



206, 5102 – 50th Avenue, Yellowknife, NT X1A 3S8 Phone: (867) 669-3390 Fax: (867) 669-3395

March 05, 2010

Mackenzie Valley Environmental Impact Review Board
#200, 5102 – 50th Avenue
Yellowknife, NT X1A 2N7

Attention: Alan Ehrlich, Senior Environmental Assessment Officer

Dear Sir:

**RE: Taltson Hydroelectric Expansion Project Environmental Assessment
Clarification of Trudel Creek Minimum Flow Hydrograph Commitment**

As requested by MVEIRB (Board) in their letter dated February 24, 2010, Dezé is pleased to clarify its commitment in regard to a variable flow regime in Trudel Creek, referenced as Agency Ref # DFO-16 in our January 29, 2010 Table of Commitments.

Dezé commits to the development of a variable hydrograph for Trudel Creek of a magnitude and frequency that minimizes impacts to the long-term integrity of Trudel Creek to the satisfaction of DFO.

Background

As background, Dezé notes that the oral hearing was the first time that DFO had raised any issue of significant negative effects in association with potential effects to Trudel Creek from the Project, even though Dezé and DFO had met numerous times in regard to the DAR effects assessment and monitoring programs, and specifically in regard to Trudel Creek.

As well, during the oral hearing (see January 15, 2010 transcript pages 42, 44 and 74) DFO repeatedly confirmed that its primary concerns were the possibility that a flow could be locked-in permanently in the future through the Water Licensing process, with the potential that Trudel Creek could experience multiple consecutive years of continuous flow of 4 m³/s with no variation (flat hydrograph).



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DAR Analysis on Variable Flows

As Dezé understands it, DFO's concern is with the uncertainty of potential significant negative effects to fish and fish habitat in the event that the Project were licensed by the Mackenzie Valley Land and Water Board in a manner that would allow consecutive, multi-year, non-variable flows at the minimum prescribed level of 4 m³/s.

The effects assessment contained in the DAR was based on a flow regime in which a capped flow is diverted through the turbines and the remaining flow is diverted to Trudel Creek. This operating procedure creates a variable flow in Trudel Creek, where wet years would experience more water being directed to Trudel, and dry years would experience less water subject to the minimum flow. The effects assessment contained in the DAR contemplated this operating procedure and found no significant negative effects, and we submit that DFO has expressed no concerns with the effects assessment presented in the DAR.

Future Regulatory Process

Dezé also notes DFO's comments on page 74 of the January 15, 2010 transcript, in which they stated that the flow regime must be finalized to the satisfaction of DFO, which would be conducted during the regulatory phase and regulated through the *Fisheries Act*.

DFO's position on the use of future regulatory processes to finalize the variable flow issue was also confirmed in their January 29, 2010 Undertaking Submission, Page 6:

Should the Proponent and DFO come to agreement on an acceptable flow regime for Trudel Creek, this minimum flow regime could be incorporated as a term or condition of a *Fisheries Act* authorization issued for the harmful alteration, disruption or destruction of fish habitat or the killing of fish in Trudel Creek. These minimum flow requirements should be in agreement with those prescribed in the water licenses or other federal/territorial permits applicable to the operation of the Project.

Dezé is in agreement with DFO that the flow regime in Trudel Creek should be finalized during the regulatory phase.



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We have enclosed a revised Commitments Table that includes the clarified commitment for Agency Ref # DFO-16.

We appreciate this opportunity to clarify and explain our commitment in regard to the Trudel Creek flow regime. Kindly contact the undersigned if you have any questions.

Regards,

Dan Grabke,
Managing Director
Dezé Energy Corporation

Attachment:

Dezé Taltson Expansion Project Table of Commitments March 4, 2010 Revision

TABLE OF COMMITMENTS

This table summarizes the commitments made by Dézé Energy Corporation Ltd. (Dézé) during the course of the environmental assessment of the Taltson Expansion Project. The commitments are limited to those that were made as part of the EA process. The commitments do not extend to the Draft Environmental Monitoring Program (Oct 2009) at this time, as feedback has not been fully received from parties on this plan. However, should agencies agree with the Monitoring Program as presented, Dézé is prepared to commit to it. The commitments in this document stem from three sources, namely:

- The Taltson Expansion Project Developers Assessment Report (DAR);
- The document entitled *Commitments 2009: Commitments Arising from the Mackenzie Valley Review Board Technical Sessions held in Yellowknife on October 1st, 2nd, and 5th and in Lutsel K'e on September 30th, 2009* (Dézé 2009); and
- Various meetings between Dézé and government agencies, as outlined in Meeting Reports (available on the Review Board public registry).

The tables below contain a summary of the commitment and the source. Please refer to the source for the full wording and context of the commitment.

DESIGN MITIGATION FEATURES		
#ID	DAR COMMITMENTS	DAR SECTION
DAR-1	Project would comply with water level and flow conditions in the existing Type 'A' water licence N1L4-0154 Northwest Territories Power Corporation.	13.9, 13.10
DAR-2	No new flooding would occur under either expansion option during normal operating conditions. Maximum and minimum water elevations will not exceed those regulated pursuant to Type 'A' Water Licence N1L4-0154 Northwest Territories Power Corporation.	6.10
DAR-3	Dézé commits to evaluating the technical and economic feasibility of using turbines with fewer blades (fewer blades reducing the probability of fish mortality) and to providing the results of its feasibility analysis to regulatory authorities.	15.3; 13.9
DAR-4	Dézé commits to implementing maintenance schedules designed to take only one turbine off-line at any one time. This will minimize ramping flows in Trudel Creek. Dézé also commits to work with the Northwest Territories Power Corporation when designing its maintenance schedules.	6.10

DESIGN MITIGATION FEATURES		
#ID	DAR COMMITMENTS	DAR SECTION
DAR-5	Dezé commits to establishing operational guidelines for controlled turbine shutdowns and start-ups (all turbine start-ups are controlled). Dézé recognizes that shutdown and start-up guidelines are typical for hydroelectric facilities across Canada and will form part of its overall management of the Taltson Expansion Project.	13.1
DAR-6	Dezé commits to maintaining a minimum flow of 4 m ³ /s in Trudel Creek.	14.1; 14.7; 14.9
DAR-7	Dezé commits to a gated bypass spillway adjacent to the existing Twin Gorges generation facility in order to maintain flows over and below Elsie Falls during planned and unplanned plant shutdowns, and to reduce excess spillage flows to Trudel Creek. 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.	6.10;
DAR-8	Dezé commits to maintaining the newly installed flow gauge on Tazin River (2008) in order to provide real time water flow monitoring. The real time flow monitoring will contribute to flow management at Nonacho Lake.	6.10
DAR-9	Dezé commits to annual inspections and the application of the <i>Dam Safety Guidelines 2007</i> , and the companion series of <i>Technical Bulletins</i> in its processes and criteria for management of dam safety, including water conveyance and generation systems.	15.7
DAR-10	Dezé commits to storing routine replacement and repair equipment at the Northwest Territories Power Corporation Twin Gorges Facilities and at the Nonacho Control structure.	17
DAR-11	Dezé commits to a transmission tower design such that the phase-to-ground distance is wide enough and oriented such that large birds are unlikely to be electrocuted.	15.4
DAR-12	If permission from the mine owners is granted, Dézé intends to install substations within the lease boundaries of existing mines.	15.7; 12
DAR-13	Dezé commits to positioning the transmission line crossing through the proposed East Arm National Park in consultation with Łutsel K'e and Parks Canada.	15.10;
DAR-14	Dezé will not install overhead ground wires on the transmission line except near substations in order to reduce the potential for bird-wire collisions.	15.4
DAR-15	Dezé commits to investigating the feasibility and practicability of using bird diverters areas of high waterfowl density to facilitate bird avoidance of transmission lines and reduce bird-transmission line collisions.	15.4
DAR-16	Dezé commits to the use of existing camps where possible to avoid the construction of new camps during the construction phase.	15.4
DAR-17	Dezé commits to using the least possible area needed for the safe and efficient operation of the temporary camps and to the removal of the construction completion and winter road access.	15.4

