

LABRADOR – ISLAND TRANSMISSION LINK ENVIRONMENTAL ASSESSMENT

Vegetation Component Study

May 2011

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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

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Preface

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

The *Component Study* is comprised of five (5) associated study reports:

a) Ecological Land Classification (ELC) (July 2010)

A regional ELC that identifies, categorizes and maps vegetation types and associated habitats within a regional study area that encompasses the proposed and various alternative transmission corridors and their adjacent areas. The ELC forms the core basis for much of the terrestrial baseline study work and environmental effects analyses being completed for the Project's EA.

b) Wetlands Inventory and Classification (July 2010)

A study which further identifies, classifies and maps all wetlands that are located within the proposed transmission corridor.

c) Regionally Uncommon Plants Potential Mapping (October 2010)

A modeling and mapping exercise to assess the potential locations and extent of habitats for regionally uncommon plants within the transmission corridor and larger ELC study area, as input to Project planning and EA. This exercise will also help plan any further (post-EA) botanical studies in specific areas once the specific transmission line right-of-way is determined.

d) Timber Resources (February 2011)

An analysis of the existing timber resource within the proposed transmission corridor, including estimates of the likely wood quantities that would be harvested or otherwise affected as a result of the eventual clearing of the transmission line right-of-way.

e) Vegetation Supplementary Report (April 2011)

A supplement that provides the above described information for an additional transmission corridor option from Muskrat Falls in Labrador.

The environmental information presented in the above reports 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.