

United States Entity

US Department of Energy, Bonneville Power Administration
US Army Corps of Engineers, North Pacific Division

Delivery of the Canadian Entitlement Final Environmental Impact Statement

Supplement to Record of Decision

Summary

The United States Entity has decided to supplement an earlier decision regarding the Canadian Entitlement. The United States Entity issued a Delivery of the Canadian Entitlement Record of Decision (ROD) on November 8, 1996. The ROD was based on the Delivery of the Canadian Entitlement Environmental Impact Statement (DOE/EIS-0197, issued in January 1996). The November 1996 ROD announced the United States Entity decision to fulfill its obligation under the Columbia River Treaty (Treaty) between Canada and the United States of America (United States) by delivering the full Canadian Entitlement (Entitlement) at existing transmission interconnections between the United States and Canada near Blaine, Washington, and Nelway, British Columbia (BC). The November 1996 ROD also replaced an earlier March 12, 1996, ROD.

The November 1996 ROD did not address delivery of the Entitlement in the United States. It did, however, note that: “If the United States and Canadian Entities propose delivery in the United States, the United States Entity will review the Delivery of the Canadian Entitlement EIS to ensure that the impacts are adequately analyzed. A decision to dispose of the Entitlement in the United States would be the subject of an additional United States Entity ROD.”

The Federal governments of Canada and the United States have exchanged diplomatic notes, as provided in the Treaty, to permit disposal of all or part of the Entitlement directly in the United States. The Bonneville Power Administration (BPA) and the Province of British Columbia (Province) have reached agreement on the terms and conditions of the disposal. The Administrator and Chief Executive Officer of BPA, as Administrator and also as Chair of the United States Entity, has decided to enter into an agreement to enable disposal of the Canadian Entitlement directly in the United States. As a result, the United States Entity (which is responsible for representing United States interests pursuant to the Treaty) is supplementing the November 1996 ROD to recognize the decision to enable disposal of the Entitlement in the United States through September 15, 2024, as well as delivery at Blaine and Nelway.

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Supplement to the November 1996 ROD are available from BPA's Public Information Office, P.O. Box 12999, Portland, Oregon 97212. Copies of the documents may also be obtained by using BPA's nationwide toll-free document request line, 1-800-622-4520.

Supplementary Information

1. Columbia River Treaty

The Treaty, signed in 1961 and ratified in 1964, required Canada to construct and operate three storage dams on the Columbia River system in Canada (Duncan, Keenleyside, and Mica Dams), and allowed for one additional dam in the United States (Libby Dam). The dams help control floods in both countries, and the regulated streamflow provided by the three Treaty reservoirs in Canada enables dams downstream in the United States to produce additional power. Under the Treaty, Canada and the United States share these downstream power benefits equally. Canada's half of the downstream benefits, known as the Canadian Entitlement, is approximately 1,200 to 1,500 megawatts (MW) of capacity and 520 to 560 average megawatts (aMW) of energy. Technical studies (called the Determination of Downstream Power Benefits) conducted each year determine that year's amounts of capacity and energy. The Treaty is to run for a minimum period of 60 years; the earliest it can terminate is September 15, 2024, and would terminate only if either the United States or Canada has given 10 years' advanced notice of its intent to terminate.

The Entitlement is owned by the Province. In 1964, Canada sold the Entitlement for 30-year periods to a consortium of United States utilities. The 30-year sale expires in stages, beginning in 1998, and will completely expire in 2003. At the expiration of the 30-year sale, the United States Entity must fulfill the United States' obligation under the Treaty to deliver the Entitlement power to Canada. The Treaty specifies that the Entitlement be delivered to Canada at a point on the United States/Canada border (border) near Oliver, BC, unless the parties agree to other arrangements. An interim agreement, signed in 1992, directed the Entitlement be delivered over existing transmission facilities between 1998 and 2003. A November 20, 1996, Entity Agreement (1996 Entity Agreement) on "Aspects of Delivery of the Canadian Entitlement for April 1, 1998 through September 15, 2024" superseded that interim agreement and determined that the Entitlement was to be delivered over existing transmission facilities through 2024. The 1996 Entity Agreement has since been superseded by 1998 and 1999 Entity Agreements of the same title, which still provide for the Entitlement to be delivered over existing transmission facilities.

