Meeting Notes Power Net Revenue Improvement Sounding Board February 11, 2004

Attendees: Rod Webring (EN), Kris Mikkelsen (Inland Power and Light), Rachel Shimshak (Northwest Renewable Project), Lyn Williams (PGE), Jason Eisdorfer (Citizens Utility Board of Oregon), Howard Schwartz (State of Washington), Ralph Goode (Mission Valley Power), Steve Loveland (Springfield Utility Board), Ralph Cavanagh (NRDC), LeAnn Bleakney (NPCC), Jerry Leone (PPC), Mary Verner (Upper Columbia United Tribes), Mark Walker (NPCC).

BPA Attendees: Paul Norman, Michelle Manary, Andy Rapacz, Dana Sandlin, Ed Brost, Claudia Andrews

Paul Norman began the meeting by drawing the Sounding Board's attention to the chart showing progress toward the \$100M target for FY 04-05. At the last meeting there was a good discussion about line item 9, Net Interest Expense, and whether or not that should count toward our target. The consensus was yes, but it wasn't what we were expecting when we set the target, therefore, we should set our sights higher than the original \$100M target. We will be going into more detail at the March 3rd meeting regarding the changes in the category of Net Interest Expense.

Paul also pointed out that in the Internal Operations Expenses line, that we have a reduction of \$3M in managers' performance contracts which, if achieved, would make the total internal cost reduction in 2004 \$6 million rather than the \$3 million shown in the table. By June we should know whether this additional \$3 million can be achieved. We are also looking at 2005 internal costs and should be able to show savings there as well. There also is a likely \$8-\$9M net savings in renewables because Calpine geothermal is unlikely to be going on line in FY04. [Correction at 2/25 meeting is that these savings however will be captured in a lower Load Based CRAC, but will not contribute to a lower Safety Net CRAC]

Jerry Leone made a statement that last Friday the Inspector General released a report on "Electricity Transaction Management System" at the Bonneville Power Administration" that indicated there were significant cost overruns on the computer system being developed to schedule transmission. The split, both functional and physically, between the Transmission Business Line (TBL) and the Power Business Line (PBL) have created significant costs and duplicate systems. If these things hadn't happened, we wouldn't need the Sounding Board to find most of the cost savings. Paul Norman indicated that at the agency level we are looking at streamlining our processes without compromising Standards of Conduct rules. He also pointed out that most of the costs Jerry identified were in TBL and would not count against Power rates. Lyn Williams asked if we had a choice of not having separate billing, scheduling and load forecasting. Paul indicated that we thought in the mid 1990's when BPA separated business lines that these processes needed to be separated, because BPA was likely headed toward full separation. Now that is clearly not our future and these are the types of processes we are looking for further efficiencies in, constrained only by FERC Standards of Conduct.

Paul indicated that several of the Sounding Board members had indicated a request for a change of venue for the meetings due to BPA's security measures. Therefore, our meeting on February 25th, 8:30-11 a.m., will be held at the PPC offices. At the meeting scheduled for March 16th, Steve Wright wants to meeting with the Sounding Board after they have a preliminary take on all of the categories. Mr. Wright would like to discuss what conclusions we have come to and what comes next.

Columbia Generating Station (CGS)

Andy Rapacz introduced himself as the Oversight Manager for CGS and also Rod Webring, Energy Northwest Vice President of Nuclear Generation. Andy indicated that BPA has a small office in Richland on-site with EN. Andy then started taking the group through the presentation package. Andy stated that it is BPA's goal that the plant be operated in a safe, reliable, and cost-effective manner with performance in the top quartile of the industry. Kris Mikkelsen asked if this was EN's goal as well. Rod Webring answered that it was.

Turning to page 4 of the package, Andy Rapacz indicated that BPA's fiscal year is October-September, while EN is on a July-June fiscal year. This means that there is some translation needed to get to an appropriate cash number for our rate base. By far the largest impact is due to fuel expenditures as EN uses burn-up rate to cost its fuel while BPA uses actual cash expenditure. Also, decommissioning costs are paid directly by BPA and thus do not appear in the EN budgets.

Kris Mikkelsen asked about debt service and Andy indicated that debt service is not included. Claudia Andrews stated that debt service is between \$300-600 million per year, one-third of which is attributed to CGS. Howard Schwartz asked if debt service was a monthly payment and if we make decisions about how it is funded. Claudia Andrews stated that what we pay is based on net billing based and EN manages the fund. Howard Schwartz asked if the bill could be different each year and Claudia indicated that is usually the case.

