

1 Q. **Project - Upgrade Waste Water Equalization System - Holyrood**

2 With reference Table A-1 2021 Project Prioritization (2021 Capital Projects Overview Appendix  
3 A), please explain in detail how and why this project was assigned a rank of 4, while Overhaul  
4 Unit 3 Generator - Holyrood, Overhaul Unit 3 Generator - Holyrood, Boiler Condition  
5 Assessment and Miscellaneous Upgrades - Holyrood, and Inspect Chemical Tanks\_ Holyrood,  
6 were all ranked 29 lower. In providing such detailed explanation, please provide complete  
7 copies of all internal Hydro work product (the completed prioritization matrix templates;  
8 prioritization scoring by Asset Planners; reports; memoranda; emails) , and of the work product  
9 of any external consultants, documenting the project prioritization process in relation to the  
10 foregoing projects, and please reconcile such explanation with the "two-pronged approach to  
11 prioritizing capital investments" summarized at page 14 of the September 16, 2020  
12 presentation to the Board.

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15 A. In Newfoundland and Labrador Hydro's ("Hydro") 2021 Project Prioritization, Table A-1, the  
16 Upgrade Waste Water Equalization System project was assigned a ranking of 4, the Overhaul  
17 Unit 3 Generator - Holyrood project was assigned a ranking of 5, the Boiler Condition  
18 Assessment and Miscellaneous Upgrades - Holyrood project was assigned a ranking of 6 and the  
19 Inspect Chemical Tanks – Holyrood project was assigned a ranking of 8. As outlined in IC-NLH-  
20 014, Attachment 1, the scores for these projects were within a close range. The waste water  
21 equalization system vital to the operation of the Holyrood Thermal Generating Station has  
22 severely deteriorated, and poses a safety concern for employees due to the mold growth within  
23 the facility and the corroded structural steel members; it therefore ranked higher than the other  
24 projects. However, when considering the range of scores produced, they are all high and are of  
25 fairly equivalent ranking priority. Project scoring is completed by Hydro's Long-Term Asset  
26 Planners based on their knowledge and experience with the assets. All projects put forward in  
27 Hydro's annual capital budget submissions are required to ensure that Hydro provides safe,  
28 reliable, least-cost service.

1 As outlined in Hydro’s capital budget application overview presentation, Hydro takes a two-  
2 pronged approach to prioritizing its capital investments. First, Hydro qualitatively undertakes an  
3 assessment of projects that are put forward by operations and asset management professionals.  
4 Projects are assessed based on their scope and justification and critically evaluated as to  
5 whether there is opportunity for deferral. Once satisfied that the projects should be considered  
6 as part of the annual capital submission, they are then prioritized based on the matrix model.  
7 Once the algorithm produces a priority list based on the scores, the resultant list is then reviewed to  
8 ensure the ranking reflects investment priorities and adjusted if required.

9 It is Hydro’s position that the additional records requested above are unnecessary as the  
10 information in the Capital Budget Application, Capital Budget Application Overview  
11 Presentation, and the above-noted response is sufficient for a satisfactory understanding of the  
12 matters before the Board of Commissioners of Public Utilities.

NEWFOUNDLAND AND LABRADOR HYDRO  
2021 CAPITAL BUDGET APPLICATION  
2021 PROJECT PRIORITIZATION

Not Likely = 1  
Low Likelihood = 2  
Likely = 3  
Highly Likely = 4  
Near Certain = 5

Low = 1  
Medium = 2  
High = 3

Confidence Level:  
Low = 1  
Medium = 2  
High = 3

		I		II		III		IV		V		VI		VII		VIII		IX		X		XI		XII		XIII		XIV		XV		XVI	
		Work Classification		Net Present Value		Goal 1 Safety		Goal 2 Environment		Goal 3-5 Alignment		Schedule Risk		Continue Service to Customers		# Customers Impacted		System Impact: Critical to .....		Impact Intensity		Loss Type: Loss of .....		Loss Mitigation		% Improvement: 5 Yr Avg. SAIDI or SAIFI		Estimated Project Cost Range		SCORE			
*	Extreme Safety OR Mandatory Load Driven (If "Yes" then HIGH priority)	Normal=5	NPV(\$0)=0	Minor=10	None=10	None=15	External & Internal Conflicts=10	Can=20	<100=10	None Specific=5	Minor=5	No Type=5	Redundant	% Improve(0)=0	N.R.P.=0																		
		Justifiable: Payback(70)=15	NPV(<\$100K)=5	Treatment=50	Minor=50	Maps but no document=40	External Affecting Completions=20	Can but with High Costs=50	<1000=30	System with Standby Unit=50	Moderate=40	Significant=70	Equipment=40	Backup	% Improve(<1)=10	>\$1M=5																	
		Payback(40)=45	NPV(<\$500K)=15	Lost Time=80	Moderate=80	Maps but with document=65	NO Extr. but Intr. Conflicts=40	Cannot=70	>10000=70	Plant or Station=70	High=90	Production=70	Customer Delivery=90	Nothing=90	% Improve(<2)=15	\$500K-\$1M=15																	
		Payback(10)=85	NPV(<\$1M)=45	Disability=100	Significant=100		NO Conflicts=65			Entire System=90					% Improve(<3)=30	\$200K-\$500K=30																	

PROJECT DESCRIPTION

	Impact	Con Lvl	Impact	Con Lvl	Impact	Prob.	Impact	Con Lvl	Impact	Prob.	Impact	Con Lvl	Impact	Prob.	Impact	Con Lvl	Impact	Prob.	Impact	Con Lvl	Impact	Prob.	Impact	Con Lvl	Impact	Prob.	Impact	Con Lvl	Impact	Prob.	Impact	Con Lvl	Score
Upgrade Waste Water Equalization System - Holyrood	5	3	0	3	100	4	100	3	40	3	50	2	90	2	90	2	90	2	90	2	90	2	90	2	90	2	90	3	15	5	3	2,000	
Overhaul Unit 3 Generator - Holyrood	5	3	0	3	100	2	100	1	65	3	50	2	90	2	90	2	90	2	90	2	90	2	90	2	90	2	90	3	15	3	1,770		
Boiler Condition Assessment and Miscellaneous Upgrades - Holyrood	5	3	0	3	100	2	100	1	65	3	50	2	90	2	90	2	90	2	90	2	90	2	90	2	90	2	90	3	15	5	3	1,740	
Inspect Chemical Tanks - Holyrood	5	3	0	3	100	2	80	1	65	3	50	2	90	2	90	2	90	2	90	2	90	2	90	2	90	2	90	3	15	5	3	1,705	