

December 18, 2009

Chair, Yukon Utilities Board P.O. Box 31728 Whitehorse, YT Y1A 6L3

Dear Chair:

RE: ENERGY PROJECT CERTIFICATE AND ENERGY OPERATION CERTIFICATE APPLICATION FOR THE PROPOSED MAYO HYDRO ENHANCEMENT PROJECT (MAYO B)

Please find enclosed the energy project certificate and energy operation certificate application for the proposed Mayo Hydro Enhancement project commonly referred to as Mayo B.

As required by Part 3 of the Public Utilities Act, I am referring the application for the certificates to the Board for a review and hearing in accordance with the attached Terms of Reference.

Yours truly,

Marian C. Horne Minister of Justice

Attachment (2)



TERMS OF REFERENCE

IN THE MATTER OF the Public Utilities Act and

IN THE MATTER OF an Application by Yukon Energy Corporation for an Energy Project Certificate and an Energy Operation Certificate regarding the Proposed Mayo Hydro Enhancement Project (Mayo B)

Background

- **A.** On June 5, 2006 the Minister of Justice requested that the Yukon Utilities Board (YUB) carry out a review and hold a hearing on Yukon Energy Corporation's (YEC) 20-year Resource Plan: 2006-2025. As part of the Resource Plan, YEC proposed planning activities to protect YEC's ability to commit to development of major generation and transmission projects before 2016 to meet the needs of potential major industrial development opportunities.
- **B.** The proposed Mayo Hydro Enhancement Project ("Mayo B") was identified as one of the hydro enhancement options to be considered regarding grid-related industrial load growth if the Carmacks-Stewart Transmission Project (CSTP) was completed. Construction on Stage 2 of the CSTP, extending the CSTP transmission line from Pelly Crossing to Stewart Crossing commenced in the fall of 2009 and current schedules indicate that the full CSTP connecting the Whitehorse-Aishihik-Faro and Mayo Dawson grids will be in service by the end of 2010 or early in 2011. Since completion of the Resource Plan, grid-related industrial load growth is occurring with connection of the Minto mine in 2008, the expected connection in 2010 of the Bellekeno mine, and ongoing planning to develop and connect the Carmacks Copper mine.
- **C.** After a public review of the 20-year Resource Plan, the YUB issued its Report to the Minister of Justice on January 15, 2007. The Board agreed with the long-term planning approach utilized by YEC in the Resource Plan and recommended that YEC continue to monitor potential material load additions and, when warranted, make a filing with the Board when new facilities are required to meet these increased loads.
- **D.** Mayo B will enhance YEC's existing Mayo hydroelectric facilities and increase hydro generation capacity installed on the Mayo River from the existing 5 MW to as much as 15 MW. Mayo B, as defined in OIC 2009/220, includes construction of a new powerhouse downstream of the existing powerhouse, the construction of related facilities such as a tunnel-penstock-canal system, all weather access road, distribution line, transmission line and temporary construction-related facilities, and related adjustments to the management of water on the Mayo River system downstream of the existing Wareham Dam.

- E. A proposal for Mayo B was submitted in February 2009 to the Yukon Environmental and Socio-economic Assessment Board (YESAB) under the Yukon Environmental and Socio-economic Assessment Act (Canada), and is subject to a screening by the Executive Committee of YESAB. This process will lead to a recommendation by the Executive Committee, and a response by the Yukon Government and other decision bodies in the form of a "decision document". Any government authorizations issued in support of Mayo B, including any Energy Project Certificate or Energy Operation Certificate under Part 3 of the Public Utilities Act, will have to conform to the decision document of the Yukon Government.
- **F.** Mayo B has been designated, in OIC 2009/220, as a Regulated Project under Part 3 of the *Public Utilities Act* pursuant to section 36 of that Act.
- **G.** Mayo B will receive up to 53.3 million dollars from the Government of Canada as part of the Canada-Yukon Energy Corporation Green Infrastructure Fund: Agreement for the Yukon Green Energy Legacy Project 2009-10/2011-2012 ("Federal Agreement").
- H. In addition to Mayo B, YEC has identified that it may be advantageous to use water from Mayo Lake in an amount greater than is presently authorized to supply the Mayo B facilities. This use would be an approximate 1 metre additional drawdown from the lake (the "Mayo Lake Drawdown").
- I. On December 11, 2009 YEC applied under Part 3 of the *Public Utilities Act* for an energy project certificate and an energy operation certificate regarding Mayo B.

THEREFORE, as required by Part 3 of the *Public Utilities Act*, the YEC application for an Energy Project Certificate and an Energy Operation Certificate is hereby referred to the YUB for a review and hearing as follows:

General purpose of review and hearing

1. The general purpose of the review and hearing is to obtain the YUB's report and recommendations on the potential benefits, costs, risks and customer impacts that influence whether Mayo B should proceed as proposed by YEC.

Public hearing

2. The YUB shall hold a public hearing in a format to be determined by the YUB and it shall receive submissions from any person or groups or classes of persons who, in the opinion of the YUB, have an interest in the matter.

