



June 2, 2014

Ms. G. Cheryl Blundon
Board of Commissioners of Public Utilities
120 Torbay Road, P.O. Box 12040
St. John's, NL A1A 5B2

Dear Ms. Blundon:

Re: Newfoundland and Labrador Hydro – Application for Approval of Expenditures for the Installation of Diesel Units at Holyrood for the Purposes of Black Starting the Generating Units, and for the Deferral of Lease Costs (“Black start”) and Application to Supply and Install 100 MW (Nominal) of Combustion Turbine Generation

Please find enclosed one (1) original and twelve (12) copies of the following Requests for Information:

1. Re - Black Start
CA-NLH-20 to CA-NLH-25
2. Re – 100 MW (Nominal) of Combustion Turbine Generation
GT-CA-NLH-01 to GT-CA-NLH-26

A copy of the letter, together with enclosures, has been forwarded directly to the parties listed below.

If you have any questions regarding the filing, please contact the undersigned at your convenience.

Yours very truly,

O'DEA, EARLE



THOMAS JOHNSON

TJ/cel
Encl.

cc: Newfoundland & Labrador Hydro
P.O. Box 12400
500 Columbus Drive
St. John's, NL A1B 4K7
Attention: Geoffrey P. Young, Senior Legal Counsel

Newfoundland Power
P.O. Box 8910
55 Kenmount Road
St. John's, NL A1B 3P6
Attention: Gerard Hayes, Senior Legal Counsel

Vale Newfoundland and Labrador Limited
c/o Cox & Palmer
Suite 1000, Scotia Centre
235 Water Street
St. John's, NL A1C 1B6
Attention: Thomas J. O'Reilly, Q.C.

Island Industrial Customers Group
c/o Stewart McKelvey
Cabot Place, 100 New Gower Street
P.O. Box 5038
St. John's, NL A1C 5V3
Attention: Paul Coxworthy

Sierra Club Canada
Atlantic Canada Chapter
St. John's, NL
Attention: Mr. Fred Winsor, Conservation Chair

Mr. Danny Dumaresque
31 Portugal Cove Road
St. John's, NL A1B 2N5

IN THE MATTER OF

the *Electrical Power Control Act*, R.S.N.L. 1994,
Chapter E-5.1 (the "*EPCA*") and the *Public*
Utilities Act, R.S.N.L. 1990, Chapter P-47
(the "*Act*"), and regulations thereunder;

AND

IN THE MATTER OF

an Application by Newfoundland and
Labrador Hydro ("Hydro"), pursuant to
Subsection 41(3) of the Act, for approval
of the procurement and installation of a
combustion turbine at Holyrood.

**CONSUMER ADVOCATE
REQUESTS FOR INFORMATION
GT-CA-NLH-1 to GT-CA-NLH-26**

Issued: June 2, 2014

1
2 GT-CA-NLH-1 Please provide the current status on the project size, cost and in-
3 service date.
4

5 GT-CA-NLH-2 (April 10, 2014 report entitled Supply and Install 100 MW
6 (Nominal), Table 11, pages 41 and 42) Now that Hydro has
7 received submissions in response to its public tender, please
8 provide an update of the schedule included in Table 11.
9

10 GT-CA-NLH-3 (April 10, 2014 report entitled Supply and Install 100 MW
11 (Nominal) of Combustion Turbine Generation) It is stated that a
12 combustion turbine located at Holyrood provides (page 8) "*The*
13 *ability to return the leased black start diesels at Holyrood*". What
14 annual savings and impact on rates are expected to result from this
15 and when will the leased units be returned?
16

17 GT-CA-NLH-4 Please provide a list of the proposals received in response to
18 Hydro's public tender for the 100 MW combustion turbine
19 identifying each project by name, output (nominal), cost in Dollars
20 and \$/kW, in-service date, and pertinent comments; i.e., if the
21 project has synchronous condenser capability.
22

23 GT-CA-NLH-5 Please file a copy of Hydro's evaluation and selection report
24 relating to the submissions received in response to its public tender
25 for the 100 MW combustion turbine.
26

