

Meeting Notes
Power Net Revenue Improvement Sounding Board
January 16, 2004

Attendees: Ralph Cavanagh (NRDC), Melinda Eden (NPCC), Steve Loveland (Springfield Utility Board), Lyn Williams (Portland General Electric), Pat Reiten (PNGC), Jim Kempton (NPCC), Mary Verner (Upper Columbia United Tribes), Jerry Leone (PPC), Rachel Shimshak (Northwest Renewables Project), Ralph Goode (Mission Valley Electric), Kris Mikkelson and Fred Rettenmund (Inland Power and Light), Howard Schwartz (State of Washington), Pat Ford (Save Our Wild Salmon), Nancy Hirsh (NW Energy Coalition).

BPA Attendees: Paul Norman, Michelle Manary, Christy Brannon, Greg Delwiche, Mark Jones, Mike Alder

Corps of Engineers Attendees: Peter Gibson, Hiroshi Eto, Rick Werner

Bureau of Reclamation Attendees: Karl Wirkus, Terry Kent, Dave Lyngholm

Paul Norman began the meeting by stating we have identified categories where we are seeking advice or input from the Sounding Board where we believe we have the potential for additional cost reduction or revenue improvement opportunities to reach our \$100 million target. We shared a scorecard for keeping track of progress toward the goal at the last meeting. We will provide an updated scorecard based on our 1st Quarter Review next month.

One major piece of our revenues is secondary sales which are driven by market and water conditions. If you live in Portland, you would think things are going great, but the reality is that basin wide we have below average water conditions. So far we are behind on our target in the SN rate case for secondary revenues.

Paul Norman then said that today's meeting is devoted to Corps and Bureau hydro O&M costs, but asked if the Sounding Board first had any insights or comments they would like to provide us before we started on the presentation.

Ralph Cavanagh stated that he would like to follow-up on comments he made at the last Sounding Board meeting regarding opportunities for revenue enhancements. He indicated that he thought this was a promising time for capacity exchanges and long-term peak system arrangements, since our current contracts have recently expired. Perhaps we need to look at secondary sales in a different, more diverse way. PG&E and SCE are becoming credit worthy again and will be seeking long-term capacity exchange arrangements. With gas prices on the east coast at all-time highs, folks are desperate to hedge. There could be arrangements that would be win-win solutions. Hopefully we can explore this area more at the March meetings.

Steve Loveland indicated that when thinking about how we look at the categories that count against the \$100 million target, we may have different standards of measuring performance. We need to consider cost-benefit analysis to back up spending decisions.

Federal Columbia River Power System (FCRPS) -- Corps and Reclamation O&M

Greg Delwiche introduced the topic by stating that there are 31 hydro facilities in the FCRPS and BPA doesn't operate any of them, the Corps and Bureau does. BPA works in partnership with the Corps and Bureau to deliver value to the region.

Mike Alder began the briefing by introducing the management team from the Corps and Bureau present in the room. Then starting on page 2 of the presentation package took the group through the system summary.

Ralph Cavanagh asked what the difference was between critical water and average water. Greg Delwiche responded that critical water would be 7,000 aMW (in a given year) and great water would be 13,000 aMW or a 6,000 aMW swing. Part of the reason for this gap is the lack of storage. Someone asked Greg what would be a great water year, and he indicated that in 1997 there was a historical high run-off of 160 MAF.

Mike Alder then turned to page 4 and went through the history and drivers of the program, stating that prior to 1993 O&M was funded through appropriations. In 1992 Congress agreed that BPA should be able to direct-fund O&M costs. The Corps/BOR and BPA determine appropriate levels of funding and set the budgets. This is done through the Joint Operating Committees. Pete Gibson indicated that they felt that the FCRPS was the jewel of the region that needed to be jointly operated to meet the needs of the region, and that the three agencies had taken great strides toward this joint approach in recent years.

Tom Karier asked if he was correct in assuming that BPA on it's own can't change the budgets—it needs to be a consensus. What happens if there is a dispute? Mike Alder indicated that there are dispute resolution clauses in the direct funding agreements. The Joint Operating Committee Representatives for the three agencies sign the budgets. If there isn't agreement, it moves up through the management chain of the agencies for resolution. In the unlikely event that there still is no resolution, OMB would ultimately become involved to determine resource requirements.

Mike Alder continued taking the group through the history and drivers. We are seeking cost efficiencies through budgetary performance targets and incentives that could total about \$6 million below rate case forecast. In answer to a question from Pat Reiten, Paul Norman said this \$6 million, if achieved, would count toward the \$100 million goal. Peter Gibson later clarified that at least some of these savings could be plowed back into the plants to complete maintenance expense tasks associated with the capital program.

Greg Delwiche stated that the median unit age is 48 years old. By getting direct funding approved we are better able to deal with this aging system by allowing the region to make good business decisions.

Tom Karier asked about how the age of a unit was determined—whether or not rewinding and/or parts replacements changed the age of the unit. The answer was that rewinding a generator would give it a new date, but if you are doing preventative maintenance or replacing some parts,

it would likely not renew the date. Tom Karier asked whether the O&M budget could be flexible to respond to changes in BPA financial circumstances. Mike Alder stated that 75% of expenses is labor and material supply related. Also you can only take so many units out of service at one time. Greg Delwiche indicated that there is some additional flexibility on capital expenditures, but it takes a long time to receive new equipment, which also delays a return on investment.

Mike Alder then began a discussion on forced outage factors, indicating that since direct funding has been in place, the level of unit availability is up. However, in order to make the necessary replacement capital improvements you have to take units out of service, increasing planned outages. Howard Schwartz asked if the unit availability factor was percentage of units available or megawatts available and the answer was megawatts.