The Treaty also allows for disposals of all or part of the Entitlement in the United States if authorized by an exchange of diplomatic notes between the Federal governments. BPA and the Province, with the assistance of the Federal governments, have negotiated an "Agreement on Disposals of the Canadian Entitlement Within the United States for April 1, 1998 through September 15, 2024" (Disposal Agreement) setting out mutually agreeable terms and conditions for disposal of the Entitlement directly in the United States. On March 31, 1999, the United States government (through the Department of State) exchanged diplomatic notes with the Canadian government [through the

Department of Foreign Affairs and International Trade (Department of Foreign Affairs)] authorizing such Disposal Agreement.

2. Delivery of the Canadian Entitlement EIS

BPA, which transmits power from United States Federal hydroelectric projects in the Pacific Northwest (PNW) and markets that power in the PNW and California, had been assigned responsibility by the United States Entity for implementing the United States Entity's obligation to deliver the Entitlement to Canada. Therefore, BPA prepared the Delivery of the Canadian Entitlement EIS. The EIS evaluated the environmental impacts of a range of alternatives for delivering the Entitlement to Canada. On March 12, 1996, the United States Entity issued a ROD documenting its decision to deliver the full Entitlement to Oliver, BC. The decision reflected the inability of the Canadian and United States Entities, despite a concerted effort over a period of several years, to find a mutually agreeable, commercially reasonable alternative to the Treaty-specified delivery at Oliver.

Delivery at Oliver would have required the construction and operation of a new single-circuit 500-kv transmission line from Grand Coulee or Chief Joseph Substation to the border, a distance of 135 to 155 kilometers (85 to 95 miles). To comply with the Treaty, the United States Entity needed to be able to deliver the full Entitlement to Canada by midnight on March 31, 2003. Therefore, the United States Entity began the Oliver Delivery Project EIS in March 1996.

Subsequent technical discussions led to a mutually agreeable alternative to delivery at Oliver. The United States and Canadian Entities executed the 1996 Entity Agreement for full delivery of the Entitlement from 1998 to 2024 at existing transmission interconnections in the vicinity of Blaine and Nelway. The Agreement provided for deliveries using a 3.4 percent transmission loss factor. The ROD issued on November 8, 1996, documented the United States Entity's decision, replaced the March 1996, ROD and withdrew the Oliver Delivery Project.

3. Columbia River System Operation Review (SOR) EIS

A Federal interagency team, including BPA, prepared the SOR EIS (DOE/EIS-0170, November, 1995) to evaluate the environmental impacts of four actions: a system operating strategy for managing the multiple uses of the Columbia River system, a forum for periodic review and update of system operations, renewal of the Pacific Northwest Coordination Agreement, and the extension of the Canadian Entitlement Allocation Agreements (CEAA).

The CEAA, also executed in 1964, established how the obligation to deliver the Canadian Entitlement was to be allocated through March of 2003 among the six downstream Federal hydroelectric projects and each of the five downstream non-Federal projects which generate the Canadian Entitlement. The five non-federal dams, known as the Mid-Columbia projects, are owned and operated by three Washington state public utility districts [Chelan County, Douglas County, and Grant County Public Utility Districts (PUDs)]. The Mid-Columbia projects benefit from the improved streamflows

created by the Treaty. The five CEAA expired concurrently with the 30-year sale of the Entitlement.

The SOR EIS evaluated four alternative allocations that reflected different ways of allocating the downstream power benefits of Treaty storage. On April 29, 1997, BPA issued a ROD documenting the Administrator's decision to extend the Mid-Columbia projects' obligation through 2024 in exchange for the Mid-Columbia projects' continued use of the improved streamflow, and to establish 27.5 percent of the amount of Canadian Entitlement as their allocation. These agreements are called the Canadian Entitlement Allocation Extension Agreements (CEAEA).