27 GT-CA-NLH-6 Is the tendering process followed by Hydro for the combustion
28 turbine project an internally approved process? Has it received
29 external approval, for example, by the Board or a Government
30 agency?
31

1 GT-CA-NLH-7 Did Hydro follow a tendering process that is consistent with
2 practice elsewhere for procurement of generation facilities such as
3 a combustion turbine? More specifically, is the tendering process
4 followed by Hydro consistent with good utility practice as it relates
5 to competition and the assurance that customers receive optimum
6 value? For example, was the number and quality of proposals
7 received comparable to that in other jurisdictions issuing similar
8 tenders, or was the procurement process too restrictive with too
9 short a turnaround that might necessitate re-issuing the tender?
10

11 GT-CA-NLH-8 Were bids received from the expected sources; i.e., the usual
12 suppliers? If not, please explain why the expected sources did not
13 submit bids?
14

15 GT-CA-NLH-9 (April 10, 2014 report entitled Supply and Install 100 MW
16 (Nominal) of Combustion Turbine Generation)
17 At p. 8, Hydro stated, *“To guard against losing the opportunity,*
18 *Hydro has issued a functional specification through a public*
19 *tender with a close date of April 21, 2014 with the subsequent*
20 *award subject to the Board’s approval of this application. The*
21 *award date to secure such an expedited schedule is April 30,*
22 *2014.”* Please provide details as to how the tender schedule
23 followed in this matter compares to the tender schedule Hydro
24 typically follows for large capital expenditures and as compared to
25 Hydro’s previously Board-filed estimates for the procurement of a
26 combustion turbine.
27

28 GT-CA-NLH-10 (April 10, 2014 report entitled Supply and Install 100 MW
29 (Nominal) of Combustion Turbine Generation)
30 At p. 9 Hydro states that, *“The tender process will be open to both*
31 *new and ready built (but unused) combustion turbines thus*

1 *encouraging original manufacturers as well as aftermarket*
2 *sources. All proposals must assure an in service date in 2014.*
3 *Discussions have been held with several vendors and they are*
4 *aware of the required 2014 in service date. However, to ensure*
5 *this expedited schedule can be achieved a timely approval by the*
6 *Board is essential.”* What measures were taken by Hydro to make
7 its tender call known to the potential supplier market? How, if at
8 all, did those measures differ from Hydro’s typical measures for
9 tenders of large capital expenditures?

10
11 GT-CA-NLH-11 (April 10, 2014 report entitled Supply and Install 100 MW
12 (Nominal) of Combustion Turbine Generation)
13 At p. 9 Hydro states that, “*The tender process will be open to both*
14 *new and ready built (but unused) combustion turbines thus*
15 *encouraging original manufactures as well as aftermarket sources.*
16 *All proposals must assure an in service date in 2014. Discussions*
17 *have been held with several vendors and they are aware of the*
18 *required 2014 in service date. However, to ensure this expedited*
19 *schedule can be achieved a timely approval by the Board is*
20 *essential.”* What is Hydro’s assessment as to how the accelerated
21 in-service date impacted upon the level of market interest in this
22 tender process and provide support for this assessment?

23
24 GT-CA-NLH-12 (April 10, 2014 report entitled Supply and Install 100 MW
25 (Nominal) of Combustion Turbine Generation) It is stated (page 9)
26 “*Hydro is proposing to negotiate interruptible contracts with*
27 *major industrial customers at least for 2014-2015”.* What is the
28 status of these negotiations?

