

**Government of Newfoundland and Labrador's Response
to the
Report of the Joint Review Panel
for
Nalcor Energy's Lower Churchill Hydroelectric Generation Project**

Response to Recommendations

(No. 1)

Recommendation 4.1 – Government confirmation of projected long-term returns

The Panel recommends that, if the Project is approved, before making the sanction decision for each of Muskrat Falls and Gull Island, the Government of Newfoundland and Labrador undertake a separate and formal review of the projected cash flow of the Project component being considered for sanctioning (either Muskrat Falls or Gull Island) to confirm whether that component would in fact provide significant long-term financial returns to Government for the benefit of the people of the Province. Such financial returns must be over and above revenues required to cover operating costs, expenditures for monitoring, mitigation and adaptive management, and financial obligations to the Innu Nation. The Panel further recommends that the Government of Newfoundland and Labrador base these reviews on information on energy sales, costs and market returns that have been updated at the time of sanction decision, and make the results of the reviews public at that time. The financial reviews should also take into account the results of the independent alternatives assessment recommended in Recommendation 4.2.

Response:

The Government of Newfoundland and Labrador accepts the principle that a review of the Project's financial viability is required prior to sanction, but does not support the Panel's assumption that the information provided by the proponent was inadequate. Based on information that Nalcor has already provided, the Government is satisfied that the development of each component of the Project will result in significant financial benefits to the Government for the people of the Province, over and above revenues required to fund the mitigation measures and monitoring activities that the Project requires.

(No. 2)

Recommendation 4.2 – Independent analysis of alternatives to meet domestic demand

The Panel recommends that, before governments make their decision on the Project, the Government of Newfoundland and Labrador and Nalcor commission an independent analysis to address the question "What would be the best way to meet domestic demand under the 'No Project' option, including the possibility of a Labrador-Island interconnection no later than 2041 to access Churchill Falls power at that time, or earlier, based on available recall?" The analysis should address the following considerations:

- why Nalcor's least cost alternative to meet domestic demand to 2067 does not include Churchill Falls power which would be available in large quantities from 2041, or any recall power in excess of Labrador's needs prior to that date, especially since both would be available at near zero generation cost (recognizing that there would be transmission costs involved);
- the use of Gull Island power when and if it becomes available since it has a lower per unit generation cost than Muskrat Falls; the extent to which Nalcor's analysis looked only at current technology and systems versus factoring in developing technology;
- a review of Nalcor's assumptions regarding the price of oil till 2067, since the analysis provided was particularly sensitive to this variable;
- a review of Nalcor's estimates of domestic demand growth (including the various projections to 2027 in the EIS (2007, 2008, 2009 and the 0.8 percent annual growth to 2067 provided at the hearing);
- Nalcor's assumptions and analysis with respect to demand management programs (compare Nalcor's conservative targets to targets and objectives of similar programs in other jurisdictions and consider the specific recommendations, including the use of incentives to curtail electric base board heating, from Helios Corporation, among others);
- the suggestion made by the Helios Corporation that an 800 MW wind farm on the Avalon Peninsula would be equivalent to Muskrat Falls in terms of supplying domestic needs, could be constructed with a capital cost of \$2.5 billion, and would have an annual operating cost of \$50 million and a levelized cost of power of 7.5 cents per kilowatt-hour;
- whether natural gas could be a lower cost option for Holyrood than oil; and
- potential for renewable energy sources on the Island (wind, small scale hydro, tidal) to supply a portion of Island demand.

Response:

The Government of Newfoundland and Labrador does not accept this recommendation. The information provided by Nalcor to the JRP on the need, purpose and rationale for the Project provides an adequate basis to conclude that the interconnected Island alternative is the long – term, least cost option to meet domestic demand.

(No. 3)

Recommendation 4.3 – Integrated Resource Planning

The Panel recommends that the Government of Newfoundland and Labrador and Nalcor

consider using Integrated Resource Planning, a concept successfully used in other jurisdictions. Such an approach would involve interested stakeholders and look simultaneously at demand and supply solutions and alternative uses of resources over the medium and long term.

Response:

The Government of Newfoundland and Labrador accepts this recommendation.

(No. 4)

Recommendation 4.4 – Project sequencing and applying lessons learned

The Panel recommends that, if the Project is approved, and if for any reason construction of the Gull Island portion of the Project occurs before Muskrat Falls, Nalcor should be expected to apply the lessons learned from the construction of Gull Island to the construction of Muskrat Falls.

Response:

The Government of Newfoundland and Labrador accepts this recommendation.

(No. 5)

Recommendation 4.5 – Full clearing of the Muskrat Falls reservoir

The Panel recommends that, if the Project is approved, Nalcor be required to apply its ‘full clearing’ reservoir preparation option to the Muskrat Falls reservoir.

Response:

The Government of Newfoundland and Labrador agrees with the principle of maximizing the utilization of the forest resource. With limited opportunities to use the resource, and the likely insignificant reductions in mercury levels associated with full versus partial clearing, the Government supports partial harvesting of the flood zone. If an economic opportunity to use the resource materializes, consideration will be given to harvesting additional fibre.

(No. 6)

Recommendation 4.6 – Preparation approach for Gull Island reservoir

The Panel recommends that, if the Project is approved, the reservoir preparation approach for the Gull Island reservoir be finalized and approved by the provincial Department of Natural Resources at the time of the sanction decision for Gull Island. The approach should take into account lessons learned from the preparation of the Muskrat Falls reservoir and should make all reasonable effort to increase harvested volumes above those currently projected by Nalcor under its ‘partial clearing’ option for the Gull Island reservoir.

Response:

The Government of Newfoundland and Labrador agrees with the principle of maximizing

the utilization of the forest resource and accepts the intent of this recommendation. With limited opportunities to use the resource, the Government supports partial harvesting of the flood zone. If an economic opportunity to use the resource materializes, lessons learned from the preparation of Muskrat Falls reservoir should be evaluated and consideration will be given to harvesting additional fibre.

(No. 7)

Recommendation 4.7 – Utilization of Merchantable Timber

The Panel recommends that, if the Project is approved, Nalcor be required to ensure utilization of both the harvested timber from reservoir preparation and the merchantable wood taken from the reservoir as part of its 'trash and debris' removal program after impoundment. Nalcor would retain the right to determine how this would be achieved, but should work with relevant Provincial Government departments and third party commercial interests to identify options.

Response:

The Government of Newfoundland and Labrador accepts the intent and principle of utilizing all natural resources. The Government of Newfoundland and Labrador will accept responsibility for the resource after it is harvested by Nalcor, processed and stored at the landing sites identified.

(No. 8)

Recommendation 5.1 – Use of best available technology

The Panel recommends that, if the Project is approved, Nalcor be required to implement its mitigation commitments to minimize air pollution, noise and greenhouse gas emissions resulting from the Project. In addition, Nalcor should be required to use the best available technology for any new construction and harvesting equipment purchased for the Project. This means that any new equipment purchased after Project approval should be required to meet the highest current emissions standards for such equipment, even if such standards are above current regulatory requirements.

Response:

The Government of Newfoundland and Labrador accepts the intent of this recommendation for Nalcor to implement mitigation commitments for the Project to operate as efficiently as possible and routinely replace equipment. Emissions from new and well-maintained heavy equipment are expected to meet all applicable standards and regulations.

(No. 9)

Recommendation 5.2 – Backing up intermittent renewable energy

The Panel recommends that, if the Project is approved, Nalcor be required to make all reasonable efforts to maximize the potential to utilize power from the Project to back-up wind power and other intermittent renewable sources of electricity. The results of

Nalcor's efforts should be reported to the public through its annual report.

Response:

The Government of Newfoundland and Labrador accepts the intent of this recommendation that Nalcor should make reasonable efforts to use power from the Project to back-up wind and other intermittent renewable sources of electricity.

(No. 10)

Recommendation 5.3 – Displacement of high greenhouse gas energy sources

The Panel recommends that, if the Project is approved, Nalcor be required to take all reasonable steps to ensure that power from the Project is used to displace energy from high greenhouse gas emission sources and does not displace demand management, conservation, efficiency, and the generation of power from renewable, low greenhouse gas emission energy sources. The results of Nalcor's efforts should be reported to the public through its annual report.

Response:

The Government of Newfoundland and Labrador accepts the intent of this recommendation and notes that it has been directed to Nalcor. The Provincial Government will cooperate where required with Nalcor to offer advice and expertise on greenhouse gas mitigation and energy efficiency within Newfoundland and Labrador and the jurisdictions that Nalcor may deal with on Project power.

