

**REGISTRATION PURSUANT TO**  
**SECTION 3 of the NEWFOUNDLAND AND LABRADOR**  
**REGULATION 54/03**

*Environmental Assessment Regulations, 2003*

under the

*Environmental Protection Act*

(O.C. 2003-220)

**FOR THE PROPOSED**  
**Dome Mountain Line Construction**

October 2005

## **NAME OF UNDERTAKING**

### **Dome Mountain Line Construction**

#### **PROPONENT**

(i) Name of Corporate Body:

Newfoundland and Labrador Hydro (Hydro)

(ii) Address:

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

(iii) Chief Executive Officer:

Name: Ed Martin  
Official Title: President and Chief Executive Officer  
Telephone No: (709) 737-1291

(iv) Principal Contact Persons for Purposes of Environmental Assessment:

Name: L. J. LeDrew  
Official Title: Ecologist, Environmental Services  
Telephone No: (709) 737-1409

Name: F. L. Ricketts  
Official Title: Manager, Environmental Services  
Telephone No: (709) 737-1708

(v) Principal Contact Person for General Information:

Name: D. Dalley  
Official Title: Manager, Communications  
Telephone No: (709) 737-1315

## **1. THE UNDERTAKING**

### **(i) Nature of Undertaking**

This project involves the construction of approximately 3.0 kilometers of single phase distribution from the existing distribution line L6 to a proposed communications tower located on Dome Mountain in Goose Bay, Labrador.

### **(ii) Rationale for the Undertaking**

This project is being undertaken at the request of the Canadian Coast Guard who require a supply of electricity to operate a communications tower to be installed on Dome Mountain.

## **2. DESCRIPTION OF THE UNDERTAKING**

### **(i) Geographical Location**

Dome Mountain is located in the community of Goose Bay in South Central Labrador. It is situated west of the Goose Bay Airport near Alexander Lake at approximate location 664000E X 5908000N (UTM 20 U NAD 27). The proposed distribution power line will run from approximate position 665250 E X 5906000 N in a northerly direction to position 664900E X 5908700N. The general location of the proposed line route is presented in Figure 1, taken from NTS map sheet 13 – F – 07 (Goose River).

### **(ii) Physical Features**

The proposed 3 km long distribution line consists of single wood pole structures, 11 to 15 m high, with an average span length of 70 - 75 m. All poles will be pressure treated with Chromated Copper Arsenate (CCA). A typical pole is illustrated in Figure 2. Steel anchors will be required at some structures. Wood pole H-frame structures may be used where longer spans are required. The line will be built to 25 kV standard and operated at 14.4 kV and will have a life expectancy of 40 years.

(iii) **Construction**

a) **Construction Schedule**

Contractual forces will carry out construction activities over a 4 -6 week period. Staking of structures, right-of-way clearing, and material distribution will be conducted on or near June 1, 2006. Pole erection, framing and stringing will begin in mid-June and will be completed by mid July, 2006.

b) **Construction Activities**

The major construction activities associated with the construction of the proposed line include:

- Right-of-way clearing
- Material handling and distribution
- Crib installation (where required)
- Pole erection
- Structure framing
- Conductor stringing
- Clean up and rehabilitation

Material distribution will entail the delivery of poles, insulators, hardware and conductor by Nodwells and Go Tracks. The right-of-way will be cleared manually to a width of 9 meters. Danger trees will be removed as required. For the most part excavators will be used for the erection of poles, however, in areas of rock, holes will be drilled and blasted.

Equipment to be used for construction of the line will include:

- Excavators (2)
- Nodwells (1)
- All Terrain Vehicles (3-4)

c) Potential Sources of Pollutants

The potential sources of pollutants associated with the construction of the proposed project would be sediment run-off from pole excavations and hydrocarbon leakage from temporary fuel storage facilities and construction equipment.

d) Potential Resource Conflicts

Prior to final route selection, Hydro's Environmental Services and Properties Department will undertake a ground survey to assess the location of structures in relation to water bodies and wetlands.

