



20. TABLE OF COMMITMENTS

DESIGN MITIGATION FEATURES	
COMMITMENT	SECTION
Project would comply with existing water licence.	13.9, 13.10
No new flooding would occur under either expansion option during normal operating conditions.	6.10
The completed power facility, including the existing facility, would house three turbines in two separate powerhouses, minimizing likelihood of complete flow interruptions.	13.9
Turbines with the least number of blades (fewer blades results in lower fish mortality) could be used where technically viable.	15.3; 13.9
Maintenance schedules would be designed to take only one turbine off-line at any one time. This would minimize ramping flows in Trudel Creek.	6.10
Operational guidelines would be established for controlled shutdowns and start-ups (all start-ups are controlled). The purpose of the guideline is to provide a gradual change to the flow at a rate designed to accommodate fisheries and other concerns. Shutdown and start-up guidelines are typical for hydroelectric facilities across Canada.	13.1
The developer's economic feasibility review originally proposed a flow of 4 m ³ /s or less in Trudel Creek to maximize flows for power production. As a result of communications with agencies and the results of the Trudel Creek Fish and Fish Habitat Effects Assessment, the proponent revised the Project design parameters to maintain a minimum flow of 4 m ³ /s.	14.1; 14.7; 14.9
No development at Tronka Chua gap. Continued unregulated releases into Tronka Chua system.	6.10;
Provision of a gated bypass spillway next to the existing Twin Gorges generation and ancillary facilities to maintain flow levels over and below Elsie Falls during plant shutdowns or other outages. The spillway would be opened in the event of an outage that could not be corrected quickly (i.e., before water spills over the South Valley Spillway into Trudel Creek) to release up to 30 m ³ /s of water into the tailrace of the Twin Gorges power facility, instead of re-directing this flow over the SVS.	6.10;
Continue funding maintenance of newly installed flow gauge on Tazin River to provide real time monitoring to assist in flow management at Nonacho Lake.	6.10
Continuation of annual inspections and periodic dam safety reviews according to Dam Safety Guidelines would be performed on the water conveyance and generation systems.	15.7
Replacement and repair equipment would be stored at Twin Gorges Facilities and Nonacho Control structures.	17
The conductor lines (transmission lines) would be run at approximately 18% capacity or less (below US Environmental Protection Agency guidelines), so noise is not expected from the conductor line.	15.4
Phase-to-ground distances for the proposed transmission towers would be small enough that larger birds may span the distance between the conductor and the tower, but the orientation of the lines (either hanging below or suspended below an insulator) reduces the likelihood of phase-to-ground contact.	15.4
Substations would be developed within the boundaries of existing mines.	15.7; 12



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Transmission line crossing of the Lockhart River within the proposed East Arm National Park would be determined through discussion with the community of Łutsel K'e.	15.10;
Routing and tower locations would be selected to have minimal site disturbances, such as locating poles on high elevation rock outcrops and spanning lowlands, locating the line in previously burned areas, and avoiding wetlands, riparian zones, trails and sensitive areas.	15.7; 15.4
Construction would attempt to avoid placing towers, guys, or other infrastructure in or immediately adjacent to water bodies, and avoid wet substrate.	15.7
Elimination of overhead ground wire except near substations, to reduce potential for bird collisions.	6.10
Possible use of bird diverters in known key migratory bird paths to avoid collisions with the transmission line.	6.10
Use of existing mine facilities to negate creation of new camps north of the treeline.	15.4
Size of new camps would be minimized and camps would be removed upon construction completion.	15.4
Smaller crew camps would be placed at existing lodges, to reduce infrastructure needs.	15.7; 12

MITIGATION AND MONITORING	
COMMITMENT	SECTION
General Construction	
 Draft Environmental Management Plans have been designed to provide key management personnel, contractors, consultants, and visitors to the Project with guidance and procedures to avoid and/or minimize any and all negative environmental effects through construction and operation of the Project. These EMPs would be finalized during detailed design and implemented prior to construction. Plans would include, at a minimum: Materials and Waste Management Erosion and Sediment Control Management Vegetation Management Human-Wildlife Conflict Management Spill Contingency and Response Plan. 	7
 Environmental monitors would be in place during construction to ensure Management Plans and mitigation measures are adhered to; inspections and incidences are documented, samples gathered as necessary, and promptly reported; and participate in adaptive management planning if necessary. Monitors would also: Oversee issues such as camp waste disposal, human-wildlife conflicts, and managing any unanticipated Project conflicts with wildlife (i.e. environmental monitoring). Document the presence of carnivores, ungulates, and raptors near construction areas, communicate this information to construction managers, and carry out any deterrent action that may be necessary (documented in the Human Wildlife Conflict Management Plan). This type of monitoring has been demonstrated to be of great value at the Diavik, Ekati and Snap Lake Diamond Mines. 	12 - 15



