

Draft Potential Conditions

The Canadian Environmental Assessment Agency is contemplating the following potential conditions in relation to the Tazi Twé Hydroelectric Project (the Designated Project) for recommendation to the Minister of the Environment for inclusion in a Decision Statement under the *Canadian Environmental Assessment Act, 2012*. Such conditions would become legally binding on the Proponent only if the Minister of the Environment decides that the carrying out of the Designated Project is unlikely to cause significant adverse environmental effects under subsections 5(1) and 5(2) or that the Governor in Council decides such effects are justifiable in the circumstances therefore allowing the Designated Project to proceed.

1 Definitions

- 1.1 *Aboriginal groups* – Black Lake Denesuline First Nation, Fond du Lac Denesuline First Nation, Hatchet Lake Denesuline First Nation and Métis Local Stony Rapids #80.
- 1.2 *Agency* – Canadian Environmental Assessment Agency.
- 1.3 *Baseline* - environmental conditions immediately prior to construction for the Designated Project.
- 1.4 *Construction* – the phase of the Designated Project during which physical activities in connection with site preparation, building or installation of any component of the Designated Project prior to operations.
- 1.5 *Days* – calendar days.
- 1.6 *Decommissioning* – the phase of the Designated Project where commercial production has permanently ceased and actions have commenced to remove from service all or part of the Designated Project and continues until site restoration activities are complete.
- 1.7 *Designated Project* – the Tazi Twé Hydroelectric Project as described in documents provided by the Proponent to support the environmental assessment under the *Canadian Environmental Assessment Act, 2012* (Canadian Environmental Assessment Registry Reference Number 80031).
- 1.8 *Discharge point* – location through which wastewater from settlings ponds is discharged into the Fond du Lac River.
- 1.9 *Fish* – as defined in the *Fisheries Act*, includes (a) parts of fish, (b) shellfish, crustaceans, marine animals and any parts of shellfish, crustaceans or marine animals, and (c) the eggs, sperm, spawn, larvae, spat and juvenile stages of fish, shellfish, crustaceans and marine animals.
- 1.10 *Fish habitat* – as defined in the *Fisheries Act*, means spawning grounds and any other areas, including nursery, rearing, food supply and migration areas, on which fish depend directly or indirectly in order to carry out their life processes.

- 1.11 *Follow-up program* – as defined in the *Canadian Environmental Assessment Act, 2012*, means a program for (a) verifying the accuracy of the environmental assessment of a designated project; and (b) determining the effectiveness of any mitigation measures.
- 1.12 *Migratory bird* – as defined in the *Migratory Birds Convention Act, 1994*, means a migratory bird referred to in the Convention, and includes the sperm, eggs, embryos, tissue cultures and parts of the bird.
- 1.13 *Mitigation measures* – as defined in the *Canadian Environmental Assessment Act, 2012*, means measures for the elimination, reduction or control of the adverse environmental effects of a designated project, and includes restitution for any damage to the environment caused by those effects through replacement, restoration, compensation or any other means.
- 1.14 *Operation* – the phase of the Designated Project where commercial production takes place.
- 1.15 *Project area* – the geographic area occupied by the Designated Project that includes the all-season access road, the bridge over the Fond du Lac River, the submerged weir, the powerhouse and associated infrastructure, the settling ponds, the waste rock disposal areas, the construction camp and the granular borrow sources.
- 1.16 *Progressive reclamation* – a planned approach carried out concurrently with Designated Project activities aimed at progressively returning any physically disturbed areas to a state as close to the baseline as possible, as soon after the disturbance as practical.
- 1.17 *Project footprint* – the land area physically disturbed by activities related to the construction, operation, decommissioning or abandonment of the Designated Project.
- 1.18 *Proponent* –Saskatchewan Power Corporation (SaskPower).
- 1.19 *Qualified individual* –someone who, through suitable education, experience and knowledge relevant to a particular matter, may be reasonably relied on to provide advice within his or her area of expertise.
- 1.20 *Species at risk* – as defined in the *Species at Risk Act*, means an extirpated, endangered or threatened species or a species of special concern.
- 1.21 *Structure, site or thing that is of historical, archaeological, paleontological or architectural significance* – one that is determined, on the basis of heritage value, to be directly associated with an important aspect or aspects of human history or culture. Heritage value is the aesthetic, historic, scientific, cultural, social or spiritual importance or significance for past, present or future generations.
- 1.22 *Wastewater* – all site generated run-off water for all phases of the Designated Project.
- 1.23 *Wetland* – land saturated with water long enough to promote formation of water altered soils, growth of water-tolerant vegetation and various kinds of biological activity that is adapted to the wet environment and separated into five classes: fen, bog, marsh, swamp and shallow open water wetlands (includes open water areas less than two metres deep with wetland characteristics).

