

Lynn Kriwoken
 Director, Water Strategic Initiatives
 Innovation and Planning Team,
 Water Stewardship Division
 Ministry of Environment,
 Victoria, British Columbia

May 7, 2010

Re: *Water Act* Modernization

Dear Lynn:

BC Hydro is entrusted with a major interest under the Province's water allocation system, the *Water Act*, and is by far the largest water licence holder by volume. Approximately 98% of surface water by volume is allocated to hydropower under the *Water Act* and accounts for over 97% of water licence payments. Changes to the *Water Act* may change BC Hydro's ability to produce clean power and therefore affect the Province's ability to achieve energy self-sufficiency goals. Along with the Comptroller of Water Rights, BC Hydro has extensive experience operating within the *Water Act* in connection with daily operations, water licence management, and Water Use Plans.

In order to facilitate beneficial changes to the *Water Act* and to minimize unintended consequences, BC Hydro respectfully requests that:

1. It have representation within any inter-ministry or other steering committee considering changes to the *Water Act*;
2. The Province may wish to draw on BC Hydro's legal and technical advice, as it has with other major Provincial initiatives, such as the *Clean Energy Act*. BC Hydro would be willing to sign a confidentiality agreement to enable them to provide such expertise and assistance; and
3. The Comptroller of Water Rights and the Ministry of Energy, Mines and Petroleum Resources (MEMPR) also be extensively consulted on any proposed changes to the *Water Act*.

Background:

BC Hydro is a provincial Crown corporation and the largest electrical utility in BC. The corporation serves >94% of British Columbians and generates ~90% of its electricity from the non consumptive use of water for clean and renewable hydroelectric power. All hydroelectric generation is subject to licencing under the *Water Act*.

BC Hydro's hydro generation system includes 31 hydroelectric facilities with an installed capacity of over 10,250 MW. Operation of these works is based on ~110 non consumptive water licences for the purpose of power. BC Hydro also holds ~120 consumptive water licences for domestic, irrigation, etc., to support its general infrastructure.

The certainty associated with our power licences is essential for short and long-term planning to serve BC Hydro's shareholder and ratepayer. In return for the use of these

licences, BC Hydro paid \$321 million in calendar year 2009 and \$360 million in calendar year 2010 in water licence fees to the Province.

BC Hydro's water licences allow it to profitably operate its generation system. Annual dividends to BC Hydro's shareholder, the Province of British Columbia, were \$288 million in FY2009 and \$331 million in FY2008. BC Hydro, within its existing water licence rights, also has an important role in helping to deliver key BC Government policy initiatives, especially in the areas of clean energy and climate action.

BC Hydro represents Canada and the Province, as the Canadian Entity, under the Columbia River Treaty with the United States of America. BC Hydro is responsible for the Skagit Treaty with the USA and related operations and obligations, and participates directly on other international and inter-provincial cross-boundary water operations.

The Province recently announced Bill 17, the Clean Energy Act and its support for the advancement of the Site C Clean Energy Project. This project will be the third dam and hydroelectric generating station on the Peace River, a project of significant cost and of great importance to BC's economy. Change to the *Water Act* must be done in complete consideration of government policy direction under "The BC Energy Plan: A Vision for Clean Energy Leadership" (the 2007 Energy Plan), "Energy for our Future: A Plan for BC" (the 2002 Energy Plan), and the future *Clean Energy Act*.

Issues for Discussion:

We have reviewed the *Water Act* Modernization Discussion Paper and the Technical Background Report and have the following summary notes. At this time, we have kept our discussion brief and confined to larger strategic issues. As direction unfolds on which specifics are to be addressed under *Water Act* Modernization (WAM), BC Hydro will provide more detailed comments.

1. **Water Allocation:** BC Hydro is able to optimize the water resources granted under its licences because of the certainty the current *Water Act* provides with respect to priority of allocation rights. A change to a system which allows priority based on type of use, rather than precedence date of allocation, could allow major re-allocations of water to and from users licenced for hydroelectric power generation. This could amount to an expropriation, with significant implications for energy planning, electricity rates, and provincial revenue. If WAM makes such re-allocations possible, to the detriment of existing power licence rights, then a requirement for full compensation for lost electricity generation would be necessary.
2. **Centralized Planning and Governance:** The existing centralized system of water governance has served BC Hydro well in meeting provincial challenges associated with both the generation and transmission of electricity. BC Hydro's facilities are part of an integrated electricity system. Specifically, trade-offs between projects and regions are optimized provincially to the net benefit of the ratepayer and shareholder. This optimization may, on occasion, conflict with regionally specific agendas. For context, BC Hydro is not subject to local government regulation under the *Hydro and Power Authority Act* and, under the *Water Act*, is defined as a Government Corporation with specific provisions and responsibilities. Delegating or sharing control of water licenses could impose

significant new regulatory risk and reduce operational certainty for BC Hydro. BC Hydro strongly believes that centralized management of water licencing, at least in respect of our licences, remains in the best interest of the province.