	MITIGATION AND MONITORING	
#ID	DAR COMMITMENTS	DAR SECTION
	General Construction	
DAR 18	<p>Dezé commits to the preparation of Draft and Final Environmental Management Plans (EMP). The EMPs will provide key management personnel, contractors, consultants, and visitors to the Project with guidance and procedures to avoid and/or minimize 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:</p> <ul style="list-style-type: none"> • Materials and Waste Management • Erosion and Sediment Control Management • Vegetation Management • Human-Wildlife Conflict Management • Spill Contingency and Response Plan 	7
DAR-19	<p>Dezé commits to having a sufficient number of environmental monitors in place during construction to implement the Environmental Management Plans and mitigation, to conduct inspections, promptly document and report incidents, collect samples, manage spills, and participate in adaptive management planning if necessary.</p> <p>Monitors would also:</p> <ul style="list-style-type: none"> • Oversee issues such as camp waste disposal and human-wildlife conflicts; • Document wildlife hazards or sensitivities near construction areas, communicate this information to construction managers, and implement the Human Wildlife Conflict Management Plan; and • Report any potential archaeological sites identified during Project construction, and ensure that all Project activity maintains a safe distance from all known archaeological sites. 	12 - 15
DAR-20	Dezé commits to provide its entire staff with environmental sensitivity and awareness training.	12; 15.2; 15.7; 15.4
DAR-21	Dezé commits that construction activities near caribou hunting camps will occur in winter, outside of the caribou hunting season.	15.1; 19
DAR-22	Dezé commits that its construction activities will be planned and scheduled to avoid caribou migrations, and monitoring will be conducted to predict and avoid disturbance to caribou groups.	12
DAR-23	Dezé commits that when concrete works cannot be completed in the dry; that site specific operational and management plans would be developed with the contractor and submitted to DFO before conducting the concrete works.	15.5; 15.1

MITIGATION AND MONITORING		
#ID	DAR COMMITMENTS	DAR SECTION
DAR-24	Dezé commits to the use of DFO's <i>Protocols for Winter Water Withdrawal in the NWT</i> during construction (DFO 2005).	15.2
DAR-25	Dezé commits that before in-stream construction happens at Nonacho Lake that it will draw down the water levels at Nonacho Lake over a two-or more month period commencing in autumn to enable in-stream construction works to occur in the dry.	15.2
DR-26	Portage trails interrupted by the Project infrastructure would be re-routed. This is likely limited to the portage trail around the rapids at the Nonacho Lake control structure, at the outflow of Nonacho Lake.	15.5
Roads and Access		
DAR-27	Dezé commits to the use of existing winter access roads where practical (e.g., the Tibbitt to Contwoyto winter road, upgrading of existing Fort Smith to Twin Gorges winter road).	15.5
DAR-28	Dezé will not construct winter roads or temporary access trails within the proposed East Arm National Park 1970/1997 withdrawal area.	15.10
DAR- 29	Dezé commits to restricting public use of all southern sector winter roads and to discourage and control winter road access by installing fencing and locked on privately held property at the beginning of the Twin Gorges to Nonacho Lake winter road (at Twin Gorges). Fencing will extend to inhibit detours around the gate and fence. The gate will be closed and locked when not in use by Dézé contractors for construction. The efficacy of these measures at preventing access will be monitored, and additional measures may be implemented.	15.5
DAR- 30	Dezé commits to managing access along the winter roads by other users for non-Project purposes (i.e., Aboriginal land uses) with land users and agencies in consideration of traveler safety along the road and in and around the work sites. Dézé will document unauthorized use of the proposed winter roads from Fort Smith to Twin Gorges and from Twin Gorges to Nonacho Lake. Any evidence of wildlife harvesting, ice fishing, recreational snowmobiling, firewood harvesting, camping, or any other such activities would be recorded.	15.7; 15.4
DAR- 31	Dezé will ensure that there will be no recreational use of Project vehicles at any time during construction.	15.5; 15.2;
DAR- 32	Dezé will adhere to the DFO <i>Operational Statements for Ice Bridges and Snow Fills in the NWT</i> for all winter road construction.	15.5; 15.2
DAR- 33	Dezé commits to maximizing the use of frozen lakes and rivers for the winter road.	
DAR- 34	Dezé commits that winter road portages will not exceed the minimum required width, unless required for construction or safety considerations.	15.7; 15.4
DAR- 35	Dezé commits to block the entrance to the Twin Gorges to Nonacho Lake winter road at the end of each hauling season (e.g., March) through the use of gates, snow berms, and slash (as well as for the Fort Smith to Twin Gorges winter road, if allowable).	15.5

MITIGATION AND MONITORING		
#ID	DAR COMMITMENTS	DAR SECTION
DAR- 36	Dezé commits to decommissioning all roads and staging areas at the end of the construction phase. Barriers will be placed across the lower portages to discourage future use.	15.5
DAR- 37	Dezé commits to obtaining a Navigable Waters permit for all Project components that require permits, including the transmission line, barge landings, and in-stream works.	15.5
DAR- 38	Dezé commits to a minimum flying altitude of 300 m for cargo and passenger aircraft when outside of the immediate Project area, as per ENR guidelines.	15.1; 15.2
Transmission Line		
DAR-39	Dezé commits to adhere to Transport Canada's <i>Aerodrome Standards and Recommended Practices</i> (Transport Canada 2005).	15.5
DAR-40	Dezé commits to implement the DFO <i>Operational Statement for Construction of Overhead Lines</i> during construction of the transmission line, and to use proven best management practices for road construction. In the event that the Project needs to deviate from the Op Statement, site specific mitigation plans will be developed and reviewed with DFO prior to construction activities at that site.	15.2
DAR-41	Dezé commits to avoid all known archaeological resources and cultural sites, or those discovered during future assessments, by a minimum of 50 metres.	15.12
DAR-42	Dezé commits that it will consult GNWT archaeologists in the event of changes to Project footprint, and conduct further archaeological surveys if so requested.	15.12
DAR-43	Dezé commits that the clearing of vegetation above the treeline will be limited to requirements for tower foundations and staging areas.	15.4
DAR-44	Dezé commits that vegetation clearing will occur outside of the migratory bird season (May 15 through July 31).	15.4
DAR-45	Dezé commits that it will not use herbicides to control vegetation.	15.4
DAR-46	Dezé will identify areas where construction activity may pass within 1.5 km of a known raptor nest site during the nesting season. If a raptor nest is found within 1.5 km of construction activity, construction managers will identify strategies to avoid the nest. ENR would be contacted for further advice if this is not achievable.	15.4
Post-Construction Monitoring		
DAR-47	Dezé commits to the implementation of a post-construction environmental monitoring program that would be finalized during the permitting process, in consultation with the regulatory agencies and other stakeholders.	12 - 15