MITIGATION AND MONITORING	
COMMITMENT	SECTION
• Document unauthorized use of the proposed winter roads from Fort Smith to Twin Gorges and from Twin Gorges to Nonacho Lake. Further, any evidence of wildlife harvesting, ice fishing, recreational snowmobiling, firewood harvesting, camping, or any other such activities would be recorded. An example of a similar monitoring program is that conducted by ENR on the Tibbitt to Contwoyto winter road (Ziemann, 2007).	
 Report any archaeological sites identified during Project construction, and would ensure that all Project activity maintains a safe distance from all known archaeological sites. 	
Environmental sensitivity and awareness training would be provided for all personnel.	12; 15.2; 15.7; 15.4
Construction activities in the vicinity of the caribou hunting camps would take place in winter, outside of the caribou hunting season.	15.1; 19
Construction activities are planned to occur during periods that would be least disruptive to caribou in the area.	12
Blasting within the caribou range would be limited to the upgrades to the Nonacho Lake control structure.	12
When concrete works can not be completed in the dry, site specific operational and management plans would be developed with the contractor and submitted to DFO prior to conducting the works.	15.5; 15.1
Construction activities would follow DFO Operational Statements for water withdrawal in the NWT (DFO 2005).	15.2
Water levels at Nonacho Lake would be drawn down over a two- or more month period in autumn, to enable instream construction works to occur in the dry.	15.2
Portage trails interrupted by the Project infrastructure would be re-routed.	15.5
Roads and Access	
Use of existing winter access roads where possible (e.g., northern access roads, upgrading of existing Fort Smith to Twin Gorges winter road).	15.5
No winter roads or temporary access trails within the proposed East Arm National Park.	15.10; 19
Recreational use of vehicles would not be permitted. Public use would be restricted on all southern sector winter roads and access would only be permitted to vehicles involved in Project construction. Gates at the beginning of the Fort Smith to Twin Gorges winter road (on the east side of the Slave River), and at the beginning of the Twin Gorges to Nonacho Lake winter road (at Twin Gorges) would be installed to control access.	15.5; 15.2; 15.7;
Single point access to winter roads restricted by ice conditions on the Slave River.	15.5
Access along the winter roads by other users for non-Project purposes (i.e., Aboriginal land uses) would be discussed with land users and agencies in consideration of traveler safety along the road and in and around the work sites.	15.7; 15.4
Road construction would follow the DFO Operational Statements for Ice Bridges and Snow Fills in the NWT (DFO 2007a).	15.5; 15.2
The use of frozen lakes and rivers for the winter road would be maximized. Clearing for winter roads would be limited to only those areas necessary to support the construction activities.	15.7; 15.4; 12
Where portage clearing would be required, the corridor would be single lane width.	15.7; 15.4



MITIGATION AND MONITORING	
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The entrance to the winter road would be blocked at the end of each hauling season (e.g., March) through the use of gates, snow berms, and slash.	15.5
Decommissioning of all roads and staging at Project completion. Following construction (e.g., March 2011), the winter roads would no longer be maintained, and slash would be placed across the lower portages to discourage use.	15.5
Restoration of temporary site disturbances (construction sites) to the extent possible.	15.2
Barge landing sites and other infrastructure would not interfere with navigable waters.	15.5
A minimum flying altitude of 300 m would be maintained, as possible, for cargo and passenger aircraft when outside of the Project area.	15.1; 15.2
Transmission Line	
Transmission lines and towers would follow applicable guidelines for aviation safety, as outlined in Aerodrome Standards and Recommended Practices (Transport Canada 2005) and Standards for Overhead Systems (CSA 2006). Average tower height would be 22 metres.	15.5
Construction of the transmission line would follow the DFO Operational Statement for Construction of Overhead Lines and use proven best management practices for road construction.	15.2
Adjustments to tower locations would be made during construction to avoid sensitive areas (e.g., wetlands and marshes with high soil contents).	15.4, 15.7
Known archaeological resources and cultural sites would be avoided.	15.12
Archaeological assessment would be performed for any changes to Project footprint in areas considered to have moderate to high potential to contain archaeological resources.	15.12
Vegetation clearing above the treeline would be limited to requirements for tower foundations and staging areas.	15.4
Discontinuous clearing of ROW where possible and when clearance requirements can be met by natural terrain.	15.4
Clearing of vegetation would take place outside of the migratory bird season (May 15 through July 31).	15.4
Herbicides would not be used for vegetation control.	15.4
Hand clearing would be undertaken in sensitive areas, where feasible.	15.4, 15.7
Selective clearing and retention of shrub vegetation at a height of up to 3 m in select areas (i.e., where terrain is too difficult for machinery to access and within East Arm National Park).	15.4, 15.7
Disturbance to riparian zones would be avoided where practical.	15.2
Clearing for camps and staging areas would be limited to only those areas necessary to support the construction activities.	15.4, 15.7
To avoid any disturbance of nesting raptors, the environmental monitors would identify areas where construction activity may pass within 1.5 km of a known nest site during the nesting season. Surveys would be completed to determine which nests are occupied. If a known nest is found to be occupied, or a new nest is found, construction managers would be requested to identify strategies to avoid the nest. ENR would be contacted for further advice if avoidance of the 1.5 km buffer around an active nest during the construction season is not easily achievable.	15.4



