

Hydro Place, 500 Columbus Drive. P.O. Box 12400. St. John's. NL Canada A1B 4K7 t. 709.737.1400 f. 709.737.1800 www.nlh.nl.ca

July 15, 2011

Board of Commissioners of Public Utilities Prince Charles Building 120 Torbay Road, P.O. Box 21040 St. John's, NL A1A 5B2

ATTENTION: Ms. Cheryl Blundon

**Director of Corporate Services & Board Secretary** 

Dear Ms. Blundon:

Re: An Application by Newfoundland and Labrador Hydro pursuant to Subsection 41 (3) of the Act for approval of two capital projects at the Holyrood Thermal Generating Station.

Please find enclosed the original and eight copies of the above-noted Application, plus supporting affidavit, project reports and draft order.

The projects proposed in this Application are an upgrade to Unit 1 stack breeching at the Holyrood Thermal Generating Station to permit the continued safe and reliable operation of Unit 1, and refurbishment of Tank 3 at the Holyrood fuel storage facility. These projects were included in Hydro's 2011 Capital Budget, but not approved by the Board. Amended proposals are now being submitted.

Should you have any questions, please contact the undersigned.

Yours truly,

NEWFOUNDLAND AND LABRADOR HYDRO

Senior Legal Counse

GPY/jc

cc: Gerard Hayes – Newfoundland Power
Paul Coxworthy – Stewart McKelvey Stirling Scales

Thomas Johnson – Consumer Advocate
Dean Porter – Poole Althouse

IN THE MATTER OF the Electrical Power Control Act, RSNL 1994, Chapter E-5.1 (the "EPCA") and the Public Utilities Act, RSNL 1990, Chapter P-47 (the Act) as amended, and their subordinate regulations;

AND N THE MATTER OF an Application by Newfoundland and Labrador Hydro pursuant to Subsection 41(3) of the Act, for the approval to upgrade Unit 1 stack breeching and to upgrade the fuel oil storage facility at the Holyrood Thermal Generating Station.

TO: The Board of Commissioners of Public Utilities (the Board)

### THE APPLICATION OF NEWFOUNDLAND AND LABRADOR HYDRO (Hydro) STATES THAT:

- Hydro is a corporation continued and existing under the Hydro Corporation Act,
   2007, is a public utility within the meaning of the Act and is subject to the
   provisions of the Electrical Power Control Act, 1994.
- 2. Hydro owns and maintains the Holyrood Thermal Generating Station (Holyrood) which is an essential part of the Island Interconnected System with three units providing a total capacity of 490 MW representing approximately one-third of Hydro's Island Interconnected System generating capacity.

#### **Stack Breeching**

 One of the main components of each generation unit, the boiler, requires stack breeching to convey the boiler hot flue gas safely outside the plant.

- 4. The existing stack breeching for Unit 1 has erosion damage to its insulation, cracks in the internal insulating liner and concrete floor, corrosion to steel plates, and other damage and deterioration. Details and supporting documentation are found in the attached report entitled "Upgrade Unit 1 Stack Breeching".
- 5. Refurbishment of the stack breeching is required to ensure reliable operation of Unit 1, consistent with the anticipated future use of Holyrood as described in Attachment A.
- 6. The attached proposal document entitled "Upgrade Unit 1 Stack Breeching" describes the project in further detail and provides justification for the project.

## **Fuel Oil Storage Facility**

- 7. The generating units at Holyrood are fuelled by No. 6 (Bunker C) oil, which is stored in four tanks, two installed in 1969 and two, including Tank 3, installed in 1977.
- 8. Two of the four tanks at Holyrood have been refurbished and are known to be in reliable condition. The last major inspection of Tank 3 occurred in 2003, when 195 repairs, or patches, were made, extending the life of the tank by five to six years, which have now passed. A complete internal inspection of Tank 3 will be

completed as part of the proposed project, and the exact scope of the required work modified at that time.

- 9. The criticality of the availability of all four fuel tanks at Holyrood is expected to steadily increase over the next six years, with fuel consumption forecast to increase from 1.5 million barrels in 2011 to 2.7 million in 2016, as load on the Island Interconnected System.
- 10. As the requirements for fuel consumption increase, fuel storage is required to ensure a secure supply of No. 6 fuel. When the plant is operating at full load, with all four tanks in service, fuel shipment is required every 11 to 14 days to sustain the full output level of the generating units at Holyrood. Loss any one of the (200,000 barrel capacity) tanks would require more frequent fuel shipments, which may be impeded by ice or weather conditions.
- 11. The inspection and consequent refurbishment of Tank 3 is critical to maintain that secure supply of No. 6 fuel.
- 12. The attached proposal document entitled "Refurbishment of the Fuel Oil Storage Facility" describes the project in further detail and provides justification for the project.

