

PAGE

TABLE OF CONTENTS

4.	COMMUNITY ENGAGEMENT			4.1
4.1	Part	nership	Consultation and Formation	4.1
4.2	Community Consultation			4.1
	4.2.1 Project Design Considerations of Public Importance			
		4.2.1.1	PROJECT CAPACITY	
		4.2.1.2	COMMITMENT OF MINES TO PURCHASE EXPANSION PROJECT POWER	4.4
			OTHER POTENTIAL BENEFICIARIES OF THE PROJECT POWER AND INFRASTRUCTURE	
	4.2.2	Discuss	ion – Community Consultations	4.6
4.3	Regulatory Consultations			4.7
	4.3.1 Discussion – Regulatory Consultations			4.8
4.4	Summary			4.12

TABLE OF FIGURES

Figure 4.1 — Regulatory Priorities	4.9
Figure 4.2 — Regulatory Priorities Summary	4.10





4. COMMUNITY ENGAGEMENT

4.1 PARTNERSHIP CONSULTATION AND FORMATION

In early 2000, the NWT Energy Corporation (03) Ltd. (NTEC 03) commenced analyses into methods of developing a hydroelectric power project that would bring economic and social benefits to residents of the South Slave region. The goal of analyses was to identify hydroelectric projects that could be developed in partnership with the region's Aboriginal people to increase societal benefits with comparatively few environmental effects and with long-term northern economic benefits.

From early 2000 to November 2006, the Akaitcho Treaty 8 First Nations, South Slave Métis (Northwest Territory Métis Nation) and NTEC 03 (collectively referred to as "parties") engaged in the development of a proponent model for a hydroelectric power project. This engagement resulted in the three parties first entering into a Memorandum of Understanding (MOU), followed by a Memorandum of Intent (MOI), and finally in November 2006, the formation of the Dezé Energy Corporation Ltd. (Dezé). As the Project proponent, Dezé represents a unique opportunity for the residents of the Northwest Territories, and in particular, the residents of the South Slave region.

Concurrent to the proponent formation process, NTEC 03, with input from consultations in the South Slave region, assessed conceptual and pre-feasibility concepts for an economically viable and socially and environmentally sustainable power project. Development of potential project concepts that could meet these objectives involved the ongoing assessment of evolving scenarios and opportunities as discussed in the description of alternatives found in Chapter 8.

4.2 COMMUNITY CONSULTATION

During the proponent development period (2000 to 2006), a Contribution Agreement was established between the Akaitcho Treaty Tribal 8 Corporation and the South Slave Métis (now known as the Northwest Territory Métis Nation) that included a method of communicating Project developments to the parties' community leaders and membership, and obtaining feedback from the same.

Before Dezé management embarked on the preparation of the Project Description in support of the Water Licence and Land Use permit applications, a series of selfdirected Traditional Knowledge studies were commissioned to identify Traditional Knowledge holders, approaches to community and Traditional Knowledge engagement, and feedback on development concepts considered by Dezé.

Traditional Knowledge engagements were held by Deninu Kue, the Akaitcho Territory Government and Thebacha; one outcome of these engagements was a recommendation that Dezé hold a workshop to introduce the Project and develop questions for a Traditional Knowledge questionnaire. Dezé subsequently undertook follow-up workshops, provided Fort Resolution, Fort Smith and Łutsel K'e with scale models of the proposed Project, and prepared a questionnaire based on the concerns expressed at the workshops. The questionnaires were subsequently approved and interviews were undertaken.



The Akaitcho and Métis preferred a consultation method in which the parties themselves would establish Community Coordinators responsible for disseminating Project information to their respective memberships and stakeholders. Consequently, as those Community Coordinators conducted community consultation up until the formation of the Dezé Energy Corporation, a formal database of these occurrences was not maintained.

With the guidance of the Community Coordinators, the parties provided Project updates to, and sought feedback from, the political leadership at the General Assemblies and to the South Slave region communities through presentations, brochures, newsletters, and the placement of the Project models in public buildings in each community. The feedback from these endeavours was incorporated into both the proponent structure and the Project design.

