Ministers' Reasons for Decision

Revelstoke Generating Station Unit 6 Project

Proposed by BC Hydro and Power Authority

On November 27, 2018 pursuant to Section 17(3)(c) of the *Environmental Assessment Act,* we, the Minister of Environment and Climate Change Strategy and the Minister of Forests, Lands, Natural Resource Operations and Rural Development, have issued an Environmental Assessment Certificate for the Project. This document sets out the reasons for this decision.

BRITISH COLUMBIA

1.0 NATURE AND SCOPE OF THE DECISION

The Environmental Assessment (EA) of the Revelstoke Generating Station Unit 6 Project (Revelstoke 6) began in 2013 and included the establishment of an advisory Working Group, consultation with Indigenous groups and engagement with the public. Revelstoke 6 consists of the addition of a sixth generating unit within the Revelstoke Dam, situated on the Columbia River five kilometers upstream from the City of Revelstoke, BC and a new capacitor station west of Summerland, BC.

On August 29, 2018, the Environmental Assessment Office (EAO) referred the BC Hydro and Power Authority (BC Hydro) application for an EA Certificate (Application) for Revelstoke 6 to us for a decision. Section 17(3) of the *Environmental Assessment Act* (Act) requires that ministers must consider the Assessment Report and any recommendations accompanying the Assessment Report, and may consider any other matters that they consider relevant to the public interest in making their decision on an application. Ministers must decide whether to issue an EA Certificate with any conditions they consider necessary, refuse to issue an EA Certificate, or order that further assessment be carried out.

We considered the documents provided by the EAO including the Assessment Report and Summary Assessment Report, the Recommendations of the Executive Director, the proposed Certified Project Description and EA Certificate conditions, and the separate submissions provided to us by Indigenous groups.

2.0 MINISTERS' CONSIDERATIONS

2.1 EAO'S ASSESSMENT

The EAO, with advice from the advisory Working Group, reviewed BC Hydro's Application, provided its detailed findings in the Assessment Report, and summarized its findings in the Summary Assessment Report. As described in in the Assessment Report and Summary Assessment Report, the EAO worked closely with Indigenous groups, provincial agencies and local governments to identify issues and seek ways to address these issues and concerns, including proposing 20 EA Certificate conditions for our consideration.

The EAO advised us that it was satisfied that the proposed EA Certificate conditions and project design requirements set out in the proposed Certified Project Description would prevent or reduce potential adverse environmental, social, economic, heritage or health impacts of Revelstoke 6, such that no significant adverse effects are expected. We concur with the EAO's conclusion.

2.2 RECOMMENDATIONS OF THE EXECUTIVE DIRECTOR

The EAO's Executive Director considered the Assessment Report, the proposed EA Certificate conditions and the project design requirements set out in the proposed EA Certificate. He recommended that an EA Certificate be issued for Revelstoke 6.

The EAO's Executive Director further advised that he was satisfied that the Crown's duty to appropriately consult and accommodate Indigenous groups had been discharged for Revelstoke 6. During the EA, the EAO consulted with the *Syilx* Okanagan Nation, Ktunaxa Nation, Lakes Tribe, Secwepemc Nation and Nlaka'pamux Nation.

We are of the view that consultation has been carried out in good faith and that the process of seeking to understand potentially outstanding issues and project impacts was reasonable. We are also of the view that the potential for adverse effects on the Aboriginal rights and title (Aboriginal Interests) of Indigenous groups has been appropriately avoided, minimized or otherwise accommodated.

2.3 KEY CONSIDERATIONS

2.3.1 ADVERSE EFFECTS

The EAO examined whether Revelstoke 6 would have adverse environmental, economic, social, heritage or health effects to a wide range of Valued Components and Intermediate Components. The EAO identified several residual effects to fish and fish habitat, and historical and archaeological heritage resources that are expected after the implementation of legally-binding conditions and mitigation measures, as noted below. None of these adverse residual effects were determined to be significant.

Fish and Fish Habitat

The EA identified that Revelstoke 6 would have residual effects on fish and fish habitat, specifically a potential increase in the rate of fish entrainment in the turbines that may result in fish mortality and loss of upstream fish populations. The EA also identified that there could be a potential reduction of suitable fish habitat and decrease in white sturgeon larval dispersal and juvenile survival in the Mid-Columbia River. To address these potential effects, the EAO has proposed a condition to require the development of a fish and fish habitat monitoring and mitigation plan, which would include a fish entrainment program to monitor and report fish entrainment rates, would require the implementation of recommendations from the Water Use Plan to address adverse effects to flows on white sturgeon larvae drift and juvenile survival, and would require the mitigation for potential loss of kokanee.