Mike Alder indicated that as part of the Annual Outage Planning Process, the Joint Operating Committee looks at maintenance requirements for the next year, the range of forecasted water, and market conditions to set the HLH unit availability target. The goal is to optimize outages and have units available when we have the water and the market.

Pete Gibson indicated that when they are doing fish adaptation testing, if the moving screens stop, they have to have a forced outage on that unit to determine what went wrong. The operating plans for maintenance are set in January; however, fish research plans aren't determined until March or April. Therefore, sometimes the outage plans aren't in sync with fish research. Melinda Eden asked if these forced outages get accounted for as costs of the Fish and Wildlife program. The answer is that they are considered as unit outages and don't count against the fish program costs. Melinda asked for clarification of how fish protection activities related to forced and planned outage data and the agencies agreed to provide this.

Steve Loveland asked if we had looked at the cost of getting to greater than 97% HLH availability by looking into having replacement capacity as some utilities do. The answer was no. Steve also asked where the handoff is between the Corps and Bureau and BPA Transmission. The answer was at the boundary of ownership of facilities.

Mike Alder indicated that there is a weekly operations/outage conference call between BPA/Corps/Bureau as part of the Joint Operating Committee to refine operations and meet real-time needs. During the call we convey marketing factors, weather indicators, what maintenance is going on, and any transmission limitations or restrictions. The call enables us to convey the performance requirements across the FCRPS down to the project level so everyone understands why we're operating the system the way we are.

Ralph Cavanagh asked what the rate-of-return on investments are. Greg Delwiche indicated that there is a 22% rate-of-return on the whole program, and efficiency-improvement projects have a return of 60 to 70%. Terry Kent indicated that there is a 6- to 7-year payback on improvements at Grand Coulee. Ralph Cavanagh asked why not accelerate investments to capture greater revenues? Terry Kent and Dave Lyngholm indicated that the contracting process is very lengthy and that you can only do so much work in a given year. There was a question about performance incentives and Mike Alder explained that this goes to the laborers at the individual projects that do the work. Before this program was implemented most of these individuals didn't understand

what their connection to the entire system was. There was a question about how much money was available and how much was paid out. The answer was that there was \$3 million available last year and the actual payout based on targets reached or partially reached came to \$1.5 million.

Mike Alder took the group through the O&M Cost Benchmarks on page 12, explaining that during the first two years of the benchmarking we looked at all of the plants in the system. Now we rotate and look at about 5 plants per year to see how we are doing. There was a question about who is in the benchmarking data. Mike Alder indicated it included all the major North American hydro plants, and that we compare to projects of comparable size as much as possible.

Steve Loveland and others expressed surprise that the Public Affairs and Regulatory category was so high. Mike and others explained that this is where fish-related costs are captured. He asked if we could provide a further breakdown of what is in these categories by the February 25th meeting. We indicated that we would provide that breakdown.

Ralph Cavanaugh and Howard Schwartz said they would expect the public affairs and regulatory category for Corps/Bureau plants to be higher than others, because other hydro does not have the same anadromous fish protection challenges.

Lyn Williams asked whether the buildings and grounds cost definitions were comparable between Corps and Bureau plants and the other benchmarked plants. The answer was that they are.

Jerry Leone asked if 3.79 mills is all of the hydro costs? The answer is yes if you exclude the capital program. By the time you add in debt service the cost of power is around 10 mills.

Kris Mikkelson asked if we could provide historical FTE data. The agencies agreed to provide this. Steve Loveland and Ralph Cavanaugh asked about seeing further information on irrigation-related costs such as the costs of providing power at lower rates, the costs of foregone generation, and imputed wheeling costs. The BPA and Bureau staff agreed to provide extant information on these topics.

Mike Alder indicated that at Grand Coulee there has been a cost reallocation that was mandated by Congress. The costs allocated to power went from 70 percent to 92 percent. Ralph Cavanaugh asked how this happened and Paul Norman indicated that at the time it happened we looked at it very closely and there didn't appear to be a defensible way to get to a lower number. It was a large hit, but it could have been larger and could have come upon us earlier.

Mike Alder took us through upcoming challenges, risks and needs, stating that expense items associated with the capital program and security costs are going to be very significant. At Grand Coulee alone the cost for security is likely to be \$4.5-\$5 million annually. Melinda Eden asked if the BiOp and rate case timing were disconnected and Mike Alder indicated that without the upcoming Willamette BiOp in place, costs are uncertain.

Mike Alder discussed the value of unit availability and the flexibility of the Federal System. With the recent cold snap of 20° load center departures of 20,000 MWs, it would have cost

\$70/MW to buy in the market. BPA, the Corps and Reclamation worked together to move unit outages and draft the system to meet load. Rachel Shimshak asked if we made money on secondary sales during the cold snap and Greg Delwiche indicated that we made about \$1 million per day. Paul Norman pointed out that BPA's secondary sales forecast in the rate case calls for us to make \$1.5 million per day.

Paul Norman closed the meeting by thanking the Corps and Bureau folks for their preparation and participation. Paul indicated follow-up information would be provided to the Sounding Board on irrigation support, a breakdown of expenses that are in the Public Affairs and Regulatory category, historical data on FTE, and clarification of the information on planned and unplanned outages in relation to operation of screens and other fish protection measures.

Howard Schwartz asked if there was an inventory of statutory provisions that cause BPA to make sales at below costs. He thought there was a provision for Hungry Horse that caused us to do that and wondered if Grand Coulee has something similar.

Greg Delwiche stated that we had presented a lot of information today and hoped that as the Sounding Board reflected on the material they would get back to us with suggestions or clarifications.