(No. 11)

Recommendation 5.4 – Atmospheric monitoring

The Panel recommends that, if the Project is approved and in addition to its monitoring commitments, Nalcor should carry out the following monitoring programs using methodologies approved by federal and provincial regulators:

- monitor greenhouse gas emissions related to construction;
- monitor greenhouse gas emissions related to operation;
- track the displacement of greenhouse gas emissions in the various markets for Project power and report annually based on transparent methodologies approved by federal and provincial regulators, taking into account relevant issues identified by the Panel; and
- work with appropriate government agencies to ensure that there are active climate change monitoring programs on appropriate rivers in Labrador not affected by the Project, so that there is a better chance to separate Project impacts from climate change impacts based on local weather data collected within the Project area.

Response:

The Government of Newfoundland and Labrador accepts the intent of this recommendation. The Government of Newfoundland and Labrador will cooperate where required with Nalcor to offer advice and expertise on monitoring greenhouse gas

emissions related to the Project and the displacement of greenhouse gas emissions in various markets for Project power. The Government of Newfoundland and Labrador will ensure active climate change monitoring programs are established to separate impacts of the Project from climate change impacts. However, with the existing 12 climate stations and 10 hydrometric stations in Labrador located outside the Project area including one real-time weather station being operated by the Water Resources Management Division (WRMD), the focus of any climate change monitoring network should be within the Project area. WRMD is willing to provide technical assistance to Nalcor in establishing and operating additional real-time weather stations within the Project area.

(No. 12)

Recommendation 6.1 – Timing of Reservoir Impoundment

The Panel recommends that, if the Project is approved, Fisheries and Oceans Canada require Nalcor to carry out impoundment of both the Muskrat Falls and Gull Island reservoirs during the period mid-July to the end of September, and to prepare a detailed mitigation plan for approval by Fisheries and Oceans Canada. The mitigation plan should include information on how the effects of dewatering would be monitored, thresholds to trigger further mitigation, and identification of specific adaptive management measures and how they would be applied.

Response:

The Government of Newfoundland and Labrador notes this recommendation is directed to Fisheries and Oceans Canada and Nalcor.

(No. 13)

Recommendation 6.2 – Environmental Flow Standards

The Panel recommends that, if the Project is approved, the provincial Department of Environment and Conservation, in consultation with Fisheries and Oceans Canada, Nalcor, Churchill Falls (Labrador) Corporation Limited, and Aboriginal groups and stakeholders, develop environmental flow standards for the lower Churchill River with respect to flows (magnitude, frequency, duration, timing, and rate of change) designed to promote the maintenance of ecological functions and the conservation of riparian and fish habitat. The environmental flow standards should be incorporated by regulation under appropriate provincial legislation and acknowledged in the Water Management Agreement. The Panel further suggests that the Department of Environment and Conservation consider developing environmental flow standards for the upper Churchill River, recognizing the importance of addressing the entire watershed as an integrated system.

Response:

The Government of Newfoundland and Labrador accepts the intent of the recommendation to develop environmental flow standards in consultation with Fisheries and Oceans Canada and others for the Lower Churchill River to promote ecologic functions and conserve riparian and fish habitat. The Water Resources Management

Division will review the flow standards from a hydrologic perspective.

Such standards will implicitly recognize existing water rights and flow requirements under the relevant sections of the *Electrical Power Control Act, 1994*, and the *Energy Corporation of Newfoundland and Labrador Water Rights Act* and Water Management Agreement.

(No. 14)

Recommendation 6.3 – Erosion and Sedimentation Prevention

The Panel recommends that, if the Project is approved, Nalcor be required to prepare an erosion and sedimentation prevention strategy including the use of 15-metre vegetated buffer areas during reservoir preparation, best practices at all construction and cleared areas, and specified adaptive management measures to be applied should these mitigation measures fail.

Response:

The Government of Newfoundland and Labrador agrees with the intent of this recommendation and will require the proponent to submit an Environmental Protection Plan (EPP) which will outline the proposed erosion and sedimentation prevention strategies. The EPP will include the use of 15-metre vegetated buffer areas during reservoir preparation, best practices at all construction and cleared areas, and specified adaptive management measures to be applied should these mitigation measures fail as recommended by the Panel.

(No. 15)

Recommendation 6.4 – Mitigating Entrainment Effects

The Panel recommends that, if the Project is approved, Fisheries and Oceans Canada require Nalcor to take the following steps before receiving a Section 35(2) authorization with respect to potential entrainment losses: (a) carry out further baseline sampling at Gull Island to verify both juvenile and adult fish movements in this area; and (b) prepare a mitigation and adaptive management strategy that establishes thresholds for further action, and identifies what adaptive measures would be taken when, and for what species. The strategy should also address compensation measures should it become apparent that high losses of a specific species are inevitable.

Response:

The Government of Newfoundland and Labrador notes this recommendation has been directed to Fisheries and Oceans Canada.

(No. 16)

Recommendation 6.5 – Pilot study for methyl mercury mitigation through soil removal

The Panel recommends that Natural Resources Canada, in consultation with Nalcor and,

if possible, other hydroelectricity developers in Canada, carry out a pilot study to determine (a) the technical, economic and environmental feasibility of mitigating the production of methyl mercury in reservoirs by removing vegetation and soils in the drawdown zone, and (b) the effectiveness of this mitigation measure. The pilot study should take place in a location where the relevant parameters can be effectively controlled (i.e., not in the Lower Churchill watershed) and every effort should be made to complete the pilot before sanction decisions are made for Gull Island. If the results of the pilot study are positive, Nalcor should undertake to employ this mitigation measure in Gull Island to the extent possible and monitor the results.

Response:

The Government of Newfoundland and Labrador notes this recommendation is directed to Natural Resources Canada and Nalcor.

(No. 17)

Recommendation 6.6 – Fish habitat compensation

The Panel recommends that, if the Project is approved, Fisheries and Oceans Canada require Nalcor to:

- prepare a detailed fish habitat compensation plan in consultation with stakeholders and Aboriginal groups that addresses to the extent possible the likely interactions between species and life stages, including predator-prey relationships and also the potential to replace tributary-type habitats;
- prepare a habitat monitoring plan including thresholds for further action and identified adaptive management measures;
- implement the proposed plan, documenting the process;
- evaluate the extent to which new, stable habitat has been created, its use and productivity; and
- apply any lessons learned from implementing the Muskrat Falls compensation plan to the proposed Gull Island compensation works.

If, after all feasible adaptive management measures have been applied, Fisheries and Oceans Canada determines that there has been a significant shortfall in the amount of habitat successfully created and maintained, compared to the original proposal, Nalcor should be required to compensate by carrying out habitat compensation works in other watersheds in Labrador. Preference should be given to remediation and enhancement in areas adversely affected by the Churchill Falls project.

Response:

The Government of Newfoundland and Labrador notes this recommendation is directed to Fisheries and Ocean Canada and Nalcor.

(No. 18)

Recommendation 6.7 – Assessment of downstream effects

The Panel recommends that, if the Project is approved and before Nalcor is permitted to begin impoundment, Fisheries and Oceans Canada require Nalcor to carry out a comprehensive assessment of downstream effects including:

- identifying all possible pathways for mercury throughout the food web, and incorporating lessons learned from the Churchill Falls project;
- baseline mercury data collection in water, sediments and biota, (revised modeling taking into account additional pathways, and particularly mercury accumulation in the benthos) to predict the fate of mercury in the downstream environment;
- quantification of the likely changes to the estuarine environment associated with reduction of sediment and nutrient inputs and temperature changes; and
- identification of any additional mitigation or adaptive management measures.

The results of this assessment should be reviewed by Fisheries and Oceans Canada and by an independent third-party expert or experts, and the revised predictions and review comments discussed at a forum to include participation by Aboriginal groups and stakeholders, in order to provide advice to Fisheries and Oceans Canada on next steps.

Response:

The Government of Newfoundland and Labrador notes this recommendation is directed to Fisheries and Oceans Canada and Nalcor.

(No. 19)

Recommendation 6.8 – Published analysis of downstream effects over time

The Panel recommends that, if the Project is approved, Nalcor contribute to the overall knowledge about the effects of hydroelectric projects in northern regions by ensuring that a longitudinal analysis of the effects of the Project on the downstream environment (Goose Bay and Lake Melville) over an appropriate time period, including both mercury transport and bioaccumulation and other ecological parameters, is published in a peer-reviewed journal or the equivalent. The Panel suggests that Nalcor consider collaborating with an appropriate independent research organization to carry out this recommendation by providing knowledge, data and financial resources.

Response:

The Government of Newfoundland and Labrador accepts the intent of this recommendation that Nalcor make project effects data on the downstream environment available to the parties/public and any interested academics/research organizations.

(No. 20)

Recommendation 6.9 – Development of the Aquatic monitoring program

The Panel recommends that, if the Project is approved, Fisheries and Oceans Canada

require Nalcor to organize a workshop with third-party facilitation and invited participation by Aboriginal groups, stakeholder organizations, knowledgeable local people, and independent experts from academic or equivalent organizations to review and advise on a detailed draft monitoring plan.

