# INFORMATION RESPONSES LOWER CHURCHILL PROJECT CEAA REFERENCE NO.07-05-26178

JOINT REVIEW PANEL

Volume 5 IR# JRP.1S/2S to JRP.112S

October 2009



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# **IR# JRP.1S/2S**

Consultation with Innu Nation / Consultation with Aboriginal Groups Other than Innu Nation

Information Request No.: JRP.1S/2S

#### Requesting Organization – Joint Review Panel

Subject – Aboriginal Consultation with Nunatsiavut Government

#### References:

EIS Guidelines, Section 4.8 (Consultation with Aboriginal Groups and Communities)

EIS, Volume IB, Appendix 1B-I (Aboriginal and Public Consultation Summaries)

Nalcor. July 3, 2009. Information Responses – Volume IA (IR# JRP.1 to IR# JRP.13)

#### **Related comments/Information Requests:**

CEAR #213 (Innus of Ekuanitshit)

CEAR #214 (Innu Nation - IN.21)

CEAR #216 (Labrador Metis Nation)

CEAR #217 (Nunatsiavut Government)

CEAR #222 (Uashuannuat, Innu Takuaikan Uashat mak Mani-Utenam Council and certain Innu families)

IR#JRP.1 & IR#JRP.2

#### Rationale:

The EIS Guidelines require the EIS to "demonstrate the Proponent's understanding of the interests, values, concerns, contemporary and historic activities, Aboriginal traditional knowledge and important issues facing Aboriginal groups, and indicate how these will be considered in planning and carrying out the Project." (p. 40)

The Proponent is required to consult with Aboriginal groups and communities for the purpose of fulfilling three objectives, namely:

- Familiarize the group with the Project and its potential environmental effects;
- Identify any issues of concern regarding potential environmental effects of the Project; and
- Identify what actions the Proponent is proposing to take to address each issue identified, as appropriate.

In JRP.1 and JRP.2, the Proponent was asked to provide additional information on how it had fulfilled the requirements of the EIS Guidelines regarding Aboriginal consultation. However, the Panel is of the opinion that the information provided in response to these two Information Requests does not fulfill the information requirements of the EIS Guidelines. In their submissions to the Panel, Aboriginal groups also raised issues regarding both the adequacy of consultation initiatives conducted by the Proponent to date and the reporting in the EIS on efforts already undertaken.

Innu Nation argues that the EIS fails to reflect accurately how Innu issues raised during past consultation initiatives have been considered in planning and carrying out the Project. Appendix 1B-I, which tracks where issues raised during Aboriginal consultation initiatives are considered in the EIS, does not distinguish between issues raised by each of the Aboriginal groups that the Proponent is required to consult.

With regards to the Nunatsiavut Government, the Proponent indicated in response to JRP.2 (a) that, given its determination that the physical footprint of the Project does not extend into Labrador Inuit Lands or the Labrador Inuit Settlement Area, it has chosen not to offer to enter into a consultation agreement with the Nunatsiavut Government. Instead, the Proponent notes that "consistent with the treaty and with the limited interest of the Labrador Inuit in the land and resources of the Project footprint, Nalcor has elicited information respecting the impact of the Project upon Labrador Inuit directly from the Nunatsiavut Government through the provision of project-related information on an ongoing basis" (Nalcor, p. 22). However, in its submission to the Panel, the Nunatsiavut Government argued that the Proponent has failed to demonstrate an understanding of the interests, values, concerns and issues facing Inuit people, in spite of over 2300 Inuit living within the Project Assessment Area, of historical and current use of the Churchill River by Inuit, and of Inuit having been the primary users of the Lake Melville ecosystem for a long period of time. The Panel is of the opinion that the Proponent's determination of whether or not the physical footprint of the Project may extend into Labrador Inuit Lands or the Labrador Inuit Settlement Area should not prevent the Proponent from demonstrating its understanding of the interests, values, concerns, contemporary and historic activities, Aboriginal traditional knowledge and important issues facing Inuit people of Labrador.

With regards to Innu communities in Québec and the Labrador Metis Nation, the Proponent indicated in response to JRP.2 (c) that it has developed a template for a draft community consultation agreement that was presented to each of these groups in May 2009 "on a confidential and 'without prejudice' basis" (Nalcor, p. 25). The response to JRP.2 (c) goes on to say that the draft consultation agreements:

(...) establishes a collaborative and cooperative framework, supported by funding, for the exchange of Project-related information between Nalcor and the particular Aboriginal Group in order to identify potential environmental impacts of the Project upon current land and resource usage, identify and strengthen mitigation measures and develop an understanding of aboriginal traditional knowledge represent the concerns and interests of the community (Nalcor, p. 25).

The Proponent also indicated that "[a] final assessment of the Project's anticipated effects on the current use of lands and resources for traditional purposes by the enumerated Québec Innu communities and Labrador Metis Nation has not been completed but is in progress" (Nalcor, p. 25), presumably though the implementation of these draft consultation agreements.

Requesting Organization – Joint Review Panel Information Request No.: JRP.1S/2S

**Information Requested:** 

The proponent is asked to:

a. Clearly demonstrate that all issues of concern raised by each of the Aboriginal groups in consultation initiatives to date have been or would be addressed in planning or carrying out the Project. Provide a separate answer for each group by detailing issues raised by each group and how they have been or would be addressed;

#### Response:

Nalcor Energy (Nalcor) has made and will continue to make efforts to address concerns raised by various Aboriginal groups during the consultation process. However, certain issues raised by Aboriginal groups relate to matters that are not influenced by the Project and are beyond the capacity of Nalcor to resolve. For example, the identification by Innu Nation of the need for improved community infrastructure (e.g., community arena, funding for a museum) and the need to increase the capacity of service providers speaks to systemic community issues which are not attributable to the Project and which cannot be resolved by Nalcor. Other issues speak to areas over which the government is responsible such as concerns about increased domestic violence, community population decline, or increase in health problems. The solutions to these problems lie in the exercise of governmental authority - federal, provincial and Innu. For an explanation of Nalcor's role in managing Project-related effects to social services and infrastructure, please see response to IR# JRP.108. Other issues raised by Innu Nation relate to the ongoing tripartite land claims negotiation process with Canada and the Province.

#### **Consultative Initiatives with Innu Nation**

Nalcor and its predecessors (Newfoundland and Labrador Hydro and Energy Corporation of Newfoundland and Labrador) have engaged Innu Nation in consultation respecting the Project since 2000. Through a series of agreements concluded between February, 2000 and August, 2008, Nalcor has provided funding to Innu Nation to participate in three distinct processes: community consultation, Impact and Benefits Agreement (IBA) negotiations and an environmental Task Force. The purpose of these processes was to provide the Labrador Innu with Project-related information in order to identify issues of particular concern, to develop an understanding of Innu land use and social, cultural and economic activities (both contemporary and historic) and Innu traditional knowledge and to determine appropriate actions and measures by Nalcor to address Innu issues and concerns respecting adverse impacts of the Project. Through these arrangements, Innu Nation has been provided with comprehensive environmental, engineering and socio-economic information respecting the planning, operation and predicted impacts of the Project and been afforded the opportunity to identify all issues of concern on an ongoing basis. The individualized responses of Nalcor to the specific issues and concerns raised by Innu Nation are set out in Table 1 of this response. However, as a general statement, Nalcor is in the process of negotiating an IBA which addresses many of the issues and concerns identified by Innu Nation. In addition, Nalcor has, in partnership with Innu Nation, the Labrador Metis Nation and the Nunatsiavut Government, submitted a proposal for funding under the federal Aboriginal Skills and Employment Program. This proposal will provide the opportunity for members of these Aboriginal organizations to undergo training in order to acquire the skills necessary to obtain employment on the Project, thus responding to issues raised by Innu Nation relating to certain of the socio-economic impacts of the Project.

#### **Consultative Initiatives with other Aboriginal Groups**

Nalcor is engaged in ongoing consultative efforts with the Quebec Innu communities of Uashat Mak Mani-Utenam, Ekuanitshit, Nutaskuan, Unamen Shipu, Pakua Shipi and Matimekush-Lac John as well as the Labrador Metis Nation and the Nunatsiavut Government. Pursuant to these consultative initiatives, the Proponent has provided and will continue to provide to these groups a comprehensive range of Project-related information. The purpose of these initiatives is to enable each group to become familiar with the Project and its potential environmental effects, identify issues and concerns and assist the Proponent in determining actions to address such issues and concerns in both the planning and operation phases of the Project. The particular issues raised by each group, either in meetings with Nalcor or through each group's respective review of the Environmental Impact Statement, as well as the responses of the Proponent are set out in Table 2 of this response. Nalcor will continue to engage in consultation with these groups on a regular and ongoing basis as described in the responses to parts (b) and (c) of this IR.

## Table 1 Issues of Concern Raised by Innu Nation in Consultation Initiatives to Date

Aboriginal Group	Area of Concern	Issue Identified	Response/Action
Innu Nation	Accidents	Potential for accidents to result in flooding	<ul> <li>Volume IA, Sections 4.11.3 and 4.11.5.1</li> <li>IR# JRP.96; IR# JRP.145</li> <li>Provision of Dam Break Study and Inundation Mapping</li> </ul>
		Possibilities of unforeseen industrial accidents	<ul> <li>Volume IA, Section 4.11.4</li> <li>Volume IIB, Section 6.2.2</li> <li>Volume III, Section 7.2.2</li> <li>IR# JRP.145</li> </ul>
		Consequences of a dam break or overflow	<ul> <li>Volume IA, Sections 4.11.3 and 4.11.5.1</li> <li>Volume IIB, Sections 6.4.1, 6.4.2, 6.5.1 and 6.6</li> <li>Volume III, Sections 7.4, 7.5, 7.6 and 7.7</li> <li>IR# JRP.96; IR# JRP.145</li> <li>Provision of Dam Break Study and Inundation Mapping</li> </ul>
	Addictions	Potential for increase in the use of alcohol, drugs, substances and gambling and associated health consequences	<ul><li>Volume III, Section 4.7.5.3</li><li>IR# JRP.140</li></ul>
		Potential for increase in crime related to substance abuse	Volume III, Section 4.7.5.3
		Potential for secondary effects of substance abuse on youth	Volume III, Section 4.7.5.4
	Benefits/Compensation	Discomfort about accepting money for agreeing to Hydro development	Volume III, Section 4.7.5.3
		Potential for imbalance in terms of benefits (i.e., greater benefits to outsiders, and benefits to Innu only of short-term duration)	<ul> <li>Volume IA, Sections 1.2.2 and 1.4</li> <li>Volume III, Section 3.6.5.2</li> <li>The IBA will apply to all phases of the Project and the provision of long-term benefits to Innu is the subject of IBA negotiations</li> </ul>
		Compensation for the Churchill Falls project as a prerequisite to consent to the Lower Churchill Project	<ul> <li>Volume IA, Section 1.5</li> <li>Section 2 of the Tshash Petapen Agreement provides the framework for compensation respecting the Churchill Falls project</li> </ul>

Aboriginal Group	Area of Concern	Issue Identified	Response/Action
Innu Nation		The importance of a long-term benefits agreement	<ul> <li>Volume IA, Section 1.2.2</li> <li>Volume III, Section 3.6</li> <li>Nalcor and Innu Nation are currently negotiating an</li> </ul>
		The inclusion of people from Natuashish in training and employment opportunities	<ul> <li>Impacts and Benefits Agreement (IBA)</li> <li>Volume IA, Sections 1.2.2 and 1.4</li> <li>Volume III, Sections 3.6.5.1 and 3.6.5.2</li> <li>This matter is the subject of IBA negotiations</li> <li>Nalcor has partnered with Innu Nation, the Labrador Metis Nation and the Nunatsiavut Government to submit an application for training funding under the auspices of the federal Aboriginal Skills and Employment Program</li> </ul>
		The need for Innu benefits to include future generations	<ul> <li>Volume IA, Sections 1.2.2 and 1.4</li> <li>The IBA currently under negotiation will continue for the lifetime of the Project and the need for long- term benefits and stable funding is the subject of IBA negotiations.</li> </ul>
		The need to provide future generations with the choice to live off the land or find jobs	• IR# JRP.142
		The need to balance benefits between individuals and the entire community	<ul><li>Volume IA, Section 1.4</li><li>Volume III, Sections 3.5, 3.8, 4.7 and 5.5</li></ul>
		The need for improved community infrastructure (e.g., community arena, recreation centre)	<ul><li>Volume III, Section 4.7.5.3</li><li>IR# JRP.108</li></ul>
		The need to provide employment for youth and equal access to job opportunities	<ul> <li>Volume III, Sections 3.6.5.1, 3.6.5.2 and 5.5</li> <li>This matter is the subject if IBA negotiations.</li> <li>Nalcor has partnered with Innu Nation, the Labrador Metis Nation and the Nunatsiavut Government to submit an application for training funding under the auspices of the federal Aboriginal Skills and Employment Program</li> </ul>
		The need to participate in mitigation and monitoring programs	<ul> <li>Volume IA, Section 9.10</li> <li>IR# JRP.112</li> <li>This matter is the subject of IBA negotiations.</li> </ul>

<b>Aboriginal Group</b>	Area of Concern	Issue Identified	Response/Action
Innu Nation	Benefits/Compensation Health and Social Services	Support for health and social services	<ul><li>Volume III, Section 4.7.5.2</li><li>IR# JRP.108</li></ul>
		The need to communicate in Innu-aimun	<ul> <li>Volume III, Sections 4.7.5.1 and 4.7.5.5</li> <li>This matter is the subject of IBA negotiations</li> </ul>
		Provision of funding for job-sharing, on the job training, and related approaches	<ul> <li>Volume III, Section 3.6.5.1, 5.6.1.1 and 8.1</li> <li>This matter is the subject of IBA negotiations.</li> <li>Nalcor has partnered with Innu Nation, the Labrador Metis Nation and the Nunatsiavut Government to submit an application for training funding under the auspices of the federal Aboriginal Skills and Employment Program</li> </ul>
		The need to recognize the achievements of service providers	<ul><li>Volume IA, Section 2.2</li><li>Volume III, Section 3.6</li></ul>
		Ongoing capacity building for new and existing service workers	<ul><li>Volume IA, Sections 1.4, 2.2 and 3.6</li><li>Volume III, Sections 3.2.4</li></ul>
		Support and funding for new and existing programs (Family Treatment Program, outreach)	Volume III, Section 4.7.5.2
		Programs for youth, families, recreation, spirituality in healing, justice	Volume III, Sections 2.5.3.9 and 2.7.2.7
		The need for a new healing centre in Sheshatshiu	<ul> <li>Volume III, Sections 2.7.2.4 and 4.7.5.2</li> <li>IR# JRP.108</li> </ul>
		The need for resources to diagnose Fetal Alcohol Syndrome	Volume III, Section 2.7.2.10
	Benefits/Compensation Employment Opportunities	The need for a distinct job quota for Innu	<ul> <li>Volume IA, Sections 1.4, 2.2 and 3.6</li> <li>Volume III, Sections 3.6.1 and 3.8.2</li> <li>This matter is the subject of IBA negotiations.</li> </ul>
		The need for flexibility in work hours	<ul> <li>Volume III, Section 4.7.5.1</li> <li>IR# JRP.142</li> <li>This matter is the subject of IBA negotiations.</li> </ul>
		The provision of bus services for commuters	<ul> <li>Volume III, Section 4.5.4</li> <li>IR# JRP.29</li> </ul>

Aboriginal Group	Area of Concern	Issue Identified	Response/Action
Innu Nation		The need to allow for camps or cabins for construction workers' families to stay nearby	Volume III, Sections 3.2.6 and 4.2.3
		The need for an affirmative action program for women	Volume IA, Section 3.2.1
			<ul> <li>Volume III, Sections 3.6.1, 3.6.5.2 and 3.8.2</li> </ul>
			This matter is the subject of IBA negotiations
		The provision during construction of an orientation	Volume III, Sections 3.6 and 4.7.5.5
		program, counselling services, cultural leave and entertainment / recreation on-site	These matters are the subject of IBA negotiations
		The need for cultural awareness programs to reduce	Volume III, Section 4.7.5.5
		discrimination by non-Innu employees	This matter is the subject of IBA negotiations
		The need for a process to track and deal with problems that Innu have on the job	<ul> <li>Volume III, Section 4.7.5.5</li> <li>This matter is the subject of IBA negotiations</li> </ul>
		The need to support businesses that create jobs in the	Volume IA, Section 2.2
		community	Volume III, Section 3.7.5.1
			As part of the IBA, Innu businesses will have first
			opportunity to bid on a separate list of contracts. This list is confidential
		The need for preferential access to Project contracts	Volume III, Section 3.7.5.1
			<ul> <li>According to section 3(d) of the Tshash Petapen Agreement, qualified Innu Businesses will be offered first opportunity to bid on a specific list of contracts. Nalcor will establish an Innu Business Participation Target of \$400,000,000 and if this target is not achieved Nalcor will pay Innu Nation an amount equal to 5 percent of the difference between the</li> </ul>
			target amount and the total value of contracts awarded to Innu Businesses
		The need for support for Innu owned business	Volume III, Section 3.7.5.1

<b>Aboriginal Group</b>	Area of Concern	Issue Identified	Response/Action
Innu Nation	Benefits/Compensation Training and Education	The urgency to develop training programs as soon as possible	<ul> <li>Volume IA, Sections 1.4, 2.2 and 3.6</li> <li>Volume III, Section 3.6.5.1</li> <li>Nalcor has partnered with Innu Nation, the Labrador Metis Nation and the Nunatsiavut Government to submit an application for training funding under the auspices of the federal Aboriginal Skills and Employment Program. If this application is approved, monies for training will be made available prior to Project Sanction</li> </ul>
		The provision of resources to enable young Innu to get training programs and support	<ul> <li>Volume I, Sections 1.4, 2.2 and 3.6</li> <li>Volume III, Sections 3.6 and 4.7</li> <li>Nalcor has partnered with Innu Nation, the Labrador Metis Nation and the Nunatsiavut Government to submit an application for training funding under the auspices of the federal Aboriginal Skills and Employment Program. If this application is approved, monies for training will be made available prior to Project Sanction</li> </ul>
		The need to focus on training in trades and technology so Innu can get jobs after construction phase	<ul> <li>Volume IA, Sections 1.4, 2.2 and 3.6</li> <li>Volume III, Sections 3.6.5.1 and 4.7.5.1</li> <li>Nalcor has partnered with Innu Nation, the Labrador Metis Nation and the Nunatsiavut Government to submit an application for training funding under the auspices of the federal Aboriginal Skills and Employment Program. This funding is intended to promote the development of transferable skills which will encourage long-term employment</li> </ul>
		The provision of funding for adult education centres	• IR# JRP.108
		The need for support programs to keep children in school	Volume III, Sections 2.6.5.1 and 4.7.5.1
		The need for support for Innu curriculum in school	Volume III, Section 2.6.5.1
		The need for support and training for Innu teachers	Volume III, Section 2.6.5.1
	Benefits/Compensation Culture	The need to fund programs to allow Innu to hold onto culture	Volume III, Sections 4.7.5.5 and 5.2
		The need for a living allowance for hunters	This is an issue which is beyond the capacity of Nalcor to resolve

<b>Aboriginal Group</b>	Area of Concern	Issue Identified	Response/Action
Innu Nation		The need to change the school calendar so children can go to Nutshimit in spring and fall	This is an issue which is beyond the capacity of Nalcor to resolve
		The need to incorporate elders and traditional knowledge into curriculum	This is an issue which is beyond the capacity of Nalcor to resolve
		The need to provide training for Innu to become wilderness guides	This is an issue which is beyond the capacity of Nalcor to resolve
		The provision of funding for a museum	This is an issue which is beyond the capacity of Nalcor to resolve
		The need to capture and document histories / stories of the area	<ul> <li>Volume IA, Sections 8.3.1.4 and 9.1.1</li> <li>Volume III, Sections 2.8.3, 2.8.5, 2.8.11, 2.8.12, 2.8.16, 4.2,</li> <li>5.2 and 6.5.5.1</li> </ul>
	Business Opportunities	The need to consider and address the potential that the Project could preclude other business opportunities, such as ecotourism	Volume III, Section 5.5.5.2
		The need to avoid joint ventures that are controlled by non-Innu	This is an issue which is beyond the capacity of Nalcor to resolve
		The possibility that only a small number of Innu will benefit from business opportunities related to the Project	Volume III, Section 3.7.5.1
		The suspicion that Innu leaders could make decisions that benefit their business and not the whole community	This is an issue which is beyond the capacity of Nalcor to resolve.
	Community Health	Communities are stressed and vulnerable and the Project could affect mental and physical health of local residents	<ul> <li>Volume III, Sections 4.7.5.2 and 4.7.5.3</li> <li>IR# JRP.140</li> </ul>
		The potential for social problems associated with project employment (e.g., substance abuse, family problems) to place increased burden on existing social and community services and infrastructure - many of which are operating beyond capacity now	• Volume III, Sections 4.1, 4.2.3, 4.6.5.1, 4.7.5.2 and 4.7.5.3
	Consultation	Cynicism about consultation process - seen as tokenism (i.e., Innu concerns are heard but then ignored)	Volume IA, Section 8.3

Aboriginal Group	Area of Concern	Issue Identified	Response/Action
Innu Nation		Importance of education about the Project for everyone concerned	<ul> <li>Volume IA, Sections 7.1 and 8.0</li> <li>Through a series of agreements, negotiated between 2000 and 2008, Nalcor has provided significant funding for community consultation and an environmental task force</li> </ul>
		A concern that consultation occurs only after plans are made and a project has been approved	<ul> <li>Volume IA, Section 8.3.1.3</li> <li>Nalcor and Innu Nation have been engaged in consultation arrangements since 2000. These arrangements are fully funding by Nalcor and relate to IBA negotiations, a community consultation process and an environmental Task Force</li> </ul>
		The lack of trust in the information provided by government and industry	<ul> <li>IR# JRP.123</li> <li>Almost all information provided in the Traditional Ecological Knowledge (TEK) report was readily incorporated into the EIS because it was either consistent with that presented by government and industry or it addressed a gap in that knowledge.</li> </ul>
		The need to hold more small meetings for Innu to voice concerns and gather information	Volume IA, Section 8.0
		The need for better organization and advertising of public forums	Volume IA, Section 7.3.7
		The need to make provision for Innu leaders to provide information to the community	• Volume IA, Sections 7.1 through 7.6, 8.1, 8.2 and 9.3
		The need to organize forums for Innu to get information from industry and government leaders	Volume IA, Sections 7.5, 8.0 and 9.1.1
		The need to recognize the division and dysfunction of Innu institutions	Volume IA, Section 8.2.1
		The need for effective Aboriginal consultation	<ul> <li>Volume IA, Sections 8.3 and 9.1.1</li> <li>Nalcor and Innu Nation have been engaged in consultation arrangements since 2000. These arrangements are fully funding by Nalcor and relate to IBA negotiations, a community consultation process and an environmental Task Force</li> </ul>
		The challenge for Innu to understand some concepts associated with the Project	Volume IA, Sections 7.1 through 7.6, 8.1, 8.2 and 9.3
		The need to find solutions to translation as many English words do not have an Innu-aimun equivalent	Volume IA, Sections 8.0 and 9.1.1

Aboriginal Group	Area of Concern	Issue Identified	Response/Action
Innu Nation		The need for more consultation and discussion on mercury levels in reservoirs	<ul> <li>Volume IA, Sections 5.1.2, 7.3.5, 7.4.2 and 7.5</li> <li>Volume IIA, Sections 2.7.3.7 and 4.9.2</li> <li>Volume III, Sections 4.1.2, 4.2.5, 4.7.5.6 and 5.2</li> </ul>
	Country Foods	The effects of environmental changes of animals diet and the effects on colour, texture and quality of country foods	Volume III, Section 5.2
		The potential for increase in parasites	Health effects which could lead to or be a result of increased parasite loads were mentioned in some of the interactions addressed in Volume IIB, Chapter 5
		The likelihood that an increase in consumption of store-bought food will degrade the health and finances for families and the community	Volume III, Sections 2.7.3.3 and 5.5.5.1
		The potential that Innu will no longer trust the quality of country foods and eat fewer of them	<ul><li>Volume III, Section 5.2</li><li>IR# JRP.142</li></ul>
	Culture	The potential to alter the deep spiritual connection between Innu and the land	<ul><li>Volume III, Section 4.7.5.5</li><li>IR# JRP.142</li></ul>
		The potential for loss of the traditional way of life on the land and the Innu sense of identity	<ul><li>Volume III, Sections 4.7.5.5, 5.2 and 5.5.5.1</li><li>IR# JRP.142</li></ul>
		The potential loss of traditional knowledge	Volume III, Section 4.7.5.5
		The likelihood that the potential loss of ability to practice traditional uses of the River	<ul> <li>Volume III, Sections 2.8, 2.9 and 5.5.5.2</li> <li>IR# JRP.34; IR# JRP.35; IR# JRP.36; IR# JRP.38; IR# JRP.70</li> <li>IR# JRP.72; IR# JRP.73; IR# JRP.80; IR# JRP.142; IR# JRP.143</li> </ul>
		The likelihood that the Project will alter or destroy heritage sites and sites used for cultural activities	<ul><li>Volume III, Sections 2.7.11 and 6.5.5.1</li><li>IR# JRP.104</li></ul>
		The potential that increases in non-native population may diminish Innu political influence	This is an issue which is beyond the capacity of Nalcor to resolve.
		The concern that hydroelectric development conflicts with the Innu culture and worldview	Volume III, Section 5.2
		The possibility that the Project will result in flooding of gravesites	Volume III, Section 6.5.5.1
		The concern that the difference between western science and Innu culture can lead to mistrust of scientists by Innu	<ul> <li>This is an issue which is beyond the capacity of Nalcor to resolve.</li> </ul>

<b>Aboriginal Group</b>	Area of Concern	Issue Identified	Response/Action
Innu Nation	Cumulative Effects	The perception that an overall deterioration of the environment of the region is occurring as a result of a sequence of projects	<ul> <li>Volume IA, Section 9.9</li> <li>Volume IIA, Sections 3.11 and 4.16</li> <li>Volume IIB, Section 5.15</li> <li>Volume III, Sections 3.5.6, 3.6.6, 3.7.6, 4.5.6, 4.6.6, 4.7.6, 5.6.6 and 6.5.6</li> <li>IR# JRP.44; IR# JRP.97</li> </ul>
		The likelihood that the Project will open the door to other big projects that would use the available power and use the improved access	<ul> <li>Volume IA, Section 9.9</li> <li>Volume IIA, Sections 3.11 and 4.16</li> <li>Volume IIB, Section 5.15</li> <li>Volume III, Sections 3.5.6, 3.6.6, 3.7.6, 4.5.6, 4.6.6, 4.7.6, 5.6.6 and 6.5.6</li> </ul>
		Concern about the increased risk to human life as more dams are built close to communities	<ul> <li>Volume IA, Section 9.9</li> <li>Volume IIA, Sections 3.11 and 4.16</li> <li>Volume IIB, Section 5.15</li> <li>Volume III, Sections 3.5.6, 3.6.6, 3.7.6, 4.5.6, 4.6.6, 4.7.6, 5.6.6 and 6.5.6</li> <li>IR# JRP.145; IR# JRP.96</li> <li>Provision of Dam Break Study and Inundation Mapping</li> </ul>
		The increased risk of river contamination with more industrial development	<ul> <li>Volume IA, Section 9.9</li> <li>Volume IIA, Sections 3.11 and 4.16</li> <li>Volume IIB, Section 5.15</li> <li>Volume III, Sections 3.5.6, 3.6.6, 3.7.6, 4.5.6, 4.6.6, 4.7.6, 5.6.6 and 6.5.6</li> </ul>
		The cumulative effects on social problems as a result of more industrial developments (alcohol, drugs use, increased disease)	<ul> <li>Volume IA, Section 9.9</li> <li>Volume IIA, Sections 3.11 and 4.16</li> <li>Volume IIB, Section 5.15</li> <li>Volume III, Sections 3.5.6, 3.6.6, 3.7.6, 4.5.6, 4.6.6, 4.7.6, 5.6.6 and 6.5.6</li> <li>IR# JRP.97</li> </ul>