29
30 GT-CA-NLH-13 (April 10, 2014 report entitled Supply and Install 100 MW
31 (Nominal) of Combustion Turbine Generation) It is stated (page 9)

1 *“Hydro is proposing to negotiate interruptible contracts with*
2 *major industrial customers at least for 2014-2015”*. How will
3 Hydro determine if the interruptible contracts are economic?
4

5 GT-CA-NLH-14 (April 10, 2014 report entitled Supply and Install 100 MW
6 (Nominal) of Combustion Turbine Generation) It is stated (page 9)
7 *“Hydro is proposing to negotiate interruptible contracts with*
8 *major industrial customers at least for 2014-2015”*. Will Hydro
9 file these interruptible contracts for Board approval and how does
10 Hydro propose that the costs of these contracts be recovered?
11

12 GT-CA-NLH-15 (May 2, 2014 submission by Newfoundland Power entitled
13 Newfoundland and Labrador Hydro – Application for Approval of
14 a Capital Project to Supply and Install 100 MW (Nominal) of
15 Combustion Turbine Generation – Request for Comments) It is
16 stated *“Certain of the findings in the Interim Report suggest that*
17 *the high risk of supply-related emergencies identified by Liberty is*
18 *attributable to acts or omissions of Hydro related to the planning,*
19 *maintenance and operation of its generation and transmission*
20 *assets on the Island Interconnected System. In light of those*
21 *findings, Newfoundland Power submits it is appropriate that a*
22 *separate process be undertaken to consider whether or not the*
23 *costs associated with the Application proposal are prudent and*
24 *should be recovered from ratepayers”*. What is Hydro’s position
25 relating to the prudence of the expenditure for the combustion
26 turbine project in the light of the foregoing statement regarding the
27 acts or omissions of Hydro and their relation to the high risk of
28 supply-related emergencies identified by Liberty?
29

30 GT-CA-NLH-16 In Order No. P.U. 16(2014), the Board ordered as follows (page 4,
31 lines 31 to 34) *“Hydro’s proposal to proceed with the purchase*

1 *and installation of 100 MW of combustion turbine generation at*
2 *Holyrood Thermal Generating Station is approved, with the issues*
3 *of costs and cost recovery to be determined by the Board in a*
4 *future Order*". What cost and cost recovery mechanism is Hydro
5 proposing for the 100 MW combustion turbine project?
6

7 GT-CA-NLH-17 (April 10, 2014 report entitled Supply and Install 100 MW
8 (Nominal) of Combustion Turbine Generation) Table 9 (page 34)
9 shows cost estimates for various combustion turbine alternatives.
10 The cost of the 60 MW combustion turbine option is roughly
11 \$2000/kW, while the cost for the 113 MW combustion turbine
12 option is much lower at \$1261/kW. The US Energy Information
13 Administration (EIA) (see April 2013 report entitled, "Updated
14 Capital Cost Estimates for Utility Scale Electricity Generating
15 Plants" at
16 http://www.eia.gov/forecasts/capitalcost/pdf/updated_capcost.pdf)
17 estimates the cost of a conventional combustion turbine with
18 nominal rating of 85 MW at US\$ 973/kW (Can\$ 1058/kW based
19 on an exchange rate of 1 Can\$ = 0.92 US\$). This includes owner
20 costs of about US\$ 162/kW (Can\$ 176/kW). An October 23, 2012
21 report entitled, "Cost and Performance Review of Generation
22 Technologies – Recommendations for WECC 10- and 20-Year
23 Study Process" (at
24 [http://www.wecc.biz/committees/BOD/TEPPC/TAS/121012/Lists/](http://www.wecc.biz/committees/BOD/TEPPC/TAS/121012/Lists/Minutes/1/121005_GenCapCostReport_finaldraft.pdf)
25 [Minutes/1/121005_GenCapCostReport_finaldraft.pdf](http://www.wecc.biz/committees/BOD/TEPPC/TAS/121012/Lists/Minutes/1/121005_GenCapCostReport_finaldraft.pdf))
26 recommends a target price (for use in economic evaluations) for
27 combustion turbines of US\$ 1150/kW (Can\$ 1250/kW). This
28 estimate is based on actual costs of a wide range of combustion
29 turbine projects completed in the United States with nominal
30 outputs ranging from 50 MW to 300 MW. While Hydro's estimate
31 for the larger 113 MW combustion turbine alternative is

comparable with the WECC and EIA estimates, the Hydro estimate for the 60 MW combustion turbine option is considerably higher. Please reconcile this difference.

