BPA and BC Hydro seek to negotiate new long-term water storage agreement

In the 1940s, officials from the United States and Canada began a long process to create a joint solution to Columbia River flooding and the postwar demand for energy. The effort resulted in the Columbia River Treaty between Canada and the United States.

The Columbia River Treaty required Canada to build three dams that would provide water storage in Canada that could be used for power generation and flood control benefits downstream in both countries. When Canada built its dams in the 1970s, it chose to construct more water storage than was required by the Treaty.

The additional water storage is termed non-Treaty storage because it is not operated under terms of the Treaty and access to this storage is obtained only through negotiation of operational agreements that provide mutual benefits to the Bonneville Power Administration and BC Hydro.

BPA is seeking to negotiate a non-Treaty storage agreement that would provide power and nonpower benefits for BPA, BC Hydro, and other Canadian and U.S. interests. Nonbinding terms for negotiating such an agreement have been developed by BPA and BC Hydro, and BPA is now holding open house meetings to share the proposed terms with the public.

The proposed terms would benefit threatened and endangered fish by providing flexibility for BPA to store excess water in the spring and then release that water in the summer when Columbia River flows are low. In the driest water conditions, the proposed terms also would allow BPA to release up to 500,000 acre-feet of additional water in the spring for fish. This water would be in addition to the water provided under the Treaty.

The proposal would also provide additional flexibility to reduce flows and spill during periods when dissolved gas levels caused by spill exceed state standards.

The power benefits of the proposed terms include giving BPA the flexibility to store water in the spring — beyond what is needed for fish — and releasing it in the summer when it has greater economic value to Northwest ratepayers.

Why is an agreement important to BPA?

Absent an agreement with BC Hydro, BPA does not have access to non-Treaty storage, and BC Hydro uses the storage space for flexibility within Canada. The Treaty limits the use of non-Treaty storage to actions that do not reduce Treaty flood control and power benefits. Within that constraint, BC Hydro has used the storage space for its benefit by redistributing water among its reservoirs.

BPA and BC Hydro have had a number of agreements, both long-term and short-term, for shared use of non-Treaty storage. All long-term agreements have now expired and the existing
short-term agreement expires by the end of December 2011.

In order to achieve the potential future power and nonpower benefits of non-Treaty storage use, BPA and BC Hydro must negotiate a mutually beneficial agreement. If negotiations based on the proposed nonbinding terms are successful, an agreement allowing access to non-Treaty storage would be in place through 2024.

What are the potential benefits of a new agreement?

The use of non-Treaty storage has been an important part of BPA’s power and fish operations for many years. Both the 2010 Federal Columbia River Power System Biological Opinion and the Columbia Basin Fish Accords include an objective calling for BPA to seek to negotiate a long-term agreement to provide benefits to ESA-listed fish, consistent with the Treaty.

The proposed terms would provide opportunities to achieve benefits for ESA-listed fish by providing flexibility for BPA to store water when it is abundant and exceeds fish requirements in the spring and then release that water in the summer to provide water when Columbia River flows are low. This operation benefits fish by providing needed summer flows and also provides power benefits by increasing hydro generation when it is needed to meet summer loads. In the driest water conditions, the proposed terms would allow BPA to release water in the spring to provide additional water for fish.

The proposal would also provide additional flexibility to reduce flows and spill during periods when dissolved gas levels (caused by spill) exceed state standards and to reduce or increase flows to move generation into higher value periods.

What are the important provisions of the nonbinding terms?

- The agreement would expire Sept. 15, 2024.
- The agreement would coordinate use of 5 million acre-feet of storage in Canadian reservoirs.
- BPA and BC Hydro each have continuing access to 1.5 maf of active storage.
- Either party can decline a transaction if the flow impacts are unacceptable.
- BPA has right to 0.5 maf of water releases in May/June of years within the lowest 20 percent of water conditions if it hasn’t been used in the prior year.
- BC Hydro benefits from the energy value of generation changes at U.S. federal hydro projects that result from their use of storage to shape water flows.
- BC Hydro’s benefits are either energy delivered at the B.C./U.S. border or are financially settled with the exception of BC Hydro’s firm energy benefit, which is always delivered to the border with all transmission costs paid by BC Hydro.

Did BPA confer with anyone when it developed the proposal?

BPA held many meetings with federal and state agencies and with the region’s tribes to gather ideas and information. The feedback received has been integrated into the proposed agreement terms.

What’s next?

BPA will be preparing an environmental document for the proposed non-Treaty storage agreement. BPA has already reached out to many stakeholders through ongoing federal, state and tribal coordination. We are now expanding our outreach through public information meetings. Four open house meetings have been scheduled to present the proposed terms to the public. If negotiations are successful, a new non-Treaty storage agreement could be completed by early fall.

For more information call BPA at 800-622-4519.