# Bonneville Power Administration Power Function Review Management Level Discussion April 18, 2005

Rates Hearing Room, BPA Headquarters, Portland, Oregon Approximate Attendance: 55

Fish and Wildlife Program Expenses; Risk Mitigation

[The handouts for this meeting are available at: <a href="www.bpa.gov/power/review">www.bpa.gov/power/review</a>.]

# I. Welcome

Paul Norman (BPA) opened the meeting, saying fish and wildlife (F&W) program expenses and risk management are the two remaining issues for BPA to discuss with managers. Our next step in the PFR will be to put out a draft closeout letter May 2 that says, "this is what we heard and plan to go forward with," he explained. We'll have a technical meeting and a managers' discussion on the draft in May, we'll take comment until May 20, and then put out a final letter the week of June 13, according to Norman. With regard to risk, we won't be concluding how to treat it in the PFR, but will signal where we are leaning in the closeout letter, he said. Risk will be a big topic in the rate case, and we will make the decision about how to address it then, Norman said. We are very open to any additional input you have ahead of May 2, he concluded.

# II. F&W Program Expense

Greg Delwiche (BPA) went over F&W costs that factor into power rates. Altogether, the six expense categories and repayment obligations for current and past F&W investments is about \$691.6 million annually in the next rate period, he said. The repayment obligations include the Columbia River Fish Mitigation (CRFM) project, and there is a decision to make about how to handle the \$300 million backlog, Delwiche noted.

He listed several key decisions that BPA needs to make relative to 2007-2009 F&W costs. These include: schedule and operating requirements for removable spillway weirs (RSWs); assumptions about a proposed summer transportation test; funding levels for Lower Snake River hatcheries (three alternatives have been proposed); Integrated Program funding level; and plant-in-service assumptions for CRFM.

<u>Hydro Operations Effects</u>: When we talk about economic effects associated with operations conducted at dams "in the name of fish and wildlife recovery," people ask us "compared to what?," Delwiche said. We have developed a "power base case" that optimizes the hydro system for power production only, and we compare the energy production under the base case with the production under the Biological Opinion (BiOp) operating requirements, he explained. We end up with a table of differences in deficits

and surpluses between the two scenarios, and we run that through the Aurora model to get the associated economic effect in dollars, Delwiche said. We have pegged the difference at about \$366 million annually, he stated. The power base case takes into account the authorized uses of the projects, like irrigation and flood control, Delwiche clarified. Asked about the irrigation impact on generation, Suzanne Cooper (BPA) said it is about \$110 million annually.

Ralph Cavanagh (NRDC) expressed skepticism about the irrigation impact figure. In an analysis I saw, there was a 40 percent correction for the impact of restricted generation and the rising market price, he indicated. Cooper said BPA's analysis captured the price variability. I'd like to go through those numbers, Cavanagh responded.

But does BPA set the market rate? Steve Eldrige (Umatilla) asked. We are part of the West Coast market, and we do influence it, but the market is tens of thousands of megawatts – we don't set the price, Delwiche answered. Aren't you energy short, so you purchase too? Eldrige asked. Yes, we have to purchase in the market, Delwiche stated.

Scott Levy (Bluefish.org) asked for the MW associated with the \$366 million figure. It's about 1,050 MW, Cooper responded.

Delwiche outlined the "significant assumptions" that will be made about deployment schedules for RSWs and other bypass improvements at the dams. The assumptions about the schedule are important because the installations affect generation, he explained. The RSWs and other bypass improvements are operated in a test mode for two years, a period during which they do not provide as much energy benefit as expected in the long run, Delwiche said. He explained how "paired tests" are conducted on the installations.

The assumptions we will go forward with are based on our commitment to the BiOp and what we think is possible in terms of the fabrication schedule for the RSWs, Delwiche said. The fabrication is complex, and the Corps is providing us the most accurate schedule they can, he said. The table on page 13 of the meeting packet is our best estimate of the expected generation change that will occur in 2007-2009 with the installations made, Delwiche explained.