Specific aspects of the project to be reviewed

- 3. The YUB shall report on and make recommendations about the necessity for Mayo B and its timing and design, with particular regard to:
 - a. The public need for Mayo B under various reasonable electric load forecasts, including near term requirements related to the Minto (Capstone Mining Corporation), Bellekeno (Alexco Resource Corporation) and Carmacks Copper (Western Copper Corporation) mines and to any other potential major industrial customers, and the effect of the project on the rates of customers;
 - b. The capability of existing and currently committed new transmission and generation facilities to provide reliable electric power generation to meet the forecast load requirements, taking into account the new planning criteria as proposed by the YEC and recommended by the YUB In particular, the YUB shall report on:
 - the implications of approving Mayo B prior to the environmental and socio-economic assessment and regulatory approval of the Mayo Lake Drawdown (including how, if at all, Mayo B's expected impact on YEC and its customers differs according to whether the Mayo Lake Drawdown is permitted or not);
 - ii. the relationship between Mayo B and CSTP Stage 2 completion;
 - iii. the effect the completion of Mayo B is expected to have on the ongoing use of diesel generation at various locations under various reasonable electric load forecasts; and
 - iv. other implications of Mayo B to the system reliability, customer rates and economic growth in the Yukon.
 - c. The risks facing Mayo B and their potential impacts on rates for customers, including, but not limited to, the risks arising from:
 - i. changes to general economic, market, or financial conditions;
 - any mitigation measures and/or modifications to project design or schedule required by the environmental and socio-economic assessment and regulatory approvals;
 - iii. the timelines, and other conditions, contained in the Federal Agreement;
 - iv. loads forecasts, both industrial and residential, not being realized;
 - v. unanticipated cost overruns or project financing capability; and

- vi. the possibility that the Mayo Lake Drawdown does not proceed.
- d. What, if any, alternatives to Mayo B might be advisable given reasonable load assumptions and risk assessments. In particular, the YUB shall report on:
 - i. possible alternative configurations for timing and structure of the Mayo B as proposed by YEC; and
 - ii. whether it is prudent to build Mayo B at this time.

Timing of report and recommendations

4. The YUB shall submit its report and recommendations to the Minister of Justice no later than March 31, 2010.

Recommendation respecting certificates

5. The YUB shall provide a recommendation on whether YEC should be granted an energy project certificate and an energy operation certificate for Mayo B and if so, whether the certificates should be subject to any terms and conditions and what these terms and conditions should be.

Other Recommendations

6. The YUB may make any other recommendations or provide any other information that it considers advisable in the circumstances.

Issued by Marian C. Horne, Minister of Justice

December 17, 2009

YUKON

YUKON

CANADA

CANADA

Whitehorse, Yukon

Whitehorse, Yukon

ORDER-IN-COUNCIL 2009/220

DÉCRET 2009/220

PUBLIC UTILITIES ACT

LOI SUR LES ENTREPRISES DE SERVICE PUBLIC

Pursuant to section 36 of the *Public Utilities Act*, the Commissioner in Executive Council orders as follows

Le commissaire en conseil exécutif, conformément à l'article 36 de la *Loi sur les entreprises de service public*, décrète :

1 The following energy project is designated as a regulated project for the purposes of Part 3 of the *Public Utilities Act*:

1 Le projet énergétique suivant est reconnu à titre de projet agréé aux fins de la Partie 3 de la Loi sur les entreprises de service public:

The Mayo Hydro Enhancement Project (also referred to as "Mayo B"), being an enhancement to the existing Yukon Energy Corporation Mayo hydroelectric facilities to increase hydro generation capacity installed on the Mayo River from approximately 5 MW to approximately 15 MW, including the construction of a new powerhouse downstream of the existing powerhouse, the construction of related facilities such as a tunnel-penstock-canal system, all weather access road, distribution line, transmission line and temporary construction-related facilities, and related adjustments to the management of water on the Mayo River system downstream of the existing Wareham Dam.

Le projet d'amélioration hydroélectrique de Mayo (aussi appelé « Mayo B »), améliore le rendement des installations hydroélectriques actuelles de Mayo de la Société d'énergie du Yukon, en augmentant la capacité de production hydraulique de la rivière Mayo d'environ 5MW à environ 15 MW. Le projet comporte aussi la construction d'une nouvelle centrale électrique en aval de la centrale électrique actuelle, la construction d'installations connexes telles que les suivantes: une conduite forcée en galerie et en réseaux de canaux, une voie d'accès toute saison, une ligne de distribution, une ligne de transmission, des installations temporaires pendant la période de construction et des rajustements connexes à la gestion des eaux dans le bassin hydrographique de la rivière Mayo, en aval du barrage Wareham actuel.

Dated at Whitehorse, Yukon,

2009.

Fait à Whitehorse, au Yukon, le 25 novembre

2009.

this

25 November 200

O. Consolation

Commissioner of Yukon/Commissaire du Yukon