Meetings were held in Fort Smith on March 16, 2003, Fort Resolution on March 17, 2003, and Hay River on March 18, 2003 (Rescan, 2004). In each community, an open house was held at a public facility in the afternoon followed by a community meeting in the evening. Meetings were promoted by newspaper advertisements, radio announcements and notices on community bulletin boards. Translation services were offered in all communities but were required only in Fort Resolution. Meetings were best attended in Fort Resolution and least attended in Hay River.

Generally, community leaders supported the Project concept and were awaiting additional information associated with the Project definition and final Project proponent before deciding how far they would go in supporting it.

Support was strongest in Fort Smith and Hay River. Support was evident in Fort Resolution but legacy issues and the lack of Łutsel K'e's involvement were barriers to widespread Project endorsement.

As the Project and its ownership remained in a dynamic state up until late 2006, the parties agreed to continue to have the Community Coordinators disseminate Project information amongst the Akaitcho and Northwest Territory Métis until a Project proponent was defined and a feasible Project determined. Respecting the proponent formation process and the evolution of the Project design, a limited amount of consultation occurred beyond the Annual General Assemblies prior to these two critical components being finalized. The parties agreed that engaging in public and membership consultations in the absence of a clearly-defined Project and ownership structure would have resulted in the presentation of inconsistent information, or information that could rapidly become inaccurate or superseded as the Project was iteratively refined.

In late 2006, with the formation of Dezé and the identification of a feasible Project in terms of design, clients, and economic viability, Dezé undertook community consultation meetings to reintroduce the Project and the new ownership. The parties agreed to transition consultation responsibilities from the Coordinators to Dezé. In 2006, meetings were held in Fort Resolution, Fort Smith and Hay River. The meeting planned in Lutsel K'e did not occur.





4.2.1 Project Design Considerations of Public Importance

The MVEIRB-sponsored public and Aboriginal issues scoping sessions held in Fort Smith, Fort Resolution, Yellowknife and Łutsel K'e facilitated the identification of Project rationale and design questions. For example, the public and Aboriginal groups asked Dezé to explain the implications of wind energy initiatives at the diamond mines, the ability of the Project to supply electrical power to the proposed East Arm National Park, and what Dezé was doing to reduce electrical power costs to the residents of Łutsel K'e. MVEIRB subsequently asked Dezé to provide rationale and design considerations for energy and economic issues and to report the significance of possible effects.

The Project design and economic issues assessment set out by the MVEIRB does not require in-depth analysis beyond showing that significant impacts can be prevented with standard mitigation or regulatory conditions (MVEIRB, 2008). However, Dezé factored the public's energy and economic issues through its iterative Project design process involving all professional disciplines and Traditional Knowledge. The rationale for the design choices as reflected in the current Project Description follows, and serves to provide answers to questions raised by the public at the scoping sessions. These issues can be broadly classified as relating to Project capacity, commitment of the mines to the Project, and other potential beneficiaries of both the power generated by the Expansion Project and the infrastructure required for the Project.

4.2.1.1 **PROJECT CAPACITY**

4.2.1.1.1 Maximum Energy Capacity the Expanded System Can Produce

The assessment of plant sizing suggests that a total plant installed capacity of a minimum of 54 MW and a maximum in the range of 74 MW would be an optimized project. Plant sizing is presented in detail in Chapter 8 – Alternatives.

4.2.1.1.2 Ease of Upgrading the Expansion Project to Produce More Electricity

Plant sizing discussed in Chapter 8 – Alternatives, demonstrates that there would be no ability to further expand the capacity of the Expansion Project or the existing Twin Gorges facility.

4.2.1.1.3 Quantity of Surplus Power Beyond the Mines' Needs

Mine loads to support Project sizing at 54 MW indicate a reasonable balance between peak demand, including line losses, of about 53 MW to 58 MW, and the plant output of 54 MW, assuming that all mine peak loads would almost never occur simultaneously. The new plant at 54 MW is not able to provide the full requirement for energy delivery to the mines due to line losses. Further discussion of loads and power production are contained in Chapter 5 – Project Purpose and Rationale.



4.2.1.2 COMMITMENT OF MINES TO PURCHASE EXPANSION PROJECT POWER

4.2.1.2.1 Commitment from Mines to Purchase Power

Power Purchase Agreements are currently being negotiated with four prospective mine customers. Confidentiality agreements have been signed by all parties, and letters of intent estimating the nature and term of future power needs have been provided by each potential client. Contractual arrangements are under negotiation and it is envisioned that all firm and interruptible power would be contracted between the prospective customers. Mine loads and power production are discussed in Chapter 5 – Project Purpose and Rationale.