Aboriginal Group	Area of Concern	Issue Identified	Response/Action
Innu Nation		The high level of existing pressures on mental, physical and social health for Innu	<ul> <li>Volume IA, Section 9.9</li> <li>Volume IIA, Sections 3.11 and 4.16</li> <li>Volume IIB, Section 5.15</li> <li>Volume III, Sections 3.5.6, 3.6.6, 3.7.6, 4.5.6, 4.6.6, 4.7.6, 5.6.6 and 6.5.6</li> <li>IR# JRP.140</li> </ul>
	Environmental Assessment Process	A concern that the environmental assessment process will include consideration of other projects that may occur	<ul> <li>Volume IA, Section 9.9</li> <li>Volume IIA, Sections 3.11 and 4.16</li> <li>Volume IIB, Section 5.15</li> <li>Volume III, Sections 3.5.6, 3.6.6, 3.7.6, 4.5.6, 4.6.6, 4.7.6, 5.6.6 and 6.5.6</li> </ul>
		The importance of consulting with Aboriginal groups as part of the environmental assessment process	<ul> <li>Volume IA, Sections 7.0, 8.0 and 9.1.1</li> <li>IR# JRP.1; IR# JRP.2</li> <li>Nalcor and Innu Nation have been engaged in consultation arrangements since 2000. These arrangements are fully funded by Nalcor and relate to IBA negotiations, a community consultation process and an environmental Task Force. Nalcor is also engaged in consultation with six Quebec Innu communities, Labrador Metis Nation and the Nunatsiavut Government.</li> </ul>
		The concern that research is only happening after plans have already been made  The potential that the process is rushed and Innu will be forced to make decisions without enough information	<ul> <li>Volume IA, Sections 7.0, 8.0 and 9.1.1</li> <li>Volume IA, Sections 7.0, 8.0 and 9.1.1</li> <li>Nalcor and Innu Nation have been engaged in consultation arrangements since 2000. These arrangements are fully funding by Nalcor and relate to IBA negotiations, a community consultation process and an environmental Task Force.</li> </ul>
	Ecosystem - General	Size of the Project footprint is an issue, especially when combined with the Churchill Falls project	<ul> <li>Volume IA, Sections 4.3, 4.4.1 and 4.4.2</li> <li>IR# JRP.46; IR# JRP.124; IR# JRP.32</li> </ul>

Aboriginal Group	Area of Concern	Issue Identified	Response/Action
Innu Nation		Environmental concerns include changes in climate, methane produced by rotting trees, pollution from dust, electromagnetic radiation, possible accidents	<ul> <li>Volume IA, Sections 2.3.1.4</li> <li>Volume IIA, Sections 2.2.1.2, 3.3.1.2, 3.7 and 3.8</li> <li>IR# JRP.88; IR# JRP.88S; IR# JRP.100; IR# JRP.99; IR# JRP.85 IR# JRP.96; IR# JRP.145</li> <li>Provision of Dam Break Study and Inundation Mapping</li> </ul>
		The transformation of the river will mean that it will no longer behave like a river	<ul> <li>Volume IIA, Sections 2.3.3 and 4.11.2.1</li> <li>IR# JRP.32; IR# JRP.54</li> </ul>
		Flooding will affect the watershed, wetlands and other rivers	<ul> <li>Volume IA, Sections 3.8, 4.1 and 10.3</li> <li>Volume IIA, Section 2.4.2</li> <li>Volume IIB, Sections 5.7.11, 5.10, 5.11.1.10 and 5.11.1.14</li> <li>IR# JRP.67; IR# JRP.101; IR# JRP.32</li> </ul>
		Effects on trees, grasses, berries and other vegetation that grows along the shoreline, including plants used in Innu medicines	<ul> <li>Volume IIA, Section 2.4.2.10</li> <li>Volume IIB, Sections 5.15.1.14, and 5.16</li> <li>Volume III, Sections 2.8.12, 5.5.5.1 and 5.6.2.1</li> <li>IR# JRP.101; IR# JRP.103; IR# JRP.70</li> </ul>
		Devastation of the shoreline changing natural fluctuations that maintain the ecosystem	<ul> <li>Volume IIA, Sections 4.7.4, 4.10.1, 4.10.2.3, 4.10.2.4, 4.12.2, 4.12.2.2, 4.12.2.3 and 4.15.2</li> <li>Volume IIB, Sections 5.7.11, 5.10, 5.11.1.7, 5.11.1.9, 5.11.1.12, 5.11.1.13, 5.11.1.16, 5.11.2.1, 5.11.2.2, 5.11.2.9, 5.11.2.10, 5.12.2, 5.14.4.2, 5.14.10.2 and 5.14.12.2</li> <li>IR# JRP.119; IR# JRP.55</li> </ul>
		If the reservoir does not provide good habitat for trout and salmon, they will die or migrate to other areas	<ul> <li>Volume IIA, Sections 2.3.7.1, 4.8.2 and 4.13.1.1</li> <li>IR# JRP.107</li> </ul>
		The concern that Nalcor does not truly know the extent of flooding and it will extend beyond the river valley  Land would need to be destroyed to build roads, more roads would lead to more cabin development, hunting, trapping by outsiders; pollution from exhaust would affect animals	<ul> <li>Volume IA, Sections 4.2.1.3 and 4.2.2.3; Appendix IB-C</li> <li>IR# JRP.119</li> <li>Volume IIA, Section 3.3.1.2</li> <li>IR# JRP.88 and IR# JRP.88S; IR# JRP.100</li> <li>IR# JRP.24</li> </ul>

<b>Aboriginal Group</b>	Area of Concern	Issue Identified	Response/Action
Innu Nation		Effects on the water include flow changes, fluctuating water levels, rotting vegetation on water quality, effects on aquatic vegetation, oil and chemical spills, strong medicine of plants affecting water quality, methylmercury affecting fish and other animals	<ul> <li>Volume IIA, Sections 2.3.3 and 4.0</li> <li>IR# JRP.22; IR# JRP.119; IR# JRP.32; IR# JRP.145; IR# JRP.89; IR# JRP.20; IR# JRP.21</li> </ul>
		The potential for the Project to affect downstream communities due to erosion and changing ice conditions	<ul> <li>Volume IIA, Section 2.3.1.1</li> <li>IR# JRP.48; IR# JRP.43; IR# JRP.71</li> </ul>
		The pattern of water levels fluctuation could affect ice cover and travel	<ul> <li>Volume IIA, Section 4.12.2.1</li> <li>Volume IIB, Section 5.11.2.2</li> <li>Volume III, Sections 5.5.5.1, 5.6.1.2, 5.6.2.1 and 5.6.2.2</li> <li>IR# JRP.71</li> </ul>
	Education and Training	The lack of resource for Innu to receive training to get jobs within and outside the community	<ul> <li>Volume III, Sections 2.4.4 and 3.6.5.1</li> <li>Nalcor has partnered with Innu Nation, the Labrador Metis Nation and the Nunatsiavut Government to submit an application for training funding under the auspices of the federal Aboriginal Skills and Employment Program.</li> </ul>
		Lack of basic education for Innu to qualify for training programs	<ul> <li>Volume III, Sections 2.4.4 and 3.6.5.1</li> <li>Nalcor has partnered with Innu Nation, the Labrador Metis Nation and the Nunatsiavut Government to submit an application for training funding under the auspices of the federal Aboriginal Skills and Employment Program.</li> </ul>
		The concern that there are important impediments to training – takes too long, there is no funding and programs are only offered outside the Innu communities	<ul> <li>Volume III, Sections 2.4.4 and 3.6.5.1</li> <li>Nalcor has partnered with Innu Nation, the Labrador Metis Nation and the Nunatsiavut Government to submit an application for training funding under the auspices of the federal Aboriginal Skills and Employment Program.</li> </ul>
	Elder Issues	The potential for the Project to have cultural and spiritual effects on elders	Volume III, Sections 6.5.5
		The potential for increased abuse of the elderly (e.g., increased alcohol and drug abuse results in abandonment by their families)	Volume III, Section 4.7

<b>Aboriginal Group</b>	Area of Concern	Issue Identified	Response/Action
Innu Nation		The fear that elders will be excluded from Project benefits	The IBA which is under negotiation is intended to apply equally to all members of Innu Nation.
		The concern that elders and their traditional knowledge will be forgotten as society changes	<ul> <li>Volume III, Section 4.7.5.5 and 5.2</li> <li>The relevance of traditional knowledge to environmental management is the subject of IBA negotiations.</li> </ul>
		Skepticism about types of jobs Innu will get and success of training programs	Volume III, Sections 2.4.4 and 3.6.5.1
		The concern that the promise of jobs and training will be used to lure Innu into agreeing to let Project go ahead	Volume III, Sections 2.4.4 and 3.6.5.1
		The concern that women will not get any Project-related jobs and if they do, they might face harassment.	<ul> <li>Volume IA, Section 3.2.1</li> <li>Volume III, Section 3.6.1, 3.6.5.2 and 3.8.2</li> <li>The issue of gender equality in the workplace is the subject of IBA negotiations.</li> </ul>
		The concern that employment is relatively short term. What will happen once jobs end	<ul><li>Volume IA, Sections 1.4, 2.2 and 3.6</li><li>Volume III, Sections 3.6.4 and 3.6.5.1</li></ul>
		Project-related employment will affect Innu ability to go to the country to practice traditional way of life	• Volume III, Sections 4.7.5.1, 4.7.5.3, 4.7.5.5, 5.2, 5.5.5.1 and 5.6.1.1
		The need for employment equity measures	<ul> <li>IR# JRP.142</li> <li>Volume IA, Section 3.2.1</li> <li>Volume III, Sections 3.6.1, 3.6.5.2 and 3.8.2</li> </ul>
		The fear that outsiders will get jobs, not Innu	<ul> <li>Volume IA, Sections 1.2.2 and 1.4</li> <li>Volume III, Sections 3.6.5.1 and 3.6.5.2</li> <li>The issue of employment of Innu is the subject of IBA negotiations.</li> </ul>
	Family and Community Life	The potential for the Project to attract more people in the area and in Innu communities	Volume III, Sections 4.2.4, 4.5.5.1 and 4.6.4
		More people and more money can result in increased stress, alienation, and the availability of drugs and alcohol	• Volume III, Sections 2.7.3.1, 4.2.2, 4.7.5.1, 4.7.5.2 and 4.7.5.3
		The potential for employment on the Project to cause increased tensions within families and lead to family break-ups	Volume III, Sections 4.2.3 and 4.7.5.2

Aboriginal Group	Area of Concern	Issue Identified	Response/Action
Innu Nation		The likelihood that the reduced opportunities and ability to go into the country due to changes to the landscape and more non-native resource use	• Volume III, Sections 4.7.5.1, 4.7.5.3, 4.7.5.5, 5.2, 5.5.5.1, 5.6.1.1, 4.2.4, 4.5.5.1 and 4.6.4
		The concern that, once constructed, the short term construction jobs may leave people feeling hopeless and abandoned	Volume III, Section 4.7.5.1
		With more newcomers in the region, intermarriage may increase which could lead to Innu moving away and children losing their language	Volume III, Sections 2.8, 4.6 and 4.7
		The potential for rifts within and between communities to develop when some people get ahead and benefits are unevenly distributed	Volume III, Section 4.7.5.1
		The difficulty in predicting and monitoring social effects of the Project to determine how the Project affects Social problems and families	<ul><li>Volume III, Section 4.0</li><li>IR# JRP.112</li></ul>
		The potential for a large influx of single men into the community to create problems for young women (abuse and rape), including more single mothers	Volume III, Section 4.7.5.4
		The potential for diseases, such as AIDS, to be brought into the community	Volume III, Section 4.7.5.4
		The potential for the Project to result in addictions with consequent effects on families, including neglect, violence and sexual abuse	Volume III, Section 4.7.5.3
		The potential for long distance commuting to work on the Project affecting family life	<ul> <li>Volume III, Sections 4.2.3 and 4.7.5.1</li> <li>IR# JRP.34; IR# JRP.36</li> </ul>
	Fish Harvesting	The potential loss of fish and fish habitat through flooding, blocked access, turbine mortalities and nutrient depletion.	<ul> <li>Volume IIA, Sections 4.7, 4.8.3.2 and 4.11</li> <li>IR# JRP.107; IR# JRP.51</li> </ul>
		The potential for contamination by methylmercury and increase in parasites to degrade fish quality	<ul> <li>Volume IA, Section 4.11</li> <li>Volume IIA, Section 2.2, 2.4 and 4.9.2</li> <li>IR# JRP.121</li> </ul>
		The potential for changes in competition between species to cause increases in predation on other species	Volume IIA, Section 2.3.7
		Increased water depth causing loss of plant species and affecting food availability for fish	Volume IIA, Section 4.7.6
		The potential for reduced harvest levels of some fish species due to habitat alterations	Volume IIA, Section 4.8

Aboriginal Group	Area of Concern	Issue Identified	Response/Action
Innu Nation		The potential for increased harvesting costs to result from increased travel time, boat or gear damage or increased fishing time	Volume III, Sections 4.7.5.5, 5.2 and 5.5.5.1
		The potential for decrease or loss of shoreline access	<ul> <li>Volume III, Sections 5.5.5.1, 5.5.5.2 and 5.6.1.1</li> <li>IR# JRP.34; IR# JRP.36</li> </ul>
		The expectation that fishing may become less enjoyable due to changes to the landscape	Volume III, Section 5.5.5.1
		The possibility that reservoir formation will result in foreclosure of future fisheries	• The potential effects of the Project on the existing Aquatic Ecosystem (Chapter 4, Volume IIB) and Land and Resource Use (Chapter 5, Volume III) have been assessed in the Environmental Impact Statement (EIS) (also see response to IR# JRP.43) with significant effects determined to be not likely. In addition, the response to IR# JRP.73 describes the existing recreational, commercial and aboriginal fisheries in Lake Melville and the relationship between them and the Churchill River and its tributaries. Recreational fishing activity within the proposed reservoir areas is limited as described in Section 2.8.5, page 2-66 Volume III of the EIS and the Lower Churchill River (also see the Fish Consumption and Angling Survey: Socio-Economic Component Study Report 4 of 6) and is focused primarily on brook trout, lake trout and ouananiche (landlocked salmon). Habitat within and around the proposed reservoirs will most likely remain available for future fisheries. Nalcor does not have the mandate to foreclose any future fisheries within or around the proposed Project.
	Flora	The potential for flooding to affect vegetation used for medicines or spiritual rituals	<ul> <li>Volume II, Sections 2.4.2.10, 4.15.4.14 and 7.2.3</li> <li>Volume III, Section 5.5.5.1</li> <li>IR# JRP.42; IR# JRP.70; IR# JRP.103</li> </ul>
		The concern that vegetation used by animals for food and building their homes will be affected by reservoir formation	• IR# JRP.101; IR# JRP.102; IR# JRP.119

<b>Aboriginal Group</b>	Area of Concern	Issue Identified	Response/Action
Innu Nation		The potential for habitat of berries and other plants to be lost to flooding	<ul> <li>Volume III, Section 5.5.5.1</li> <li>IR# JRP.70; IR# JRP.119</li> </ul>
	Gathering	Herbicide use on cleared areas may affect the quality or abundance of food plants, such as berries	<ul> <li>Volume IIB, Section 5.10</li> <li>Volume III, Section 5.2</li> <li>IR# JRP.91</li> </ul>
	Health and Social Services/Programs	The potential for the Project to increase demands on existing programs and services	<ul> <li>Volume III, Sections 2.6, 2.7, 4.6 and 4.7</li> <li>IR# JRP.108</li> </ul>
		The loss of qualified personnel to Project jobs would mean fewer resources in the Innu communities	• IR# JRP.106; IR# JRP.133
		The need for programs to support families, youth, spirituality in healing	Volume III, Section 2.7.2 and 4.7
	Hunting – Waterfowl, other birds, large and small game	The concern that the harvest for some species will go down because of shoreline effects and changes in distribution	<ul> <li>Volume III, Sections 5.2, 5.5.5.1 and 5.5.5.2</li> <li>IR# JRP.48; IR# JRP.65; IR# JRP.92; IR# JRP.93; IR# JRP.122; IR# JRP.128</li> </ul>
		The potential for the Project to affect migratory routes and divert birds from traditional hunting areas	<ul><li>Volume III, Sections 5.7.7 and 5.7.8</li><li>IR# JRP.48; IR# JRP.65</li></ul>
		The effects of the Project on the population of big game animals because of habitat disturbances	<ul> <li>Volume IIB, Sections 5.14.1, 5.14.3 and 5.14.4</li> <li>IR# JRP.9; IR# JRP.92; IR# JRP.93; IR# JRP.122</li> </ul>
		The potential for sudden increases in water level to drown animals or force them to change travel routes	<ul> <li>Volume IIB, Sections 5.7.1 and 5.9.2</li> <li>IR# JRP.9; IR# JRP.92; IR# JRP.93; IR# JRP.122; IR# JRP.32</li> </ul>
	Innu Readiness and Capacity	The concern that Innu are not ready for the Project and don't have the capacity to deal with effects	Volume III, Sections 2.7, 4.2 and 4.7
		The fear that consultation efforts don't allow time for Innu to understand implications or absorb the information provided	<ul> <li>Volume IA, Sections 7.5, 8.0 and 9.11</li> <li>Nalcor and Innu Nation have been engaged in consultation arrangements since 2000. These arrangements are fully funded by Nalcor and relate to IBA negotiations, a community consultation process and an environmental Task Force.</li> </ul>
	Land Rights Issues	The view that land rights should be settled before development of the Project proceeds	<ul> <li>Volume IA, Section 1.5</li> <li>The Tshash Petapen Agreement speaks to the relationship of ongoing land claims negotiations to the Lower Churchill Project.</li> </ul>
		The frustration that the only recognized uses for land are those that change it in degrading ways	Volume IA, Section 1.5

<b>Aboriginal Group</b>	Area of Concern	Issue Identified	Response/Action
Innu Nation		The concern that the Project is increasing pressure to finalize land rights agreement	Volume IA, Section 1.5
		A perception that this Project is the latest in a long legacy of seizure of Innu land by government / industry, leading to a further loss of Innu self-determination	This is a matter between the Province of Newfoundland and Labrador and Innu Nation which are engaged in ongoing land rights negotiations with Canada. The New Dawn Agreement between the Province, Innu Nation and Energy Corporation of Newfoundland and Labrador which was signed September 26, 2008 represents a significant step in the finalization of a comprehensive land rights agreement.
		The loss of hunting territory and Innu travel routes will make it more difficult for Innu to practice their culture	<ul> <li>Volume III, Sections 4.7.5.1, 4.7.5.3, 4.7.5.5, 5.5.5.1 and 5.6.1.1</li> <li>IR# JRP.142</li> </ul>
		The presence of more outsiders will increase competition for land use	Volume III, Section 5.5.5.1
	Project Need	The need for the Project and for more electricity is questionable	Volume IA, Section 2.3
		The need for alternatives that won't destroy the Earth	Volume IA, Section 2.3.1
		Size of the Project questioned	<ul><li>Volume IA, Section 2.0</li><li>IR# JRP.26S</li></ul>
	Resource Harvesting	Change in diet due to less harvesting or a decline in quantity / quality of country foods may have health and economic repercussions	<ul> <li>Volume IA, Appendix I-H</li> <li>Volume III, Sections 2.7.3.3 and 5.5.5.1</li> <li>IR# JRP.141</li> </ul>
		Increase in one activity (trapping) may reduce opportunities for other harvesting activities (hunting or berry-picking)	• IR# JRP.110
		Should construction workers hunt or fish in their spare time, this will create competition for resources	<ul> <li>Volume III, Sections 5.2, 5.5.4 and 5.5.5.1</li> <li>IR# JRP.38; IR# JRP.118</li> </ul>
		Easier access to the land may attract tourists and cause a decrease in harvest for Innu	• Volume III, Sections 5.2, 5.5.4 and 5.5.5.1
		Excessive kills by non-native hunters may reduce resource availability	• Volume III, Sections 5.2, 5.5.4 and 5.5.5.1
		Methylmercury levels in of reservoir fish could cause Innu to lose confidence in the quality of other animals and plants	<ul> <li>Volume III, Sections 4.2.1, 4.2.5 and 4.7.5.6</li> <li>IR# JRP.22</li> </ul>

Aboriginal Group	Area of Concern	Issue Identified	Response/Action
Innu Nation		The potential for the Project to result in loss of access to harvesting areas or increased travel time	<ul> <li>Volume III, Sections 5.2 and 5.5.5.1</li> <li>IR# JRP.72; IR# JRP.110</li> </ul>
		A fear of unsafe conditions may deter harvesters from using that area at all	<ul><li>Volume III, Sections 5.2 and 5.5.5.1</li><li>IR# JRP.48</li></ul>
		The potential for construction noise and activity to cause animals to leave usual habitats	<ul><li>Volume IIB, Section 5.11.1</li><li>IR# JRP.87</li></ul>
		The possibility that construction workers and other non-native fishers/hunters may steal hunting and trapping equipment or damage camps	• Volume III, Sections 5.2, 5.5.4 and 5.5.5.1
		The potential for new roads to lead to other developments such as commercial forestry	<ul> <li>Volume IA, Section 9.9</li> <li>Volume III, Sections 3.5.6, 3.6.6, 3.7.6, 4.5.6 and 5.6.6</li> </ul>
	Trapping	Direct loss of trapping area due to flooding	<ul><li>Volume III, Section 5.2</li><li>IR# JRP.110</li></ul>
		Trappers may lose traps, boats, snowmobiles, cabins, and portions of their trap lines in areas that are flooded	<ul><li>Volume III, Section 5.2 and 5.5.5.1</li><li>IR# JRP.16</li></ul>
		Methylmercury in furbearers	<ul><li>Volume III, Section 5.2</li><li>IR# JRP.22</li></ul>
		Transmission corridors may encourage more non-Innu trapping	<ul> <li>Volume III, Sections 4.2.4, 4.5.5.1, 4.6.4, 4.7.5.1, 4.7.5.3, 4.7.5.5, 5.2 and 5.5.5.1</li> <li>IR# JRP.30</li> </ul>
		The potential loss of culture because of reduced trapping opportunities	<ul> <li>Volume III, Sections 4.2.4, 4.5.5.1, 4.6.4, 4.7.5.1, 4.7.5.3, 4.7.5.5, 5.2 and 5.5.5.1</li> <li>IR# JRP.110; IR# JRP.142</li> </ul>
	Women's Issues	The potential for increased abuse and exploitation of women	Volume III, Sections 2.7.3.1 and 4.7.5.2
		The potential for women to fail to get any Project-related jobs and the possibility for those who do, to face harassment	<ul> <li>Volume IA, Section 3.2.1</li> <li>Volume III, Sections 3.6.1, 3.6.5.2 and 3.8.2</li> <li>The issue of gender equality and employment of women is the subject of IBA negotiations.</li> </ul>
		The potential for the Project to result in increased domestic violence	Volume III, Sections 2.7.3.1 and 4.7.5.2

<b>Aboriginal Group</b>	Area of Concern	Issue Identified	Response/Action
Innu Nation	Wildlife and Wildlife Habitat	The potential for flooding and changes in ice and water conditions to degrade habitat (nesting, breeding, feeding)	<ul> <li>Volume IIB, Section 5.7 and 5.11</li> <li>IR# JRP.48; IR# JRP.65</li> </ul>
		The potential for the Project to alter the diet of animals, waterfowl and fish	<ul><li>Volume III, Sections 4.7, 5.7 and 5.11</li><li>IR# JRP.126</li></ul>
		The concern that no amount of compensation could make up for the loss of land and wildlife	• IR# JRP.110
		The potential for bears to be attracted to camps by garbage or workers feeding them	<ul><li>Volume IIB, Section 5.7.3 and 5.11.1.6</li><li>IR# JRP.9</li></ul>
		The potential for the Project to cause animals to die or move away from the area	<ul><li>Volume IIB, Sections 5.7 and 5.11</li><li>IR# JRP.126</li></ul>
		The potential for the Project to cause decline in one population causing a decline in other populations	<ul><li>Volume IIB, Sections 5.7 and 5.11</li><li>IR# JRP.126</li></ul>
		The potential for changes in shoreline habitat to decrease shorebird abundance	<ul> <li>Volume IIB, Sections 5.7.7, 5.7.8, 5.7.10, 5.7.11, 5.11.1.10, 5.11.1.11, 5.11.1.12, 5.11.1.14, 5.11.2.11, 5.11.2.12, 5.11.2.13 and 5.11.2.14</li> <li>IR# JRP.101</li> </ul>
		The potential for the Project to add to the decline in caribou herd populations	<ul> <li>Volume II, Sections 5.2, 5.3, 5.4, 5.11.1.3, 5.11.1.4, 5.11.2.4 and 5.11.2.5</li> <li>IR# JRP.93; IR# JRP.122</li> </ul>
		The potential for construction noise to chase animals away from the area	<ul><li>Volume IIB, Section 5.11.1.2</li><li>IR# JRP.87</li></ul>
		The potential to lose wildlife habitat that is significant to animals and humans for subsistence and cultural sustainability	• Volume III, Sections 5.2, 5.5.5.1 and 5.5.5.2
		Skepticism about efforts to mitigate effects on wildlife since wildlife don't like to go to disturbed areas	Volume III, Sections 7.2.3 and 7.4
		The potential for increase in road kill along new roads	• Volume IIB, Sections 5.13.1 and 7.3

Area of Concern	Issue Identified	Response/Action
	The potential for reductions in fish populations to result in decreases in wildlife populations	Volume IIB, Sections 5.7 and 5.11
Youth Issues	The potential to increase the conflict amongst youth between the traditional way of life and having to work/go to school	Volume III, Section 4.7
	The challenge of dealing with the elevated level of social problems in youths, including substance abuse, low self-esteem, exhibiting destructive behaviours	• Volume III, Sections 4.7.5.1, 4.7.5.2 and 4.7.5.3
	The lack of resources / programs to address youth issues	• Volume III, Sections 4.7.5.1, 4.7.5.2 and 4.7.5.3
	The ability to address the concern that young people will lose connections to the land and will not know what to do with their lives if they feel they cannot participate in the industrial economy	• Volume III, Sections 2.9, 5.3, 5.5, 6.1 and 6.5
	The potential for the Project to fail to provide jobs for young people because they lack training	Volume III, Sections 3.6.5.1 and 3.6.5.2
		The potential for reductions in fish populations to result in decreases in wildlife populations  Youth Issues  The potential to increase the conflict amongst youth between the traditional way of life and having to work/go to school  The challenge of dealing with the elevated level of social problems in youths, including substance abuse, low self-esteem, exhibiting destructive behaviours  The lack of resources / programs to address youth issues  The ability to address the concern that young people will lose connections to the land and will not know what to do with their lives if they feel they cannot participate in the industrial economy  The potential for the Project to fail to provide jobs for

## Table 2 Issues of Concern Raised by Other Aboriginal Groups in Consultation Initiatives to Date

Aboriginal Group	Area of Concern	Issue Identified	Response/Action
Conseil des Innu d'Ekuanitshit (Mingan)	Aboriginal Rights and Title	<ul> <li>Lack of recognition of rights and title by the Province of Newfoundland and Labrador.</li> <li>Traditional hunting rights in Labrador not recognized</li> </ul>	Explanation provided regarding the role of the proponent.     Nalcor representatives acknowledged Ekuanitshit's concern and explained that as the Proponent, Nalcor does not have the mandate to resolve Aboriginal rights and title issues. This is a federal and provincial Crown issue
	Project representation	Who does Nalcor represent?	Clarification provided regarding the role of Nalcor as the proponent of the project, not as an agent of the Government of Newfoundland and Labrador
	Consultation	<ul> <li>Concerns and actions of the consultations will not be addressed</li> <li>No consultation prior to 2008</li> </ul>	<ul> <li>Clarification provided regarding the project and consultation</li> <li>In accordance with the EIS Guidelines, issued July 2008, Nalcor is fulfilling its consultation requirements as the Project Proponent</li> <li>The consultation process between Nalcor and Ekuanitshit was initiated on 20 May 2008 and has been ongoing since that time</li> <li>The information shared is important for Ekuanitshit's participation in the public hearings</li> <li>The Proponent has presented a Community Consultation Agreement for the Community of Ekuanitshit. This Agreement will form part of the ongoing consultation initiative. Nalcor is hopeful the Agreement can be executed soon</li> <li>The draft agreement establishes a collaborative and cooperative framework, supported by funding, for the exchange of Project-related information between Nalcor and the particular Aboriginal Group in order to identify potential environmental impacts of the Project upon current land and resource usage, identify and strengthen mitigation measures and develop an understanding of Aboriginal traditional knowledge that represent the concerns and interests of the community</li> <li>The associated workplan will have both parties working jointly in the Community to understand and address issues and concerns the community may have regarding the project</li> <li>Volume IA, Section 8.3.4</li> <li>IR# JRP.70; IR# JRP.70S</li> </ul>

Aboriginal Group	Area of Concern	Issue Identified	Response/Action
Conseil des Innu d'Ekuanitshit (Mingan)	Project Impact	Woodland Caribou – Monitoring and Mitigation – Requires further information	IR# JRP.93
		Lac Joseph Caribou Herd not considered in EIS	• IR# JRP.122
		Project description lacking detail on water level, velocity and flow regimes during the operating period	<ul> <li>Section 4.11.1 provides the predicted change in Habitat Quantity during construction (includes reservoir inundation)</li> <li>Fish and Fish Habitat Component Study Report 3 of 11</li> <li>IR# JRP.32</li> </ul>
		Data required on the changes in the operating regime of the Churchill Falls facility	• IR# JRP.32
		Additional information required in waterfowl study, particularly more detailed inventories during migratory periods	IR# JRP.65

Aboriginal Group	Area of Concern	Issue Identified	Response/Action
Conseil des Innu d'Ekuanitshit (Mingan)	Impact on Fish	Additional information on spawning grounds required for each fish species in each section of the reservoirs, at locations where substrate, depth and velocity conditions are suitable for the species; indicate the locations and surface areas of these spawning grounds after filling of the reservoirs; identify the locations where spawning grounds could be developed in order to compensate for the deficits in area between the required spawning grounds and those that will be available.	<ul> <li>The suitabilities of all habitat within the reservoirs has been generated for each species life-cycle stage (including spawning). The method and results are briefly described in the EIS but is provided in detail in the Habitat Quantification Report (Fish and Fish Habitat Component Study Report 3 of 11)</li> <li>The surface areas of all habitats are provided in the EIS and in detail in the Habitat Quantification Report (Fish and Fish Habitat Component Study Report 3 of 11). The overall suitability of each habitat for all species life-cycle stages are also provided</li> <li>The Compensation planning process is ongoing and the Fish and Fish Habitat Compensation Strategy Framework is provided in response to IR# JRP.107. The Compensation Strategy Framework includes identified compensation options to date that could be developed as spawning habitat for numerous species</li> </ul>
		Determine the surface area of habitats essential to the other phases of the life cycle (nursery, feeding, and migration habitats) of the species present and ensure that these habitats are available	The surface areas of all habitats have been determined, both existing and predicted future as a result of the Project, as well as the suitabilities of these habitats by all resident species. The above stated "habitats essential to other phases of the life cycle" were defined as "critical habitats" in the habitat quantification for the Project. Section 3.1.4 (page 25 of Report Three) of the HADD Determination Methodology (Fish and Fish Habitat Component Study Report 5 of 11) defines Critical Habitats and how they were determined for each species lifecycle stage. Section 7.1.3 of the Habitat Quantification Report outlines the final species life-cycle stages that have what was determined to be Critical Habitat (Lake Trout young-of-year). This identification of a critical life-cycle habitat was also incorporated into the Fish and Fish Habitat Compensation Strategy Framework (appended to response to IR# JRP.107).