Paul Norman said that in a year when we sell new bonds, we can get the payment down to around \$300 million, but if no new bonds are sold, the expense is about \$600 million.

There was a discussion about whether or not to capitalize fuel costs. Kris Mikkelsen asked if BPA has a capitalization policy that would apply in this instance as it would apply to other projects in need of capital. Andy Rapacz indicated that BPA capitalized spent fuel costs for the first time last year. Paul Norman stated that we have a capitalization policy and this is something that we are considering for CGS.

Kris Mikkelsen asked about performance incentives. Rod Webring indicated that they incentivize employees with targets for safety, radiation exposure, and plant outages among others.

Andy Rapacz indicated that EN is implementing a new fuel procurement strategy that means a \$37 million reduction in the current rate period and a \$46 million increase in the next rate period. This means a net increase to BPA of \$9 million. Ralph Goode asked why a net increase was good. Andy Rapacz indicated that BPA had asked EN to look for creative ways to reduce costs

in the current rate period. Rod Webring indicated the goal was to help this rate period and we are being challenged to reduce costs in the next rate period. Costs will depend on the future fuel market, whether we can get \$9 million better. Someone asked if that was nominal dollars and the answer was yes. Andy Rapacz pointed out that the \$9 million impact has been reduced to about \$4 million through some creative actions taken by EN.

Lyn Williams asked if there were more details on the spent fuel budgets. Rod Webring indicated that EN uses the same vendor as PGE did for Trojan, but differences are because of type of reactor. Lyn Williams indicated that she would be willing to have a dialogue with EN and share information they learned from Trojan regarding spent fuel.

Andy Rapacz then moved to page 6 and discussed significant impacts to O&M costs. Since September 11th, NRC has mandated certain security requirements that have increased future budgets--\$4 million in FY03 and \$10 million in FY04. In addition there are increased staffing costs for guards for the life of the plant. Kris Mikkelsen asked if some of these costs weren't going to be covered by Homeland Security. Rod Webring indicated that they were not and the NRC changes requirements throughout the year, so this can be a moving target. EN is hopeful that they will have monitoring schemes in place in the future that will reduce staff expenses.

Howard Schwartz asked if other utilities that have generation other types of generation facilities were being asked to do as much increased security measures. Paul Norman indicated that we heard in January about the security measures that the Corps and Reclamation are being asked to do. Howard asked if the security measures for nuclear facilities were adding to the costs enough to make it harder for them to compete. Rod Webring said that it made it more difficult. He also noted that BPA might someday need to take additional measures to address the transmission system. Mark Walker asked if there was any consideration given to taking advantage of the security measures already at the Hanford site. Rod Webring noted that each facility needs to stand on its own with respect to security.

Rachel Shimshak asked what the biggest security measure was that they had taken. Rod Webring indicated that the most visible is the 10 miles of jersey barriers around the plant. We've had to move people around in the plant for security reasons. They also had to relocate the guardhouse to create a single access point. Kris Mikkelsen asked if they were following some sort of NRC recipe for safety. Rod Webring answered that every plant has different design issues that have to be taken into consideration. Rod indicated that CGS has to have redundancies because they won't be able to rely on outside help.

Andy Rapacz continued with the presentation indicating that this is CGS' 20th year of operation and it is becoming difficult to find replacement equipment and also vendor support for existing equipment. They have had to retool parts so they fit. These types of issues definitely put upward pressure on the budgets – and it is not a factor that will go away.

Howard Schwartz asked what the original book life of the plant was. Andy Rapacz indicated in was 40 years. Rod Webring indicated the plant was designed to last 40 years, but some parts begin to wear out before that time. For example, they are seeing more valve leakage and starting

to replace feedwater heaters. At some point you have to replace rather than repair, but CGS is relatively young compared to most plants and the design is better.

Howard Schwartz asked if at some point the cost to replace gets prohibitive and it doesn't make sense to discontinue operation of the plant. Rod Webring indicated that so far that hasn't happened. Once you have the sunk costs it usually is cost-effective to keep running.

Rachel Shimshak asked if there was any benefit to surveying plants that have closed before their time. Rod indicated that they did this to gather information and to get replacement parts.