Rick Lovely (Grays Harbor) pointed out that new evidence indicates spill is not effective in causing smolts to migrate out of reservoirs and may be having a detrimental effect by sending the wrong temperature signal. Why not try a year without spill and see what happens? he suggested. We're spending \$110 million a year on spill, Lovely said.

The new information refers to fall chinook that migrate in the summer, Cooper responded. We want more information about the effect of spill ahead of conducting the transportation test for Snake River fall chinook that is scheduled to begin in 2007 or 2008, she said. The test calls for spill at collector projects, Cooper indicated. Delwiche noted that spill does not affect temperature in the river. There may be some local effects,

but there is not a significant effect overall, he said. The purpose of spill is to increase survival "over the concrete," Delwiche clarified.

Levy asked for an estimate of the cost of the RSWs. It's about \$20 million, according to Paul Ocker (Corps). That is about \$13 million for the RSW plus studies, he clarified.

Are we better off from an economic point of view if we stay with your schedule or are we better off if we push it forward? John Saven (NRU) asked. It is better to get the RSWs installed now since they save energy production, Delwiche answered. Fish advocates seem to agree that the RSWs are an improvement, so the customers would be better off moving this forward – we should move them along, Saven said.

The RSW benefits are smaller on the Lower Snake, Levy pointed out. "The jury is out" on their effectiveness on the Lower Snake, particularly at Little Goose, he said. When the decision was made to proceed with RSWs, the survival and economic effects penciled out to be positive at all dams where they are to be installed, Delwiche replied. We have not decided to deploy RSWs anywhere the biological and economic benefit is not positive, he said, adding that at this time there is no decision to install an RSW at Little Goose

The transport study is scheduled to start in 2008, Delwiche said. We estimate increasing spill for the study would reduce generation significantly, by 473 aMW in July and 448 aMW in August, he reported. It's a two-year study, and we don't have an assumption about what would happen beyond the 2007-2009 rate period, Delwiche wrapped up.

These are the assumptions we are making for purposes of setting rates, Norman reiterated. This is the time to let us know if you have input on what would be the appropriate forecasts and assumptions, he said.

What is BPA's position on covering fish costs? Eldrige asked. Are you planning to cover any and all obligations up to dam breaching? he asked. We are looking for the most realistic assumption we can find for fish costs in the rate case, Norman responded. We have issues related to fish costs that we have to treat as part of our risk, he added.

It's important to know what ground we are standing on, Eldrige said. If we cover costs that are unrelated to the power system, "which we have done," it sets up liabilities we should not be responsible to meet, he indicated. We should make an effort to re-examine what BPA is responsible for, Eldrige stated. "It's so easy to extract money from BPA," that we are paying for things we should not pay for – maybe someone should pay for them, but not BPA, he said.

Are you taking into account climate change? Nancy Hirsh (NWEC) asked. Is the 50-year water record still appropriate or should you look at having less water in the system? she asked. Our hydrologists and streamflow forecasters are seeing great volatility with water conditions, Delwiche acknowledged. But we are not ready to conclude we should set

rates according to a drier part of the historical record, he stated. It's definitely something we think about, Delwiche added.

Asked about the transport study, he said it was an action called for in both the current and previous BiOps. The economic consequence of the study is estimated to be between \$17 million and \$23 million in lost generation annually in 2008 and 2009, Cooper said, adding that she would find out if that is included in the \$366 million in operating effects.

It's seems reasonable for BPA to pay only for the effects of the hydro system, but "that's too easy" – it's difficult to internalize environmental costs, according to Jason Eisdorfer (CUB). BPA should take "its best crack" at identifying the costs, but you either pay now or pay later, he said. The question is how to identify "the fair share," Delwiche replied. For the Federal Columbia River Power System (FCRPS), it's an interesting question to consider, he said: should the FCRPS mitigate for the existence of the city of Portland, Interstate 84, diking, and railroads on both sides of the Columbia? "It's a stretch" to say the hydro system should pay for all of these human effects, Delwiche stated.