Aboriginal Group	Area of Concern	Issue Identified	Response/Action
Conseil des Innu d'Ekuanitshit (Mingan)		Analysis of forage fish dynamics and habitats and ensure the abundance of these fish so as not to affect the entire fish food chain	Forage fish, as defined in the Habitat Quantification Report, were all assessed in terms of habitat utilization within the existing habitats of the lower Churchill River as well as the predicted post-Project habitats. Sampling of all species captured from the lower Churchill River were also processed for stomach contents to determine the trophic feeding level (for example, see Fish and Fish Habitat Component Study Report 8 of 11 and Mercury Component Study Report 5 of 5)
		Analysis of the impacts of water level and velocity regimes in the reservoirs for the various fish species, on the basis of a multi-year production simulation	The final post-project habitats, including reservoir characteristics of velocity and water level fluctuations, were included in both the Habitat Quantification Report as well as the ongoing Fish and Fish Habitat Compensation planning process (Compensation Strategy Framework appended to IR# JRP.107)
		Provide information on managing reservoir levels that will help avoid significant impacts on fish populations	As stated in the EIS, the reservoirs will be operated as close to full supply level as possible. In addition, the overall elevation ranges between full-supply and low-supply are relatively small for both reservoirs (3m for Gull Island Reservoir and 0.5m for Muskrat Falls Reservoir). These were designed, in part, as a result of potential effects to fish and fish habitat of larger drawdowns. The potential drawdown of each reservoir in anticipation of spring freshet (described in response to IR# JRP.84) has been identified and is being incorporated into any compensatory fish habitat design as part of the Fish and Fish Habitat Compensation planning process
	Traditional Knowledge	Knowledge of Ekuanitshit not taken into consideration	<ul> <li>Nalcor acknowledged that extensive work with Innu Nation that has been incorporated in the EIS</li> <li>Nalcor noted that additional information pertaining to the traditional knowledge of other Aboriginal groups, relevant to the Project, will be identified through the ongoing consultation process and incorporated through ongoing project planning</li> <li>The Community Consultation Agreement is in general conformity with the policy and factors described in the Canadian Environmental Assessment Act Agency's</li> </ul>

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Aboriginal Group	Area of Concern	Issue Identified	Response/Action
			"Considering Aboriginal traditional knowledge in environmental assessments conducted under the "Canadian Environmental Assessment Act – Interim Principles"

### Table 2 Issues of Concern Raised by Conseil des Montagnais de Nutaskuan in Consultation Initiatives to Date

Aboriginal Group	Area of Concern	Issue Identified	Response/Action
Conseil des Montagnais de Nutaskuan (Nutaskuan)	Consultation	• Purpose • Method	<ul> <li>Clarification provided regarding the project and consultation</li> <li>In accordance with the EIS Guidelines, issued July 2008, Nalcor is fulfilling its consultation requirements as the Project Proponent</li> <li>The consultation process between Nalcor and Nutaskuan was initiated on 20 May 2008 and has been ongoing since that time</li> <li>The Proponent has presented a Community Consultation Agreement for the Community of Nutaskuan. This Agreement will form part of the ongoing consultation initiative. We are hopeful the Agreement can be executed soon</li> <li>The draft agreement establishes a collaborative and cooperative framework, supported by funding, for the exchange of Project-related information between Nalcor and the particular Aboriginal Group in order to identify potential environmental impacts of the Project upon current land and resource usage, identify and strengthen mitigation measures and develop an understanding of Aboriginal traditional knowledge represent the concerns and interests of the community</li> <li>The associated workplan will have both parties working jointly in the Community to understand and address issues and concerns the community may have regarding the project</li> <li>Nalcor remains committed to the continued provision of information and workshops relevant to specific issues and interests of the community</li> <li>Volume IA, Section 8.3.4</li> <li>IR# JRP.15/2S.c</li> </ul>
	Project Benefits	<ul><li>What are the benefits?</li><li>Will there be jobs?</li><li>Will there be business opportunities?</li></ul>	<ul> <li>Aboriginal groups have been and will continue to be provided with a comprehensive range of Project-related information that includes typical goods and services needed by the project. The purpose of these initiatives is</li> </ul>

Aboriginal Group	Area of Concern	Issue Identified	Response/Action
			to enable each group to become familiar with the Project and its potential business opportunities, identify issues and concerns and assist the Proponent in determining actions to address such issues and concerns in both the planning and operations phases of the Project  • Aboriginal groups have been and will continue to be provided with a comprehensive range of Project-related information that includes typical job numbers and skill categories needed by the project. The purpose of these initiatives is to enable each group to become familiar with the Project and its potential employment opportunities, identify issues and concerns and assist the Proponent in determining actions to address such issues and concerns in both the planning and operations phases of the Project.  • IR# JRP.132 addresses business-related benefits and the measures which Nalcor will be using to maximize local business participation  • Estimates of jobs and other spin-off benefits are discussed in IR# JRP.11
	Project Impact	<ul> <li>Project impact on hunting</li> <li>Project impact on the wildlife, particularly caribou</li> </ul>	<ul> <li>The initial information available to the community regarding the assessment of the project's impact on hunting, wildlife and protection measures that will be implemented and environmental impacts on lakes was provided through the EIS and component studies</li> <li>In order to systematically assess the impacts of the Project upon an Aboriginal Group's current use of land and resources for traditional purposes, the Quebec Innu, Labrador Metis Nation and Nunatsiavut Government have been provided with copies of the Lower Churchill Hydroelectric Generation Project Environmental Assessment Registration and a map book illustrating the anticipated reservoir areas and predicted extent of flooding</li> <li>Additional Project-related information has been provided to the various Aboriginal groups on an ongoing basis through provision of documentation and through meetings and technical workshops</li> </ul>

Aboriginal Group	Area of Concern	Issue Identified	Response/Action
			<ul> <li>Each group has been asked to provide information to Nalcor respecting its particular interests and concerns</li> <li>Further discussion regarding areas of concern will be addressed throughout the consultation process and community workshops</li> <li>Volume II, Sections 5.2, 5.3, 5.4, 5.11.1.3, 5.11.1.4, 5.11.2.4, 5.11.2.5</li> <li>IR# JRP.38; IR# JRP.93; IR# JRP.122; IR# JRP.143; IR# JRP.72</li> </ul>
	New Dawn Agreement		Acknowledged concern and restated that Nalcor does not have the mandate to resolve issues pertaining to the Upper Churchill Project
	Upper Churchill Project	<ul><li>Lack of consultation</li><li>Compensation</li></ul>	<ul> <li>Nalcor provided clarification regarding consultation during the Upper Churchill Hydro Project and discussed that consultation was not a part of the process at the time of the Upper Churchill Project</li> <li>Nalcor does not have the mandate to discuss or resolve compensation issues related to the Upper Churchill Project</li> </ul>

Aboriginal Group	Area of Concern	Issue Identified	Response/Action
Conseil de bande des Montagnais d'Unamen Shipu (La Romaine)	Aboriginal Rights and Title	Lack of recognition of traditional hunting rights by the Province of Newfoundland and Labrador	Nalcor representatives acknowledged the concern and explained that as the Proponent, Nalcor does not have the mandate to resolve Aboriginal rights and title issues. This is a federal and provincial Crown issue
	IBA		IBAs are, generally, specific requirements arising under a land claims settlement agreement and do not apply in this situation.     Nalcor is prepared to consult and work with the Unamen Shipu to address their concerns to the extent possible
	Project Impact	<ul> <li>Transmission line crosses hunting grounds</li> </ul>	Nalcor is committed to engaging in consultation to discuss land use in the area
		g	<ul> <li>Nalcor provided clarification regarding the transmission line project. Discussion was held on this project and its registration as a new and separate project with its own environmental assessment. The separate assessment will ensure that the transmission line issues will receive appropriate attention- which might be lost if combined with a larger project</li> <li>Nalcor committed to return to discuss the Labrador Island Transmission Link and hold further review and discussion</li> <li>Further determination regarding land use in the area and potential project impacts will occur during ongoing engagement and consultation</li> </ul>
		Project will affect ability to hunt and trap	• IR# JRP.38; IR# JRP.143, IR# JRP.70S
		Impact on caribou – Red Wine     Mountain and Mealey Mountain     Caribou	<ul> <li>Volume IIB, Sections 2.4.1.2, 5.2, 5.3, 5.4, 5.11.1.3, 5.11.1.4, 5.11.2.4, 5.11.2.5</li> <li>IR# JRP.93, IR# JRP.95; IR# JRP.122</li> </ul>

Aboriginal Group	Area of Concern	Issue Identified	Response/Action
Conseil des Innus de Pakua Shipi (St. Augustin)	Project Impact	Transmission line crosses hunting grounds	<ul> <li>Nalcor is committed to engaging in consultation to discuss land use in the area</li> <li>Nalcor provided clarification regarding the transmission line. Discussion was held on this project and its registration as a new and separate project with its own environmental assessment. The separate assessment will ensure that the transmission line issues will receive appropriate attention-which might be lost if combined with a larger project</li> <li>Nalcor committed to return to discuss the Labrador Island Transmission Link and hold further review and discussion</li> <li>Further determination regarding land use in the area and potential project impacts will occur during ongoing engagement and consultation</li> </ul>
		Impact on wildlife	<ul> <li>The initial information available to the community regarding the assessment of the project's impacts on hunting, wildlife and protection measures that will be implemented and environmental impacts was provided through the EIS and component studies</li> <li>Nalcor remains committed to providing information directly to Aboriginal groups in response to questions and issues that may arise throughout the EA process</li> <li>Further discussion regarding areas of concern will be addressed throughout the consultation process and community workshops</li> <li>Volume IIB, Sections 5.2, 5.3, 5.4, 5.11, 5.12, 5.13, 5.14</li> <li>IR# JRP.65; IR# JRP.68; IR# JRP.92; IR# JRP.93; IR# JRP.94; IR# JRP.95; IR# JRP.101; IR# JRP.105; IR# JRP.122; IR# JRP.124; IR# JRP.125; IR# JRP.126; IR# JRP.128; IR# JRP.129</li> </ul>
		Impact on ice formation on lakes	<ul> <li>Volume IIA, Section 4.12.2.1</li> <li>Volume IIB, Section 5.11.2.2</li> <li>Volume III, Sections 5.5.5.1, 5.6.1.2</li> <li>IR# JRP.48; IR# JRP.71</li> <li>Ice Dynamics Component Study</li> </ul>
	Traditional Knowledge	No Quebec Innu traditional knowledge of substance	<ul> <li>Nalcor acknowledged that extensive work with Innu Nation that has been incorporated in the EIS.</li> <li>Nalcor noted that additional information pertaining to the traditional knowledge of other Aboriginal groups, relevant to the Project, will be identified through the ongoing consultation process and incorporated</li> </ul>

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Aboriginal Group	Area of Concern	Issue Identified	Response/Action
			<ul> <li>through ongoing project planning</li> <li>The Community Consultation Agreement is in general conformity with the policy and factors described in the Canadian Environmental Assessment Act Agency's "Considering Aboriginal traditional knowledge in environmental assessments conducted under the "Canadian Environmental Assessment Act – Interim Principles"</li> </ul>

Aboriginal Group	Area of Concern	Issue Identified	Response/Action
Conseil Innu Takuaikan Uashat mak Mani- Utenam (Sept Iles)	Aboriginal Rights and Title	<ul> <li>Lack of recognition of rights and title by the Province of Newfoundland and Labrador</li> <li>Uashat mak Mani-Utenam will remain opposed to the Project unless their Aboriginal rights and title are recognized</li> </ul>	Nalcor representatives acknowledged the concern and explained that as the Proponent, Nalcor does not have the mandate to resolve Aboriginal rights and title issues. This is a federal and provincial Crown issue
	Consultation	<ul> <li>Why are you here?</li> <li>Consultation is necessary</li> <li>Consulted late in the process</li> </ul>	<ul> <li>Clarification provided regarding the project and consultation</li> <li>In accordance with the EIS Guidelines, issued July 2008, Nalcor is fulfilling its consultation requirements as the Project Proponent</li> <li>The consultation process between Nalcor and Uashat mak Mani-Utenam was initiated on 20 May 2008 and has been ongoing since that time</li> <li>The Proponent has presented a Community Consultation Agreement for the Community of Uashat mak Mani-Utenam. This Agreement is currently under review by the Band's legal counsel and, once executed, will form part of the ongoing consultation initiative</li> <li>The draft agreement establishes a collaborative and cooperative framework, supported by funding, for the exchange of Project-related information between Nalcor and the particular Aboriginal Group in order to identify potential environmental impacts of the Project upon current land and resource usage, identify and strengthen mitigation measures and develop an understanding of Aboriginal traditional knowledge represent the concerns and interests of the community</li> <li>The associated workplan will have both parties working jointly in the Community to understand and address issues and concerns the community may have regarding the project</li> <li>Nalcor remains committed to the continued provision of information and workshops relevant to specific issues and interests of the community</li> <li>Volume IA, Section 8.3.4</li> <li>IR# JRP.15/2S.c</li> </ul>

<b>Aboriginal Group</b>	Area of Concern	Issue Identified	Response/Action
Conseil Innu Takuaikan Uashat mak Mani- Utenam (Sept Iles)	IBA		IBAs are, generally, specific requirements arising under a land claims settlement agreement and do not apply in this situation. Nalcor is prepared to consult and work with Uashat mak Mani-Utenam to address their concerns to the extent possible
	Staged Environmental Assessment Approach		• Nalcor is committed to ensuring that both the generation and transmission facilities are subject to comprehensive and thorough Environmental Assessments. What this approach ensures is an ability to commence with the Environmental Assessment of the generation facilities now, rather than having to delay the entire process while there is uncertainty regarding the transmission lines that will deliver the electricity to market. Although the generation and transmission facilities would be undergoing separate Environmental Assessments, they will very likely overlap in time. All interested individuals and groups would therefore have an ability to receive information and to formulate and provide their questions, comments and issues with consideration of both generation and transmission and their potential effects, and thus, with consideration of the "big picture"
	New Dawn Agreement		<ul> <li>Acknowledged concern and restated that Nalcor does not have the mandate to resolve concerns regarding the Upper Churchill Project</li> </ul>
	Project Impact	Rights are affected by the Project and the transmission line	<ul> <li>Nalcor provided clarification regarding the transmission line.         Discussion was held on this project and its registration as a new and separate project with its own environmental assessment. The separate assessment will ensure that the transmission line issues will receive appropriate attention-which might be lost if combined with a larger project     </li> <li>Further determination regarding land use in the area and potential project impacts will occur during ongoing engagement and consultation</li> <li>The Transmission registration document has been provided, in French, to Uashat mak Mani-Utenam</li> </ul>
		Project Impact on Wildlife – Caribou and Waterfowl	• IR# JRP.93; IR# JRP.122; IR# JRP.143; IR# JRP.105; IR# JRP.128
	Traditional Knowledge	Lack of traditional knowledge	Nalcor acknowledged that extensive work with Innu Nation

Aboriginal Group	Area of Concern	Issue Identified	Response/Action
			<ul> <li>that has been incorporated in the EIS.</li> <li>Nalcor noted that additional information pertaining to the traditional knowledge of other Aboriginal groups, relevant to the Project, will be identified through the ongoing consultation process and incorporated through ongoing project planning</li> <li>The Community Consultation Agreement is in general conformity with the policy and factors described in the Canadian Environmental Assessment Act Agency's         "Considering Aboriginal traditional knowledge in environmental assessments conducted under the "Canadian Environmental Assessment Act – Interim Principles"</li> </ul>
	Upper Churchill Project	They have been affected by the Upper Churchill Project	Acknowledged concern and restated that Nalcor does not have the mandate to resolve concerns regarding the Upper Churchill Project

Aboriginal Group	Area of Concern	Issue Identified	Response/Action
Nation Innu Matimekush-Lac John (Schefferville)	Aboriginal Rights and Title	Issues raised regarding ownership and use of land	Nalcor representatives acknowledged the concern and explained that as the Proponent, Nalcor does not have the mandate to resolve Aboriginal rights and title issues. This is a federal and provincial Crown issue
	Consultation	<ul> <li>Why are you here?</li> <li>Consultation is necessary</li> <li>Concerns regarding what is seen as consultation late in the process</li> </ul>	<ul> <li>Clarification provided regarding the project and consultation</li> <li>In accordance with the EIS Guidelines, issued July 2008, Nalcor is fulfilling its consultation requirements as the Project Proponent</li> <li>The consultation process between Nalcor and Matimekush-Lac John was initiated on 20 May 2008 and has been ongoing since that time</li> <li>The Proponent has presented a Community Consultation Agreement for the Community of Matimekush-Lac John. This Agreement, once executed, will form part of the ongoing consultation initiative</li> <li>The draft agreement establishes a collaborative and cooperative framework, supported by funding, for the exchange of Project-related information between Nalcor and the particular Aboriginal Group in order to identify potential environmental impacts of the Project upon current land and resource usage, identify and strengthen mitigation measures and develop an understanding of Aboriginal traditional knowledge represent the concerns and interests of the community</li> <li>The associated workplan will have both parties working jointly in the Community to understand and address issues and concerns the community may have regarding the project</li> <li>Nalcor remains committed to the continued provision of information and workshops relevant to specific issues and interests of the community</li> <li>Volume IA, Section 8.3.4</li> <li>IR# JRP. 15/2S.c</li> </ul>

Aboriginal Group	Area of Concern	Issue Identified	Response/Action
Labrador Metis Nation	Consultation	Lack of consultation in project planning	<ul> <li>Clarification provided regarding the project and consultation</li> <li>In accordance with the EIS Guidelines, issued July 2008, Nalcor is fulfilling its consultation requirements as the Project Proponent</li> <li>The consultation process between Nalcor and Labrador Metis Nation was initiated on 09 April 2007 and has been ongoing since that time</li> <li>The Proponent has presented a Community Consultation Agreement to the Labrador Metis Nation. This Agreement, once executed, will form part of the ongoing consultation initiative</li> <li>The draft agreement establishes a collaborative and cooperative framework, supported by funding, for the exchange of Project-related information between Nalcor and the particular Aboriginal Group in order to identify potential environmental impacts of the Project upon current land and resource usage, identify and strengthen mitigation measures and develop an understanding of Aboriginal traditional knowledge represent the concerns and interests of the community</li> <li>The associated workplan will have both parties working jointly in the Community to understand and address issues and concerns the community may have regarding the project</li> <li>Nalcor remains committed to the continued provision of information and workshops relevant to specific issues and interests of the community</li> <li>Volume IA, Section 8.3.3</li> <li>IR# JRP. 1S/2S.c</li> </ul>
	Benefits	Expects to have a significant and direct role in the process	<ul> <li>Aboriginal groups have been and will continue to be provided with a comprehensive range of Project-related information that includes typical goods and services needed by the project. The purpose of these initiatives is to enable each group to become familiar with the Project and its potential business opportunities, identify issues and concerns and assist the Proponent in determining actions to address such</li> </ul>

Aboriginal Group	Area of Concern	Issue Identified	Response/Action
			<ul> <li>issues and concerns in both the planning and operations phases of the Project</li> <li>Aboriginal groups have been and will continue to be provided with a comprehensive range of Project-related information that includes typical job numbers and skill categories needed by the project. The purpose of these initiatives is to enable each group to become familiar with the Project and its potential employment opportunities, identify issues and concerns and assist the Proponent in determining actions to address such issues and concerns in both the planning and operations phases of the Project</li> <li>Nalcor has partnered with the Labrador Metis Nation to submit a proposal for funding to Canada under the auspices of the federal Aboriginal Skills and Employment Program (ASEP) which is administered by Human Resources and Development Canada. ASEP funding is made available to enable Aboriginals to access specialized training programs in order to acquire the skills necessary to gain employment on projects. While funding is awarded on a project-specific basis, the intention is to allow the Aboriginal population to acquire skills which will be transferable in future to other projects, both within and outside the Province. Funding will be administered by a not-for-profit corporation – the board of directors of this not-for- profit entity will consist of representatives of Nalcor, Innu Nation, the Nunatsiavut Government and the Labrador Metis Nation. Training programs will be developed jointly by the Proponent and the relevant Aboriginal organization. The program will be implemented immediately upon receipt of federal funding</li> <li>IR# JRP.132 addresses business-related benefits and the measures which Nalcor will be using to maximize local business participation</li> <li>Estimates of jobs and other spin-off benefits are discussed in IR# JRP.11</li> <li>IR# JRP.133</li> </ul>
		Lack of crown response to consultation process	<ul> <li>Nalcor acknowledged concern and clarified that it is consulting, as the Project Proponent, according to the requirements of the EIS Guidelines</li> </ul>

Aboriginal Group	Area of Concern	Issue Identified	Response/Action
Labrador Metis Nation	Environmental Impact of the Project – Aquatic Environment	<ul> <li>Fish</li> <li>Effects on trophy sized trout</li> <li>Access to the river will eliminate the fish populations</li> <li>Fish Habitat – Changing shoreline, impacted spawning grounds</li> </ul>	• IR# JRP.143; IR# JRP.107
		No comprehensive studies on formation of "frazil" ice     Decreased ice formation will impact transportation in communities like Mud Lake	<ul> <li>Volume IIA, Section 4.12.2.1</li> <li>Volume IIB, Section 5.11.2.2</li> <li>Volume III, Section 5.5.5.1, 5.6.1.2</li> <li>IR# JRP.48; IR# JRP.71</li> <li>Ice Dynamics Component Study</li> </ul>
		<ul> <li>Mercury Levels</li> <li>Mitigation levels in current EIS are inadequate</li> <li>Further studies required to define</li> <li>Methylmercury levels beyond mouth of river</li> </ul>	• IR#RP.33
		<ul> <li>Total Suspended Solids (TSS)</li> <li>Content of current EIS contradictory to precautionary principle</li> <li>An increase in TSS will result in decreased nutrients and oxygen in water and impact fish and photosynthesis</li> </ul>	• IR#RP.120
	Environmental Impact of the Project – Terrestrial Environment	Down stream effects  What will happen to the water levels down river?  Effects on river bottom  Vegetation  Canada Yew	<ul> <li>Volume IIA, Sections 2.3.3, 4.0</li> <li>IR# JRP.22; IR# JRP.119; IR# JRP.32; IR# JRP.20; IR# JRP.21; IR# JRP.28; IR# JRP.32</li> <li>Volume IIA, Section 2.4.2.10</li> <li>Volume III, Section 5.5.5.1</li> <li>IR# JRP.42; IR# JRP.70; IR# JRP.103</li> </ul>
	Ziviroiiiicit	Caribou  Red Wine Mountain Caribou – Further information required as to project impact from construction to operation	• IR# JRP.93, IR# JRP.122, IR# JRP.143
		Harlequin Duck     Inappropriate mitigation measures in place in current EIS	• IR# JRP.105
		Beaver	• IR# JRP.128

Aboriginal Group	Area of Concern	Issue Identified	Response/Action
		<ul> <li>Questions regarding the proposed live trapping – where will they be moved?</li> </ul>	
		Archaeological sites     Studies deemed to be inadequate	• IR# JRP.144
		<ul> <li>Not consulted or given artifacts</li> </ul>	
	Environmental	Climate change and GHG emissions	Volume IIA, Section 3.1 through 3.12
	Impact of the Project –	<ul> <li>An increase in surface area of current bodies of water will impact weather</li> </ul>	• IR# JRP.27; IR#JP.36
	Atmospheric Environment	<ul> <li>There will be an initial increase in GHG emissions due to a rise in decay of vegetation due to the 126km2 flooding</li> </ul>	
	Socio-economic environment	Expressed concerns regarding employment numbers for Labrador relating to the adjacency principle	<ul> <li>The employment estimates presented represent broader estimates and were generated from the economic impact analysis, the assumptions behind which took into account the Adjacency Principle. This principle is based on qualified and experienced persons</li> <li>In the revised economic impacts in IR# JRP.11, we are showing almost 8,600 direct jobs in Labrador or 860 per year, out of a total labour force of 13,300 in Labrador and 5,100 in Upper Lake Melville</li> <li>Additionally, IR# JRP.131, shows the detailed assumptions used in the economic impact analysis.</li> <li>IR# JRP.133</li> </ul>
		Subsistence Diet/Country food	IR# JRP.70: IR# JRP.70S
	Population and Demographics	Concern that project construction will create a boom and bust effect with potential social and economic impacts	<ul> <li>Issues related to boom and bust effects are addressed in several IRs, including:</li> <li>IR# JRP.139; IR# JRP.137; IR# JRP.115; IR# JRP.12; IR# JRP.106</li> </ul>
	Project Rationale	Concern that transmission of power to the island will not benefit the Province as a whole	This EIS is only concerned with the generation project.  Detailed information on the benefits from the transmission of power to the island will be provided in the EIS for the transmission project
	Project Alternatives	<ul> <li>No thorough analysis of alternatives provided in EIS</li> <li>No cost analysis of alternatives provided</li> </ul>	<ul> <li>Other power projects being contemplated by Nalcor are discussed in the following IRs:</li> <li>IR# JRP.5; IR# JRP.25; IR# JRP.26; IR# JRP.26S</li> </ul>
		<ul> <li>Wind power proposal as submitted to the Government of NL not considered as an</li> </ul>	

Aboriginal Group	Area of Concern	Issue Identified	Response/Action
		alternative	
	Project Footprint	Current EIS does not contain information on effects beyond the mouth of the Churchill River	• IR# JRP.43
	Staged Environmental Assessment Approach	Purpose and rationale	• Nalcor is committed to ensuring that both the generation and transmission facilities are subject to comprehensive and thorough Environmental Assessments. What this approach allows, however, is an ability to commence with the Environmental Assessment of the generation facilities now, rather than having to delay the entire process while there is uncertainty regarding the transmission lines that will deliver the electricity to market. Newfoundland and Labrador Hydro also noted that although the generation and transmission facilities would be undergoing separate Environmental Assessment s, they will very likely overlap in time. All interested individuals and groups would therefore have an ability to receive information and to formulate and provide their questions, comments and issues with consideration of both generation and transmission and their potential effects, and thus, with consideration of the "big picture"