	MITIGATION AND MONITORING	
#ID	DAR COMMITMENTS	DAR SECTION
DAR-48	Dezé is committed to the use of adaptive management. 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		
#ID	DAR COMMITMENTS	DAR SECTION
DAR-49	Dezé commits to developing an NWT Business, Employment and Training policy that would seek to maximize the employment of Northern Aboriginal persons and use of northern businesses, and provide them with the first opportunity to fill any available positions and bid on available contracts. This policy will include targets for Project procurement and employment. Targets and results will be reported annually during the construction period.	15.9
DAR-50	Dezé will seek to provide opportunities on a first preference basis for the Akaitcho Territory Government and its members and the Northwest Territory Métis Nation and its members and any business entities formed by any of them.	15.8
DAR-51	Dezé commits to having culturally aware employees and contractors and will provide cultural awareness programs and conflict resolution policies.	15.8
DAR-52	Dezé commits to work with existing Federal and GNWT programs to support work and life skills training for prospective employees in advance of Project initiation.	15.8
DAR-53	Dezé commits to provide briefings and presentations on the Project and its employment plans and policies to interested groups.	15.8, 15.9
DAR-54	Dezé commits to participation in local and regional career fairs.	15.8, 15.9
DAR-55	Dezé commits to identifying opportunities for student work placements or internships on the Project.	15.8, 15.9
DAR-56	Dezé commits to engaging 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 human resources.	15.8, 15.9
DAR-57	Dezé would collaborate with <i>Aboriginal Human Resource Development Agreement</i> (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
DAR-58	The Project commits to adhere to established 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
DAR-59	Dezé is committed to a healthy and safe workplace. The Project will establish policies to ensure that its camps are free from alcohol and drug usage; employee assistance program for its employees are available, and that contractor's adopt these practices as well as industry standard workplace safety training and programs.	15.8

	EMPLOYMENT	
#ID	DAR COMMITMENTS	DAR SECTION
DAR-60	Dezé commits to provide information on job opportunities for circulation to all South Slave regional communities.	15.8, 15.9
DAR-61	Dezé commits to post job listings using available employment and career centres and electronic means.	15.8, 15.9
DAR-62	Dezé commits to establishing an employment office for the Project in the South Slave region.	15.8
DAR-63	Dezé is committed to hiring Aboriginal and northern workers. Dézé would require its contractors and sub-contractors to establish Aboriginal and northern resident employment plans, policies, and practices, together with monitoring and reporting systems that comply with the Proponent's policies, commitments and agreements.	15.8, 15.9
DAR-64	Dezé commits to prepare a plan to address the accommodation needs of temporary workers brought in or through communities to Project work sites with effected South Slave community governments.	15.8, 15.9
DAR-65	Dezé commits to supporting northern business opportunities.	15.9
DAR-66	Dezé commits to providing environmental reporting routinely during Project construction.	15.8

	NEW COMMITMENTS (FROM OCTOBER TECHNICAL SESSION AND SIDE-BAR MEETING REPORTS)	
#ID	TECHNICAL SESSIONS AND SIDE-BAR MEETING COMMITMENTS	DOCUMENT
DAR-67	In-stream concrete works will be constructed in dry conditions. Monitoring will be conducted during concrete works that have potential to affect water bodies.	DFO -IR 1
DAR-68	Dezé commits to investigating, during detailed design, additional entrainment mitigation measures that could be incorporated into the Project design to reduce potential for fish mortality, to monitoring the assumptions that the canal North Gorge intake canal fish use would be low and that adult and juvenile fish can escape the canal if they swim into it, and to discussing outcomes of the monitoring program with DFO and identify if additional monitoring or mitigation / adaptive management is required to protect fish populations.	IR 17, Meeting Report with DFO, 6 October 2009
DAR-69	Dezé also recognizes that limited dissolved oxygen environmental data is available for Zone 2, specifically Tronka Chua Lake, and that testing prior to Project construction, of the assumptions made to complete the effects assessment, such as fish species composition, habitat availability, lake depths, and winter dissolved oxygen is required.	DFO IR 6, 7, 8

NEW COMMITMENTS (FROM OCTOBER TECHNICAL SESSION AND SIDE-BAR MEETING REPORTS)		
#ID	TECHNICAL SESSIONS AND SIDE-BAR MEETING COMMITMENTS	DOCUMENT
DAR-70	Winter DO measurements will allow for verification of the model, and confirmation that the reduced flow will be sufficient to uphold the concentration of dissolved oxygen, as prescribed in the CCME guidelines for cold water, or similar DO concentrations to the baseline conditions. Fish and fish habitat information and DO testing in Tronka Chua Lake, as well as DO monitoring in Trudel system to verify the model, has been included in the Taltson Expansion Project Monitoring Program.	DFO IR 6, 7, 8
DAR-71	Dezé will continue to revise the power generation model and subsequently the Basin Model, to identify if a preferred operational scenario for both generation water balance and environmental effect mitigation is feasible.	DFO IR 8
DAR-72	Dezé commits to investigating, during detailed design, additional mitigation measures that could be incorporated into the Project design to reduce potential for fish mortality, to monitoring the assumptions that the canal North Gorge intake canal fish use would be low and that adult and juvenile fish can escape the canal if they swim into it, and to discussing outcomes of the monitoring program with DFO and identify if additional monitoring or mitigation / adaptive management is required to protect fish populations.	DFO IR 17, Meeting Report with DFO, 6 October 2009
DAR-73	Dezé intends to work with people that travel on the Taltson River ice between Tsu Lake and Twin Gorges to develop a communication system to advise users of potential abrupt changes to river flows	DFO IR 19
DAR-74	In 2007, Dézé installed temperature loggers in Trudel Creek and Gertrude Lake to record temperature conditions. These will remain in place pre-construction and during operations.	DFO IR 24
DAR-75	Dezé will incorporate a 50 kPa overpressure threshold for in-stream blasting, less than the published Canadian Guidelines.	DFO IR 37
DAR-76	Dezé will follow the GNWT open burning policies. Dézé will make re-useable materials available to local communities. Dézé will have an approved incinerator at camps that meets regulatory guidelines and is permitted as required. Dézé commits to following the Environment Canada guidelines as presented in the Technical Document for Batch Waste Incineration and 6 Step Process. Dézé also commits to developing an Incineration Management Plan with annual reports.	EC IR 38, 39, 40, 41, Meeting Report with Environment Canada, 21 October 2009
DAR-77	Dezé will consider various offsite cultural mitigation options specific to the Lady of the Falls on the Lockhart River that contribute to their vitality and significance, such as annual gatherings, Dene and Métis arts and culture (including traditional knowledge collection), cross-cultural experiences for visitors, or a contribution towards an exhibition, as these relate to the Lady of the Falls on the Lockhart River.	IR 42

NEW COMMITMENTS (FROM OCTOBER TECHNICAL SESSION AND SIDE-BAR MEETING REPORTS)		
#ID	TECHNICAL SESSIONS AND SIDE-BAR MEETING COMMITMENTS	DOCUMENT
DAR-78	For in-stream works, Dézé has committed to using a packaged, water-resistant explosive to reduce the amount of nitrate that could leach during deployment and detonation.	EC IR 43
DAR-79	To control public access on the Fort Smith to Nonacho Lake winter road and associated temporary access trails, several measures are proposed. The winter road from Twin Gorges to Nonacho Lake would be closed with locked gates on private property, and only Project vehicles would be permitted to use the road. Fencing will extend from the gates into the adjacent forest/shrub to inhibit detouring around the gate. The gate would be closed and locked at the end of each hauling season. At the end of the final winter road season (i.e., February or March 2013), the start of the winter road at Twin Gorges would be permanently blocked with a combination of slash windrows (i.e., piled trees and other vegetation cleared for construction), by falling trees across the road, or blocking the road with boulders. Environmental monitors will record public use of the road.	GNWT IR 1, 52, 53, 62
DAR-80	Dézé commits to preparing a photomontage of the transmission line on the existing landscape from viewpoints within the proposed East Arm National Park, to assist with the assessment and mitigation of aesthetic effects. Dézé will continue to work with Parks Canada on this and other issues related to the integrity of the proposed East Arm National Park.	PC IR 60
DAR-81	Dézé will investigate different tower types that could reduce aesthetic effects, and will continue to discuss alternatives with Parks Canada and Lutsel K'e.	PC IR 61, Meeting Report with Parks Canada, 26 November 2009
DAR-82	Dézé will develop a nest protection plan, that outlines strategies and mitigation intended to reduce effects to waterfowl nests within Trudel Creek during scheduled ramping events.	EC Meeting Report with EC, dated 18 December, 2009.
DAR-83	Dézé will investigate the feasibility of using tower designs with low nesting potential for ravens, and present these to Environment Canada for review.	EC Meeting Report with EC, dated 18 December, 2009.