1.24 *Wetland functions* – the natural processes and derivation of benefits and values associated with wetland ecosystems, fish and wildlife habitat, organic carbon storage, water supply and purification (groundwater recharge, flood control, maintenance of flow regimes, shoreline erosion buffering), and soil and water conservation, as well as traditional use, tourism, heritage, recreational, educational, scientific, and aesthetic opportunities.

Conditions

These conditions are established for the sole purpose of the Decision Statement that may be issued under the *Canadian Environmental Assessment Act, 2012*. They do not relieve the Proponent from any obligation to comply with other legislative or other legal requirements by the federal, provincial or local governments. Nothing in this document should be construed as reducing, increasing, or otherwise affecting what may be required to comply with all applicable legislative or other legal requirements.

2 General conditions

- 2.1 The Proponent shall, throughout all phases of the Designated Project, ensure that its actions in meeting the conditions set out in this document are informed by the best available information and knowledge, are based on validated methods and models, are undertaken by qualified individuals and have applied the best available economically and technologically feasible mitigation strategies.
- 2.2 The Proponent shall, where consultation is a requirement of a condition set out in this document:
 - 2.2.1 provide written notice of the opportunity for the party or parties to present their views on the subject of the consultation;
 - 2.2.2 provide sufficient information and a reasonable period of time to permit the party or parties to prepare their views; and
 - 2.2.3 provide a full and impartial consideration of any views presented.
- 2.3 The Proponent shall, where consultation with Aboriginal groups is a requirement of a condition set out in this document, first consult each Aboriginal group on the most appropriate manner in which to conduct the consultation.
- 2.4 The Proponent shall, from the start of construction, submit to the Agency an annual report, including an executive summary of the annual report in both official languages. The annual report is to be submitted no later than September 30. The Proponent shall document in the report:
 - 2.4.1 implementation activities undertaken in the preceding reporting year (defined as from July 1 to June 30) for each of the conditions;
 - 2.4.2 how it met in condition 2.1 in the implementation of the conditions set out in this document;
 - 2.4.3 for conditions set out in this document for which consultation is a requirement, how it has considered any views and information received;
 - 2.4.4 the results of the follow-up program requirements identified in conditions 3.13, 5.4, 5.5 and 6.8; and
 - 2.4.5 any corrective actions taken by the Proponent, or proposed to be taken, should the predictions of environmental effects prove to be inaccurate or the mitigation measures prove not to be effective.

- 2.5 The Proponent shall make the annual report and the executive summary referred to in conditions 2.4, as well as the implementation schedule referred to in condition 10, available on its website upon submission to the Agency. The Proponent shall keep these documents available on its website for twenty-five years following the end of operations or until the end of decommissioning of the Designated Project, whichever comes first.
- 2.6 The Proponent shall notify in writing the Agency as soon as possible if the Designated Project is expected to be undertaken by another party due to a sale, a transfer or other circumstances that arise and would result in a new proponent taking over the Designated Project in whole or in part.

3 Fish and fish habitat

- 3.1 The Proponent shall install a submerged weir to maintain water levels in Black Lake within the historical range and that maintains safe fish passage in the Fond du Lac River in the vicinity of the weir.
- 3.2 The Proponent shall maintain a minimum flow of 40 cubic meters per second at all times in the Fond du Lac River, and implement a flow of 70 cubic meters per second in the Fond du Lac River between Black Lake and Middle Lake during spring fish spawning and rearing periods.
- 3.3 The Proponent shall, during unplanned shutdowns of the power generation facility that exceed 15 minutes during spring fish spawning and rearing periods and winter low flow periods, activate the bypass conduit to maintain the minimum flows in condition 3.2 in the Fond du Lac River downstream of the tailrace outlet.
- 3.4 The Proponent shall comply with the *Fisheries Act* at the point(s) of discharge.
- 3.5 The Proponent shall meet, for receiving water quality, the Canadian Council of Ministers of the Environment *Water Quality Guidelines for the protection of aquatic life* and the Saskatchewan *Surface Water Quality Objectives for the protection of aquatic life* at a location between 100 and 150 meters downstream of any discharge point(s).
- 3.6 The Proponent shall implement mitigation measures including:
 - 3.6.1 designing and constructing settling ponds to collect and treat wastewater prior to discharge;
 - 3.6.2 testing all construction generated waste rock for acid rock drainage potential and metal leaching potential, and uranium mineralization consistent with the *Prediction Manual for Drainage Chemistry from Sulphidic Geologic Materials* of the Mine Environment Neutral Drainage (MEND) Program; and
 - 3.6.3 in a separate settling pond system and prior to discharge, collecting and treating wastewater run-off from waste rock storage piles that have acid rock drainage potential or metal leaching potential or uranium mineralization.
- 3.7 The Proponent shall protect fish and fish habitat during all phases of the Designated Project including by implementing mitigation measures to avoid causing harm to fish and fish habitat, including when using explosives, or conducting activities in or around water.