Aboriginal Group	Area of Concern	Issue Identified	Response/Action
Nunatsiavut Government	Consultation		<ul> <li>Clarification provided regarding the project and consultation</li> <li>In accordance with the EIS Guidelines, issued July 2008, Nalcor is fulfilling its consultation requirements as the Project Proponent</li> <li>The consultation process between Nalcor and the Nunatsiavut Government was initiated in March 2008 and has been ongoing since that time</li> <li>During initial meetings, Nalcor invited the Nunatsiavut Government to discuss the preferred method for information sharing and the provision of input on the Project</li> <li>Attempts to re-establish meeting dates have been ongoing and recent meeting invitation was offered on 31 August 2009. Confirmation for potential dates to be established</li> <li>Nalcor remains committed to the continued provision of information and workshops relevant to specific issues and interests of the community</li> <li>Volume IA, Section 8.3.2</li> </ul>
	Project Benefits	Socioeconomic benefits for Rigolet	<ul> <li>IR# JRP.1S/2S.c</li> <li>Aboriginal groups have been and will continue to be provided with a comprehensive range of Project-related information that includes typical goods and services needed by the project. The purpose of these initiatives is to enable each group to become familiar with the Project and its potential business opportunities, identify issues and concerns and assist the Proponent in determining actions to address such issues and concerns in both the planning and operations phases of the Project</li> <li>Aboriginal groups have been and will continue to be provided with a comprehensive range of Project-related information that includes typical job numbers and skill categories needed by the project. The purpose of these initiatives is to enable each group to become familiar with the Project and its potential employment opportunities, identify issues and concerns and assist the Proponent in determining actions to address such issues and concerns in both the planning and operations phases of the Project</li> </ul>

Aboriginal Group	Area of Concern	Issue Identified	Response/Action	
Nunatsiavut Government		EIS does not include effective strategies for ensuring Labrador's Aboriginal population is prepared for employment needs of the proposed Project	<ul> <li>Nalcor has partnered with the Nunatsiavut Government to submit a proposal for funding to Canada under the auspices of the federal Aboriginal Skills and Employment Program (ASEP) which is administered by Human Resources and Development Canada. ASEP funding is made available to enable Aboriginals to access specialized training programs in order to acquire the skills necessary to gain employment on projects. While funding is awarded on a project-specific basis, the intention is to allow the Aboriginal population to acquire skills which will be transferable in future to other projects, both within and outside the Province. Funding will be administered by a notfor-profit corporation – the board of directors of this not-forprofit entity will consist of representatives of Nalcor, Innu Nation, the Nunatsiavut Government and the Labrador Metis Nation. Training programs will be developed jointly by the Proponent and the relevant Aboriginal organization. The program will be implemented immediately upon receipt of federal funding</li> </ul>	
	Environmental Impact Statement Issues	<ul> <li>Power to the Labrador coast</li> <li>No transmission line to Rigolet as a result of the Project</li> <li>Concerns regarding power supply</li> </ul>	<ul> <li>As a public utility Nalcor, and its predecessor Newfoundland and Labrador Hydro, has a mandate to provide least cost power and, for Inuit communities, diesel generated power is less expensive than building a transmission line. In order for a transmission line to be built there must be a clear demand for power and a business case</li> <li>Nalcor provided clarification regarding the transmission line project. Discussion held on this project and its registration as a new and separate project with its own environmental assessment. The separate assessment will ensure that the transmission line issues will get appropriate attention- which might be lost if combined with a larger project</li> </ul>	
		Whether Inuit living in Goose Bay will be studied as a separate community for the purpose of socio-economic benefits?	<ul> <li>Clarification provided</li> <li>No separate studies would be done with respect to impact on communities. Inuit resident in these communities will be considered as part of the community of residence</li> </ul>	
	Project Impact	Lake Melville and scope of the study area; impact beyond mouth of Churchill River; Impact on seal occurrence and abundance	• IR# JRP.43; IR# JRP.73	

Aboriginal Group	Area of Concern	Issue Identified	Response/Action
Nunatsiavut Government		Methylmercury	<ul> <li>Volume IIA, Section 2.3.7.3</li> <li>IR# JRP.20; IR# JRP.66; IR# JRP.78; IR# JRP.82; IR# JRP.33</li> </ul>
		Emergency Planning	<ul><li>Volume IA, Section 4.11</li><li>IR# JRP.96; IR# JRP.145</li></ul>
	Other Power Projects	<ul> <li>Is the Lower Churchill the only power project being considered by Nalcor?</li> <li>Hopedale wind power</li> </ul>	<ul> <li>Wind Power – Provincial Energy Plan</li> <li>Other power projects being contemplated by Nalcor are discussed in the following IRs: IR# JRP.5; IR# JRP.25; IR# JRP.26</li> </ul>
	Traditional Knowledge	Lack of Inuit Knowledge incorporated into environmental assessment	<ul> <li>Nalcor acknowledged that extensive work with Innu Nation that has been incorporated in the EIS.</li> <li>Nalcor noted that additional information pertaining to the traditional knowledge of other Aboriginal groups, relevant to the Project, will be identified through the ongoing consultation process and incorporated through ongoing project planning</li> </ul>
	Upper Churchill Project	<ul> <li>No discussion of effects of past hydro development on the river nor any discussion on overlapping cumulative effects of the proposed project</li> </ul>	<ul> <li>Volume IA, Section 5.1.2</li> <li>IR# JRP.44</li> </ul>
		Compensation	Acknowledged concern and restated that Nalcor does not have the mandate to resolve concerns regarding the Upper Churchill Project

Requesting Organization – Joint Review Panel Information Request No.: JRP 1S/2S

### **Information Requested:**

b. With regards to the Nunatsiavut Government, the proponent is asked to fulfill the information requirements of the EIS Guidelines with respect to Aboriginal consultation, namely to demonstrate the proponent's understanding of the interests, values, concerns, contemporary and historic activities, Aboriginal traditional knowledge and important issues facing Aboriginal groups, and indicate how these will be considered in planning and carrying out the Project; and

### Response:

Section 4.2.5 of the EIS Guidelines requires the proponent to determine whether the Project may be reasonably expected to have adverse environmental effects on the Labrador Inuit Settlement Area for the purpose of determining the applicability of the Labrador Inuit Land Claims Agreement. Section 4.8 of the EIS Guidelines requires the Proponent to demonstrate its understanding of interests, values, concerns, contemporary and historic activities, Aboriginal traditional knowledge and important issues facing Aboriginal groups and indicate how these will be considered in planning and carrying out Project.

The physical footprint of the Project does not extend into Labrador Inuit Lands or the Labrador Inuit Settlement Area, as defined in chapter 4 of the Labrador Inuit Land Claims Agreement. However, the Land and Resource Use Assessment Area does include the area identified in Schedule 12-E of the Labrador Inuit Land Claims Agreement (which area is not within the Labrador Inuit Settlement Area) as well as a portion of Upper Lake Melville (which is included within the 'Zone' – the marine component of the Labrador Inuit Settlement Area). The Labrador Inuit Land Claims Agreement imposes certain duties of consultation upon the federal and provincial governments with respect to projects outside Labrador Inuit Lands or the Labrador Settlement Area which may reasonably be expected to have adverse impacts in the Labrador Inuit Settlement Area.

While Nalcor is committed to consulting with all parties who express an interest in the Project, there is no treaty obligation to consult with the Labrador Inuit with respect to projects outside the Labrador Inuit Settlement Area. Nalcor has also assessed the impacts of the Lower Churchill Hydroelectric Generation Project upon the Labrador Inuit Settlement Area. Consistent with the Treaty and with the limited interest of the Labrador Inuit in the land and resources of the Land and Resource Use Assessment Area as well as the marginal impact of the Project upon the Labrador Inuit Settlement Area, Nalcor has determined that the interests, values and concerns of the Labrador Inuit can be identified and addressed through a process of regular information exchange. Nalcor remains committed to sharing information, respecting the Project, directly with the Nunatsiavut Government through the provision of Project related information.

The Proponent has garnered a knowledge and awareness of the concerns of the Nunatsiavut Government from an understanding of the rights established under the Labrador Inuit Land Claims Agreement, an appraisal of concerns raised during the Voisey's Bay project negotiations, and through meetings held, throughout 2008, between representatives of Nalcor and the Nunatsiavut Government. In addition, representatives of the Nunatsiavut Government have been invited to and have participated in Project open houses and technical workshops and copies of various presentations, as well as studies, have been provided to the Nunatsiavut Government.

Through the means outlined above, Nalcor has consistently heard two main areas of concern expressed by the Nunatsiavut Government; Project impact on Lake Melville within the Zone and the extension of socio-economic

benefits from the Project to Inuit resident in Labrador. In response to the Lake Melville and Study Area concerns, reports containing information addressing issues pertaining to Lake Melville were sent to the Nunatsiavut Government on January 29, 2009. These reports were: Aquatic Environment in the Goose Bay Estuary (AMEC-BAE 2001), Ice Dynamics of the Lower Churchill River (Hatch 2007) and Seal Abundance and Distribution (Sikumiut 2007).

Additionally, the response provided for IR# JRP.43 indicates that adverse environmental effects resulting from the Project do not extend into the marine environment of Lake Melville. As a consequence, there is no likely effect on that portion of Upper Lake Melville which forms part of the marine component of the Labrador Inuit Settlement Area. Further comprehensive answers to questions regarding impacts on Lake Melville and the Study Area are provided in responses to IR# JRP.44 (Previous Development in the Churchill River Valley), IR# JRP.45 (The La Grande Hydroelectric Development as a Predictor of Future Reservoir Conditions within the lower Churchill River) and IR# JRP.73 (Land and Resource Use – Commercial Recreational and Aboriginal Fisheries).

With respect to the extension of employment benefits, Labrador Inuit, like other residents of Labrador, will be entitled to employment opportunities through the application of the adjacency principle. In addition, Nalcor has partnered with resident Aboriginal organizations – Innu Nation, the Nunatsiavut Government and the Labrador Metis Nation – to submit a proposal for funding to Canada under the auspices of the federal Aboriginal Skills and Employment Program (ASEP) which is administered by Human Resources and Development Canada. ASEP funding is made available to enable Aboriginals to access specialized training programs in order to acquire the skills necessary to gain employment on projects. While funding is awarded on a project-specific basis, the intention is to allow the Aboriginal population to acquire skills which will be transferable in future to other projects, both within and outside the Province. Funding will be administered by a not-for-profit corporation – the board of directors of this not-for- profit entity will consist of representatives of Nalcor, Innu Nation, the Nunatsiavut Government and the Labrador Metis Nation. Training programs will be developed jointly by the Proponent and the relevant Aboriginal organization. The program will be implemented immediately upon receipt of federal funding.

It is Nalcor's understanding, based upon the Treaty and the information received, that the Project will have no or no measurable impacts upon the Labrador Inuit Settlement Area and Inuit rights. The process of consultation which has been adopted is therefore commensurate with the nature of the interests potentially affected. Nalcor has provided Project information and has held meetings with the Nunatsiavut Government and will continue this practice on an ongoing basis. To the extent possible, Nalcor will take any new issues identified into consideration during the ongoing consultation.

Requesting Organization – Joint Review Panel Information Request No.: JRPS.1S/2S

# **Information Requested:**

- c. With regards to Innu communities in Québec and the Labrador Métis Nation, the Proponent is asked to provide information on:
  - The current status of the discussions between each group and the Proponent regarding the proposed consultation agreements and anticipated timelines for the implementation of these agreements;

# Response:

The status of ongoing discussions with each of the relevant Quebec Innu Communities and with the Labrador Metis Nation (LMN) is described in the following text. The names and offices of the individuals participating in the Proponent's consultation with each of the named Quebec Innu communities and LMN are set out in Table 3.

Table 3 Names and Affiliations of Consulting Parties

Affiliation	Representative	Title		
Conseil des Innu d'Ekuanitshit (Mingan)	Jean-Charles Piétacho	Chief Conseil des Innu d'Ekuanitshit		
	Liette Boudreau	Assistant to the Chief		
	Vincent Napish	Vice-Chief		
	Judith Napess	Band Councillor		
	Rita Mestokosho	Band Councillor		
	David Schulze	Legal Counsel		
Conseil des Montagnais de Nutaskuan (Natashquan)	François Bellefleur	Chief Conseil des Montagnais de Nutaskuan		
	Clement Tremblay	Consultant and Advisor to Chief and Conseil des Montagnais de Nutaskuan		
	Daniel Malec	Chief Negotiator		
Conseil des Montagnais d'Unamen Shipu (La Romaine)	Guy Bellefleur	Chief – Conseil des Montagnais d'Unamen Shipu		
	Ken Rock	Legal Counsel		
Conseil des Innus de Pakua Shipi (St. Augustin)	Christiane Lalo	Chief – Conseil des Innus de Pakua Shipi		
	Ken Rock	Legal Counsel		
Conseil Innu Tauaikan Uashat mak Mani-	Georges-Ernest	Chief – Conseil Innu Takuaikan Uashat mak Mani-		
Uteman (Sept Iles)	Grégoire	Utenam		
	Lynne Morissette	Assistant to the Chief		
Nation Innu Matimekush-Lac John (Schefferville)	Réal McKenzie	Chief – Innu Matimekush-Lac John		
Labrador Metis Nation	Chris Montague	President – Labrador Metis Nation		
	Dorothy Earle	General Manager – Labrador Metis Nation		
	Bruce Clarke	Legal Counsel		
Nalcor	Gilbert Bennett	Vice-President – Lower Churchill Project		
	Paul Harrington	Project Manager – Lower Churchill Project		
	Todd Burlingame	Manager, Environmental and Aboriginal Affairs		
	Mary Hatherly	Aboriginal Agreements Lead		
	Gale Warren	Aboriginal Planning Lead		
	Jeanette Drover	Consultation Coordinator		
	Mike Wilkshire	French/English Interpreter		

# **Quebec Innu**

On May 13, 2009, each of the Quebec Innu communities of Uashat Mak Mani-Utenam, Ekuanitshit, Nutaskuan, Unamen Shipu, Pakua Shipi and Matimekush-Lac John were provided with a copy of Nalcor's proposed community consultation agreement and were invited by cover letter to review the draft agreement and indicate their response to its terms. The specific steps taken by Nalcor to advance community consultation agreements with these Quebec Innu communities since providing them with copies of the community consultation agreements are described in the following text and summarized in Table 4.

### **Ekuanitshit:**

On June 1, 2009, a one day meeting was held in Ekuanitshit attended by the following:

<u>Ekuanitshit:</u> Chief Jean Charles Piétacho; Vice Chief Vincent Napish; Judith Napess; Rita Mestokosho; David Schulze; Liette Boudreau.

<u>Nalcor</u>: Paul Harrington; Todd Burlingame; Mary Hatherly; Jeanette Drover; Michael Wilkshire.

The meeting was conducted in French. Mr. Harrington delivered a power point presentation on the Project, including an update on the status of environmental assessment and provided an explanation of the purpose and operation of the proposed community consultation agreement. A paper copy of the presentation (in both English and French) was provided to the Chief and members of Band Council.

On July 13, 2009, Ekuanitshit provided Nalcor with a revised version of the community consultation agreement. Nalcor has reviewed the changes proposed by Ekuanitshit and discussed these changes with their legal counsel by phone and in correspondence during the month of August. The parties are very close to finalizing the terms of the proposed agreement and Nalcor has proposed, by e-mail to Ekuanitshit's legal counsel from Ms. Hatherly dated August 11, 2009, and by correspondence from Mr. Burlingame to Chief Pietacho dated August 18, 2009, that a second meeting take place in the community to conclude the community consultation agreement. Since Band Council elections will be held during early September, the proposed meeting will likely take place during the later part of September.

It is anticipated that the community consultation agreement will be soon signed, following which the parties will develop an agreed-upon workplan and budget. The agreement will be subject to immediate implementation.

### Nutaskuan

Since providing Nutaskuan with a copy of the proposed community consultation agreement on May 13, 2009, Nalcor has been in frequent contact with representatives of the community. Mr. Burlingame and Ms. Warren spoke with M. Tremblay by phone on June 22, 2009, to discuss the scope of the proposed community consultation agreement. On July 7, 2009, Ms. Gale Warren met with M. Tremblay in Quebec City to discuss the path forward and potential meeting dates. Follow-up communications by e-mail and phone between M. Tremblay and representatives of Nalcor to determine an acceptable meeting date took place between July 16 and 24, 2009.

A meeting between representatives of Nutaskuan and Nalcor was held in Quebec City on August 6, 2009 attended by the following:

Nutaskuan: Chief François Bellefleur; Daniel Malec, Clément Tremblay.

Nalcor: Paul Harrington, Gale Warren, Mary Hatherly, Jeanette Drover; Mike Wilkshire.

At this meeting, representatives of Nalcor delivered a status report on the Project and discussed the scope of the proposed community consultation agreement. Nutaskuan has reviewed the terms of the agreement and has provided Nalcor with comments on the Agreement. Based on the substance of its meeting with Nutaskuan and the comments received, Nalcor anticipates concluding the agreement and developing a workplan and budget within a short timeframe. The agreement will be subject to immediate implementation.

## Pakua Shipi:

Pakua Shipi was provided with a copy of the proposed community consultation agreement on May 13, 2009. At the same time, a copy was also provided to Mr. Rock, Legal Counsel to the Chief and Band Council of Pakua Shipi. Since no communication was received from the community during June or July, Nalcor attempted to contact Chief Lalo by phone on August 3 and 4, 2009. On August 5, 2009, Chief Lalo contacted Nalcor to advise that the draft community consultation agreement had not been received. Copies of the agreement in both English and French and original correspondence were resent to Chief Lalo on August 19, 2009, together with an invitation to meet to discuss the Project and the Agreement at the convenience of the Chief and Band Council.

### **Unamen Shipu:**

Unamen Shipu was provided with a copy of the proposed community consultation agreement on May 13, 2009. A copy was also provided to Mr. Rock, Legal Counsel to the Chief and Band Council of Unamen Shipu. Since no communication was received from the community during June or July, Nalcor attempted to contact Chief Guy Bellefleur by phone on August 3 and 4, 2009. On August 5, 2009, Mr. Wilkshire, Interpreter and a representative of Nalcor spoke with Chief Bellefleur who advised that he had not received the draft community consultation agreement. Copies of the agreement in both English and French and original correspondence were resent to Chief Bellefleur on August 18, 2009, together with an invitation to meet to discuss the Project and the Agreement at the convenience of the Chief and Band Council.

### **Uashat mak Mani-Utenam:**

Uashat mak Mani-Utenam was provided with a copy of the proposed community consultation agreement on May 13, 2009. Since no communication was received from the community during June or July, Nalcor attempted to contact Chief Grégoire by phone during the weeks of August 3 and August 10 without success. Messages were left with both the Chief and his assistant, Mme. Morisette. Mme. Morisette responded to Nalcor to provide an update on the status of the Agreement and noted that it was undergoing review by the Band's legal counsel.

### Matimekush-Lac John:

Matimekush-Lac John was provided with a copy of the proposed community consultation agreement on May 13, 2009. Since no communication was received from the community during June or July, Nalcor attempted to contact Chief McKenzie by phone during the weeks of August 3 and August 10 without success. Messages have been left with the Chief and Nalcor will continue to attempt to engage the community.

# Table 4 Steps to Advance Community Consultation Agreements with Quebec Innu

Aboriginal Group	Who	Date	Action Taken
Ekuanitshit	David Schulze	May 25, 2009	Letter to Todd Burlingame inviting Nalcor to a meeting in Ekuanitshit
		June 1, 2009	Meeting in Ekuanitshit between representatives of Ekuanitshit and Nalcor
	David Schulze	July 13, 2009	Correspondence to Mary Hatherly and Todd Burlingame including revisions to draft community consultation agreement proposed by Ekuanitshit
	David Schulze/Mary Hatherly	August 11, 17 - 18	Series of e-mails to set up a conference call to discuss terms of proposed community consultation agreement and schedule a subsequent community meeting
	Mike Wilkshire/Liette Bourdreau		Phone call to propose second meeting in Ekuanitshit in early September to finalize agreement
	Todd Burlingame	August 18, 2009	Letter to Chief Piétacho proposing a meeting in Ekuanitshit in early September, 2009
	David Schulze/Mary Hatherly	August 24, 2009	Conference call to discuss terms of community consultation agreement.
			Planning of next meeting in the community after elections in mid- September
Nutaskuan	Todd Burlingame/Gale Warren/Clément Tremblay	June 22, 2009	Conference call to discuss proposed community consultation agreement
	Gale Warren/Clément Tremblay	July 7, 2009	Meeting in Quebec City to discuss the way forward and potential meeting dates
	Clément Tremblay/Gale Warren	July 16, 2009	Phone call to discuss potential meeting dates
	Gale Warren/Clément Tremblay	July 20, 2009	E-mail to discuss potential meeting dates
	Clément Tremblay/Gale Warren	July 21, 2009	Phone call to discuss potential meeting dates
	Gale Warren/Clément Tremblay	July 24, 2009	Phone call to confirm meeting dates
		August 6, 2009	Meeting in Quebec City between representatives of Nutaskuan and Nalcor
	Gale Warren/Clément Tremblay	August 27, 2009	E-mail with French version of the proposed community consultation agreement attached

Aboriginal Group	Who	Date	Action Taken
	Clément Tremblay/Gale Warren	August 28, 2009	E-mail indicating that Nutaskuan will provide its response to community consultation agreement during the week of September 1, 2009
	Clément Tremblay/Gale Warren	September 3, 2009	Phone call to provide update. Nutaskuan has advised they have new legal counsel, Michel Lussier. Counsel is engaged in reviewing the proposed agreement
	Clément Tremblay/Gale Warren	September 9, 2009	Received review comments, via email, on Agreement.
Pakua Shipi	Mike Wilkshire	August 3, 2009	Phone call to Chief Lalo – no response
	Mike Wilkshire	August 4, 2009	Phone call to Chief Lalo to discuss agreement. Chief Lalo indicated that had not received agreement
	Mike Wilkshire	August 5, 2009	Phone call to Chief Lalo who confirmed that she had not received agreement
	Gilbert Bennett	August 18, 2009	Correspondence to Chief Lalo including copies of the agreement in both English and French and an invitation to meet to discuss the Project and the draft agreement at the convenience of the Chief and Band Council
Unamen Shipu	Mike Wilkshire	August 3, 2009	Phone call to Chief Bellefleur – Chief away from office
	Mike Wilkshire	August 4, 2009	Phone call to Chief Bellefleur – left message
	Mike Wilkshire	August 5, 2009	Phone call to Chief Bellefleur who confirmed that he had not received a French version of the agreement
	Gilbert Bennett	August 18, 2009	Correspondence to Chief Bellefleur including copies of the agreement in both English and French and an invitation to meet to discuss the Project and the draft agreement at the convenience of the Chief and Band Council

Aboriginal Group	Who	Date	Action Taken
Uashat mak Mani- Utenan	Mike Wilkshire	August 3, 2009	Phone call to Chief Grégoire – no answer
	Mike Wilkshire	August 4, 2009	Phone call to Chief Grégoire no response
	Mike Wilkshire	August 11, 2009	Phone call to Lyne Morissette – left message
	Mike Wilkshire	September 3, 2009	Phone call to Lyne Morissette.
			Mme. Morrissette acknowledged receipt of Community Consultation proposal, which is currently under review by legal counsel. Undertook to respond with comments once review complete, revision of text may be required at that time
Matimekush – Lac John	Mike Wilkshire	August 3, 2009	Phone call to Chief McKenzie – no response
	Mike Wilkshire	August 4, 2009	Three phone calls to Chief McKenzie – no response
	Mike Wilkshire	August 5, 2009	Phone call to Chief McKenzie – no response
	Mike Wilkshire	August 11, 2009	Phone call to Chief McKenzie – left message

# **Labrador Metis Nation (LMN)**

The specific steps taken by Nalcor to advance community consultation agreements with LMN since providing it with copies of the community consultation agreements are described in the following text and summarized in Table 5.

LMN was provided with a copy of the draft community consultation agreement on April 23, 2009. On June 10, 2009, LMN submitted a revised version of the agreement. This proposal was reviewed internally by Nalcor and on June 17, 2009, Ms. Hatherly contacted Mr. Montague by e-mail seeking clarification of certain of the proposed revisions. A conference call was held between Ms. Hatherly, Mr. Montague and Ms. Earle on July 3, 2009 to discuss the proposed revisions and on the same day, Ms. Hatherly spoke with Mr. Clarke to discuss certain aspects of the agreement. As a result of these conversations, a revised community consultation agreement was prepared and submitted by Nalcor to LMN on July 4, 2009. This agreement was sent to Mr. Clarke on August 10, 2009. This agreement is currently under review by LMN and it is anticipated that an agreement will be concluded with LMN within a short time frame, following which the parties will develop an agreed-upon workplan and budget. The agreement will be subject to immediate implementation.

Table 5 Steps to Advance Community Consultation Agreements with Labrador Metis Nation

Aboriginal Group	Who	Date	Action Taken
Labrador Metis Nation (LMN)	Chris Montague	June 10, 2009	Meeting with Todd Burlingame and Mary Hatherly. LMN's proposed revisions to community consultation agreement submitted
	Mary Hatherly/Chris Montague	June 17, 2009	Series of e-mails requesting clarification of certain points and responses
	Mary Hatherly/Chris Montague/Dorothy Earle	July2, 2009	Conference call to discuss LMN's proposed revisions to community consultation agreement
	Mary Hatherly/Bruce Clarke	July 2, 2009	Phone call to discuss proposed changes; follow-up email
	Mary Hatherly/Chris Montague	July 3, 2009	E-mail with Nalcor's redraft of community consultation agreement attached
	Mary Hatherly/Bruce Clarke	August 10, 2009	E-mail with Nalcor's redraft of community consultation agreement attached
	Mary Hatherly/Bruce Clarke	September 1, 2009	Email correspondence seeking update from LMN

# **Nunatsiavut Government**

As described above in response to IR# JRP 1S/2S(b), Nalcor does not propose to enter into a community consultation agreement with the Nunatsiavut Government. However, Nalcor is committed to consulting with all parties who express an interest in the Project, including the Nunatsiavut Government. Accordingly, Nalcor has provided Project-related information to the Nunatsiavut Government and has met with representatives of the government and with the various communities and will continue to do so on an ongoing basis. Nalcor is confident that this level of consultation will be sufficient to gain an understanding of the interests, values, concerns and issues facing the Labrador Inuit and to take these interests, values, concerns and issues into account in the planning and conduct of the Project.

Information Request No.: JRPS.1S/2S

**Requesting Organization – Joint Review Panel** 

**Information Requested:** 

- c. With regards to Innu communities in Québec and the Labrador Metis Nation, the Proponent is asked to provide information on:
  - ii. How the Proponent is proposing to bring forward into the environmental assessment process, in a timely and integrated fashion, information received as a result of the implementation of these consultation agreements;

### Response:

Nalcor understands its obligation to provide opportunities for Aboriginal groups to be consulted on the Project. In order for the consultation process to move forward, however, there must be a willingness on both parties to engage in consultation. Given the progress of discussions to date, Nalcor is confident that, out of the consultation agreements proposed, agreements will be concluded with the Quebec Innu communities of Ekuanitshit and Nutaskuan and with the Labrador Metis Nation (LMN) within a short timeframe. In addition to its ongoing consultative relationships with the above mentioned groups, Nalcor has provided consultation agreements and opportunities for consultation to the Quebec Innu communities of Pakua Shipi, Unamen Shipu, Uashat Mak Mani-Utenman, and Matimekush-Lac John. These activities are documented in Tables 4 and 5, of this response. Nalcor will continue to pursue a community consultation agreement with the Quebec Innu communities of Pakua Shipi, Unamen Shipu, Uashat Mak Mani-Utenman, and Matimekush-Lac John and remains committed to providing further opportunities for these groups to provide input on the Project and to work with them to address their concerns

The environmental assessment process is a planning tool designed to identify issues, and allow the proponent to incorporate any mitigation to address concerns into the final project design, where appropriate. In addition, as outlined in the response to IR# JRP.112, Nalcor will be undertaking Monitoring and Follow-up Programs. The Follow-up Programs are designed to test the accuracy of predictions made in the EIS (e.g., assessment of ashkui following commissioning of the Project). Further, Nalcor has committed to an adaptive management process that will allow them to respond to issues, as appropriate and feasible, to achieve resolution (see response to IR# JRP.112). The Follow-up Programs and Adaptive Management Process within the environmental assessment process are the mechanisms that will allow Nalcor to incorporate information received as a result of the implementation of the consultation agreements.