"The people who pay have a greater interest in cost control than the people who spend," Eldrige responded. We have about 9,000 customers in Umatilla and Morrow counties, and what we sent BPA last year included \$6 million for F&W mitigation, he said. We have a great interest in seeing that those who cause the impact pay for the mitigation, Eldrige stated. Everyone needs "to ante up," so we can collectively make better decisions than those made "when one group spends and another pays," he said.

"Carbon emissions ramp up when the hydro system is throttled back," Lovely said. I agree with Steve – we can't mitigate for everything and put the burden on those who pay for the hydro system, he said.

But in this program, we are talking about direct costs of things related to the FCRPS, Hirsh responded. Let's make sure that is the case, Eldrige said. There is habitat restoration going on that has nothing to do with the hydro system, Lovely added. We do have offsite mitigation responsibilities, but we need to assure our partners share the costs, Delwiche responded.

These comments suggest F&W advocates are better represented in BPA's ratemaking process than customers. Cavanagh commented. I don't agree that's the case, he said.

Whatever obligation there is, Congress has said it should be done at least cost, Steve Marshall (Snohomish) said. Have you done studies to see that is the case? he asked. I'm not aware of a comprehensive study, but pieces have been done, Delwiche said. As for a study that cuts across the Hs, "No", he said.

We recently offered comments on harvest to the Pacific Marine Fisheries Commission, Marshall stated. We would like to see BPA take a leadership role to stop the predation and harvest, he said. We are ignoring those impacts, which lead to more losses than the hydro system, Marshall contended. We do not have jurisdiction over harvest, but we encourage you to continue to make your point to the appropriate agencies, Delwiche said.

Virgil Lewis Sr. (Yakama Nation) said the tribes are very regulated in the catch they are allowed. We watch our fishermen and see that they stay within their limits, he said. Lewis said he had been telling NOAA-Fisheries about the sea lions at Bonneville Dam for a number of years, and now there are 30 sea lions there. They will have a big impact on the population, since they seem to target females to get at their eggs, he said.

Let's take the \$23 million annually for the transport study out of the budget, Saven recommended. I don't know that there's a compelling scientific reason to do it, he said.

I'd like to echo what John said, Jean Ryckman (Franklin) stated. We need to make sure money spent is based on sound science, and this study does not fit that criterion, she said. The court has rendered a no-jeopardy opinion based, among other things, on our taking this action in the Updated Proposed Action (UPA), Delwiche responded. We would have a weak argument about carrying out the UPA if our rates are based on removing that test, he said.

If you have risk in the next rate period related to what the judge decides on the BiOp, one response is not to do anything now, Marshall said. Avoid a commitment you may not have to make, depending on how the judge rules, he said. Retain the flexibility and don't make this decision a year ahead, Marshall advised.

We have to have something in our PFR closeout, but we'll adjust our estimates before we put a rate case proposal out, Norman responded. Customers have said costs that are not locked in should be part of our risk management, and we will pursue that option, he said.

The court schedule calls for Summary Judgment this month – we could have a decision by next month, Delwiche said. Before the next rate period, we should have information about where the litigation will take us, he added.

Why not wait until you implement the planned surface bypass improvements at the dams before you conduct the transportation study? Shane Scott (PPC) asked. If the study spans years both before and after RSWs are installed, the configuration on the system will be different over the research period – there would be too much difference to get a clear result, he said. Something this basic should be discussed and modified – it doesn't pass scientific muster, he added.

Lower Snake River Compensation Program Hatchery Funding: Delwiche went on to describe funding alternatives for the Lower Snake River Compensation Program (LSRCP) hatcheries: baseline O&M, baseline O&M plus, and baseline O&M plus, plus. These hatcheries are 40 years old, and there is no capital agreement for rehabilitation, he said. There are also two hatchery reform processes under way in the region, according to

Delwiche. These efforts may suggest reprogramming the region's hatcheries, so there is a cost uncertainty and risk factor here, he explained.

Why wouldn't there be appropriations to fund capital investments for these hatcheries? Lovely asked. Bob Austin (BPA) pointed out that "the route through Congress" would require reports and take time. Do we have control for the money we spend? Eldrige asked. We should have management control if we fund, he added. We are in partnership with U.S. Fish and Wildlife Service (USFWS) on these hatcheries, Delwiche replied.

