

THE HONORABLE JAMES A. REDDEN

Tim Weaver, WSB #3364  
weavertimatty@qwest.net  
Law Offices of Tim Weaver  
402 E Yakima Ave Suite 190  
Yakima, WA 98901  
509-575-1500  
509-575-5227 Fax  
*ATTORNEY FOR AMICUS YAKAMA NATION*

**UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF OREGON**

NATIONAL WILDLIFE FEDERATION, et al.,

Plaintiffs,

and

STATE OF OREGON,

Intervenor-Plaintiff,

v.

NATIONAL MARINE FISHERIES SERVICE, U.S.  
ARMY CORPS OF ENGINEERS, and U.S. BUREAU  
OF RECLAMATION,

Defendants,

and

NORTHWEST IRRIGATION UTILITIES, PUBLIC  
POWER COUNCIL, WASHINGTON STATE FARM  
BUREAU FEDERATION, FRANKLIN COUNTY  
FARM BUREAU FEDERATION, GRANT COUNTY  
FARM BUREAU FEDERATION, and STATE OF  
IDAHO,

Intervenor-Defendants.

Civ. No. 01-0640-RE (Lead Case)  
CV 05-0023-RE  
(Consolidated Cases)

DECLARATION OF  
EDWARD W. SHEETS  
(MOTION FOR INJUNCTION)

---

COLUMBIA SNAKE RIVER IRRIGATORS  
ASSOCIATION, and EASTERN OREGON  
IRRIGATORS ASSOCIATION,

Plaintiffs,

v.

DONALD L. EVANS, in his official capacity as  
Secretary of Commerce, NOAA FISHERIES, and D.  
ROBERT LOHN, in his official capacity as Regional  
Director of NOAA Fisheries,

Defendants.

---

/// /// ///

*Law Offices of Tim Weaver*  
402 E Yakima Ave., Suite 190  
Yakima, WA 98901  
509-575-1500

I, EDWARD W. SHEETS, STATE AND DECLARE AS FOLLOWS:

1. This declaration is in response to the declarations filed by Roger Schiewe of the Bonneville Power Administration dated April 22, 2005.

2. I am the President of Ed Sheets Consulting; a consulting firm in Portland, Oregon founded in 1996. I have been an expert witness in the BPA rate case proceedings since 1999. I have participated in other BPA processes related to its costs on behalf of the Columbia River Inter-Tribal Fish Commission and the Yakama Nation (the Tribes). I am also working with the Energy Trust of Oregon on evaluating wind resource development and am familiar with the current market cost of electricity (the Energy Trust is authorized by the Oregon Public Utility Commission to pay the above market costs of renewable resources from a public purposes fee established by state law). I have worked on Northwest energy issues since 1975. I served on the research faculty at the University of Washington between 1975 and 1977 working with the Washington Energy Research Institute and serving as director of the Energy Information Project. I served as legislative assistant and special assistant to the late Senator Warren G. Magnuson responsible for energy and environmental issues between 1977 and 1981, including the development of the Northwest Power Act. During 1981, I served as the director of the Washington State Energy Office. In this capacity I was the principal energy advisor to Governor Spellman and a member of the Governor's cabinet. In 1981, I helped found the Northwest Power Planning Council and served as its executive director of for 15 years. I was responsible for the development of every regional power plan and fish and wildlife program developed by the Council between 1981 and 1995. I was also responsible for the

DECLARATION OF EDWARD W. SHEETS  
(MOTION FOR INJUNCTION)

- 1 -

*Law Offices of Tim Weaver*  
402 E Yakima Ave., Suite 190  
Yakima, WA 98901  
509-575-1500

development of numerous, energy, biological, and economic reports during that period. I have a bachelor's degree from Brown University and a master's degree from the University of Washington.

3. My testimony will address the electricity rate impacts of the proposed operations in the preliminary injunction. I will also attempt to put these rate impacts into context by comparing them to the total costs of electricity in the region and comparing BPA's rates with market-based rates. Finally, I will summarize recent analysis that shows that the Northwest has a large surplus of electricity and therefore the proposed injunction operation should not affect the reliability of electricity supplies.