Additionally, with the execution of the Community Consultation Agreements, a formal mechanism will be put into place whereby both parties will work jointly in the Community, allowing Nalcor to further understand and address issues and concerns the community may have regarding the Project. The ongoing sharing of Project-related information between Nalcor and each of the Aboriginal groups will progressively contribute to the identification of potential environmental effects of the Project upon current land and resource usage, identify and strengthen mitigation measures and develop an understanding of Aboriginal traditional knowledge that represent the concerns and interests of the community.

Information Request No.: JRP.1S/2S

# **Information Requested:**

- c. With regards to Innu communities in Québec and the Labrador Metis Nation, the Proponent is asked to provide information on:
  - iii. Alternative arrangements in the event that consultation agreements cannot be successfully negotiated with one or more groups; and

### Response:

In the event that consultation agreements cannot be finalized, Nalcor will continue, as necessary, to solicit information directly from Innu communities in Quebec and the Labrador Metis Nation through the following mechanisms:

- community meetings and open houses;
- technical workshops; and
- site visits.

However, while these opportunities to consult will be provided by Nalcor, there is no guarantee the Aboriginal groups will participate. Canadian courts have acknowledged that the failure of Aboriginal groups to participate in the consultation process does not constitute a failure of consultation. In the unlikely event that one or more of the relevant Quebec Innu communities or the Labrador Metis Nation chooses not to avail themselves of opportunities provided by Nalcor to consult on the Project, Nalcor will use publicly available information in its EIS to address known concerns to the extent possible. If those Aboriginal groups avail themselves of the opportunities to participate in this public review process to make their concerns known, Nalcor is prepared to address the concerns raised in this process to the extent possible.

Information Request No.: JRP.1S/2S

# **Information Requested:**

- c. With regards to Innu communities in Québec and the Labrador Metis Nation, the Proponent is asked to provide information on:
  - iv. How the Proponent is proposing to inform the Panel of the progress made regarding the implementation of these consultation agreements.

# Response:

Where appropriate, Nalcor will provide updates to the Panel as material information becomes available on the progress concerning:

- its efforts to enter into consultation agreements with Innu communities in Quebec and the Labrador Métis Nation; and
- the implementation of those agreements.

# IR# JRP.5S/25S Need, Purpose and Rationale for the Project

Information Request No.: JRP.5S/25S

### Requesting Organization - Joint Review Panel

Subject – Need, Purpose and Rationale for the Project

### References:

EIS Guidelines, Section 4.3.1 (Need, Purpose and Rationale of the Project)

EIS, Volume IA, Section 2.4.4 (Market Opportunities)

### **Related Comments / Information Requests:**

CEAR #214 (Innu Nation – IN.4 & IN.5) IR # JRP.5 & JRP.25

### Rationale:

The EIS Guidelines require the Proponent to provide a comprehensive explanation of the need, purpose and rationale for the project. The Proponent is required to present the Project's justification in both energy and economic terms, and shall provide a clear description of the assumptions and conclusions used in the analysis. In particular, the guidelines indicate that the EIS shall include:

- a. Current and forecasted provincial electricity supply and demand;
- b. Current and forecasted provincial electricity conservation;
- c. Current and future provincial transmission line network;
- d. Current exports by the Proponent to markets outside the Province;
- e. Export market opportunities, forecasts and expected evolution;
- f. Current energy and water management regimes;
- g. Risks to the Project, in-stream flow variability, market prices and schedule delays, interest rates and other risk factors relevant to the decision to proceed with the Project;
- h. Projected financial benefits for the project (including their distribution) as measured by standard financial indicators; and
- i. Relationship with the Newfoundland and Labrador's 2007 Energy Plan.

The Panel requires more detailed information than was provided by the Proponent in its response to JRP.5. The Proponent is asked to revisit its response to JRP.5 in light of the following clarification.

The Panel appreciates that the Proponent would not, at this time, have in place the firm market and project financing arrangements required for Project sanction (Gate 3 stage), and is not asking for that information. Rather, the Panel is requesting order of magnitude estimates, financial analysis, risk assessments, and sensitivities normally or generally available at the feasibility stage of a Project of this nature.

The Proponent is also asked to consider IN.4 and IN.5 of the Innu Nation submission in finalizing its response to JRP.25.

Information Request No.: JRP.5S/25S

**Information Requested:** 

In addition to the information requested in JRP.5 and JRP.25, the Proponent is asked to:

a. Describe how the various wholesale markets operate, including how prices are determined, and how power from different generation facilities is dispatched;

### Response:

The operation of the wholesale electricity markets is generally fashioned after two designs. One of which administers a centralized financial transmission rights market that grants transmission access to a generator based primarily on economic merit, and the other is a physical transmission rights market that provides transmission access to a customer for a prescribed fee. The philosophy, design and rules of operation for these markets are elaborate and actual market operation is more involved than the brief descriptions provided herein. A brief overview of how each of the markets identified in the Environmental Impact Statement (EIS) operates is provided in the following sections.

### New York/New England

The wholesale electricity markets for New York and New England are designed to facilitate bilateral and spot market transactions for the energy commodity as well as for the purchase and sale of capacity and ancillary services. As such, they are examples of financial transmission rights markets.

In these markets, participants are provided with the opportunity to competitively offer and bid energy into a spot market as well as the opportunity to undertake bilateral transactions. Clearing prices are economically based; however, to avoid transmission line overloading it is often necessary to dispatch generation out of economic merit. This out-of-merit dispatch creates a situation where the cost for the next MW of power does not remain equal throughout the system, thus causing locational price differences on each side of the constraint. This situation is called Locational Based Marginal Pricing (LBMP) where the LBMP is comprised of an energy component for the commodity, a congestion component to cover off the costs of the redispatch and a factor to account for heating losses in the transmission. In the LBMP scheme, generators are paid at the LBMP associated with their generator bus (i.e. where they inter-connect to the grid) while energy purchasers pay an LBMP that is derived from a collection of nodes that are put together to form a Zone.

The market functions on both a day-ahead basis and in a real-time market. In the day-ahead market, generation offers, bids for energy and zonal load forecasts from the Load Serving Entities (LSEs) are matched both economically to minimize cost and technically to observe system security considerations. The match through this clearing process establishes a binding forward contract between suppliers and purchasers with generators scheduled to be available for dispatch and purchasers scheduled to take specific amounts of energy each hour. From the matches, LBMP are computed for the day-ahead market.

As a result of changes that may occur to load forecasts, or generation and transmission availability from one day to the next, a real-time market has also been established to accommodate these changes. This market employs the same bid and offer process to rediscover generation quantities and LBMP prices for each generator bus and zonal LBMPs for the loads. For those market participants who committed to the day-ahead market, the differences in the supply and purchase quantities and the differences in prices are reconciled based on the real-time values.

Players who are involved in bilateral arrangements may elect to have that bilateral arrangement established as a firm point-to-point transaction, where they commit to paying congestion costs to ensure delivery or may elect to have it structured as a non firm transaction, conditional on those congestion cost components mentioned above.

### Quebec, New Brunswick and Nova Scotia

The Quebec, New Brunswick and Nova Scotia markets are examples of wholesale electricity markets that connect buyers and sellers of power through transmission rights and entitlements prescribed within a pro forma transmission tariff and are examples of physical rights markets. Within these markets, buyers and sellers of electricity are able to acquire two general forms of transmission products to service their needs. Market participants can acquire point-to-point contracts to facilitate the bulk movement of power or acquire network service products to provide LSEs such as distribution utilities with access to supply-side resources. Point-to-point service is offered on a firm and non-firm basis with network access being firm. The fees associated with usage are based on the MW capacity booked and not on the distance over which the energy flows. In these markets, transmission entitlements that have not been scheduled for use by their owner in the day before market, become available to other users in the same-day market.

### **Ontario**

The Ontario wholesale electricity market is a hybrid market which has characteristics of both the physical rights markets of Eastern Canada and the financial rights markets found in the northeastern United States. It is managed by the Independent Electricity Systems Operator (IESO) which connects potential buyers and sellers of energy on the transmission system through an hourly auction process that matches the least expensive offers of supply from importers and generators with the highest demand side bids from exporters, distribution companies and large industrials. Through this interaction of supply and demand, resources are sourced on an increasingly expensive basis until sufficient generation is available to supply the system's load requirements. The most expensive generation value sourced to satisfy demand establishes a preliminary generation schedule and sets the uniform clearing price for energy that is paid to all suppliers. The supply demand price is adjusted every 5 minutes and averaged to set the Hourly Ontario Energy Price (HOEP). To alleviate any transmission congestion that may result from the injection and withdrawal of quantities identified in the preliminary schedule, generation may be re-scheduled to establish the real-time dispatch within the physical market. These additional generation costs, along with other fees required to account for system management and market administration are charged to wholesale customers. It is worth noting that this form of physical market differs from the proforma tariff markets in that within the pro-forma market, the connection between buyers and sellers is facilitated through the separate acquisition of physical transmission capacity as opposed to the right to transmission system access that results from being a selected supplier. As a result of not having physical rights to the transmission at the boundaries of the Ontario system, out-of-province suppliers are required to be amongst those providing least cost offers of supply in order to obtain the transmission required to connect with an Ontario customer.

Further information regarding the rules of operation of eastern North American electricity markets may be found at the following links:

New Brunswick http://www.nbso.ca/Public/en/op/market/rules/rules.aspx

Nova Scotia http://oasis.nspower.ca/en/home/oasis/wholesalemarketdocs.aspx

Ontario http://www.ieso.ca/imoweb/manuals/marketdocs.asp New England http://www.iso-ne.com/regulatory/tariff/index.html

New York http://www.nyiso.com/public/documents/tariffs/market\_services.jsp

Requesting Organization – Joint Review Panel Information Request No.: JRP.5S/25S

**Information Requested:** 

In addition to the information requested in JRP.5 and JRP.25, the Proponent is asked to:

b. Describe the implications of these operations for the financial performance of the Project, including the potential need for intermittent spillage;

### Response:

As a result of the nondiscriminatory nature of transmission access and the competitive nature of the target markets, the implications of market operations are similar for the Lower Churchill Hydroelectric Generation Project as they are for other hydraulic suppliers; that is, hydraulic suppliers have a natural competitive advantage relative to base load must-run units and a predicable cost structure relative to carbon-based alternatives.

The nature of the operations of these markets is well understood by Nalcor Energy (Nalcor), and Nalcor has considered market operations as well as price variability in its revenue forecasting for the Project. In assessing the markets that could be included in its portfolio, the timing of peak demand, on peak and off peak pricing, and any relevant market access constraints, are all included in Nalcor's strategy.

Hydrology and therefore production for the Project has been modeled under a variety of predicted inflow conditions, and the plants have been optimized accordingly. The need for intermittent spillage is a reality in hydro generation, and the Project has been optimized to make the best use of the water resource available. The extent of spillage will be reduced, and the scheduling of production will be optimized, with the implementation of a water management agreement with CF(L)Co. Such an agreement is mandatory pursuant to the *Electrical Power Control Act* and the *Water Management Regulations*. The implementation of such an agreement is subject to approval by the Board of Commissioners of Public Utilities.

When all of these factors are considered using appropriate modeling tools, Nalcor is confident that it can optimize its market and market access strategy with the production from the plants.

Information Request No.: JRP.5S/25S

# **Information Requested:**

In addition to the information requested in JRP.5 and JRP.25, the Proponent is asked to:

c. Provide information on current and future competing demand resources, and how they could affect the competitive position of the Project; and

# Response:

The portfolio of future competitive resources is expected to remain dominated by natural gas fired combustion turbines. The price of natural gas is expected to escalate in the long term, and the cost of emissions is also expected to increase in the long term. The Project has a cost advantage over other renewable projects, including the HQ Romaine project, and as demand increases, the economics of the Project are expected to be more attractive compared to other more expensive projects that may be developed in the future.

Nalcor is not aware of any significant new technologies with the potential to change the Project's competitive position.

Requesting Organization – Joint Review Panel Information Request No.: JRP.5S/25S

**Information Requested:** 

In addition to the information requested in JRP.5 and JRP.25, the Proponent is asked to:

d. Provide current and projects prices for average, peak and off-peak electricity in the potential export markets.

# Response:

While Nalcor has access to detailed commodity forecasts, these forecasts are made available to Nalcor on a confidential basis, and therefore the information presented in the EIS and IR's JRP.5 and JRP.25 represents the level of detail that can be provided.

# IR# JRP.7S/85S Greenhouse Gas Emissions

Information Request No.: JRP.7S/85S

Subject - Need, Purpose and Rationale for the Project (Electricity Demand Projections)

### **References:**

EIS Guidelines, Section 4.5 (Environmental Effects – General)

EIS, Volume IA, Section 2.4.3 (Addressing Climate Change), Section 2.4.4 (Market Opportunities), Section 2.4.4.5 (Newfoundland and Labrador – Displacement of Holyrood) & Section 2.5.7 (No Project)

EIS, Volume IIA, Section 2.2 (Existing Environment – Atmospheric Environment)

# **Related Comments / Information Requests:**

CEAR # 214 (Innu Nation - IN.8)

IR # JRP.7 & JRP.85

### Rationale:

The EIS Guidelines require a description of specific greenhouse gas (GHG) emissions that the Project would or could offset, the necessary conditions for that offset occurring, and a quantitative net estimate of potential greenhouse gas reductions or increases (section 4.5.1). In discussing GHG displacement scenarios in response to JRP.7(a) the Proponent referred to broad markets rather than addressing specific markets and sources of energy.

Information Request No.: JRP.7S/85S

### Information Requested:

In addition to the information already provided in response to IR # JRP.7 (a) and in light of the response to IR# JRP.85, the Proponent is asked to:

a. Provide a detailed analysis of specific sources of energy and associated GHG emissions that could potentially be replaced or avoided by the Project in each of the potential markets for the Project's electricity (including location, capacity, current energy sources and associated GHG emissions), including those with lower emissions such as wind or demand management options;

### Response:

The specific sources of energy displaced by the Project in each of the potential markets will be determined by the dispatch decisions within the respective markets. The factors that affect dispatch decisions in each of the different types of markets are outlined the response to IR# JRP.5S/25Sa. It is not possible for Nalcor Energy (Nalcor) to identify specific sources that would be displaced with any greater certainty than what is presented in the response to IR# JRP.7a because dispatch decisions on individual facilities are made by the operators of the facilities and not by the sellers in the market. The absence of a formal federal GHG policy framework both in the Canada and in the United States results in additional uncertainty in relation to the effect of the Project on displacing alternative energy sources and GHG emissions in each of the markets.

In Atlantic Canada, some of the potential sources of energy that could be displaced are those facilities with higher levels of emissions. Table 1 identifies the top 10 emitting generation stations in Atlantic Canada as well as their respective fuel source(s) and capacity. In the northeastern United States, it is expected that any short-term sales that occur would displace natural gas-fired generation. In Ontario, the provincial government has committed to retire its coal fired generation, and is on a path to eliminate its dependence on coal by 2014.

Table 1 Top Ten Emitting Generating Stations in Atlantic Canada

Generating Station	Source	Primary Fuel Source	Capacity (MW)	2007 GHG Emissions (Mt)
Lingan (NS)	2, 3	Coal	620	4.3
Belledune (NB)	1, 3	Coal	457	2.9
Trenton (NS)	2, 3	Coal	307	2.2
Dalhousie (NB)	1, 3	Oil	299	1.7
Point Aconi (NS)	2, 3	Coal	171	1.5
Coleson Cove (NB)	1, 3	Oil	969	1.4
Point Tupper (NS)	2, 3	Coal	154	1.2
Holyrood (NL)	3, 4	Oil	490	1.0
Tuft's Cove (NS)	2, 3	Oil/Gas	415	1.0
Bayside (NB)	1,3	Gas	263	0.5
	17.7			

### Sources:

- 1. New Brunswick System Operator (2009).
- Nova Scotia Power (2009).
- Environment Canada (2009).
- 4. EIS, Section 1A, Section 2.4.4.5, pg 2-11.

As stated in the response to IR# JRP.7a, Nalcor has a high degree of confidence that displacement of other generation alternatives will take place if the Project is constructed. Similar to hydroelectric developments, other renewable energy sources such as wind have low marginal operating costs and as such Nalcor does not expect to displace other in-service renewable production. Once completed, the Project will displace energy from thermal generation sources such as gas or oil powered facilities that have higher marginal operating costs due to the dependency on fuel costs.

Dispatch decisions within the various power markets will be, in part, governed by demand management and wind targets established by the respective jurisdictional governments and individual utilities – power from the Project will not directly contribute to meeting these targets.

#### References:

Environment Canada. 2009. Facility GHG Reporting, Search Data. Available at: http://www.ec.gc.ca/pdb/ghg/onlineData/ dataSearch\_e.cfm

New Brunswick System Operator. 2009. 10-Year Assessment of the Adequacy of Generation and Transmission Facilities in New Brunswick: 2009-2019. April 2009. Available at: http://www.nbso.ca/public/private/NBSO%2010-Year%20Assessment%202009.pdf

Nova Scotia Power. 2009. NS Power Thermal Generating Facilities. Available at:

http://www.nspower.ca/en/home/environment/reportsandmetrics/archivedemissionslevels/nspower\_t hermalgeneratingfacilities.aspx

Information Request No.: JRP.7S/85S

#### **Information Requested:**

Describe the implications of each of the three factors presented in the response to JRP.7 (a), namely
government policy, marginal operating costs and substitution effects, on each of the jurisdictions in
which GHG emission could be offset by the Project; and

#### Response:

As discussed in the response to IR# JRP.7a government policy, marginal operating costs and substitution effects can affect the ranking and dispatch order for power in any given market. The degree of that effect is determined by the individual market and is largely dependent upon the market structure. The response to IR# JRP.5S/25S provides further detail on how dispatch decisions are made in each of the various market types.

While the full extent of the effect of each of the three factors cannot be fully determined there are a number of general assumptions that can be made in relation to the effects on power markets in general:

- government policy imposing limits on the emission of greenhouse gases should result in increased carbon prices; the more stringent the restriction, the higher the price;
- marginal operating costs of thermal generation facilities should increase as the price carbon increases;
- substitution of generation from non-emitting sources with very low marginal costs such as the Project, for generation from thermal sources should increase as the marginal operating costs, for thermal facilities increases; and
- displacement of GHG emissions will increase with increased use of non-emitting generation over thermal generation.

Both Canada and the United States are in the process of developing federal regulatory frameworks that will impose restrictions on GHG emissions upon implementation. The extent to which these new regulations will affect decisions in the various markets cannot be determined until the regulations are finalized. However, it can be assumed that the movement in government policy towards GHG regulations will result in higher carbon prices. In addition, as stated above, the more stringent the GHG regulations are, the greater the effect they will have on reducing emission levels.

Information Request No.: JRP.7S/85S

**Requesting Organization – Joint Review Panel** 

**Information Requested:** 

c. Indicate whether Nalcor Energy (Nalcor) plans to offset GHG emissions from the Project's construction and operation phases, and how this would be accomplished.

#### Response:

As discussed in IR# JRP.85 the GHG emissions from the Project's construction phase arelow minimal (less than one megatonne (in total) over the 10 year construction phase). Nalcor is committed to reducing greenhouse gas emissions during construction through:

- conducting work according to regulations and codes of good practice;
- maintaining vehicles and other equipment in good working order, complying with federal emissions and efficiency standards;
- controlling vehicle emissions and thereby GHG emissions by posted speed limits; and
- implementing and anti-idling policy regarding vehicle operations.

As noted in IR# JRP.27 the GHG emissions from the Lower Churchill Project during operations, while not zero (i.e., similar to natural lakes), are dramatically less than other emitting generation alternatives (as illustrated in Table 1 of part (a)). In addition to nominal GHG emissions during construction and operations, the Project has the potential to displace up to 16 megatonnes of GHG emissions per year from other power generation.

Based on the consideration of the above factors, Nalcor Energy has no plans to offset GHG emissions.

## IR# JRP.24S Federal and Provincial Energy Policies

Information Request No.: JRP.24S

#### Requesting Organization - Joint Review Panel

**Subject - Federal and Provincial Energy Policies** 

#### References:

EIS Guidelines, Section 4.2.4 (Relationship to Legislation, Permitting, Regulatory Agencies and Policies) & Section 4.3.1 (Need, Purpose and Rationale of the Project)

EIS, Volume IA, Section 1.4 (Relationship to Legislation, Permitting, Regulatory Agencies and Policies) & Chapter 6.0 (Regulatory Context & Scope of Assessment)

EIS, Volume IB, Appendix 1-B-G (Table of Content for the Environmental Protection Plan and List of Permits)

#### **Related Comments / Information Requests:**

CEAR # 214 (Innu Nation - IN.1)

IR# JRP.24

#### Rationale:

The EIS Guidelines require that "the EIS identify and discuss all relationships between the Project and relevant legislation, regulations and policies (municipal, provincial, and federal)" (p. 14). In addition, Section 4.3 specifies that "the statement of the Project's justification... shall include an evaluation of the following: (e) Export market opportunities, forecasts and expected evolution" (p. 15).

The presentation in the EIS of legislation, regulations and policies of relevance to the Project is limited to provincial and federal legislation and regulations required in relation to construction and operations, as summarized in Appendix 1-B-G. Little information is provided concerning policies potentially affecting the Project and no information is provided in relation to the transmission, sale or marketing of electricity from the Project.

Innu Nation has suggested that presentation of such information should include relevant portions of the *National Energy Board Act*, policies and orders of the Federal Energy Regulatory Commission (FERC) in the United States, as well as policies and proceedings of provincial and U.S. state energy boards, including the *Régie de l'énergie* in Québec.

As part of the rationale for the Project is to provide electricity to third parties in order to generate revenues for the Province, the EIS should show that this is actually possible and that revenues would result.

The implications of relevant policies for the Project are critical to understanding:

- The ability of the Project to access appropriate markets outside of the Province, and to achieve both its stated purpose and financial viability of the Project;
- The ability of the Project to achieve its stated purpose;
- The financial ability of the Project to pay for planned and unplanned mitigation and monitoring; and
- Lower Churchill Hydroelectric Generation Project Joint Review Panel 10
- The financial ability of the Project to provide third party stakeholders with financial and other compensation for adverse effects and financial benefits from the Project (e.g. compensation to Innu Nation pursuant to the Impacts and Benefits Agreement referred to in *Tshash Petapen* and in the EIS).

In its submission to the Panel, Innu Nation indicated that there are several proceedings in front of regulatory bodies outside Newfoundland and Labrador that have significant ramifications for this Project, and have not been considered in the EIS. Two examples are the petition to the Federal Energy Regulatory Commission by Northeast Utilities Service Company and NSTAR Electric Company and the complaints filed by Newfoundland and Labrador Hydro (now Nalcor) to the *Régie de l'énergie* in Québec (further details available in Innu Nation submission).

Information Request No.: JRP.24S

#### **Information Requested:**

In addition to the information requested in JRP.24, the Proponent is asked to provide:

 a. Information pertaining to the implications of recent and ongoing proceedings at various energy boards, including but not limited to the proceedings noted above in light of the requirement in the EIS to consider the application of legislation, regulations and policies to the project;

#### Response:

Proceedings before regulatory tribunals such as the National Energy Board (NEB), Federal Energy Regulatory Commission (FERC) and the Régie de l'énergie (Régie) are fact specific and each application must, by law, be considered on its merits. These regulators ensure all parties have fair and open access to transmission. None of the referenced proceedings, relate to, or have implications for, the development and environmental assessment of the Project.

Since the EIS was submitted, Newfoundland and Labrador Hydro has executed a transmission service agreement with Hydro-Québec TransÉnergie (HQT) so that surplus capacity and energy available to NLH can be transmitted on HQT's transmission system and sold in export markets.

Nalcor Energy (Nalcor) has been granted an Export Permit by the NEB, as well as Market Based Rate Authorization by the FERC. Also, Newfoundland and Labrador Hydro is registered as an electricity market participant with the New Brunswick Energy and Utilities Board.

With the execution of the transmission service agreement with HQT and the granting of applicable licenses to Nalcor and its affiliates, Nalcor sees no reason why it will not be successful in obtaining market access.

Requesting Organization – Joint Review Panel Information Request No.: JRP.24S

**Information Requested:** 

In addition to the information requested in JRP.24, the Proponent is asked to provide:

b. Updated information from any ongoing proceedings as it pertains to the export market opportunities, forecasts and expected evolution; and

#### Response:

The outcome of these Proceedings will ultimately be considered by Nalcor in its selection of the final market access and destination market portfolio. Any further developments will be considered by Nalcor as it makes final decisions related to the Project, but the market opportunities and forecasts described in the EIS and responses to information requests represent the best information available to Nalcor.

Information Request No.: JRP.24S

#### **Information Requested:**

In addition to the information requested in JRP.24, the Proponent is asked to provide:

c. A description of known or anticipated changes to potential market operations, rules, and policies and how these could affect the competitive position of the Project.

#### Response:

Nalcor Energy is not aware of any potential changes that would affect the competitive position of the Project. Since the establishment and modification of market rules is within the regulatory oversight of external regulators, Nalcor is not in a position to speculate on anticipated changes to these rules.

The forecasts and information provided in the EIS and Information Requests represent the best information available to Nalcor.

## IR# JRP.25S/26S

Need, Purpose and Rationale for the Project (Electricity Demand Projections)

Information Request No.: JRP.25S/26S

Subject – Need, Purpose and Rationale for the Project (Electricity Demand Projections)

#### **References:**

EIS Guidelines, Section 4.3.1 (Need, Purpose and Rationale of the Project) & Section 4.3.2.1 (Alternatives to the Project)

EIS, Volume IA, Section 2.4.5.5 (Newfoundland and Labrador) & Section 2.5.1 (Utility-based Conservation Initiatives)

#### **Related Comments / Information Requests:**

CEAR # 214 (Innu Nation - IN.2 & IN.7)

IR # JRP.25 & JRP.26

#### Rationale:

n/a

Information Request No.: JRP.25S/26S

#### **Information Requested:**

In addition to the information requested in JRP.25 and JRP.26, the Proponent is asked to provide:

a. A discussion of whether the Proponent or the Provincial Government has sought independent opinion concerning electricity demand projections. If so, present the findings of these opinions;

#### **Response:**

Neither Nalcor Energy (Nalcor) nor Newfoundland and Labrador Hydro (NLH) has sought independent opinion concerning electricity demand projections.

NLH, which has forecasted provincial energy and demand requirements since the 1970's, has the capabilities internally and access to the necessary information to prepare these forecasts. The forecasts prepared by NLH are subject to review by its regulator, the Board of Commissioners of Public Utilities. Similarly, forecasts are also subject to regulator review in other jurisdictions.

Since forecasts are subject to review through regulatory process, Nalcor, as a participant in these markets, sees no reason to obtain another independent opinion.

Recent forecasts from other eastern North American regions can be found at:

#### **New Brunswick**

http://www.nbso.ca/Public/en/docs-EN/Notices/10-year%20Outlook%202007.pdf

#### Nova Scotia

http://oas is.nspower.ca/site-nsp/media/Oas is/2009%2006%2030%2010%20 Year%20 System%20 Outlook%20 Report.pdf (1998) and (1998) an

#### Ontario

http://www.powerauthority.on.ca/Storage/53/4861\_D-1-1\_corrected\_071019.pdf

#### **New England**

http://www.iso-ne.com/trans/rsp/2009/rsp09\_public\_meeting\_draft\_090309.pdf

#### New York

http://www.nyiso.com/public/webdocs/services/planning\_data\_reference\_documents/2009\_LoadCapacityData\_PUBLIC\_Final.pdf

Information Request No.: JRP.25S/26S

#### **Information Requested:**

In addition to the information requested in JRP.25 and JRP.26, the Proponent is asked to provide:

 The projected wholesale price of electricity delivered from the Project to St. John's and a comparison of this project price with current prices of electricity sold by Newfoundland and Labrador Hydro to Newfoundland Power;

#### Response:

The approval of rates, terms, and conditions associated with the supply of electricity to customers of Newfoundland and Labrador Hydro and Newfoundland Power is governed by the *Public Utilities Act* and associated regulations.

Since the regulatory body with a mandate to consider these matters and the application of the *Act* and *Regulations* is the Board of Commissioners of Public Utilities, and the HVdc link between Labrador and the Island of Newfoundland is not a component of the Project as described in the Guidelines, Nalcor will defer discussions relating to the delivered cost of energy to the Island to the applicable regulatory authority.

Information Request No.: JRP.25S/26S

#### **Information Requested:**

In addition to the information requested in JRP.25 and JRP.26, the Proponent is asked to provide:

c. the potential for demand management to be used in combination with embedded energy and Island generation sources (other than the Project) to meet demand on the Island;

#### Response:

Conservation Demand Management (CDM) alone cannot result in savings that would negate the need for the Project. While conservation is and will remain an important part of Hydro's planning and education efforts, the Province's projections for a 29 percent growth in demand from 2007 to 2027 (582 MW) are significantly greater than the potential savings from CDM. Table 1 summarizes the total achievable peak load savings potential from demand management.