4.2.1.2.2 Feasibility of the Project Without the Proposed Gahcho Kué Diamond Mine

At a minimum, the Project would need to secure a sufficient revenue stream for capital recovery. A number of scenarios exists that would achieve this end. The quantity of power and duration of the contracts arranged with the mines would affect the price of the power supplied and the importance of securing multiple power customers could certainly affect the nature of these contracts. However, no single prospective customer would, on its own, determine the viability of the Project.

4.2.1.2.3 Implications of Wind Energy Development and the Mines

Industrial-scale customers purchase power from a private supplier using instruments called Power Purchase Agreements (PPA). PPAs commit the purchaser (i.e., diamond mines) to a specific quantity and duration of power. For economic reasons the diamond mines would purchase sufficient electrical power to meet their respective needs. If, in the future, alternate sources of power, such as wind power, are developed at the mines, the PPA would remain as a contractual obligation on the parties. In addition, alternate energy such as wind is an intermittent source, only available when the resource (wind) is available. Therefore alternate power would not be expected to have a material affect on the quantity of power to be contracted.

4.2.1.3 OTHER POTENTIAL BENEFICIARIES OF THE PROJECT POWER AND INFRASTRUCTURE

4.2.1.3.1 Ability of the Transmission Line to Provide Power to the East-Arm National Park

If the power needs of the National Park were situated in close proximity to the final transmission line route, electrical power could technically be made available to park facilities. The additional capital cost of the substation and distribution systems would be passed on to the user. This capital investment would likely be beyond the costbenefit of the Park, given the high cost to step-down power from the high voltage line to the low voltage needs of the park, the need for stringent safety standards, and reliability requirements for the integrated system.



4.2.1.3.2 Ability of the Transmission Line to Provide Łutsel K'e with Power

The community of Łutsel K'e is over 70 kilometres from the preferred route around the East Arm of Great Slave Lake. According to the Northwest Territories Statistics Bureau, the community had 400 residents in 2006. NTPC indicates that the community uses 1.5 GWh annually. Cost estimates from industry experts for transmission line construction indicate that the cost of the intertie from the proposed route to the community distribution system would be approximately \$15 to \$25 million, not including the substation to step down the power to a suitable voltage for community distribution. This substation would need to be situated near the town site for access and safety reasons, which would require that a 161 kV intertie be built. The cost of the substation would be at least \$5 million and as much as \$15 million depending on the configuration of the substation components (transformers, breakers, etc.).

4.2.1.3.3 Mini Hydro for Łutsel K'e

NTEC 03, a one-third partner in Dezé, has been working with NTPC, the community of Łutsel K'e, and the GNWT to investigate the potential for a 1 MW mini-hydro station on the Snowdrift River. The proposed site is 20 kilometres from Łutsel K'e and accessible by all-terrain vehicle (ATV) in summer and snowmobile in winter. The Project has been investigated to a pre-feasibility level and the community of Łutsel K'e has been asked to appoint a community liaison to help manage the Project at the community level. An engineering firm has been retained to conduct more detailed engineering on the proposed site. A site investigation was conducted in September 2008, and a more detailed examination, including geo-technical examination, was scheduled to occur in October 2008. Local labour has been hired to upgrade the ATV trail to improve access. Final results and recommendations are expected in March 2009.

4.2.1.3.4 <u>Potential for Other Prospective Power Purchasers</u>

Given the uncertainty of commodity markets, it is difficult to speculate what industrial customers might emerge in proximity to the Project transmission line in the coming years. The Project is sized to meet the power needs of existing industrial customers and the availability of future power would be directly related to the quantity and term of the PPA contracts signed with those customers. It is envisioned that the Project would continue to deliver power well beyond the life of existing mines, but it is difficult to predict the market conditions that would prevail in the Northwest Territories at that time. As well, power sales to southern markets like Alberta are not currently viable, given the cost of transmission and the market value for power. Fossil fuel sources such as coal and natural gas are likely to continue to meet growing power demands in the near term, but hydroelectric power may become increasingly attractive as these non-renewable resources are depleted and/or are valued differently in the market place.

