



TESTIMONY OF
Kathy Eichenberger
Executive Director, Columbia River Treaty Review
Ministry of Energy and Mines
Province of British Columbia

BEFORE

The U.S. House of Representatives Committee on Natural Resources
Hearing on “The Future of the US-Canada Columbia River Treaty - Building on 60 years of
Coordinated Power Generation and Flood Control”
December 9, 2013
Pasco, Washington

Good afternoon Mr. Chairman. My name is Kathy Eichenberger and I am the executive director of the Columbia River Treaty Review for the Province of British Columbia’s Ministry of Energy and Mines. I want to thank you for inviting the Province of B.C. to share some of our perspectives on the future of the Columbia River Treaty which we hope your committee will find useful.

The Columbia River Treaty is known throughout the world as one of the most successful models of transboundary water management, providing a framework for cooperation on energy and public safety, while demonstrating flexibility in addressing environmental interests. This agreement is seen as a benchmark on cooperation to create and share benefits that other jurisdictions wish to emulate.

The Treaty has made the Columbia River system into a North American clean energy powerhouse. The 14 hydroelectric dams on the Columbia's main stem and many more on its tributaries produce more hydroelectric power than on any other North American river. The Treaty has also prevented devastating floods in the United States which was the other original impetus behind the Treaty. The Treaty has served both countries well for almost 50 years and it’s now an appropriate time for it to be reviewed on both sides of the border, especially in light of intensified concern about climate change and climate change impacts.

In Canada, like in the U.S., the federal government is responsible for international treaties. As such, the Columbia River Treaty is an agreement between our two countries which was entered into by our two federal governments of the time. In Canada, the provinces have certain constitutional responsibilities, including in areas such as natural resources, which includes hydropower development. 94% of the territory of British Columbia is public land, which we call



provincial Crown land. The Columbia River Basin in Canada falls entirely within the territory of the Province of BC. Reflecting these realities, in 1963 a Canada-British Columbia Agreement was put in place that transferred most of the obligations and benefits of the Treaty to the Province.

The Province of BC is therefore leading the Treaty Review on the Canadian side. We are working closely with Canada to ensure a coordinated approach to the Treaty Review. The Province is also engaging First Nations, local governments and citizens throughout the Canadian Columbia basin who have been and continue to endure significant environmental, social and economic impacts from the Treaty. The provincial Treaty Review Team expects to present options on the future of the Treaty to our Provincial Cabinet in December.

As both Canada and the US continue to review options regarding the future of the Treaty, it is important to ensure that citizens on both sides of the border have a full understanding of the scope of the issues that need to be considered, balanced and managed. The implementation of the Treaty, especially over the last 20 years, has been a careful balancing act of many interests and issues crafted by studies and negotiations between the U.S. and Canadian Entities.

It is important to understand how the Treaty helps and the benefits it creates, and also how further cooperation can enhance or create new benefits. It is also important to understand the ongoing cost to environmental, social and economic interests in Canada to meet U.S. requirements and what is at risk if the Treaty is terminated, especially as we enter an era of intensified climate change impacts.

British Columbia believes that the coordinated management of river flows and storage reservoirs has produced the intended objectives of flood management and the opportunity to maximize hydro-electric power production on both sides of the border. We have also identified a wide range of additional benefits from Treaty operations to interests such as ecosystems, navigation, water supply and recreation. Yet through our consultations, we have also discovered that these existing and future benefits under the Treaty are not well understood.

Flood Control Benefits

Half of the available flood storage in the Columbia Basin is located in British Columbia. Since the Treaty storage became operational, there has never been a flood causing major damage along the Columbia River. In fact, coordinated flood control avoided \$2 billion in potential damage in the United States in one year alone (2011).



In 2024, regardless of whether the Treaty continues or is terminated, assured flood control operations change to a more ad hoc “called upon” flood control regime. This means that – if no other arrangement is in place– all U.S. reservoirs that are able to reduce damaging flood flows will need to be drafted deeper than is current practice before Canada can be “called upon” to provide additional assistance. British Columbia is open to discussing alternative coordinated flood risk management arrangements that would make better use of existing facilities, increasing certainty of operations and avoiding negative impacts to U.S. interests.

At this time, the Canadian and U.S. Entities disagree on how called upon flood control would be implemented, particularly with regard to which U.S. reservoirs would be affected and when to call upon Canada. Regardless of this disagreement, BC believes that called upon flood control will increase the flood risk on the system and the risk of U.S. reservoirs not being able to refill, with potential negative consequences for a number of U.S. interests, such as fisheries, ecosystems, power production and water supply.

Power Generation Benefits

The Treaty has significantly enhanced hydropower production in the U.S. and continues to provide predictable and reliable flows that translate into firm energy so that utilities can meet their customer loads during all periods of the year, including cold winter and dry hot summers. Treaty operations are designed to maximize incremental power production in the U.S. British Columbia believes that it should not be negatively impacted by water allocation choices made in the United States for other interests that reduce power benefits in your country.

Ecosystem Benefits

Flexibility within the Treaty has allowed changes in operations to benefit ecosystem values, including U.S. salmon recovery, by augmenting flows in the spring to better imitate the natural hydrograph, and by augmenting flows during late summer and during dry years which are particularly critical to fish survival. As climate change predictions foresee hotter and drier conditions for the lower Columbia Basin, this coordination will become only more valuable for the U.S. British Columbia believes that we don’t need to change the Treaty to work towards improving ecosystems even further.

Navigation and Recreation

Coordination under the Treaty also benefits navigation by limiting higher flows that affect



shipping times and docking operations, and cause sedimentation leading to increased dredging costs. Treaty flow augmentation from Canada during low flow periods also increases channel draft and reduces the risk of grounding. Generally, because of the Treaty, U.S. reservoirs can be also kept fuller with less fluctuation, which supports a longer recreation season.

Water Supply

Currently, the implementation of the Treaty for both power production and flood control also benefits water supply in the U.S. By using Canadian storage for flood control, U.S. reservoirs are not drafted as deeply, thereby meeting minimum intake levels and reducing pumping costs for irrigation, municipal and industrial water supply. Assured flood control planning also provides more certainty of annual refill of U.S. reservoirs which is critical to irrigators and other water users. Flow augmentation in late summer and early fall, supplemented by a dry-year strategy agreement between the Entities, supports a wide range of interests, including water supply. This will become increasingly important when considering climate change predictions.

Climate Change Benefits

Looking into the future - climate change studies predict that total precipitation in the Canadian portion of the Columbia Basin will remain the same or higher, while the US basin will see a reduction by as much as 40%. It is predicted that as much as 60% of the Columbia River flows will come from Canada.

As climate change will increasingly alter the environment of the Columbia Basin in the broadest sense, reservoir management and coordination are seen as important tools in adapting to climate change challenges that threaten salmon recovery, water supply and energy reliability.

In Conclusion

As both Canada and the United States continue to review options regarding the future of the Treaty, it is important that legislators on both sides of the border understand how the Treaty is beneficial, how further cooperation can enhance or create new benefits, and what is at risk of being lost if the Treaty is terminated.

British Columbia continues to be guided by the Treaty's fundamental premise of collaboration between two countries to create benefits and share them equitably. Our draft recommendation to continue the Columbia River Treaty and seek improvements based on guiding principles has been widely supported in our province. We are looking forward to hearing the outcome of the U.S. Treaty review. Thank you for this opportunity to offer comments.