Meeting Notes
Power Net Revenue Improvement Sounding Board
April 22, 2004

Jim Kempton (NPCC), Melinda Eden (NPCC), Geoff Carr (NRU), Jerry Leone (PPC), Howard Schwartz (State of Washington), Ralph Goode (Mission Valley Power), Lyn Williams (PGE), Steve Eldrige (Umatilla Electric), Pat Reiten (PNGC Power), Tom Karier (NPCC)

BPA Attendees: Paul Norman, Michelle Manary, Andy Rapacz, Dana Sandlin

Energy Northwest Attendees: Vic Parrish and Rod Webring

Introduction

Paul Norman reviewed progress-to-date on the Sounding Board's efforts toward the $100 million goal. Paul stated that the 2nd quarter review would be posted on April 30 and it would show that we continue to have deteriorating water conditions and a corresponding deterioration in revenues. We would be summarizing the impacts of that and will be sending that to the Sounding Board in May.

The last time the Sounding Board saw the tally, it was $87 million, today it is $95 million and that includes reductions in budgets for Columbia Generating Station (CGS) in FY04 and FY05. In the June meeting we will be looking at FY05 cost reductions and revenue enhancements. Setting spill aside, we should hit the $100 million goal.

Steve Eldrige asked if that was $100 million per year and Paul answered that the $100 million is a total for 2 years, FY04 and FY05. Steve then asked if there would be reductions that would continue beyond FY05 and Paul indicated that there were a mix of one-time reductions and some reductions that would continue. There are also deferrals from the FY04 and FY05 timeframe that will be reappearing in FY06 and FY07.

Paul stated that we have factored in the FY04 savings in the 2nd quarter review but not FY05. On June 16 the Sounding Board will wrap up the FY05 outlook for revenue decisions and on June 30 there is a wrap-up meeting with Steve Wright.

Columbia Generating Station (CGS) Costs

Andy Rapacz began his presentation next. He stated that the topic of today's meeting was CGS and Vic Parrish and Rod Webring from Energy Northwest (EN) would be making the presentation. Andy wanted to first give some background on how the budget numbers work and how they get into BPA rates. Starting on page 2 of the BPA presentation, Andy stated that EN and BPA have different fiscal years and so it is necessary to do a conversion of fiscal years as well as cost to cash.

On page 3, Andy explained the difference between cost and cash basis. Steve Eldrige asked about the taxes or other charges that CGS has to pay for decommissioning. Vic Parrish responded that these are pre-paid costs and they come in multiple forms. Steve asked if there

was spent fuel that was saved on site and Vic responded that EN took some risk and developed an on-site multi-fuel storage facility that we can grow to optimize costs.

Rod Webring stated that the industry has funded over $20 billion for the Yucca Mountain spent fuel storage facility. CGS's portion of this has totaled over $100 million since Plant startup. CGS's cask loading campaign that is currently completing has resulted in significant savings over previous estimates. Savings total about $200,000 per cask.

Andy Rapacz continued on page 4 stating that the amended FY04 Budget is $10 million over the Safety Net Cost Recovery Adjustment Clause (SNCRAC) forecast on a cost basis and $8 million on a cash basis. This is due to a carryover of FY03 outage cost overruns into FY04 of $5 million and increased security costs of $3 million. On page 5 it shows that, on a cash basis, FY05 costs have declined somewhat from $268 million down to $251 million.

Steve Eldrige asked what is the total cost of CGS. Paul Norman replied that we had that request from Steve and we are working to pull that information together.

Rod Webring and Vic Parrish indicated that they would be presenting a modification of the budget package that they presented to the Energy Northwest Board in March. Beginning on page 2 of the EN package, Vic Parrish went through the various activities that EN has been doing to reduce costs. Lyn Williams indicated that part of the Sounding Board's earlier recommendations were to look at capitalizing fuel to reduce costs. She also asked about interest savings and whether or not there weren't opportunities to be had before interest rates go up again. Vic Parrish indicated that BPA has a very good and successful finance group and that he would have to defer to their judgment on whether there were opportunities.

Steve Eldrige asked if BPA had a place at the table when EN was preparing its budget. Vic Parrish indicated that this was a collaborative process between BPA, EN and its Board. The EN Executive Board wants to protect the ratepayers too. The Executive Board is the principle decision body, however.