BPA is looked at "as an easy source of money," Lovely stated. Agencies realize they don't have to go through Congress, and the expense is just added to BPA's costs, he said. BPA needs to look at who should be responsible for these costs – another federal or state agency, or should it be the ratepayers, Lovely said.

"We do have an obligation to mitigate," Delwiche responded. "However, I understand your feedback to us is to be extremely careful about putting BPA in the position to do capital improvements at these hatcheries because it is not our responsibility," he clarified. One of the questions is whether to spend more money "to get \$75 fish" from the LSRCP hatcheries, Levy stated.

I'd say go with the budget for O&M only, and tell USFWS if BPA has a good year, come back and talk to us about the additional items, Randy Gregg (Benton) stated.

Integrated Program: Delwiche moved on to the Integrated Program, the obligation for which comes from the ESA and the Northwest Power Act. This rate period, the level of annual expenditures was \$139 million, and previous to that it was \$100 million, he said. Delwiche described efforts to come up with a funding level for the next rate period, explaining a table of program spending categories, recent average spending, committed contract amounts, and budget drivers up and down. BPA worked with the Northwest Power and Conservation Council (NPCC) staff and Columbia Basin Fish and Wildlife Authority (CBFWA) to come up with the numbers, and we are pretty well in agreement on them, he said.

Delwiche went over additional graphics about direct program spending and pointed out that BPA is promoting a guideline of committing 70 percent of the funds to on-the-ground projects, 25 percent to research, monitoring, and evaluation (RME), and 5 percent to coordination and administration. This means more dollars would flow to on-the-ground work, with less spent in the two other areas, he said.

Delwiche explained three alternatives for the funding level, low (\$126 million), medium (\$144 million), and high (\$174 million), and what each includes. Lovely asked about partnerships to share costs. We don't have a rigorous cost-share protocol, Delwiche stated. There are cost-share projects going on, so non-BPA dollars are being spent, he said. We could put cost-share guidelines in place for the next round of project selection, Delwiche added.

I would gravitate toward the low end of the spending, Eldrige stated. People will spend money more wisely if there is less to go around, and it would also be good if people are aware there are priorities, and BPA will fund projects based on stringent criteria, he said. Revenues will be a problem this year, Eldrige said. He suggested in good years, BPA could authorize an amount 10 percent above the budget to fund a high-quality project, "if one is out there." If not, bank the 10 percent for a future project, Eldrige proposed. Also, there needs to be a transparent, verifiable outcome for these projects, he stated.

Eldrige cited the example of the Conforth Ranch, which was purchased for mitigation with BPA dollars and turned over to the tribes for management. The ranch has since been changed in a way that the benefits it was purchased for are gone, he said. If a sponsor does not deliver on a project, there ought to be a penalty, Eldrige said. And if a project is multi-year but doesn't meet its goals, the funding should stop, he stated.

Delwiche recapped the suggestions he had heard: constrain the budget; set aside additional dollars based on BPA's financial health; base projects on clear biological outcomes; and conduct rigorous annual project review with consequences.

Doug Marker (NPCC) pointed out that an independent scientific review is conducted on proposed F&W projects, so "the scientific rigor is there." There is a substantial amount of partnership activity with habitat, and the subbasin plans provide a good basis for pursuing more partnerships, he said.

Marshall asked if there is an estimate of returning adults that would be achieved with the low, medium, and high funding levels. Delwiche said there is not. Determining the smolt-to-adult return ratio (SARs) is an inexact science, and quantifying benefits to adult return from habitat enhancements is even more difficult, he added. Subbasin plans adopted into the Council's F&W program are based on a rigorous biological analysis, and they set out ways "to close the gap" for species mitigation and recovery, Delwiche said.

The low case is a 20 percent reduction and the medium case is a 10 percent reduction in actual F&W dollars, Cavanagh pointed out. By imposing a limit on RME, we will create additional dollars for work on the ground, Delwiche responded. Customers view RME as administrative, but if this program is to be science based, "that's where the science is," Cavanagh said.