NEW COMMITMENTS (FROM OCTOBER TECHNICAL SESSION AND SIDE-BAR MEETING REPORTS)		
#ID	TECHNICAL SESSIONS AND SIDE-BAR MEETING COMMITMENTS	DOCUMENT
DAR-84	<p>To reduce risk of fish entrainment, Dezé commits to:</p> <ul style="list-style-type: none"> Investigating if screen sizes <100 mm [at the penstock] are effective in preventing applicable fish species and life stages from being entrained and if they are operationally feasible Incorporating a screen on the intake facilities for the Nonacho turbine, and investigating an operationally feasible mesh size that assists with fish entrainment mitigation Investigating technical feasibility of utilizing turbines with the least impact to fish (i.e. minimal blades etc.). Developing a monitoring program to confirm the assumption that North Gorge intake canal fish use would be low and that adult and juvenile fish can escape the canal if they swim into it. Discuss outcome of monitoring program with DFO and identify if additional monitoring or mitigation / adaptive management is required to protect fish populations. 	Meeting Report with DFO, 6 October 2009

TABLES OF AGENCY RECOMMENDATIONS

The tables below contain all recommendations made by Environment Canada (EC), Fisheries and Oceans Canada (DFO), Indian and Northern Affairs Canada (INAC) and Parks Canada (PC) in their technical reports to the Mackenzie Valley Review Board. The tables identify whether the agency recommendation already has a corresponding commitment in the tables above, or has not yet been finalized between Dezé and the Party. The numbering corresponds to the original Agency report recommendation number.

AGENCY REC NO.	ENVIRONMENT CANADA RECOMMENDATIONS	CURRENTLY COMMITTED? (Y/N)	COMMITMENT # OR SOURCE	COMMENTS
EC-1	EC supports the recommendation in the Klohn Crippen Berger memorandum (dated September 8, 2008 in Appendix 6A) for sampling to be performed during excavation. Such confirmatory sampling should be conducted to address the uncertainty associated with interpreting the test results. By testing drill-hole cores in advance of blasting, the Proponent is able to assess the results and implement any appropriate mitigation measures. This additional testing and monitoring, as well as operating procedures on how all rock will be managed during construction and potential remedial measures should be detailed in the proposed Metal Leaching and Acid Rock Drainage Management Plan, The plan should be submitted for review in advance of the work.	N		In the DAR, Dezé has committed to protecting water quality from contamination associated with construction works. There are various means to monitor ARD/ML during construction. Dezé will work with INAC during the regulatory phase to develop a monitoring program that satisfies INAC water quality concerns.
EC-2	Kinetic or leach testing should be undertaken in a timely manner to evaluate the character of any drainages from the granite to ensure the excavated rock will not leach contaminants. Depending on the nature of the test is the distilled water or site-water shake flask extraction.	N		There are various means to monitor ARD/ML during construction. Dezé will work with INAC during the regulatory phase to develop a monitoring program that satisfies INAC water quality concerns.

AGENCY REC NO.	ENVIRONMENT CANADA RECOMMENDATIONS	CURRENTLY COMMITTED? (Y/N)	COMMITMENT # OR SOURCE	COMMENTS
EC-3	Reference to the proposed monitoring of rock excavation materials to ensure ARD potential remains low should be included in the Environmental Monitoring Program for the proposed project. Also, the commitment to develop and implement a Metal Leaching and Acid Rock Drainage Management Plan should be included in the Proponent's commitments and referenced in the Environmental Monitoring Program document.	N		In the DAR, Dézé has committed to protecting water quality from contamination associated with construction works. There are various means to monitor ARD/ML during construction. Dézé will work with INAC during the regulatory phase to develop a monitoring program that satisfies INAC water quality concerns.
EC-4	DFO's <i>Guidelines for the Use of Explosives In or Near Canadian Fisheries Waters</i> should be followed (except for the change to overpressure threshold outlined in Proponent's commitment #37) including the advise to not use ammonium nitrate-fuel oil (ANFO) mixtures in or near water due to the chance of the production of toxic by-products (ammonia), and the change of accidents/spills.	Y	DAR CH 15.2, DAR-75, DAR-80	
EC-5	The Proponent's commitment to develop a Drill and Blast Management Plan should be included in its Commitments 2009 document. Treatment or alternative disposal of water containing blasting residue from the washing of aggregates, from water collected from the blasting areas or seepage through the blast rock should be included in the plan.	Y		Dézé will commit to this recommendation
EC-6	Any effluent discharges should be regulated in a MVLWB water license for ammonia and nitrate such that aquatic life is protected.	Y	DAR-18	
EC-7	Implement proposed mitigation measures and commitments identified in the EA process for concrete wash water and effluent.	Y	DAR-18, DAR-67	

AGENCY REC NO.	ENVIRONMENT CANADA RECOMMENDATIONS	CURRENTLY COMMITTED? (Y/N)	COMMITMENT # OR SOURCE	COMMENTS
EC-8	Any effluent discharges should be regulated in a MVLWB water license for total suspended sediment and pH such that aquatic life is protected.	N	DAR-18	
EC-9	A comprehensive AEMP expanded from the Draft EMP should be developed for the project, in consultation with stakeholders, prior to construction phase beginning and in time to complete baseline characterization.	Y	DAR-47	
EC-10	To ensure that natural spatial and temporal variability in the system is characterized before construction begins, and assumptions made for water quality confirm, baseline water quality data should be collected from all zones.	N		Details will be finalized during the permitting phase of the Project.
EC-11	Dissolved Oxygen (DO) is being checked pre-construction to fill the data gap identified. EC recommends more than one year of data collection to capture the extent of natural variability since DO levels vary with snow cover, cloud conditions and any pulses of organic material into depositional areas.	N		Details will be finalized during the permitting phase of the Project.
EC-12	Summer temperature increases in Trudel Creek have been modeled, and an average increase of 2 deg C indicated. The monitoring of temperatures using loggers is an excellent idea. EC recommends that the data be reviewed annually, within the AEMP process, to determine where DO monitoring might be warranted. Summer kill of fish has been observed in creeks and lakes, and can occur when temperatures are elevated and the amount of oxygen that the water can hold is reduced accordingly.	Y	DAR-76	

AGENCY REC NO.	ENVIRONMENT CANADA RECOMMENDATIONS	CURRENTLY COMMITTED? (Y/N)	COMMITMENT # OR SOURCE	COMMENTS
EC-13	EC recommends more than one year of baseline data be collected for benthic invertebrates. Since they can be highly variable from year to year of the risk is run of not being able to distinguish change from natural variability. It is recommended that the metrics outlined in EC's Environmental Effects Monitoring Program be used (see 3.6 for more details).	N		As benthic monitoring on hydropower projects is primarily in relation to fish food (as opposed to its more typical use as an indicator of toxicity from urban or industrial sites), benthic monitoring presented in the Draft Environmental Monitoring Program (Oct 2009) will monitor predictions in the DAR.
EC-14	<p>Details are required for the water quality monitoring proposed. Some examples are as follows:</p> <ul style="list-style-type: none"> a. How will the monitoring listed in the second paragraph (EMP, page 18), which is largely compliance monitoring, fit in with effects monitoring? b. The third paragraph (EMP, page 18) states that monitors will do in-situ monitoring to ensure water quality meets CCME guidelines for the protection of freshwater aquatic life. What parameters and specific guidelines values will be used? c. The plan should include a map which shows monitoring locations, including the discharge of camp effluent mentioned in this section (5.2.2). d. The potential discharge sites mentioned should be at a minimum be sampled for ammonia, suspended solids, and pH, with periodic testing for total metals, The camp wastewater parameters should also include biological oxygen demand and oil and grease. 	N		Details of the monitoring program will be finalized during the permitting phase of the Project.