4.2.1.3.5 Location of Project Headquarters and Control Station

The Project headquarters could be located either in Fort Smith or Yellowknife, with the control station configuration yet to be determined. Monitoring of the new hydroelectric power plant may warrant a stand-alone control station, or could be situated at the Jackfish Plant in Yellowknife. The existing Taltson plant is controlled at the Jackfish plant in Yellowknife.



4.2.2 Discussion – Community Consultations

Generally, a low level of concern on environmental issues was expressed at the meetings. However, concern was expressed in Fort Resolution regarding unresolved compensation issues associated with the original construction of the Taltson hydro development at Twin Gorges. There was also notable concern about Łutsel K'e's absence from the proposed Project. Finally, there were questions about what role Traditional Knowledge (TK) would play in Project definition, who would collect the TK, and the compensation needed to acquire it. Traditional Knowledge is further discussed in Section 9.6 – Human Environment).

Expressions of support for the Project were greatest in Hay River and Fort Smith. However, Fort Resolution residents were more cautious about the Project and generally indicated that their community could be willing to support it, if certain concerns were addressed. Many of these concerns had to do with unresolved legacy issues resulting from the changes caused by the existing Twin Gorges power facility.

Support for the proposed Project in Fort Resolution and Fort Smith was linked to the concept of less expensive power rates in the South Slave region and employment and business opportunities associated with the Project's construction.

The following is a summary of concerns expressed at the meetings and open houses:

- The highest general level of concern was expressed in Fort Resolution. The most common concern dealt with compensation for past "wrongs" associated with the existing Twin Gorges power facility. Some suggested that Fort Resolution withhold its support until this issue is resolved, or at least put a process in place to resolve the matter.
- A second level of concern dealt with the need for more information about possible effects on water levels, ice conditions and trapping as a result of the proposed Project. A third concern addressed the need for consensus among Aboriginal communities with respect to development, given that Łutsel K'e was possibly in opposition to the Project expansion and the proposed transmission line.
- A concern was raised by the original inhabitants of Rocher River, who are now considered part of Fort Resolution. Many of these self-identified Rocher River individuals do not see themselves as part of Fort Resolution and believe they should have separate representation on the proposed Project and separate participation in studies and the gathering of Traditional Knowledge. Concern was also raised by one former Rocher River resident that the descendents of Chief Snuff should be discussing the proposed Project and not those from Łutsel K'e, Salt River, Smith's Landing, Detah or Ndilo.
- Concerns from residents of Fort Smith focused on power rates and getting a fair share of business opportunities from the proposed Project. There were also some concerns about environmental effects and the visual effects of the power line.
- Hay River seemed to have few concerns but wanted a share of benefits that could come from Project construction. There was some concern that the Project might disproportionally benefit Fort Resolution or Fort Smith if Dezé chooses to implement preferential purchasing policies favouring Aboriginal peoples and communities closest and most likely affected by the Project.
- Several barriers to the success of the Project were also identified. The biggest potential barrier was the absence of Łutsel K'e from Dezé. It was reported



Łutsel K'e had entered into a right of first refusal contract with Regional Power Inc. for the development of hydro power in its traditional area of use and occupancy. It was reported that the contract prohibits Łutsel K'e from participating in a potentially competing hydro project.

• Finally, there appeared to be concern with the role that Traditional Knowledge would play in the Project definition, and the gathering and compensation of Traditional Knowledge.

A common theme was "us" and "them" thinking. Community residents attending the public meetings did not yet exhibit a sense of Project ownership. Some were even suspicious that this was a plan on the part of NWT Power Corporation to transfer liabilities associated with the existing Twin Gorges power facility onto Aboriginal people (Rescan, 2004).

4.3 **REGULATORY CONSULTATIONS**

The involvement of the Northwest Territories regulatory community started in February 2006, concurrent with Dezé's decision to advance the Project into the regulatory process.

Before preparing a Project Description suitable for regulatory applications, Dezé undertook a series of interviews with the regulators that would likely have some involvement in the environmental assessment or authorization of the Project. The purpose of the interviews was to gather information about what was most important to the regulatory community regarding the conceptual Project. The interviews were analyzed and a regulatory risk assessment prepared.

