

LABRADOR – ISLAND TRANSMISSION LINK ENVIRONMENTAL ASSESSMENT

Caribou and Other Large Mammals Component Study

June 2011



LABRADOR – ISLAND TRANSMISSION LINK ENVIRONMENTAL ASSESSMENT
Environmental Component Studies: Introduction and Overview

Nalcor Energy is proposing to develop the *Labrador – Island Transmission Link* (the Project), a High Voltage Direct Current (HVdc) electrical transmission system extending from Central Labrador to the Avalon Peninsula on the Island of Newfoundland.

The Project was registered under the Newfoundland and Labrador *Environmental Protection Act (NLEPA)* and the *Canadian Environmental Assessment Act (CEAA)* in January 2009 (with subsequent amendments and updates), in order to initiate the provincial and federal environmental assessment (EA) processes. Following public and governmental review of that submission, an Environmental Impact Statement (EIS) was required for the Project. The EIS is being developed by Nalcor Energy, in accordance with the requirements of both *NLEPA* and *CEAA* and the *EIS Guidelines and Scoping Document* issued by the provincial and federal governments.

In support of the Project's EIS, Nalcor Energy has undertaken a series of environmental studies to collect and/or compile information on the existing biophysical and socioeconomic environments and to identify and assess potential Project-environment interactions. This environmental study program has included field surveys, associated mapping and analysis, environmental modeling, and the compilation and analysis of existing and available information and datasets on key environmental components. This report comprises one of these supporting environmental studies.

A general guide to these Environmental Component Studies, some of which are comprised of multiple associated reports, is provided on the opposite page.

The information reported herein will be incorporated into the Project's EIS, along with any additional available information, to describe the existing (baseline) environmental conditions and/or for use in the assessment and evaluation of the Project's potential environmental effects and in the identification and development of mitigation.

This study focuses on the relevant aspects of the proposed Project – including the proposed and alternative HVdc transmission corridors, marine cable crossings, and/or other Project components and activities – as known and defined at the time that the EA process was initiated and/or when the study commenced. Project planning and design are ongoing, and as is the case for any proposed development, the Project description has and will continue to evolve as engineering and EA work continue. The EIS itself will describe and assess the specific Project components and activities for which EA approval is being sought, and will also identify and evaluate other, alternative means of carrying out the Project that are technically and economically feasible as is required by EA legislation.

The EIS and these Component Studies will be subject to review by governments, Aboriginal and stakeholder groups and the public as part of the EA process.

LABRADOR-ISLAND TRANSMISSION LINK: ENVIRONMENTAL COMPONENT STUDIES (CSs)		
1) Vegetation CS	Report 1a Ecological Land Classification	Report 1b Wetlands Inventory & Classification
	Report 1c Regionally Uncommon Plants Model	Report 1d Timber Resources
	Report 1e Vegetation Supplementary Report	
2) Avifauna CS		
3) Caribou & Other Large Mammals CS	Report 3a Caribou & Their Predators	Report 3b Moose & Black Bear
4) Furbearers & Small Mammals CS		
5) Marine Environment: Fish & Fish Habitat, Water Resources CS	Report 5a Marine Fish: Information Review	Report 5b Marine Flora, Fauna & Habitat Survey
	Report 5c Marine Habitats (Geophysical) Survey	Report 5d Water, Sediment & Benthic Surveys
	Report 5e Marine Surveys: Electrode Sites	Report 5f Marine Surveys: Supplementary
6) Freshwater Environment: Fish & Fish Habitat, Water Resources CS		
7) Marine Environment: Marine Mammals, Sea Turtles & Seabirds CS	Report 7a Marine Mammals, Sea Turtles & Seabirds: Information Review	Report 7b Marine Mammal & Seabird Surveys
	Report 7c Ambient Noise & Marine Mammal Surveys	
8) Species of Special Conservation Concern CS		
9) Marine Environment & Effects Modelling CS	Report 9a Strait of Belle Isle: Oceanographic Environment & Sediment Modelling	Report 9b Strait of Belle Isle: Marine Sound Modelling - Cable Construction
	Report 9c Electrodes: Environmental Modelling	
10) Historic & Heritage Resources CS		
11) Socioeconomic Environment: Communities, Land & Resource Use, Tourism & Recreation CS	Report 11a Communities, Land & Resource Use, Tourism & Recreation	Report 11b Current Levels of Accessibility Along the Transmission Corridor
12) Socioeconomic Environment: Aboriginal Communities & Land Use CS		
13) Socioeconomic Environment: Marine Fisheries in the Strait of Belle Isle CS		
14) Viewscapes CS		
Environmental Component Study Required Under the EIS Guidelines: Comprising Reports (Shaded cells above)		
Avifauna: 2, 7a, 7b	Furbearers: 4	
Caribou (and Predators): 3a	Timber Resources: 1d	
Water (Quality and Quantity): 5a, 5d, 5e, 5f, 6	Marine and Freshwater Fish and Fish Habitat: 5, 6, 7, 13	
Species at Risk: 8	Historic Resources: 10	
Viewscapes: 14	Socioeconomics: 11, 12, 13	
Environmental study reports submitted as additional background information: 1a, 1b, 1c, 1e, 3b, 9		

Labrador – Island Transmission Link

Caribou and Other Large Mammals Component Study

Preface

This *Caribou and Other Large Mammals Component Study* has been prepared and submitted as part of the Environmental Assessment (EA) of the proposed **Labrador-Island Transmission Link**.

It is comprised of two (2) associated study reports, which were undertaken in order to gather, summarize and present information on caribou (*Rangifer tarandus caribou*), moose (*Alces alces*) and black bear (*Ursus americanus*) in the area of, and which may therefore interact with, the proposed Project:

a) Caribou and Their Predators (June 2011)

- Please note that this report addresses both the Muskrat Falls and Gull Island transmission corridor options in Labrador, as well as the proposed and alternative transmission corridors on the Island of Newfoundland.

b) Moose and Black Bear (March 2010 and February 2011)

- The initial report (March 2010) focuses on the originally defined transmission corridors from Gull Island (Labrador) to Soldiers Pond (Newfoundland).
- The initial report also includes information related to the originally identified Labrador electrode line alternatives from the lower Churchill River to the north and south sides of Lake Melville. These were being evaluated when the Project's EA and this study were initiated, but are no longer under consideration by Nalcor Energy.
- An attached Supplement (February 2011) provides similar information on moose and black bear for the additional transmission corridor option from Muskrat Falls in Labrador.

In addition to the compilation, analysis and presentation of information on the known presence and distributions of these large mammal species, the studies also include detailed habitat potential mapping for the transmission corridors and a surrounding (15 km wide) study area based on the Ecological Land Classification (ELC) that has been completed for the Project and its EA. This habitat potential mapping is presented generally in these reports as a series of regional summary maps, but is available at the 1:50,000 scale in a GIS system for use in the eventual EA analyses.

The environmental information presented in this *Caribou and Other Large Mammals Component Study* will be incorporated and used in the Project's eventual Environmental Impact Statement (EIS), which will provide a summary description of the existing environment and an environmental effects assessment for the Project.