GT-CA-NLH-18 (April 10, 2014 report entitled Supply and Install 100 MW (Nominal) of Combustion Turbine Generation)

It is stated (p. 8), *“An analysis with budgetary quotations from suppliers has determined that by going to the pre-owned but unused or aftermarket⁷, a combustion turbine can be brought into service at Holyrood in late in 2014 within the \$120.8 M cost estimate of a new 60 MW combustion turbine with an in service of December 2015. Therefore, the least cost, reliable option could be a pre-owned but unused 100 MW combustion turbine plant installed at Holyrood in late 2014.”* (Footnote omitted). Please provide a copy of the analysis referred to in the above quoted statement.

GT-CA-NLH-19 (April 10, 2014 report entitled Supply and Install 100 MW (Nominal) of Combustion Turbine Generation)

With reference to the statement quoted in the previous Request for Information, please provide the back-up information and analysis that led to Hydro’s cost estimate of \$120.8 M for a new 60 MW combustion turbine with an in service of December 2015.

GT-CA-NLH-20 (April 10, 2014 report entitled Supply and Install 100 MW (Nominal) of Combustion Turbine Generation)

At p. 8, Hydro stated, *“During the investigation of options for meeting the 60 MW combustion turbine requirement in 2015 and, while examining options for a more immediate generation addition during January of 2014, Hydro identified several combustion turbine options that, with expedited regulatory approval and*

1 *contract award, could provide capacity up to 100 MW and in late*
2 *service in 2014.”* How and what were the several combustion
3 turbine options identified?
4

5 GT-CA-NLH-21 (April 10, 2014 report entitled Supply and Install 100 MW
6 (Nominal) of Combustion Turbine Generation)
7 Further to the previous RFI, when did the investigation of options
8 for meeting the 60 MW combustion turbine requirements in 2015
9 formally commence?
10

11 GT-CA-NLH-22 (April 10, 2014 report entitled Supply and Install 100 MW
12 (Nominal) of Combustion Turbine Generation)
13 At p. 9 Hydro states that it “*estimates the combustion turbine may*
14 *cause an approximate 2.3 per cent increase above existing rates.”*
15 Please provide the calculations that were used to arrive at this
16 estimate, stating all assumptions and inputs.
17

18 GT-CA-NLH-23 (April 10, 2014 report entitled Supply and Install 100 MW
19 (Nominal) of Combustion Turbine Generation)
20 At p. 9 Hydro states, “*Hydro will be assessing the annual cost of*
21 *the combustion turbine plant with its other costs and will make an*
22 *appropriate application to the Board for approval for the recovery*
23 *of these cost changes in its customers’ rates.”* When does Hydro
24 presently anticipate that it will make such an application to the
25 Board?
26

27 GT-CA-NLH-24 A member of the public, in his submission to the Board dated May
28 27, 2014 stated, “*Since NL Hydro has not used a life-cycle, CPW*
29 *methodology (where operating and maintenance costs are*
30 *included) to reach its conclusions and recommendations, then I*
31 *would submit that NL Hydro has not rationally demonstrated that*

1 *a 100 MW combustion turbine is best suited to meet the island's*
2 *short term reliability and least-cost needs."*

3 Please fully address this submission.
4

5 GT-CA-NLH-25 The submission of a private citizen dated April 27, 2014 states,
6 *"Given that NL Hydro's 2008 CDM Potential Study did not*
7 *explore demand opportunities, how then can NL Hydro's current*
8 *application be evidence-based and how therefore can NL Hydro*
9 *rationally conclude that a 100 MW combustion turbine is the best*
10 *and least cost option?"* Please provide Hydro's reply to this
11 question.
12

13 GT-CA-NLH-26 The submission of private citizen dated April 27, 2014 states,
14 *"Accordingly, the application provides insufficient evidence to*
15 *rationally conclude that CDM (combined with other suitable*
16 *options) could not provide the required short and long term*
17 *reliability and least-cost that is needed."* Please reply to this
18 submission.
19

20 Dated at St. John's in the Province of Newfoundland and Labrador, this 2nd day of June,
21 2014.



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