Saven said spending 36 percent on RME and 11 percent on coordination is difficult to comprehend. So few of the things I hear in the BiOp litigation are based on anything we've learned for all of this money we've spent over the years, he said. I'd suggest we look at the medium range of \$144 million and take another \$10 million out of RME and \$2 million out of BPA overhead and dedicate that \$12 million to direct, on-the-ground projects, Saven recommended.

Lewis read a statement in support of funding F&W "adequately" in the next rate case. He said the tribes had repeatedly been asked to cut back on harvest to restore species, and he said they had spent considerable effort and money trying to get BPA to provide adequate funding for F&W. Lewis urged BPA to incorporate CBFWA's estimate of what it will take to implement subbasin plans into the budget for the rate case. We are asking BPA to start at \$186 million in the next rate period and ramp up to \$240 million by 2009, he said. Lewis said if BPA goes with the low case alternative for F&W spending, it would take 100 years to implement subbasin plans and result in more species loss. This is unacceptable, he stated. The bottom line is that BPA should incorporate the CBFWA cost estimates into its rate case and recognize events that could impact F&W funding, particularly the litigation on the FCRPS BiOp, Lewis said. Recovery under the ESA could go well beyond the subbasin plans, he pointed out. The Yakama Nation wants to work with others in the region on F&W funding, but if BPA goes forward without an adequate budget, "we have no choice but to nationalize" this issue, Lewis concluded. [Lewis' complete statement will be posted on the web site.]

We are working on a response to the CBFWA proposal, Delwiche said. The costs CBFWA came up with are estimates of implementing all of the activities in the subbasins plans, without a recognition of what BPA is responsible for funding, he said. It's an overestimate of what we see as the ratepayers' responsibility, Delwiche stated.

Rod Sando (CBFWA) said it is important to note that CBFWA did not say it is entirely BPA's responsibility to fund the subbasin plans. We need to see how to partition off the responsibility, he said. We do start at \$186 million for the rate period, which is what the number was at the start of the last rate period, Sando added. BPA spent \$15 million on the subbasin plans, he pointed out. We spend so much on planning, but then have to struggle to implement the plans, Sando commented.

When the 2000 BiOp came out, the region adopted an aggressive non-breach strategy, he continued. "It put you in the habitat business" to take pressure off of operations, Sando said. Habitat restoration isn't easy, especially when you have to do it on private land, he said. As you struggle with the budget, you have to look at what you want to achieve – the F&W managers have not been able to fully implement their programs, Sando said.

F&W O&M: Representatives from the Corps of Engineers and the Bureau of Reclamation explained the funding for their F&W related O&M activities, the projected total for which is \$41.2 million annually in the 2007-2009 rate period. Paul Ocker (Corps) went over his agency's process for prioritizing projects and how the expense budget is divided among anadromous fish, wildlife and resident fish, and water quality projects. A budget history shows a ramp up from 2001 to 2002 and 2003, which reflects activities done to meet the BiOp, he explained. In 2007, the budget levels off, Ocker said. The budget is flat out to 2011, but the Willamette BiOp could change that when it comes out, he noted.

Ocker described things that have affected the budget in the past and those that could affect it in the future, and he pointed out that cost and biological effectiveness are considered on a case-by-case basis. We don't operate in a vacuum, he stated, describing the role of the Regional Forum on the Corps' spending decisions.

Dave Lyngholm (Reclamation) went over the background and goals for the Leavenworth Fish Hatchery Complex, which mitigates for Grand Coulee Dam. He explained the budget allocations among various facilities and a history of expenses.

Delwiche gave an overview of the history of the CRFM, noting that annual appropriations for CRFM have been about \$70 million in recent years and that BPA ratepayers cover about 80 percent of the costs. CRFM will cost about \$1.5 billion to \$1.6 billion when it is complete in 2014, he said. Delwiche said there have been recent discussions about CRFM transfers to plant-in-service. These have to be done in accordance with standard accounting practices and they must pass muster with the Inspector General, he said.

