125	739	864	(129)	NOTE 3
Insulator Replacements		945	209	648	857	(88)	NOTE 4
Purchase and Install Recloser L6 - Bear Cove		85	15	64	79	(6)	
Replace Substation Transformer - Rigolet		76	5	22	27	(49)	
Purchase and Install Recloser L1 - Conche		25	8	15	23	(2)	
<b>TOTAL DISTRIBUTION</b>	<b>0</b>	<b>5,153</b>	<b>2,063</b>	<b>2,816</b>	<b>4,879</b>	<b>(274)</b>	
<b><u>GENERATION</u></b>							
Protection Upgrades - Isolated Systems	593	33	13	0	13	(20)	
Upgrade Generator Relaying - Happy Valley North Plant		170	79	91	170	0	
Purchase and Install P.T.'s - Ramea		35	2	33	35	0	
<b>TOTAL GENERATION</b>	<b>593</b>	<b>238</b>	<b>94</b>	<b>124</b>	<b>218</b>	<b>(20)</b>	
<b><u>GENERAL</u></b>							
<b><u>METERING</u></b>							
Purchase Meters & Equipment - TRO System		98	15	83	98	0	
Purchase Metering Spares - Bulk Electrical System		6	0	7	7	1	
<b>TOTAL METERING</b>	<b>0</b>	<b>104</b>	<b>15</b>	<b>90</b>	<b>105</b>	<b>1</b>	
<b><u>PROPERTIES</u></b>							
Survey of Hydro's Primary Distribution Line Right-of-Ways		49	3	46	49	0	
<b>TOTAL PROPERTIES</b>	<b>0</b>	<b>49</b>	<b>3</b>	<b>46</b>	<b>49</b>	<b>0</b>	
<b><u>TOOLS &amp; EQUIPMENT</u></b>							
Purchase & Replace Tools & Equipment Less than \$ 50,000 (Carryover 2003)	0	45	60	0	60	15	
Purchase & Replace Tools & Equipment Less than \$ 50,000	0	102	62	40	102	0	
Replace Light Duty Mobile Equipment Less than \$50,000		389	214	86	300	(89)	NOTE 5
<b>TOTAL TOOLS &amp; EQUIPMENT</b>	<b>0</b>	<b>536</b>	<b>336</b>	<b>126</b>	<b>462</b>	<b>(74)</b>	
<b>TOTAL GENERAL</b>	<b>0</b>	<b>689</b>	<b>354</b>	<b>262</b>	<b>616</b>	<b>(73)</b>	
<b>TOTAL TRANSMISSION &amp; RURAL OPERATIONS</b>	<b>1,159</b>	<b>11,999</b>	<b>3,126</b>	<b>8,976</b>	<b>12,102</b>	<b>103</b>	

**NEWFOUNDLAND & LABRADOR HYDRO**  
**GENERAL PROPERTIES**  
**2004 CAPITAL EXPENDITURES - DETAIL**  
**FOR THE QUARTER ENDING JUNE 30, 2004**  
**(\$,000)**