AGENCY REC NO.	ENVIRONMENT CANADA RECOMMENDATIONS	CURRENTLY COMMITTED? (Y/N)	COMMITMENT # OR SOURCE	COMMENTS
EC-15.	The proponent has committed to taking more sediment cores prior to the proposed expansion and then during operations. Thought should be given to the method to ensure increases are detected early and complete baseline data should be gathered, as there are areas of the Northwest Territories with higher than expected mercury concentrations due to geology or long-range transport. The surficial layer should be analyzed for mercury. This will provide a more meaningful baseline against which future considerations can be made to determine effects with the expansion.	N		Details will be finalized during the permitting phase of the Project.
EC-16	Increasing sediment mercury concentrations (or even measurable initial ones, depending on the levels) should be a trigger to look at levels in biota.	N		Details of the monitoring program will be finalized during the permitting phase of the Project.
EC-17	EC recommends that mitigation measures be developed to avoid or lessen all potential adverse effects to Horned Grebes.	Y	Meeting Report with EC, dated 18 December, 2009	
EC-18	EC recommends that monitoring be undertaken to determine the effectiveness of mitigation and/or identify where further mitigation is required. Details of all mitigation measures and monitoring for Horned Grebes should be developed, in consultation with EC, prior to the start of construction for the project.	Y	Meeting Report with EC, dated 18 December, 2009. Also DAR-15, DAR-19, DAR-44	
EC-19	EC recommends that scheduled outages are prior to May 7, unless local baseline data on migratory birds indicate that these outages could be done later without disturbing or destroying migratory bird nest or eggs.	Y	DAR-4, DAR-5	Dezé will implement maintenance schedules that minimize ramping flows in Trudel Creek.

AGENCY REC NO.	ENVIRONMENT CANADA RECOMMENDATIONS	CURRENTLY COMMITTED? (Y/N)	COMMITMENT # OR SOURCE	COMMENTS
EC-20	EC recommends that additional Yellow Rail surveys be done prior to construction of the project in the areas likely to have Yellow Rail. If Yellow Rails are detected, the Proponent should work with EC to determine the appropriate mitigation and monitoring measures.	N		Dezé conducted Yellow rail surveys in 2008. Yellow rail were not detected, and the Taltson River is on the outer limits of yellow rail range. Regardless, Dézé has committed to mitigation that assumes the presence of yellow rail (see DAR-4, DAR-5, DAR-6, DAR-7, DAR-82).
EC-21	EC recommends that the Proponent undertake a spring and fall survey of potential wetlands/lakes along the transmission line route to determine if large flocks of birds are staging near the line. If areas along the transmission line have significant numbers of waterfowl during spring or fall migration, the Proponent should assess whether further mitigation and monitoring measures are required to minimize the impact of collisions of these flocks of birds with the transmission line.	N	DAR-14, DAR-15	As outlined in the DAR, local breeding waterfowl (as opposed to staging migrants) are at the greatest risk of collision. Baseline studies of local breeding waterfowl indicated that effects would be low. Monitoring and possible mitigation for local breeding waterfowl collisions are proposed. Staging migratory birds tend to select deltas and other productive areas that melt early in the spring. No such features have been identified on the transmission line route.
EC-22	EC recommends that the numbers and locations of raven and raptor nests on transmission towers be recorded annually. If the number exceeds a pre-established threshold, the Proponent should undertake further mitigation measures to discourage further nesting on the transmission towers.	Y	Meeting Report with EC, dated 18 Dec. 2009.	Dezé will record stick nests on towers during annual inspections. Recognizing that post-construction mitigation is difficult, Dézé will investigate means to make towers less conducive to nesting, rather than attempting to remove nests during operations.

AGENCY REC NO.	ENVIRONMENT CANADA RECOMMENDATIONS	CURRENTLY COMMITTED? (Y/N)	COMMITMENT # OR SOURCE	COMMENTS
EC-23	To mitigate the risk of significant adverse impacts to the environment, EC recommends that the Proponent develop and implement an Incineration Management Plan which incorporates the information provided in the EC "Technical Document for Batch Waste Incineration". The proponent should also submit an annual report providing the information described in the Meeting Report and the Technical Document.	Y	DAR-76	
EC-24	Waste water treatment facility and effluent monitoring should be detailed in the monitoring programs for the project for both the construction and operations phases.	Y	Dezé has committed to monitoring, contained in the Draft Environmental Monitoring Program (Oct 2009)	
EC-25	EC will continue to operate these [water survey] gauging stations as per the signed MOU and agreements. However, if unforeseen future events threaten the viability of any of these 4 gauging stations, a reassessment to explore options would be required between the Proponent, EC and other government agencies.	n/a		Dezé will work with agencies if the viability of the stations is threatened.
EC-26	EC supports the Proponent's proposal to undertake extreme event prediction modeling as more flow data become available.	n/a		Dezé noted, in the DAR, that as more data is collected, modelling can be undertaken. However, the need to undertake further modelling must first be supported by considerably greater data and by specific concerns regarding extreme events.

AGENCY REC NO.	ENVIRONMENT CANADA RECOMMENDATIONS	CURRENTLY COMMITTED? (Y/N)	COMMITMENT # OR SOURCE	COMMENTS
EC-27	<p>EC recommends the development of a spill contingency plan which involves prevention preparedness and response. Copies of all spill plan must be made readily available on site, and all staff should be familiar with operational procedures in the event of a spill. The Spill Contingency Plan should contain:</p> <ul style="list-style-type: none"> • Assign responsibilities to company staff and/or contractors and outline a clear path of response; • Provide a list of agencies/persons to be contacted in the event of a spill including their phone numbers, etc.; • Provide direction regarding response actions for spills on various types of terrain (e.g. spills on land, water, snow/ice, muskeg, etc.); • Create and maintain a list and indicate location(s), both on and off site, of equipment available to be used in the event of a spill; • Ensure and appropriate spill kit with absorbent material is located at all sites where fuel storage and transfer occurs; • Ensure drip pans are utilized when refuelling equipment; • Ensure proper handling and disposal of contaminated materials resulting from the containment, clean-up, etc. of any spills; and • State that all spills of oil, fuel, or other deleterious materials, regardless of size, are to be reporting to the NWT 24-hour Spill Line (867) 920-8130. All releases of harmful substances, regardless of quantity, are immediately reportable where the release: 	Y	DAR-18, DAR-19, DAR-20, DAR-66	

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	<ul style="list-style-type: none"> ○ Is near or into a water body; ○ Is near or into a designated sensitive environment of sensitive wildlife habitat; ○ Poses an imminent threat to human health or safety; or ○ Poses an imminent threat to a listed species at risk or its critical habitat. 			
EC-28	<p>The following was not included in the plan, but is required under E2 Regulations if applicable:</p> <ul style="list-style-type: none"> • Identification of an Emergency that can reasonably be expected to occur at the place; • How notification of Members of the public will be carried out in an Emergency situation; and • Must update and test the plan at least once a year. 	N		Details of the plan will be finalized during the permitting phase of the Project.
EC-29	<p>The following criteria must be met to be in compliance with the E2 Regulations:</p> <ul style="list-style-type: none"> • Must keep copies readily available for individuals to carry out plan. • Must keep the plan, a record of results from annual updates, and test for period of not less than 5 years. 	N		Details of the plan will be finalized during the permitting phase of the Project.