Mitigation measures will be employed to reduce potential disturbance at structure locations. The proposed line will cross two streams where fording may be required. Hydro will assess stream crossings along the proposed route and confirm that the streams can be forded. All fording activities will be done in accordance with the terms and conditions of fording permits issued by the Department of Environment and Conservation and letters of advice received from the Department of Fisheries and Oceans Canada. Mitigation measures will be implemented to minimize impacts to fish and fish habitat.

The proposed line will be constructed in accordance with Hydro's Environmental Protection Plan for the Maintenance, Upgrade and Construction of Transmission and Distribution Lines (2004) and clauses in Contract Documents will identify specific mitigation measures to be implemented through all phases of the project.

(iv) **Operation**

Operation activities associated with the proposed line include maintenance inspection and vegetation management. Regular inspections will be conducted once every five years and for the most part, by helicopter, or in winter by snow machine. Hydro undertakes an integrated vegetation management program on its distribution system. The program employs several methods including the selective use of herbicides which when applied following initial cutting offers long term control of tall (danger) trees. Hydro's vegetation management plan is submitted annually for review and approval to the provincial Pesticides Control Section of the Department of Environment and Conservation.

a) Potential Sources of Pollution

Potential sources of pollutants would be sediment run-off from exposed soils and hydrocarbon leakage from maintenance equipment and transport vehicles. All maintenance equipment and transport vehicles will be inspected regularly to ensure they are free of leaks and in good repair prior to undertaking maintenance activities.

b) Potential Resource Conflicts

Fording of streams or work near water are potential resource conflicts.

(v) **Occupations**

The occupations required to design and construct the interconnection, estimated numbers of each and their respective National Occupation Classification Codes are as follows:

- Line workers (1) – 7244 ;
- Equipment Operators (3) – 7421;
- Drillers and Blasters (1) – 7372;
- Labourers (4-5) – 7612;
- Environmental Coordinators (1) - 2221;
- Land Surveyors (1) – 2154;
- Civil Engineers Technologist (1) – 2231;
- Construction Inspectors (1) – 2264;
- Contractor Supervisor (1) – 7212.

(vi) **Project Related Documents**

Environmental Protection Plan For The Maintenance, Upgrade and Construction of Transmission and Distribution Line Facilities, 2004, Newfoundland and Labrador Hydro.

### **3. APPROVAL OF THE UNDERTAKING**

The following is a list of permits, approvals and authorizations which may be necessary for the proposed project:

- (1) Authorization for work near a water body - Department of Fisheries and Oceans Canada, Department of Environment and Conservation, Water Resources Division;
- (2) Certificate of Approval to Ford a Watercourse - Department of Fisheries and Oceans Canada, Department of Environment and Conservation, Water Resources Division;
- (3) Authorization for Development over Crown Land – Department of Environment and Conservation, Lands Branch;
- (4) Authorization for removal of timber- Department of Natural Resources, Forestry Division.

### **SCHEDULE**

The proposed project release date for this undertaking is anticipated to be June 1, 2006 and is expected to take 4-6 weeks to complete.

### **FUNDING**

This proposed development is being initiated at the request of Canada Coast Guard. Funding for the project will be the responsibility of Canada Coast Guard.