PROJECT DESCRIPTION	PUB Expenditures Prior To 2004	2004 Approved Budget 2004	2004 Expenditures To June 30	Expected Remaining Expenditures 2004	Expected Total Expenditures 2004	Var. from Approved to Expected Expenditures	Variance Explanation Reference
<b><u>INFORMATION SYSTEMS &amp; TELECOMMUNICATIONS</u></b>							
<b><u>SOFTWARE APPLICATIONS</u></b>							
<b><u>INFRASTRUCTURE REPLACEMENT</u></b>							
Replace Energy Management System - Energy Control Centre	387	5,120	430	2,293	2,723	(2,397)	NOTE 6
<b><u>NEW INFRASTRUCTURE</u></b>							
Corporate Applications Environment		540	40	500	540	0	
Applications Enhancements		463	23		463		
Security Program - Centralized Log Monitoring & Analysis System	71	69	3		69		
Security Program - Secure Remote Access		75	0	75	75	0	
<b>TOTAL SOFTWARE APPLICATIONS</b>	<b>458</b>	<b>6,267</b>	<b>496</b>	<b>2,868</b>	<b>3,870</b>	<b>(2,397)</b>	
<b><u>COMPUTER OPERATIONS</u></b>							
<b><u>INFRASTRUCTURE REPLACEMENT</u></b>							
<b><u>NEW INFRASTRUCTURE</u></b>							
Peripheral Infrastructure Replacement		101	47	54	101	0	
<b>TOTAL COMPUTER OPERATIONS</b>	<b>0</b>	<b>101</b>	<b>47</b>	<b>54</b>	<b>101</b>	<b>0</b>	
<b><u>NETWORK SERVICES</u></b>							
<b><u>INFRASTRUCTURE REPLACEMENT</u></b>							
Replace Powerline Carrier Equipment - Transmission System - West Coast	1,037	391	53	338	391	0	
Replace Battery System - Multiple Sites - 2004		274	171	137	308	34	
Replace Remote Terminal Unit for Hydro - Phase 5		314	57	257	314	0	
Replace Telephone Isolation Equipment - Doyles		49	2	69	71	22	
Upgrade Site Grounding at Telecontrol Site - Phase 5		49	1	48	49	0	
<b><u>NETWORK INFRASTRUCTURE</u></b>							
Purchase Test Equipment		48	48	0	48	0	
Upgrade Local Area Networks (LANs) - Multiple Sites - 2004		48	10	38	48	0	
<b><u>UPGRADE OF TECHNOLOGY</u></b>							
Replacement of Operational Data & Voice Network - Phase II		971	79	892	971	0	
<b>TOTAL NETWORK SERVICES</b>	<b>1,037</b>	<b>2,144</b>	<b>421</b>	<b>1,779</b>	<b>2,200</b>	<b>56</b>	
<b>TOTAL INFORMATION SYSTEMS &amp; TELECOMMUNICATIONS</b>	<b>1,495</b>	<b>8,512</b>	<b>964</b>	<b>4,701</b>	<b>6,171</b>	<b>(2,341)</b>	

**NEWFOUNDLAND & LABRADOR HYDRO**  
**GENERAL PROPERTIES**  
**2004 CAPITAL EXPENDITURES - DETAIL**  
**FOR THE QUARTER ENDING JUNE 30, 2004**  
**(\$,000)**

<b>PROJECT DESCRIPTION</b>	<b>PUB Expenditures Prior To 2004</b>	<b>2004 Approved Budget 2004</b>	<b>2004 Expenditures To June 30</b>	<b>Expected Remaining Expenditures 2004</b>	<b>Expected Total Expenditures 2004</b>	<b>Var. from Approved to Expected Expenditures</b>	<b>Variance Explanation Reference</b>
<b><u>ADMINISTRATIVE</u></b>							
<b><u>VEHICLES</u></b>							
Replace Vehicles - Hydro System - 2003	1,138	1,588	586	1,002	1,588	0	
Replace Vehicles - Hydro System - 2004		1,081	258	823	1,081	0	
<b><u>ADMINISTRATION</u></b>							
Purchase Cash Remittance Processor		60	0	60	60	0	
Electronic Metering Reading		36	0	36	36	0	
Purchase & Replace Admin Office Equip less than \$50,000	0	73	0	32	32	(41)	
<b>TOTAL ADMINISTRATIVE</b>	<b>1,138</b>	<b>2,838</b>	<b>844</b>	<b>1,953</b>	<b>2,797</b>	<b>(41)</b>	
<b>TOTAL GENERAL PROPERTIES</b>	<b>2,633</b>	<b>11,350</b>	<b>1,808</b>	<b>6,654</b>	<b>8,968</b>	<b>(2,382)</b>	



**NEWFOUNDLAND & LABRADOR HYDRO**  
**OTHER APPROVED FUNDS**  
**2004 CAPITAL EXPENDITURES - DETAIL**  
**FOR THE QUARTER ENDING JUNE 30, 2004**  
**(\$,000)**