The assessment was intended to quantify the interviews and to provide guidance on further iterations of the Project design. To help the Project design team use the results of the regulatory risk assessment, interviews were analyzed and coded using ENvivo¹ in order to provide a quantitative and transparent understanding of the Project design priorities from a regulatory perspective.

The regulatory risk assessment was conducted through a series of interviews with Northwest Territories regulators that would likely have influence over the final Project design through the environmental assessment and regulatory authorization phase of the development process. Those interviewed included:

- The Prince of Wales Northern Heritage Centre,
- Department of Fisheries and Oceans Canada,
- Department of Indian and Northern Affairs Canada,
- Department of Environment and Conservation,
- Department of Municipal and Community Affairs,
- Department of Transportation,
- Department of Industry Tourism and Investment,
- Department of Environment and Natural Resources,
- Mackenzie Valley Land and Water Board, and
- The Mackenzie Valley Environmental Impact Review Board.

¹ http://www.qsrinternational.com/products_nvivo.aspx



4.3.1 Discussion – Regulatory Consultations

The method used to quantify the results of the interviews began with coding of the interviews. The coding was then analyzed to determine the frequency and the total number of times a particular subject matter was referenced. Then, the potential consequence of the subject matter was taken into account. The result was a prioritized list of issues, as presented graphically in Figures 4.1 and 4.2.



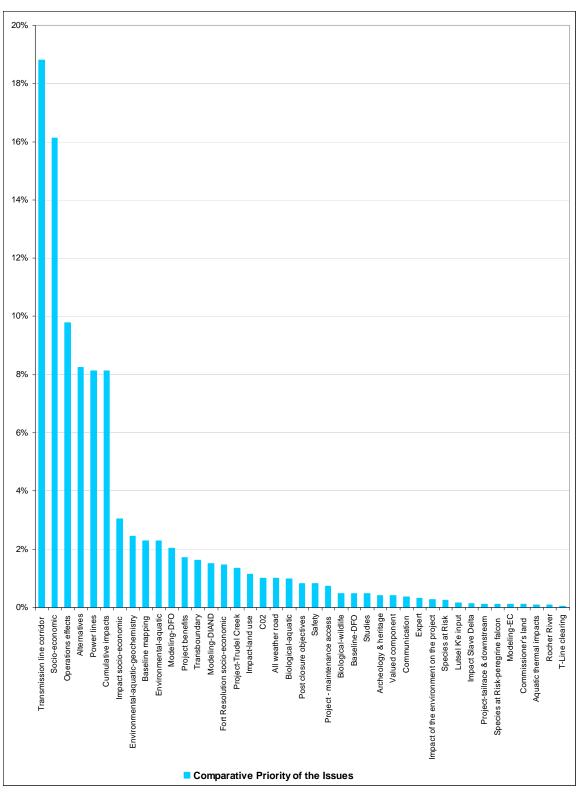


Figure 4.1 — Regulatory Priorities



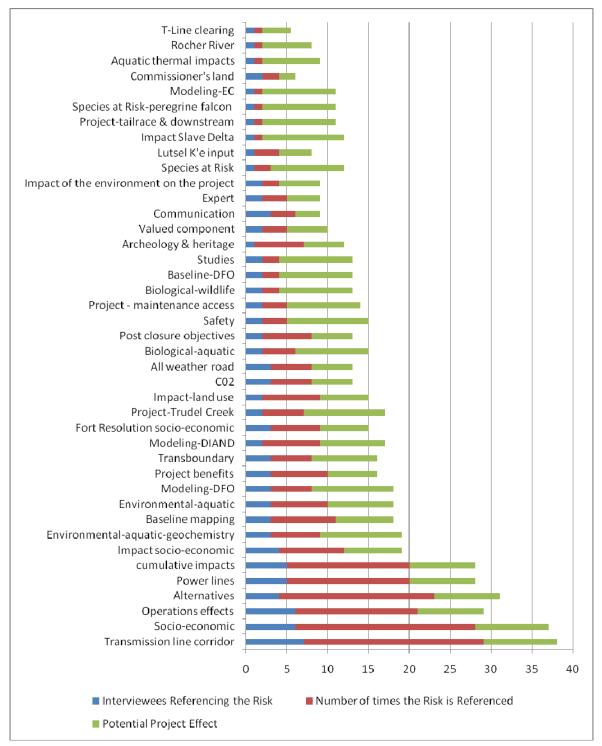


Figure 4.2 — Regulatory Priorities Summary



Summaries of the comments, issues and concerns received by the MVLWB during the Preliminary Screening process (review of land use permit and water licence applications) as well as scoping sessions held by the MVEIRB are included in the Taltson Hydroelectric Expansion Project Developer's Assessment Report: Socio-Economic Effects (Terra Firma 2008).

