

Lower Churchill Hydroelectric Generation Project Joint Review Panel

Lower Churchill Joint Review Panel Secretariat, 33 Pippy Place, P.O. Box 8700, St. John's, NL A1B 4J6, Tel: 709-729-7720
Canadian Environmental Assessment Agency, 160 Elgin Street, 22nd Floor, Place Bell Canada, Ottawa, ON K1A 0H3, Tel: 613-948-1364

January 25, 2011

Mr. Charles Bown
Assistant Deputy Minister (A)
Energy Policy
Department of Natural Resources
Confederation Building
Prince Philip Drive, P.O. Box 8700
St. John's NL A1B 4J6

Sent by e-mail: cdown@gov.nl.ca

Subject: Lower Churchill Hydroelectric Generation Project – Invitation to participate in the public hearing and prepare submission to Joint Review Panel

Dear Mr. Bown:

The Joint Review Panel for the Lower Churchill Hydroelectric Generation Project (the Panel) has completed its review of the Environmental Impact Statement (EIS) and additional information submitted by Nalcor Energy for the Lower Churchill Hydroelectric Generation project (the Project) and has concluded that there is sufficient information to proceed to public hearing. The Panel has announced the public hearing and would like your department to participate in the hearing and in particular in the topic-specific sessions that pertain to your mandate.

The Panel has identified your department as having expertise that could assist the Panel in its determination of the significance of the effects of the Project. As per section 7.1 of the *Agreement Concerning the Establishment of a Joint Review Panel for the Environmental Assessment of the Lower Churchill Hydroelectric Generation Project*, at the Panel's request, a federal or provincial government department or agency shall provide information or knowledge when it has the expertise to do so. The Panel is interested in obtaining your department's views on whether the EIS and supplemental information adequately identify impacts, risks and uncertainties of the Project, including the significance of the environmental effects.

The attached document includes a preliminary list of issues related to federal and provincial departmental mandates that the Panel would like departments to consider and discuss in the public hearing. Departmental representatives present at the hearing should be well versed in the Project and its potential effects related to your mandate.

<http://www.ceaa-acee.gc.ca> Registry number 07-05-26178

The document also includes a list of relevant topic-specific sessions where your expertise may be required.

Your department is also invited to provide its views on recommendations should the Project proceed. Detailed information is required to support your conclusions.

We recommend that you plan to be present at all the topic-specific sessions relevant to your mandate, recognizing that minor changes to the released schedule may be required. The Panel will make every attempt to keep parties informed of changes to the schedule during the hearing.

Please confirm your attendance by February 21, 2011. For submission deadlines, please see the schedule released by the Panel on January 24, 2011 and send your submission by e-mail to lowerchurchill.review@ceaa.gc.ca or to comments@lcsec.nl.ca. If you have any questions you may contact Livain Michaud at (613) 948-1359 or Thomas Graham at (709) 729-7720.

Yours truly,

<original signed by>

<original signed by>

Lesley Griffiths
Co-Chair

Herb Clarke
Co-Chair

Attachment: Preliminary list of issues related to federal and provincial departments' mandate and expertise

C.c. Mr. Paul Carter, Environmental Assessment Division, Department of Environmental and Conservation (sent by email: PCarter@gov.nl.ca)

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PRELIMINARY LIST OF ISSUES RELATED TO FEDERAL AND PROVINCIAL DEPARTMENTS' MANDATE AND EXPERTISE