Response:

The Government of Newfoundland and Labrador notes this recommendation is directed to Fisheries and Oceans Canada and Nalcor.

(No. 21)

Recommendation 7.1 – Wetland compensation plan

The Panel recommends that, if the Project is approved, Nalcor be required to develop a detailed wetland compensation plan in consultation with Environment Canada, the provincial Department of Environment and Conservation, Aboriginal groups and appropriate stakeholders. The plan should set appropriate goals for the re-establishment of wetlands taking into account the purpose served by each type of wetland in the context of the surrounding ecosystem.

Response:

The Government of Newfoundland and Labrador accepts this recommendation. The Department of Environment and Conservation will work with Environment Canada, Aboriginal groups and appropriate stakeholders to advise Nalcor on the development and implementation of a detailed wetland compensation plan in accordance with the *Federal Policy on Wetland Conservation*.

(No. 22)

Recommendation 7.2 – Riparian Compensation Plan

The Panel recommends that, if the Project is approved, Fisheries and Oceans Canada require Nalcor to develop a detailed riparian habitat compensation plan in consultation with Fisheries and Oceans Canada, the provincial Department of Environment and Conservation, Aboriginal groups and appropriate stakeholders, that looks closely at water levels and variations in the levels needed to ensure healthy and resilient riparian habitat and coordinates with the environmental flow standards referenced in Recommendation 6.2.

Response:

The Government of Newfoundland and Labrador accepts this recommendation. The Department of Environment and Conservation will work with Fisheries and Oceans Canada, Aboriginal groups and appropriate stakeholders to advise Nalcor on the development and implementation of a detailed riparian compensation plan.

(No. 23)

Recommendation 7.3 – Recovery strategies for endangered species

The Panel recommends that, if the Project is approved, federal and provincial governments make all reasonable efforts to ensure that recovery strategies are in place and critical habitat is identified for each listed species found in the assessment area before a final decision is made about the effects of the Project on those species. Compliance with federal and provincial species protection legislation should be seen as a minimum standard. In fairness to Nalcor, this work should be given the priority needed to ensure that the Project decision is not unduly delayed. A final Project decision should only be made once government decision makers are satisfied that the recovery of listed species would not be compromised by the Project. Where Environment Canada is relying on provincial efforts to fulfill its obligations under the safety net provisions of the federal Species at Risk Act, before a federal decision is made about the Project it should satisfy itself that the provincial efforts for any species at risk are sufficient for its recovery and will not be compromised by the Project.

Response:

The Government of Newfoundland and Labrador accepts the intent of this recommendation but does not accept the proposed timelines. Recovery Strategies that contain full or partial identification of critical habitat may not necessarily be posted for all *Endangered Species Act* listed species within the Project footprint prior to Project approval.

Recovery document development and critical habitat identification is a complex process which, under provincial legislation, requires the formation of a recovery team. This ensures participation of numerous stakeholders including provincial, federal and Aboriginal groups, in addition to fulfilling legislated consultation processes and timelines. Under provincial legislation, critical habitat is identified where appropriate.

The Wildlife Division is available to review Project related activities to facilitate Nalcor's understanding of restrictions and prohibitions under the provincial *Endangered Species Act* and the *Wild Life Act* and, to the extent possible, advise on mitigation measures for any activities which could compromise the recovery of species based on current knowledge at the time.

(No. 24)

Recommendation 7.4 – Compliance with species at risk legislation

The Panel recommends that, if the Project is approved, Nalcor should work with federal and provincial departments responsible for species at risk legislation to ensure all Project-related activities comply with restrictions and prohibitions against harassment, disturbance, injuring or killing of listed species or destroying and disturbing their residence.

Response:

The Government of Newfoundland and Labrador accepts this recommendation. The Wildlife Division is available to review Project related activities to facilitate Nalcor's understanding of restrictions and prohibitions under the provincial *Endangered Species Act* and the *Wild Life Act*. Nalcor should then conduct activities to be in compliance with these Acts.

(No. 25)

Recommendations 7.5 – Road construction and decommissioning

The Panel recommends that, if the Project is approved, the provincial Department of Natural Resources require Nalcor to minimize road construction outside the reservoirs, by locating new roads inside the impoundment area as much as possible. Any new roads proposed by Nalcor to be located outside the impoundment areas should be carefully reviewed by the Forestry Branch of the Department of Natural Resources and only approved if there is no reasonable alternative. In order to ensure that conservation objectives are met, all temporary roads outside the reservoir should be decommissioned as soon as possible to the satisfaction of the provincial Department of Environment and Conservation.

Response:

The Government of Newfoundland and Labrador accepts the Panel recommendation with respect to road construction and decommissioning.

(No. 26)

Recommendation 7.6 – Recovery of the Red Wine Mountain caribou herd

The Panel recommends that, if the Project is approved, the provincial Department of Environment and Conservation ensure that adequate resources are available so that all reasonable efforts to ensure the recovery of the Red Wine Mountain caribou herd are taken. In addition, the Department should require Nalcor to play an enhanced role in the recovery process for the Red Wine Mountain caribou herd by putting resources into the process for research and recovery efforts and to participate actively in the overall effort to ensure the recovery of the caribou herd.

Response:

The Government of Newfoundland and Labrador accepts this recommendation. The Red Wine caribou herd is a Woodland caribou which is listed as Threatened under the provincial *Endangered Species Act* and the federal *Species at Risk Act*. The Province, however, retains jurisdiction and management authority.

In 2004, Newfoundland and Labrador released its first recovery document under the *Endangered Species Act* for this species entitled "Recovery strategy for three Woodland caribou herds (*Rangifer tarandus caribou*; *Boreal population*) in Labrador." The document was prepared by the Labrador Woodland Caribou Recovery Team which Nalcor is a member of and provided advice on actions needed to recover the species in Labrador. This recovery document is currently being updated with new information,

activities complete, critical habitat and new actions required based on the new information that has been gathered over the past seven years. The updated recovery plan is scheduled to be released in 2012.

(No. 27)

Recommendation 7.7 – Management of the George River caribou herd

The Panel recommends that, if the Project is approved, the provinces of Quebec, and Newfoundland and Labrador, Environment Canada, and all interested Aboriginal communities initiate a dedicated range-wide joint management program for the George River caribou herd, and through this program cooperatively carry out a comprehensive cumulative effects assessment of the impact of human activities on the herd to be updated periodically as required.

Response:

The Government of Newfoundland and Labrador accepts the intent of this recommendation. It is the intent of the Government of Newfoundland and Labrador, as per the Labrador Caribou Management Initiative, to cooperatively develop a management plan for the George River caribou that ensures the involvement of the Quebec Government and aboriginal groups. Government intends to consider Aboriginal Traditional Knowledge in developing management measures and is already engaged in caribou management consultation activities with Innu Nation and Quebec Innu. Government will also take into consideration the Torngat Wildlife and Plants Co-Management Board and the Hunting, Fishing and Trapping Coordinating Committee constituted pursuant to the James Bay and Northern Quebec Agreement and the Northeastern Quebec Agreement. The structure and function of this process is currently being established.

(No. 28)

Recommendation 7.8 – Effect of reservoir preparation activities on migratory birds

The Panel recommends that, if the Project is approved, Nalcor and Environment Canada negotiate an agreement prior to reservoir preparation regarding whether and how clearing could proceed between May and July without violating the Migratory Birds Convention Act. To initiate this process, Nalcor should be required to submit a plan describing how it would carry out clearing activities during this period in compliance with the Migratory Birds Convention Act.

Response:

The Government of Newfoundland and Labrador notes this recommendation has been directed to Nalcor and Environment Canada.

(No. 29)

Recommendation 7.9 –Vegetation control

The Panel recommends that, if the Project is approved, Nalcor be required to restrict the

use of chemical herbicides to areas where alternative vegetation control is not reasonably possible. Approval of the use of herbicides should only be granted after Nalcor has submitted an overall vegetation control plan to the provincial Department of Environment and Conservation, demonstrating that all alternatives have been adequately explored and the use of non-chemical approaches maximized.

Response:

The Government of Newfoundland and Labrador accepts the intent of this recommendation that approval of the use of herbicides should only be granted after Nalcor has submitted an overall vegetation control plan and it is fully in keeping with the practices of Integrated Vegetation Management.

