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UNITED STATES DISTRICT COURT  
DISTRICT OF OREGON

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NATIONAL WILDLIFE FED’N, et al., )  
Plaintiffs, )  
v. )  
NATIONAL MARINE FISHERIES SERVICE )  
And UNITED STATES ARMY CORPS OF )  
ENGINEERS, )  
Defendants. )  
\_\_\_\_\_

Civ No. 01-00640-RE

**Declaration of  
Richard M. Pendergrass**

I, Richard M. Pendergrass, hereby state and declare:

1. I am an employee of the Bonneville Power Administration (BPA). I have been employed by BPA since 1986. During my 19-year career at BPA, I have worked extensively on hydropower operations and planning issues in the Pacific Northwest. Exhibit 1. Since 2002, I have served as the manager of the Power & Operations Planning group for Generation Supply in BPA’s Power Business Line (PBL).

2. Since 1989, I have worked at BPA in various capacities in matters related to the Columbia River Treaty,<sup>1</sup> which is a treaty between the United States and Canada for cooperative development and operation of Columbia River Basin water resources for the dual purposes of optimizing hydroelectric power production and providing flood control. Exhibits 2 and 3. Initially, I worked primarily in a technical capacity on numerous Treaty-required plans and studies. In 1991, I was assigned as BPA's Co-Team Lead for these plans and studies. Throughout the 1990s, I frequently participated in, and sometimes helped lead, negotiations with Canada concerning issues under the Treaty. For example, I have negotiated long-term and operating agreements with B.C. Hydro on behalf of the U.S. Entity to meet both power and non-power requirements in Canada and the U.S. In 1998, I was appointed as one of two U.S. Chairs for the U.S. Section of the Columbia River Treaty Operating Committee, and I continue to serve in this role at the present time. In this role, I manage all treaty operations, planning, and operating plans under the Columbia River Treaty for BPA. Exhibit 1.

3. I have reviewed and evaluated the portion of Plaintiffs' Motion for Further Injunctive Relief that requests injunctive relief related to the Columbia River Treaty and the Canadian storage projects that are located along the Columbia River and its tributaries. As is further explained in this declaration, the requested relief is highly problematic because it is contrary to the Treaty's express purposes, would represent a huge departure from normal operating practice, and would cause significant negative impacts on other fish and wildlife activities by the Action Agencies. More importantly, the requested relief is not feasible because: (1) the Canadian Entity must agree to any change from Treaty operating plans and it is highly unlikely they will

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<sup>1</sup> *Treaty Between the United States of America and Canada Relating to Cooperative Development of the Water Resources of the Columbia River Basin*; signed at Washington, January 17, 1961; entered into force September 16, 1964, with related agreements effected by exchanges of notes at Washington, January 22, 1964, and at Ottawa, September 16, 1964. 15 UST 1555, TIAS No.5638, 542 UNTS 244. BPA and the U.S. Army Corps of Engineers have been appointed through Executive Order to act as the U.S. Entity for implementation of the Treaty.

agree to the requested relief given operations already underway and likely significant adverse impacts from the requested change in operation of Canadian storage; and (2) even if some form of agreement with Canada could ultimately be reached for some part of the relief requested by Plaintiffs, there simply is not sufficient time to conduct and complete the complex and lengthy negotiations with Canada that would be required in order to implement such a drastic change in Treaty storage operations.

### **Treaty Background**

4. The Columbia River Treaty was the result of a lengthy, often contentious, multi-year negotiation process in the late 1950s and early 1960s between the U.S. and Canada. Exhibits 2 and 3. During these negotiations, Canada insisted, among other things, that the Treaty include a Protocol and Annexes acknowledging Canada's great discretion to operate Canadian storage under the Treaty in whatever manner they choose, so long as Treaty requirements are met. Only after obtaining this acknowledgement was Canada finally willing to agree in 1964 to ratification of the Treaty, which locks in certain obligations and rights until at least the year 2024.<sup>2</sup>

5. The whole purpose of the Treaty is to optimize hydropower generation and provide flood control benefits in both countries. This is not surprising given that U.S. interest in the Treaty was firmly rooted in finding a long-term solution to devastating floods and regional power needs. Exhibit 2. In order to accomplish the Treaty's purpose, the Treaty required Canada to construct and operate 15.5 million acre feet (Maf) of storage in Canada at Mica (7.0 Maf), Arrow (7.1 Maf), and Duncan (1.4 Maf) reservoirs. B.C. Hydro built these facilities in the late 1960s and early 1970s, and now operate them in coordination with the U.S. These facilities essentially allow storage of water in Canada during peak flow periods (approximately

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<sup>2</sup> The Treaty provides that it can be terminated by either the U.S. or Canada after it has been in effect for 60 years, with at least 10 years written notice. Since the Treaty went into effect in September 1964, the earliest it can be terminated is September 2024.