#### **RATE IMPACTS OF PROPOSED OPERATIONS**

4. The declaration by Roger Schiewe documents his analysis of the costs of the preliminary injunction proposed operations. Given the time available, Mr. Schiewe made professional judgments about how to meet the proposed operation and states: "I recognize that other choices or allocations could have been used for the Study, which would have led to somewhat different power revenue estimates—some lower, some higher." (Schiewe Declaration page 7, at 11). Mr. Schiewe estimates that the costs in 2005 would be \$52 million (id. Page 8, at 13) and the costs in 2006 would be an average of \$50 million, with a range of \$18 to \$74 million (Id. Page 9 at 15). In addition, BPA estimates that there would be a loss of \$1.2 million in transmission revenues to BPA in 2005 (Id. Page 12 at 19). BPA calculates these cost would translate into \$1.53 per megawatt-hour<sup>1</sup> if all the costs were recovered in FY 2006, but acknowledges that some of these impacts

---

<sup>1</sup> A megawatt-hour is one megawatt provided for one hour; the sale of wholesale electricity is usually measured in dollars per megawatt-hour.

would be lower if some of the costs were recovered in the FY 2007 to FY 2009 rate period (Id. Page 10 at 16).

5. Clearly, \$50 million to \$100 million is a lot of money; however, the rate impacts for a large system like BPA are relatively small. The greatest impact would fall on consumers that are served by utilities that buy all of their electricity requirements from BPA. The rule of thumb that BPA uses for these full requirements customers is that \$85 million in costs translates to approximately \$0.001 per kilowatt-hour<sup>2</sup>. Using this rule of thumb and assuming that all of the costs identified by Mr. Schiewe in FY 2005 and FY 2006 are allocated into FY 2006, these costs would translate into an increase of \$0.0012 per kilowatt-hour or \$1.34 per month for the average residential customer that uses 1,100 kilowatt-hours per month. The average customer pays \$72 per month for electricity<sup>3</sup> so this would represent a 1.9 percent increase for those customers who receive 100 percent of their power from BPA.

6. I also calculated the rate impact if BPA recovered the costs for FY 2005 and FY 2006 over two years. In this case, the average residential customer served by a utility that purchases all of its electricity from BPA would pay an additional \$0.0006 per kilowatt-hour or \$0.69 per month; an increase of one percent.

7. I also calculated a range of rate impacts for other consumers in the Northwest. BPA supplies about 40 percent of the firm energy in the Northwest and about 50 percent of the total electricity generated. Many of the larger utilities in the region purchase a

---

<sup>2</sup> Retails electricity costs are typically referred to in cents per kilowatt-hour or mills per kilowatt-hour (one mill equals 0.1 cents or \$0.001 per kilowatt-hour).

<sup>3</sup> Average retail rates across the Northwest states in 2002 were \$66.50 per megawatt-hour (mills per kilowatt-hour). Typical customer annual residential electricity consumption is around 13,000 KWh per year, so annual bills would be about \$865, or about \$72 per month.

portion of their electricity from BPA; the percentage that comes from BPA varies widely. For example, many large utilities such as Seattle City Light, Tacoma City Light, Puget Sound Energy, Portland General Electric, PacifiCorp, Idaho Power, and Avista supply a large percentage of their own power. To simplify this analysis I calculated the impacts for a utility that purchases 30 percent from BPA and one that purchases 70 percent. In this calculation, I used the rule of thumb that on average every \$65 million represents \$0.001 per kilowatt-hour<sup>4</sup>. If all the costs are recovered in one year, the average residential consumer served by a utility that buys 30 percent of its power from BPA would pay an additional \$0.52 per month; a 0.7 percent increase. For a utility that purchases 70 percent of its power from BPA, the increase would be \$1.22 per month—a 1.7 percent increase. If BPA recovered the costs over two years, these costs would be reduced to \$0.63 per month and \$0.27 per month respectively.

### **COMPARISON TO THE TOTAL COST OF ELECTRICITY**

8. The projected costs of \$50 to \$103 million represent 1.5 to 3 percent of BPA's \$3 billion per year revenue requirement. These costs represent approximately 0.6 to 1.1 percent of the total retail electricity costs in the Northwest<sup>5</sup>.

### **COMPARISON TO OTHER BPA COSTS**

9. In FY 2004, BPA made advance payments to the U.S. Treasury of \$346 million ([http://www.bpa.gov/corporate/About\\_BPA/Finance/Budget/](http://www.bpa.gov/corporate/About_BPA/Finance/Budget/), BPA FY 2006 Budget Submission to Congress, page 11). The advance payment – which was not required and could be thought of as BPA “profits” –was an additional payment to the Treasury beyond

---

<sup>4</sup> The rule of thumb for the average impact is different than for full requirements customers.

