

- 1 Q. Produce a copy of the Environmental Agreement referred to in the second
2 paragraph on page 5 of the report entitled Holyrood Thermal Generating
3 Station Air Emission Control Assessment.
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6 A. A copy of the Agreement is attached.

AN ENVIRONMENTAL AGREEMENT

BETWEEN

THE DEPARTMENT OF ENVIRONMENT AND LANDS

AND

NEWFOUNDLAND AND LABRADOR HYDRO

RESPECTING

THE HOLYROOD THERMAL GENERATING STATION

OWNED BY

NEWFOUNDLAND AND LABRADOR HYDRO

AN ENVIRONMENTAL AGREEMENT FOR THE HOLYROOD THERMAL GENERATING FACILITY

THIS AGREEMENT made as of the 18 day of March, A.D. 1994.

Pursuant to the authority granted the Minister, in the Department of Environment and Lands Act, sections 12 and 24(5), The Air Pollution Control Regulations, 1981, as amended, section 13, The Environmental Control (Water and Sewage) Regulations, 1980, section 10, and in the best interests of the environment, the Department of Environment and Lands and Newfoundland and Labrador Hydro hereby enter into an environmental agreement respecting Newfoundland and Labrador Hydro's Holyrood thermal generating facility.

DEFINITIONS

For the purpose of this agreement the following definitions will be used:

- "Hydro" is the abbreviation for Newfoundland and Labrador Hydro or its successor company(ies).
- "NDOEL" is the abbreviation for the Newfoundland Department of Environment and Lands or its successor Department(s).
- "HTGS" is the abbreviation for the 500 MW Holyrood Thermal Generating Station located at Seal Cove, Newfoundland, and includes the emergency gas turbine and diesel generators.
- "NO_x" is the abbreviation for total nitric oxides which includes nitric oxide (NO) and nitrogen dioxide (NO₂).
- "SO₂" is the abbreviation for sulphur dioxide.

GENERAL

1.0) Hydro will exercise all reasonable care in its operation of the HTGS to prevent damage to or pollution of water, air, vegetation and land.

2.0) (a) Hydro will, within a reasonable time of receiving an observation concerning possible abnormal emissions from the HTGS from a designated NDOEL official, investigate the observation and provide the results of the investigation to the designated NDOEL official. Hydro will also:

- when possible and necessary, mitigate the emissions and submit a report with NDOEL outlining why the occurrence developed, how it was mitigated and what, if any steps are required to prevent its reoccurrence, or

- when immediate mitigation is not possible but is deemed to be necessary, develop plans to mitigate the emissions and present such plans for review by NDOEL within a reasonable time after notification of the occurrence.
- (b) If an observation of possible abnormal emissions is received by Hydro directly from a member of the public, and it is deemed by Hydro to be a significant change from normal plant operation, Hydro will notify NDOEL within two (2) working days of receiving the observation. Once notification has taken place, procedures established in 2(a) will be in effect.

AIR MONITORING

- 3.0) Hydro will operate an ambient air monitoring program in the vicinity of the HTGS as currently approved by NDOEL. The program will not be changed or modified unless approved by NDOEL.
- 4.0) Hydro will report the results of the ambient air monitoring to NDOEL in a format acceptable to NDOEL on a monthly basis normally within twenty (20) days of the end of each month, however, as a result of exceptional circumstances, the report may not be available until thirty (30) days following the end of the month.
- 5.0) Hydro will adhere to the terms of the Canada/United States Air Quality Agreement related to the requirement for continuous emissions monitoring. Hydro, in consultation with NDOEL, will develop a schedule for the purchase and installation of continuous emissions monitoring equipment, if it is necessary.
- 6.0) Hydro will conduct stack sampling every two years commencing in 1995 on all three units at the HTGS for: SO₂, NO_x, and Particulate. A report will be submitted to NDOEL within three (3) months after completion of the stack sampling test. Once the continuous emission monitors, if they are necessary, are operational, stack sampling will be conducted to validate the monitors according to the requirements of the manufacturer.
- 7.0) Hydro will submit monthly to NDOEL the quantity and sulphur content of each delivery of fuel oil.
- 8.0) Commencing in 1995, Hydro will submit to NDOEL an annual report on the operation of the HTGS for each calendar year that the HTGS is in operation. Such report will be submitted to NDOEL by the 31st day of March following the end of each such calendar year and will include:

- a) total fuel consumption,
- b) the weighted average sulphur content of the fuel,

- c) the estimated, or, if available, the monitored, annual emissions of the following flue gas constituents:
 - sulphur dioxide,
 - total nitric oxides,
 - carbon dioxide,
 - carbon monoxide,
 - particulate.
- d) the actual calculations including factors, formulae or assumptions used.
- e) the results of dispersion modelling of the flue gas constituents listed under (c) based on locally available meteorological data. Dispersion modelling will be conducted using measured emission (stack test) data which has been obtained in accordance with section 6.0.

SOLID WASTE

9.0) Hydro will conduct a feasibility study for construction of a landfill site at HTGS for the disposal of waste materials from the equalization and continuous flow basins associated with the waste water treatment plant and from the treatment plant's filter press, and flyash in the event that the present means of disposal is terminated. The final feasibility study report will be submitted to NDOEL by December 31, 1994.

WASTE WATER

10.0) In 1992, NDOEL, Hydro, and Environment Canada executed an agreement entitled An Environmental Compliance Agreement Between The Department of Environment and Lands, Environment Canada and Newfoundland and Labrador Hydro Respecting The Holyrood Thermal Generating Station Wastewater Treatment Plant. It is hereby agreed that NDOEL and Hydro shall make their best effort to meet with Environment Canada before December 31, 1994 to determine what, if any, changes may be required to address their respective concerns regarding these facilities at the HTGS.

ENVIRONMENTAL EFFECTS MONITORING

11.0) Hydro will implement an environmental effects monitoring program to monitor the impacts of SO₂ emissions on vegetation. Surveys will be conducted in two (2) consecutive years from the initiation of the program. The program will consist of as a minimum, two (2) one day surveys each year of vegetation in areas

most heavily impacted. Evaluations will be done by a qualified botanist. Design of the program is subject to approval by NDOEL.

The report of the surveys will be submitted to NDOEL by December 31 of the survey year. Following completion of the second annual surveys, the justification for the continuation of the program will be reviewed by the parties hereto.

12.0) Hydro will implement an environmental effects monitoring program to monitor the impacts of the discharge of the cooling water, the continuous flow basin's water and the waste water treatment plant's treated water on Conception Bay. Two (2) surveys will be conducted at five (5) year intervals. Study design will be subject to approval by NDOEL. The report of the survey will be submitted to NDOEL by March 31 of the year following the survey. The justification for the continuation of the study will be reviewed by the parties hereto following submission of the second report.

CONDITIONS OF AGREEMENT

13.0) This agreement shall be binding upon and shall enure to the benefit of the parties hereto and their successors and permitted assigns.

14.0) The parties of this Agreement shall have the right in their sole discretion, upon giving twelve (12) months notice in writing to the other party, to terminate this Agreement as to all or any part of this Agreement.

15.0) Any written notice required to be given to one party by the other party shall be deemed properly given and received if served personally or mailed by prepaid registered post or telefax, addressed, if service is to be made:

(a) on Hydro to:

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

Attention: Director, Environmental Services and
Properties Department

Telefax: 737-1790

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(b) on NDOEL, to:

Department of Environment and Lands
P.O. Box 8700
St. John's, NF
A1B 4J6

Attention: Director, Industrial Environmental
Engineering Division

Telefax: 729-1930

16.0) Any amendment to or change or modification of this Agreement shall be binding upon the parties hereto only if such amendment, change or modification is in writing and is executed by the parties hereto.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed by their duly authorized representatives as of the day and year first above written.

Signed in the Presence of:

DEPARTMENT OF ENVIRONMENT AND LANDS

Shirley Boyle
Witness

By: Patricia A. Cowan
HON. PATRICIA A. COWAN,
MINISTER

Signed in the Presence of:

NEWFOUNDLAND AND LABRADOR HYDRO

Wayne Chamberlain
Witness

By: David W. Mercer
DAVID W. MERCER
PRESIDENT AND CHIEF
EXECUTIVE OFFICER

Wayne Chamberlain
Witness

By: David W. Reeves
DAVID W. REEVES
VICE-PRESIDENT, ENGINEERING
AND CORPORATE SERVICES