April through August) and shift its release to October through March to prevent flood damage and optimize power production, as required by the Treaty. In return for constructing these facilities and operating them to optimize power generation and flood control, Canada received an up-front payment of \$64.4 million for flood control benefits, as well as the right to one-half of the estimated annual additional power benefits<sup>3</sup> produced downstream in the U.S. on an ongoing basis (the Canadian Entitlement). Exhibits 2 and 3.

6. The Treaty requires the U.S. and Canada to jointly prepare, on an annual basis, Assured Operating Plans (AOPs) for the Canadian storage six years in advance. These AOPs provide an assured plan for hydroelectric power and flood control operations for the operating year that will occur six years in the future. As of this date, the most recently prepared AOP is for Operating Year 2009-2010 (i.e., August 1, 2009 to July 31, 2010). The Entities are currently working on the AOP for Operating Year 2010-2011.

7. These AOPs also are the basis for determining the Canadian Entitlement – i.e., the annual power benefits owed to Canada under the Treaty. These benefits are one half of the additional generation in the U.S. as a result of coordinated operation of Canadian storage. It is important to note that pursuant to the Treaty, the calculation of the Canadian Entitlement is largely divorced from reality. That is, this calculation assumes that all of the seasonal flow regulation provided by Canadian storage is used for power production and flood control; it does not account for “real world” operations, such as those due to the extensive current fisheries measures implemented at U.S. projects downstream on the Columbia River. The annual payment of the Canadian Entitlement from the U.S. to Canada varies from year to year and for

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<sup>3</sup> Treaty Article III requires calculation of Canadian Entitlement be based on the assumption that U.S. projects are operated to make the most effective use of the improvement in stream flow from the Canadian storage operation for power generation in the U.S.

the 2004-2005 operating year was 537 average megawatts (aMW) of energy and 1,176 MW of capacity, valued at approximately \$220 million<sup>4</sup>.

8. In addition to the AOPs, the Treaty authorizes the Entities to prepare and implement Detailed Operating Plans (DOPs) to produce results more advantageous than those that would arise from operations under the AOP, but only so long as these results are more advantageous to both countries. DOPs are prepared each year prior to the beginning of each operating year, and are typically mutually agreed to and signed by the Entities in June or July preceding the August 1 start of a given operating year. DOPs may include only mutually-agreed revisions to the AOP for that particular year. Because of this high standard, the DOP prepared in advance of the operating year typically incorporates very few changes from the AOP for that year.

9. In addition to the AOPs and DOPs, the Treaty Operating Committee has been delegated limited authority by the Entities in each DOP to enter into supplemental operating agreements that provide further benefits beyond the DOP. Like the DOP, development of any supplemental operating agreement requires mutual agreement, and the changes must be more advantageous to both the U.S. and Canada. In addition, the supplemental operating agreement can only provide for mutually beneficial changes occurring specifically within the particular operating year of August 1 through July 31; agreements spanning more than one operating year are not authorized. Although these agreements can be negotiated to obtain use of Treaty storage for non-power uses, our experience has been that Canada is unwilling to enter into such agreements for amounts of storage over any level that would compromise their power and non-power objectives. When a supplemental operating agreement is being negotiated, there is a

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<sup>4</sup> This value was calculated as an example assuming firm energy prices (Mid-C Index) for heavy load hours August 1, 2004 through July 31, 2005, and assuming the average Canadian Entitlement return of 537 aMW for the same period.

Careful assessment and balancing of risks and benefits for each party, and a mutually agreeable resolution must be reached or no agreement will occur.