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Date

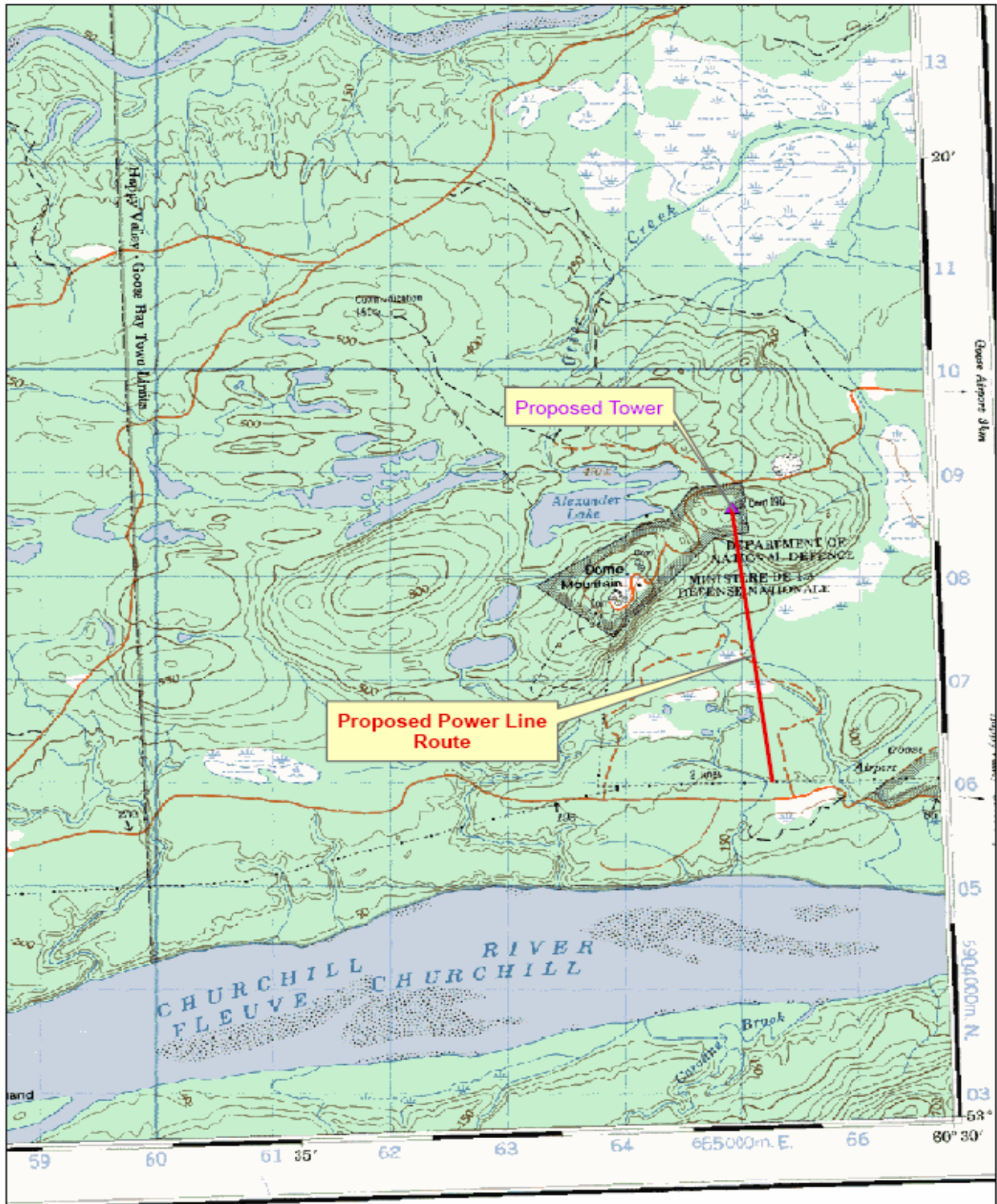
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Frederick H. Martin, P. Eng.  
Vice President, Engineering Services  
Newfoundland and Labrador Hydro