AGENCY REC NO.	ENVIRONMENT CANADA RECOMMENDATIONS	CURRENTLY COMMITTED? (Y/N)	COMMITMENT # OR SOURCE	COMMENTS
EC-30	Section 3.1.2: Worker Training and Qualifications – A specific list of training for those individuals identified in specific Emergency Response positions should be listed here. Specific training should correspond with the Emergency Role required.	N		Details of the plan will be finalized during the permitting phase of the Project.
EC-31	Section 3.2.10: Hazardous Materials – This section states that specific handling and disposal instructions will be prepared if any equipment contains polychlorinated biphenyls (PCBs). In addition, the spill contingency and response plan will need to identify and address response for the chemical substances contained with transformers or other equipment.	N		Details of the plan will be finalized during the permitting phase of the Project.
EC-32	Table 2-2: Internal Emergency Response Communications List – A detailed list of roles of the individuals involved in an Emergency Response Scenario should be included. The current section could be expanded to include a more detailed list.	N		Details of the plan will be finalized during the permitting phase of the Project.
EC-33	Section 2.8: Spill and Emergency Response Equipment – This list could be more specific, and include the locations of emergency equipment at the facility and in proximity to hazardous materials.	N		Details of the plan will be finalized during the permitting phase of the Project.
EC-34	Section 5: Material Specific Risks (Appendix 7A) – General Substance Properties were included and references to Material Safety Data sheets available in section 6.3. Specific substance properties (numerical values) should be listed in the ERP for call CEPA regulated substances.	N		Details of the plan will be finalized during the permitting phase of the Project.

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EC-35	Figure 6-1: NTPC Plan Site Area (Page 30, Appendix 7A) – According to the map, staff housing, garage and airstrip are located nearby. Potential consequences of all spill into these areas need to be addressed. What situation would cause a spill to occur that would affect the Staff Housing unit? What substances can affect these areas, and how is notification of staff housing/ other people in the area carried out in an Environmental Emergency situation.	N		Details of the plan will be finalized during the permitting phase of the Project.
EC-36	A similar table should be present in the Spill Protocol developed by the Proponent to address potential accidents and malfunctions during regular operations of the facility.	N		Details of the plan will be finalized during the permitting phase of the Project.
EC-37	Adhere to the requirements the <i>Federal Storage Tank Systems for Petroleum Products</i> and Allied Petroleum Products Regulations, under CEPA.	N		Dezé will commit to this recommendation.
EC-38	Implement proposed mitigation measures and commitments identified in the EA process including those outlined in Tables 12.2.1 (p. 12.2.2) and 15.4.5 (p. 15.4.14) of the DAR.	Y	DAR as quoted	
EC-39	To strengthen the program, EC recommends that the monitoring design answers the following questions: <ul style="list-style-type: none"> How will the data be analyzed, interpreted and applied? What statistical test will be employed? How will comparisons between baseline and future conditions be made? What will distinguish a change from an impact? Temporal comparisons are used extensively; reference sites should also be considered. 	N		These details will be defined during the permitting process.

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EC-40	Guidance on some aspects of monitoring design may be taken from the EC Environmental Effects Monitoring website at: http://www.ec.gc.ca/eseem/Default.asp?lang=En&n=D450E00E-1	N		Dezé will commit to consulting the guidelines.
EC-41	The Proponent should apply all appropriate mitigation measures as described in the DAR, and Commitments, as well as identified in the public hearing review process and potential regulatory authorizations in order to minimize the potential for cumulative impacts.	N		Dezé will follow up on all commitments listed in this document. Although Dézé agrees with the intent of mitigation identified in the hearing review process, some recommendations require clarification and further discussion.
EC-42	EC reiterates here, the need for the Proponent to follow EC's Recommendation (Section 3.2.4. of this Submission) regarding the potential impact of ravens on migratory birds.	Y	Meeting Report with EC, dated 18 December, 2009. EC-22	

AGENCY REC NO.	FISHERIES AND OCEANS CANADA RECOMMENDATIONS	CURRENTLY COMMITTED? (Y/N)	COMMITMENT # OR SOURCE	COMMENTS
DFO-1	DFO recommends that the Proponent consult with DFO during the finalization of the Erosion and Sediment Control Plan.	Y	DAR-18	
DFO-2	DFO recommends that the Proponent follow the DFO Freshwater Intake End-of-Pipe Fish Screen Guidelines.	Y	DAR CH. 15.2	
DFO-3	DFO recommends that the Proponent consult with local aboriginal peoples to ensure that restricting use of the access trails and roads to construction traffic only does not impede traditional use of the Project, or surrounding areas.	Y	DAR-29, DAR-30, DAR-79	Use of existing trails by snowmachine will not be affected. Access mitigation is primarily focused on controlling access by private trucks.
DFO-4	DFO recommends the Proponent collect baseline information on aquatic resources in a representative number of fish-bearing waterbodies along the transmission line to form the basis of a scientifically defensible monitoring program.	N		Dezé has committed to following the DFO Operational Statement for Overhead Line Construction (DAR-40). By following this statement, there is no interaction between the Project and the aquatic habitat; therefore, no effect. Should localized stream information be required, the Environmental Monitor can obtain information during construction, and up and downstream environments can be used as representative sites for the crossing.
DFO-5	DFO recommends that monitoring be developed and implemented to ensure the 50 kPa IPC threshold is adequately protective of fish species and lifestages in habitats adjacent to the point of detonation. Adaptive management measures to lower the IPC threshold should be developed should the 50 kPa prove to cause injury or mortality of fish. The monitoring and adaptive management program should be included in the	Y	DAR-75	

AGENCY REC NO.	FISHERIES AND OCEANS CANADA RECOMMENDATIONS	CURRENTLY COMMITTED? (Y/N)	COMMITMENT # OR SOURCE	COMMENTS
	Proponent's Drill and Blast Management Plan.			
DFO-6	DFO recommends that the Proponent continue to proceed with the two phased pre-construction assessment of lake trout spawning habitat in Nonacho Lake identified in the draft monitoring plan. DFO is willing to assist the Proponent in developing the assessment plan, analyzing the results, and working together to refine drawdown scenarios in order to mitigate potential impacts.	Y	Dezé has committed to this assessment in the Draft Environmental Monitoring Program (Oct 2009)	
DFO-7	DFO recommends that the Proponent involve the Nonacho Lake Fishing Camp in this study as their lodge relies on a healthy lake trout population. Potentially affected aboriginals should be included in these discussions.	Y	Dezé has committed to this assessment in the Draft Environmental Monitoring Program (Oct 2009)	
DFO-8	DFO recommends that the monitoring program for Tronka Chua Lake include a pre-operation bathymetric survey.	Y	Dezé has committed to this assessment in the Draft Environmental Monitoring Program (Oct 2009)	
DFO-9	DFO recommends that the Proponent investigate the cost/benefits of maintaining flow through Tronka Chua Gap throughout the year for the 56 MW expansion scenario and/or feasibility of diverting flow through the Tronka Chua Gap post-construction should the impacts to the Tronka Chua system be greater than anticipated.	Y	DAR-71	

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DFO-10	To better inform the analysis in DFO's Recommendation #9, DFO recommends that the proposed assessment and monitoring program for Tronka Chua Lake be expanded to include Thekuthili Lake since flow over Tronka Chua Gap is its dominant source of flow. Baseline information will also be essential for determining whether impact predictions were accurate.	N		Dezé has presented a monitoring program based on predicted water level, and thus habitat change, contained in the Draft Environmental Monitoring Program (Oct 2009)
DFO-11	DFO recommends that the Proponent proceed with a monitoring program to inform an adaptive management approach, developed in consultation with DFO, to determine whether the predictions made in the EA regarding entrainment were correct (as per the October 6, 2009 entertainment meeting report).	Y	DAR-84	
DFO-12	DFO recommends that the Proponent incorporate mesh on the penstock screens that is of a size that will mitigate impacts to fish species/ life stages that could be present in the intake canal and could be sent through the turbines.	N		Dezé committed in Meeting Report with DFO Oct 2009, to investigating if screen sizes <100 mm [at the penstock] are effective in preventing applicable fish species and life stages from being entrained and if they are operationally feasible
DFO-13	DFO recommends that the Proponent investigate the use of trashracks at the entrance of the intake canal to decrease use of the canal by larger bodied fish; DFO recommends the Proponent refer to Tsikata et al, 2009 ¹ to design a trash rack that protects fish but not unduly impact hydroelectric power generation.	N		Dezé committed in Meeting Report with DFO Oct 2009, to investigating if screen sizes <100 mm [at the penstock] are effective in preventing applicable fish species and life stages from being entrained and if they are operationally feasible. Dézé will refer and consider Tsikata et al, 2009.
DFO-14	DFO recommends that the Proponent utilize turbines with the least number of blades, if technically feasible, to further reduce the risk of fish mortality.	Y	DAR-3	