John Kranda (Corps) explained that the Corps has been holding CRFM mitigation analysis costs as construction-work-in-progress since 1991. This was done according to guidance from Congress, but Congress probably didn't anticipate the scope of the studies once the BiOps came along, he said. The Department of Defense auditors have been looking at the amount that is being held and said the policy needs to be revisited, Kranda said. If a determination is made that holding these longer is not appropriate, they will have to be transferred to plant-in-service and go onto BPA's books, he said.

Kranda said two scenarios for transfer are laid out in the packet (p. 49) – they represent "bookends" for what could happen. One certainty is that we have to go up the chain of command at the Corps and discuss the policy, he said.

Can the studies be paid for over 50 years? Saven asked. Yes, Val Lefler (BPA) responded. The guidance at the time from Congress was to capitalize the studies, Kranda agreed. Lefler explained the impacts of the scenarios to BPA's interest and depreciation budget, which were presented in the packet (p. 63).

The \$300 million in study costs seem to have taken people by surprise, Kris Mikkelsen (Inland Power) said. I can't imagine that going on at our utility – that we would be responsible for something of that magnitude that takes us by surprise, she said. There is "a missing link" with how BPA is relating to the Corps and Reclamation on projects that BPA is responsible to fund, Mikkelsen said. "The system is broken," she added.

With respect to the plant-in-service issue, the guidance from Congress has been followed, but the outcome may not be consistent with the intent of Congress, Delwiche responded. There has been a lot of discussion about this in the PFR workshops, he said, adding that the actual cost and rate impacts are not as big as might have been expected.

## Conclusion:

Norman went over a list of items he captured from the discussion in terms of what BPA ought to do to increase or decrease F&W budgets. "The elephant in the living room is the outcome of the BiOp litigation," he said before summarizing what he had heard.

I support the Yakama statement, Hirsh said. "Planning is good, doing is better," she said. If we are not implementing, we're not achieving the goals in the subbasin plans, Hirsh said. I support a high level of funding for the direct program, she stated.

The burden is falling disproportionately on ratepayers in depressed communities, Lovely stated. If there are sufficient additional revenues to fund above the base level, do it, he said. But I support Eldrige's suggestion, Lovely added.

I support that as well, Gregg said. I also support the lower level of funding for the LSRCP hatcheries, he added. And I'd support moving funding from RME in the Integrated Program to on-the-ground projects, Gregg said.

You have heard from the F&W managers that they don't have enough money to put the F&W program into full effect, Cavanagh pointed out. One thing that's encouraging is no one has said to just let the resource go entirely, he added. There is a minimal level at which the program is effective – listen to the F&W managers, Cavanagh urged.

Fish spend a limited amount of time in proximity to the hydro system and most of their time elsewhere, Marshall pointed out. We have to get a handle on the losses from predation and harvest, he said. With regard to the three levels of Integrated Program funding, we can't say what we'll get with any of them, Marshall said. We have to get at a measurement of what we will get, he said. The idea seems to be, if we spend more money we will get more, but we have no idea if that is true, Marshall stated. We need better studies about what we are getting with expenses of this magnitude, he said.

With regard to the \$300 million in CRFM studies, it is only fair that we understand "the rules of the road" about how these decisions are made and our opportunities to participate, Saven stated. The process would be enriched by the participation of our customers, Delwiche responded. A broad spectrum of opinion leads to better decisions, and I would advocate for stronger, regular customer involvement, he said. We need information about when the decisions will be made in this process so our participation counts, Saven said.

## III. Risk Mitigation

Risk management will be a huge issue in the rate case – it's such a big issue that we wanted to get the discussion going in the PFR, Norman said. He listed four major categories of risk: hydro variability; market price variability, IOU benefits, and other, including unexpected expenses and the BiOp. He also explained why risk is a bigger challenge in the next rate period: low starting reserves, reduced credits to mitigate low

water; returning to a traditional 92.6 percent Treasury payment probability (TPP) standard; greater reliance on volatile secondary revenues; increase in power liquidity reserves; and new uncertainties, including IOU benefits, wind, and transmission expense.