Table 1 Total Achievable Peak Load Savings Potential

	Milestone Year	Peak Load Savings (MW)		
Service Region		Upper Achievable	Lower Achievable	
Island of Newfoundland and Isolated	2011	27	14	
	2016	60	36	
	2021	99	61	
	2026	144	83	
	2011	1.4	0.9	
Labrador	2016	3.8	2.4	
Interconnected	2021	6.4	3.8	
	2026	9.7	5.5	
	2011	28.4	14.9	
Total Island of Newfoundland	2016	63.8	38.4	
and Labrador	2021	105.4	64.8	
	2026	153.7	86.8	

Source: Marbek 2008.

As Table 1 indicates, even under the Upper Achievable scenario, there will still be a shortfall of 427 MW of demand by 2027. There are no other potential projects on the Island of Newfoundland that can meet the projected demand, regardless of the extent of energy savings that can be achieved from demand management.

The potential for embedded energy and other Island of Newfoundland generation sources to meet the expected demand growth on the Island of Newfoundland is discussed in IR# JRP.26.

#### Reference:

Marbek Resource Consultants Ltd. 2008. Conservation and Demand Management (CDM) Potential. Newfoundland and Labrador Residential, Commercial and Industrial Sectors. Summary Report, January 31, 2008.

Information Request No.: JRP.25S/26S

#### **Information Requested:**

In addition to the information requested in JRP.25 and JRP.26, the Proponent is asked to provide:

d. The Proponent's objectives and targets for demand management (in MWh and MW) of the Proponent over the period of 2007 to 2027; and

#### Response:

The focus of the NLH "Potential Study" (Marbek 2008) was to assess energy savings rather than demand savings due to the fact that energy reductions had a stronger economic impact. Demand management strategies were not included in the Potential Study. However, the study also assessed the demand reductions that would result from the energy savings identified for both the commercial and residential sectors. The scope of the analysis in the industrial sector was at a higher level than those of the commercial and residential sectors and therefore used a different methodology that did not provide the corresponding demand reductions expected from the energy savings identified. Table 2 provides the expected energy savings at each of the five year milestone dates for the residential, commercial and industrial sectors as well as the corresponding demand potential from the residential and commercial sector analysis.

Table 2 Newfoundland and Labrador Energy and Demand Potential

	Residential, Commercial an	d Industrial Sectors (GWh)	Residential and Commercial Sectors (MW)		
	Lower Achievable	Upper Achievable	Lower Achievable	Upper Achievable	
2011	124	222	14	27	
2016	277	461	36	60	
2021	436	714	61	99	
2026	586	1,001	83	144	

The study results were then used to develop a 5 Year Plan outlining a portfolio of CDM programs, providing their estimated energy savings. CDM planning follows a five year planning cycle, and the current cycle ends in 2013. The savings estimates from the 5 Year Plan are summarized in Table 3.

Table 3 Conservation Program Portfolio Savings Estimates (GWh/yr)

Five Year Electrical Energy Conservation Plan								
	2009	2010	2011	2012	2013			
Residential	3.1	6.6	10.4	14.4	18.5			
Commercial	0.7	1.7	3.0	4.5	6.3			
Industrial	-	-	20.0	45.0	45.0			
Total	3.8	8.3	33.4	63.9	69.8			

#### Reference:

Marbek Resource Consultants Ltd. 2008. Conservation and Demand Management (CDM) Potential. Newfoundland and Labrador Residential, Commercial and Industrial Sectors. Summary Report, January 31, 2008.

Information Request No.: JRP.25S/26S

**Information Requested:** 

In addition to the information requested in JRP.25 and JRP.26, the Proponent is asked to provide:

e. The cost of demand management (in cents/kWh) and the assumptions made in determining that cost

#### Response:

The focus of the "Potential Study" (Marbek 2008) was to assess energy savings rather than demand savings due to the fact that energy reductions had a stronger economic impact. As a result, demand management strategies were not included in the Potential Study.

In the "Potential Study", each energy efficiency measure was compared using a CCE (cost of conserved energy) measure. Marbek defined the CCE as "the annualized incremental capital and operating and maintenance (O&M) cost of the upgrade measure divided by the annual energy savings achieved, excluding any administrative or program costs. The CCE represents the cost of conserving one kWh of electricity; it can be compared directly to the cost of supplying one new kWh of electricity." The assumptions for determining these inputs for each energy efficiency measure, as outlined in the sector reports of the Potential Study were determined using national data and local validation of those values.

The CCE is a metric for initial measure selection for further program development and does not include program related costs.

#### Reference:

Marbek Resource Consultants Ltd. 2008. Conservation and Demand Management (CDM) Potential. Newfoundland and Labrador Residential, Commercial and Industrial Sectors. Summary Report, 2008.

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<sup>&</sup>lt;sup>1</sup> "Final Report: Residential Sector" p.3, Marbek Resource Consultants Ltd.

### **IR# JRP.25S**

Need, Purpose and Rationale for the Project (Industrial Development Opportunities)

Information Request No.: JRP.25S

#### Subject - Need, Purpose, and Rationale for the Project (Industrial Development Opportunities)

#### References:

EIS Guidelines, Section 4.3.1 (Need, Purpose and Rationale of the Project) & Section 4.5.3 (Cumulative Effects)

EIS, Volume IA, Section 2.4.4.5 (Newfoundland and Labrador) & Section 9.9 (Cumulative Environmental Effects)

#### **Related Comments / Information Requests:**

CEAR # 214 (Innu Nation – IN.3) IR # JRP.245

#### Rationale:

The Guidelines state that "the EIS shall provide a comprehensive explanation of the need, purpose and rationale for the Project. The statement of the Project's justification shall be presented in both energy and economic terms, shall provide a clear description of methodologies, assumptions and conclusions used in the analysis, and shall include an evaluation of the following:

- (a) Current and forecasted provincial electricity supply and demand; (...)
- (g) Risks to the Project, in-stream flow variability, market prices and schedule delays, interest rates and other risk factors relevant to the decision to proceed with the Project; and
- (h) Projected financial benefits of the Project (including their distribution) as measured by standard financial indicators (...)" (p. 15)

To this end, the EIS indicates that "[t]here are a number of proposed and potential major industrial development opportunities in the Province, which could substantially influence the load in Labrador (...). These potential requirements will also be considered in the market portfolio development that is currently underway." (Volume IA, Section 2.4.4.5, p. 2-12).

Based on the inclusion of these opportunities in the market portfolio, more information is required in order to determine whether these opportunities create conditions that would enhance the financial viability of the Project. Financial viability is relevant to the ability of the Project to achieve its stated purpose, the financial ability of the Project to pay for planned and unplanned mitigation and monitoring, and the financial ability of the Project to provide third party stakeholders with financial and other compensation for adverse effects and financial benefits from the Project, (e.g. compensation to Innu Nation pursuant to the Impacts and Benefits Agreement referred to in *Tshash Petapen* and in the EIS).

Information Request No.: JRP.25S

#### **Information Requested:**

In addition to the information requested in JRP.25 the Proponent is asked to provide further information pertaining to the industrial development opportunities in Labrador as follows:

 Quantity, price, and schedule of energy and capacity expected to be purchased by these industrial load opportunities from the Project; if the price is not currently known, ranges can be provided based on similar power purchase arrangements at competing aluminum and mining facilities in Québec and Labrador;

#### Response

Nalcor Energy (Nalcor) has been monitoring developments in the mining sector in Labrador for some time, and is aware of a number of proposed mining activities that could result in additional demand for energy and capacity. Examples include:

- an opportunity to interconnect the Vale Inco Voisey's Bay mine site to the grid and replace local diesel generation;
- an opportunity to provide energy and capacity from the grid to a new uranium mine proposed by Aurora/Fronteer Resources; and
- an opportunity to provide energy and capacity from the grid to a new iron ore development proposed by Grand River Ironsands.

Nalcor has also been evaluating opportunities for large-scale industrial development in Labrador, including a potential aluminum smelter.

The demand for capacity and energy varies over a broad range. For example, the Duck Pond Mine on the Island of Newfoundland, operated by Aur Resources, consumes about 10 MW during normal operations. An aluminum smelter, could consume approximately 600 MW, and the largest aluminum smelter in the world, the Norsk Hydro/Qatar Petroleum Qatalum project, consumes over 1300 MW. The capacity factor required for such operations, is generally quite high, so typical energy requirements would be 0.07 TWh to approximately 11 TWh.

As indicated above, none of these opportunities has advanced to the point where schedules for such projects have been announced by the developers.

Electricity rates for energy and capacity for industrial customers in Labrador are not subject to regulation, so standardized rates are not applicable and each development is considered on a case by case basis. Consequently, a comparison cannot be drawn between rates in Labrador and those in Quebec, where standardized electricity rates are available. Rates for existing industrial customers in Labrador are also not applicable to new entrants, as the existing iron ore mines in Labrador benefit from their ownership of Twin Falls Power Corporation and its contract with CF(L)Co.

To date, no proposed mineral or industrial development has advanced its planning to the point where a concrete development plan has been announced. In particular, no developer has submitted an EIS for its project.

Information Request No.: JRP.25S

#### **Information Requested:**

In addition to the information requested in JRP.25 the Proponent is asked to provide further information pertaining to the industrial development opportunities in Labrador as follows:

b. Risks posed by the development of these industrial opportunities to the financial viability of the Project, including with respect to schedule delays in developing these opportunities, and potential financial penalties to the Project in the event of Project-related schedule delays in meeting the contracted or expected energy requirements of these opportunities; and

#### Response

An industrial customer would not be included in the market portfolio for the Project unless any risks associated with the development were mitigated. The important considerations associated with an industrial offtaker include:

- a robust business case for both Nalcor and the industrial developer, and a correspondingly high
  degree of confidence that the new development will be successful in its competitive
  marketplace;
- a creditworthy developer who has demonstrated competence and ability in construction and operations in its market sector;
- alignment on permitting and construction schedules for Nalcor's Project and the industrial development; and
- the allocation of energy and capacity to the industrial development and Nalcor's dependence on a single customer in its market portfolio.

If these conditions are met, then an industrial customer would likely be a desirable element of Nalcor's portfolio, as it would offer a greater level of diversity among customers and markets. In addition, a domestic requirement simplifies market access, as the construction of transmission lines is within the control of Nalcor in its local market.

For smaller customers, the required energy and capacity can be redirected from short term or opportunistic market sales, or energy and capacity can be acquired from other markets, so these are not considered to be a major consideration to the success of the Project.

The risks identified by the Panel are possible issues, but they would be mitigated through due diligence, appropriate oversight, effective Project planning, and alignment of construction activities.

**Information Request No.: JRP.25S** 

#### **Information Requested:**

In addition to the information requested in JRP.25 the Proponent is asked to provide further information pertaining to the industrial development opportunities in Labrador as follows:

c. Projected contribution of these industrial development opportunities to the financial benefits of the Project, using standard financial indicators.

#### Response:

Any industrial customer would be expected to pay a rate for energy and capacity that covers the Project's cost and a reasonable rate of return that is commensurate with the risks associated with the Project.

The rate of return coupled with the risk mitigation considerations outlined in part (b) of this IR provide Nalcor with reasonable assurance that an industrial development would be accretive to the Project, Nalcor, and its shareholders.

### IR# JRP.26S

**Alternatives to the Project and Alternative Means** 

**Information Request No.: JRP.26S** 

#### **Subject - Alternatives to the Project and Alternative Means**

#### **References:**

EIS Guidelines, Section 4.3.2.2 (Alternative Means of Carrying out the Project)

EIS Volume IA, Table 3.2 (Summary of Analysis of Alternative Means), Sections 3.7.7 (Muskrat Falls Generation Facility Alternatives), 3.7.7.1 (Generation Facility Layouts), 3.7.7.7 (Permanent Access Roads), 3.7.9.1 (Construction Infrastructure at Gull Island and Muskrat Falls), 3.7.9.3 (Borrow Pits and Quarries), 4.4.2.1 (Construction Infrastructure), Figure 4.23 (Construction Sequence Year 7) & Figure 4.32 (Muskrat Falls Construction Infrastructure)

#### Rationale:

n/a

Requesting Organization - Joint Review Pane

Information Request No.: JRP.26S

#### **Information Requested:**

In addition to the information requested in IR# JRP.26, the Proponent is asked to provide:

 A discussion of whether the Proponent intends to conduct further sessions with the Innu Traditional Knowledge Committee (ITKC) in light of the changes to the preferred layout and the remaining infrastructure located on the rock knoll at Muskrat Falls since previous discussions occurred;

#### Response:

The Innu Traditional Knowledge Committee (ITKC) was established as a consultation mechanism with Innu Nation during earlier planning phases of the Project, but it has since been discontinued (as of early 2009), as its mandate has been completed.

During earlier Project planning, however, details regarding the preferred layout and the basis for changes from earlier studies were reviewed in depth with the ITKC. In particular, the basis for changing the 1998 preferred layout, where diversion tunnels were sunk through the rock knoll, to the current layout was discussed in detail. The current preferred layout for the Muskrat Falls generating facility was first discussed with the Innu Task Force (ITF) in 2007. The ITF consisted of representatives from Nalcor Energy (Nalcor) (then Newfoundland and Labrador Hydro), Innu Nation and Innu Nation's technical advisor.

The rationale for the preferred layout, the requirement to abut the Muskrat Falls generating facility adjacent to the rock knoll, and the need for the transmission lines to cross to the west of the knoll, were also reviewed with the leadership of Innu Nation during the course of IBA negotiations in mid-2009.

Since this issue has been discussed in depth with the ITKC, Innu Nation's technical advisor, and with Innu Nation leadership, Nalcor does not anticipate further discussions on this matter. However, there will continue to be opportunities for Innu Nation to discuss the Project with Nalcor.

Requesting Organization – Joint Review Panel Information Request No.: JRP.26S

**Information Requested:** 

In addition to the information requested in IR# JRP.26, the Proponent is asked to provide:

 A discussion of whether and how the preferred access alternatives would change if the forestry road is not constructed on time as part of plans for District 19A and if or under what circumstances the Proponent would undertake construction of the road;

#### Response:

If the forestry road is not constructed on time as part of plans for Forest Management District 19A the preferred access would not change and the construction of the south side access road would be undertaken by Nalcor. This would not change the conclusions regarding the environmental effects predictions in the EIS.

Requesting Organization – Joint Review Panel Information Request No.: JRP.26S

**Information Requested:** 

In addition to the information requested in IR# JRP.26, the Proponent is asked to provide:

c. Presentation of any alternatives considered for routing the transmission line across the River that would avoid any permanent clearing of the rock knoll;

#### Response:

The transmission lines from the Muskrat Falls site will cross the river upstream of the powerhouse and dam, and will be routed as far to the west as practical in order to minimize any disturbance of the rock knoll. No other technically and economically feasible alternatives have been identified for the transmission line corridor for the crossing at Muskrat Falls.

Information Request No.: JRP.26S

Information Requested:

In addition to the information requested in IR# JRP.26, the Proponent is asked to provide:

d. Information on the nature of the access and activities required to clear a portion of the rock knoll in order to construct the dam;

#### Response:

Access to the north side of the dam will be achieved by extending the existing 3 km access road to the area from the Trans Labrador Highway. The existing road will be extended approximately 1.8 km around the rock knoll to the north end of the dam. Efforts will be made to minimize disturbance of the rock knoll by routing the road as far away as practical from the rock knoll. In order to construct the dam, the north end of the dam will abut the rock knoll. The area will be properly prepared by removing vegetation, overburden and weathered rock, and by grouting the subsurface rock to ensure a watertight barrier. This work will be carried out to create a solid foundation for the abutment. Clearing activities and removal of weathered rock will be limited to the minimum extent necessary as a measure to limit the extent of interaction with the rock knoll; however, the extent will be sufficient enough to ensure that the dam is solidly anchored to rock.

Requesting Organization – Joint Review Panel Information Request No.: JRP.26S

**Information Requested:** 

In addition to the information requested in JRP.26, the Proponent is asked to provide:

e. A map indicating the location of all existing and potential new quarries and borrow pit locations along both the north and south sides of the River;

#### Response:

A map indicating the location of all existing quarries and borrow areas is provided in Section 2.8.1.3, Volume III of the EIS (Figure 2-17). Additional quarry and borrow pit areas in the vicinity of Gull Island are identified in Section 4.4.1.1, Volume IA of the EIS (Figure 4-30) and is discussed on page 4-39.

Two quarries (Q-4 and Q-5) have been identified on the south side of the river in the vicinity of Muskrat Falls and a glacial till borrow area (T-1) has also been identified on the south side of the Churchill River. In addition, there is a large rock quarry near the south end of the Black Rock Bridge. The locations of Q-4, Q-5 and T-1 are provided on Attachment A.

The areas identified are preliminary and will be subject to further field investigation and consultation. Once finalized the proposed borrow areas and quarry pits will be the subject matter of an application process regulated by the Newfoundland and Labrador Department of Natural Resources, Mines and Energy Division.

Requesting Organization – Joint Review Panel Information Request No.: JRP.26S

**Information Requested:** 

In addition to the information requested in JRP.26, the Proponent is asked to provide:

f. Information on the location of suitable sources of rock materials for dam construction along the south side of the River within reasonable proximity of the proposed access road. If they do not exist on the south shore, and suitable materials must be obtained from the north side of the River (where they are known to exist), a discussion of the preferred alternatives for the construction and permanent access road is required; and

#### Response:

The locations of borrow and quarry areas containing materials for the construction of the Muskrat Falls facilities is discussed in part (e) of this IR. The layout studies for the Muskrat Falls development, completed in 2008, determined that access along the south side of the river, from Black Rock Bridge, is a viable alternate since the majority of construction materials required for the Muskrat Falls Project would come from the structure excavations on the south side of the River. The identified quarries Q-4 and Q-5 and the quarry at Black Rock Bridge, as well as the borrow area T-1 would supplement the construction material requirements.

The location of borrow and quarry areas (whether on the north or south side of the river) will not affect the preferred alternatives for the construction of permanent access roads.

Requesting Organization - Joint Review Panel Information Request No.: JRP.26S

**Information Requested:** 

In addition to the information requested in JRP.26, the Proponent is asked to provide:

g. When addressing alternative dam considerations in response to IR# JRP.26, a discussion of (i) construction of a single dam located at Gull Island, (ii) a single dam at Gull Island in combination with alternative generation sources as appropriate.

#### Response:

The chosen Project configuration consists of a generating facility at Gull Island and a generating facility at Muskrat Falls. After Gull Island, Muskrat Falls is the most attractive power generation alternative in Nalcor's portfolio.

Construction of a single dam at Gull Island, or in other words, not constructing the Muskrat Falls generating site, would not meet the stated purpose of the Project, which is to develop the hydroelectric potential of the Churchill River. Construction of a single dam at Gull Island in combination with alternative generation sources, or in other words, constructing Gull Island in conjunction with some other generation project, is also inconsistent with the stated purpose of the Project, as the second best project in Nalcor's portfolio remains undeveloped.

In either case, not constructing an attractive generating site, or constructing a less attractive development after lengthy delays for engineering design, consultation, and environmental assessment would result in an economic loss to Nalcor and its owners – the people of Newfoundland and Labrador.

Since there is no guarantee that any alternate project would be in the immediate area of Muskrat Falls, the result would be a loss of benefits to the region, including residents of Labrador, local communities, and Aboriginal groups.

As indicated above, and elsewhere in the EIS, the chosen Project configuration is a generating facility at Gull Island and at Muskrat Falls with the facilities constructed in sequence. This provides significant benefits in that:

- Costs are optimized, as resources deployed at one site can be relocated to the other without remobilization. This applies to engineering design resources, the owner team, construction equipment and facilities, as well as labour and the local business community;
- Opportunities for local participation are enhanced, as work takes place over a longer term than
  would be the case with a single project at Gull Island. This mitigates a 'boom and bust,' as
  expenditures and opportunities are spread over a longer period of time; and
- Planning for power transmission resources includes capacity for Muskrat Falls, thus reducing unit costs for both projects.

As these actions would serve to increase costs relative to a combined project, these are not desirable outcomes for Nalcor, its shareholder, and other beneficiaries of the Project.

# INFORMATION RESPONSES LOWER CHURCHILL PROJECT CEAA REFERENCE NO.07-05-26178

JOINT REVIEW PANEL

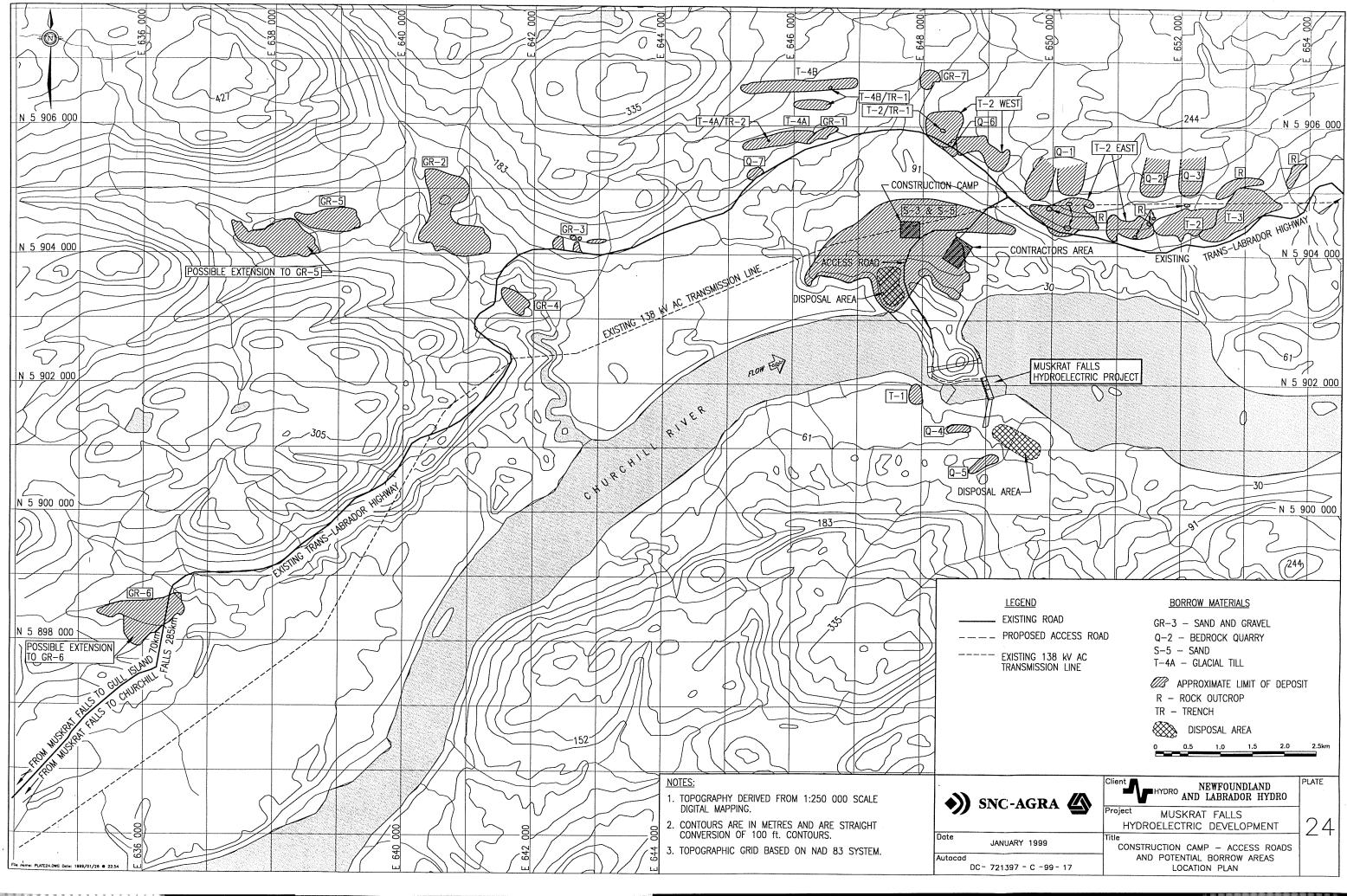
### **Attachment A**

Construction Camp – Access Roads and Potential Borrow Areas Location Plan

IR# JRP.26S

October 2009





## IR# JRP.41S Selection of Key Indicators

Information Request No.: JRP.41S

#### Requesting Organization - Joint Review Panel

**Subject - Selection of Key Indicators** 

#### References:

EIS Guidelines, Section 3.1 (Study Strategy and Methodology), Section 4.5 (Environmental Effects) & Section 4.4.1 (Identification of Issues and Selection of Valued Environmental Components)

EIS, Volume IIA, Section 2.3.7 (Lower Churchill River), Section 4.2 (Selection of Key Indicators) & Section 4.4.2 (Aquatic Environment)

EIS, Volume IIB, Section 5.2 (Selection of Key indicators)

EIS, Volume III, Section 4.3 (Selection of Key Indicators)

#### **Related Comments / Information Requests:**

CEAR # 214 (Innu Nation – IN.39, IN.49, IN.77) IR # JRP.41

#### Rationale:

n/a

Information Request No.: JRP.41S

**Information Requested:** 

In responding to JRP.41, the Proponent is asked to:

 a. Clarify how Key Indicators representative of the communities Valued Environmental Components (VEC) were selected and applied in order to understand and address concerns expressed by Innu Nation and other Aboriginal groups during early consultation; and

#### Response:

Nalcor Energy (Nalcor) selected the Key Indicators of Communities (Community Health, Social Infrastructure and Services, and Physical Infrastructure and Services) because they address the community elements in the study areas summarized in Section 4.4.4.6 of the Guidelines and because they were raised by stakeholders during consultation.

#### **Community Health**

Community Health was selected as a Key Indicator (KI) primarily because it has been identified as a key concern by Health Canada (1999) and others (e.g., Banken 1999), and because of its importance to local communities. In the latter regard; it was identified as an aspect of concern during both reviews of secondary sources and stakeholder consultation by Nalcor Energy (Nalcor).

Issues related to Community Health concerning the Innu and other Aboriginal groups in the Study Area have been well documented in the literature – academic, media, and other non peer-reviewed sources, including the 2000 report by the Innu Nation Hydro Community Consultation Team. In addition, information from the 'Aboriginal and Labradorian Peoples Health Database', compiled by Dr. Diana Gustafson, Memorial University of Newfoundland (Gustafson 2006), was used extensively in the baseline report. The database provides a comprehensive literature review concerning the Community Health issues and concerns of Innu Nation and other Labradorian Aboriginal groups.

Consultation was initiated with Innu Nation in 1998 by Newfoundland and Labrador Hydro and Hydro-Québec, and has been ongoing for the current Project since 2006 by Nalcor (and its predecessor, Newfoundland and Labrador Hydro). The Project Team and Innu Nation implemented a process for consultation on the Project in the communities of Sheshatshiu and Natuashish, and the Innu Community Consultation Team provided information and conducted consultation with Innu with respect to the Project (Volume IA, Section 8.3). More recently, other Aboriginal groups have also been consulted by Nalcor. Please refer to the responses for IR# JRP.1 and IR# JRP.2 for more information on consultation efforts to date with Innu Nation and other Aboriginal groups.

For the Community Health Key Indicator, no specific consultation was carried out with Innu Nation and other Aboriginal groups for the identification and selection of Community Health measurable parameters. However, interviews were conducted with health practitioners from the Innu community of Sheshatshiu during the data collection and baseline study phases (Aura Environmental Research and Consulting Inc. 2008).

Accordingly, the Innu concerns summarized in Volume I, Table 8-1, includes Community Health; specifically concern that more employment will worsen existing social problems. A range of Community Health concerns identified through consultation with Innu Nation is presented in The Aboriginal and Public Consultation

Summaries (Appendix IB-I, Volume IB of the EIS), including: the Project effects on stressed and vulnerable communities with social services and infrastructure operating beyond capacity, social problems associated with Project employment, increased affluence resulting in greater alienation, stress and alcohol and drug consumption, potential social rifts in communities, the effects of an influx of male construction workers, and the effects of Project employment-related absences on family life.

When assessing the environmental effects to Community Health, a determinant of health approach was adopted, based on Health Canada (1999), and as modified by Bronson and Noble (2006) based on research into the use of health determinants in environmental assessment practices in northern environments. Determinants of health are not themselves health effects; rather, they are the factors that influence or provide an indication of health and wellbeing and can be affected, either positively or adversely, by project development (Kahan and Goodstadt 1999). The emphasis of a determinants approach is not on predicting uncertain health effects and outcomes, but on identifying the linkages between project actions and the various driving forces or determinants of health and well-being (e.g., Banken 1999; Birley 2002; Bronson and Noble 2006).