(No. 30)

Recommendation 7.10 – Monitoring, follow-up and adaptive management for the terrestrial environment

The Panel recommends that, if the Project is approved and in addition to its monitoring commitments listed in Chapter 7, Terrestrial Environment, Nalcor should carry out the following monitoring programs:

- monitor the effectiveness of riparian and wetland habitat compensation work, including the effect on wetland sparrows;
- monitor the response of the Red Wine Mountain caribou herd including any population changes through the construction phase and in the early part of the operation phase;
- monitor wolf predation of caribou, particularly the Red Wine Mountain herd;
- monitor interactions of the George River caribou herd with Project activities and facilities and identify any impacts;
- monitor ashkui formation in the Project area;
- monitor direct and indirect impacts on waterfowl, such as waterfowl adjustment to changes in riparian habitat, and changes in the location and formation of ashkui;
- confirm the presence of and monitor the impact of the Project on salamanders and spring peepers;
- develop a detailed mitigation and monitoring plan for all listed species for approval by the provincial Department of Environment and Conservation;
- confirm the presence outside the flood zone of the eight plant species identified by Nalcor as unique to the river valley plus the two additional species listed by the Department of Environment and Conservation (marsh horsetail and hidden fruit bladderwort) and develop a detailed mitigation plan for these plant species for approval by the Department;
- monitor the impact of the Project on furbearers, small game, small mammals, and black bears; and
- collaborate with the Department of Environment and Conservation to develop an appropriate approach to monitor pine marten in areas affected by the Project where there is no trapping activity.

Response:

The Government of Newfoundland and Labrador accepts the intent of this recommendation. The Department of Environment and Conservation will continue to advise monitoring programs regarding issues under provincial jurisdiction. The Department of Environment and Conservation will work cooperatively with the federal government and Aboriginal groups to advise Nalcor on the requirements of a scientifically defensible monitoring program.

(No. 31)

Recommendation 8.1 – Trapping compensation program

The Panel recommends that, if the Project is approved, Nalcor be required to establish a compensation program for all bona fide trappers along the lower Churchill River, without requiring proof of ten years' use as an entry point. Instead, compensation should be commensurate with the total extent of trapping activity during the previous ten years, as shown by the recorded income attributable to the Project area. Compensation should be awarded within six months after an individual trapper has established eligibility.

Response:

The Government of Newfoundland and Labrador accepts the intent of this recommendation.

(No. 32)

Recommendation 8.2 – Mud Lake ice bridge mitigation

The Panel recommends that, if the Project is approved, Nalcor, the Government of Newfoundland and Labrador and the Mud Lake Improvement Committee negotiate an agreement to address how any future adverse changes to the ice bridge that would lengthen the existing period of time when residents are unable to cross the river by boat or snowmobile would be assessed and mitigated. Alternative transportation options should be provided if travel across the river is prevented during the freeze-up or break-up for periods in excess of two weeks. The selected solution should adequately meet the residents' needs for everyday and emergency travel and should respect the character of the community. Road access should not be imposed on the community as a solution to address ice bridge changes without its consent. The primary onus to cover the costs of this mitigation should be placed on Nalcor. The agreement should also address the role of the Province in mitigating any cumulative effects caused by climate change.

Response:

The Government of Newfoundland and Labrador accepts the intent of this recommendation. The Government of Newfoundland and Labrador will review Nalcor's ice monitoring and climate change reports which may be used to assess any changes to the period of ice road use resulting from the Project. Government will consult relevant Aboriginal organizations as appropriate.

Nalcor shall only be required to provide alternative transportation if travel is adversely

affected during freeze-up and other situations as a result of changes directly related to the Project.

(No. 33)

Recommendation 8.3 – Navigation during impoundment

The Panel recommends that, if the Project is approved, Nalcor be required to develop a mitigation plan in consultation with the Mud Lake Improvement Committee to address temporary transportation difficulties during reservoir impoundment periods. If transportation is impeded, Nalcor should provide and pay for alternative transportation that minimizes inconvenience to the residents.

Response:

The Government of Newfoundland and Labrador accepts the intent of this recommendation and agrees that Nalcor should address transportation difficulties if impeded during reservoir impoundment periods and provide alternative transportation to minimize any inconvenience to residents. Nalcor should address this matter in consultation with appropriate parties including the Mud Lake Improvement Committee and relevant Aboriginal organizations as appropriate.

(No. 34)

Recommendation 8.4 – Lower Churchill navigation mitigation and monitoring plan

The Panel recommends that, if the Project is approved, Transport Canada require Nalcor to develop a mitigation and monitoring plan for each reservoir, in consultation with river users, to address navigation issues on the river, including both reservoirs and the downstream portion of the main stem. The plan would address (a) navigation issues during the construction and impoundment periods, (b) provision of boat launches and portages, (c) identification of areas that need to be cleared before impoundment to create safe shoreline access areas for small boats, (d) management of the stick-up zones, including how and when Nalcor would manually remove trees left standing three years after impoundment, (e) management of trash and debris in the reservoirs, (f) charts to show navigational hazards, signage and information, and (g) monitoring and specific adaptive management measures to address any navigational problems downstream from Muskrat Falls.

Response:

The Government of Newfoundland and Labrador notes this recommendation is directed to Transport Canada and Nalcor.

(No. 35)

Recommendation 8.5 – Allowing local forestry operators to clear additional areas

The Panel recommends that, if the Project is approved, the provincial Department of Natural Resources require Nalcor to allow local forestry operators to clear timber from areas not otherwise scheduled to be cleared, provided they can demonstrate a safe

approach. Nalcor should be required to pay the stumpage fees for the forestry operators salvaging the extra timber.

Response:

The Government of Newfoundland and Labrador accepts the intent of the recommendation to allow local forestry operators to clear additional areas.

(No. 36)

Recommendation 9.1 – Noise and dust management

The Panel recommends that, if the Project is approved, and to avoid disturbance of persons carrying out traditional land and resource use activities, Nalcor be required to monitor and manage construction traffic and borrow pit activities to minimize dust problems, noise and sleeping disturbance for occupants of cabins and camps along the roads.

Response:

The Government of Newfoundland and Labrador accepts the intent of this recommendation for Nalcor to monitor and manage construction traffic and borrow pit activities to minimize dust and noise problems. Construction and borrow pit activities are regulated for the protection of workers by the Occupational Health and Safety legislation and would include dust and noise. This may indirectly address some of the public concerns; however, there may be some negative effects that will not be mitigated such as equipment operation affecting cabin occupants. These could be addressed by the application of measures proposed by Health Canada for Hamilton River Road in other locations where seasonal camps are located within 2 kilometres of Project infrastructure having a high potential for noise and air emissions, such as quarries and access roads.

(No. 37)

Recommendation 9.2 – Relocation of Canada yew

The Panel recommends that, if the Project is approved, Nalcor be required to collaborate with Innu Elders on where and how to relocate Canada yew plants, conduct regular field visits with Elders for assessment, and employ any adaptive management procedures required to maintain a stable population of the plant.

Response:

The Government of Newfoundland and Labrador accepts the intent of this recommendation as the plant is culturally significant to the Innu people.

(No. 38)

Recommendation 9.3 – Community level land and resource use monitoring

The Panel recommends that, if the Project is approved, Nalcor involve all Aboriginal groups in the design and implementation of its proposed community land and resource use monitoring program for the duration of the construction period to ensure that

parameters of importance to these groups and Traditional Knowledge are included.

Response:

The Government of Newfoundland and Labrador accepts the intent of this recommendation. A community land and resource use monitoring program would inform the process used by the Government of Newfoundland and Labrador to review Nalcor Energy's post-environmental assessment (EA) regulatory approval applications.

(No. 39)

Recommendation 11.1 – Involvement of Aboriginal Groups in the management and protection of historic and archaeological resources.

The Panel recommends that, if the Project is approved, Nalcor, in collaboration with the Provincial Archaeology Office, establish and support a program to involve all three Labrador Aboriginal groups in (a) the documentation and interpretation of known historic and archaeological sites and artifacts and (b) the process to be followed in the case of inadvertent discoveries of previously unknown sites and artifacts during construction, including notification of the three groups. Nalcor should also give consideration to inviting participation by interested Aboriginal communities in Quebec. Nalcor should share with Aboriginal groups the results of its work on the monitoring of historic and archeological resources to be compiled and provided annually to the Provincial Archaeology Office.

Response:

The Government of Newfoundland and Labrador accepts the intent of this recommendation, that aboriginal groups be involved in the management and protection of historic and archaeological resources.

(No. 40)

Recommendation 11.2 – Commemoration initiatives

The Panel recommends that, if the Project is approved, Nalcor work in collaboration with local communities and Aboriginal groups to (a) identify sites, artifacts and intangible elements (including portages, traplines, trails and personal stories) to be documented and commemorated, (b) determine how commemoration should occur and (c) implement specific commemorative initiatives (such as plaques and story boards) at appropriate locations in communities and throughout the river valley. Local heritage organizations could benefit by receiving funding to undertake part of this work and to implement education and interpretation programs.

Response:

The Government of Newfoundland and Labrador accepts the intent of this recommendation that Nalcor undertakes commemorative and educational efforts to preserve historical, archaeological, spiritual and cultural sites and artifacts.

