The Columbia River Treaty is an agreement between the governments of Canada and the United States that required large hydroelectric dams to be built (3 in Canada and 1 in the U.S.) for optimal year production of electricity and reduced risk of devastating floods. The Canadian Dams are in British Columbia and operated by BC Hydro. The U.S. pays Canada (through returned electricity) for the additional power generation that results from operation of the Canadian Dams ($150-250 million/yr). The Treaty is considered an international model of international cooperation on hydropower development. The province of British Columbia carries most of the Treaty responsibilities (and benefits) for Canada, while the US operations are run by federal agencies.

OBJECTIVE
In 1964, Canada and the United States entered into the Columbia River Treaty (CRT) to develop the hydroelectric potential of the Columbia River basin, and provide flood control.

KEY ELEMENTS
Based on a referral by both the Canadian and U.S. governments, joint Canada-US Engineering studies were initiated in 1944 through formation of the International Columbia River Engineering Board under the International Joint Commission (IJC) leading to recommendations for hydro-power development.

In accordance with the terms of the treaty, Canada constructed three reservoirs on the Canadian side of the basin from 1967 to 1973 (Duncan Dam, Hugh Keenleyside Dam and Mica Dam, in order of construction) and receives, in return, one-half of the additional electricity generation and payment for increased flood control benefits enabled on the US side as a result of this additional storage. In 1975, the US constructed one dam under the treaty resulting in a transboundary reservoir (Libby Dam/Koocanusa reservoir). The treaty may not be...
terminated sooner than 60 years from its ratification (i.e., 2024), and even if terminated, parts of the treaty pertaining to flood control remain in effect (although mode of flood control will change from assured to called-upon). Ten years’ notice is required for termination (i.e., 2014 at the earliest).

Canada operates 15.5 Million Acre-Feet (19,119 Mm3) of reservoir storage for optimum power generation and flood control in Canada and US.

At the time of treaty ratification, the first 30 years of Canadian Entitlement was sold to a consortium of US utilities for US $254.4 M.

The US also provided up-front purchase of 8.45 Million Acre-feet (10,422 M m3) of primary flood control capacity from the Canadian CRT reservoirs through to 2024 for US$ 64.4 M.

Pre-sale of power and flood benefits helped to pay for construction of the 3 Canadian treaty dams by the government of British Columbia.

Resulting from Treaty obligations, 110,000 hectares (270,000 acres) of Canadian ecosystems were inundated; local community residents, First Nations and infrastructure were displaced, with impacts to cultural heritage, agricultural and forestry activities.

The treaty pre-dates current Canada and US domestic environmental protection legislation and focuses on power generation and flood control as its primary purposes. Domestic environmental issues such as protection of species at risk are currently addressed outside of the treaty. There is some operational flexibility in the treaty to address a range of water management requirements (e.g. fisheries issues) through supplementary operating plans and infrastructure modifications (etc.).

EXPECTED RESULTS

Coordinated operations of Canadian and US hydropower and reservoir storage facilities in the Columbia River Basin.

Greatly reduced risk of devastating floods as per the Columbia River flood of 1948.

Predictable and dependable hydro-power generation for Canada and the US to support regional economic development.

CANADA’S INVOLVEMENT

All commitments and financial returns pertaining to the treaty were assigned by Canada to British Columbia through the 1963 British Columbia-Canada agreement (and 1964 supplementary agreement). British Columbia has designated BC Hydro as the “Canadian Entity” to deliver on the river management terms of the treaty.

Natural Resources Canada (NRCan) participates on the CRT Permanent Engineering Board to help oversee delivery of treaty commitments. Canada does not have an Act of Parliament pertaining to this treaty but implemented the International River Improvements Act in 1955 to provide federal approval of such projects on Canada-US transboundary rivers. The Canadian CRT dams are licensed through Environment and Climate Change Canada under this Act, with 50-year license terms recently renewed in 2015, although conditional with continuation of the CRT.

Environment and Climate Change Canada provides atmospheric and hydrometric monitoring services to support CRT operations as outlined in various agreements with BC Hydro.

RESULTS / PROGRESS

Activities

NRCan actively participates in secretariat support and membership on the CRT Permanent Engineering Board.

The potential to terminate the treaty by 2024 resulted in a period of Columbia River Treaty review including evaluations of domestic benefits associated with the Treaty by groups and agencies on both sides of the border. These Treaty review activities were initiated by key agencies in advance of the initial date for announcement of intent to terminate (2014). The Canadian entity, through the province of British Columbia, issued its position for continuation of the treaty on March 13, 2014, while the US entity provided a regional recommendation to the Department of State on December 13, 2013, which resulted in a national interest review process at the federal level and the development of a U.S. CRT negotiating team.

On May 29, 2018, Global Affairs Canada initiated a formal negotiation process with the United States towards renewal of the Columbia River Treaty. Treaty negotiation is ongoing at present.

Reports

Annual Reports are available on the website of the Permanent Engineering Board.