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DFO-15	DFO recommends that, once results from the monitoring program become available, the Proponent consult with DFO on mitigation measures that may need to be modified or added to ensure the protection of fish from entertainment or impingement.	Y	DAR-68, DAR-84	
DFO-16	In order to address the need for variable flow to protect fish and fish habitat in Trudel Creek, DFO recommends that the proponent adopt a flow regime that incorporates the minimum flow release of 4 m ³ /s in conjunction with a variable 95% exceedance (5 th percentile) baseline monthly flow hydrograph, where the greater of the two flows would define the minimum monthly flow release. The minimum monthly flow release could be refined with additional baseline information and analysis. DFO recognizes the need to balance the developers flow needs for an economically viable project with the minimum flow required to sustain the fish habitat in Trudel Creek for the target species in our flow recommendation.	N	As stated at the oral hearing, Dezé commits to the development of a variable hydrograph for Trudel Creek of a magnitude and frequency that minimizes impacts to the long-term integrity of Trudel Creek to the satisfaction of DFO.	The effects assessment contained in the DAR was based on a variable flow regime, and found no significant negative effects. This variable flow regime would be created by the diversion of a limited flow through the turbines and directing the remaining flow to Trudel Creek.
DFO-17	DFO recommends that the Proponent develop a rigorous pre and post project monitoring program capable of determining changes in aquatic habitat to verify impact predictions and to determine if changes in operations are required.	Y	Dezé has committed to monitoring, contained in the Draft Environmental Monitoring Program (Oct 2009)	
DFO-18	DFO recommends that the Proponent investigate options for maintaining the existing pool sucker habitat near South Valley Spillway.	Y	Dezé has committed to this investigation, contained in the Draft Environmental Monitoring Program	

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			(Oct 2009)	
DFO-19	DFO recommends that the Proponent further refine and implement a monitoring program, in consultation with DFO, to verify model predictions for WUA, DO, temperature and implement adaptive management measures, including operational changes, where impacts were underestimated.	Y	Dezé has committed to monitoring, contained in the Draft Environmental Monitoring Program (Oct 2009)	
DFO-20	DFO recommends that the Proponent develop and implement an active riparian/ aquatic replanting program, in consultation with DFO, in order to expedite the successful re-colonization of vegetation along and within the new stream channel.	N		Experts in re-colonization of aquatic vegetation have advised Dézé that, for various reasons, Trudel Creek should not be actively revegetated in the immediate years after operations. Monitoring should be conducted to monitor the natural transition and revegetation. The need for active revegetation should be determined at that time. Dézé has committed to monitoring vegetation transition, contained in the Draft Environmental Monitoring Program (Oct 2009).
DFO-21	DFO recommends that the Proponent reduce the frequency of ramping events as much as is technically feasible in Trudel Creek to allow the creek to stabilize and riparian/ aquatic vegetation communities to become re-established.	N		Dezé has committed to a number of technical and feasible mitigation measures to reduce effects from start-up and shutdown. These are contained in DAR Chapter 17.

AGENCY REC NO.	INDIAN AND NORTHERN AFFAIRS RECOMMENDATIONS	CURRENTLY COMMITTED TO? (Y/N)	COMMITMENT ID # OR SOURCE	COMMENTS OR RELATED COMMITMENTS
INAC-1	INAC recommends that Dézé be required to continue calibration and verification of its Taltson River Basin Model during the regulatory phase but most importantly during the initial years of operations such that further operational adjustments can be implemented to reduce potential impacts. This calibration and verification should take into consideration, to the extent possible, precipitation information within the basin to help improve forecasting ability.	In Part	DAR-8, DAR-71	INAC had not raised this issue or recommendation during the technical sessions. Dézé first became aware of these issues and recommendations in INAC's Technical Report Dec 11, 2008 Therefore, to-date Dézé has not had the opportunity to discuss the issues and potential paths forward with INAC. Flow regimes in the Taltson basin are not directly related to basin precipitation, therefore Dézé is prepared to discuss alternate means than precipitation information to calibrate and verify the model and improve forecasting ability. A proposed monitoring method is contained in the Draft Environmental Monitoring Program (Oct. 2009)
INAC-2	INAC recommends that Dézé implement its mitigation commitments to control the release of water from Nonacho Lake to reduce ice break-up and water level drops in the near shore area which can affect access and safety.	Y	DAR-2	
INAC-3	INAC recommends that Dézé be required to monitor and report on water level, ice formation and ice thickness at agreed upon location throughout the Taltson Watershed and that these requirements be conditions of its Environmental Monitoring Program.	N		INAC had not raised this issue or recommendation during the technical sessions. Dézé first became aware of these issues and recommendations in INAC's Technical Report Dec 11, 2008 Therefore, to-date Dézé has not had the opportunity to discuss the issues and potential paths forward with INAC. Ice

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				regimes in the Taltson basin were predicted in the DAR and proposed monitoring is contained in the Draft Enviro Monitoring Program.
INAC-4	INAC recommends that Dézé moderate and control water releases through Trudel Creek to the extent possible during power outages, shutdowns and restarts to reduce impacts from a relative quick increase in flow and water level.	In Part	DAR-7, DAR-4	Dézé has committed to a number of technical and feasible mitigation measures to reduce effects from start-up and shutdown. These are contained in DAR Chapter 17.
INAC-5	INAC recommends that Dézé use the most recent version of its hydrological model for Taltson River, particularly during the initial years of operation, to make operational adjustments during these outages, shutdowns and restarts such that the effects of water fluctuations in Trudel Creek are minimized.	Y	DAR-71	
INAC-6	INAC recommends that more evidence be provided that supports the recommendation that a winter minimum flow of 4m ³ /s will maintain the ecology of Trudel Creek. Dézé should also establish minimum flow requirements for other seasons for Trudel Creek.	N		<p>INAC had not raised this issue or recommendation during the technical sessions. Dézé first became aware of these issues and recommendations in INAC's Technical Report Dec 11, 2008</p> <p>Therefore, to-date Dézé has not had the opportunity to discuss the issues and potential paths forward with INAC.</p> <p>A proposed monitoring program for Trudel Creek is contained in the Draft Environmental Monitoring Program.</p> <p>If INAC were to identify those pathways or effects predictions that are not adequately supported in the DAR, Dézé will continue to develop the monitoring program to address</p>

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				these issues, if warranted.
INAC-7	INAC recommends that more work be done to determine if minimum flow requirements are necessary for Tronka Chua Gap to ensure there are no significant ecological effects.	N		<p>INAC had not raised this issue or recommendation during the technical sessions. Dezé first became aware of these issues and recommendations in INAC's Technical Report Dec 11, 2008</p> <p>Therefore, to date Dezé has not had the opportunity to discuss the issues and potential paths forward with INAC.</p> <p>A proposed monitoring program for Tronka Chua Lake (downstream of Tronka Chua Gap) is contained in the Draft Enviro. Monitoring Program.</p> <p>If INAC were to identify those pathways or effects predictions that are not adequately supported in the DAR, Dezé will continue to work with INAC to develop the monitoring program to address these issues, if warranted.</p>
INAC-8	INAC recommends that Dezé implement all commitments and mitigation measures as outlined in its Commitments 2009 document (October, 2009) when conducting activities in-stream and near-stream to ensure the contamination of surface waters is reduced or avoided.	Y	DAR-21, DAR-48, DA-67, DAR-75, DAR-78	