(No. 41)

Recommendation 11.3 – Naming Project-Related Features

The Panel recommends that, if the Project is approved, the Government of Newfoundland and Labrador develop an approach to the naming of Project-related features in consultation with local communities and Aboriginal groups that recognizes the importance of place names in Aboriginal cultures.

Response:

The Government of Newfoundland and Labrador accepts this recommendation.

(No. 42)

Recommendation 12.1 – Early candidate selection and training

The Panel recommends that, if the Project is approved, Nalcor take a more proactive approach to providing early and specific training programs to certain Labrador candidates. This approach could include measures such as early candidate selection, conditional letters of intended employment, and, on-the-job training at other Nalcor operations or with other entities with which Nalcor has influence.

Response:

Subject to the Impacts and Benefits Agreement (IBA) between the Innu Nation and Nalcor and the Benefits Strategy, the Government of Newfoundland and Labrador accepts the intent of the recommendation and will continue to work with Nalcor to assist with the implementation of training initiatives that will provide Newfoundlanders and Labradorians with the skills required to work on future large-scale development projects in the Province.

(No. 43)

Recommendation 12.2 – Workplace attachment for apprenticeship graduates

The Panel recommends that, if the Project is approved, Nalcor commit to providing workplace attachment for both first and second year graduates of apprenticeship programs to the maximum extent possible.

Response:

Subject to the IBA and the Benefits Strategy, the Government of Newfoundland and Labrador accepts the intent of this recommendation and will work with Nalcor to identify appropriate measures and/or policies required to maximize workplace attachment for entry-level completers, and first and second year apprentices.

(No. 44)

Recommendation 12.3 – Training to ‘journeyman’ level in community of residence

The Panel recommends that, if the Project is approved, relevant provincial departments commit to explore with Nalcor, other educational entities and agencies and relevant

communities in Labrador, how to implement to the extent practical, training to 'journey person' level in the community of residence.

Response:

Subject to the IBA and the Benefits Strategy, the Government of Newfoundland and Labrador accepts the intent of this recommendation and will work with Nalcor and other stakeholders to explore and determine training sites to ensure journey person training is accessible.

(No. 45)

Recommendation 12.4 – Address wage subsidy stigma

The Panel recommends that, if the Project is approved, to the extent that wage subsidies might be available and used for new job entrants, Nalcor implement an education and communications program to address and remove the stigma that some might feel is associated with such a practice.

Response:

The Government of Newfoundland and Labrador accepts the intent of this recommendation and will work with Nalcor to raise awareness among job seekers and employers about the availability and benefits of wage subsidies and other employment supports that can help increase labour force attachment among new job entrants.

(No. 46)

Recommendation 12.5 – Preparing for participation in wage economy

The Panel recommends that, if the Project is approved, Nalcor develop and implement, in consultation with Aboriginal groups, an appropriate orientation and information process to assist prospective employees who might have little or no experience of participation in a wage economy. Nalcor should also expand training programs to include, in addition to skills training, training to equip potential Aboriginal employees to deal with various financial, social and cultural challenges as a result of employment in the construction industry. In consultation with Aboriginal groups, Nalcor should also consider providing additional money management programs such as payroll saving schemes.

Response:

Subject to the IBA and the Benefits Strategy, the Government of Newfoundland and Labrador accepts the intent of this recommendation and will work with Nalcor to help ensure appropriate orientation and information resources are available to assist individuals, including new entrants, prepare for job requirements in a wage economy.

(No. 47)

Recommendation 12.6 – Continuation of Labrador Aboriginal Training Partnership

The Panel recommends that, if the Project is approved, Nalcor support the continuation of the Labrador Aboriginal Training Partnership beyond 2012, including making a financial

contribution if required to both enable current participants to complete their training and to meet additional training requirements.

Response:

The Government of Newfoundland and Labrador accepts the intention of this recommendation, subject to conclusion of a funding agreement with the Government of Canada.

(No. 48)

Recommendation 12.7 – Employment Outreach to Quebec Aboriginal Communities

The Panel recommends that, if the Project is approved, Nalcor initiate an employment outreach program for interested Aboriginal groups in Quebec; such a program could include among other measures, a specific recruitment program, transportation assistance from Sept-Iles, and measures to address social and cultural issues including any associated language barriers.

Response:

Recognizing the priorities of the IBA and the Benefits Strategy, the Government of Newfoundland and Labrador recognizes that Nalcor will take appropriate measures to meet its human resource requirements for the Project, and further recognizes that employment opportunities are open to Aboriginal people living in Quebec.

(No. 49)

Recommendation 12.8 – Quantitative targets for goods and services

The Panel recommends that, if the Project is approved, the concept of quantitative objectives or targets be applied to the provision of goods and services, with targets established both for the province as a whole, and for Labrador.

Response:

Subject to the IBA and Benefits Strategy, the Government of Newfoundland and Labrador accepts the intent of this recommendation and will continue to work with Nalcor and private sector interests to maximize supplier development opportunities and partnerships for Labrador and the province as a whole.

(No. 50)

Recommendation 12.9 – Enhanced supplier development program

The Panel recommends that, if the Project is approved, Nalcor enhance its supplier development program by implementing the following measures: (a) establish the Labrador Business Opportunities Committee and appoint the full time Coordinator in Happy Valley-Goose Bay as soon as possible, (b) ensure the Coordinator (a Nalcor employee) has sufficient seniority within the organization to influence relevant procurement decisions and has full access to all procurement information and related decision making, (c) release as soon as possible the list of goods and services required by

the Project, with specific indications of time frame, approximate volumes and dollar values or ranges as appropriate, and (d) ensure immediately that all engineering management personnel involved in specifications, bidder prequalification, and procurement are fully aware of Nalcor's commitments towards maximizing benefits in this area and act accordingly.

Response:

Subject to the IBA and Benefits Strategy, the Government of Newfoundland and Labrador accepts the intent of this recommendation and will continue to work with Nalcor and private sector interests to maximize supplier development opportunities and partnerships for Labrador and the province as a whole.

(No. 51)

Recommendation 12.10 – Update quantitative targets at time of sanction

The Panel recommends that, if the Project is approved, Nalcor update at the time of Muskrat Falls sanction, the quantitative objectives or targets and the detailed list of goods and services required by the Project. Further, that this update be done in consultation with interested parties and the information be provided for Muskrat Falls construction and, to the extent possible, for the Project as a whole.

Response:

Subject to the IBA and Benefits Strategy, the Government of Newfoundland and Labrador accepts the intent of this recommendation and will continue to work with Nalcor and private sector interests to maximize supplier development opportunities and partnerships.

(No. 52)

Recommendation 12.11 – Transparent bidding process

The Panel recommends that, if the Project is approved, Nalcor implement a transparent bidding process that ensures that bidders are fully aware of the decision-making process, unsuccessful bidders can find out the reasons why and thereby improve, and Nalcor's commitments and programs apply and are enforced by all its contractors, sub-contractors and suppliers.

Response:

Subject to the IBA and Benefits Strategy, the Government of Newfoundland and Labrador accepts the intent of this recommendation.

(No. 53)

Recommendation 12.12 – Modifications to the Benefits Strategy

The Panel recommends that, if the Project is approved, Nalcor and the provincial Department of Natural Resources modify two overall provisions of the Benefits Strategy. The first is to ensure that both the monthly reports on employment and goods and

services and the quarterly reports on compliance are publically available and not restricted by the confidentiality provisions of Nalcor's legislation. The second is to remove the provision that allows the Minister to modify the benefits targets and other commitments regarding this Project at the Minister's sole discretion.

Response:

The Government of Newfoundland and Labrador does not accept this recommendation. However, Government will require Nalcor to report on a range of benefits and targets which will be made available publically.

(No. 54)

Recommendation 13.1 – Sheshatshiu social effects mitigation

The Panel recommends that, if the Project is approved, Innu Nation, Sheshatshiu Innu Band Council, Nalcor, the provincial Department of Health and Community Services, and relevant federal government departments develop a Memorandum of Understanding with regard to identifying and implementing (a) mechanisms to prevent the exacerbation of existing social problems and (b) mitigation measures such as mental health and addictions services and family support required to address any Project-related increases in social problems. Each party would bring to the table its relevant knowledge and resources. In the case of Innu Nation and Sheshatshiu Innu Band Council, this would include any provisions of the Impacts and Benefits Agreement component of the Tshash Petapen Agreement that directly address this issue. In the case of Nalcor, its role would be to adjust hiring, employment and employee assistance arrangements where possible and appropriate to assist or reinforce mitigation. The federal and provincial governments should provide resources to discharge their responsibilities in these areas.

