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November 17, 2005

MEMORANDUM

TO: Council Members

FROM: John Fazio

SUBJECT: Analysis of the Preliminary Injunctive Relief Operation for the Hydro System

The plaintiffs, in the current court hearings regarding the NOAA Fisheries' biological opinion, have filed a motion seeking an injunction from Judge Redden that would allow alternative spill and flow operations for 2006. The final version of that proposed operation was made available to Council staff on November 2, 2005, which did not allow enough time for evaluation prior to the packet mailing. The proposal calls for more bypass spill and greater volumes for flow augmentation. It is anticipated that the proposed operation will result in a net cost to the region, primarily to the Bonneville Power Administration. At this time staff cannot speculate as to the magnitude of that cost. A more detailed summary of the proposed operation is provided in Appendix A.

Staff will analyze the power system impacts of the injunctive relief operation in terms of changes to energy production, river flows, reservoir elevations and cost. In addition, an assessment of impacts to both winter and summer adequacy will be made. Results from that analysis will be made available to the Council members as soon as it is ready -- which is likely to be sometime during the week of November 7th through the 11th. Because of the difficulties involved in setting up these analyses, Council staff will work with Bonneville staff to "interpret" the operation language into data that can be used in system models. By working cooperatively with Bonneville, the analysis can be done in a shorter time period and will be reviewed more rigorously. It should be emphasized that once the input data has been assembled, Council staff and Bonneville staff will analyze system impacts in an independent fashion using different methods and computer models.

The presentation to the Council will also include an analysis of the impacts of reducing the load following capability of the hydroelectric system. Staff investigated the potential cost of this type of operation in anticipation that it could be included in the plaintiffs' proposed operation for 2006, but it was not. However, there has been some interest in examining the impacts of eliminating load following at the four lower Snake dams. The staff anticipates doing this analysis in the near future relating to the ISAB request for experiments in this area.

Appendix A

2006 Flow and Spill Operations Proposal¹

Spring spill: Provide spill at the following projects in the following amounts between the following dates:

From April 3, 2006 through June 20, 2006 on the Snake River, and from April 10, 2006 through June 30, 2006 on the Columbia River (spill figures are in thousand cubic feet per second or a percentage of the total river flow) unless this spill would cause an exceedance of the applicable Total Dissolved Gas (“TDG”) limits, in which case spill would be limited to avoid exceeding the gas cap. *Italicized entries indicate changes from the current BiOp operation.*

	<u>Day</u>	<u>Night</u>
<i>Bonneville</i>	<i>100 kcfs</i>	<i>120 kcfs</i>
The Dalles	BiOp level	BiOp level
<i>John Day</i>	<i>45%</i>	<i>45%</i>
<i>McNary</i>	<i>55%</i>	<i>55%</i>
Ice Harbor	BiOp level	BiOp level
Lower Monumental	BiOp level	BiOp level
<i>Little Goose</i>	<i>30%</i>	<i>45 kcfs</i>
Lower Granite	BiOp level	BiOp level

Summer spill: Provide spill at the following projects in the following amounts between the following dates:

From June 21, 2006 on the Snake River and from July 1, 2006 on the Columbia River, through August 31, 2006 on both rivers (also subject to compliance with the applicable gas cap):

	<u>Day</u>	<u>Night</u>
<i>Bonneville</i>	<i>100 kcfs</i>	<i>120 kcfs</i>
The Dalles	BiOp level	BiOp level
<i>John Day</i>	<i>45%</i>	<i>45%</i>
<i>McNary</i>	<i>60%</i>	<i>60%</i>
Ice Harbor	BiOp level	BiOp level
<i>Lower Monumental</i>	<i>35 kcfs</i>	<i>35 kcfs</i>
<i>Little Goose</i>	<i>30%</i>	<i>45 kcfs</i>
<i>Lower Granite</i>	<i>21 kcfs</i>	<i>21 kcfs</i>

Flow conditions: Improve river flow conditions and provide a more natural hydrograph in the lower Snake and Columbia Rivers by:

(a) Maintain all FCRPS storage reservoirs (i.e., Dworshak, Grand Coulee, Hungry Horse, and Libby) at their upper flood control rule curve elevation on a bi-weekly basis (i.e., each reservoir would be at its upper rule curve elevation on or about the 15th and 30th of each

¹ Summarized by John Shurts.

month) from February 1, 2006, through April 30, 2006, and, through the Columbia River Treaty forum, ensure that Duncan, Arrow, and Mica reservoirs are maintained at their upper flood control rule curves on a bi-weekly basis during this same period, subject to weather related or other actual power generation emergencies. (Footnote: Identification of such emergencies and appropriate responses to them would be discussed in advance with the plaintiffs to the extent possible much as occurred during this past summer).

(b) 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, with specific use of this water determined through in-season collaboration between the defendants, and state and tribal fishery managers.

(c) During both spring and summer seasons as described above for spill operations, operate the reservoirs above each of the projects on the lower Snake and lower Columbia Rivers at Minimum Operating Pool (i.e., with fluctuations up to one foot above the minimum operating pool elevation for each reservoir), with the exception of John Day Pool, which would be operated at Minimum Irrigation Pool, and The Dalles and Bonneville Pools, which would be operated according to the 2004 BiOp.

(d) Manage the flows and the storage described above to provide an average May flow peak at The Dalles of approximately 345,000 cubic feet per second (kcfs) with a gradually receding hydrograph following that, assuming that 2006 is an average water year.

Footnote: Because it is not possible at this time to foresee likely water conditions in the Snake River during the summer of 2006, NWF reserves the right to seek additional injunctive relief, by a supplemental motion to be filed on or before March 1, 2006, for summer flows in the Snake River only if NWF concludes that such relief is needed to further reduce the risk of harm to listed salmon.

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