<sup>5</sup> In 2002 the U.S. Energy Information Agency estimated total retail electricity revenue in the Pacific Northwest was \$9.172 billion in 2002 dollars.

what the agency obligated to pay under its standard repayment studies. If BPA had not made this discretionary payment, it could have more than covered the added costs of the proposed injunction operation without raising rates.

10. Mr. Schiewe states that BPA's combined net costs include a little more than \$300 million for hydro system operations for fish and wildlife (Schiewe, page 10 at 16). BPA counts the revenue foregone from operating the FCRPS to meet the requirements of the Endangered Species Act, the Northwest Power Act, the Clean Water Act, and other laws and regulations as a part of these costs. I am not aware of other businesses or government agencies that calculate the revenues or profits that they could have made if they had violated Federal laws, regulations, or court orders as a part of foregone revenue and "costs". Given BPA practices of reporting foregone revenue for fish and wildlife protection, it is interesting that BPA does not report the foregone revenue associated with meeting other legal constraints on power generation such as providing irrigation water, flood control, transportation, or recreation. All of these other federally-mandated actions limit the ability to generate electricity and reduce BPA's potential revenue. Hence, to be consistent, BPA would need to count them as "costs" as well. For example, the Northwest Power and Conservation Council has calculated that the 14.4 million acre-feet withdrawn for irrigation could generate an additional 625 average megawatts if the water remained in the river. At BPA's rates, this additional power would be worth \$170 million per year or \$1.7 billion dollars over 10 years. At average market rates, the foregone revenue would be \$280 million per year—about the same as BPA's estimate of the "foregone revenue cost" of its fish and wildlife operations. At the market prices that are projected for this summer, the lost revenue associated with irrigation withdrawals

would be over \$380 million. BPA does not count these “costs.”

11. BPA fish and wildlife funding – as opposed to foregone power generation “costs” -- goes to three types of activities. BPA reimburses the costs of the Corps of Engineers and Bureau of Reclamation for modifications to the Federal dams and operation and maintenance of facilities to reduce the mortality of fish passing these projects. Funding also goes to maintain fish hatcheries built to partially mitigate for fish losses caused by the dams. The third type goes to enhance fish and wildlife; most of these activities are included in BPA’s Integrated Fish and Wildlife budget. During the last BPA rate case, this budget was set at \$186 million per year. In 2001, BPA capped these costs and current funding is only \$139 million per year. On May 3, 2005, BPA proposed FY 2007 to FY 2009 funding levels of \$143 million per year. I calculate that this proposed funding level for fish and wildlife enhancement effort is actually a \$17 million per year cut from the current level of effort when adjusted for inflation.

#### **BPA RATES COMPARED TO THE MARKET PRICE OF ELECTRICITY**

12. The monthly costs associated with the proposed injunction operation would be larger for commercial and industrial customers that use large amounts of electricity than for residential customers. It is very difficult to calculate specific rate impacts because electricity rates for these customers vary widely and costs are allocated based on the cost of service and other policies set by the utilities that serve them. For example, in many utilities, the price per kilowatt-hour is significantly lower for commercial and industrial customers than for residential customers. Many commercial and industrial customers compete with other companies in regional, national, and international markets; therefore, in assessing the impact on these companies it is useful to compare BPA’s rates

to the market price of electricity. BPA's current electricity rates are \$31 per megawatt-hour. Based on the most recent analysis prepared by the Northwest Power and Conservation Council, the market price of electricity in the Northwest in 2005 is \$51 per megawatt-hour; therefore, BPA's rates are approximately 40 percent below the market price of electricity. Using BPA's estimate that the proposed operation would add \$1.52 per megawatt-hour, even with the added cost of the injunction operations, BPA rates would still be approximately 36 percent below market rates. Any effects of the injunction on industrial customers should be view in light of the substantial competitive advantage these customers already receive through the purchase of BPA electricity, an advantage that would be temporarily reduced by a small amount by the proposed injunction operations. Finally, if utility or industrial customers believe that lower cost electricity is available, they have the option of purchasing power from other sources and reducing their reliance on BPA.