Response:

The Government of Newfoundland and Labrador accepts the intent of this recommendation for Nalcor, provincial health and social service providers, the community and relevant federal government departments to work together to mitigate Project-related increases in social problems in the communities of the Upper Lake Melville area including Sheshatshiu.

(No. 55)

Recommendation 13.2 – Social Effects Needs Assessment and Outreach

The Panel recommends that, if the Project is approved, the provincial Department of Health and Community Services, in consultation with Aboriginal groups, and appropriate government and community agencies from the Upper Lake Melville area, conduct a social effects needs assessment, including an appropriately resourced participatory research component, that would determine the parameters to monitor, collect baseline data, and provide recommendations for social effects mitigation measures and an approach to on-going monitoring. It is expected that Innu Nation would be a participant in the research and that the results would inform and enhance the social effects mitigation measures suggested in Recommendation 13.1. The results of the needs assessment would

be documented in a public report and, subject to the agreement of participants, the results of the research would be published in a peer-reviewed journal.

Response:

The Government of Newfoundland and Labrador accepts the intent of the recommendation. The Department of Health and Community Services would offer to collaborate with Health Canada, which is already undertaking such an assessment in the Innu communities. The Department would, in collecting baseline information, seek data specific to Labrador Inuit Land Claims Agreement beneficiaries in the Upper Melville Lake area. However, there are aspects of this recommendation that are beyond the control of the Department, specifically conducting the research and having it published in a peer reviewed journal. The Department is committed to partnering with relevant research and academic institutions to pursue the intent of the recommendation.

(No. 56)

Recommendation 13.3 – Worksite measures to address addictions issues

The Panel recommends that, if the Project is approved, Nalcor conduct careful monitoring of the effectiveness of the policy of controlled access to alcohol at the accommodation camps and provide professional addictions counseling to employees.

Response:

The Government of Newfoundland and Labrador accepts the intent of this recommendation and will work with Nalcor as necessary to assess the effectiveness of its drug and alcohol policies.

(No. 57)

Recommendation 13.4 – Variety of work schedules

The Panel recommends that, if the Project is approved, Nalcor offer a variety of work schedules, and require the same of its contractors, to accommodate different groups of workers and to assist in meeting its employment goals, particularly for Aboriginal employees and women.

Response:

Subject to the IBA and Benefits Strategy, the Government of Newfoundland accepts this recommendation.

(No. 58)

Recommendation 13.5 – Health and social services

The Panel recommends that, if the Project is approved, the provincial Department of Health and Community Services formally commit to provide the human resources required to address any Project-related increases in the demand for mental health, addictions and other health and social services at the Labrador Health Centre, as identified in the needs assessment. Nalcor's contribution to mitigation measures to

address this should be clarified through a Memorandum of Understanding with the Labrador-Grenfell Regional Health Authority.

Response:

The Government of Newfoundland and Labrador accepts the intent of the recommendation for Labrador-Grenfell Health to be provided with sufficient resources to meet Project-related health services demands. The needs assessment will identify potential human resource needs and the Department of Health and Community Services will work with Labrador-Grenfell Health and Nalcor to address human resource deficits.

(No. 59)

Recommendation 13.6 – Capacity agreement with Happy Valley-Goose Bay

The Panel recommends that, if the Project is approved, the Government of Newfoundland and Labrador and Nalcor negotiate a capacity agreement with the Town of Happy Valley-Goose Bay to provide financial resources to increase the Town's capacity to address additional administrative demands related to the Project. The time period for the agreement would be negotiated by the parties and should relate to the needs expected at different stages of the Project. The resources would be intended to enable the Town to:

- establish baseline data on infrastructure capacity and use prior to the start of construction;
- monitor Project-related infrastructure effects throughout the construction period of the Project and identify needed mitigation;
- prepare, publicize and update on a regular basis, emergency preparedness plans to
- address the possibility of a catastrophic flood event;
- prepare a low income housing strategy; and
- Address issues related to Project-related in-migration and the potential economic downturn at the end of the construction phase, and any other Project-related effects within the Town, not otherwise mitigated.

Response:

The Government of Newfoundland and Labrador accepts the intent of the recommendation to work with Nalcor to negotiate a capacity agreement with the Town of Happy Valley-Goose Bay to provide financial resources which will increase the Town's capacity to address additional administrative demands related to the Project. The rationale for the increased administrative demand will need to be substantiated during the negotiation process.

(No. 60)

Recommendation 13.7 – Funding for infrastructure mitigation

The Panel recommends that, prior to Project sanction, a binding and firm commitment be given by Nalcor and the Government of Newfoundland and Labrador that sufficient funds and resources be made available to fully mitigate Project-related adverse impacts on infrastructure in Happy Valley-Goose Bay.

Response:

The Government of Newfoundland and Labrador accepts the intent of this recommendation to provide sufficient funds and resources to fully mitigate Project-related adverse impacts on infrastructure in Happy Valley-Goose Bay. Government agrees with the conditions in the recommendation.

(No. 61)

Recommendation 13.8 – Low-income housing strategy

The Panel recommends that, if the Project is approved, before construction begins, Nalcor support the efforts of the Town of Happy Valley-Goose Bay, relevant federal and provincial departments, and local low-income housing agencies, to develop and implement a strategy to set measurable targets, address the existing low-income housing needs and mitigate the adverse impacts of Project-related in-migration on low-income housing.

Response:

The Government of Newfoundland and Labrador accepts this recommendation and will work with Nalcor, the Town of Happy Valley-Goose Bay and other relevant departments and agencies, and other appropriate parties, to develop a strategy to address low-income housing needs in the area.

(No. 62)

Recommendation 13.9 – Possible requirement for consumption advisories in Goose Bay or Lake Melville.

The Panel recommends that, if the Project is approved and the outcome of the downstream mercury assessment (Recommendation 6.7) indicates that consumption advisories would be required for Goose Bay or Lake Melville, Nalcor enter into negotiations prior to impoundment with the parties representing – as appropriate – Goose Bay and Lake Melville resource users. Depending on where the consumption advisories would apply, these could include Aboriginal groups, the Town of Happy Valley-Goose Bay, Mud Lake Improvement Committee, the Town of North West River and the community of Rigolet. The purpose of the negotiations would be to reach agreement regarding further mitigation where possible and compensation measures, including financial redress if necessary. This recommendation would also apply later in the process if the downstream mercury assessment indicated that advisories were not likely, but monitoring subsequently required their application.

Response:

The Government of Newfoundland and Labrador accepts the intent of this recommendation. If consumption advisories are required as a result of the downstream mercury assessment, then Nalcor should consult with downstream resource users on further mitigation measures, including the potential for compensation.

(No. 63)

Recommendation 13.10 – Consumption advisory implementation

The Panel recommends that, if the Project is approved and fish and seal monitoring indicates that consumption advisories are required, Nalcor:

- follow Health Canada guidelines regarding the establishment of human mercury hazard quotient levels and fish consumption advisories;
- consult with Aboriginal Affairs and Northern Development Canada regarding best practices for the communication of advisories;
- consult with Aboriginal groups and affected communities regarding an effective approach to the communication and implementation of consumption advisories that ensures that affected communities have an understanding of the quantities and types of fish that can be consumed safely and the health benefits of including fish in one's diet;
- ensure that notifications of the consumption advisories are placed at regular intervals in easily visible locations along the shorelines of affected water bodies;
- ensure that consumption advisories are updated as necessary to reflect any changes detected in mercury levels in fish or seal; and
- provide publicly accessible, up-to-date and accurate information through the internet, radio, newspapers and other means regarding the health risks of mercury and the status of the advisories.

Response:

The Government of Newfoundland and Labrador accepts the intent of this recommendation. Government will work with Nalcor to ensure that consultation with relevant Aboriginal organizations as appropriate will take place to ensure that effective and culturally appropriate communication protocols are established to get consumption advisories to those who need them in a timely fashion.

(No. 64)

Recommendation 13.11 – Human health and mercury monitoring

The Panel recommends that, if the Project is approved, Nalcor, in collaboration with Health Canada and the provincial Department of Health and Community Services:

- consult with Aboriginal groups and affected communities regarding the approach to be taken to baseline and follow-up mercury testing and the communication of results for each group; and
- establish baseline human mercury levels in Churchill Falls, Upper Lake Melville communities and Rigolet, with consideration given to offering blood tests as well as hair samples for Innu participants, due to inconsistencies noted in the correlation between hair sample results and dietary consumption.

If consumption advisories are required, it is further recommended that Nalcor ensure that a human health mercury monitoring program is established concurrently with the issuing

of consumption advisories. This monitoring would continue until five years after the lifting of consumption advisories, or until such time as determined by Health Canada, and would be overseen by the Monitoring and Community Liaison Committee described in Chapter 15

Response:

The Government of Newfoundland and Labrador accepts the intent of this recommendation for Nalcor to consult with Aboriginal groups and communities on approaches to baseline and follow-up mercury testing, and the establishment of baseline human mercury levels, in collaboration with the Department of Health and Community Services.

