

Meeting Notes
Power Net Revenue Improvement Sounding Board
February 5, 2004

Attendees: Fred Rettenmund for Kris Mikkelsen (Inland Power and Light), Tom Karier (NPPC), Rachel Shimshak (Renewable Northwest Project), Lyn Williams (PGE), Jason Eisdorfer (Citizens' Utility Board of Oregon), Steve Eldrige (Umatilla Electric), Nancy Hirsh (NW Energy Coalition), Howard Schwartz (State of Washington), Ralph Goode (Mission Valley Power), Jim Kempton (NPCC), Steve Loveland (Springfield Utility Board), Ralph Cavanagh (NRDC), Steve Crow (NPCC), LeAnn Bleakney (NPCC).

BPA Attendees: Paul Norman, Michelle Manary, John Pynch, Steve Oliver, Deb Malin, Elliot Mainzer, Orville Blumhardt

Paul Norman began the meeting stating that the main items on the agenda today are conservation and renewables. However, before getting to that he wanted to report on progress to date toward the \$100 million goal. At the last meeting we identified the 10 categories where we have the potential for additional cost reduction or revenue improvement opportunities. Paul then indicated the table showing when each category has been or will be addressed by the Sounding Board and the percentage each line item contributes to the total of the categories. Of today's categories, conservation expense and revenues is 2 percent and renewables expense and revenues is 1 percent. Paul then pointed out to the group that nearly \$67 million worth of progress has occurred in the category of net interest expense. He asked for the Sounding Board's advice regarding whether the savings we are seeing in net interest expense should count toward the \$100 million.

Ralph Cavanagh stated that he wanted to make a request to assign a dollar value to the sale of northwest renewable resources into California. The California Energy Commission has changed its stance so that out-of-state resources are acceptable. This could be a revenue enhancement that BPA should look at. Paul Norman said that we would look into this. Rachel Shimshak indicated that they were hoping that these resources would stay in the region.

Paul Norman then took the group line by line through the progress table. He indicated that on the Internal Operation Expense line that we are counting \$3 million reduction in 2004 toward the \$100 million goal, and that performance managers have in their contracts that they need to collectively reduce costs by an additional \$3 million to fully achieve that contract target. He said BOA is not yet counting that \$3 million because it is not yet certain enough that managers will be able to achieve it, but this should be clear by June.

Going to the next category, Paul indicated that Columbia Generating Station (CGS) costs appear to be moving up from the SN rate case levels. He said this will be addressed in detail at the next Sounding Board meeting. Steve Eldrige asked why CGS was BPA's responsibility. Paul indicated that BPA has an obligation to pay 100 percent of the cost to receive all of the output. Mr. Eldrige asked if we had any control over the budget and Paul indicated that we work with ENW on the budget, but in a formal sense to overturn and ENW budget decision that we could not get agreement on, BPA would have to prove in an arbitration hearing that ENW is not using

prudent utility practice and that would be very difficult. Lyn Williams asked if this was an increase in the budget and Paul and Michelle explained that it was higher than what was forecasted in the SN CRAC rate case.

Michelle Manary explained the Net Interest Expense line, indicating that since the time of the rate case the updated forecast shows higher reserve levels that we are earning interest on and some debt that we paid off early which has lowered our interest payments. We also have deferred a number of projects out of FY04-05 that saves us interest expenses. Paul Norman said that these savings will be a rate benefit, but wanted the Sounding Board's advice on whether it should count toward the \$100M goal.

Steve Eldrige indicated that he thought it should count because BPA will have some things go for it and some go against it and both should count. Lyn Williams asked if delaying the projects just move this problem forward and if we still didn't have to pay AFUDC (Accounting for Funds Used During Construction). Michelle indicated that we didn't have to pay until the projects began. Steve Eldrige asked how much of the \$30M was related to delaying the in-service dates of the projects and Michelle indicated it was most of that amount, but didn't have it broken down and would have to get back to the Sounding Board on that when the Sounding Board takes up this category.

Steve Loveland asked if BPA was just looking at the FY04-05 time period and that in FY06 all of our spending levels will return to historic levels? Paul indicated that the Sounding Board was specifically looking at the FY04-05 period in order to affect a zero SN CRAC in FY05. Steve Eldrige asked if there is a fundamental change in BPA culture taking place that will influence future rate case funding—is BPA changing the way it does business? Paul Norman indicated that in his opinion BPA was making fundamental changes that would continue through time. Mr. Eldrige asked for examples of activities that will carry through into the future. Paul stated that BPA is currently in the process of setting cost management targets for the 2007-2011 period and that would be available fairly soon.