Another SOR EIS ROD, the Columbia River System Operation Review on Selecting An Operating Strategy for the Federal Columbia River Power System (SOS) ROD (February 21, 1997), defined hydrosystem operations and the amount of power available to BPA.

4. Business Plan EIS

In response to a need for sound policy to guide its business direction under changing market conditions and its administration of other statutory obligations, BPA prepared the Business Plan EIS (DOE/EIS-0183, June 1995). The EIS evaluated six alternative plans of action and focused on the analysis of the relationships among BPA, the utility market, and the affected environment. On August 15, 1995, BPA issued a ROD documenting the Administrator's decision to adopt a market-driven approach for participation in the increasingly competitive electric power market. BPA would use its success in the market to ensure the financial strength necessary to provide public benefits. The Business Plan EIS and ROD were also intended to guide BPA in a series of related decisions on specific power and transmission actions and issues.

5. Exchange of Notes

The November 8, 1996, Delivery ROD noted that the 1996 Entity Agreement would not address disposal of the Entitlement in the United States, and that any such proposed disposal would be addressed in a separate process. The Delivery ROD also noted that the United States Department of State would need to authorize the United States to conduct negotiations regarding the disposition of the downstream benefits in the United States, since the Treaty requires that disposition in the United States must be evidenced by an exchange of notes between the Federal governments of Canada and the United States. Subsequent to the issuance of the Delivery ROD, BPA contacted the Department of State. The Department of State began their process of considering an exchange of notes with the Canadian Department of Foreign Affairs.

With the exchange of notes process drawing to a close, the Entities superseded their 1996 Entity Agreement with two 1998 Entity Agreements. The first, signed March 9, 1998, temporarily added 0.2 percent to the 3.4 percent transmission losses, to correct for the omission of step-up transformer losses at Federal projects in the computation of the Entitlement. The 3.6 percent transmission losses will remain in effect until the Entitlement computation process is changed to include those losses. The

second, signed March 26, 1996, but not effective until the exchange of notes, was a revision of the 1996 Entity Agreement that deleted the losses-renegotiation provision and added language governing deliveries at the border of any Entitlement power not disposed of in the United States.

Following 16 months of discussions, the Department of State and the Department of Foreign Affairs began, on March 9, 1998, the formal process to obtain approvals to negotiate a Disposal Agreement and a diplomatic note. The Department of State successfully concluded its first “Circular 175” process on November 25, 1998, which authorized the United States to negotiate a Disposal Agreement and the diplomatic notes to be exchanged by the Federal governments. Since that time, the Department of State and the Department of Foreign Affairs have led the negotiations and now have reached mutually agreeable terms and conditions for disposal. The Department of State has approved, through a second Circular 175 process, conclusions of negotiations and an exchange of notes between the Federal governments. The exchange of notes allows for the disposal of all or portions of the Entitlement within the United States, pursuant to Article VIII of the Treaty, with the disposal arrangements to be made in the Disposal Agreement. The exchange of notes also contains a provision that designates the Province as a Canadian entity, under Article XIV(1) of the Treaty, for the limited purpose of making arrangements for disposal of all or portions of the Canadian Entitlement within the United States. BC Hydro remains the Canadian Entity for all other Treaty purposes.

6. Disposal and Delivery Documents

1999 Entity Agreement

As previously noted, the March 26, 1998, Entity Agreement superseded the 1996 Entity Agreement in order to (1) delete the 1996 Entity Agreement provision allowing renegotiation of the 3.4 percent transmission losses and (2) provide for return of the Entitlement to the border in the event that disposals directly in the United States expire or are terminated. These revisions to the Entity Agreement were necessary to account for disposals in the United States. The 1998 Entity Agreement never reached its effective date and was in turn superseded by a 1999 Entity Agreement of the same title.