DEPARTMENT	REQUIRED EXPERTISE	RELATED TOPIC-SPECIFIC SESSION(S)
Fisheries and Oceans Canada	<ul style="list-style-type: none"> • Effects on aquatic ecosystems and fish and fish habitat (e.g. erosion and sedimentation, changes in water flows, water quality, biodiversity, habitat availability) • Fish habitat utilization methodology (e.g. habitat quantification, data collection) • Methylmercury in fish (e.g. fish health, effects of alternative vegetation removal strategy on the aquatic environment, downstream bioaccumulation) • Effect on ice regime (e.g. frazil ice, ashkui development) • Effects on groundwater (e.g. saltwater intrusion, upwelling) • Effects downstream from Muskrat Falls (e.g. entrainment, water flows) • Effects of transportation of materials and vessel traffic (e.g. port traffic) on fish and fish habitat • Mitigation and compensation plan and strategy (e.g. adaptive management, physical works) • Monitoring and follow-up required (e.g. field program details, data collection parameters) 	<p style="text-align: center;">Reservoir Preparation</p> <p style="text-align: center;">Aquatic Environment</p> <p style="text-align: center;">Environmental Management, Monitoring and Follow-Up</p> <p style="text-align: center;">Cross-Cutting Issues</p>
Transport Canada	<ul style="list-style-type: none"> • Effects on river navigation and from vessel traffic through the port of Goose Bay • Production, dissemination, communication and maintenance of navigational hazard information • Impacts on air traffic (e.g. existing Goose Bay airport capacity, expansion requirements) • Mitigation, monitoring and follow-up measures 	<p style="text-align: center;">Reservoir Preparation</p> <p style="text-align: center;">Economic Impacts</p> <p style="text-align: center;">Social and Cultural Impacts</p> <p style="text-align: center;">Environmental Management, Monitoring and Follow-Up</p> <p style="text-align: center;">Cross-Cutting Issues</p>

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DEPARTMENT	REQUIRED EXPERTISE	RELATED TOPIC-SPECIFIC SESSION(S)
Environment Canada	<ul style="list-style-type: none"> • Effect of water quality impacts on wildlife (e.g. otters, osprey) • Impacts on drinking water supply and quality • Greenhouse gases • Impact determination and methodology for terrestrial ecosystems and species (e.g. biodiversity, habitat availability, predator-prey interactions) • Specific impacts on terrestrial habitat types (e.g. riparian, woodland and wetland habitat) • Recovery strategy and status of caribou herds • Impact determination and methodology on rare plants • Mitigation measures (e.g. riparian and wetland habitat, rare plants, species-specific mitigation) • Emergency Preparedness and Emergency Response Plans (e.g. wastewater, hazardous materials, hydrocarbon storage) • Monitoring and follow-up required (e.g. field program details, data collection parameters) • Fate of mercury in aquatic and terrestrial systems from reservoir preparation and flooding (e.g. alternative soil and vegetation removal strategies, mitigation options) • Impact determination and methodology related to methylmercury contamination (e.g. groundwater and soil) and bio accumulation implications for terrestrial species 	<p>Reservoir Preparation</p> <p>Atmospheric Environment</p> <p>Aquatic Environment</p> <p>Terrestrial Environment</p> <p>Environmental Management, Monitoring and Follow-Up</p> <p>Cross-Cutting Issues</p>
Natural Resource Canada	<ul style="list-style-type: none"> • Seismic activity (e.g. neotectonic reactivation of faults) • Slope stability and mass movement • Fate of mercury in aquatic and terrestrial systems from reservoir preparation and flooding (e.g. alternative soil and vegetation removal strategies, mitigation options) • Impact determination and methodology related to methylmercury contamination (e.g. groundwater and soil) • Hydrogeology impacts (e.g. groundwater contamination, salt water intrusion) • Mitigation, monitoring and follow-up measures (e.g. fault examination, seismography, slope stability) 	<p>Reservoir Preparation</p> <p>Terrestrial Environment</p> <p>Aquatic Environment</p> <p>Environmental Management, Monitoring and Follow-Up</p> <p>Cross-Cutting Issues</p>

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DEPARTMENT	REQUIRED EXPERTISE	RELATED TOPIC-SPECIFIC SESSION(S)
Health Canada	<ul style="list-style-type: none"> • Impact determination and methodology related to methylmercury and bio accumulation implications on human health • Human health risk assessment and fish consumption public advisories • Monitoring of the Project's impact on community health (including changes related to increased mercury levels) • Impacts on drinking water supply and quality • Monitoring and follow-up required (e.g. groundwater quality, sampling regime) 	Aquatic Environment Social and Cultural Impacts Environmental Management, Monitoring and Follow-Up Cross-Cutting Issues
Indian and Northern Affairs	<ul style="list-style-type: none"> • Monitoring of the Project's impact on community health and delivery of health and social services for Aboriginal communities. 	Social and Cultural Impacts Environmental Management, Monitoring and Follow-Up Cross-Cutting Issues
Environment and Conservation	<ul style="list-style-type: none"> • Herbicides control • Natural Areas System Plan Strategy 	Terrestrial Environment

