NEWFOUNDLAND AND LABRADOR HYDRO 2015 CAPITAL BUDGET (\$000)

	2015
GENERATION	10,508.4
TRANSMISSION AND RURAL OPERATIONS	22,636.4
GENERAL PROPERTIES	3,746.8
ALLOWANCE FOR UNFORESEEN EVENTS	1,000.0
TOTAL PROJECTS UNDER \$50,000	953.6
MULTI-YEAR (2013 Expenditures):	
Multi-year Projects Commencing in 2015	22,556.6
Multi-year Projects Commencing in 2014	14,095.8
Multi-year Projects Commencing Prior to 2014:	
Replace Instrument Transformers - Various Sites Perform Grounding Upgrades - Various Sites Perform Arc Flash Remediation - Various Sites Upgrade Microsoft Office Products - Hydro Place	538.4 345.4 413.1 297.7
TOTAL CAPITAL BUDGET	77,092.2

PROJECT DESCRIPTION	2015
Generation	
HYDRAULIC PLANT	
Refurbish Surge Tank - Bay d'Espoir	1,629.3
Refurbish Access Road - Cat Arm	990.0
Replace ABB Exciter Unit 2 - Cat Arm	845.9
Automate Generator Deluge Systems Units 3,5 and 6 - Bay d'Espoir	645.2
Upgrade Public Safety Around Dams and Waterways - Various Sites	483.9
Install Hydrometeorological Stations - Various Sites	377.9
Refurbish Generation Unit - Snook's Arm	352.9
Upgrade Equipment Doors - Various Sites	348.5
Replace Autogreasing Systems Units 2 and 4 - Bay d'Espoir	254.4
Overhaul Turbine/Generator - Various Sites	304.4
Replace Generator Bearing Coolers - Bay d'Espoir	153.8
THERMAL PLANT	
Overhaul Turbine Valves Unit 1 - Holyrood	1,577.5
Upgrade Powerhouse Roofing - Holyrood	1,047.8
Upgrade Quarry Brook Dam Equipment - Holyrood	498.7
Overhaul Boiler Feed Pump East Unit 1 - Holyrood	196.3
Replace DC Distribution Panels and Breakers - Holyrood	127.9
Overhaul Extraction Pumps - Holyrood	189.6
GAS TURBINES	
Replace Alternator Shaft - Happy Valley	484.4
TOTAL GENERATION	10,508.4

PROJECT DESCRIPTION	2015		
Transmission and Rural Operations			
TERMINAL STATIONS			
Perform Site Work for Mobile Substation - Barachoix	489.3		
Upgrade Terminal Station Foundations - Various Sites	302.3		
Upgrade Control Wiring Phase 1 to Terminal Station 1 - Bay d'Espoir	301.0		
Install Support Structures C2 Capacitor Bank - Hardwoods	199.3		
Replace Surge Arrestors - Various Sites	198.1		
Upgrade Transformer Differential Protection - Grandy Brook	154.0		
TRANSMISSION			
Perform Wood Pole Line Management Program - Various Sites	2,830.6		
DISTRIBUTION			
Provide Service Extensions - All Service Areas	6,080.0		
Upgrade Distribution Systems - All Service Areas	3,340.0		
Construct Second Distribution Feeder - Nain	1,050.3		
Relocate Voltage Regulator - Hawkes Bay	166.4		
<u>GENERATION</u>			
Inspect Fuel Storage Tanks - Various Sites	1,761.1		
Increase Fuel Storage - Rigolet	1,666.8		
Overhaul Diesel Units - Various Sites	1,199.2		
Upgrade Building Exterior - Makkovik	309.5		
Increase Generation Capacity - Makkovik	272.6		
<u>PROPERTIES</u>			
Upgrade Line Depots - Various Sites	953.3		
Install Additional Washrooms - Various Sites	259.3		
Install Fall Protection Equipment - Various Sites	198.9		
Upgrade HVAC System - Port Saunders	137.0		
Reshingle Roof - Stephenville	76.8		
METERING			
Purchase Meters, Equipment and Metering Tanks - Various Sites	196.2		
TOOLS AND EQUIPMENT			
Replace Light Duty Mobile Equipment - Various Sites	494.4		
TOTAL TRANSMISSION AND RURAL OPERATIONS	22,636.4		

General Properties INFORMATION SYSTEMS SOFTWARE APPLICATIONS New Infrastructure Perform Minor Application Enhancements - Hydro Place	329.5 (141.6)
SOFTWARE APPLICATIONS New Infrastructure	
New Infrastructure	
Perform Minor Application Enhancements - Hydro Place	
,	(141.6)
Cost Recoveries	
<u>Upgrade of Technology</u>	
Upgrade Lotus Notes - Hydro Place	635.4
Cost Recoveries	(273.1)
Upgrade Energy Management System - Hydro Place	194.9
Replace Customer Care System - Hydro Place	134.9
COMPUTER OPERATIONS	
Infrastructure Replacement	
Replace Personal Computers - Hydro Place	573.3
Upgrade Enterprise Storage Capacity - Hydro Place	621.3
Cost Recoveries	(267.0)
Replace Peripheral Infrastructure - Hydro Place	200.5
Upgrade of Technology	
Upgrade Server Technology Program - Hydro Place	601.3
Cost Recoveries	(227.1)
TELECONTROL	
NETWORK SERVICES	
Infrastructure Replacement	
Network Infrastructure	
Replace Network Communications Equipment - Hydro Place	169.5
Upgrade of Technology	
Replace Telephone System - Springdale	132.7
Replace WIFI Access Points - Various Sites	126.3
Replace GDC Metroplex - Various Sites	69.2
<u>ADMINISTRATION</u>	
Replace Roof - Hydro Place	671.9
Remove Safety Hazards - Various Sites	194.9
TOTAL GENERAL PROPERTIES	3,746.8
TOTAL SINGLE YEAR PROJECTS OVER \$50,000	36,891.6