For Innu Nation in particular, many community health concerns raised by Innu Nation relate to the potential for increased alcohol and drug use and the implications for criminal activity (addressed through the health services, and personal health practices and coping skills determinants), the health of the individual and the family (addressed through the income, employment and social status, and health services determinants), and the loss of the traditional way of life (addressed through the income, employment and social status, and the social environments and social support networks determinants). Other Aboriginal groups (Conseil des Montagnais de Natashquan (Natashquan) and Conseil de bande des Montagnais d'Unamen Shipu (La Romaine) have also expressed concerns specific to potential effects of the Project on traditional hunting and trapping. Many of these are ongoing issues that are of concern with or without the Project. Based on the health determinants approach, and upon review of the wealth of literature available concerning health issues and concerns in the Assessment Area, the Environmental Impact Statement (EIS) identified and focused on those parameters most sensitive to potential change or additional Project-induced stress. Most effects will be experienced indirectly through demographic change, specifically through any in-migration to and worker-community interactions within the Upper Lake Melville area, and through increased disposable income for those who find new employment as a result of the Project.

#### **Social Infrastructure and Services**

Social Infrastructure and Services was selected as a Key Indicator primarily because of its importance to local communities; in particular, it was identified as an aspect of concern during regulatory and stakeholder consultation. However, there is an overlap of issues of concern between the Community Health KI and the Social Infrastructure and Services KI, given the holistic nature of the former. For example, the Community Health KI addresses in some depth health, education and social infrastructure and services.

Thus, the Social Infrastructure and Services KI addresses, from a different perspective (in particular, through the choice of measurable parameters: Security, Education, and Housing and Accommodations), many of the concerns raised by Innu Nation (Volume IA, Table 8-1; Volume IB, Appendix IB-I. For example, concerns regarding the lack of basic education, increased Project-related demands on existing social programs, and the potential for increased abuse and domestic violence have been raised and are addressed in Volume III, Sections 4.6.5.1 and 4.6.5.2 of the EIS.

#### **Physical Infrastructure and Services**

Physical Infrastructure and Services was selected as a KI primarily because of its importance to local communities; in particular, it was identified as an aspect of concern during regulatory and stakeholder consultation. However, neither the key Innu concerns (Volume IA, Table 8-1) nor the Aboriginal and Public Consultation Summaries (Volume IB, Appendix IBI) identify the provision of Physical Infrastructure and Services among concerns expressed by Innu Nation.

#### **References:**

- Aura Environmental Research and Consulting Ltd. 2008. Community Health Study, Lower Churchill Hydroelectric Generation Project. Newfoundland and Labrador Hydro. Report No. MIN0319.13.
- Banken, R. 1999. From concept to practice: Including the social determinants of health in environmental assessment. Canadian Journal of Public Health, 90(1): S27-S30.
- Birley, M. 2002. A review of trends in health-impact assessment and the nature of the evidence used. Environmental Management and Health, 13(1): 21-39.
- Bronson, J. and B. Noble. 2006. Health determinants in Canadian northern environmental impact assessment. Polar Record, 42(4): 1-10.
- Gustafson, D.L 2006. Aboriginal and Labradorean Peoples Health Database: Research, People, Programs, and Services 2000-2005. Faculty of Medicine, Memorial University of Newfoundland, St. John's, NL.
- Health Canada. 1999. The Canadian Handbook on Health Impact Assessment: The Basics. Available on-line: http://www.hc-sc.gc.ca/hecs-sesc/ehas/publications.htm.
- Innu Nation Hydro Community Consultation Team. 2000. Power Struggle: An Innu Look at Hydro Developments in Nitassinan. Report Prepared for Newfoundland and Labrador Hydro, St. John's, NL.
- Kahan, B. and M. Goodstadt. 1999. Understanding the determinants of health: Key decision makers in Saskatchewan health districts and Saskatchewan Health, 1998. Canadian Journal of Public Health, 90(1): S47-S52.

Information Request No.: JRP.41S

**Information Requested:** 

In responding to JRP.41, the Proponent is asked to:

b. Include the riparian ecosystem, and songbirds and appropriate fish species such as brook trout, when addressing JRP.41 (b) and JRP.41 (c).

#### Response:

When preparing an EIS, it is necessary to select the environmental components so it examines those parts of the environment that best represent potential areas of concern. As it is not possible to evaluate all species or species groups, it is important that the components that are selected for analysis are appropriate and are also representative. The VECs/KIs were selected based on the principles listed in response to IR# JRP.41(a). The table below explains why the suggested items mentioned in the supplemental IR were not selected as VECs/KIs.

Component	Comments
riparian ecosystem	As indicated in Volume IIA of the EIS, the riparian ecosystem is represented by Wetland
	Sparrows, which are closely associated with Riparian Meadow, a habitat which occurs in
	approximately 0.3 percent of the lower Churchill River valley. The conservative selection of
	these species and this habitat was not only representative of the riparian ecosystem but was
	also identified as the most limited in distribution and abundance consistent with the
	precautionary approach employed for this assessment (refer to IR# JRP.19)
Songbirds	In addition to the four songbird species comprising the Wetland Sparrow KI, (Swamp Sparrows,
	Song Sparrow, Lincoln's Sparrow and Savannah Sparrow) other songbird species considered
	and assessed in the EIS include the Olive-sided Flycatcher, the Rusty Blackbird and the Grey-
	cheeked Thrush
fish species	The Fish and Fish Habitat KI included consideration of sixteen species of fish as detailed in Table
	4-16 and described in Volume IIA, Section 2.3.7 of the EIS

Based on the criteria for selection as indicated above and within the EIS, Nalcor is confident that a suitable selection of VECs and KIs was used to predict the significance of the Project's effects on the environment. Consequently, it is not necessary to add to or revise the list of Valued Environmental Components or Key Indicators which were the subject of the EIS.

### **IR# JRP.49S**

Alteration, Disruption or Destruction of Fish Habitat (Text Only)

#### **Requesting Organization – Joint Panel Review**

Information Request No.: JRP.49S

#### Subject – Alteration, Disruption or Destruction of Fish Habitat

#### **References:**

EIS Guidelines, Section 4.5 (Environmental Effects)

EIS, Volume IIA, Section 4.4 (Selection of Measurable Parameters)

#### **Related Comments / Information Requests:**

CEAR #214 (Innu Nation — IN.41) IR#JRP.49

#### Rationale:

n/a

Requesting Organization – Joint Review Panel Information Request No.: JRP.49S

**Information Requested:** 

In addition to the information requested in JRP.49, the Proponent is asked to provide:

a. Population estimates for key fish species; and

#### Response:

The assessment methodology used habitat rather than population modeling. In addition, DFO requirements are based on Harmful Alteration, Damage or Destruction (HADD) to fish habitat. The developed methodology used catch-based data (i.e., biomass) from numerous sampling techniques including gillnets, fyke nets, angling and electrofishing. Numerous techniques were necessary due to the challenges associated with both the size of the study area, the variability of the habitats and species being sampled and the capture biases of each method. Biomass has been used in this, and other studies, as a representative value of fish productivity. Catch data were used to quantify the utilization of the distinct habitat types available within the Project area for all species present. This method is also similar to other habitat quantification methods used in the province (see Bradbury et al. 2001). This approach is valid for determining predicted effects and for developing appropriate mitigation.

Population estimates would not be a useful tool for HADD determination as the DFO requirements specifically require reference to habitat.

If population estimates were made in the assessment methodology, those estimates would be based on several combined habitat types. In order for populations for separate habitat types to be valid, they would have to be successfully conducted over a relatively short time period (assumption that populations are closed). Successful population estimates (eg. mark-recapture) over the entire study area would necessitate massive effort using only live-capture techniques which may not adequately sample each habitat type.

Given the applicability of the habitat modeling approach, the deficiencies inherent in the population approach, and the requirement for a habitat model to be developed for DFO requirements, a habitat modeling approach was selected for the assessment methodology.

#### Reference:

Bradbury, C., A.S. Power and M.M. Roberge. 2001. Standard Methods Guide for the Classification/Quantification of Lacustrine Habitat in Newfoundland and Labrador. Fisheries and Oceans, St. John's, NF. 60p.

Information Request No.: JRP.49S

#### Information Requested:

In addition to the information requested in JRP.49, the Proponent is asked to provide:

b. Map(s) showing the known or predicted locations of these key species or of their specific habitat both before and after inundation.

#### Response:

Maps showing key species' relative utilization of each habitat type within the areas of inundation, both before and post-inundation are attached. Key species have been identified as those most used/fished or those that could represent a particular guild or life-history (see AMEC and Sikumiut [2007] page 115 in the Habitat Quantification report appended to the Environmental Impact Statement). Species include brook trout, ouananiche, lake whitefish, lake trout and longnose dace.

The maps present the utilization values as generated from the habitat quantification methodology (see AMEC and Sikumiut 2007 for details on their development). The greater the utilization value, the greater the relative habitat suitability.

#### Reference:

AMEC Earth & Environment and Sikumiut Evironmental Management Ltd. 2007. Lower Churchill Hydroelectric Generation Project Habitat Quantification. Prepared for Newfoundland and Labrador Hydro, St. John's, NL. viii + 129 pp. + Appendices.

## IR # JRP.70S Effects on Subsistence-Based Diet

Information Request No.: JRP.70S

#### **Subject - Effects on Subsistence-Based Diet**

#### **References:**

EIS, Volume III, Section 5.6 (Summary of Residual Environmental Effects and Evaluation of Significance – Land and Resource Use)

#### **Related Comments / Information Requests:**

CEAR # 216 (Labrador Metis Nation)
IR # JRP.70

#### Rationale:

In its submission to the Panel, the Labrador Metis Nation mentioned that "[t]he local populations of Labrador (in particular the LMN) have Subsistence Based Diet. They use the local resources (caribou, fish, and birds) for an integral and fundamental portion of their diet." (p. 16) It is unclear how the Project would affect access to the resources needed to sustain a subsistence-based diet.

In IR # JRP.70, the Proponent was asked to provide additional information on the current use and potential effects from the Project on gathering of medicinal herbs and country food plants.

Requesting Organization – Joint Review Panel Information Request No.: JRP.70S

#### Information Requested:

In addition to information requested in JRP.70, the Proponent is asked, with regards to country food obtained through hunting, fishing and gathering activities, to provide additional information on:

a. The current importance to local Aboriginal communities of hunting, fishing and gathering activities to obtain country foods;

#### Response:

Nalcor Energy (Nalcor) understands that hunting, fishing and gathering activities to obtain country foods are important to local Aboriginal communities. In consideration of this, Nalcor has developed effects management measures to address Project-related effects on harvesting activities.

The current importance of hunting, fishing and gathering to local Aboriginal communities is also being addressed by Nalcor through the on-going consultation and data collection efforts with Aboriginal groups, as detailed in the responses to IR# JRP.1, IR# JRP.2, and IR# JRP.1S/2S.

Information Request No.: JRP.70S

#### **Information Requested:**

In addition to information requested in JRP.70, the Proponent is asked, with regards to country food obtained through hunting, fishing and gathering activities, to provide additional information on:

b. The resources area(s) in which Aboriginal community members currently practice hunting, fishing and gathering activities to obtain country foods that would be lost after the reservoirs are filled and the transmission line corridor cleared;

#### Response:

Information on current locations of hunting, fishing and gathering activities is generalized, thus making it difficult to determine the exact nature of the overlap between the Project footprint and these resource areas. The information sources are provided in the "References" section. As indicated above in response to part (a) of this information request, more information on resource areas in which Aboriginal community members currently conduct hunting, fishing and gathering activities will be collected as part of ongoing consultation with Aboriginal communities.

Game species currently present in the Assessment Area will continue to be distributed throughout. With respect to the reservoirs, the Project will result in a net increase of over 11,000 ha in fish habitat. In addition, the transmission line corridors will continue to be available for hunting after the Project is constructed.

While the pattern and location of hunting, trapping and fishing activities in the Assessment Area will be altered because of the Project, populations of fish and game species are predicted to remain at levels that will continue to support harvesting activities.

#### **Labrador Innu**

Available information on the harvesting areas of the Sheshatshiu Innu is described in the EIS, Volume III, Section 2.8.16.2 and in Figures 2-21, 2-22, 2-23, 2-25, and 2-29, and also in the ITKC Report (Innu Nation 2007) included as Appendix IB-H of Volume IB. These areas are both inside and outside the Land and Resource Use Assessment Area, where interactions with the Project may occur. Information from the ITKC report indicates that fishing, hunting and trapping areas occur within the Land and Resource Use Assessment Area, although precise locations are not provided.

#### **Labrador Inuit**

Survey results presented in "Labrador Inuit Knowledge of Lake Melville" (Nunatsiavut Government 2009) indicate that respondents hunt (seal, caribou, moose, rabbit, birds), fish and trap in the Lake Melville area, but precise locations for these activities were not provided. Based on the results of the Fish Angling and Consumption Survey (Minaskuat 2009), 27.5 percent of respondents from the study area identified themselves as Inuit (Nunatsiavut Beneficiary), and it is likely that a portion of these respondents use the Assessment Area for angling activities.

The Labrador Inuit are the beneficiaries of a concluded comprehensive land claims agreement and the predicted Project effects on land and resource use do not extend into Labrador Inuit Lands or the Labrador Inuit Settlement Area (LISA). There are areas outside the LISA where Inuit rights apply to harvest of wildlife and plants under Sections 12.13.10 and 12.13.13 of the Labrador Inuit Land Claims Agreement; some of this area overlaps with the Land and Resource Use Assessment Area at the mouth of the Churchill River (please see the response to IR# JRP.16).

#### **Labrador Métis**

Hanrahan (2000) states that country food harvesting is still an important element in the livelihood of the Labrador Métis, but describes a decline in harvesting since 1949 and barriers to hunting and harvesting from various directives and moratoria concerning hunting and fishing of large and small game, freshwater and saltwater fish, seals and seabirds in Labrador. Published or publicly available sources of locations of contemporary hunting, fishing and gathering activities of the Labrador Métis are not common. Armitage and Stopp (2003) noted that Métis trappers from Happy Valley-Goose Bay have traplines between Kenamu River and Churchill River, but precise locations are not provided.

The communities closest to the Project where the Labrador Métis live include Happy Valley-Goose Bay, Mud Lake and North West River (approximately 30 km, 40 km, and 50 km, respectively). It can be expected that some of the hunting, fishing, trapping and gathering activities of the Labrador Métis will be conducted close to those communities, but areas further afield may also be used. Based on the results of the Fish Angling and Consumption Survey (Minaskuat 2009), 22.7 percent of respondents identified themselves as Labrador Metis Nation members, and it is likely that a portion of these respondents use the Assessment Area for angling activities.

#### Quebec Innu

Nalcor is aware that the Quebec Innu communities of Uashat Mak Mani-Utenam, Ekuanitshit, Nutaskuan, Unamen Shipu, Pakua Shipi and Matimekush-Lake John engage in some level of harvesting in the Land and Resource Use Assessment Area (please refer to Attachment A of the response to IR# JRP.2). Published sources of information on the location of the hunting, fishing and gathering activities of the Québec Innu in Labrador are rare. Armitage and Stopp (2003) stated that "[w]e recognize that Innu from some Québec Innu communities have used the study area (Phase III of the Trans-Labrador Highway) historically and to a lesser extent in the contemporary period", but that area is in large part outside the area that will be directly affected by the Project.

#### References:

- Armitage, Peter and Marianne Stopp. January 2003. Labrador Innu Land Use in Relation to the Proposed Trans Labrador Highway, Cartwright Junction to Happy Valley-Goose Bay, and Assessment of Highway Effects on Innu Land Use. Innu Environmental Limited Partnership, Happy Valley-Goose Bay, Labrador.
- Ashini Goupil, Serge. No date. Nation Innu du Québec et du Labrador. Available at: http://www.ashini.com/fr/pdf/Carte\_Nation\_Innu.pdf. Accessed 19 August 2009.
- DND (Department of National Defense). 1991. An Environmental Impact Statement on Military Flying Activities in Labrador and Quebec. Technical Report 12 Innu of Labrador: Profile and Harvesting Practices. Prepared by MacLaren Plansearch Limited, NS, Canada.
- DND (Department of National Defense). 1994. An Environmental Impact Statement on Military Flying Activities in Labrador and Quebec. Chapter 8 Human Environment. Canada.
- Hanrahan, Maura. 2000. Industrialization and the Politicization of Health in Labrador Métis Society. The Canadian Journal of Native Studies, 20(2):231-250.

- Henriksen, Georg. 1977. Hunters in the Barrens: The Naskapi on the Edge of the White Man's World.

  Newfoundland Social and Economic Studies No.12. Published by the Institute of Social and Economic Research, Memorial University of Newfoundland, St. John's, NL.
- Innu Nation. 2007. Innu Kaishitshissenitak Mishta-shipu (Innu Environmental Knowledge of the Mishta-shipu (Churchill River) Area of Labrador in Relation to the Proposed Lower Churchill Project). Report of the work of the Innu Traditional knowledge Committee prepared by Wolverine & Associates, Inc. for Innu Nation.
- Labrador Inuit Association. 1977. Our Footprints are Everywhere. Dollco Printing Ltd. Canada.
- Leacock, Eleanor. 1987. Chapter 7: The Innu Bands of Labrador. In Cox, Bruce A. Native People, Native Lands: Canadian Indians, Inuit and Metis. Carleton University Press, Ottawa, ON.
- Lee, Richard B. 1999. The Campbridge Encyclopedia of Hunters & Gatherers. Campbridge University Press, United Kingdom.
- LMN. 2007. Map of Labrador Métis Communities. Available at: http://www.labradormetis.ca/home/10. Accessed 17 August 2009.
- Mailhot, Jose. 1997. The People of Sheshatshit: In the Land of the Innu. Published by the Institute of Social and Economic Research, Memorial University, St. John's, NL.
- Minaskuat Inc. 2009c. Lower Churchill River Fish Consumption and Angling Survey. Report prepared for the Lower Churchill Hydroelectric Generation Project.
- Naskapi Montagnais Association. 1989. Homeland or Wasteland? Contemporary Land Use and Occupancy Among the Innu Nations of Utshimassit and Sheshatshit and the Impact of Military Expansion. Prepared by Peter Armitage.
- Nunatsiavut Government. 2009. Labrador Inuit Knowledge of Lake Melville. Report prepared by Sikumiut Environmental Management Ltd.

Information Request No.: JRP.70S

#### **Information Requested:**

In addition to information requested in JRP.70, the Proponent is asked, with regards to country food obtained through hunting, fishing and gathering activities, to provide additional information on:

c. The effects of flooding and clearing on access to these resources areas;

#### Response:

During the construction phase, access to work sites, including sections of the river (depending on the location of reservoir preparation activities), will be restricted as a result of safety considerations (please refer to the responses to IR# JRP.34, IR# JRP.38 and IR# JRP.72), and varying as reservoir preparation progresses. After the Project is operational, access will only be restricted to the generating facility sites. The reservoirs, transmission line corridor, and surrounding areas will remain accessible for hunting, fishing and gathering activities.

Where clearing, construction, and/or flooding will affect shoreline access and boat launching points, this will be mitigated by replacing them with new boat launches in locations as close as possible to existing launches (please refer to the response for IR# JRP.34). Where sections of snowmobile trails will be inundated, new sections will be established to re-connect the existing trails. When the Project is operational, the potential for boat and snowmobile travel on the reservoirs will likely increase as a result of reduced flows and increased ice cover.

Following the commissioning of the Project, and subject to safety considerations, the entire area surrounding the Project will continue to be available for traditional harvesting activities in close proximity to areas used previously.

Information Request No.: JRP.70S

#### **Information Requested:**

In addition to information requested in JRP.70, the Proponent is asked, with regards to country food obtained through hunting, fishing and gathering activities, to provide additional information on:

d. The distance Aboriginal community members would need to travel to access similar resources area(s) after flooding and clearing; and

#### Response:

As discussed in the response for part (c) above, following the commissioning of the Project, and subject to safety considerations, the entire area surrounding the Project will be available for traditional harvesting activities in proximity to areas used previously. While the pattern and location of hunting, trapping and fishing activities in the Assessment Area may be altered because of the Project, it is predicted that levels of land and resource use activities throughout the Assessment Area will be able to continue to support harvesting activities. Consequently, Aboriginal community members are not expected to be required to travel extended distances within the Assessment Area in order to access similar resources.

Information Request No.: JRP.70S

#### **Information Requested:**

In addition to information requested in JRP.70, the Proponent is asked, with regards to country food obtained through hunting, fishing and gathering activities, to provide additional information on:

e. Proposed measures to mitigate effects of the Project on access to country food resources and current and future subsistence diet-based lifestyle for Aboriginal groups.

#### Response:

As noted in the response to parts (b) and (d), the populations of game species will remain sustainable within the Assessment Area, and although there may be some local shifting of land use patterns, it is predicted that levels of land and resource use activities throughout the Assessment Area will be able to continue to support harvesting activities. As noted in part (c), major changes to access within the Assessment Area are not anticipated, and with the exception of the generating facility sites, the entire area surrounding the Project will be available for traditional harvesting activities in proximity to areas used previously. Consequently, no mitigation measures are considered necessary to address access to country food resources.

## IR# JRP.88S Air Quality (Health Impacts)

Information Request No.: JRP.88S

#### Requesting Organization - Joint Review Panel

**Subject - Air Quality (Health Impacts)** 

#### References:

EIS Guidelines, Section 4.4.4.1 (Atmospheric Environment)

EIS Volume II, Section 2.2.1.2, Table 2-1 (Ambient Air Quality Objectives); Section 3.5 (Criteria for Describing Environmental Effects); 3.6.2 (Determination of Significance, Air Quality) & Section 3.12 (Monitoring and Followup)

#### **Related Comments / Information Requests:**

CEAR # 214 (Innu Nation - IN.31 & IN.38)

IR# JRP.88

#### Rationale:

Innu Nation has expressed concerns that as a result of the way that the Proponent has defined its Assessment Area degraded air quality may result over a very large area that is not captured in the effects assessment. According to Innu Nation, "[t]he only apparent prediction made in this entire section of the EIS is that air quality will not exceed regulatory requirements at the edge of the buffer zone (...)" (Innu Nation, p. 71) but the return of air quality to regulatory limits may not be the proper measure to use in an environment where current air quality is considered "pristine" (Innu Nation, p. 61).

Little rationale or background information is given with respect to the geographic extent of the air quality assessment area or specific contaminants of potential concern.

Information Request No.: JRP.88(S)

**Information Requested:** 

In addition to the information requested in JRP.88, the Proponent is asked to:

 a. Clarify the geographic extent of the air quality assessment area that may be adversely affected by each of the contaminants of potential concern, such that ambient air quality objectives are exceeded, preferably including the use of maps to present this information;

#### Response:

A relatively large Assessment Area was selected so that any Project effects were considered in conjunction with other activities within the Assessment Area. As indicated in Section 2.2.1.2 (Volume IIA) of the EIS, the Assessment Area for Air Quality extends approximately 5 km beyond the Project footprint as well as a corridor along the Trans Labrador Highway (TLH) between Churchill Falls and Happy Valley-Goose Bay, including the Project Sites at Gull Island and Muskrat Falls and extending 500 m on either side of the highway. Note that the Project footprint encompasses all physical Project activities (e.g., dam, construction camp, reservoir preparation, access roads and associated quarries and borrow areas) as presented in Figures 4-17 to 4-26 in Chapter 4 (Volume IA) of the EIS. This Assessment Area is conservatively large enough, such that any emissions of air contaminants with the potential to cause an exceedance of Air Quality objectives would be limited to this area. Based on the assessment of potential environmental effects to Air Quality with consideration of the effective implementation of the mitigation measures during construction, and operation and maintenance, the environmental effects on Air Quality (including those related to species or habitat) in the Assessment Area are expected to be not significant. Beyond the Assessment Area, these sources of emissions would be further attenuated and of lesser consequence.

Information Request No.: JRP.88S

**Information Requested:** 

In addition to the information requested in JRP.88, the Proponent is asked to:

b. Describe those elements (species, habitat types, etc.) of the environment present throughout the Assessment Area that may be sensitive to the predicted reductions in air quality; and

#### Response:

As indicated in the response to part (a) of this IR, the potential environmental effects of the Project on Air Quality are predicted to be not significant. Small quantities of airborne dust created during construction will accumulate in terrestrial and aquatic habitats at the site of construction activity. This along with other Project effects on Air Quality, are predicted to be not significant. The consequences of the possible sensory disturbance and/or habitat alteration from airborne dust are discussed for each KI within Chapters 4 and 5 (Volumes IIA and IIB) of the EIS.

Requesting Organization – Joint Review Panel Information Request No.: JRP.88S

**Information Request:** 

In addition to the information requested in JRP.88, the Proponent is asked to:

c. Discuss whether any additional measures would be taken to address the fact that the Project would be constructed and operated in an area where the existing air quality may be considered to be "pristine".

#### Response:

The main issue regarding Air Quality and this Project is the potential for the generation of airborne dust during construction. The regulations and standards governing airborne emissions do not consider whether an area is pristine or not. The provincial ambient air quality standards consider the concentration from all sources, as indicated in Section 3.2 of the Newfoundland and Labrador Air Pollution Regulations, 2004.

As presented in Chapter 3 (Volume IIA), feasible and standard mitigation measures are proposed, including the application of dust suppressants as required, following equipment maintenance schedules (to optimize efficient operation), preservation of natural vegetation where possible and reducing activities that generate large quantities of dust during high winds. The planned mitigation (Table 3-7 in Volume IIA; and response to information requested for IR# JRP.100) is sufficient to maintain the existing 'pristine' environment.

An anti-idling policy for vehicles will be implemented. As presented in Section 7.3 dealing with Monitoring and Follow-up (Volume IIB), should complaints of excessive airborne dust occur during construction or operation, the root causes of these complaints will be determined by Nalcor Energy (Nalcor), and corrective action will be taken if warranted. Ambient monitoring of dust may be conducted if required to identify the source or extent.

## IR# JRP.97S Cumulative Effects Methodology and Analysis

Information Request No.: JRP.97S

#### Requesting Organization - Joint Review Panel

Subject - Cumulative Effects Methodology and Analysis

#### References:

EIS Guidelines, Section 4.5.3 (Cumulative Effects)

EIS Volume III, Section 3.5.5 (Socio-economic Effects Analysis and Effects Management) & Section 3.5.6 (Cumulative Socio-Economic Effects)

#### **Related Comments / Information Requests:**

CEAR #214 (Innu Nation – IN.72) IR # JRP.97

#### Rationale:

Innu Nation indicated in its submission to the Panel that "[t]he EIS presents a very vague description of on-going or new "industrial opportunities" and activities that potentially may interact with the Project. The information provided in Table 3-4 (page 3-15) is insufficient to formulate an understanding of how the combination of these other projects and the proposed Project may cumulatively impact on the economy and labour force in the Upper Lake Melville area" (Innu Nation, p. 118). The submission further stated that "[t]he EIS suggests that any other projects that result in expenditures and/or generate employment will have a positive effect on Labrador and the Province. This will only be the case if Labrador can supply the necessary goods and services. Otherwise, these projects will of necessity draw upon resources from outside of Labrador. The Proponent has not clearly established and articulated the level of goods and services that Labrador — and the Upper Lake Melville area in particular — can supply to the Lower Churchill Project or whether there is any surplus to cover other projects during the same timeframe" (Innu Nation, p 125).

Innu Nation identifies a number of additional projections, not referenced in the EIS that may overlap with the Lower Churchill Project.

**Information Request No.: JRP.97S** 

#### **Information Requested:**

To the extent that information and/or data are available, the Proponent is asked to provide in addition to the information requested in JRP.97:

a. Information regarding capital expenditures, income and employment estimates, and timelines for other confirmed and proposed projects in the Upper Lake Melville area and Labrador; and

#### Response:

Capital expenditures, income and employment estimates, and timelines for other confirmed and proposed projects in the Upper Lake Melville Area and Labrador are summarized in Table 1.