Similar to the 1998 Entity Agreement, the 1999 Entity Agreement sets out the terms and conditions for deliveries of the Canadian Entitlement to the border as the Treaty requires under Article V(2). The Entity Agreement also specifies the terms of conditions of deliveries to the border after such time that the Province elects to take delivery of all or portions of the Canadian Entitlement in the United States pursuant to the Disposal Agreement. The 1999 Entity Agreement was necessary because the Federal governments did not conclude an exchange of notes in the timeframe expected.

Disposal Agreement

In the 1998 United States Entity/BPA Agreement, dated February 18, 1998, the United States Entity delegated to BPA (acting in its capacity as the power marketer in the Pacific Northwest) the duties and responsibilities of implementing the disposition of the Canadian Entitlement. The Province and BPA, acting on behalf of the United States Entity, have mutually agreed upon an “Agreement on Disposals of the Canadian

Entitlement Within the United States for April 1, 1998 through September 15, 2024” for disposal of all or portions of the Entitlement in the United States. This Disposal Agreement is a Treaty transaction between BPA and the Province, and BPA is executing it pursuant to its Treaty authorities. BPA’s delivery of the Entitlement under this Agreement will be in satisfaction of the United States’ obligation to deliver that portion of the Entitlement to Canada.

The Disposal Agreement establishes three methods by which Entitlement power could be disposed of directly in the United States. The first would allow any or all of the three CEAEA PUDs, and potentially their purchasers, to buy down (or buy out) their contractual obligation to provide power to the United States Entity in satisfaction of their 27.5 percent share of Entitlement delivery. Any such buyout, even though for a period less than through September 15, 2024 (the earliest date the Treaty expires), would permanently reduce the United States’ capacity return obligation by the amount bought down. The second would allow the Province, or its agent, to receive the Entitlement at the Federal projects’ busbars. The Province would be responsible for arranging and paying for transmission to its customer. The third method would allow the Province to enter into mutually agreeable agreements with BPA for sale, exchange, or other disposition.

The Disposal Agreement also outlines a dispute resolution process authorized under Article XVI(6) of the Treaty, and provides for the appointment of a scheduling agent for the Province. This Disposal Agreement can become effective only upon an exchange of notes by the Federal governments as discussed above.

7. Alternatives Evaluated in the Delivery of the Canadian Entitlement EIS

The United States Entity evaluated the potential environmental impacts of a range of alternatives, including No Action, for delivering the Entitlement to Canada. As discussed in the March 1996 and November 1996 RODs, alternatives were analyzed in terms of components, actions, and connected actions in Canada. The action alternatives were compared to the Base Case alternative. Focusing the analysis this way allowed decisionmakers to understand the environmental impacts of the full range of alternatives for the delivery of the Entitlement. It also accommodated the changing course of negotiations between Canada and the United States over the multi-year process.

Under the Disposal Agreement, all or part of the Entitlement would be delivered to Canada in the United States. The power could then be disposed by Canada in either the PNW or Pacific Southwest (PSW), subject to interconnection limitations. Consistent with the November 1996 ROD, Entitlement power not disposed of in the United States would continue to be delivered to Canada at existing transmission interconnections between the two countries near Blaine, Washington, and Nelway, BC. Disposal of all or part of the Entitlement in the United States is within the scope of the Delivery of the Canadian Entitlement EIS. It is accommodated by two of the alternatives evaluated in the Final EIS and the March 1996 ROD: Alternative B (PNW Purchase) and Alternative C (PSW Purchase). Alternative B covers delivery and disposal of the Entitlement in the

PNW. Alternative C covers delivery of the Entitlement in the PNW, and disposal in the PSW.