Why don't you consider BPA as one fund [as opposed to each business line] for purposes of reserves? Gregg asked. We don't want to double-count reserves, for both the TBL and PBL, and power rates need to recover power costs, Norman responded. Are you stacking all of these risks on top of each other? Ryckman asked. All are factored into the size of the risk, Norman said. It seems you are being overly conservation since not all of these things will happen, Ryckman pointed out. What we're looking at is whether we have a 92.6 percent chance of paying Treasury given the probability of each of these factors, Norman explained. We are trying to come up with the appropriate probability, he said.

I agree that transmission should not subsidize power, Lyn Williams (PGE) said. But that seems inconsistent since other things, like debt optimization, transfer across the line, she pointed out. At the end of the day, you need to get the Treasury paid, Williams stated. Our principle for the agency TPP not to get higher than the 95 percent two-year standard, Norman said.

When we were discussing the SN CRAC, we were talking about a 50 percent probability, Lovely pointed out. We have had four and are going on five "horrible years," but we're doing okay, he said. You are actually doing okay now, but "you see this grave risk on the horizon," Lovely said. What you are proposing is to take money from depressed communities to put it in your coffers, even though we still bear the risk, he said. Leave the money in our communities, understanding that you will raise rates if you need to Lovely urged. You are ruining our credit rating to keep your rating high, he said.

To the extent you want to keep the money in your communities and live with the variability, we are open to it, Norman said.

With regard to "the traditional" TPP of 92.6 percent, that came from your 10-year financial plan that is now over 10 years old, Saven said. We didn't know the answers to these risk factors then either, he said. I don't think you should take a 10-year-old plan and say, that's where we need to be, Saven said.

This is a number we can debate in the rate case, but it's a standard we've talked to OMB and DOE about, Norman responded. It signals BPA's commitment to meeting its responsibilities to pay its debts, he added.

I see downside risk on your list, but no upside risk, Kevin Clarke (Seattle) pointed out. The problem is counting on secondary revenues and not having them materialize, he said. You sold off 20 percent of the risk to your customers in the form of Slice, Clarke said.

Costs are also a way to meet risk, Marshall said, adding that BPA should start looking today at where it can cut costs. You have time to do this before the next rate period, he

said. "We're tapped out," Marshall stated. If we have to go back and raise rates, there will be new managers at some utilities, he predicted.

We are trying to do that in every way, Norman stated. We are trying to manage costs aggressively, he said. Call me or e-mail if you see things we can cut, Norman said.

Your load serving obligations are clearer now than they were in the last rate case, Saven pointed out. I'd say we have a huge amount more certainty than we had in the last rate period, he said.

Norman explained the range of possible PF rate outcomes. We came up with a 28-mill cost without any risk factored in, he said. To set the rate, you have to deal with risk, and the range of responses is, at the high end, you have a fixed rate, and at the low end, you have customers take the risk of variability, Norman explained. The "risk adder" ranges from relatively small to large, he added.

Norman went on to describe several rate options that incorporate risk in different ways and offered a table of where the rates would go with each option. These are "really rough numbers," but we are trying to illustrate the effect of the mechanisms, he said.

Your table assumes the costs will be the same regardless of the rates, Kevin O'Meara (PPC) stated.

What about the effect of rates on your credit ratings? Cavanagh asked. As long as we are meeting the TPP, we don't see that as a problem, Norman said. The ratings analysts will look at how we are handling things overall, Eric Larsen (BPA) agreed.

If there's \$600 million in risk to cover, can BPA commit to cover a portion on the expense side? Dick Helgeson (EWEB) asked. If you have an adverse year, could BPA carry a portion of the risk, with \$200 million in CRACs, and \$200 million covered by reserves? he asked. I don't see cuts figured in here, Helgeson added. We need to look at our options, Norman responded, adding that he didn't know which parts of the cost structure could be used for cuts of that magnitude.