- 3.8 The Proponent shall locate and construct in-water works in areas that avoid critical fish habitat in the Black Lake and in the Fond du Lac River between Black Lake and Middle Lake.
- 3.9 The Proponent shall construct and install the water intake structure, located on the north shore of Black Lake, at a depth that minimizes entrainment of deep water fish species.
- 3.10 The Proponent shall mitigate serious harm to fish in accordance with paragraph 35(2)(b) of the *Fisheries Act* and associated regulations, and implement any fisheries offsetting plan approved by Fisheries and Oceans Canada for residual serious harm to fish associated with the carrying out of the Designated Project.
- 3.11 The Proponent shall, for any physical fish habitat offsets area proposed in any offsetting plan under condition 3.10, evaluate prior to submitting the offsetting plan to Fisheries and Oceans Canada whether there are adverse effects:
 - 3.11.1 on migratory birds and their habitats;
 - 3.11.2 on terrestrial species, including amphibians and reptiles, and their habitats;
 - 3.11.3 on species at risk and their habitats;
 - 3.11.4 on current use of lands and resources for traditional purposes by Aboriginal peoples;
 - 3.11.5 on sites of cultural significance to Aboriginal peoples; and
 - 3.11.6 from potential sources of contamination (e.g. acid rock drainage, metal leaching and uranium mineralization).
- 3.12 The Proponent shall, if there are adverse effects on any of the elements of condition 3.11, avoid or lessen the identified adverse effects.
- 3.13 The Proponent shall monitor water quality and quantity, and fish and fish habitat, to determine the effectiveness of the mitigation measures and to verify the accuracy of the environmental assessment. The monitoring shall include:
 - 3.13.1 water flows within the Fond du Lac River between Black Lake and Middle Lake as per condition 3.2 until the end of operations and in accordance with any *Fisheries Act* authorization;
 - 3.13.2 the water quality at discharge point(s) against the criteria indicated in condition 3.4 in accordance with any *Fisheries Act* authorization;
 - 3.13.3 the water quality against the criteria indicated in condition 3.5 in the Fond du Lac River in years 1, 2, 3, 5, and every five years thereafter, of operations;
 - 3.13.4 the formation of, and effects of ice, including frazil ice, anchor ice and surface ice, in the Fond du Lac River between Black Lake and Middle Lake as per the requirements of any *Fisheries Act* authorization;
 - 3.13.5 the number and the species of fish injured or killed from entrainment or impingement at the water intake as per the requirements of any *Fisheries Act* authorization; and
 - 3.13.6 Arctic grayling (*Thymallus arcticus*) populations in the Fond du Lac River between Black Lake and Middle Lake as per the requirements of any *Fisheries Act* authorization.

4 Migratory birds and species at risk

- 4.1 The Proponent shall carry out all phases of the Designated Project in a manner that protects and avoids harming, killing or disturbing migratory birds or destroying or taking their nests or eggs. In this regard, the Proponent shall take into account Environment Canada's *Avoidance Guidelines*. The Proponent's actions in applying the Avoidance Guidelines shall be in compliance with the *Migratory Birds Convention Act, 1994* and with the *Species at Risk Act*.

5 Wildlife

- 5.1 The Proponent shall route and construct the access and construction roads along existing trails in a manner that minimizes new linear disturbance.
- 5.2 The Proponent shall impose a speed limit to minimize the risk of wildlife mortality on the access and construction roads.
- 5.3 The Proponent shall construct gaps in snow windrows large enough to provide passage for wildlife, including ungulates and furbearers.
- 5.4 The Proponent shall monitor mortality of wildlife, including ungulates and furbearers, along the access and construction roads to determine the effectiveness of the mitigation measures and verifying the accuracy of the environmental assessment.
- 5.5 The Proponent shall, following consultation with Aboriginal groups and prior to construction of the Designated Project, develop and implement a boreal woodland caribou (*Rangifer tarandus caribou*) and barren-ground caribou (*Rangifer tarandus groenlandicus*) follow-up program to verifying the accuracy of the environmental assessment. The follow-up program shall include a community-based monitoring component. The follow-up program starts with construction and ends after five years of operation.

