

1 Q. The response to NP-NLH-019 states that *"Prior to January 2012, the Holyrood gas*
2 *turbine was available for blackstart functionality"* and the response to PUB-NLH-024
3 states that *"There was no action taken in 2010 and 2011 as the Holyrood gas*
4 *turbine was still available for blackstart power during that period"*. The response to
5 PUB-NLH-014 states that *"Blackstart testing was not performed in 2010 or 2011 as*
6 *the gas turbine was deemed to be used for emergency purposes only"*. However, the
7 amended Application, paragraph 3, states that a stop work order was placed on the
8 unit in 2011 which was amended in February 2011 to make the unit available only
9 in emergency conditions. Also, in the response to IC-NLH-26, Attachment 1, page 1,
10 in the 2011 Capital Budget Application, Hydro stated that in March of 2010 a
11 directive was issued preventing the gas turbine from being operated and that there
12 had been unsuccessful repair attempts in an effort to get the directive cancelled,
13 Please provide a detailed explanation of the conflicting information provided in
14 these responses. In the response provide the date the stop work order was first
15 issued with respect to the Holyrood gas turbine, the date it was amended to allow
16 its use for emergency purposes and the date it was cancelled. Also provide copies of
17 the directives that were issued.

18
19
20 A. A chronology of the events and circumstances may assist in understanding how the
21 information referred to in this Request for Information can be best understood. For
22 better ease of reference, the statements in the question have been broken out and
23 shown in italics.

24
25 A stop work order was issued in March of 2010 (see PUB-NLH-027 Attachment 1).
26 Over the next several months, Hydro completed work enabling this blackstart unit
27 to operate safely and communicated the actions taken with the Department of

Government Services during November of 2010. On January 17, 2011, Hydro received correspondence from the Department of Government Services clarifying the requirements to put the unit back into limited purpose service (please see PUB-NLH-027 Attachment 2). Hydro provided correspondence to the Department of Government Services on February 3, 2011 confirming that those requirements were met (please see PUB-NLH-027 Attachment 3). On that same date, Hydro received email confirmation from the Department of Government Services that the stop work order had been lifted (please see PUB-NLH-027 Attachment 4) permitting the unit to be run for emergency purposes only.

- *"There was no action taken in 2010 and 2011 as the Holyrood gas turbine was still available for blackstart power during that period".*

This statement is from Hydro's response to PUB-NLH-024 and is referable to an AMEC recommendation from its report issued in December 2011 to take action to purchase two new 5 MW gas turbines. That is, it pertains to the "action" of purchasing new blackstart capacity after the report was received and reviewed. As described above, prior to this report being completed, Hydro took action with regard to the blackstart unit. It completed work on the unit in 2010 to enable its safe operation and acquired clearance in February 2011 to use the unit for blackstart purposes.

- *"Blackstart testing was not performed in 2010 or 2011 as the gas turbine was deemed to be used for emergency purposes only".*

Routine testing and running of the unit was not carried out due to the unit's condition and the restrictions under which it was permitted to run.

- *However, the amended Application, paragraph 3, states that a stop work order was placed on the unit in 2011 which was amended in February 2011 to make the unit available only in emergency conditions.*

The first year reference to 2011 in paragraph 3 of the Amended Application (to the placement of the stop work order) is incorrect. As noted above, the stop work order was issued in 2010, not 2011. Hydro apologizes for any confusion this error may have caused.

- *Also, in the response to IC-NLH-26, Attachment 1, page 1, in the 2011 Capital Budget Application, Hydro stated that in March of 2010 a directive was issued preventing the gas turbine from being operated and that there had been unsuccessful repair attempts in an effort to get the directive cancelled.*

Please see the foregoing. The response to IC-NLH-26 in the 2011 Capital Budget Application was filed in the autumn of 2010. Subsequently, progress was made and the directive (the stop work order) was closed to give approval for the unit's use for emergency purposes.