8. Environmental Evaluation

The Delivery of the Canadian Entitlement EIS was reviewed to ensure that the impacts of this decision were adequately analyzed. The environmental impacts of delivery and disposal in the United States would be the same as if the power was purchased by the PNW (Alternative B) and/or PSW (Alternative C). In the long term, under both alternatives, Canada could need to develop and operate resources [probably combined cycle combustion turbines (CTs) and new generators at existing hydroelectric facilities] to replace the disposed of Entitlement power. Under Alternative C, resources (most likely CTs) would need to be developed and operated by the PNW to replace the delivered Entitlement power. Under both alternatives, there would also be a change in timing for new Interior-to-Lower Mainland transmission lines in Canada.

The principal environmental impacts for either alternative are air quality impacts. Under Alternative B, there would be air quality impacts in Canada, where new CTs are assumed to be located. The principal environmental impacts of Alternative C would stem from the development of new generating resources in the PNW and Canada, and the displacement or deferral of thermal resource generation in the PSW. Air pollution emissions would increase somewhat in the PNW and Canada, but would be reduced in the PSW, in areas where poor air quality and dense population make air quality particularly serious. Actual disposition involves no new resource development and the operation of the hydro system remains defined by the SOR EIS and SOS ROD.

Neither alternative directly requires the construction of new transmission lines in the United States for delivery of the Entitlement. In Canada, impacts of transmission line construction would not occur or would be delayed compared to the Base Case. Although the commercial terms for the use of the transmission system in the United States may vary with disposition, the development and operation of the transmission system itself would remain unchanged.

Alternative B was identified as the environmentally preferred alternative in the EIS. Impacts of new generating resources were shifted from quality impacts of new CTs in the PNW. New transmission in the PNW was avoided and new transmission was either avoided or delayed in Canada.

9. Decision Factors

The United States Entity used the purposes identified in the Delivery of the Canadian Entitlement EIS as decision factors. The decision to enter into the Disposal Agreement needed to be consistent with the United States Entity need to fulfill the United States' obligations under the Columbia River Treaty to deliver Canada's share of the downstream benefits of the Columbia River Treaty dams. The purposes were to:

- Meet the Treaty obligations cost-effectively.
- Avoid or minimize adverse environmental effects of fulfilling the Treaty obligation.

- Develop means for fulfilling the Treaty that are acceptable to the Canadian and United States Entities.
- Maintain the reliability of BPA’s power system.

In addition, implementing disposition of the Entitlement needed to be consistent with the Business Plan Final EIS and the subsequent Business Plan ROD. As documented in the Business Plan ROD, BPA decided to respond to the rapidly changing electric utility market by becoming market-driven. BPA has become a more active participant in the West Coast electric power and transmission markets and uses its success in those markets to ensure the financial strength necessary to provide public benefits.

10. The United States Entity’s Decision

The Administrator and Chief Executive Officer of BPA, as Administrator and also as Chair of the United States Entity, has decided to enter into a Disposal Agreement to enable disposal of all or part of the Canadian Entitlement directly in the United States. As a result, the United States Entity is supplementing its November 1996 ROD to allow disposal of the Entitlement in the United States through September 15, 2024, as well as delivery at Blaine and Nelway.

The Delivery of the Canadian Entitlement EIS was reviewed to ensure that entering into the Disposal Agreement was within the scope of the EIS. Disposal in the United States is accommodated by Alternatives B and C in the Delivery of the Canadian Entitlement EIS. This decision fulfills the United States Entity’s obligations under the Treaty to deliver Canada’s share of the downstream benefits of the Treaty dams. Consistent with the purposes of action, this decision meets the Treaty obligations cost-effectively, avoids or minimizes adverse environmental effects of fulfilling the Treaty obligation, is acceptable to the Canadian and United States Entities, and maintains the reliability of BPA’s power system. The decision is also a direct application of BPA’s market-driven approach and is consistent with BPA’s Business Plan EIS and ROD.

Issued by the United States Entity in Portland, Oregon, on March 31, 1999.

/s/ Judith A. Johansen
Judith A. Johansen
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Bonneville Power Administration, and
Chair, United States Entity