Pat Reiten asked how the savings from the debt optimization program flow into BPA's net revenues—he assumed that debt optimization benefits the agency. Rod Webring answered that it is an overall net reduction in interest funds. Steve Eldrige stated he assumed that there were strict limits on how the money is used. Paul Norman indicated that we are to pay off Federal debt first. Steve Eldrige asked if it was possible to use some portion for rate relief. Paul indicated that this was borrowed money and it would not be prudent to use borrowed money to pay operating costs. Steve Eldrige stated that you can't put all of your costs in power rates, so it seems like you should consider either borrowing money or using debt optimization to keep rates low.

Lyn Williams stated that instead of giving it to Treasury that BPA should use it for infrastructure projects. Paul indicated that this is effectively what happens, as the payments to Treasury free up BPA borrowing authority. Lyn asked about borrowing new money and only returning a part to BPA. Paul indicated that would tend to make rates higher because we would be missing opportunities to lower our interest costs by paying off higher interest rate debt.

Steve Eldrige asked if we hadn't done debt optimization, would the EN debt have been paid off after 2011. Paul Norman indicated that Federal debt gets shaped around non-Federal debt. The EN debt would have fallen off, but the federal debt would have been higher. This is not a program that is increasing ratepayer burden.

Vic Parrish moved to page 3 of the EN presentation indicating that they were able to refine some costs and defer some activities, leading to the reductions in EN FY 05's budget. Also, they will do some capital financing in FY04/05. Andy Rapacz reiterated the point that these items are deferred and will show up in the next rate period.

Steve Eldrige asked about license renewal. Paul Norman responded that customers and others have told BPA that they want a chance to look at these decisions and give input before the decisions are made. We plan some due diligence with customers on this decision, but think we will probably all conclude that CGS is a good resource and move ahead with license renewal. Vic Parrish indicated they would get the license extended another 20 years in 2008, but it takes about $14 million to go through the process. Nation wide, all plants that are operating have either renewed their license or plan for renewal.

Vic Parrish then moved to page 4 and discussed budget amendments for increased security costs. Security has always been a significant cost, but Homeland Security has increased requirements more and is holding the nuclear industry up as the poster child for how security should be done. EN expects security requirements will continue to grow.

Rod Webring continued on page 5 and stated that August 2003 was the best generation month in the station's history and CGS is currently on target for its year-end generation goal. Jerry Leone said that she had heard that CGS was in the bottom quartile for something and wondered what that was. Andy Rapacz indicated that we benchmark CGS against other similar plants and track over 18 performance indicators. In some of the indicators, such as generation, CGS is in the bottom quartile relative to other comparable plants, but is improving. Vic Parrish indicated that in any 1 year a plant can have a good or bad year in one or more of the performance indicators. During an outage year performance indicators are lower. During the last calendar year CGS had the lowest worker radiation exposure for reactors of its type. Steve Eldrige asked how CGS compared to other steam plants. Vic Parrish responded that others' outages would be shorter due to less complexity. Being 1000 miles from the next nearest nuclear plant prevents us from taking advantage of certain economies of scale that multi-plant owners can, such as consolidating maintenance crews, which could save money. Vic also indicated that they are a member of a consortium (Utility Service Alliance) to share information and resources.

Rod Webring continued with the presentation stating that their program "Quest for Excellence" for improving CGS performance is about 40 percent complete. This program is starting to produce results and adjustments are made as necessary.

Vic Parrish continued on page 6, and indicated that the graph shows O&M/A&G cost history. FY2001 and FY2003 are outage years. Vic wanted to point out that before FY96, the cost

profile was higher in FY92 and then in subsequent years replacements were under funded. In FY96 we were probably too aggressive with reductions.

Rod Webring moved to page 7 showing a historical perspective of the cost of power in a 2-year budget cycle compared to the Consumer Price Index (CPI). Steve Eldrige asked what was included in the calculation for the cost of power. Webring stated that the cost included all variable costs including O&M, capital, and fuel but did not include debt service and decommissioning charges as those costs are fixed and independent of operation.

Lyn Williams asked if this was in nominal dollars and Vic Parrish indicated that the graphs on pages 6 and 7 were both in nominal dollars.