PROJECT DESCRIPTION	Expenditures Prior To 2004	PUB Approved Budget 2004	2004 Expenditures To June 30	Expected Remaining Expenditures 2004	Expected Total Expenditures 2004	Var. from Approved to Expected Expenditures	Variance Explanation Reference
<b><u>ALLOCATION FOR UNFORESEEN EVENTS</u></b>							
Allocation for Unforeseen Events		1,000	0	1,000	1,000	0	
<b>TOTAL ALLOCATION FOR UNFORESEEN EVENTS</b>	<b>0</b>	<b>1,000</b>	<b>0</b>	<b>1,000</b>	<b>1,000</b>	<b>0</b>	
<b><u>PROJECTS APPROVED BY PUB</u></b>							
<b><u>Carryover</u></b>							
Load Research - Island and Labrador Interconnected Systems	62	143	68	75	143	0	
Wind Generation - Ramea Contribution	9 (9)	89 (89)	72 (58)	17 (31)	89 (89)	0 0	
<b><u>New</u></b>							
Upper Salmon Slope Stabilization		102	41	61	102	0	
Office Server & Productivity Tools Evergreen		639	10	629	639	0	
End User Evergreen Program		793	511	282	793	0	
Increase Generation - Port Hope Simpson		303	1	302	303	0	
Holyrood Marine Terminal - Security Upgrade		465	3	462	465	0	
Diesel Generating Unit - Hopedale		258					
<b>TOTAL PROJECTS APPROVED BY PUB</b>	<b>62</b>	<b>2,703</b>	<b>648</b>	<b>1,797</b>	<b>2,445</b>	<b>0</b>	
<b><u>NEW PROJECTS LESS THAN \$50,000 APPROVED BY HYDRO</u></b>							
<b><u>Carryover</u></b>							
Project Review - Replace VHF Mobile Radio Systems	18	30	34	0	34	4	
<b><u>New</u></b>							
Purchase Site License for Proworx 32		33	1	32	33	0	
Replace Battery Bank - Grand Lake Crossing		26	9	17	26	0	
Purchase VHF Radios		27	0	27	27	0	
Replace Air Conditioning Unit - Hardwoods Terminal Station		24	0	24	24	0	
Preliminary Engineering - Rencontre Interconnection		49	0	49	49	0	
<b>TOTAL PROJECTS LESS THAN \$50,000 APPROVED BY HYDRO</b>	<b>18</b>	<b>189</b>	<b>44</b>	<b>149</b>	<b>193</b>	<b>4</b>	

**TRANSMISSION & RURAL OPERATIONS:**

**1. Upgrade TL214 – (138KV Bottom Brook – Doyles)**

The variance is a result of additional funds being required for the transmission line construction contract and for the structural steel supply. Costs for the transmission construction were substantially higher than what was forecasted in the original project estimate, primarily due to the compressed construction schedule required for system operations.

**2. Install Motor Drive Mechanisms on Disconnect Switches – West Coast**

Based on experience gained on the installations of motor drive mechanisms in 2003, a more efficient work plan was derived from what was presented in the budget. This more efficient plan resulted in the reduction in costs as shown by the variance.

**3. Pole Replacements**

The Capital Budget Proposal estimates were based on cost data for projects completed in years prior to 2003. In 2003, the nature of distribution line construction work in the province resulted in a significant reduction in construction costs as compared to previous years. This trend of lower construction costs continues to prevail in 2004. The variance reflects the reduction in costs due to current construction trends which are significantly lower than the original budget estimate.

**4. Insulator Replacements**

The Capital Budget Proposal estimates were based on cost data for projects completed in years prior to 2003. In 2003, the nature of distribution line construction work in the province resulted in a significant reduction in construction costs as compared to previous years. This trend of lower construction costs continues to prevail in 2004. The variance reflects the reduction in costs due to current construction trends which are significantly lower than the original budget estimate.

**5. Replace Light Duty Mobile Equipment Less Than \$50,000**

The 2004 Capital Budget Proposal was based on the purchase of forty-nine units of light duty mobile equipment. A review of fleet requirements identified a reduction in light duty mobile equipment units from forty-nine to thirty-six. The budget variance is the result of the reduction in the number of units required.

**GENERAL PROPERTIES:**

**6. Replace Energy Management System - Energy Control Centre**

The cashflow for the EMS has changed from that submitted in 2003 Capital Budget proposal. The 2003 Capital Budget proposal was prepared based on the report by KEMA with an anticipated contract signing in December 2003 and an in-service date of February 2006. Due to slower progress than anticipated in the KEMA report to address the rather complex nature of the contract, it was not signed until June 2004 and therefore the scheduled project completion milestone has changed to June 2006. As a result the estimated costs for 2004 and 2005 are forecasted down and estimated costs for 2006 are forecasted up. The total cost for the project has not changed.