6 Wetlands and vegetation

- 6.1 The Proponent shall address the potential effects of the Designated Project on wetland functions with a preference for avoiding the loss of wetlands over minimizing the effects on wetlands and for minimizing the effects on wetlands over compensating for lost or affected wetlands.
- 6.2 The Proponent shall, in order to avoid the loss of wetlands or to minimize effects on wetland functions for the wetlands adjacent to the Project Footprint, implement a 100-metre buffer around the wetlands prior to construction.
- 6.3 The Proponent shall, for effects on wetlands that cannot be avoided or minimized, set out mitigation measures in a Wetland Compensation Plan which shall be prepared in consultation with Aboriginal groups and take into consideration Canada's *Federal Policy on Wetland Conservation* and Environment Canada's *Operational Framework for Use of Conservation Allowances*. The mitigation measures to be set out in the Wetland Compensation Plan shall include:
- 6.3.1 the implementation of a 2:1 ratio of compensation area to loss of wetland area;

- 6.3.2 the identification of compensation sites as close to the Designated Project as possible and reflecting similar wetland types and functions to those wetlands that will be lost;
 - 6.3.3 a preference for wetland restoration over wetland enhancement, and wetland enhancement over wetland creation; and
 - 6.3.4 inclusion of traditional use plants in the compensation sites and providing access to those sites to Aboriginal people for the purposes of gathering traditional use plants.
- 6.4 The Proponent shall implement the Wetland Compensation Plan in condition 6.3 within five years of the start of construction.
- 6.5 The Proponent shall conduct a pre-construction survey for provincially listed plant species under the *Saskatchewan Wildlife Act, 1998* and implement mitigation measures to reduce effects to these species in consultation with the Saskatchewan Ministry of Environment.
- 6.6 The Proponent shall conduct a pre-construction survey for traditional use plants and implement mitigation measures to manage effects on these plants in consultation with Aboriginal groups.
- 6.7 The Proponent shall, throughout all phases of the Designated Project, undertake progressive reclamation, including by:
- 6.7.1 separating and stockpiling removed organic rich material during construction for use to support revegetation and other reclamation activities;
 - 6.7.2 removing construction materials and infrastructure no longer needed; and
 - 6.7.3 using native plant species in reclamation activities.
- 6.8 The Proponent shall monitor wetlands and wetland functions, and vegetation, to determine the effectiveness of the mitigation measures and verify the accuracy of the environmental assessment. The monitoring shall include:
- 6.8.1 wetlands adjacent to the Project Footprint mentioned in condition 6.2 by conducting pre and post construction phase monitoring to detect potential unanticipated loss of wetland functions and consider adjustments to mitigation measures;
 - 6.8.2 the compensatory wetland habitats established under condition 6.3, from the date of completion of implementation and in years 1, 3, 5, 10 and 20, or until wetland functions are attained by the compensatory wetland habitats, whichever comes first; and
 - 6.8.3 assess the effectiveness of the progressive reclamation established under condition 6.7, including the success of the use of native plant species.

7 Current use of lands and resources for traditional purposes and socio-economic conditions

- 7.1 The Proponent shall develop and implement, in consultation with Aboriginal groups, a communication strategy no later than 30 days prior to construction. The communication strategy includes means for Aboriginal groups to:
- 7.1.1 receive the implementation schedule and any updates and revisions as stated in condition 10 at the same time as they are provided to the Agency;

- 7.1.2 be notified of public safety issues;
- 7.1.3 obtain the results of the follow-up program for caribou required in condition 5.5 and the results of the monitoring of the progressive reclamation under condition 6.8.3.
- 7.2 The Proponent shall install and maintain safety features such as, boat barrier safety booms, warning buoys and signage, in front of the submerged weir and the water intake, as well as at the tailrace channel outlet into the Fond du Lac River to notify the land and water users of hazardous areas, including sections of unsafe ice conditions. The safety features shall meet or exceed the Canadian Dam Association *Dam Safety Guidelines* and *Guidelines for Public Safety Around Dams*.
- 7.3 The Proponent shall mark safe travel routes in areas on Black Lake and Middle Lake affected by the Designated Project during the ice-covered season during all phases of the Designated Project.
- 7.4 The Proponent shall, in consultation with Aboriginal groups, provide access to the Project Area during all phases of the Designated Project to carry out traditional practices, to the extent that such access is safe.
- 7.5 The Proponent shall, following consultation with Black Lake Denesuline First Nation, prior to construction, choose an access road route to avoid sensory disturbance to any known Aboriginal community cultural camps.
- 7.6 The Proponent shall consult with Black Lake Denesuline First Nation on suitable alternate locations for existing cultural camps during construction.
- 7.7 The Proponent shall, following consultation with Aboriginal groups and the Northern Hamlet of Stony Rapids, implement restrictions to hunting, fishing and trapping by employees, contractors and the public within 500 meters around the Project Footprint.
- 7.8 The proponent shall establish and maintain alternate portage routes for any existing portage routes impacted by the Designated Project.