10. In recent years, the U.S. Section of the Treaty Operating Committee has been able to successfully negotiate supplemental operating agreements to allow use of Treaty storage in a given operating year to support fish flows in the U.S. while simultaneously meeting Canadian power and non-power objectives. The terms of such agreements have varied widely depending on that operating year's water conditions and the respective needs of both the U.S. and Canada. The U.S. Section has been able to negotiate agreements to provide the U.S. with the right to shape water from Canadian storage by storing up to 1 Maf of water from January through April for release in May through July to support U.S. spring/summer fisheries needs in return for managing flow releases to meet Canadian non-power objectives. Exhibit 4.

**Plaintiffs' Request for Certain Treaty Storage Operations**

11. I have reviewed and evaluated the request in Plaintiffs' Motion for Further Injunctive Relief that asks the District Court to enjoin the Federal Defendants to use the Columbia River Treaty to ensure "that Duncan, Arrow, and Mica reservoirs are maintained at their upper flood control rule curves on a bi-weekly basis" from February 1, 2006 through April 30, 2006.

12. Based on my knowledge of and extensive experience with the Columbia River Treaty, it is my opinion that Plaintiffs' request runs counter to the very purposes for which the Treaty was established. As stated above, the Treaty requires operation of Treaty storage to not only meet flood control objectives, but also to meet power needs and optimize power production. The Treaty operating plans – the AOPs and DOPs – are premised on meeting these dual purposes of the Treaty. These Treaty-mandated operations require a significant draft of Mica and Arrow beginning in the fall to provide flows to generate power and meet load requirements in both

Canada and the U.S. In particular Mica, which has operating criteria based on target flows, must draft well below the flood control upper rule curve. Maintaining Duncan, Arrow, and Mica reservoirs at their upper flood control rule curves as requested would not be consistent with the Treaty's clearly stated purposes of optimizing power production while providing flood control. In addition, this requested relief is not included in the 2005-2006 DOP, which has already been agreed upon by the Entities, and thus would not be consistent with this operating plan.

13. Plaintiffs' requested relief also is counter to the Treaty purposes because it would essentially revert river outflows from Canada to the pre-Treaty conditions that the Treaty was specifically designed to address. Prior to construction of the Treaty storage in Canada, peak flows from Canada occurred primarily in the April through August period. For example, using the combined Arrow and Duncan outflows and assuming the average flows for the 50-year historical water sequence from 1929 to 1978, the monthly average flow with no regulation for power or flood control (i.e., essentially pre-Treaty flows) peaks in June at about 130 kcfs. Exhibit 5.<sup>5</sup> With the Treaty regulation provided by Canadian storage (assuming DOP regulation and no supplemental operating agreements), water is now stored in Canada during the peak flow periods and its release is shifted to October through March to prevent flood damage and optimize power production. *Id.* However, inclusion of the Plaintiffs' requested relief in Treaty operations would likely result in a significant shift of flows away from operations for optimum power and flood control and back toward the unregulated flows that the Treaty was specifically designed to address. *Id.*

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<sup>5</sup> Although the U.S. has no unilateral right to direct Canadian operations under the Treaty, for purposes of evaluating potential impacts of the Plaintiffs' request, throughout my declaration I have used the results of BPA's 50 year HYDSIM modeling that assumes implementation of Plaintiffs' requested operation of Treaty storage in Canada. See Second Schiewe Decl., ¶¶8-9.

14. In addition, it is my opinion that Plaintiffs' requested operation is not feasible for two main reasons. First, because the Canadian storage projects have already drafted significantly to meet seasonal loads, Plaintiffs' request that these projects be maintained at their flood control rule curves (or upper rule curves) beginning on February 1, 2006 is simply not achievable.

Figure 1 illustrates the results of modeling conducted to determine the probability of achieving the upper rule curve at Canadian projects at various points in time in this operating year, given current conditions. These model runs, which were conducted using 50 years of historical flows for the November through September period, show that in no case could the flood control curve be achieved by February, even when Canadian storage project discharges were reduced to the minimum weekly flow set out in Annex A of the Treaty beginning on January 1, 2006.