# FIGURE I



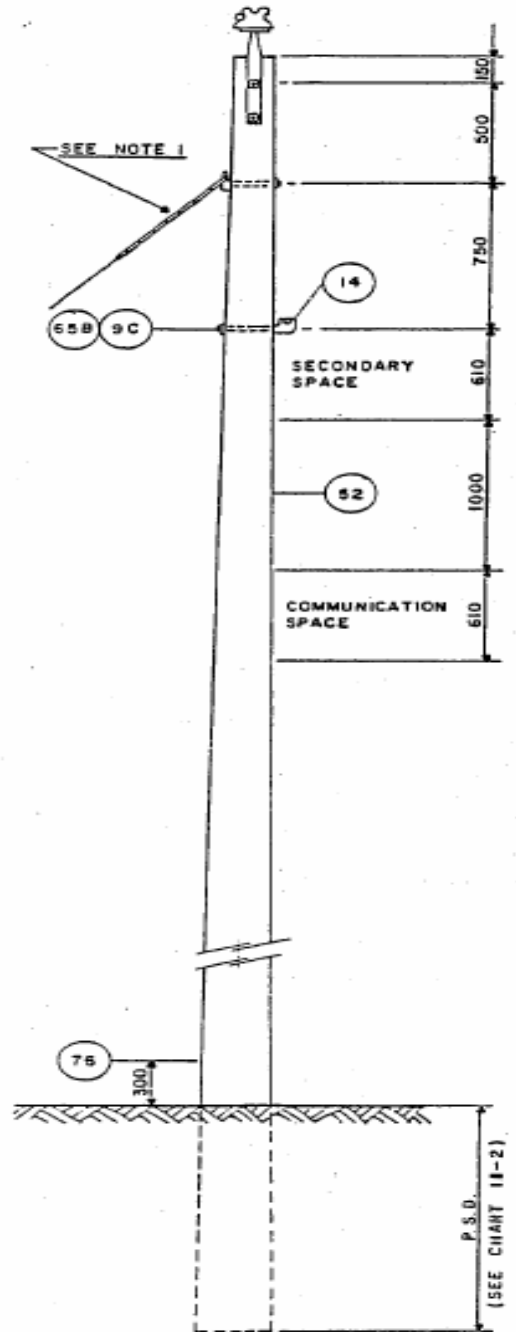
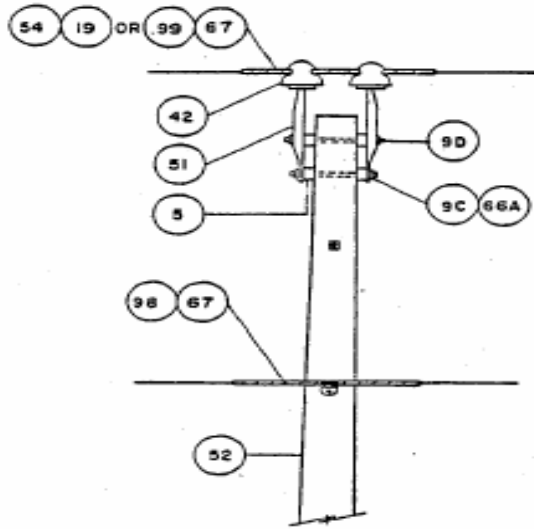
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CCG tower connection - Dome Mountain, Goose Bay



Figure 2



CONDUCTOR	MAX. LINE ANGLE
#2 ACSR, AASC 1/0, 2/0, AASC	25°
4/0 AASC 256.8 ACSR, AASC 477 AASC, ASC	20°

NOTES:

(1) SEE SECTION 13 FOR DOWNGUY DETAILS & BONDING.

ITEM NO.	QTY.	DESCRIPTION	STOCK NO.
5	AS REQD.	BLOCK, SPACING	1050017
9C	2	BOLT, MACHINE 5/8" X 12"	1050052
90	1	BOLT, MACHINE 5/8" X 14"	1050053
14	1	BRACKET, NEUTRAL WIRE	1050071
19	AS REQD.	CLAMP FOR C.T. INSULATOR	X
42	2	INSULATOR, PIN TYPE 1 3/8" THD.	X
51	2	PIN, POLE TOP 1 3/8" THD. 24" LONG	1050268
52	1	POLE, LENGTH & CLASS AS REQD.	X
54	AS REQD.	ROD, ARMOR DOUBLE (T.S.C.)	X
55B	1	WASHER, CURVED, 2 1/4" X 2 1/4" X 3/16" WITH 1/16" H.	1050565
66A	2	WASHER, ROUND, 1 3/4", 11/16" HOLE	1050440
67	AS REQD.	WIRE, ALUMINUM TIE (SEE PAGE 12-1)	X
76	1	NAIL, DATING	---
99	AS REQD.	GUARD, PREFORMED LINE, DOUBLE (T.S.C.)	X
98	AS REQD.	GUARD, PREFORMED LINE, SINGLE (T.S.C.)	X

X REFER TO SECTION 7.

DRAWN BY C. S. K. DATE 03-03-51  
 APPROVED BY [Signature] REV. NO. 1

25 KV  
 STR TYPE IB  
 3°-25°