We are aware that during the EA, several Indigenous groups raised concerns that the EA did not assess or address broader issues related to historic dam development, fish passage and salmon restoration. Although the EAO considered the importance of salmon to Indigenous groups and their future aspirations to harvest salmon in its assessment of impacts, we understand that anadromous salmon are not present in the Revelstoke 6 project area.

We agree with the EAO's conclusions that Revelstoke 6 would not have significant adverse residual effects on fish and fish habitat, and are satisfied that the EA Certificate conditions and existing and future regulatory requirements will effectively manage project impacts.

Historical and Archaeological Heritage Resources

The EA identified that Revelstoke 6 would result in residual effects on historical and archaeological heritage resources by increasing the amount of time a site is fully or partially exposed, which could lead to the disturbance or loss of historical and archeological heritage resources.

During the EA, Indigenous groups raised a number of concerns related to Revelstoke 6 including the timing of conducting an archaeological impact assessment (AIA), systemic data recovery techniques, and the potential cultural loss and impacts to land stewardship and ancestral remains. Several Indigenous groups also expressed deep concern during the EA with past and current impacts to historical and archaeological heritage resources. BC Hydro committed to completing the AIA and providing the results to Indigenous groups prior to construction, developing protocols to manage chance finds or ancestral remains, and addressing loss of cultural connection to the area through funding to support stewardship interests and transmission of Indigenous knowledge, all of which the EAO proposed as conditions.

We agree with the EAO's conclusions that Revelstoke 6 would not have significant adverse residual effects on historical and archaeological heritage resources and are satisfied that the EA Certificate conditions and existing and future regulatory requirements will effectively manage project impacts.

2.3.2 INDIGENOUS CONSULTATION

The EAO consulted deeply with identified Indigenous groups during the EA. We acknowledge the considerable efforts made to work collaboratively on the Revelstoke 6 review. Indigenous groups participated in the EA as members of the advisory Working Group and worked closely with the EAO to review, comment on and contribute to multiple drafts of decision materials, met regularly with the EAO to review and discuss issues and concerns, and worked closely and iteratively with the EAO in developing proposed conditions to address concerns raised. We are also aware that Indigenous groups and BC Hydro established a joint process, which included providing funding to Indigenous groups in order for them to draft the Indigenous consultation sections of the Application that described from their perspective the potential impacts of Revelstoke 6 to their Aboriginal Interests and other project-related concerns.

We are aware that several of the concerns raised by Indigenous groups are related to historical grievances and impacts of hydroelectric development on the Columbia River, including concerns related to the absence of anadromous salmon in the Columbia River. Further, Indigenous groups raised the additional concern regarding the lack of monitoring opportunities for the life of the project. In addressing concerns raised during the EA, the EAO considered whether potential adverse effects or concerns raised were relevant or directly attributed to Revelstoke 6. We understand that the EAO has taken extra efforts to understand broader issues that extend beyond Revelstoke 6 specific impacts to promote Indigenous reconciliation as noted below.

Historical Grievances

We are aware that there are existing initiatives underway that address concerns related to the impacts of broader hydroelectric development on the Columbia River beyond the Revelstoke 6, including initiatives related to the reintroduction of anadromous salmon. We understand that the Province is responsible for the regulatory framework for the Columbia River Treaty (CRT) negotiations between the United States and Canada, which we are aware includes salmon reintroduction as a topic of discussion. In addition, we are aware that BC Hydro is participating in multi-agency discussions facilitated by the Columbia Basin Trust on the reintroduction of salmon in the Upper Columbia, and that a governance framework and technical working group are being developed which will be led by the *Syilx* Okanagan Nation, Secwepemc Nation and the Ktunaxa Nation.

During the EA, BC Hydro requested a suspension of the timelines to allow additional time to consult with Indigenous groups in the development and refinement of proposed mitigation measures related to Revelstoke 6, as well as additional time to identify mitigation measures to address concerns related to historical grievances broader than Revelstoke 6. We understand that BC Hydro has provided additional capacity to Indigenous groups and committed to participating in a separate process to further investigate and address proposed mitigation measures broader than Revelstoke 6. BC Hydro expects that several mitigation requests can be addressed at other tables and through relationship agreements between BC Hydro and Indigenous groups.

Monitoring Opportunities

It is our understanding that Indigenous groups have requested to be involved in stewardship monitoring opportunities that extend for the life of Revelstoke 6. In response, the EAO has proposed a condition for a full-time Indigenous stewardship monitor position for the *Syilx* Okanagan Nation, Secwepemc and the Ktunaxa Nation Council for the period of construction and the first five years of operation. Given the anticipated low magnitude of potential adverse effects related to Revelstoke 6, we agree that the monitoring timeframe proposed in the condition is reasonable. We understand that the EAO has proposed additional conditions that do require providing Indigenous groups with monitoring opportunities for the life of the project in relation to monitoring for potential impacts to water, fish and fish habitat and archaeological and historical heritage resources.

