Bonneville Power Administration
Power Function Review Technical Workshop
April 5, 2005

BPA Rates Hearing Room, Portland, Oregon
Approximate Attendance: 50

Fish & Wildlife Program

[The handouts for this meeting are available at: www.bpa.gov/power/review.]

Introduction

Michelle Manary (BPA) welcomed participants to the meeting. At the end of tomorrow's meeting we'd like people to fill out the feedback form that will be included in the packet – we want your ideas for the wrap-up meeting May 9, she said. Manary also noted that an updated Scoresheet was posted on the website Monday.

F&W Program

This is the fifth in a series of workshops on BPA's fish and wildlife (F&W) costs, Greg Delwiche (BPA) began, saying the previous workshops in Portland, Spokane, and the Tri-Cities were to raise awareness about the components of the F&W budget and the drivers of increased costs. We thought we might have a proposal by today, but we are not at that point yet, he stated. Today we want to have more discussion about the drivers and the options before we develop a proposal, Delwiche said.

Suzanne Cooper (BPA) explained how BPA calculates the monetary impact of F&W hydro operations and how they are used in rate setting. The operations effects are estimated to be $356.9 million annually in the fiscal year (FY) 2007-2009 period, a figure that includes the cost of power purchases and foregone revenues, she said. Cooper pointed out that there is not a line item in the budget for fish operations. The operations are dealt with in modeling hydro operations, she said. They become assumptions we input to HYDSIM, the model used to estimate period-by-period average energy production, Cooper said.

She listed the three main areas of fish-related assumptions accounted for in the hydro regulation models: reservoir elevation objectives, juvenile bypass spill objectives, and flow augmentation targets. Cooper explained how BPA establishes fish operations criteria for modeling, and she listed several uncertainties about the next rate case period, including timing of installation and operation of removable spillway weirs (RSWs) and a proposed summer transportation test requiring additional spill at collector projects. She offered an example of operations at eight federal hydro projects taken from the Updated Proposed Action/Biological Opinion (UPA/BiOp), along with the proposed schedule for RSW and other surface passage improvements that could occur during the 2007-2009 period.

Cooper explained assumptions used to model the generation at five hydro projects with the passage improvements installed, and she offered a table of the results. She noted that improvements such as RSWs are operated in a test mode for two years, and as result, benefits are not immediate. If these improvements meet the biological performance criteria, the table reflects the energy gains that would occur over time, Cooper said.

What happens if survival does not improve during the test mode? Scott Levy (Bluefish.org) asked. Then the Corps would look for a different way to operate, Cooper replied. There would be a lot of tests before "we scrap" the improvement, she added.

Could we get the math behind the calculation of the $356.9 million in hydro operations effects? Dave Hoff (PSE) asked. We could make that available, BPA staff said.

The proposed summer transportation test would involve some in-river migration of Snake River fall chinook, along with summer spill, she said. If the test is conducted, the model shows that generation would be reduced in July and August by 473 aMW and 448 aMW respectively, Cooper said. But there is uncertainty about the assumptions for the modeling since the study design is still under discussion, she noted. The study, which would compare in-river versus transportation survival, is expected to start in 2007 or 2008, Cooper said.

Again, there are uncertainties surrounding the decisions we need to make in modeling the fish operations, she reiterated: the RSW schedule; what operations will be when the RSWs and other bypass improvements are installed; and the design and timing of the Snake River fall chinook transportation study. Cooper indicated that an optimistic outlook would be to assume the biological performance is achieved and the schedule holds, and a pessimistic outlook would be to assume that is not the case. We're interested in hearing your views, she wrapped up.

Are there choices here that are not mandated by the BiOp? Fred Rettenmund (Inland Power) asked. "Our discretion is limited," Cooper responded. We have discretion about assumptions in the hydro regulation studies – that's where our discretion lies, she said.

It looks like some assumptions are already made, Geoff Carr (NRU) commented. Are they optimistic or pessimistic? he asked. The numbers assume the schedule that has been laid out for bypass improvements, Cooper answered. These are our best estimates, but there is a wide range of uncertainty, Delwiche added.