Exhibit 5. Thus, even under an unrealistic scenario where the Canadians decide today to begin reversing their drafting of water from their storage projects, it would still be impossible to provide the relief sought by Plaintiffs.<sup>6</sup>

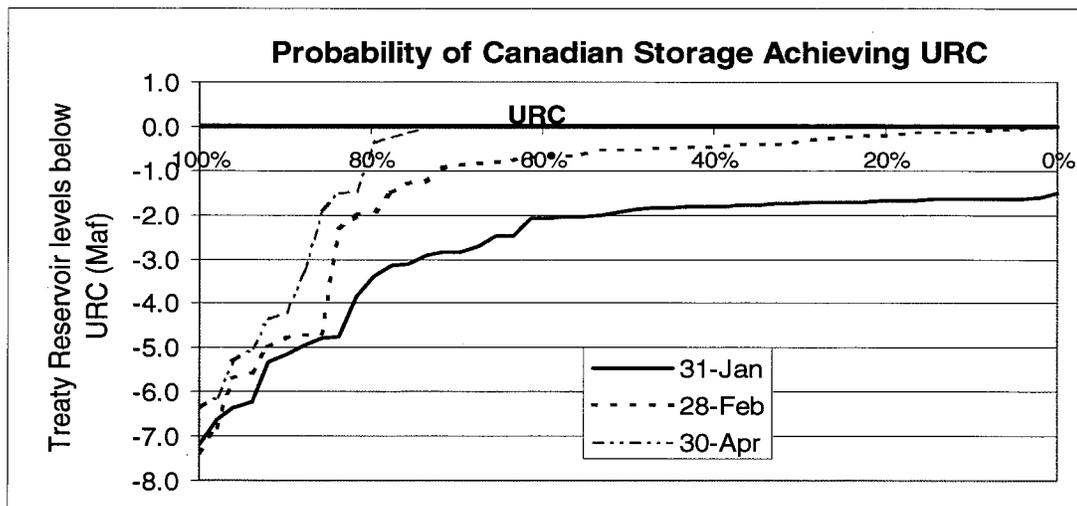


Figure 1. Probability of Canadian storage achieving upper rule curve based on the fifty historical water sequences, 1929-1978, regulated to upper rule curve in accordance with the Plaintiffs' motion.

<sup>6</sup> The request that Canadian projects be maintained at upper rule curves on a bi-weekly basis is also not possible because these curves are currently developed only for month-end points, pursuant to the Flood Control Operating Plan. Under the Treaty, the U.S. and Canadian Entities coordinate the Plan (and any changes to it) pursuant to Annex A of the Treaty. There are also practical problems with this request. See Henriksen Third Decl., ¶¶ 40-64.

15. Second, from my extensive experience in these matters, it is my opinion that Canada simply will not agree to Plaintiffs' requested operation due to the potential adverse impacts to both power and non-power uses in Canada. As discussed above, any change to the operating plan requires mutual agreement and resulting mutual benefits. The requested operations would represent a huge departure from normal operating practice. Based on an initial evaluation, and as shown in Figure 2, the requested operation likely would shift an additional approximately 4 Maf of water from the winter period with its high regional electrical demand into the spring and early summer. Since B.C. Hydro operates these dams to meet regional power needs in the cold winter months, when power demand is high, the requested operation will not be amenable to Canada.

Exhibit 5.

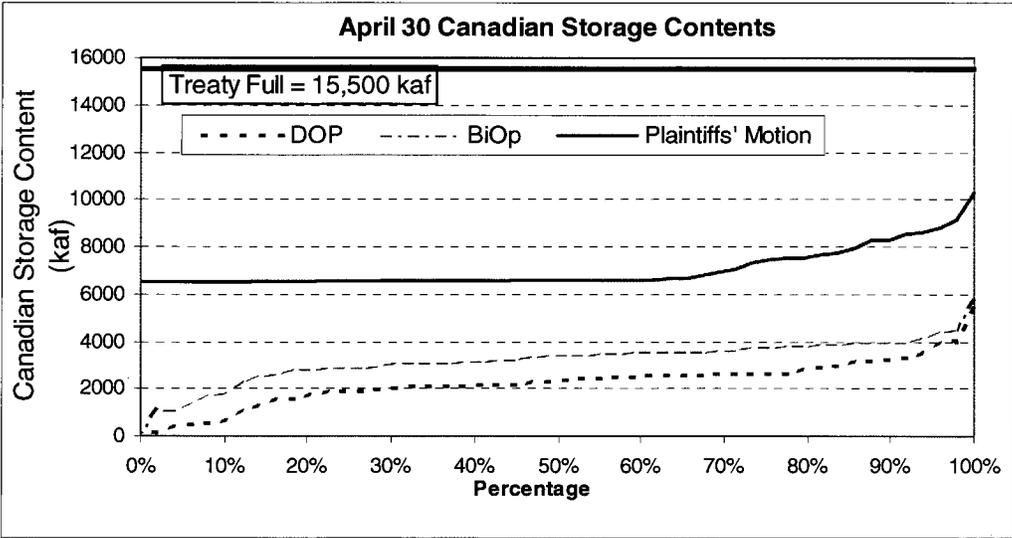


Figure 2. Distribution of Canadian storage contents on 30 April based on the fifty historical water sequences, 1929-1978, regulated to the Detailed Operating Plan, Biological Opinion, and upper rule curve in accordance with the Plaintiffs' motion.