Jason Eisdorfer asked if EN forecasted what equipment replacements and overhauls are expected over the years. Rod Webring indicated that they did this and in fact they are currently working on the long-range plan. Some things have been moved into future years. Andy Rapacz noted that the deferrals have been done following careful thought and analysis. Rod Webring added that they make such decisions considering safety first and reliability second.

Jason asked if this was going to create a huge cost mountain that will need to be dealt with in 2007-11. Paul Norman indicated that we have had a fair amount of deferral of expenditures that will catch up with us, but we are looking at that internally and so far it was not creating an overall cost increase in 2007-11.

Rachel Shimshak asked if there was any thought to synchronizing EN's and BPA's fiscal years. Rod Webring indicated that they would like to go to a January to December fiscal year, since June is refueling and are trying to close the books at the same time. He'd also be interested in a 2-year cycle to smooth the impacts of the 2-year fueling cycle. Andy Rapacz indicated that the rest of the industry is on a calendar fiscal year, but BPA follows the government-mandated October to September fiscal year.

Steve Loveland stated he is a bit concerned about the current forecast of expenses and the large increases in the cost of power relative to the average of 1997-2000. He is concerned that he hears discussion of the challenges to keeping costs down, but not hearing a discussion of what's cost-effective or competitive. He believes that the Corps and Reclamation seem to have "gotten it". Perhaps a further look at the economics of the plant is warranted. Rod Webring indicated that EN deferred some maintenance in the 1990's but that continuing to do so is not sustainable. The budget swings year to year are caused by the 2-year fuel cycle. We continue to look at ways to move costs out while maintaining reliability. It can't be right for the region to run the plant into the ground.

Greg Delwiche indicated that BPA is working with EN to reduce the length of outages. CGS's outage length tends to be at the longer end of the industry range. This is one action that will help reduce the cost of power. Rod indicated that the U.S. nuclear fleet has significantly improved plant capacity factors with values above 90 percent being common. Columbia is budgeting its generation at these levels for non-outage periods and working to reduce outage lengths.

Mark Walker asked how much EN spent for nuclear waste. Rod Webring indicated that EN has paid approximately \$100 million into the DOE nuclear waste fund over the years.

Jason Eisdorfer stated he was reaching the conclusion, when looking for areas to find savings, there wasn't much in the operations area for CGS. Perhaps there are more accounting treatments. Rod Webring indicated that Vic Parrish has challenged the other VP's to reduce staff by 100 people over time.

Andy Rapacz stated that there are some real challenges in front of us that may put pressure on costs, but capitalizing long-term improvements might be part of a strategy to keep near term costs down. EN is moving to an activity-based management, along with most of the industry. Ralph Goode stated that he thought that EN was moving in the right direction with their cost controls and asked if the benchmarking efforts showed any other areas where there could be efficiencies. Rod Webring indicated that in the 1997-2000 time period the demand for power was not as significant, therefore, they didn't put as many overtime dollars into refueling and outages. Now we are looking at operating with a higher availability and reliability.

Kris Mikkelsen indicated that rather than doing more benchmarking, looking for low-hanging fruit, perhaps the best focus is on the number of days in an outage. Rod Webring indicated that EN was planning to look at staffing numbers and process improvements that would simplify procedures that would also allow fewer staff.

Kris Mikkelsen asked how much an outage cost. Rod Webring indicated that it depended upon the time of year, but usually over \$1 million per day. We try to take advantage of high water, which lessens the revenue impact.

Andy Rapacz then moved to page 10 indicating that EN has been challenged by their own senior management to bring down costs for FY05. There is a tax issue related to some purchases from General Electric by EN that is included at the worst-case level. Howard Schwartz indicated that this came up last summer and thought that it had been resolved. Claudia Andrews said that she thought that Mr. Schwartz was thinking about the Bank of America settlement that has been resolved. However, there is a tax issue with the State of Washington regarding equipment and services provided at a discount by GE to EN. Washington State is proposing to tax EN on the full market price of the equipment and services.

Andy Rapacz also indicated that there were services that should not be taxed that were included. However, EN is working on this with the State of Washington and GE. The full amount of the taxes would be around \$5.6 million. Paul Norman added that this was not in the Safety Net CRAC rate case. A question was asked about the other increases in FY04 that total \$18.9 million. Paul indicated that the full \$18.9 million was above the forecasts in the rate case. Greg Delwiche stated that about half of the \$18.9 million can be capitalized, since it is for security and long-term benefits.