In addition, we are informed that Ktunaxa Nation, *Syilx* Okanagan Nation and Secwepemc are involved in many existing BC Hydro monitoring and fieldwork programs on the Columbia River. Through the Reservoir Archaeology Program, for example, Ktunaxa Nation, *Syilx* Okanagan Nation and Secwepemc are involved in fieldwork to assess and manage impacts to archaeology sites. We are also informed that the Ktunaxa Nation, *Syilx* Okanagan Nation and Secwepemc sit on a Board that makes decisions on awards for fieldwork of the Fish and Wildlife Compensation Program. We also understand that businesses affiliated with the Ktunaxa Nation, *Syilx* Okanagan Nation and Secwepemc have performed many of the monitoring and work programs through the Water Use Plans.

We are of the view that the EAO meaningfully and reasonably sought to address concerns raised by Indigenous groups. In particular, we note that a majority of the conditions were proposed to establish a strong foundation for ongoing consultation and consensus-building with Indigenous groups throughout the life of Revelstoke 6. We note that conditions were also proposed to address stewardship and cultural interests by utilizing Indigenous knowledge and traditional use information and that the EAO sought to adequately reflect and understand concerns raised during the EA that were out of scope of Revelstoke 6 to promote Indigenous reconciliation.

During the final stages of the EA, we received letters from the *Syilx* Okanagan Nation, Ktunaxa Nation Council and Splatsin Indian Band which detailed their outstanding concerns with Revelstoke 6. We understand that the EAO delayed the referral of Revelstoke 6 to ensure they had adequately considered and responded to key concerns raised in the letters, and in several cases the EAO made additional revisions to the decision materials in response to these concerns. We have considered all of the concerns raised in the decision materials and the separate submissions provided by Indigenous groups, as well as the EAO's responses to these concerns, in making our decision.

We are of the view that consultation has been carried out in good faith and that the process of seeking to understand and respond to potentially outstanding issues and project impacts was reasonable. We are also of the view that the potential for adverse effects on Aboriginal Interests of Indigenous groups has been appropriately avoided, minimized or otherwise accommodated.

2.3.3 PUBLIC CONSULTATION

We are aware of the opportunities for the public to submit comments during the two public comment periods held during the EA. In total, over the course of two public comment periods and four open houses, the public had 75 days of consultation in order to review materials and submit comments. We note also that these comments, and BC Hydro and the EAO responses, were appropriately considered during the EA as reflected in the EAO's Assessment Report and EA Certificate conditions.

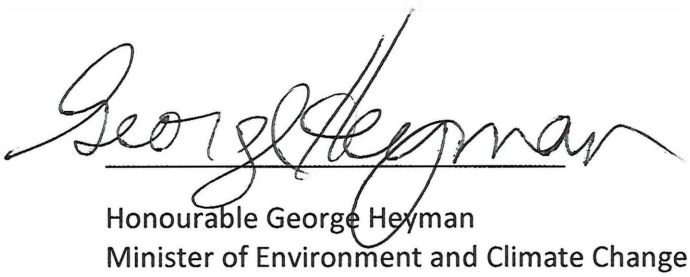
2.3.4 PROVINCIAL AND COMMUNITY BENEFITS

We are aware that Revelstoke 6 would provide local, regional and provincial benefits. BC Hydro estimated that the total project expenditures during construction would be up to approximately $550.0 million and would generate an estimated Gross Domestic Production total of $120.0 million for BC over the 40 months of construction of the generating unit. BC Hydro estimated that during construction, the Revelstoke 6 Project would generate approximately $10.8 million in total provincial tax revenues, 436 person-years (PYs) of direct employment at the generating unit, and 36 PYs of direct employment at the capacitor station.

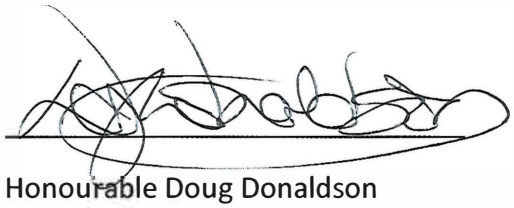
3.0 CONCLUSION

We have considered the EAO's Assessment Report, the recommended Certified Project Description and conditions of the proposed EA Certificate, the Recommendations of the Executive Director, and the separate submissions by Indigenous groups. Now, having regard to our responsibilities under the Act and Crown obligations to consult and accommodate Indigenous groups, we have decided to issue an EA Certificate for Revelstoke 6.

The EA Certificate includes enforceable conditions and specifies design parameters. These give us confidence to conclude that Revelstoke 6 will be constructed and operated such that no significant adverse effects are likely to occur.



Honourable George Heyman
Minister of Environment and Climate Change Strategy



Honourable Doug Donaldson
Minister of Forests, Lands, Natural Resource Operations and Rural Development

signed this 27th day of November 2018