I have no interest in a mechanism with rebates, Saven stated. If you have a mechanism that you can adjust only for certain things, like a fuel-adjustment clause, it's easier to explain, he said. The load-based CRAC had high credibility, Clarke agreed.

I circled the word "trust," Paul Elias (McMinnville) stated. He referred to "the mischief" BPA created with the Slice product, saying I see words like "possible" and "forecast," which give BPA a lot of leeway. When you negotiate with "an 800-pound gorilla," you know which way it is going to go, Elias added.

What about a line of credit from the Treasury to use for the variability, Marshall suggested. You could make a good case given that the Treasury would lose tax revenues

from the region if the Northwest economy takes a hit, he said. We have explored extensively having the government act more aggressively as our banker, and I'm not real sanguine about getting that to happen, Norman responded. Having a third-party take on the hydro risk doesn't look promising either, he said.

Lovely said utilities have taken hits to their credit ratings. It's detrimental to us now in our ratings to be a customer of BPA, he said. That is not the way it used to be, and "you should be worried about that," Lovely stated. You're proposing an increase, and to do option B in my utility would mean a 20 percent rate increase, he said. "That's a lot to ask so BPA can have a bucket of money," Lovely stated.

"It would be comforting to have one number on your table that begins with a 2," Gregg commented.

The year between when you adopt rates and when they take effect can be very problematic, Clarke said. It's something we need to keep an eye on, he added.

Aren't there ways BPA could create a more stable revenue stream, for example, provide preferential access to secondary energy? Cavanagh asked. On price risk management, there are a lot of tools, but we're assuming we're doing a good job with forward contracts, Larsen responded.

We've appreciated the transparency you've offered, Hirsh said. It would be a loss if the first thing that comes forward in risk management is cutting programs that are within budget, she said. Specifically, I'm talking about conservation and renewables, energy efficiency, and F&W, Hirsh stated.

We've been seeing BPA do okay even with bad water years, Lovely said. I'm struggling to understand what you perceive is so much riskier in the three-year rate period than in the last five-year rate period, he said. Why is it so imperative to go to this level of risk mitigation? Lovely asked. We have tried to lay out as clearly and openly as we can what we see as the risks, and we have great interest in working with customers and others to find a solution, Norman replied.

The Yakamas and CRITFC have not taken a position on risk, Ed Sheets (Yakama) said. There are still significant uncertainties with your F&W costs and disagreement about the base costs, he said. In the past, F&W have borne the risk in your mitigation strategy, Sheets stated.

If you raise rates 20 percent, we will lose load, Eldrige said. There is a point at which you won't have as much revenue coming in as you project, he stated. That is not going to happen with this range of rates, Cavanagh commented. The choice is to face the most volatile energy market in history, and people will have to balance all of that with making BPA purchases, he said.

We are involved in the litigation over the BiOp, and the potential changes could have a drastic effect on the economy, Saven said. We need to consider if the business would be there to support it, he said.

You made the cost reductions recommended by the Sounding Board, Cavanagh said. You've exercised cost restraint, and I'm skeptical you can find much more, he said. You can always minimize rates in the short term, but the financial markets could react if they see customers potentially facing the volatility of the market – the principal victim wouldn't be BPA, it would be credit ratings, he stated.

But in this case, higher market prices help BPA, O'Meara pointed out. High prices unrelated to hydro conditions are not necessarily a good deal, Norman responded. This year, high prices are not hurting us, he added.

Ultimately, BPA customers take all of the risk, so it's a question of timing, Williams said: when do we take the risk.

The last couple of years have increased our trust – we aren't through, but we've made progress, he said. The more variable the rate, the more problem it gives retail utilities, Clark stated. We don't have "piles of cash" either so we have to find ways to move money around among us, he said.

Norman cautioned customers not to walk out of the room with the idea that BPA is proposing a 36-mill rate. He noted that BPA views that high a rate as unacceptable, and the task is to work together to find the best way of dealing with the risks. The risk discussions will go on for the next year, he said.

We're open for input on the PFR topics until May 20, Norman reiterated.

The meeting adjourned at 3 p.m.