GOVERNMENT OF NEWFOUNDLAND AND LABRADOR

Newfoundland
Labrador

Department of Government Services

Occupational Health and Safety Inspections Branch

Page: 1 of: 2

Reference #: 0800153

MAR 30, 2010

ORDER FORM

Toll Free: 1-800-563-5471

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BOX 29
HOLYROOD
NLFirm #: 120001
WCC #: 440001
Tel: 709-229-7441
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NIC:

A0A-2R0

TAKE NOTICE THAT YOU ARE TO COMPLY WITH THE FOLLOWING ORDER(S) ISSUED UNDER AUTHORITY OF THE OCCUPATIONAL HEALTH AND SAFETY ACT, REVISED STATUTES OF NEWFOUNDLAND AND LABRADOR 1990, CHAPTER 0-3 AS AMENDED AND REGULATIONS PASSED PURSUANT THERETO.

ORDER: 0800153- 01

ACT: Occupational Health and Safety
27 - 1a -Stop work orders

Where the assistant deputy minister or an officer is of the opinion that work is being carried out in a way that the conditions at the workplace pose an immediate risk to the health and safety of workers engaged in the workplace or other persons at or near the workplace, the assistant deputy minister or officer shall, in writing, order the person at the workplace responsible for the work being carried out to immediately stop all or a portion of the work and to vacate all or a portion of the workplace; and

REGULATION: Part VIII - Machinery and Equipment
88 1-a Safe machinery and equipment

An employer shall ensure that each tool, machine and piece of equipment in the workplace is capable of safely performing the functions for which it is used; and

TO WIT:

This Division prohibits the use of this Gas Turbine Unit mentioned in the attached report pending this Officers review of safe work procedures and supporting documentation. All safe work procedures shall be suitable for the task at hand. This SWO remains in place until a follow up response has been issued in writing by this Officer.

This Order shall be carried out on or before: **MAR 30, 2010**

ORDER: 0800153- 02

A copy of this inspection/order report must be provided at the earliest possible opportunity to your OHS Committee, Worker Representative or Workplace Designate.



Government of Newfoundland and Labrador

Department of Government Services
Occupational Health & Safety Division

January 17, 2011

Jeff Vincent
Manager, Long Term Asset Planning
Thermal Generation
Newfoundland and Labrador Hydro

RE: Stop Work Order #800153-01

We feel that it is necessary for Hydro/Nalcor to communicate in writing several items before the stop work order can be lifted.

We require a letter stating:

1. confirmation that the turbine in question is to be used only in the case of a black start,
2. reference to procedures to be followed in the event of emergency black start,
3. the steps that have been taken to mitigate any risk to workers,
4. the progress to date in acquiring a new turbine including timeline for installation,
5. and assurance that all steps have been taken to mitigate any risk associated with starting the turbine in its current condition.

All of the above should be sent under the signature of your engineer.

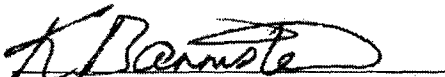
Please feel free to include any other pertinent information that will provide assurance that this operation will not put your workers at risk.

If you choose to cite materials that have been previously submitted to the department in relation to this order, please ensure that you clearly identify which document you are referring to and/or include them with the letter as one package.

Sincerely,

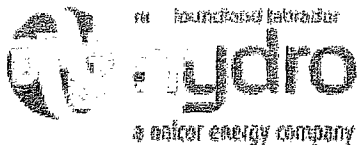


Mark Bailey
OHS Hazardous Materials Officer



Kimberley Bannister, B. Eng.
OHS Engineer

cc Denis Martin, Manager of Compliance, OHS
Gerald Rowe, Manager of Occupational Health, OHS



February 3, 2011

Mr. Mark Bailey

Department of Government Services
Occupational Health and Safety Inspections Branch

RE: Stop Work Order #800153-01

Mr. Bailey:

With regard to your January 17, 2011 letter:

1. Confirmation that the turbine in question is to be used only in the case of a black start.

This information has been provided:

- Via the November 19, 2010 letter from Wade Kelloway, Safety Coordinator, Holyrood Thermal Generating station
- Via the November 30, 2010 letter from Sean Mullaney, P. Eng., Plant Electrical Engineer, Holyrood Thermal Generating station

2. Reference to procedures to be followed in the event of emergency black start.

This information has been provided:

- Via the Holyrood Thermal Generating station black start procedure # 6046, faxed by Wade Kelloway on December 17, 2010.
- As per your January 6, 2011 request, procedure # 0636 for start up and synchronization of the gas turbine (i.e. the procedure for starting the gas turbine, with the remainder of the black start steps for re-starting the

main powerhouse omitted), complete with a detailed risk assessment of each step

3. The steps that have been taken to mitigate the risk to any workers.

This information has been provided:

- Via the November 19, 2010 letter from Wade Kelloway, which included a detailed list of repairs performed on the gas turbine lube oil system with the aide of Alba Power
- Via the January 10, 2011 Risk assessment for procedure #0636, listing number of lube oil repairs made, safety systems in place and location of plant operators for each step of the procedure for starting the gas turbine

4. The progress to date in acquiring a new turbine including timeline for installation.

- Our Central Engineering Group is in contact with vendors regarding the procurement of a new unit. The intention is to do a comparison of the cost to re-furbish our existing unit vs. purchasing something new in late 2011 or early 2012.

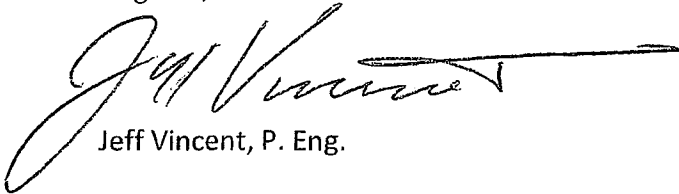
5. and assurance that all steps have been taken to mitigate any risk associated with starting the turbine in its current condition.

This information has been provided:

- Via the November 19, 2010 letter from Wade Kelloway, which included a detailed list of repairs performed on the gas turbine lube oil system with the aide of Alba Power
- Via the November 30, 2010 letter from Sean Mallowney, P.Eng., stating "I am comfortable that the work done on our gas turbine in 2010 has significantly reduced the risk of lube oil fires associated with running it in a black start situation."
- Via the January 10, 2011 Risk assessment for procedure #0636, listing number of lube oil repairs made, safety systems in place and location of plant operators for each step of the procedure for starting the gas turbine

Given the detailed information provided, our site expertise with regard to gas turbines and the safety record of the Holyrood facility in general, I respectfully request that you remove order #800153-01 in a timely manner.

Regards,

A handwritten signature in black ink, appearing to read "Jeff Vincent", with a long horizontal stroke extending to the right.

Jeff Vincent, P. Eng.

Manager, Long Term Asset Planning
Thermal Generation
Newfoundland and Labrador Hydro, A Nalcor Energy Company

From: "Bailey, Mark" <markbailey@gov.nl.ca>
To: <JVincent@nlh.nl.ca>
Cc: <TLeDrew@nlh.nl.ca>, <WadeKelloway@nlh.nl.ca>, <SeanMullowney@nlh.nl.ca>, "Bannister, Kimberley" <KimberleyBannister@gov.nl.ca>, "Rowe, Gerald" <geraldrowe@gov.nl.ca>, "Emberley, Alex" <emberleya@gov.nl.ca>, "Carter, Doug" <dcarter@gov.nl.ca>
Date: 02/03/2011 03:53 PM
Subject: RE: HTGS Gas Turbine SWO Reference #800153

Thanks Jeff,

We have reviewed your attachments and have closed Orders 800153-01 and 800153-02 effective immediately. Our Division will be following up on your progress with unit highlighted in section 4 of your February 3, 2011 letter. We will be sure to notify you prior to this inspection. Have a safe day.

Regards,

*Mark Bailey
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Occupational Health & Safety Division
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