# **Application**

13. Therefore, Hydro makes Application that the Board make an Order approving, pursuant to Section 41 (3) of the *Act*, the capital expenditure of \$1,853,900 for upgrade Unit 1 stack breeching, and the capital expenditure of \$2,694,700 for the refurbishment of Tank 3, both projects at Holyrood.

**DATED AT** St. John's in the Province of Newfoundland and Labrador this **/**S **/**Kday of July 2011.

Geøffrey P. Young

Counsel for the Applicant

Mewfoundland and Labrador Hydro, 500 Columbus Drive, P.O. Box 12400 St. John's, Newfoundland, A1B 4K7

Telephone: (709) 737-1277 Facsimile: (709) 737-1782

IN THE MATTER OF the Electrical Power Control Act, RSNL 1994, Chapter E-5.1 (the EPCA) and the Public Utilities Act, RSNL 1990, Chapter P-47 (the Act) and regulations thereunder;

AND IN THE MATTER OF an Application by Newfoundland and Labrador Hydro for the approval, pursuant to Subsection 41(3) of the Act, for the approval to upgrade Unit 1 stack breeching and to upgrade the fuel oil storage facility at the Holyrood Thermal Generating Station.

#### **AFFIDAVIT**

I, David Harris, Professional Engineer, of St. John's in the Province of Newfoundland and Labrador, make oath and say as follows:

- I am Manager, Rates and Regulation, on behalf of Newfoundland and Labrador Hydro,
   the Applicant named in the attached Application.
- 2. I have read and understand the foregoing Application.
- I have personal knowledge of the facts contained therein, except where otherwise indicated, and they are true to the best of my knowledge, information and belief.

sworn at St. John's in the Province )
of Newfoundland and Labrador )
this <u>kr</u> day of <u>fuly</u> 2011 )
before me: )

Barrister - Newfoundland and Labrador

David Harris, P. Eng.

# (DRAFT ORDER) NEWFOUNDLAND AND LABRADOR BOARD OF COMMISSIONERS OF PUBLIC UTILITIES

# AN ORDER OF THE BOARD

NO. P.U. \_\_ (2010)

1	IN THE MATTER OF the Electrical Power		
2	Control Act, RSNL 1994, Chapter E-5.1 (the		
3	"EPCA") and the Public Utilities Act, RSNL 1990,		
4	Chapter P-47 (the "Act") as amended, and their		
5	subordinate regulations;		
6			
7	AND		
8			
9	IN THE MATTER OF an Application		
10	by Newfoundland and Labrador Hydro		
11	pursuant to Subsections 41(3) of the Act, for		
12	the approval to upgrade Unit 1 stack breeching		
13	and to upgrade the fuel oil storage facility at the		
14	Holyrood Thermal Generating Station.		
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17	WHEREAS the Applicant is a corporation continued and existing under the <i>Hydro</i>		
18	Corporation Act, 2007, is a public utility within the meaning of the Act and is subject to		
19	the provisions of the Electrical Power Control Act, 1994 and		
20			
21	WHEREAS Section 41(3) of the Act requires that a public utility not proceed with the		
22	construction, purchase or lease of improvements or additions to its property where:		
23	a) the cost of construction or purchase is in excess of \$50,000; or		
24	b) the cost of the lease is in excess of \$5,000 in a year of the lease, without prior		
25	approval of the Board; and		
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27	WHEREAS Hydro owns, operates and maintains the Holyrood Thermal Generating		
28	Station (Holyrood) which is an essential part of the Island Interconnected System with		
29	three units providing a total capacity of 490 MW representing approximately one-third of		
30	Hydro's Island Interconnected System generating capacity; and		
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32	WHEREAS refurbishment of the stack breeching is required to ensure reliable operation		
33	of Unit 1, consistent with the anticipated future use of Holyrood; and		
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35	WHEREAS refurbishment of Tank 3 of the Holyrood fuel storage facility is required to		
36	ensure reliable operation of the Holyrood generating units, consistent with the anticipated		
37	future use of Holyrood; and		
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39	WHEREAS on July 15, 2011, the Applicant made Application to the Board requesting		
40	approval of the capital expenditure of \$1,853,900 for upgrade Unit 1 stack breeching, and		

1	the capital expenditure of \$2,694,700 for the refurbishment of Tank 3, both projects at		
2	Holyrood; and		
3 4	WHEREAS the Board has considered Hydro's Application and the materials filed		
5	therewith.		
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8	IT IS THEREFORE ORDERED THAT:		
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10 11	1.	Pursuant to Section 41 (3) of the <i>Act</i> , the Board approves the capital	
12		expenditure of \$1,853,900 for upgrade Unit 1 stack breeching, and the capital expenditure of \$2,694,700 for the refurbishment of Tank 3, both projects at	
13		Holyrood.	
14		1101,1004.	
15	2.	The Applicant shall pay all expenses of the Board arising from this	
16		Application.	
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19	<b>DATED</b> at St. John's, Newfoundland and Labrador, this day of ,		
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