Levy asked about the effect of reservoir elevations on power generation. Roger Schiewe (BPA) explained that holding water in the system to provide flow augmentation affects reservoir elevations. Under the BiOp, we store water in reservoirs and release it to provide flow augmentation, he said. But storing that water so it is available in the spring takes away from generation in the winter, so flow augmentation does not provide a net gain for the power system, Schiewe added. Overall, there is a loss since power prices in spring and summer are lower than in the winter, he said.

Moving on to the Northwest Power and Conservation Council's (NWPCC) annual budget, Delwiche said the annual average for 2007-2009 is estimated to be $9.1 million, of which F&W pays 50 percent. How does that figure compare to the statutory limit on the NWPCC's budget? Bill Drummond (Western MT G&T) asked. Have they reached the cap? he asked. Delwiche said he did not know, and Manary said she would try to provide the answer.

There is a formula in the Northwest Power Act that relates the Council's budget to BPA's firm power sales, Larry Cassidy (NWPCC) explained. But changes that were made to the residential exchange have rendered that formula unworkable, he indicated. We think we are below the limit set in the Act, and BPA thinks we are above, Cassidy said. It is a continuing discussion we are having with BPA, according to Melinda Eden (NWPCC chair). We are working this out with BPA, Cassidy agreed, adding that the Council "sits tight" on its expenses.

Bob Austin (BPA) explained the expenses BPA covers for O&M at the Lower Snake River Compensation Plan (LSRCP) hatcheries, which are operated by the U.S. Fish and Wildlife Service (USFWS). He went over the program goals, which he noted are stated in terms of adult returns, and objectives, performance measures, and program funding mechanisms.

Through FY 2000, the LSRCP program was funded by Congressional appropriations, which BPA repaid, but a direct funding agreement for program expenses is now in place between BPA and USFWS, Austin explained. The agreement covers only expense, not capital, he pointed out.

Austin listed several drivers of costs and future uncertainties, including hatchery reform, new BiOps, cost of living increases, outcome of the U.S. v. Oregon litigation, and unexpected maintenance costs associated with aging facilities. He went over LSRCP spending levels since 2002 and noted that a new funding agreement will need to be put in place by 2007. Negotiations will begin within the next year, Austin said.

He outlined three alternative approaches to funding and the costs associated with each for the 2007-2009 period. The approaches are: baseline O&M; baseline O&M plus some non-routine maintenance; and baseline O&M and a more comprehensive inventory and schedule for non-routine maintenance. These are the alternatives we have looked at, but there are others, Austin wrapped up.

There is a lot of monitoring and evaluation (M&E) associated with hatcheries, Kevin Banister (PNGC Power) pointed out. Given the limited resources, have we looked at whether there are hatcheries doing similar things and whether there are redundancies? Banister asked. Has a hatchery ever been closed? he asked. Austin said the LSRCP hatcheries are reviewed and evaluated periodically, and there is an annual report issued on them. No LSRCP hatchery has ever been closed, he added.

Joe Krakker (USFWS – LSRCP Project Manager, Boise Office) said LSRCP programs have been modified over the years to address issues in the evaluations, as well as issues raised elsewhere. He said that meeting adult return goals depends on ocean conditions and other things "outside our control." We've done better in recent years, but we can't do anything at the hatcheries to improve things when ocean conditions are bad, Krakker indicated.

The direct funding agreement is up for renewal, Carr said. How would you compare the old funding mechanism with the new? he asked. In hindsight, "it's a double-edged sword," Krakker said. With appropriations, we could carry funds forward, and as the facilities began to age, we were very careful about keeping money back to address problems at them, he indicated. With the new funding agreement, we lost our ability to carry over funds, so we try to incorporate the needs we have each year, Krakker said.

Could you capitalize things that are done to extend facility life? Kevin Clark (Seattle) asked. In some cases we could, if the item meets our capitalization standards, Austin replied. We do not currently have a capital agreement, but we have raised that as an issue, he added. Clark asked that LSRCP capitalization be put on the PFR Scoresheet.