16. By maintaining Canadian storage reservoirs at upper rule curves through April 30, Plaintiffs request would shift releases of water from the winter period into the spring and summer. In order to compare the amount of water after April 30 that would likely be available

assuming different Canadian storage operations, a simple comparison of Canadian storage contents at the end of April is useful because, in all cases, Canadian storage must end at the same content by July 31 (i.e., the end of the operating year). Therefore, differences in April 30 Canadian storage contents are directly related to changes in available flows from Canada in the May through July period. Figure 2 shows Canadian storage contents on April 30 expected under 50 historical water conditions assuming three different operating strategies. The first operation shown is the agreed operation under the Treaty as reflected in the DOP, which represents Treaty operations strictly for power and flood control. This operation results in a significant draft of Canadian storage by the end of April. Also depicted in Figure 2 is the Biological Opinion operation that targets storage of 1 Maf of water above the normal Treaty operation by late April for release in the spring and summer. On an average basis, the BiOp operation increases April 30 Canadian storage contents by about 40% compared to the Treaty operation strictly for power and flood control. Finally, the Canadian project contents from 50-year studies implementing the Plaintiffs' request are shown. Plaintiffs' request results in substantially more storage contents than the BiOp operation. On an average basis, their request increases Canadian storage contents by about 210% compared to the Treaty operation strictly for power and flood control. This is a monumental change from past operations on an unprecedented scale that would run contrary to many of Canada's power and non-power needs. Exhibit 2.

17. To the extent that the proposal would affect B.C. Hydro's ability to operate Mica for power production at site and downstream, huge power impacts to the Province could occur. Mica and Revelstoke Generating stations are the two largest B.C. Hydro installations in the Columbia River Basin and contribute about 38% of the B.C. hydroelectric capacity. Exhibit 6. If Mica were restricted to minimum outflow during January for example, this could result in a

loss of a staggering 2,700 MW of generation from Mica and Revelstoke over heavy load hours. Exhibit 5. From my work with my Canadian counterparts, my understanding is that there are few alternative generating resources available to B.C. Hydro and limited capability to import and transmit power. Plaintiffs' proposal thus likely presents serious economic and reliability issues for B.C. Hydro that may be difficult, if not impossible, to resolve.

18. Plaintiffs' requested operations would likely also have significant negative impacts to Canadian non-power interests, including whitefish, trout, and recreational operations. Exhibit 2. These interests are extremely important to Canada, as evidenced by Canada's recently released Draft Columbia River Water Use Plan. Exhibit 7. This document addresses non-power uses in detail and is the result of over three years of effort by representatives of BC Hydro, provincial and federal government agencies, municipal government, industry, First Nations, and local stakeholders to explore issues and interests affected by the operation of Mica, Revelstoke, and Arrow projects on the Columbia River in Canada.

19. Because of the importance of these interests to Canada, they are very sensitive to ensuring these interests are recognized and respected. For example, one of the mutual benefits that was essential to successfully negotiating previous supplemental operating agreements with Canada was agreeing to a benefit to Canada involving the provision of flows downstream of Arrow for trout spawning and emergence. See Exhibits 4 and 8. Plaintiffs' requested relief would not meet Canadian needs for trout spawning or emergence in any of the 50 historical water conditions studied because the requested change would either result in insufficient flow during the spawning period or cause redds established in the spawning period to later become dewatered before their emergence. Exhibit 5. This conclusion is supported by Canadian concerns raised during development of previous non-power agreements with B.C. Hydro.

20. On this point Canada has been most adamant –they have declined to incur impacts to their non-power interests in Canada in order to provide non-power benefits in the U.S., and if any such impact occurs, the Canadians have insisted upon a “sharing of risk” approach.