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DEPARTMENT	REQUIRED EXPERTISE	RELATED TOPIC-SPECIFIC SESSION(S)
Environment and Conservation - Wildlife	<ul style="list-style-type: none"> • Management, enforcement and monitoring of natural resources within Labrador, including current and future human, financial and operational capacity • Project impacts on terrestrial ecosystem • Recovery strategy and status of caribou herds • Impact determination and methodology on terrestrial wildlife species (e.g. habitat modeling, classification, significance, data collection) • Specific impacts on terrestrial wildlife species (e.g. population trends, habitat use, abundance and distribution) • Specific impacts on terrestrial habitat types (e.g. riparian, woodland and wetland habitat) • Impact determination and methodology on rare plants • Mitigation and compensation measures (e.g. wetland habitat, rare plants, caribou and other species-specific mitigation) • Monitoring and follow-up required (e.g. field program details, data collection parameters) 	<p>Reservoir Preparation</p> <p>Terrestrial Environment</p> <p>Environmental Management, Monitoring and Follow-Up</p> <p>Cross-Cutting Issues</p>
Environment and Conservation - Water Resources Management	<ul style="list-style-type: none"> • Dam design approval, safety and monitoring • Baseline water quality information for the Lower Churchill • Ice modeling and dynamics (e.g. ice crossing requirements) • Impacts to groundwater quality, drinking water supply and quality and alternative water sources • Monitoring and follow-up required (e.g. water quality, salt intrusion, sampling regime, provincial and proponent responsibility, ice modeling) 	<p>Reservoir Preparation</p> <p>Aquatic Environment Economic Impacts</p> <p>Social and Cultural Impacts</p> <p>Environmental Management, Monitoring and Follow-Up</p> <p>Cross-Cutting Issues</p>
Environment and Conservation - Labrador Crown Lands Administration Division	<ul style="list-style-type: none"> • Required policy and regulatory adjustments for road access • Authorizations 	Economic Impacts
Natural Resources	<ul style="list-style-type: none"> • Women's Employment Plan 	Economic Impacts

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DEPARTMENT	REQUIRED EXPERTISE	RELATED TOPIC-SPECIFIC SESSION(S)
Natural Resources - Forestry Services	<ul style="list-style-type: none"> • Forest harvesting techniques and industry standards • 5-Year Operating Plan for Forest Management District 19 • Forestry activity in Labrador • Markets for merchantable timber and by-products • Statistics on the cause, size and frequency of forest fires in Labrador and services available to fight forest fires – particularly in the Upper lake Melville area. • Monitoring and follow-up required 	Reservoir Preparation Terrestrial Environment Economic Impacts Environmental Management and Follow-Up Cross-Cutting Impacts
Natural Resources - Mines	<ul style="list-style-type: none"> • Acid Rock Drainage (e.g. study methodology and results) 	Reservoir Preparation Environmental Management and Follow-Up
Natural Resources - Energy Policy	<ul style="list-style-type: none"> • Provincial energy policy, including energy plan for Labrador communities • Alternate forms of energy, including natural gas • Provincial demand management and energy conservation programs • Current cost of energy to consumers • Economic development strategy for the province, including energy intensive industrial growth opportunities being pursued • <i>Public Utilities Act</i> and responsibilities and procedures of the Public Utilities Board • Considerations of provincial equity investment • Distribution of Project benefits in the form of dividends and taxes 	Project Need, Purpose and Alternatives Cross-Cutting Issues

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DEPARTMENT	REQUIRED EXPERTISE	RELATED TOPIC-SPECIFIC SESSION(S)
<p>Innovation, Trade and Rural Development - Regional Economic Development</p>	<ul style="list-style-type: none"> • Supplier development initiatives and Labrador business capabilities • Proposed economic development for Labrador • Impacts of the Project on unemployment, poverty, income and quality of life • Training, benefit and human resource plans • Provincial energy policy, including energy plan for Labrador communities • Alternate forms of energy, including natural gas • Provincial demand management and energy conservation programs • Current cost of energy to consumers • Economic development strategy for the province, including energy intensive industrial growth opportunities being pursued • <i>Public Utilities Act</i> and responsibilities and procedures of the Public Utilities Board • Considerations of provincial equity investment • Distribution of Project benefits in the form of dividends and taxes • Monitoring and follow-up required to accurately assess the impact of the project on the Provincial and Labrador economy 	<p>Project Need, Purpose and Alternatives</p> <p>Economic Impacts</p> <p>Environmental Management, Monitoring and Follow-Up</p> <p>Cross-Cutting Issues</p>
<p>Women's Policy Office</p>	<ul style="list-style-type: none"> • Gender equity and diversity plans • Impacts on women (e.g. violence and abuse, existing and required services) • Mitigation measures (e.g. services and support, shelter requirements) • Monitoring and follow-up required (e.g. provincial and proponent responsibility) 	<p>Social and Cultural Impacts</p> <p>Environmental Management, Monitoring and Follow-Up</p> <p>Cross-Cutting Issues</p>

