

Update on Columbia River Treaty 2014-2024 Review

September 25, 2013
Columbia River Policy
Advisory Board





Treaty Overview

Libby
Dam

- Timeline
 - Engineering studies began after major flood in 1948
 - Treaty completed in 1961, ratified in 1964
 - Can be terminated in 2024 with 10 years notice
 - Exception is flood control
- Key elements
 - Flood control
 - Power
- Infrastructure
 - Canada built 3 dams
 - Provided 15.5 million acre feet of storage
 - U.S. built Libby Dam



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Key Provisions

- Flood Control
 - \$64 million pre-purchase of assured flood storage which expires in 2024
- Canadian Entitlement (Downstream Power Benefits)
 - U.S. bought 30 years for \$254 million
 - Since 1997 – 525 aMW per year
 - Mid-Columbia PUD's deliver 27.5%

Canadian Entitlement

- Designed to share 50/50 the increased power production in the U.S. as a result of the Treaty dams.
- A negotiated number, not based on actual calculated benefits.
- Historic Treaty documents suggest that the Canadian Entitlement was expected to drastically decrease by 2024 based on assumptions in the formula...this has not occurred.



Mica Dam

Cost of the Treaty

- Canadian Entitlement delivery valued at \$250-\$350 million annually
- Total value transferred to Canada since 1997 estimated to be about \$4 to \$6 billion dollars
- Value received by U.S. is about 10% of value transferred – in other words, we receive 10 cents for every dollar spent



Who's Who in the U.S.

Hugh Keenleyside (Arrow)

- **U.S. Department of State** - Ultimately responsible for decision and negotiations
- **U.S. Entity** - Administrator for Bonneville Power Administration and the Commander for the Corps Northwest Division
- **Sovereign Review Team (SRT)**-comprised of tribal, state, and federal agency representatives
- **Mid-Columbia project owners**-pay 27.5% of Canadian Entitlement
- **Power Group**-Consortium of over 70 utilities representing 6.4 million meters and most consumers in the Northwest
- Other interested parties include irrigation, navigation, and recreation interests

Who's Who in Canada

- The Province of British Columbia is Canadian lead for review process
- BC Hydro-Implements Treaty for Canada and is providing technical support



Duncan Dam

Where do consumers that pay for the treaty fit in?

- No seat with the U.S. Sovereign Review Team
- Utilities representing consumers helped form a consortium known as the Power Group
- Power Group representatives met with BPA Administer on a quarterly basis
- Mid-C PUD's engaged with U.S. Entity technical team (computer simulation)

Power Group Position

- Payments for downstream power should not exceed $\frac{1}{2}$ the actual benefits
- Flood control funding should be the responsibility of the U.S. taxpayer
- Domestic ecosystem mitigation requirements should not be included

Timeline

- U.S. Entity released first draft recommendations on Jun 27
- U.S. Entity met with Power Group on Aug 27 to discuss our concerns
- U.S. Entity and Department of State met with Power Group on Sep 13 to hear our concerns
- U.S. Entity released second draft on Sep 20
- U.S. Entity final expected in Dec

U.S. Entity Draft Recommendation (September 20, 2013)

- Identifies **eight key principles** that underlie the recommendation:
 - “CRT provisions should **enable the greatest possible shared benefits** in the U.S. and Canada **from the coordinated operation** of Treaty reservoirs for ecosystem, hydropower, and flood risk management, as well as water supply, recreation, navigation and other pertinent benefits and uses, as compared to no longer coordinating Treaty storage operations.”
 - “The health of the Columbia river **ecosystem should be a shared benefit** of the United States and Canada.” (NEW)
 - “The minimum duration of the CRT post-2024 **should be long enough** to allow each country to rely on the CRT's planned operations and benefits for purposes of managing their long-range budgets, resource plans and investments, but adaptable enough to allow periodic integration of new scientific and social knowledge, with rebalancing of the purposes and benefits if necessary.”



