

1 Q. Reference: *Bi-weekly Energy Supply Report for the Island Interconnected System*  
2 *for the Period Ending February 25, 2016* submitted by Hydro on March 2, 2016,  
3 Page 5, Lines 22-23 to Page 6, Line 2.

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5 “Hydro is also currently experiencing a derating at the Hardwoods gas turbine to 38  
6 MW (from 50 MW). ... Hydro expects that the original engine will be installed again  
7 by fall 2016...”

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9 In the response to Request for Information NP-NLH-020 (Revision 1, January 11-16)  
10 of the original Application, Hydro identified the derating of the Hardwoods Gas  
11 Turbine as reducing the opportunity to operate the diesel generators to reduce the  
12 operation of the Holyrood CT. Does the derating of the Hardwoods Gas Turbine  
13 through to the fall of 2016 reduce the opportunity to utilize the diesel generators to  
14 reduce operation of the Holyrood CT? If so, what is the impact on the stated 2016  
15 fuel saving of \$0.73 million referred to in the report *Purchase 12MW of Diesel*  
16 *Generation (Revised)*, Page 12, Line 5?

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19 A. Using a similar analysis to that presented in Hydro’s response to DG-PUB-NLH-14,  
20 Hydro has restated the estimated fuel savings which could be provided by the  
21 Holyrood diesels, assuming a continuation in the derating of the Hardwoods Gas  
22 Turbine (HWD GT) to its current maximum output of 38 MW until the fall of 2016.  
23 The results are found in Table 1.

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25 There is no material change in fuel savings identified by utilizing the Holyrood  
26 diesels under this scenario analysis, as they remain at an estimated \$0.41 million for  
27 the year. However, the reduction in HWD GT capability by 12 MW does reduce the

Procurement of 12 MW Diesel Generation at Holyrood (Revised)

1 band of Avalon load between the start-up of the HWD GT and the Holyrood diesels  
 2 to the start-up of the Holyrood CT; from 35 MW to 23 MW. Given the inherent  
 3 uncertainty in load forecasts and the dynamics of the load, this will limit the  
 4 opportunities to dispatch the diesels to defer HRD CT operation until Hardwoods is  
 5 restored to full capacity.

Table 1					
Jan - Dec 2016					
Without Holyrood Diesels - HWD GT de-rated until the Fall of 2016					
Standby Unit	Operating Hours	Minimum Load (MW)	Energy (kWh)	Rate (\$/MWh)	Cost (\$)
Hardwoods One End	223	5	1,115,000	\$ 0.21	\$ 234,150
Holyrood Diesels	-	9.25	-	\$ 0.19	\$ -
Holyrood CT	659	40	26,360,000	\$ 0.21	\$ 5,535,600
Hardwoods Two Ends	-	10	-	\$ 0.21	\$ -
Totals			27,475,000		\$ 5,769,750
With Holyrood Diesels - HWD GT derated to the Fall of 2016					
Standby Unit	Operating Hours	Minimum Load (MW)	Energy (kWh)	Rate (\$/MWh)	Cost (\$)
Hardwoods One End	342	5	1,710,000	\$ 0.21	\$ 359,100
Holyrood Diesels	119	9.25	1,100,750	\$ 0.19	\$ 209,143
Holyrood CT	533	40	21,320,000	\$ 0.21	\$ 4,477,200
Hardwoods Two Ends	-	10	-	\$ 0.21	\$ -
Totals			24,130,750		\$ 5,045,443
Savings					
Gross Fuel Savings					\$ 724,308
Less Holyrood Replacement Energy Costs <sup>1</sup>					\$ (314,360)
Net Savings over Period					\$ 409,948

Note 1: The reduction in standby energy production (3,344,250 kWh) at Holyrood replacement costs \$0.094/kWh