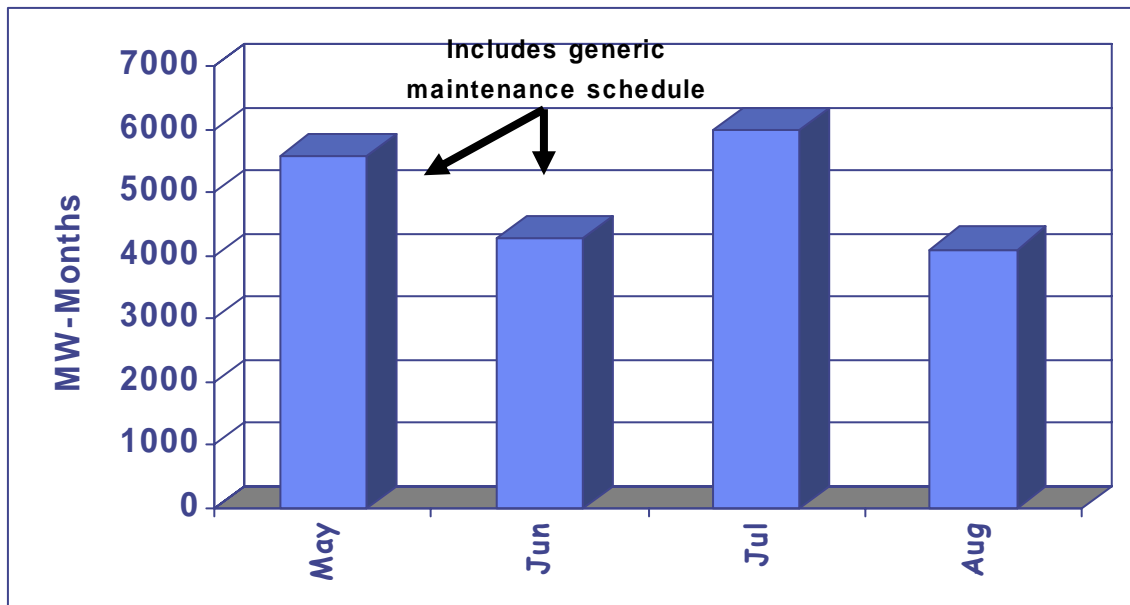
### **NORTHWEST ELECTICITY RELIABILITY**

13. John Fazio, the Senior System Analyst at the Northwest Power and Conservation Council prepared a memorandum on the Power Outlook in 2005 dated April 4, 2005. The memorandum states: "The current runoff forecast at The Dalles is 75 million acre-feet or about 70 percent of average. The region has an energy surplus of about 1,250 average megawatts<sup>6</sup> (based on critical water conditions), which means that there should be ample supply to keep the lights on." In a detailed presentation to the Council, Mr. Fazio noted that the current runoff forecast is 1,400 megawatts above

---

<sup>6</sup> An average megawatt is one megawatt provided over an entire year of 8,760 hours. In the Northwest, average megawatts are used as a measure of meeting the firm energy requirements of the power system. For comparison, Seattle uses 1,000 average megawatts.

critical water energy production (Northwest Power Supply Outlook, April 13, 2005 Council Meeting, slide 5). Therefore, the actual electricity surplus this year is approximately 2,600 average megawatts. This means that the injunction operations the plaintiffs seek will not affect the Northwest's ability to meet the electricity demands of the region this year. At most, these operations will reduce to some extent a substantial power supply surplus. The Council has also prepared a detailed analysis of the surplus available during the summer of 2005 and found that surplus generation would range from 4,000 to 6,000 average megawatt months in May through August<sup>7</sup>.



### CONCLUSION

14. If BPA recovers the costs it has estimated for FY 2005 and FY 2006 in one year, the rate impacts of the proposed operation are less than \$1.35 per month for an average residential consumer in the worst case. Other Northwest residential customers would pay less. If BPA recovers the costs over two years, the highest average cost would

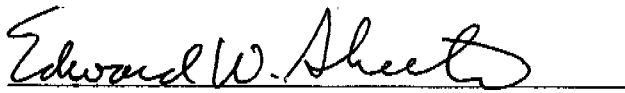
<sup>7</sup> [http://www.nwcouncil.org/news/2005\\_05/10.pdf](http://www.nwcouncil.org/news/2005_05/10.pdf) slide 10. A megawatt-month is a megawatt of electricity available for a month.

be approximately \$0.70 per month for customers served by utilities that buy all of their power from BPA; other Northwest consumers would pay less. The rate increases are in the range of 0.5 to 2 percent.

15. The costs of the proposed operations are small compared to BPA's total costs and the total costs of electricity in the Northwest. BPA's rates would continue to be well below the market price of electricity. The proposed operation would not adversely affect the reliability of Northwest electricity supplies in 2005.

I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge.

Dated the 16<sup>th</sup> of May, Portland, Oregon.

A handwritten signature in cursive script that reads "Edward W. Sheets". The signature is written in dark ink and is positioned above a solid horizontal line.

EDWARD W. SHEETS