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DEPARTMENT	REQUIRED EXPERTISE	RELATED TOPIC-SPECIFIC SESSION(S)
Department of Business	<ul style="list-style-type: none"> • Provincial energy policy, including energy plan for Labrador communities • Alternate forms of energy, including natural gas • Provincial demand management and energy conservation programs • Current cost of energy to consumers • Economic development strategy for the province, including energy intensive industrial growth opportunities being pursued • <i>Public Utilities Act</i> and responsibilities and procedures of the Public Utilities Board • Considerations of provincial equity investment • Distribution of Project benefits in the form of dividends and taxes 	<p>Project Need, Purpose and Alternatives</p> <p>Economic Impacts</p> <p>Cross-Cutting Issues</p>
Labrador and Aboriginal Affairs	<ul style="list-style-type: none"> • Proposed economic development for Labrador • Monitoring of the Project's impact on community health and delivery of health and social services • Status of caribou herds and threats to decline • Monitoring and follow-up required (e.g. field program details, data collection parameters) 	<p>Economic Impacts</p> <p>Terrestrial Environment</p> <p>Social and Cultural Impacts</p> <p>Environmental Management, Monitoring and Follow-Up</p> <p>Cross-Cutting Issues</p>
Human Resources, Labour and Employment	<ul style="list-style-type: none"> • Labour force statistics for the Province, Labrador and the Upper lake Melville area • Training capabilities within the Province and Labrador • Programs designed to help local residents and businesses to maximize benefits from large construction projects • Employment and training program to help aboriginal people, women, young people, and people with disabilities gain employment • Monitoring and follow-up required 	<p>Economic Impacts</p> <p>Environmental Management, Monitoring and Follow-Up</p> <p>Cross-Cutting Issues</p>

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DEPARTMENT	REQUIRED EXPERTISE	RELATED TOPIC-SPECIFIC SESSION(S)
Education	<ul style="list-style-type: none"> • Programs designed to help local residents and businesses to maximize benefits from large construction projects • Employment and training program to help aboriginal people, women, young people, and people with disabilities gain employment • Monitoring and follow-up required 	Economic Impacts Environmental Management, Monitoring and Follow-Up Cross-Cutting Issues
Tourism, Culture and Recreation – Provincial Archaeology Office	<ul style="list-style-type: none"> • Past and present aboriginal activity in the assessment area • Paleontological resources in Project area • Provincial requirements for assessing and preserving archaeological resources • Adequacy of Environmental Protection Plans • Cultural significance of fossils 	Social and Cultural Impacts Cross-Cutting Issues
Government Services	<ul style="list-style-type: none"> • Required policy and regulatory adjustments • Permits and authorizations required for Project implementation, including requirements for large construction projects and remote accommodation camps (waste management and fuel storage and handling) • Monitoring and Follow-Up required (e.g. inspections, compliance) 	Reservoir Preparation Environmental Management, Monitoring and Follow-Up
Municipal Affairs	<ul style="list-style-type: none"> • Waste treatment (e.g. garbage and wastewater, sewage treatment, existing and required capacity) • Infrastructure and services maintenance (e.g. responsibility, compensation) • Safety programs (e.g. fire and emergency services) 	Economic Impacts Environmental Management, Monitoring and Follow-Up Cross-Cutting Issues
Health and Community Services - Labrador Grenfell Regional Health Authority	<ul style="list-style-type: none"> • Monitoring of the Project's impact on community health (including changes related to increased mercury levels) and delivery of health and social services • Human health risk assessment for mercury and fish consumption public advisories • Adaptive management strategies related to increased mercury levels • Water distribution and waste water treatment 	Social and Cultural Impacts Environmental Management, Monitoring and Follow-Up Cross-Cutting Issues