Ralph Cavanagh stated he thought that the total amount shouldn't be count—it felt like it was accounting tricks. Steve Loveland suggested that we raise the goal to \$130M. Howard Schwartz asked why deferring these projects saved so much money and Paul and Michelle indicated that they weren't prepared to answer those questions today, but that it would be discussed at one of the March Sounding Board meetings. Jason Eisdorfer indicated that the net interest expense should at least be footnoted. The conclusion was that the net interest expense would count, but that BPA would set its sights higher than the \$100 million goal, and should be clear that this increment is different from the more straightforward expense reductions.

Steve Eldrige asked that since it appeared we would have a better water year, wouldn't this be reflected in higher secondary sales. Paul Norman indicated this year is coming in at about 93 percent of normal, but we are hopeful that secondary sales would come in close to what was expected in the SN CRAC rate case, which was a very lofty target, but that secondary revenues were explicitly not one of the categories in which we were looking for \$100 million.

BPA's Conservation Programs and Initiatives:

John Pynch, Energy Efficiency Implementation Manager, began his presentation on BPA's Conservation Programs and Initiatives. Several Sounding Board members thought that the cost of conservation should be expressed in cents per kWh over the lifetime of the efficiency measures, as opposed to the current BPA practice of counting only the first year's worth of savings when reporting or predicting conservation costs, such as the \$2 million/aMW metric. The said that this method of representing the cost of conservation includes all of the costs, but only the first year's worth of energy benefits, in contrast to the reporting of other resource costs.

A question was raised about how confident BPA was in the savings claimed under the installed measures, including their persistence over time. John Pynch indicated that BPA and the region had cut back or eliminated the evaluation programs/budgets over the last several years, but was now working in a collaborative manner with other players in the region to resurrect the evaluation effort. Ralph Cavanagh suggested that the budget for evaluation should be increased and that leveraging with the Regional Technical Forum (RTF), Energy Trust of Oregon (ETO) and Northwest Energy Efficiency Alliance (NEEA) made good sense.

Steve Eldrige disagreed with Ralph Cavanagh about characterizing that lost opportunities in conservation as being permanently lost. Steve Eldrige felt that you could do the conservation later, but it would just cost you more. Ralph Cavanagh agreed.

Ralph Cavanagh indicated that we should not only be looking at the cheapest conservation measures, since in the last couple of years we have all learned about the cost of replacement power.

Several comments centered around the NEEA funding issue. Ralph Cavanagh was surprised that BPA was only funding it at a \$10M/year level. He pointed out that this was a reduction from the previous commitment and he felt that BPA should increase the funding to NEEA since they were doing such a good job (i.e., delivering savings at the \$1M/aMW level). Before the Sounding Board members can comment on whether or not they can support extending BPA's funding commitment to NEEA, F. Rettenmund asked for more information about NEEA and their accomplishments, especially as it relates to achieving conservation savings at the \$1M/aMW level.

Ralph Cavanagh noted that BPA's cost/aMW was the lower than in California, and represents the lowest cost portfolio in North America now. He said he worried about cream skimming if we went any lower. It was noted that customers are picking up some of the cost that BPA is no longer picking up, so the total regional costs of conservation is not necessarily lower.

Ralph Cavanagh pointed out that BPA was doing great things with its "paltry" Technology Leadership budget by leveraging with other regional and national efforts to bring technical innovations to the PNW. He felt this budget should not be cut.

Steve Eldrige suggested that BPA needs to understand/explain the benefits of conservation in business terms. Can we come up with a better way to explain the benefits of conservation to

BPA? How does conservation contribute to the economic wholeness of BPA? What is the marginal cost of a negawatt? If conservation does in fact stretch the existing resource base (both capacity and energy), how can it be quantified in economic or business terms such that it reflects that value to BPA?

Action Items

1. What would be the impact of cutting another \$1 million per year out of the FYs 04–05 conservation budget?
2. We agreed to show conservation costs in levelized mills/kWh as well as our \$/aMW convention.
3. What would be the impact of zeroing out the Technology Leadership budget for FYs 04–05 (to include can it be re-established later if it is zeroed out)?
4. Get the addition NEEA information to Sounding Board members.
5. Paul Norman (in collaboration with the NPCC) agreed to look into defining a better way to explain the economic/business benefits of conservation to BPA and said that we would try to have something to share at a future Sounding Board meeting.
6. Ralph Cavanagh suggested looking at the benefits of doubling the NEEA budget.
7. Rachel Shimshak asked for more information about which measures were most prominent in the ConAug program.
8. Jason Eisdorfer wanted information about how many houses were completed with our LIWx Funding.