Exhibit 4. In fact, for several years, the U.S. Section of the Operating Committee requested additional storage in excess of 1 Maf to help meet fisheries objectives in the U.S. In all cases, Canada declined the request. Exhibit 9. Furthermore, even when the U.S. has been able to negotiate for the use of 1 Maf of Canadian storage, the Canadians have made it quite clear that it would not guarantee use of the 1 Maf in future years. As stated by Mr. Ralph Legge, former Chair of the Canadian Section of Operating Committee, “future use of the 1.0 Maf for US fish requirements is entirely conditional on the proposed operation meeting non-power requirements in Canada each year. Should Canada’s non-power requirements change, or should the proposed operation not be sufficiently attractive to Canada in meeting its non-power needs, use of the 1.0 Maf storage for fish requirements would cease.” *Id.*

21. In addition to not being feasible, I observe that Plaintiffs’ proposal would likely have significant adverse impact on fish and wildlife activities currently being implemented in the U.S. by the Action Agencies, and thus results in a “rob Peter to pay Paul” situation. The reduction in Columbia River flows in the winter period resulting from Plaintiffs’ proposal directly conflicts in many years with operations to provide flows for fall chinook at Vernita Bar and to ensure flows for ESA-listed chum downstream of Bonneville Dam. Under current BiOp operations, Vernita Bar flows are met in 49 of the 50 historical years studied (i.e., 98 percent of the years). See Second Schiewe Decl., ¶ 20. However, when available streamflows are used to maintain FCRPS and Canadian projects at upper rule curve, the success of meeting Vernita Bar flows is reduced to only 16 of the 50 years studied (i.e., 38 percent of the years). *Id.* Similarly, operating Canadian

storage at upper rule curves significantly reduces the likelihood of being able to maintain ESA-listed chum flows below Bonneville Dam to only 16 of the 50 years studied (i.e., 38 percent of the years).<sup>7</sup> *Id.*, ¶¶ 18-19. The Action Agencies work extremely hard to balance all of the competing demands on the Columbia River, and Plaintiffs' requested operations demonstrate a blatant disregard for the "ripple effect" that would occur if their request were granted.

22. Therefore, it is my opinion that Plaintiffs' request to maintain Canadian projects at their upper rule curves is not feasible because it is counter to current operating plans, it is not physically possible, it requires agreement with Canada, it would be a huge departure from normal operating practice, it has significant Canadian power impacts, and it has adverse Canadian non-power impacts.

#### **Plaintiffs' Request for "Non-Treaty" Storage**

23. Plaintiffs' Motion for Further Injunctive Relief also asks the District Court to enjoin the Federal Defendants to provide "at least 500,000 acre feet of water from non-treaty Canadian storage or Lake Roosevelt (if necessary), and an additional 130,000 acre feet of water from non-treaty Canadian storage or Banks Lake (if necessary) for summer flow augmentation...." I have reviewed and evaluated the non-Treaty aspect of this request.

24. "Non-Treaty storage" refers to additional water storage at Mica that is not part of the Treaty-required storage. In constructing Mica, Canada chose to construct this dam so that it can provide an additional 5.0 Maf of storage beyond that required by the Treaty. The U.S. Entity has

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<sup>7</sup> I am aware of a November 17, 2005 Northwest Power and Conservation Council (Council) memorandum that provides a preliminary analysis of Plaintiffs' proposed operations. This memorandum implies that Plaintiff's proposed operation would be better for Chum through its conclusion that dewatering of Chum salmon redds would occur less frequently with the Plaintiffs' proposed operation than under the BiOp. This is contrary to BPA's modeling results and appears contrary to the Council's results for Vernita Bar protection. It is my opinion that the Council's analysis does not fulfill Plaintiffs' request because my understanding is that Council's analysis allows draft of reservoirs to meet load, and thus allows deviation from meeting upper rule curves for the full period requested by Plaintiffs. I believe BPA's analysis of potential impacts to Chum is more accurate because it attempts to fully implement Plaintiffs' proposed operation, which requires operating to upper rule curve.

no rights to this storage. This storage is not operated under the Treaty, and in fact Article IV of the Treaty explicitly prohibits operation of non-Treaty space that would reduce the flood control and hydroelectric power benefits which the operation of Canadian storage according to the operating plans would otherwise produce.