MITIGATION AND MONITORING	
COMMITMENT	SECTION
Post-Construction Monitoring	
Post-construction wildlife monitoring would be finalized during the permitting process, in consultation with the regulatory agencies and other stakeholders. The monitoring program would involve the identification of key indicators and monitoring methods that stakeholders feel best monitor the potential effects and species of interest.	12 - 15
A monitoring program for Trudel Creek would be developed in consultation with the regulatory agencies to ensure the program monitors system indicators that best reflect the issues of interest. Monitoring should focus on two key biological aspects, including fish and habitat use, and vegetation re-establishment. Tools used to undertake monitoring of these as well as other aspects of the ecological components of Trudel Creek may include photography, field sampling programs, and maintenance of water temperature data loggers.	14.8
Artificial nest platforms could be used in Trudel Creek, based on vegetation re- establishment, for waterfowl management to increase reproductive success and are an appropriate mitigation strategy to avoid contravention of the Migratory Birds Convention Act (1994).	14.9
Adaptive management plans would be developed and implemented if monitoring or follow-up detects effects beyond those predicted, unanticipated effects, or the need for improved or modified design features. This may include increased monitoring, changes in monitoring plans, or additional mitigation.	12 – 1

EMPLOYMENT COMMITMENTS	
COMMITMENT	SECTION
Dezé would develop a Northern Aboriginal Project Procurement Policy that would seek to maximize the recruitment and employment of Northern Aboriginal persons and provide them with the first opportunity to fill any available positions. The Akaitcho Territory Government and its members and the Northwest Territory Métis Nation and its members would be considered on a first preference basis under this policy.	15.9
The Dezé would apply the approach to contracting set out in the Northern Aboriginal Project Procurement Policy prior to implementing an open competitive tendering process.	15.9
Recruitment and employment strategies, training, and education programs would be implemented.	15.8
Cultural awareness programs and conflict resolution policies would be implemented.	15.8
Northern business incentive policy would be implemented.	15.8
Support of work and life skills training would be implemented in advance of Project initiation.	15.8
Dezé would provide briefings and presentations on the Project and its employment plans and policies to interested groups.	15.8, 15.9
Dezé would participate in local and regional career fairs.	15.8, 15.9
Dezé would identify opportunities for student work placements or internships on	15.8, 15.9



EMPLOYMENT COMMITMENTS	
COMMITMENT	SECTION
the Project.	
Dezé would work to ensure that Project employment benefits are optimized by collaborating with public and Aboriginal governments, schools, and Aurora College to support the efficient use of available training funds in support of the development of potential Project workers.	15.8, 15.9
Dezé would collaborate with Aboriginal Human Resource Development Agreement (AHRDA) holders' groups and the governments of NWT and Canada and their agencies to identify available funding to support education and training in advance and during the construction phase of the Project.	15.8, 15.9
The Project would direct the delivery of safety training for all Project workers.	15.8, 15.9
The Project would establish processes and mechanisms for registration, documentation of work experience, and monitoring of apprentice performance on the Project in cooperation with the NWT Trades Qualification and Occupation Certification Board.	15.8, 15.9
The Project would require key contractors to provide access to Aboriginal and northern residents to training and employment opportunities that could lead to sustainable employment in the longer term, would support the development of transferable skills, and/or would offer an opportunity for advancement.	15.8, 15.9
The Project would establish policies to ensure that its camps are free from alcohol and drug usage, and an employee assistance program for its employees. This program would provide support for employees and their families who may require assistance as a result of unhealthy behaviours.	15.8
Dezé would develop information on job opportunities for circulation to all South Slave regional communities.	15.8, 15.9
Dezé would post job listings using available employment and career centres and electronic means.	15.8, 15.9
Dezé would establish an employment office for the Project in the South Slave region.	15.8
Dezé would require contractors and sub-contractors to establish Aboriginal and northern resident employment plans, policies, and practices, as well as monitoring and reporting systems that comply with the Proponent's commitments and agreements.	15.8, 15.9
Dezé would work with Aboriginal and community governments to develop plans to address accommodation needs of temporary workers brought in or through communities to Project work sites.	15.8, 15.9
Dezé would minimize, where possible, the accommodation of non-resident temporary workers in South Slave regional communities.	15.8, 15.9
Dezé would establish an employee-assistance program to assist Project employees and their families.	15.8, 15.9
The waiving of bonding requirements for certain contracts would also be considered on a case-by-case basis.	15.9
Environmental and employment reporting would occur on an annual basis.	15.8