The Government of Newfoundland and Labrador believes that the proponent should take the lead with respect to issues related to mercury monitoring in people and the environment, including appropriate follow-up action that may be required to protect people from harm. The Government of Newfoundland and Labrador will work with Nalcor on issues related to mercury exposure and human health.

(No. 65)

Recommendation 13.12 – Dietary Surveys

The Panel recommends that, if the Project is approved and consumption advisories are required as a result of mercury levels in fish or seal, Nalcor conduct ongoing dietary surveys as an integral part of the mercury monitoring program, including fish, seal, caribou and other country food. Dietary surveys should be conducted concurrently with regular mercury testing in affected communities to determine the effectiveness of the consumption advisories and the overall impact on fish and country food consumption.

Response:

The Government of Newfoundland and Labrador accepts the intent of this recommendation and will work with Nalcor and, as appropriate, Aboriginal organizations to obtain relevant data, including data regarding an Inuit Health Survey. This data will inform dietary surveys in relevant communities to determine the effectiveness of the consumption advisories and the overall impact on fish and country food consumption.

(No. 66)

Recommendation 13.13 – Research on mercury in country food

The Panel recommends that, if the Project is approved, the provincial Department of Labrador and Aboriginal Affairs, in consultation with Health Canada and Aboriginal groups, initiate a study of (a) the extent of country food contamination by mercury and other contaminants and (b) human consumption levels of country food, particularly in areas where people are also exposed to mercury in fish, to identify the potential risks to human health in Labrador.

Response:

The Government of Newfoundland and Labrador accepts the intent of this recommendation, but believes this study should be integrated with recommendations 13.11 and 13.12. That is, this type of information should be part of the proponent-led activities described in recommendations 13.11 and 13.12.

(No. 67)

Recommendation 14.1 – Emergency preparation for the possibility of a dam failure

The Panel recommends that, if the Project is approved, Nalcor be required to:

- prepare and provide to affected communities updated maps that more clearly show areas that would be flooded following a dam failure;
- prepare, in consultation with the relevant communities and appropriate authorities, an Emergency Preparedness Plan, for response in the event of catastrophic dam failure, and emergency response procedures and community evacuation procedures related to a dam failure and subsequent flooding; the Plan should be reviewed every five years;
- work with each community that has been identified as being at risk of flooding in the event of a dam failure to develop evacuation plans, to be completed prior to filling of the reservoirs;
- work with emergency response providers and assist as appropriate in the event of an evacuation;
- implement a flood warning system for Mud Lake and Happy Valley-Goose Bay to be approved by the provincial Department of Environment and Conservation; and
- conduct seismographic monitoring in the Project area prior to construction.

Response:

The Government of Newfoundland and Labrador accepts the intent of this recommendation. It is appropriate that the proponent be directed to ensure that comprehensive emergency preparedness planning is undertaken in consultation with communities identified as potentially at risk from a catastrophic dam failure. The Water Resources Management Division is responsible for the administration of dam safety under the authority of the *Water Resources Act* and will require the proponent to prepare Emergency Preparedness Plans (including inundation maps) for various dam failure scenarios. The Water Resources Management Division and other appropriate government departments must review and approve these documents prior to the filling of the reservoirs.

(No. 68)

Recommendation 14.2 – Compensation for losses in the event of a dam failure

The Panel recommends that, if the Project is approved, the Government of Newfoundland and Labrador require Nalcor to assume liability on a ‘no fault’ basis for any loss of life and financial losses incurred because of the destruction of property and belongings and disruption of activities caused by flooding as a result of one or more dams failing on the lower Churchill River. Nalcor should provide guarantees in the form of insurance, bonds

or other appropriate measures that individuals, businesses and institutions suffering damage would receive full compensation, the amount to be determined by a neutral third party, regardless of the cause of the dam failure.

Response:

The Government of Newfoundland and Labrador accepts the intent of this recommendation. Nalcor will be required to have insurance for losses in the event of possible dam failure in place as per industry standards. In the event of any loss, Government will require Nalcor to respond to any losses resulting from its negligence to the full extent of its legal obligations.

(No. 69)

Recommendation 14.3 – Seismic testing

The Panel recommends that, if the Project is approved, Nalcor carry out seismic testing during reservoir filling and apply appropriate mitigation measures in the event of a seismic event related to reservoir filling.

Response:

The Government of Newfoundland and Labrador accepts the intent of this recommendation. that Nalcor should complete seismic monitoring, but not seismic testing, during reservoir filling by using seismographs to record ground motion and monitor whether any seismic event occurs during reservoir filling.

(No. 70)

Recommendation 15.1 – Authorizing Regulation

The Panel recommends that, if the Project is approved, the Government of Newfoundland and Labrador issue an authorizing regulation or equivalent mechanism that:

- lists and requires Nalcor to implement all its environmental management commitments in relation to the Project made during the course of the environmental assessment, plus the additional measures recommended by the Panel and accepted by the Government of Newfoundland and Labrador;
- lists and requires provincial departments to implement all their environmental management commitments in relation to the Project made during the course of the environmental assessment, plus the additional measures recommended by the Panel and accepted by the Government of Newfoundland and Labrador;
- includes a mechanism for updates as required to reflect any additions or changes, including adaptive management strategies that may be required and are not yet identified;
- ensures compliance with Environmental Protection Plans, Emergency Response Plans, Contingency Plans, Occupational Health and Safety Plans, and Environmental Effects Monitoring Plans including those that are implemented through another regulatory instrument and those that are unregulated;
- requires Nalcor to prepare and publish on the internet an annual report describing

- its environmental management activities and results, including mitigation, monitoring and adaptive management as appropriate, and related disbursements;
- establishes a monitoring and community liaison committee; and
 - remains in effect for the duration of the construction period and a sufficient period of time thereafter to ensure there is no longer a risk of adverse effects as a result of the Project.

Response:

The Government of Newfoundland and Labrador accepts the intent of this recommendation and will make regulations to ensure compliance with environmental management commitments and measures and the establishment of a Monitoring and Community Liaison Committee.

(No. 71)

Recommendation 15.2 – Federal – Provincial Joint Regulatory Plan

The Panel recommends that, if the Project is approved, the federal and provincial governments prepare a joint regulatory plan for the Project which outlines their respective regulatory requirements and includes a coordinated approach to areas where there is overlapping or related jurisdiction, and commit to it by signing a Memorandum of Agreement. The regulatory plan should address the regulations, guidelines, standards and criteria to be applied to activities. Each government would appoint a coordinating department or agency to prepare the plan and to produce a joint annual report regarding Nalcor's compliance, any issues or problems that were identified and how they were resolved. This report would be made available to the public through the internet.

Response:

The Government of Newfoundland and Labrador accepts the intent of this recommendation and will continue to work to ensure collaboration with federal regulatory authorities to develop a coordinated and effective approach regarding compliance and inspection activities for the Lower Churchill Hydroelectric Generation Project. As identified in the Government Response to recommendation 15.1, the Government's regulatory requirements will be described in the Environmental Protection Plan and reporting procedures will be set out in regulations.

(No. 72)

Recommendation 15.3 – Long-term funding for environmental management from Nalcor

The Panel recommends that, if the Project is approved, and to the extent that funds are not committed from other sources, Nalcor identify and allocate in its detailed Project budget, financial support for environmental management for the duration of Project construction. The Panel further recommends that Nalcor make a general commitment with a ten-year forecast, to be updated every five years, until such time as there is no longer evidence of ongoing environmental effects resulting from the Project.

Response:

The Government of Newfoundland and Labrador accepts the intent of this recommendation.

(No. 73)

Recommendation 15.4 – Long Term Funding for Environmental Management from government departments

The Panel recommends that, if the Project is approved, the governments of Newfoundland and Labrador and Canada make long-term commitments to support annual budget requests by the relevant departments with responsibilities for Project-related environmental management including socio-economic mitigation commitments. The Panel further recommends that the governments make general commitments with a ten-year forecast, to be updated every five years, until such time as there is no longer evidence of ongoing environmental effects resulting from the Project.

Response:

The Government of Newfoundland and Labrador accepts the intent of this recommendation. The Government of Newfoundland and Labrador supports the provision of adequate and appropriate funding for Project-related environmental management including socio-economic mitigation commitments until there is no longer evidence of on-going environmental effects resulting from the Project. Any allocation of funding would be subject to the appropriate legislative approval.