Multi-year Projects Commencing in 2015

PROJECT DESCRIPTION	2015	2016	2017	2018	2019	Total
Refurbish Salmon River Spillway - Bay d'Espoir	745.6	556.8				1,302.4
Replace Station Service Breakers - Cat Arm	644.9	363.4				1,008.3
Upgrade Generator Bearings Units 1 and 3 - Bay d'Espoir	14.7	633.3				648.0
Replace Pump House and Associated Equipment - Bay d'Espoir	22.7	522.5				545.2
Refurbish Intakes - Bay d'Espoir	72.6	262.3				334.9
Install Infrared View Ports - Various Sites	83.7	113.1				196.8
Refurbish Unit Relay Protection - Paradise River	8.7	79.7				88.4
Upgrade Fire Protection (Main Warehouse) - Holyrood	46.2	197.6				243.8
Upgrade Gas Turbine Plant Life Extension - Stephenville	2,655.2	2,525.4				5,180.6
Upgrade Circuit Breakers - Various Sites (2015-2016)	6,189.1	6,873.8				13,062.9
Upgrade Power Transformers - Various Sites	4,440.4	7,002.3				11,442.7
Replace Disconnect Switches - Various Sites (2015-2016)	963.7	642.9				1,606.6
Install Transformer On line Gas Monitoring - Various Sites	700.5	975.7				1,676.2
Design and Install Fire Protection in 230 kV Station - Various Sites	67.6	424.3				491.9
Upgrade Terminal Station Protection and Control - Various Sites	172.7	307.2				479.9
Replace Station Lighting - Bay d'Espoir	16.7	160.3				177.0
Upgrade Distribution System - Various Sites (2015-2016)	1,136.1	818.8				1,954.9
(
Install Fire Protection System - Lanse Au Loup	220.6	1,126.2				1,346.8
Replace Unit 2038 - Mary's Harbour	103.5	1,241.5				1,345.0
Replace Programmable Logic Controllers - Various Sites	366.9	346.0	245.1			958.0
Replace Diesel Unit 254 - Paradise River	66.8	429.3				496.1
Upgrade Ventilation Systems - Various Sites	175.9	317.3				493.2
Install Disconnect Switches for Mobile Generators- Various Sites	10.0	189.3				199.3
Replace Accommodations/Septic System - Ebbegunbaeg	489.4	1,061.4				1,550.8
Legal Survey of Primary Distribution Line Right of Ways - Various Sites (2015-2016)	158.6	40.3				198.9
Install Automated Meter Reading - Various Sites (2015-2016)	559.9	401.8				961.7
Replace Off Road Track Vehicle Unit 7861 - Stephenville	1.1	397.8				398.9
Replace Vehicles and Aerial Devices - Various Sites (2015-2016)	2,377.1	225.3				2,602.4
Replace Cooling Tower and Auxiliaries - Hydro Place	45.7	311.3				357.0
Total Multi-Year Projects over \$50,000 commencing in 2015	22,556.6	28,546.9	245.1	0.0	0.0	51,348.6

Multi-year Projects Commencing in 2014

main year risjects commenting in 2021	Expended						
PROJECT DESCRIPTION	to 2014	2015	2016	2017	2018	2019	Total
Upgrade Burnt Dam Spillway Structure - Bay d'Espoir	110.2	1,201.9					1,312.1
Upgrade Generator Bearings Unit 2 - Bay d'Espoir	18.9	396.0					414.9
Replace Spherical By Pass Valve Assemblies Units 1-6 - Bay d'Espoir	57.5	96.3					153.8
Replace Economizer Inlet Valves Units 1 and 2 - Holyrood	192.0	329.1					521.1
Install Cold-Reheat Condensate Drains and High Pressure	49.8	467.4					517.2
Heater Trip Level Unit 3 - Holyrood							0.0
Install Fire Protection Upgrades - Holyrood	56.6	312.5					369.1
Install Handheld Pendant to Overhead Crane - Bay d'Espoir	49.9	170.8					220.7
Upgrade Circuit Breakers - Various Sites (2014-2015)	3,695.4	1,642.5					5,337.9
Replace Disconnect Switches - Various Sites (2014-2015)	815.9	189.5					1,005.4
Replace Optimho Relays on East Coast - Various Sites	89.1	96.9					186.0
Refurbish Anchors and Footings TL202 and TL206 - Bay d'Espoir to Sunnyside	1,191.7	988.2					2,179.9
Upgrade Distribution System - Various Sites (2014-2015)	370.2	4,850.1					5,220.3
Replace Recloser Control Panels - Various Sites	111.3	84.4					195.7
Install Fire Protection System - Nain	107.1	892.2					999.3
Upgrade Diesel Plant Production Data Collection Equipment - Various Sites	268.9	269.8	280.7				819.4
Legal Survey of Primary Distribution Line Right of Ways - Various Sites (2014-2015)	156.8	40.3					197.1
Install Automated Meter Reading - Various Sites (2014-15)	356.9	340.2					697.1
Replace Battery Banks and Chargers - Various Sites	267.0	398.0					665.0
Upgrade IP SCADA Network - Various Sites	254.2	238.7					492.9
Replace Vehicles and Aerial Devices - Various Sites (2014-2015)	1,809.1	1,091.0					2,900.1
TOTAL MULTI-YEAR PROJECTS OVER \$50,000 COMMENCING 2014	10,028.5	14,095.8	280.7	0.0	0.0	0.0	24,405.0