Rod Webring continued on page 8 indicating that CGS benchmarks the same vintage plants as theirs showing both outage and non-outage years. Lyn Williams asked about timing of refueling. Rod indicated that if you refuel on an 18-month cycle you can have lower fuel costs while on a 24-month cycle, fuel costs may be higher due to carrying fuel in the reactor for longer periods. For a 24-month refueling cycle they need to find the optimal mix of fuel for the fuel cycle. Vic Parrish indicated that you want to be able to coast down, starting in late February or March, depending on the run-off. Rod indicated that if you add too much fuel you run the risk of throwing power away. The price of power in the Northwest is low so adding too much fuel is not necessarily a good risk here.

Vic Parrish indicated that as the Chief Nuclear Officer (CNO) as well as the Chief Executive Officer of EN, he is constantly balancing equipment and people. Safety is job 1. Always looking to make the plant more reliable. On the people side it takes around $250,000 to train a reactor operator. Recently, EN had trouble attracting a new Outage Manager due to their non-competitive salary scale. We have to maintain a quality health benefits program and provide extensive training.

Steve Eldrige indicated that there may be times when Umatilla and EN could share technical support. Vic Parrish indicated that he would be interested in pursuing that.

Rod Webring stated that on page 14 you can see that we are challenging ourselves to reduce costs by $3 million. We are also implementing a staff reduction program of 100 positions charging to CGS by FY 2008. We have budgeted to begin the program to extend CGS's operating license.

Jerry Leone asked how many contractors EN has on staff. EN currently has 25 contractors for steady state operations. There are probably a total of 100 contractors on staff at this time. Vic Parrish responded that proprietary security staff has increased, but we have reduced other staff. There are NRC requirements EN has to meet and it takes people to implement them. We are also looking at going from six-shift operator rotations down to five-shift. This will be difficult because members of shifts need to spend 1 week out of every 6 weeks in training. Rod Webring indicated that if they do go to five shifts they will have to cover vacations with overtime and there may be no savings.

Rod moved on to discuss the graph on page 12 of generation history that shows that annual generation output has been increasing since 1997, after adjusting for the 2-year fuel cycle.

Pat Reiten asked what the other cost drivers are besides the fuel cycle. Rod said that this subject would be addressed later in their presentation, and asked if he could wait to answer that question. Pat agreed.

Moving on to page 13, Rod discussed the comparison of actual generation to that predicted in the 2002 rate case. He explained that EN has generally met or exceeded the rate case targets, with a net gain of $65 million worth of generation above those targets.

On page 14, Rod discussed EN FY 05 cost structure for CGS, noting that baseline costs are down about $6 million, fuel costs are down about $3 million, but that overall their costs are about $3 million higher than the regional target, which adds about 10 cents to the cost of every MWh that CGS generates. They therefore have challenged themselves to do better than a 45-day outage next spring and if they succeed, it will push down the cost of power.

Moving on, page 15 shows the distribution of CGS costs by category, noting that the biggest chunk of their annual budget, 42 percent, is personnel costs. The second biggest at 26 percent is the category of outages and services. During an outage they need to add about 500 people to the crews, and in addition, the outage next spring has the additional costs of a 10-year vessel inspection.

Vic Parrish indicated that an area EN is working on with the new Outage Manager is to shorten the length of outages. Rod Webring moved on to page 15 and indicated that the numbers on the chart have been adjusted. Regulatory costs have increased as a result of 9/11-related issues.

On page 16 Rod indicated that EN owns their buildings in Richland and they lease those out. EN also runs its own technicians for radiation screening. As a result, money gained from these activities will offset CGS's costs.

On page 18 Vic Parrish indicated that for FY05 budget they have reduced 49 staff positions, reduced travel and training, and reduced incentives. Incentives are tied to good performance—above average—if it is below average, then they don't pay the incentives. EN has made the payout more demanding and expect to pay out 60 percent rather than 80 percent.

Steve Eldrige asked what the average salary for an EN employee is. Rod Webring indicated it is around $88,000 per employee with 28 percent loadings and without incentives. EN has approximately a 4-5 percent turn over—it is higher in some areas and lower in others. Steve commented that 28 percent load was low, based on his experience.

On page 19, Rod indicated that they are implementing a program called ACES (Actively Committed to Everyone's Safety). This is a behavior-based program we believe will improve industrial safety. They are also working with the crafts to take ownership of their work and suggest what processes should be changed.