(No. 74)

Recommendation 15.5 – Lower Churchill Project Monitoring and Community Liaison Committee

The Panel recommends that, if the Project is approved, prior to the start of construction, the provincial Department of Environment and Conservation appoints a Monitoring and Community Liaison Committee, using a community-based nomination process. Nalcor, through the Department, should provide the Committee with sufficient resources to allow for staff support, expenses and a modest honorarium for non-government participants, acquisition of independent expert advice, and adequate communication with community residents including occasional public forums. The mandate of the Committee would be set out in the Authorizing Regulation and the Federal-Provincial regulatory plan. The Committee would operate throughout the construction period and for the first ten years of the operating period, at which point the continuing need for the Committee should be reassessed by the Department in consultation with the Committee, the communities and Nalcor. The Committee would:

- provide community feedback and advice to the Department and to Nalcor on relevant issues including Project-specific mitigation, impact monitoring and adaptive management committed to by Nalcor and as recommended by the Panel;
- be empowered as required to establish subcommittees or working groups to address the key areas of biophysical monitoring and follow-up, enhancing

- employment and business benefits, and health and social issues;
- have representation from communities, community-based agencies and non-government organizations, Aboriginal organizations, relevant federal and provincial government departments and Nalcor (ex-officio); and
- liaise with the public to ensure a transparent approach to addressing public concerns and the communication of monitoring results.

Response:

The Government of Newfoundland and Labrador accepts the intent of this recommendation to establish an Environmental Monitoring and Community Liaison Committee. As identified in the Governments' response to recommendation 15.1, a committee will be established by Nalcor to provide feedback and advice to the Proponent and Government on the effects of the Project. The Government is committed to ensuring consultation with affected Aboriginal groups, communities, and relevant stakeholders to address public concerns and communicate monitoring results.

(No. 75)

Recommendation 15.6 – Project-specific effects monitoring programs

The Panel recommends that, if the Project is approved, all Project-specific effects monitoring programs, whether conducted by Nalcor, governments or in combination, include the following elements:

- identification of monitoring objectives and means of achieving verifiable results capable of guiding remedial action;
- formulation of clearly stated research questions capable of testing impact predictions;
- key measurable indicators linking Project activities to outcomes, and threshold or reference levels to identify Project effects;
- strategies and protocols for data collection and quality control;
- protocols for data compilation, storage, control and access;
- provision for data analysis and assessment; and
- reporting procedures and schedules.

Response:

The Government of Newfoundland and Labrador accepts the intent of this recommendation and will work with other responsible parties to implement the recommendation to the extent of its authority. The Government of Newfoundland and Labrador notes that socio-economic thresholds cannot always conclusively identify Project effects because socio-economic conditions are complex and affected by many external factors. However, Government is committed to identifying key measurable socio-economic indicators that can be linked to Project activities and are most likely to identify trends.

(No. 76)

Recommendation 15.7 – Adaptive Management

The Panel recommends that, if the Project is approved, adaptive management for Project specific or cumulative effects, whether conducted by Nalcor, governments, or in combination, include the following components:

- commitment to a proactive approach to adaptive management;
- clearly defined impacts thresholds to clarify where and when adaptive responses would be necessary;
- implementation and contingency plans and resources to enable responsive action especially in areas where effect predictions are thought to be uncertain and where predictive errors may have serious consequences;
- transparent process for setting and adjusting monitoring and management priorities; and
- provision for regular review of adaptive management effectiveness, adjustment of related monitoring and responses to focus on significant continuing concerns.

Response:

The Government of Newfoundland and Labrador accepts the intent of this recommendation. While the Government of Newfoundland and Labrador will consider the elements of this recommendation in its future activities, it notes that some elements, in particular a requirement to define impact thresholds for socio-economic indicators, may not be possible.

(No. 77)

Recommendation 15.8 – Complaints resolution

The Panel recommends that, if the Project is approved, before the start of construction, Nalcor develop a complaints resolution process, in consultation with the Monitoring and Community Liaison Committee, to address concerns relating to possible adverse Project effects on individuals, and to be implemented during construction and operations. The process could include the following:

- easy access for individuals to bring concerns or complaints to Nalcor via a toll-free phone number, website and other appropriate means;
- dedicated Nalcor staff support to receive, process and respond to complaints;
- a tracking process with response time targets;
- third-party adjudication in the event that complaints cannot be otherwise resolved to the satisfaction of both Nalcor and the complainant; and
- a system to report on complaints received and how they were resolved.

Response:

The Government of Newfoundland and Labrador accepts the intent of this recommendation that a complaints resolution process be developed in consultation with the Monitoring and Community Liaison Committee, to address concerns relating to

possible adverse Project effects on individuals, and to be implemented during construction and operations.

(No. 78)

Recommendation 15.9 – Environmental Review in the event that construction of the second generation facility is delayed

The Panel recommends that, if the Project is approved and the construction of the second generating facility and reservoir does not start before the first is completed, the environmental release would expire and terms and conditions contained in the original release would be revisited. The extent of the review required for later release would be the decision of the relevant federal and provincial governments, depending on applicable laws and circumstances at the time.

Response:

The Government of Newfoundland and Labrador does not accept this recommendation. The environmental assessment of the Lower Churchill Hydroelectric Generation Project (the Project) as described in the Environmental Impact Statement (EIS) was completed in accordance with the *Environmental Protection Act* and the federal *Canadian Environmental Assessment Act* and any release will cover the entire Project as registered by Nalcor.

(No. 79)

Recommendation 15.10 – Local hiring for environmental management work

The Panel recommends that, if the Project is approved, where possible, Nalcor hire local people to work on environmental monitoring and mitigation projects to benefit from their local knowledge and to develop local skills and experience in the field of environmental management.

Response:

Subject to the IBA and Benefits Strategy, the Government of Newfoundland and Labrador accepts the intent of this recommendation that, where possible, Nalcor hire local people to work on environmental monitoring and mitigation projects.

(No. 80)

Recommendation 15.11 – Government Response to Panel Report

The Panel recommends that the federal and provincial governments provide written responses to the Panel report and that these responses be made available to the general public through the internet.

Response:

The Government of Newfoundland and Labrador accepts this recommendation and will provide a written response to the Panel report and make that response available to the general public through the Internet.

(No. 81)

Recommendation 15.12 – Decommissioning

The Panel recommends that Nalcor demonstrate, prior to Project approval and in a manner acceptable to both governments, how it will assume financial responsibility for the potential future decommissioning of the Project to ensure that decommissioning does not become a burden to future generations.

Response:

The Government of Newfoundland and Labrador does not accept this recommendation. Hydro generation is a renewable energy source and these facilities when maintained and refurbished, continue to function for hundreds of years. Should the operator of the generating plant at the time require refurbishment or remediation of the plant then it will be done in accordance with the laws of general application at that time.

(No. 82)

Recommendation 16.1 – Regionally integrated cumulative effects assessment

The Panel recommends that, if the Project is approved, the provincial Department of Environment and Conservation, in collaboration with the provincial Department of Labrador and Aboriginal Affairs and other relevant departments, identify regional mechanisms to assess and mitigate the cumulative effects of current and future development in Labrador.

Response:

The Government of Newfoundland and Labrador accepts the intent of this recommendation. The Government of Newfoundland and Labrador will identify regional mechanisms to assess and mitigate the cumulative effects of future development projects in Labrador.

(No. 83)

Recommendation 16.2 – Establishment of Protected Areas

The Panel recommends that, if the Project is approved, the provincial Department of Environment and Conservation commit resources to advance the Protected Areas Strategy process by working towards the following goals and reporting annually on progress:

- identify priority candidate areas for provincial protection in Labrador in order to bring the total protected area (federal and provincial) up to the national average (approximately 8.5 percent) before any additional major development is approved in Labrador;
- identify additional candidate areas in Labrador needed to bring the total protected area up to the level identified in the Protected Areas Strategy as desirable for adequate conservation purposes (10 to 15 percent);

- through this process, address preservation of representative areas of all ecozones, mitigation of habitat fragmentation, especially for migratory wildlife, and protection of selected rivers; and
- establish a schedule to ensure that priority candidate areas are protected.

Response:

The Government of Newfoundland and Labrador does not accept this recommendation. This recommendation is outside the scope of the Panel's mandate. The Government of Newfoundland and Labrador is advancing the Protected Areas Strategy in Labrador. Two priority candidate areas are currently proposed for protection: the Mealy Mountains National Park and the Eagle River Waterway Provincial Park. If, through the standard processes of public consultation and protected areas planning, these two proposed areas are established as parks, the total protected area in Labrador would be increased to an estimated 8.0 % of the land base.

The Provincial Government, through the Department of Environment and Conservation, has also partnered with the Nature Conservancy of Canada to develop a "Conservation Blueprint" for Labrador. This Project involves a variety of partners to collect relevant biophysical and land use information to support conservation and other land management decisions in Labrador. Criteria for selecting areas of conservation interest is also being jointly developed by the partners. Reporting on the Conservation Blueprint is scheduled to be delivered in 2012.