25. In order for the U.S. to obtain the ability to use non-Treaty storage, BPA must negotiate agreements with B.C. Hydro in their non-Entity roles.<sup>8</sup> Since 1983, BPA and B.C. Hydro have been able to negotiate two long-term agreements, called Non-Treaty Storage Agreements (NTSA), for BPA and B.C. Hydro to share use of a portion of the non-Treaty space. The last NTSA was signed in 1990. Exhibit 10.

26. Negotiation of the 1990 NTSA was a lengthy and complex process. It took almost three years of extensive negotiation, public involvement, and environmental study before BPA and B.C. Hydro could reach agreement and execute the 1990 NTSA. In addition to negotiating the 1990 NTSA, BPA needed to negotiate additional agreements with numerous other parties in the region to be able to implement the 1990 NTSA. One of these agreements was with several non-federal hydropower operators downstream in the U.S. (i.e., the Mid-Columbia Participants). Another was the Non-Treaty Storage Fish and Wildlife Agreement signed with the Columbia Basin Fish and Wildlife Authority.

27. The most significant aspect of the 1990 NTSA was the provision of up to 4.5 Maf of non-Treaty storage in Mica, with BPA and B.C. Hydro each having the opportunity to utilize 2.25 Maf of this storage, subject to mutual agreement, including the exchange of power to address storage calls. It is important to note that the 1990 NTSA did not provide the parties with firm rights to store or release using non-Treaty storage, except for the limited release of

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<sup>8</sup> To date, agreements for use of non-Treaty storage have been negotiated exclusively by BPA, which is not a party to the litigation in which Plaintiffs make their request for injunctive relief related to non-Treaty storage.

2,000 cubic feet per second (2 kcfs) each during the September through April period. Either party could block the other's use of non-Treaty storage for power or non-power reasons.

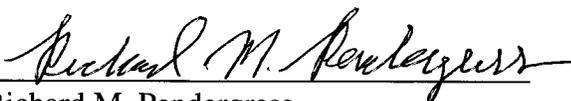
28. The provisions of the 1990 NTSA expired in June of 2004, with the exception of the provision requiring the parties to refill the non-Treaty storage space within seven years (i.e., by June 30, 2011). At this time, only about 20 percent of this space has been refilled. Thus, there is simply not a NTSA in place that would allow BPA to provide a release of water from non-Treaty storage space. Without an agreement with B.C. Hydro, BPA has no ability to obtain release of the non-Treaty storage from Mica.

29. BPA and B.C. Hydro have had some preliminary discussions in the past two years regarding a new long-term or even seasonal agreement for non-Treaty storage use by the U.S., but these discussions have not been fruitful and have not led to ongoing negotiations. Canada is now exercising more flexibility in the operation of its Treaty projects than at the time the 1990 NTSA was signed, resulting in less benefit to be derived now to Canada from a NTSA. Exhibit 2. In addition, open markets have lessened the need for a NTSA to support B.C. Hydro's marketing strategy. As a result, B.C. Hydro does not value the flexibility provided by the non-Treaty storage as highly as it had historically. Correspondingly, in preliminary discussions, B.C. Hydro is seeking significant changes to the framework established by the 1990 NTSA before it will agree to any new operations under a new NTSA, and these changes are extremely detrimental to BPA. Thus, BPA and B.C. Hydro have fundamental and significant differences to overcome before they can reach any new long-term or seasonal agreement for non-Treaty storage use by the U.S. As publicly stated by B.C. Hydro as recently as April 2005, "reaching such an agreement is not imminent." Exhibit 8.

30. Given the major differences that must be overcome and the constantly evolving operating demands in both the U.S. and Canada, and considering the Treaty Article IV requirement, it is reasonable to expect that any attempt to formally negotiate a new NTSA with B.C. Hydro would be a lengthy process, with no assurance of success or that a new agreement would enable storage use to meet the Plaintiffs' objectives.

31. As a result, it is my opinion that no additional water from non-Treaty storage is available to BPA in this operating year (i.e., through July 31, 2006), and it is not certain when or if additional agreements for use of such storage could be successfully negotiated.

I declare under the penalty of perjury that the foregoing is true and correct to the best of my knowledge, based on my education, experience and professional judgment. Executed, on this date, 11/21/05 at Portland, Oregon.

  
Richard M. Pendergrass  
Bonneville Power Administration

Exhibits 1-10