On page 20, Vic Parrish indicated that they saved money occasionally by purchasing equipment or other things as scrap from moth-balled nuclear plants. For example, they were able to maintain their security computer system by using a system that was scrapped from a nuclear plant that was closing. Page 21, when EN has an outage they look at everything to see if repairs are needed. Page 22 is a further breakdown of maintenance expenses. They have done a number of reverse engineering projects to reduce costs.

Page 23 is a profile of staffing. It shows a 21 net decrease in staff after adjusting for the additional security officers that have been added. EN has about 275-300 craft employees and about 130-140 engineers. Operations staff is split between craft and exempt—105 total—45-50 are craft. Adding in security we have approximately 400 craft employees.

Vic Parrish indicated that on page 24 it shows over time the direction the EN Executive Board would like to go with all of its business components. Jerry Leone asked for clarification of the letters on the chart. Vic responded that PW is Packwood, SS is Supply System, CT is Combustion Turbine, LF is landfill gas. Steve Eldrige asked if each of the circles is profitable. Vic Parrish responded that they are each independent, and they each contribute to EN overhead. As CEO he has oversight for all the programs.

On page 25, Vic Parrish indicated that the Energy Business Services Value is something that BPA looks at too. BPA and EN may not agree that the value is $14.3 million. Page 26, EN's goal is to be in the top quartile in cost performance of comparable nuclear operating stations. EN wants to be cost-effective, but not at the expense of safety and reliability.

The performance indicators on page 27 show that CGS is in the green. Green means exceptional, red means there are safety issues. There are plants out there that have performance indicators in the white, yellow, and red. Andy Rapacz indicated that there are some performance indicators that CGS is below the industry average that we are trying to improve upon.

Vic Parrish indicated that on page 28 it shows the Institute of Nuclear Plant Operators (INPO) weighted point average for CGS which factors in forced outages, whether safety systems took over versus operator actions, and other things. A plant could have a score of 100 and not have a number 1 rating. They look at how you are getting things done. CGS is at a number 2, which is excellent performance. In FY01 there was a small dip and a forced outage in FY03. The goal is to improve our score, but it has to be weighed against how much do we want to spend to get to a number 1 or top quartile. There are 13 plants that are higher rated than CGS out of 103 operating plants. Vic Parrish stated that radiation protection is a big indicator and in CY2002 CGS was the lowest boiling water reactor in America for radiation exposure. Steve Eldrige stated that CGS needs to show that it is better than the alternative source of energy. Expectations are high now and re-licensing will demand that costs be better than the comparable next choice. We probably need to make more of the value that nuclear power offers in terms of no sulfur or carbon emissions. But it will still be hard to support if it isn't a good deal.

Pat Reiten thanked Vic Parrish and Rod Webring for coming and making this presentation. CGS is the biggest part of our portfolio so it is where we look for short-term financial savings. He asked what could be done to get more cost reductions.

Vic Parrish indicated that EN is trying to manage by moving things out of the last 2-years of this rate period. He agrees that it is important to look at the value of the resource and what the replacement cost would be. We take our responsibilities to the region very seriously, we have a strong staff, and there is ample involvement by BPA.

Steve Eldrige asked if it makes sense to throttle back CGS at appropriate times. Rod Webring indicated that if it were a coal plant it would make sense to shut down. But most of our costs are fixed so there isn't a huge savings in variable cost of power production to manage the plant relative to river operations, i.e., fuel savings, as you would achieve by throttling back a coal or gas-fired plant.

Vic Parrish indicated that in '96-'97 we went too far in reducing the budget for replacements and maintenance and now are having to make up for it. Rod indicated that costs have gone up but generation is also coming up. We are demanding more from the plant than ever before.
Paul Norman indicated that within the next 12 months we would be doing an evaluation with customers for the next rate period on how low PBL can get its costs. We are receptive to having customers look at the license renewal issue.

Howard Schwartz thanked Vic Parrish and Rod Webring, stating that the detail was great. The debt refinancing information was very good and a good explanation. It is key, he said, that CGS remain competitive for the long-term.

Paul Norman closed that we need to look at what we can do in the short-term. Need to have a discussion about fuel and capitalizing fuel costs because we may be at the point where that makes sense.