Table 1 Confirmed and Proposed Projects in the Upper Lake Melville Area and Labrador

Project	Capital Expenditure (\$ Million)	Value of Project (\$ Million)	Income Estimates (\$ Million)	Employment Estimate (persons)	Timeline	Source
5 Wing Goose Bay	70	N/A	N/A	437	1954-present	HVGB, 2009
Trans-Labrador Highway Surfacing Phase 1	55 (2009-10)	175	N/A	N/A	2007-2012	APEC, 2009
Trans-Labrador Highway Phase 3	33 (2009-10)	128	N/A	N/A	2004-2009	APEC, 2009
Additional Transmission (Labrador-Island Transmission Link)	N/A	N/A	N/A	2011-600 2012-800 2013- 1,150 2014- 100	2011-2014	Nalcor Energy, 2009
Voisey's Bay Mine	N/A	710	4,500 (over the life of the project)	450	2005-2019	Vale Inco, 2009; APEC, 2009
Shefferville Area Iron Ore Mines	30-60 (operating costs)	N/A	N/A	40 (construction: 2009) 100 (Operations: 2010-2014)	2009-2014	LIM, 2009
Wabush Mines	N/A	N/A	N/A	990	1965-present	CNR, 2009
IOC	50 (2007) (165 of total capital expenditures , 30% of which spent in NL)	N/A	202 (2007)	1819 (1451 in Lab City)	N/A	IOC, 2007; IOC, 2009
LabMag Iron Ore Project, New Millenium	N/A			810	2011-2086	WGML and BEI, 2006
Commercial Forestry	N/A	N/A	N/A	60	N/A	Schlossek et al., 2007
Bloom Lake	N/A	N/A	N/A	160 (construction) 12 (operations)	2009-2048	Consolidate d Thompson, 2007

Table 1 Confirmed and Proposed Projects in the Upper Lake Melville Area and Labrador

	Capital	Value of	Income	Employment		
Project	Expenditure	Project	Estimates	Estimate	Timeline	Source
	(\$ Million)	(\$ Million)	(\$ Million)	(persons)		
Expansion of Goose	N/A	9	N/A	N/A	2009-2010	CBC, 2008
Bay Airport						
Нарру	N/A	13.9	N/A	N/A	N/A (City is	The
Valley/Goose Bay					waiting for	Labradorian,
Sewage Treatment					funding from	2007; HVGB,
Plant					government	2009
					to begin.)	
Labrador Grenfell	N/A	20	N/A	N/A	2007-2010	NLDHCS,
Long-term Care						2007
Home Facility						
Central Labrador	N/A	N/A	N/A	N/A	N/A	
Cruise Ship						
Customs Entry						
Point						
New Campus at	N/A	27	N/A	N/A	2009	APEC, 2009
Labrador City						
Aurora Uranium	The project not likely to progress until 2011, when a 3-year uranium mining ban			APEC, 2009		
Mine	ends. There are currently no details available on the specifics of the project.					

N/A: Not Available

The expansion of the Goose Bay airport, the proposed Happy Valley-Goose Bay sewage treatment plant and the Labrador-Grenfell Long- term Care Home were all considered under "Civil Works" for the "General Economic and Infrastructural Development in the Upper Lake Melville Area" activity (Table 9.7 of Volume IA of the Environmental Impact Study (EIS)), and included within the cumulative environmental effects analyses. Information for the customs entry point was not available. The new campus at Labrador City was not included in the cumulative environmental effects analysis because of a combination of its distance from the socioeconomic Assessment Area and its relatively small value and hence limited duration. The Aurora uranium mine was screened out in accordance with Table 9.6 in Volume IA of the EIS.

#### **References:**

- APEC (Atlantic Provinces Economic Council). 2009. APEC's Major Projects Inventory 2009: Detailed Project List. Halifax, Nova Scotia: Atlantic Provinces Economic Council, 2009.
- CBC (Canada Broadcasting Chanel). 2008. 'Not just a paint job' for beleaguered Goose Bay airport. Happy Valley-Goose Bay, Newfoundland and Labrador: CBC News, 2008. Available at URL: http://www.cbc.ca/canada/newfoundland-labrador/story/2008/11/25/goose-airport.html.
- CNR (Cliffs Natural Resources) Website. 2009. Wabush Mines. Cleveland, Ohio: Cliffs Natural Resources, 2009. Available at URL: http://www.cliffsnaturalresources.com/Operations/NAIO/Pages/Wabush.aspx.
- Consolidated Thompson. 2007. Feasibility Study: Bloom Lake Project. Montreal, Quebec: Consolidated Thompson, 2007.
- HVGB (Happy Valley-Goose Bay). 2009. Website. Happy Valley-Goose Bay, Newfoundland and Labrador: Happy Valley-Goose Bay, 2009. Available at URL: http://www.happyvalley-goosebay.com.
- IOC (Iron Ore Company of Canada). 2007. IOC 2007 Sustainable Development Report. Labrador City, Newfoundland and Labrador: Ironore Company of Canada, 2007.

- IOC (Iron Ore Company of Canada). 2009. Labrador City, Newfoundland and Labrador: Iron Ore Company of Canada, 2009. Available at URL: http://www.ironore.ca
- LIM (Labrador Iron Mines). 2009. Environmental Impact Statement. Toronto, Ontario: Labrador Iron Mines. Report for Shefferville Area Iron Ore Mines, 2009.
- Nalcor Energy. 2009. Labrador Island Transmission Link: Environmental Assessment Registration. St. John's, Newfoundland and Labrador: Nalcor Energy, 2009.
- NLDHCS (Newfoundland and Labrador Department of Health and Community Services). 2007. Premier Turns Sod on Happy Valley-Goose Bay Long-term Care Home. Happy Valley-Goose Bay: Newfoundland and Labrador, 2007. Available at URL: http://www.releases.gov.nl.ca/releases/2007/exec/0627n07.htm
- Schlossek, T., D. Jennings, V. Courtois and M. Shangreaux. 2007. Five Year Operating Plan for Forest Management District 19A (Goose Bay), Operating Period: January 1, 2008 to December 31, 2012. Happy Valley-Goose Bay, Newfoundland and Labrador, 2007.
- The Labradorian. 2007. Close to a deal: Sewage treatment facility could be announced soon. Happy Valley-Goose Bay, Newfoundland and Labrador: The Labradorian, 2007. Available at URL: http://www.thelabradorian.ca/index.cfm?sid=79791&sc=347.
- Vale Inco Website. 2009. Toronto, Ontario: Vale Inco, 2009. Available at URL: http://vinl.valeinco.com/.
- WGML and BEI (Watt, Griffis and McOuat Limited and Brass Engineering International). 2006. A Technical Review of the Pre-feasibility Study of the Labmag Iron Ore Project, Labrador. Report Prepared for Labmag Services Inc. Toronto, Ontario: Watts, Griffis and McOuat Limited and Brass Engineering International, 2006.

**Information Request No.: JRP.97S** 

#### **Information Requested:**

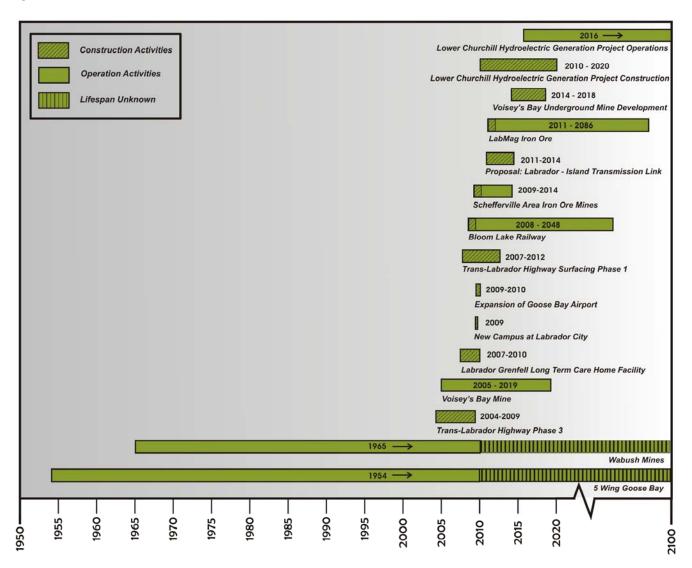
To the extent that information and/or data are available, the Proponent is asked to provide in addition to the information requested in JRP.97:

b. A chart illustrating the timelines for the Lower Churchill Project and the other confirmed and planned projects.

#### Response:

The timelines for the Project and other potential projects and activities is provided in Figure 1.

Figure 1 **Timelines** 



# IR# JRP.111S Rehabilitation Programs

Information Request No.: JRP.111S

**Subject - Rehabilitation Programs** 

**References:** 

EIS, Volume IA, Section 4.6.1 (Project Description – Construction Site Restoration)

**Related Comments / Information Requests:** 

CEAR # 214 (Innu Nation – IN.14) IR # JRP.111

Rationale:

n/a

Information Request No.: JRP.111S

#### **Information Requested:**

In addition to the information requested in JRP.111, the Proponent is asked to provide:

a. The timing of the development of the Project Construction Restoration Plan, if and how the Proponent intends to engage the public and Aboriginal groups in its development, and the regulatory agencies that will be involved in design, approval and enforcement;

#### Response:

Detailed site-specific rehabilitation plans, including associated procedures, will be developed during the detailed design phase, prior to the start of construction. The development of these plans will be done in consultation with stakeholders and in compliance with regulatory requirements. Following finalization the plan will be submitted to the appropriate regulator and stakeholders (including aboriginal groups) for review and comment. Regulatory agencies that will be involved in the design, approval and enforcement are included in, but not limited to, the list provided in Table 1 below.

Table 1 Summary of Regulatory Involvement for Site Rehabilitation

Regulatory Agency	Area of Involvement		
Newfoundland and Larbador Department of Environment and Conservation	Conditions of environmental assessment release related to site rehabilitation and restoration.		
	Conditions of permit to alter a body of water related to culvert and bridge removal and shoreline rehabilitation.		
	Conditions of permit for fuel storage and handling related to the rehabilitation and restoration of fuel storage areas.		
Newfoundland and Labrador Department of Municipal Affairs	Conditions of permit for access off of any highway related to access road rehabilitation and restoration.		
Newfoundland and Labrador Department of Health and Community Services	Conditions of Septic System permit related to rehabiliation of construction camp.		
Newfoundland and Labrador Department of Natural Resources	Conditions of Quarry Development permit related to rehbilitation and restoration of quarries and borrow areas.		
Canadian Environmental Assessment Agency	Conditions of environmental assessment release related to site rehabilitation and restoration		

In addition to the above permits and associated conditions Nalcor Energy (Nalcor) will also comply with relevant sections of the following when applying site rehabiliation and restoration measures:

- Newfoundland and Labrador Department of Natural Resources Environmental Guidelines for Construction and Mineral Exploration Companies; and
- Newfoundland and Labrador Department of Environment and Conservation Environmental Guidelines for General Construction Practices.

**Information Request No.: JRP.111S** 

**Information Requested:** 

In addition to the information requested in JRP.111, the Proponent is asked to provide:

b. Measures to be taken to prevent invasion of rehabilitated sites by non-native plant species;

#### Response:

Measures to prevent the invasion of rehabilitated sites by non-native plant species will be in accordance with regulatory requirements and industry best practice. Such practices include but are not limited to:

- use of native plant and soil material for restoration, rehabilitation and revegetation;
- where local plants are not available or will not meet the restoration and restoration objectives only species that are non-aggressive and non-persistent will be used; and
- additional materials to limit erosion, reduce sedimentation or enhance establishment may be required in some cases. Measures will be taken to reduce the risk that the material contains nonnative seed.

Other measures will be directed to remove non-native plant species, should they appear. Such measures may include, but are not limited to, manual removal, spot treatment, and herbicide application methods.

The effectiveness of the above measures will be monitored and adaptive management implemented to ensure the objectives of the restoration and rehabilitation program are met.

Requesting Organization – Joint Review Panel Information Request No.: JRP.111S

**Information Requested:** 

In addition to the information requested in JRP.111, the Proponent is asked to provide:

c. Details on the rehabilitation measures proposed for quarries and borrow pits;

#### Response:

Quarries and borrow pits will be rehabilitated as per the conditions of any quarry permits issued and in accordance with industry best practice. Rehabilitation plans will, at a minimum, meet the measures outlined in the Environmental Guidelines for Construction and Mineral Exploration Companies (Department of Natural Resources 2005) which state:

"Regardless of location or size, all pits must be restored before abandonment. Restoration steps to be taken before abandonment are:

- clean up;
- drainage and erosion control;
- recontouring;
- overburden replacement;
- revegetation.

Although the pit and surrounding areas should be kept as clean as possible throughout the operation, any garbage or debris must be completely disposed of at an approved waste disposal site prior to pit abandonment. When revegetation is required, adequate drainage control measures must be taken. These might include:

- constructing a berm at the top of the slope to stop water from running into the pit;
- laying brush and slash across the slope to slow run-off and hold back sediment; and
- directing run-off away from the pit by cutting drainage ditches or pumping.

When the pit is totally abandoned, the slopes of the pit should be graded to a suitable angle of repose no steeper than two horizontal to one vertical (2:1). The final shape of the pit should blend into the natural contour of the land. If pit walls cannot be graded to the suitable angle of repose (2:1), the recontoured slope should be gently stepped to help reduce erosion.

All overburden removed and stockpiled when the pit was opened up must be spread evenly over the pit floor and the recontoured side walls. If the pit was designed properly, there should have been a space left between the overburden stockpile and the surrounding forest so that equipment can easily get behind the overburden to push it down into the pit. The topsoil stored/salvaged, if any, when the pit was opened, must now be spread over the overburden. The topsoil contains seeds and organic material that will help vegetation regrow. Without any topsoil, natural revegetation is a much slower process.

Once the pit has been recontoured and any overburden and topsoil have been replaced, one of the following decisions must be made in consultation with the Department of Environment and Conservation keeping in mind the final land use and factors such as climate, type of surface and its moisture holding capabilities:

- allow natural revegetation with no assistance;
- allow natural revegetation with some assistance; or
- completely assist revegetation.

Generally, the best guide is to undertake a revegetation method that encourages a return to conditions as close as possible to those that existed before operations commenced."

Information Request No.: JRP.111S

# **Information Requested:**

In addition to the information requested in JRP.111, the Proponent is asked to provide:

d. A discussion on the effectiveness of past rehabilitation activities within the region and lessons learnt that are applicable to this Project;

# Response:

A discussion on the effectiveness of past rehabilitation activities within the region and lessons learned that are applicable to this Project are summarized in Table 2 below.

Table 2 Summary of Past Rehabilitation Activities within the Region and Lessons Learned

Project	Program	Lessons Learned
Voiseys Bay Mine	VBNC adopted a progressive approach to site rehabilitation and reclamation. Revegetation began in July 2006 with a focus on exposed slopes and earthen stockpiles generated during construction of the mine and concentrator. In total, 12 hectares if disturbed land was revegetated (VBNC 2006).  Vale Inco's focus in 2007 involved rehydroseeding areas previously completed in 2006, reclamation of the construction campsites and rehabilitation of a quarry. Upon removal of structures at the campsite the surface area was graded and prepared for hydroseeding. Soil berms and topsoil salvaged during the original site preparation was recovered and spread over some of the exposed area (Vale Inco 2007).	Despite a late start to the program the seed combination of winter wheat barley and oats did grow when applied with high grade mulch and fertilizers (VBNC 2006).  An assessment of previous year's hydroseeding revealed that some areas had successful germination of seeds that overwintered. Significant germination of the 2007 hydroseed was noted in areas completed early in the program. However it was noted that the short growing season affected germination of hydroseed applied late in the summer. Seed mixtures applied in the future will consist predominately of species (winter wheat and winter rye) which are able to survive the first winter after application and germinate the following spring (Vale Inco 2007).  Significant effort was required to complete the demolition of the construction camp site (Vale
	Experimental efforts with tree planting were also completed. Approximately 200 trees were planted over five test plot areas (Vale Inco 2007).	Inco 2007).  An assessment was to be conducted in 2008 (Vale Inco 2007) to determine the success; results were not available at the time of submission of this document.

Project	Program	Lessons Learned
IOC – Labrador	A pilot wetlands area was created in 2003 at	A biodiversity survey was conducted to identify
City	Patterson Pond, a man-made pond located at	use of the site by small mammals and other
	the tailings area. In 2004, IOC excavated two	animals. This study was valuable in providing IOC
	new wetlands near the Pond to provide habitat	with an understanding of land use by animals to
	for waterfowl and planted several hundred	allow for planning regarding habitat protection
	meters of shoreline with over 10,000 aquatic	and enhancement (IOC 2004).
	plants. The leftover topsoil from the excavation	
	was shaped to match the surrounding	
	landscape and seeded with grasses to provide	
	habitat and cover for small animals (IOC 2004).	
	Rehabilitation was completed at 16 hectares	The tailings biodiversity project and wetlands
	across the mine and tailings areas in Labrador	development is predicted to result in diverse
	City (IOC 2004).	habitats rather than a monoculture of grasses that
		is the traditional method of stabilization. Through
		a use of the inert tailings mixture of rock and sand
		wetlands, uplands and riparian areas formation is
		predicted (IOC 2005).
	During the 2005 revegetation campaign over 30	
	hectares was successfully rehabilitated across	
	the site. A surface area of 21.8 hectares was	
	revegetated on tailings. A surface area of	
	approximately 0.5 hectares was revegetated on	
	a roadside utilizing leftover seeds and fertilizers	
	from other works conducted during the season.	
	Approximately 1.5 hectares along a service road	
	was re-fertilized in 2005. At the mine, 8.5	
	hectares in total were revegetated at a haulage	
	road embankment and 6 hectares were	
	completed using a broadcast technique, while	
	the remaining 2.6 hectares were hydro-seeded.	
	In addition, 11 hectares of re-fertilization	
	occurred (IOC 2005).  Fish and waterfowl habitat at Patterson Pond	The new fish habitat channel, created across the
	was enhanced in 2005 through an engineering	tailings area through the reshaping of a diversion
	and construction project that created a	canal, left approximately 5 hectares of surface
	meandering stream and associated grasslands	area completely barren and exposed to wind
	(IOC 2005).	erosion - this area was stabilized through
	(100 2003).	adequate hay mulching (IOC 2005).
	Rehabilitation was successfully completed on 30	No further information was provided on the
	hectares of land (IOC 2006).	rehabilitation program.
	Rehabilitation was completed on 34 hectares of	No further information was provided on the
	inactive tailing areas (IOC 2007).	rehabilitation program.
Nalcor Energy -	Upon completion of construction quarries,	This program was very successful in establishing
Granite Canal	borrow areas, campsite, and temporary roads	riparian vegetation in the area of the fish
	were rehabilitated. Rehabilitation was also	compensation facilities.
	carried out along the transmission line. The	
	rehabilitation of these sites mainly consisted of	
	returning the areas to a natural slope.	
	Revegetation and stabilization were carried out	
	in the area of the fish habitat compensation	
	facilities along the side slopes of the channel.	I

# **References:**

Iron Ore Company of Canada, Social & Environment Report, 2004.

Iron Ore Company of Canada, Social and Environment Report, 2005.

Iron Ore Company, Sustainable Development Report, 2006.

Iron Ore Company, Sustainable Development Report, 2007.

Voisey's Bay Nickel Company, 2006 Environmental Progress Report, 2006.

Vale Inco, Labrador Operations 2007 Environmental Performance Report, 2007.

Information Request No.: JRP.111S

### **Information Requested:**

In addition to the information requested in JRP.111, the Proponent is asked to provide:

 Measures proposed to rehabilitate fuel storage areas, including fuel caches, and water disposal and sewage disposal areas, including how the effectiveness of rehabilitation activities will be measured; and

#### Response:

Site rehabilitation and restoration for fuel caches will, at a minimum, comply with the conditions of any permit issued for fuel handling and storage. The approach to restoration will start with prevention which will include proper fuel handling and storage to minimize and prevent the contamination of soil by petroleum products. These measures are outlined in Volume IA of the EIS, Section 4.8.2.4 – Storage, Handling and Transfer of Fuel and Other Hazardous Material. The aboveground storage tank system will be emptied of all liquids and vapours. The tanks and dykes will be dismantled and removed. The soil under the tank will be analyzed for petroleum products and any soil contaminated by leaks or spills will be excavated, stored and disposed at a licensed disposal site.

Site rehabilitation and restoration for water disposal and sewage disposal areas, will, at a minimum comply with the conditions of any permits issued for water and sewage disposal and industry best practice.

As stated in Volume IA of the EIS, Section 4.6.1.1, benchmarks for success of site rehabilitation and restoration will relate to the establishment of stable surface areas (e.g., with vegetative growth) and the avoidance of erosion and slumping. Additional measures of effectiveness will be incorporated into the follow-up program for site restoration as dictated by conditions of permits and industry best practice.

Requesting Organization – Joint Review Panel Information Request No.: JRP.111S

**Information Requested:** 

In addition to the information requested in JRP.111, the Proponent is asked to provide:

f. A description of the expected environmental conditions following site restoration and rehabilitation with respect to the statement in the EIS that the Proponent intends "to return work sites to an environmentally appropriates state" (Volume IA, p. 4-62).

### Response:

The expected environmental conditions following site restoration and rehabilitation will, at a minimum, comply with conditions of any permit issued and industry best practice. The objectives of the proposed site restoration and rehabilitation programs will be to achieve final site stabilization and enable future landscaping to flourish. As stated in Volume IA of the EIS, Section 4.6.1, all temporary surface infrastructures associated with construction that is not required for operations will be dismantled and removed. Permanent drainage patterns will be established at the site through grading. Natural revegetation of disturbed surfaces will be encouraged where applicable and where required. Appropriate active revegetation will be conducted in selected areas.

# IR# JRP.112S Monitoring and Follow-Up

Information Request No.: JRP.112S

#### Requesting Organization - Joint Review Panel

**Subject - Monitoring and Follow-Up** 

#### References:

EIS Guidelines, Section 2.5 (Precautionary Principle), Section 3.1 (Study Strategy and Methodology) & Section 4.6.4 (Monitoring and Follow-up Programs);

EIS, Volume I, Section 9.10 (Monitoring and Follow-up for Valued Environmental Components)

EIS, Volume IIA, Section 3.12 (Monitoring and Follow-up – Atmospheric Environment); Section 4.17 (Monitoring and Follow-up – Aquatic Environment)

EIS, Volume IIB, Section 5.16 (Monitoring and Follow-up – Terrestrial Environment)

EIS, Volume III, Section 4.7.5.1 (Income, Employment and Social Status), Section 4.9 (Monitoring and Follow-Up), Section 8.0 (Conclusions and Sustainability) & Section 8.4.1 (Precautionary Approach)

#### **Related Comments / Information Requests:**

CEAR # 214 (Innu Nation – IN.27 & IN.85) IR # JRP.112

#### Rationale:

The EIS Guidelines require the EIS to describe how the results of monitoring and follow-up programs will be used to refine or modify the design and implementation of management plans, mitigation measures and Project operations.

The EIS states that responsibility for monitoring and follow-up of Project effects and mitigation on community physical, social and health infrastructure and services would fall to agencies and organizations who currently deliver such services. The Proponent commits to provide Project-related data on employment, traffic, solid waste and methylmercury however these commitments do not meet the requirements of the EIS Guidelines.

The Proponent assumes that in-migration would be limited, with little Project-related increase in demand for community infrastructure and services. In this regard, the Proponent commits to "consult regularly with the relevant agencies and organizations to provide Project information and to identify and discuss potential Project-related implications for local Social Infrastructure and Services and ways to address those issues" (Volume III, p. 4-25). The EIS does not indicate whether or how the Proponent would consult with these agencies or fund and implement adaptive management measures should there be significant increase in Project-related demand for community infrastructure and services.

Requesting Organization – Joint Review Panel Information Request No.: JRP.112S

Information Requested:

In addition to the information requested in IR # JRP.112, the Proponent is asked to indicate:

 a. How it plans to establish suitable baseline information relating to physical/social/health infrastructure and services for Aboriginal communities affected by the Project against which to compare Project-related changes;

### Response:

The baseline information relating to physical/social/health infrastructure and services for Aboriginal communities in the Assessment Area is summarized in Volume III, Sections 2.5.3.1, 2.5.3.4, 2.5.3.5, 2.5.3.6, 2.6.2 to 2.6.4, 2.6.5.2, 2.6.6.4, 2.6.7, and 2.7.2.2 to 2.7.2.10 of the EIS, and presented in detail in the Socio-Economic component study 2 of 6, Community Health Study (Aura 2008) and Environmental Impact Statement (EIS) Socio-Economic component study 3 of 6, Socio-Economic Environmental Baseline Report (Minaskuat 2008) For additional baseline information on these services, Nalcor Energy (Nalcor) relies on the government authorities and municipalities who provide those services through the process outlined in IR# JRP.108 (e.g., Newfoundland and Labrador Department of Transportation and Works, Indian and Northern Affairs, Newfoundland and Labrador Department of Transportation and Works, Indian and Labrador Housing Corporation). An example of this would be the condition of roads in the Upper Lake Melville area, for which Nalcor would interface with the Newfoundland and Labrador Department of Transportation and Works. This Department would have the most up-to-date and authoritative information on road conditions in the area, which would be used to establish the baseline.

Information Request No.: JRP.112S

### **Information Requested:**

In addition to the information requested in IR # JRP.112, the Proponent is asked to indicate:

 What adaptive management measures would be implemented should there be significant increase in Project-related demand for community infrastructure and services (Aboriginal and non-Aboriginal communities affected by the Project);

### Response:

As outlined in IR# JRP.112 the Nalcor Adaptive Management Process is based on data collected to address specific Follow-up Programs. If, through this process, a significant increase in demand for any service would be detected a plan would be put into place to increase the service or reduce the demand. Because no specific demand is identified above, it is difficult to provide specific adaptive management measures, however, an example is provided below:

Shortage of Medical Staff – If a Follow-up Program determined that as a result of the project there was a significant increase in the demand for medical staff in HVGB; a plan would be put in place by Nalcor to mitigate the situation. Elements of the plan are difficult to specify in detail but it could deal with either reducing the demand on local medical staff (i.e. increasing medical staff at work camps) or increasing the supply in HVGB (working with the Labrador Grenfell Health to find and acquire more trained staff). There may be a third approach that would be displacement of activities by working with Labrador Grenfell Health to provide for patients to obtain medical services at another location outside the area.

It is important to note here how the process would function:

- 1. Collection of specific data.
- 2. Working through established local infrastructure providers who would provide baseline data.
- 3. Identification of a problem using a defined method in a Follow-up Program, and
- 4. Identification and implementation of specific mitigation measures to reduce the impact identified as per the Adaptive Management Process.

Please also see response to IR# JRP.108.

Information Request No.: JRP.112S

### **Information Requested:**

In addition to the information requested in IR # JRP.112, the Proponent is asked to indicate:

c. The role it envisions for Aboriginal and non-Aboriginal communities to ensure that they are involved in monitoring/follow-up/mitigation/adaptive management programs;

### Response:

Aboriginal and non-Aboriginal communities are involved with the agencies that will provide input to Nalcor in the development of their Monitoring and Follow-up Programs with respect to demand and use of social services and infrastructure. Input will be obtained either by direct consultation by Nalcor with the community (both Aboriginal and non-Aboriginal) or through consultation with the appropriate government agency. Each of the follow-up plans will have the components identified in IR# JRP.112 which include:

- a. Objectives
- b. Frequency
- c. Duration
- d. Geographic extent
- e. Methodology
- f. Reporting

Both Aboriginal and non-Aboriginal groups are involved with the development of mitigative measures for the Project through their participation in the Environmental Assessment process. The review of the effectiveness of the mitigative measures after the construction of the project will be done through the Follow-up Programs and Adaptive Management Process outlined in response to IR# JRP 112. In addition, Nalcor will continue to consult with Aboriginal and non-Aboriginal communities to allow for these communities to provide information to Nalcor, and to identify where their participation in such programs would be appropriate.

Information Request No.: JRP.112S

**Information Requested:** 

In addition to the information requested in IR # JRP.112, the Proponent is asked to indicate:

d. Ways in which holders of Aboriginal traditional and community knowledge, including elders, women and youth, will be involved in each proposed monitoring and follow-up program; and

# Response:

As discussed in responses to IR# JRP.1 and IR# JRP.2, and IR# JRP.1S/2S, Nalcor is continuing and will continue to consult with Aboriginal groups who may be affected by the Project. Part of the consultation will deal with finalizing and implementing monitoring, follow-up, mitigation and adaptive management measures as well as the incorporation of traditional and community knowledge, elders, women and youth in these plans. Because each Monitoring and Follow-up Program will be specific to an issue, the involvement and incorporation of traditional and community knowledge will vary for each specific Monitoring and Follow-up Programs.

Requesting Organization – Joint Review Panel Information Request No.: JRP.112S

**Information Requested:** 

In addition to the information requested in IR # JRP.112, the Proponent is asked to indicate:

e. The proposed source of funding for such programs.

# Response:

As discussed in response to IR# JRP.112, as appropriate, Nalcor will be responsible for managing, conducting and reporting on monitoring and follow-up, as well as implementation of efforts to address deficiencies noted during the monitoring and follow-up. Nalcor's responsibility for monitoring and follow-up of project effects on social services and infrastructure is discussed in response to IR# JRP.108.