

1 Q. **References: Volume I, 2019 Capital Projects, \$500,000 and Over, Project Title:**
2 **Terminal Station In-Service Failures, page C42.**

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4 Provide historical expenditures for the period 2014 to 2018 for the historical
5 projects now covered by this project.

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8 A. Prior to the inception of the “Terminal Station In-Service Failures Program”, failures
9 and incipient failures of terminal station equipment would be addressed as a
10 Supplemental Capital Budget Application, or within Hydro’s Allowance for
11 Unforeseen Items Account. The “Terminal Station In-Service Failures Program” has
12 allowed Hydro to address equipment failures, or incipient equipment failures, in a
13 prompt and efficient regulatory manner to maintain or restore system reliability.

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15 Activities for the years 2014-2016 inclusive that were covered under the Allowance
16 for Unforeseen Items Account or a Supplemental Application, but would be
17 addressed under in-service failures today, are outlined in Table 1. For the years
18 2017 and 2018, actual and forecasted in-service failures expenditures are also
19 provided.

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Table 1: Historical Expenditures Now Considered In-Service Failures (\$000s)

Activity	Actual Expenditures - Completed Activities	Forecasted Expenditures - Ongoing Activities	Addressed Within
2014			
230 kV Breaker (B1L17) Overhaul - Holyrood	361.3		Unforeseen Allowance
230 kV Breaker (B1L03) Overhaul - Sunnyside	160.9		Unforeseen Allowance
Total	522.2		
2015			
Internal Assessment and Repair of Transformer VBN T1	345.5		Supplemental Application (2015-2016)
Purchase Spare Breaker - 72.5kV	70.6		Inventory
Total	416.1		
2016			
Perform Upgrades - Western Avalon Transformer T5 Tap Changer	1,343.3		Unforeseen Allowance (2015-2016)
Total	1,343.3		
2017			
Replace Breaker B3L19 – Sunnyside	852.5		In-Service Failures
Transformer Protective Devices – Various	232.2		In-Service Failures
Mobile Transformer Refurbishment – Bishop’s Falls	151		In-Service Failures
Replace Station Service Transformer – St. Anthony Airport	116.8		In-Service Failures
Replace B1T1 Interrupter – Western Avalon	45.8		In-Service Failures
Upgrade Breaker Failure Protection - Hardwoods	24.4		In-Service Failures
Replace Surge Arrestors - Holyrood Terminal Station	15.1		In-Service Failures
Replace Surge Arrestor - Stony Brook	3.3		In-Service Failures
Total	1441.1		

Activity	Actual Expenditures - Completed Activities	Forecasted Expenditures - Ongoing Activities	Addressed Within
2018			
B7L38 69 kV Breaker Replacement – Holyrood	126.5		In-Service Failures
B1 PT Replacement – Cow Head	15.8		In-Service Failures
T4 Tap Changer Overhaul – Hardwoods	59.0		In-Service Failures
Purchase Spare Disconnects for Stand-By Equipment Pool		193.3	In-Service Failures
B9B10-1 B-Phase CT – Bay d'Espoir	40.7		In-Service Failures
Purchase Spare SSVT – Stand-By Pool	3.8		In-Service Failures
Purchase Spare Breakers – Stand-By Pool	447.3		In-Service Failures
B3T2-1 Disconnect Replacement – Stony Brook	12.2		In-Service Failures
46-38 B Phase CT Replacement – Wabush		35.0	In-Service Failures
TL205 PHB CVT – Buchans	21.3		In-Service Failures
Replace C2 Cap Bank 59 Relay – St. Anthony	11.9		In-Service Failures
Battery Bank Replacement – Bear Cove		30.0	In-Service Failures
Neutral Overcurrent Relay Replacement – Plum Point	3.0		In-Service Failures
Replacement of 2 CTs and 3 CT/PT Combination Units - Churchill Falls		650.8	In-Service Failures
Replace WAVTS B1T1 Circuit Switcher		22.0	In-Service Failures
Replace B1L32 A-PHASE CT – Stony Brook		30.0	In-Service Failures
H1 Surge Arrester Replacement on T12 – Bay d'Espoir	0.7		In-Service Failures
T8 X1 Bushing Replacement - Wabush	2.8		In-Service Failures
B2L21 Overhaul - Peter's Barren		48.0	In-Service Failures
Total (Actuals + Forecast)	1754.1		