Socio-economic and cultural issues that have been raised to date are broadly categorized as follows:

- effects to harvested resources, including caribou, other ungulates (especially moose and muskoxen), aquatic furbearers, fish, waterfowl and other migratory birds;
- effects to aquatic and terrestrial environments in general (i.e., wildlife and fish habitat);
- effects to traditional travel routes as a result of changes in ice conditions;
- effects to traditional homelands due to flooding;
- effects to culturally significant sites;
- effects to fishing from changed water levels;
- effects to the proposed East Arm National Park;
- socio-economic opportunities for employment and business contracts;
- involvement of Łutsel K'e in the proposed Project;
- transmission line routing, construction and operation/maintenance;
- effects of the transmission line; and
- effects to the aesthetic quality or wilderness character of the surrounding environment.

These represent general categories of concerns and issues raised. The first two relate to effects to harvested resources and the habitat for these resources. Anything that directly or indirectly affects resource habitat or the resources themselves could potentially affect users of those resources. For example, concerns were raised that flows in Trudel Creek would be reduced, potentially affecting fish habitat, and that the proposed control structure on Nonacho Lake could effect the health of the aquatic ecosystem within the Taltson River drainage basin, with resulting effects to fish habitat. Other concerns were related to the possibility that noise from construction and winter road traffic would disturb caribou and other large ungulates, and that greater mortality of wildlife would occur as a result of traffic and road use, altered predator/prey interactions, and human/wildlife conflicts. Concerns were raised that the construction of winter access would allow previously-inaccessible regions to be accessed, with resulting changes to hunting patterns and wilderness and aesthetic qualities. There was also uncertainty about how the Project would affect plans for the proposed East Arm National Park.



Some concerns relate specifically to traditional users (e.g., effects to traditional travel routes), while others are of concern to both traditional and non-traditional resource users (e.g., effects to wilderness character). In terms of the components or aspects of the Project that were perceived to have the greatest potential to result in effects, the following main components or activities were identified:

- Winter road construction and resulting access, and
- New and upgraded facilities at Twin Gorges and Nonacho Lake and resulting changes to hydrology and water quality.

4.4 SUMMARY

Community consultation has been a foundation of the Taltson Hydroelectric Expansion Project from the earliest days of Project conception, through formation of the Project proponent and development of the Project design.

A typical life cycle of a hydroelectric project begins when human use of a particular hydrological resource is deemed economically feasible. A conceptual engineering design that attempts to maximize the resource potential is then usually prepared. Once deemed technically and economically feasible, an internal design process ensues, resulting in a project description that is suitable for consultation purposes. Consultation outcomes are then used to refine the project description before submission for regulatory authorizations.

Due to the unique ownership structure, Dezé chose to take a holistic and integrated approach to their Project design. This approach included a consultation strategy that embraced the Mackenzie Valley Resource Management Act (MVRMA). This strategy resulted in a Project that did not follow typical design steps, but instead integrated consultation information, Traditional Knowledge, and principles of sustainability directly into the very initial phases of the Project design. For example, rather than maximizing the available resource, as a result of consultation and legacy issues the design was restricted to efficient use of the existing facility and limiting additional water management to within current permit limits and maximum water elevations. Dezé also sought consultation on infrastructure placement, and at the time of writing, routing of a transmission line segment remains in the hands of a consultative committee.

Approaches to the community engagement process have been made with consideration of the circumstances, culture, and diverse needs of involved communities in the South Slave region; this provided the basis for establishment of the fundamental principles for public consultation. The result of the process is a Project design that endeavours to ensure the Expansion Project provides a unique opportunity to communities in this region, while emphasizing progress, societal benefits, and conservation of existing resources.