BPA's Renewable Program:

Steve Oliver, Vice President, Bulk Marketing and Transmission Services; Deb Malin, Renewable Energy Account Executive; Elliot Mainzer, Manager, Pricing and Transaction Analysis; and Orville Blumhardt, Industry Economist, participated in the presentation on BPA's renewable program. Steve Oliver began by stating that the renewables staff has shrunk considerably. We now only have one full-time person working on renewables remarketing green tags and managing the contracts that we have.

Deb Malin began going through the presentation package. She referred to a graph of the incremental capacity acquired each year. Members noted that the increments in energy were not the same for each technology because the capacity factor varies between solar, wind, and geothermal. Steve Eldridge would like to have energy presented in renewable cost table as well as capacity.

Deb also noted the significant drop in the support costs for the renewables program. They have been reduced by \$1.5 to \$2 million and are budgeted to stay at \$500,000 per year through 2006.

She pointed out that the old accounting system makes it impossible to make an apples-to-apples comparison on support costs prior to 2002. In addition, she commented that the costs in 2003 could be artificially low because Corporate costs may not have been accounted for accurately.

Steve Oliver pointed out that the current rates carry a net cost of \$15 million for renewables. So the program is set up to not cost more than that on a net basis in any particular year. The benefit of the renewable energy is measured at market value—which is why there is a net benefit for the renewable program in 2001 when market prices were so high.

Fred Rettenmund asked if BPA sold renewables output at PF versus market, would the loss be greater. Steve Oliver indicated that that would be correct for now because BPA's cost-based rates are currently below market.

Deb summed up her points here by saying that BPA continues to support renewables as we move from an acquisition program to more of a facilitation role. As a result, acquisition costs are lower. She also noted that Four Mile Hill is still on the books with a net cost of \$8 to \$9 million per year.

Ralph Cavanagh asked if BPA had looked into selling the output from Calpine as a Renewable Portfolio Standard resource into California. Steve Oliver indicated that we have looked at tax credits and have made some calls but haven't seen any interest as yet. That resale to California is unlikely because the energy has to go back to COB, therefore, there are large transmission costs and losses. Rachel Shimshak indicated it would be preferable for Calpine to meet Northwest needs.

Steve Loveland indicated that this is a resource that isn't cost-effective. He added that geothermal is not our mission, that it is a subsidy and a bad decision which we are now standing behind. We should put the money into conservation or something else. Rachel Shimshak stated that the renewables program goes to the heart of what BPA's mission and responsibilities are. The region has benefited from the hydro system and it needs to expand that renewable base. The Act says that BPA makes conservation and renewables a priority.

Steve Loveland indicated that BPA is long on resources now, and if we have a need, conservation is better. Nancy Hirsh indicated that diversification of resources was good to avoid market vulnerabilities. Steve Loveland added that geothermal has production risks that counter its hedging benefits. Rachel Shimshak stated that BPA has done a good job with limited staff and resources.

Steve Loveland stated that his customers don't want to pay for renewables. Jason Eisdorfer indicated that gas resources could be expensive and volatile. Steve Loveland stated that geothermal was not reliable and very risky.

Steve Eldrige had a list of concerns: (1) BPA must do a better job of following through on promises and policies. They proceeded with Coffin Butte expecting that tiered rates would go into affect, they did not. (2) Need to be realistic about wind liabilities and costs—wind is only available 30% of the time, wind is not a panacea. (3) BPA needs to make certain transmission

isn't a constraint—loads are on the west, resources are on the east. The single most important thing BPA can do to relieve the transmission constraints is to place/encourage base load generation west of the Cascades. (4) BPA is good at helping the region when we enter areas where no one else will go (no one would get into renewables). Wind no longer fits in this category. He noted later that he doesn't have anything against wind; he just doesn't want to pay more for it. (5) Charges for renewables should be based on actual cost. Mr. Eldrige also asked if it would make sense to treat the variability of wind as a loss of load rather than as a loss of generation so the cost is lowered to come on and off the system. BPA needs to be more flexible on charges—recognize costs and reliability.

Ralph Cavanagh asked if the 3.8 cents/kWh cost of the wind projects included all of the cost factors. The answer was yes.

A debate followed on the merits of spending \$15 million per year of ratepayer monies basically subsidizing the development of wind energy in the region. Some thought that subsidizing any resource development was the wrong thing to do, especially in a time of financial difficulty. Fred Rettenmund made the point that BPA should not be acquiring for some at the expense of others.