8 Physical and cultural heritage and historical and archaeological sites and structures

- 8.1 The Proponent shall, in consultation of with Aboriginal groups, for all phases of the Designated Project:
 - 8.1.1 avoid the historic Denesuline cemetery; and
 - 8.1.2 cease activities and consult with the Saskatchewan Heritage Conservation Branch in addition to Aboriginal groups on appropriate management options should unanticipated structures, sites or things that are of historical, archaeological, paleontological or architectural significance be discovered.

9 Accidents or malfunctions

- 9.1 The Proponent shall take all reasonable measures to prevent accidents and malfunctions that may result in adverse environmental effects and shall implement emergency response procedures and contingencies developed in relation to the Designated Project.

- 9.2 In the event of an accident or malfunction with the potential to cause adverse environmental effects, the Proponent shall:
- 9.2.1 notify in writing the Agency of the occurrence as soon as possible;
 - 9.2.2 implement measures to minimize any adverse environmental effects associated with the occurrence as soon as possible; and
 - 9.2.3 submit a written report to the Agency as soon as possible in the circumstances, but at the latest 30 days after the day on which the accident or malfunction took place; the written report must include:
 - 9.2.3.1 a description of the accident or malfunction and of its adverse environmental effects;
 - 9.2.3.2 the measures that were taken to mitigate the environmental effects of the occurrence;
 - 9.2.3.3 a description of any residual environmental effects, and any additional measures required to address residual environmental effects;
 - 9.2.3.4 if an emergency response plan was implemented, details concerning its implementation; and
 - 9.2.3.5 changes made to avoid a subsequent occurrence of the accident or malfunction.
- 9.3 The Proponent shall prepare and implement a communication strategy in consultation with Aboriginal groups that shall include:
- 9.3.1 the types of accidents or malfunctions that require a notification to the respective Aboriginal groups;
 - 9.3.2 the manner by which Aboriginal groups shall be notified of an accident or malfunction; and
 - 9.3.3 a contact person for the Proponent and for the respective Aboriginal groups.

10 Implementation schedule

- 10.1 The Proponent shall submit an implementation schedule for conditions contained within this document to the Agency, or anyone designated pursuant to section 89 of the *Canadian Environmental Assessment Act, 2012*, at least 30 days prior to construction. The implementation schedule shall indicate the commencement and completion dates for each activities relating to conditions set out in this document.
- 10.2 The Proponent shall submit an update to this implementation schedule in writing to the Agency, or anyone designated pursuant to section 89 of the *Canadian Environmental Assessment Act, 2012*, every two years on or before September 30, until completion of the activities.
- 10.3 The Proponent shall provide the Agency, or anyone designated pursuant to section 89 of the *Canadian Environmental Assessment Act, 2012*, with a revised implementation schedule if any change occurs from the initial schedule or any subsequent updates. The Proponent shall provide the revised implementation schedule at least 30 days prior to the implementation of the change.

11 Record keeping

- 11.1 The Proponent shall record, retain and make available to the Agency, or anyone designated pursuant to section 89 of the *Canadian Environmental Assessment Act, 2012*, upon demand, at a facility close to the Designated Project (local facility), information related to the implementation of the conditions of this document and the results of all monitoring, including:
- 11.1.1 the place, date and time of any sampling, as well as techniques, methods or procedures used;
 - 11.1.2 the dates and the analyses that were performed;
 - 11.1.3 the analytical techniques, methods or procedures used in the analyses;
 - 11.1.4 the names of the persons who collected and analyzed each sample and documentation of any professional certifications relevant to the work performed that they might possess;
and
 - 11.1.5 the results of the analyses.
- 11.2 The proponent shall retain and make available upon demand to the Agency, or anyone designated pursuant to section 89 of the *Canadian Environmental Assessment Act, 2012*, the information contained in condition 11.1 at a facility close to the Designated Project (or at a location within Canada and agreed upon by the Agency, should the local facility no longer be maintained). The information shall be retained and made available throughout construction and operations, and for twenty-five years following the end of operations or until the end of decommissioning of the Designated Project, whichever comes first.