Andy Rapacz then went over page 11 on performance improvements that EN is looking to accomplish through their "Quest for Excellence" program. Rod Webring indicated that a year ago, CGS went through some on-line repairs but had 3 forced outages due to equipment problems that was not identified. There were old equipment issues and personnel performance issues that contributed to the forced outages; however, CGS' NRC indicators are all green.

Andy went through pages 12 and 13 without any questions being raised. On page 14 regarding benchmarking, Andy indicated that some of the different benchmarking studies provide inconsistent or conflicting data. BPA is working to come up with an in-house number that BPA believes is a reasonable cost of power target for CGS. This will be shared with EN with the hope that agreement can be reached on the target.

Greg Delwiche indicated that BPA is looking at the question of whether it would be beneficial to look at a fleet operation. However, the Board is very opposed to that idea. Howard Schwartz asked if there were fleet operators that would be able to include CGS in their area. Greg Delwiche indicated that there were and what they might bring is better expertise to maintenance or refueling outages with shared maintenance crews.

Rachel Shimshak asked what the root causes are of the improved performance of the plant over the last several years. Rod Webring indicated that they have learned to operate the plant better. In fact, the whole industry has improved. At some point in time you get to a level where you can't do any more cost cutting because it affects reliability and productivity. Rachel Shimshak indicated that the appropriate goal is to operate safely with an eye towards cost so CGS doesn't become uncompetitive.

Andy Rapacz indicated that EN would have their draft long-range plan ready for BPA review on February 20th. That plan includes an in-depth look at future projects and costs, including possible staff reductions. This will be a living document that will be updated every six months. Additional opportunities for savings include the financing of nuclear fuel purchases and debt financing for large capital projects.

The discussion turned to what types of costs should be capitalized or financed. Steve Loveland indicated that fuel is an operating cost, but security improvements and other longer term costs should be capitalized if they are a major cost and have a long life. Jason Eisdorfer said he agreed. He would prefer that we not push costs out into future years. Howard Schwartz indicated that in his opinion financing fuel purchases wasn't desirable, but it might be better than some other things we have yet to identify. Kris Mikkelsen indicated that a normal capitalization policy consistent with utility practices would be optimal. She also asked if there was premium charged for refinancing WPPSS projects. Claudia Andrews indicated that there is a small premium for the WPPSS legacy, about 5 to 10 basis points (0.05% to 0.1%).

Mark Walker asked if there was any reason that fuel couldn't be capitalized. Claudia Andrews answered that since fuel has an 8-year life and is considered medium-life, it wouldn't be an accounting problem. Ralph Goode stated that it would be best if costs were levelized rather than having huge swings up and down from refueling years to non refueling years. Paul Norman indicated that is what we do in the rate case. He summarized that what the Sounding Board has indicated about capitalization was that for one-time long-life items it makes sense, but probably not for fuel if it knocks some better off the table.

Howard Schwartz said he was concerned about the whole question of costs staying up and asked if we are near the place where more capital expenses doesn't make sense—with the cost of

power getting over \$30/MWh. Paul Norman indicated that this may take a longer discussion, but the short answer is that at projected costs, CGS is not really at the edge of not being competitive. It still has long-term value. Rod Webring notes that a carbon tax could make nuclear generation more cost-effective.

Steve Loveland asked about the costs for disposal. Rod Webring indicated they routinely are a near-term operating cost. For ultimate disposal, DOE assesses the utilities a charge of one mill per kWh, which the industry believes is more than adequate to fund a permanent waste repository.

Steve Loveland asked how the other ventures EN is involved in were accounted for. Rod Webring indicated that those ventures try to take some cost pressure off of CGS. Building leases also help reduce costs. EN's projected value of power for Fiscal Year 2004 is \$354 million.

Ralph Goode indicated that we buy power at cost. Rod Webring suggested that the region could look at what price they would pay for power if CGS went away.

Howard Schwartz indicated that he thought he remembered that for several years CGS operated on an as needed-basis. If hydro was up, CGS wasn't necessarily needed to meet loads in the region. Rod Webring indicated that early 2002 was the last time CGS was dispatched for economic reasons.

Paul Norman indicated that there are several follow-up items. With respect to the goal of the Sounding Board, there are many challenges in this cost category just to manage to the costs in the Safety Net CRAC rate case. We will look at capitalizing fuel and other longer-term investments, if not doing it takes something else off the table that is more desirable. We will try to find cost decreases to off set any increases. And overall will focus on managing costs down as much as possible.