3. **External Governance:** BC Hydro and the Province share the centralized responsibility for the management of transboundary waters *via* international treaties and agreements with other provinces. These factors must be considered in any proposed changes in the *Water Act* to avoid governance conflicts.
4. **Water Use Planning:** BC Hydro and the Province have invested \$25 million in the Water Use Plan (WUP) process to define water management and have committed to a near term annual implementation budget up to \$50 million. The WUP process included extensive consultation and agreement with communities, First Nations, water users and other agencies such as Fisheries and Oceans Canada. The WUPs struck a careful balance between these interests, providing public benefits as well as greater certainty for BC Hydro operations. It is important that changes to the *Water Act* not jeopardize the pre-existing WUPs nor render them less secure, both now and for future reviews. Reference to the WUP process is almost absent from the Discussion Paper and we are uncertain if or how WUPs would be affected by Water Allocation Plans or Water Management Plans. It is important to clarify this, especially since many of the stakeholders and First Nations would be common to all three processes.
5. **Stream Health and Related Environmental Protection:** BC Hydro is committed to producing, acquiring, delivering and consuming electricity in an environmentally, socially and financially responsible manner. BC Hydro's WUP process considered environmental issues associated with reservoir operations and flow management in detail. Proposed changes to the *Water Act* should not interfere with the balance which has been struck, particularly in respect of the management of water budgets. Moreover, BC Hydro believes that the application of generic guidelines or flow standards to BC Hydro's existing projects would not meet the level of Environmental Flow protection the Province currently has with BC Hydro's projects with WUPs.
6. **Work Within and Near Streams:** BC Hydro recognizes the importance of protecting aquatic ecosystems from harmful alteration, disruption, or destruction. The *Water Act* regulates a great deal of BC Hydro infrastructure which is necessarily located in and adjacent to streams. Going forward, aquatic habitat protection regulations must continue to provide a clear, workable pathway to obtain authorization under the *Water Act* to build and maintain essential generation, transmission, and distribution infrastructure.
7. **Water Licence Terms:** BC Hydro's dams are provincial "heritage assets" in perpetuity under Bill 17, the proposed *Clean Energy Act* and may not be disposed of. Water licences are required to preserve the value of these provincial assets. It is BC Hydro's belief that a term limit of 40 years for new licences, such as those which would be needed for Site C, is inappropriate given the scale of investment and the size of the provincial economic interest. *Water Act* amendments should consider a provision to provide BC Hydro with the first right of water licence renewal for heritage assets.

8. **Non Consumptive Use:** WAM documents and discussions have focussed on the consumptive use of water (a net annual removal of water from a stream). This is in contrast to that fact that ~98% of all the surface water licences by volume are associated with hydroelectric power production and are, therefore, non consumptive. The current licencing scheme for hydropower is based on the general application of "consumptive water" principles to the non-consumptive use of water for power. This is a sub optimal application and may cause power licencees to use water inefficiently to the net detriment of financial, social and environmental objectives. *Water Act* amendments should consider and distinguish between these two fundamentally different types of water use prior to any within use allocation by "priority".
9. **Transparency of Water Allocation:** Ministry of Environment (MoE), under the present *Water Act*, provides a consolidated window to track allocation volumes of water licences and permits. The BC Oil and Gas Commission also handles short term water permits in relation to oil and gas interests. Many of these permits have the potential to reduce BC Hydro generation, especially in the Peace River. MoE should explore approaches to resolve these potential impacts.
10. **Floods and Droughts:** The existing *Water Act* does not explicitly assign the responsibilities for flood protection or drought mitigation, outside of licence obligations, from power licencees to downstream users. WAM could be used to delineate and clarify the separation of responsibilities in order to improve the civil response to drought and flood events.

BC Hydro plans to provide more detailed comments on the current *Water Act* and *Water Regulation*, as discussed at an April 26, 2010 meeting with MoE staff. We would be pleased to meet again, and to provide further information to support our points noted above as required. We look forward to hearing from you as to our further involvement in this process.

Yours Sincerely,

BC HYDRO

Per:



RAY STEWART

Chief Safety, Health and Environment Officer
and Director of Dam Safety

cc:

Zita Botelho, Manager, Water Strategic Initiatives, Innovation and Planning Team, Water Stewardship Division, MoE

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