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INAC-9	INAC recommends that Dézé be required to submit a Blast Management Plan during the regulatory process that details the procedures for placing explosives in wet holes outside the near-stream set back zone (10 meters from the edge of water) such that effects to surface and groundwater are avoided.	In Part	DAR-75, DAR-80	Dézé has committed to mitigation and actions that would comprise components of a Blast Management Plan, and will commit to preparing a Blast Management Plan during the regulatory process
INAC-10	INAC recommends that Dézé consider using cofferdams when conducting other in-stream activities such as dam improvements and canal and spillway construction to prevent water contamination and sedimentation.	N	DAR-23, DAR-67	INAC had not raised this issue or recommendation during the technical sessions. Dézé first became aware of these issues and recommendations in INAC's Technical Report Dec 11, 2008 Therefore, to-date Dézé has not had the opportunity to discuss the issues and potential paths forward with INAC. Dézé commits to protecting water quality from contamination associated with in-stream works. The potential methodologies will be developed during the regulatory phase and detailed design.
INAC-11	INAC recommends that Dézé incorporate monitoring for ammonia and nitrate residues as part of the proposed Environmental Monitoring Program and for acid rock drainage and metal leaching from blast rock stockpiles as part of their Surveillance Network Program. The information from these monitoring programs should be used to adapt aspects of Project construction and operation such that background water quality is not adversely affected. INAC is willing to assist Dézé in the development of such monitoring plans.	In Part	DAR-18	INAC had not raised this issue or recommendation during the technical sessions. Dézé first became aware of these issues and recommendations in INAC's Technical Report Dec 11, 2008 Therefore, to-date Dézé has not had the opportunity to discuss the issues and potential paths forward with INAC. In the DAR, Dézé has committed to protecting water quality from contamination associated with construction works. There are various means to monitor

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				ARD/ML during construction, and the need for waste rock stockpile monitoring may not be required. Dézé will work with INAC during the regulatory phase to develop a monitoring program that satisfies INAC water quality concerns.
INAC-12	INAC recommends that Dézé gather all information necessary to address the data gaps identified in the Draft Environmental Monitoring Program (October 2009) such that Dézé can provide adequate characterization of baseline conditions. These characterizations should be used to verify the assumptions used to model the environment and predict impacts.	Y	DAR-47	Dézé has included information gathering to support the monitoring program, as described in the Draft Environmental Monitoring Program (Oct 2009)
INAC-13	INAC recommends that Dézé gather additional information on DO levels in winter for all areas of interest and that these data be used to further calibrate and validate the model used to calculate the DO levels under the two expansion scenarios to assist in the assessment of effects for the project.	In Part	DAR-70	Dézé is committed to gather additional DO information as per Item DAR 73-b, which should address INAC's issue of concern.
INAC-14	INAC recommends that this revised DO model be used along with any revisions to the power generation model and the Taltson River Basin model to identify a preferred operational scenario for both generation and environmental effects mitigation.	In Part	DAR-70, DAR-71	Dézé is committed to gathering additional DO information as per Item DAR 73-b and review of the basin model, which should address INAC's issue of concern

AGENCY REC NO.	INDIAN AND NORTHERN AFFAIRS RECOMMENDATIONS	CURRENTLY COMMITTED TO? (Y/N)	COMMITMENT ID # OR SOURCE	COMMENTS OR RELATED COMMITMENTS
INAC-15	INAC recommends that DO and Mercury be monitored and reported as part of the Environmental Monitoring Plan and that the results of this monitoring be used to adaptively manage operations at the facility to mitigate effects. INAC is willing to assist Dezé in the development of this monitoring plan.	In Part?	DAR-70	Dezé's proposed monitoring of DO, mercury and other parameters of interests is contained in the Draft Environmental Monitoring Program.
INAC-16	INAC recommends that Dezé implement its commitments in regards to waste and sewage storage, treatment and disposal as proposed in the Commitments 2009 document (October, 2009).	Y	DAR-18 DAR-76	
INAC-17	INAC recommends that a Draft Spill Contingency Plan be developed that addresses spills associated with construction activities, camps, staging and fuel storage facilities during the regulatory phase.	Y	DAR-18	
INAC-18	INAC recommends that the final detailed design package for transmission line construction include details pertaining to the exact number, location and ground condition of camps, barge landings and staging sites during the regulatory phase.	N		Dezé will commit to this recommendation.
INAC-19	INAC recommends that Dezé finalize the details for ice road construction and monitoring, including all proposed mitigation measures to reduce impacts to watercourse crossings, during the regulatory phase.	Y	DAR-32	
INAC-20	INAC recommends that Dezé conduct reconnaissance, if not already completed, along the proposed transmission line right-of-way during summer to ensure tower locations are placed where little to no effects are expected to sensitive habitat and or surface or subsurface conditions.	N		Dezé has recently obtained LiDAR mapping (detailed laser aerial mapping and photography) of the transmission line corridor so that design can be undertaken with limited field reconnaissance. Dezé will commit to developing the detailed design to avoid sensitive sites and minimize

AGENCY REC NO.	INDIAN AND NORTHERN AFFAIRS RECOMMENDATIONS	CURRENTLY COMMITTED TO? (Y/N)	COMMITMENT ID # OR SOURCE	COMMENTS OR RELATED COMMITMENTS
				ground and surface disturbances.
INAC-21	INAC recommends that during the regulatory phase Dézé submit final details and configurations for construction camps and staging areas. These details should include information pertaining to material placement and storage method as well as the quantity and type equipment being stages.	N		Final camp configuration, materials placement and storage, and equipment to be used on site will be determined by the construction contractor, and not Dézé. Dézé will commit to providing INAC with camp boundaries and a reasonable expectation of camp layout.
INAC-22	INAC recommends that Dézé be required to develop an Adaptive Management Plan along with its Environmental Monitoring Plans such that the plans are directly linked and feed into the management framework. INAC is willing to work with the Land and Water Board and Dézé to develop these plans.	Y	DAR-48	
INAC-23	INAC recommends that Dézé be required to develop a Preliminary Closure and Reclamation Plan during the regulatory phase. INAC is willing to work with the Land and Water Board and Dézé in the development of this plan.	Y	DAR CH 6.8 Project Closure	

AGENCY REC NO.	PARKS CANADA RECOMMENDATIONS	CURRENTLY COMMITTED? (Y/N)	COMMITMENT # OR SOURCE	COMMENTS
PC-1	Parks Canada recommends that assessments be made by qualified people prior to construction in areas of high potential for important cultural sites.	Y	DAR-19, DAR-41, DAR-42	This is a legislative requirement under the NWT Archaeological Sites Regulations.
PC-2	Parks Canada recommends that environmental monitors qualified to recognize sensitive sites (both cultural and ecological) work on site with construction crews and that the qualifications and/or training be made explicit.	Y	DAR-19, DAR-41, DAR-42,	Registered professional archaeologists will conduct the necessary surveys. Dezé proposes to use environmental monitors from surrounding communities, who are most familiar with local cultural sites. Measures to limit vegetation clearing are proposed. Active raptor nests will be avoided.
PC-3	Parks Canada recommends that if any such sites (both cultural and ecological) are identified during construction, in the study area for the proposed national park reserve, that this information be communicated to Parks Canada, including the nature and location of the site.	N		Archaeological Sites Regulations require that Dezé report archaeological sites only to the GNWT, as per DAR-42. Parks Canada must request data from the GNWT.
PC-4	Parks Canada recommends that Dezé include Parks Canada in discussions with respect to final route selection, including the crossing of the Lockhart River, as the project moves into the detailed design phase.	Y	DAR-13	