Rachel Shimshak reminded the group that these are up front costs, and that the experience BPA has gained related to getting wind energy up and running in an efficient manner is hugely valuable. This experience will help future projects come on-line more easily. For example, there is a consortium of small utilities in Washington that wants to jointly develop some wind resources. Each utility alone couldn't do that, but together, and with BPA's experience from developing wind, BPA can effectively facilitate this process and encourage the development of wind in the region.

Steve Eldrige commented that the region desperately needs resources west of the Cascades in order to better manage transmission constraints. There should be more focus on building resources to deal with that issue. He said that he doesn't support subsidies for several small projects.

Rachel acknowledged that transmission was a huge issue and that BPA should aggregate renewable purchase for small utilities. Steve Eldrige and Steve Loveland opposed the aggregation idea. Rachel responded that she did not mean to imply that these projects would be subsidized by BPA, but that BPA could do this work on a bilateral basis. The Steve's agreed that passing through actual costs on a bilateral basis was a good way to go.

Fred Rettenmund added the comment that the wind energy should be valued at the PF rate rather than at a market rate because the wind resource was built to meet BPA's contract obligations. He further stated that in the long run, the renewable program should respond to BPA's need for resources.

Rachel then pointed out that the major portion of the wind acquisition program occurred when BPA was hugely deficit.

Rachel commented that there are differences in the short and long term characteristics of resources. Some, like renewables, will require some significant up-front investment, but result in lower costs over time. On the other hand, market purchases may have lower costs for a while, but be subject to major volatility in price as things like the price of gas fluctuate. Renewables can be an important component of a resource portfolio that provides a hedge against such volatilities.

Steve Loveland commented that the issue in play is very connected to the discussion in the Regional Dialogue regarding BPA's long term power supply role in the region, and that this discussion is better suited to that venue. He went on to ask if there is a budget set for renewables for post-2006.

Steve Oliver answered that the budget at this point continues at the \$15 million net cost level for a while. But, since the net cost of renewables is a function of market price that reflects the value of the power generated, as market prices rise, the net cost of the renewable portfolio will fall. At what seems to be the long run marginal cost of a combined cycle combustion turbine, the renewables program will continue to have a net cost of about \$15 million. This leaves open the question for the regional dialogue about whether or not BPA should be more with this program. Should BPA acquire a small amount of wind as an "anchor tenant" to facilitate the development of the entire site by others? Or play the role of an aggregator and cover the cost with bilateral agreements?

Then, Steve continued, there is the issue concerning the Calpine geothermal plant. BPA is looking at the options, and there may or may not be a choice to make there. In addition, there is a choice regarding the possible acquisition of an additional 25 MW of wind capacity in FY 06.

Steve Eldrige asked why there is an increase in costs for the program for FY 04 and 05 compared to FY 03?

Deb Malin answered that the difference is a reflection of the low actual expenditures for FY 03, which is somewhat an artifact of the accounting system for support costs, as well as the added costs of the Fourmile Hill Geothermal project. FY 04 and 05 amounts are budgets, FY 2003 numbers were actuals.

Ralph Cavanagh expressed a concern that the bilateral approach to developing renewables might lose the benefit of integrating them with the hydro system.

Steve Eldrige commented that he just doesn't like the idea that BPA should make them do something through the rates that they don't want to do.

Deb Malin added a clarification at this point that the cost projected for the additional 25 aMW of wind in FY 06 is approximately the same as the projection of the cost of a 25 aMW market purchase for that year. So there is no subsidy reflected here.

Lyn Williams asked if BPA could reduce the budget in FY 04/05 based on the lower FY 03 actuals. Deb responded that we could not do that because the budget numbers needed to reflect anticipated output of variable wind resources.

Jason Eisdorfer added a final comment that the 25aMW of wind budgeted in FY 2006 becomes a policy choice regarding BPA's role in the region. And, that it is hard to deviate from the current policies in this venue when the group is only looking at FY 04/05. Policy discussions belong in the regional dialogue.

Steve Oliver indicated that, as a practical matter, the Calpine geothermal project will not come on line in 2005, so there will be an \$8 million to \$9 million net cost savings which will count toward the \$100 million goal of the Sounding Board.

The next Sounding Board meeting is scheduled for Wednesday February 11th from 1:30 until 4 pm. We will see if the Rates Hearing Room is available in order to allow folks to avoid at least some of the security practices. In addition, Paul noted that Steve Wright is very interested in the work of this group, and will likely attend the first meeting in March.

Renewables Action Items:

1. Explain why 2003 actuals are so much different than budgeted amounts.
2. Provide actual generation along with energy costs.