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U.S. Entity Draft Recommendation (key principles continued)

- “United States **Federal** (NEW) reservoirs/projects will continue to meet **authorized uses** consistent with applicable legislation and other U.S. laws such as Treaty and Trust Responsibilities to the Columbia Basin Tribes, the Clean Water Act, and the Endangered Species Act. Non-federal United States projects will continue to meet their responsibilities pursuant to their Federal energy regulatory Commission license plans”
- “The United States and Canada should **integrate both Treaty and Canadian non-Treaty storage** into the CRT to increase the flexibility to, and benefits of, meeting ecosystem-based function, power, flood risk management and other authorized water management purposes in both countries.”
- “The region anticipates impacts from **climate change** to all of the elements described in this document. The strategy for adapting the Treaty to future changes in climate should be resilient, adaptable, flexible and timely as conditions warrant.”



U.S. Entity Draft Recommendation (key principles continued)

- “It is recognized that modifications to the treaty could result in new benefits, and/or costs, to both Canada and the United States. United States’ interests should endure **that costs associated with any Treaty operation are aligned with the appropriate party.** As an example, any payments for Columbia river flood risk management should be consistent with national flood risk funding policy of federal funding with applicable local beneficiaries sharing those costs as appropriate.” (NEW)
- “Inclusion of ecosystem-based functions in the treaty, and the implementation of these functions should not prevent the region from achieving its objective of **reducing U.S. power costs.** In order to accomplish this, funding for additional ecosystem-based function operations should come from a rebalancing of the power benefits between the two countries or from other sources.” (NEW)



U.S. Entity Draft Recommendation (Cont.)

- More specific principles identified that cover:
 - Ecosystem-based function
 - Hydropower
 - Flood Risk Management
 - Water Supply
 - Navigation
 - Recreation
 - Climate Change
- Domestic matters to be addressed post-2013



British Columbia Perspective

- Recently released document from the BC Ministry of Mines and Energy - “The only benefit to Canada from the Treaty is the return through the Canadian Entitlement”.



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Power Group Response (August 16, 2013)

- First draft (Jun 27) did not reflect current conditions or priorities of the region
- First draft was open ended – proposed actions and corresponding costs were not defined
- Process has not allowed for meaningful input or discussions by consumers or utilities

What's next?

- Most groups are interested in reaching a regional consensus and revising the Treaty to reflect actual operations and benefits
- Generally understood that there is no additional funding – any proposed actions must come from existing budgets or from current entitlement provisions

Questions?



Glossary

Assured Operation Plan-Developed six years in advance of each operating year. The Assured Operating Plan is developed to meet flood control and power objectives, the only recognized purposes for project operation when the Treaty was signed, and to define the amount of Canadian Entitlement to downstream power benefits to be delivered for that year.

Capacity-The maximum power that an electrical system or machine such as a hydro powered or thermal powered or generating plant can produce under specified conditions.

Canadian Entitlement- $\frac{1}{2}$ of the incremental downstream power benefits from US projects as a result of the Canadian dams built as part of the Columbia River Treaty.

Glossary (Cont.)

Called Upon-Flood control operations that take effect in 2024 unless acted upon. The US has the right to call upon Canadian project for flood control in return for payment of operational and lost opportunity cost. Before this can occur, the US must make “effective use” of it’s facilities. There is disagreement between the U.S. and Canada on what this means.

Canadian Entity-BC Hydro, the Canadian Entity responsible for implementing the CRT.

Detailed Operating Plan-A Detailed Operating Plan is developed prior to each operating year and includes changes to the AOP that would be mutually advantageous to the Entities. The DOP is developed from the AOP previously agreed to for that operating year and provides information needed to operate Treaty storage within the operating year.

Glossary (Cont.)

Average Megawatt-Equivalent to the energy produced by a continuous use of 1 megawatt of capacity served over a period of 1 year. 1 aMW = 8,760 MWh.

Firm Energy-Electric power that is considered assured to meet all contractual energy load requirements over a defined period for a customer or customer group.

Permanent Engineering Board-set up by the two governments to monitor and report on the results being achieved under the Treaty. Additionally, the board assists in reconciling differences concerning technical or operational matters that may arise between the Entities. The U.S. Secretaries of Army and Energy each appoint a PEB member and the governments of Canada and British Columbia each appoint a Canadian member.



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Glossary (Cont.)

Power Group-Consortium of Pacific Northwest utilities that represent 6.4 million electric customers.

Treaty Dams-Mica, Arrow (Hugh Keenleyside), and Duncan dams in Canada. Libby Dam in the US.

U.S. Entity-Administrator for the Bonneville Power Administration and the Commander of the Northwest Division of the Corps of Engineers. The US Entity is responsible for implementing the CRT.

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