The current direct funding agreement is silent on capital, Delwiche said. There is a policy choice here about whether we add something on capital to the agreement or whether we work with Congress to get appropriations to cover capital needs, he said. The approach that's taken would affect the amortization period for capital investments, Delwiche noted. We will provide a proposal on the LSRCP funding level in our PFR closeout letter, he stated.

Rettenmund asked if USFWS benchmarks its hatchery facilities with others. Krakker said that such an exercise was done, but costs depend on a number of variables. A simple comparison does not adequately capture the differences among facilities and programs, he said. Rettenmund said he had seen both the USFWS and Idaho Power hatcheries, and the government facilities are like "a Cadillac" compared to the utility's "Chevy."

How do the LSRCP fish figure into harvest? Levy asked. We assume these fish are for harvest, Krakker said. But, he added, some of the fish in our facilities could be considered part of ESA-listed species – their relationship with ESA recovery is uncertain.

One of the uncertainties with F&W funding has to do with hatchery reforms, Ed Sheets (Yakama Nation) pointed out. What part of your proposed budget is dedicated to these activities? he asked. We don't have a good indication of those costs, but we've put in about a quarter of a million dollars per year as a placeholder, Krakker replied. The costs could be more, but there is a large amount of uncertainty, he added.

Lon Peters (PGP) asked where the LSRCP hatchery goals came from, and Krakker said they were taken from a Corps report on mitigation for the Lower Snake River dams. Peters asked how the U.S. v. Oregon case could affect the cost of achieving LSRCP goals. The uncertainties relate to how you implement the program to reach objectives

that could come out of the litigation, Krakker responded. The decision could shift harvest objectives, and that could lead to changes in how we implement the program, he indicated.

One of the goals here is for rainbow trout, Banister commented. Is the habitat behind the dam good for rainbow trout? he asked. No, Krakker said. Anticipated habitat improvements "were sidelined" – the reference to rainbow trout ties back to the fishing opportunities lost due to construction of the dams, he said.

Integrated Program

Delwiche said the Integrated Program refers to integrating BPA's Northwest Power Act and ESA responsibilities. In developing the scenarios, we've attempted to do a zero-based budget, but the subbasin plans and BiOp may mean the region will need to tweak the Program's project portfolio in the future, he said. Using the current projects as a base may not be realistic, Delwiche stated.

The current Integrated Program budget is $139 million annually, Austin said. He described the general categories of expense, reflected on pie charts in the meeting packet, and pointed out that BPA would like to see 70 percent of the money dedicated to on-the-ground projects, rather than the current 53 percent. Austin went over the assumptions for future F&W funding, explaining a matrix of recent spending, budget drivers upward and downward, and a base figure for each expense category that reflects the "slew of projects" currently funded that will need to be continued. He also noted that habitat actions are an area of great uncertainty when it comes to the next F&W budget.

Doug Marker (NWPCC) said Council staff has worked with BPA to establish the base, which he described as a "very conservative" figure that includes projects BPA has "an explicit commitment" to do. Even so, the projects are subject to the Council's project-selection process, he noted. We excluded some long-term projects that have ongoing costs but for which there is no specific funding commitment, Marker pointed out. There is a high level of agreement between the Council and BPA on the base, he added.

There are three primary issues associated with mitigation and getting to an appropriate funding level for the next rate period, according to Austin: pace, prioritization, and mitigation responsibility. He pointed out that in the current budget, about $40 million is spent annually on research, monitoring, and evaluation (RME), and that BPA and the Council are looking for ways to be more strategic and efficient with those expenditures. We would like to get RME down to 25 percent of the budget – "it's a lively issue for us," Austin stated. BPA is also very interested in cost sharing and how to structure such arrangements and is also looking for input on capitalization of investments such as land acquisitions and conservation easements, he said.

Austin laid out the background for BPA's decision on a funding level for the Integrated Program, noting again uncertainties such as subbasin planning, hatchery reforms, BiOp litigation, and a BiOp for the Willamette. In developing the funding level, BPA is

seeking to keep rates as low as reasonably possible, while meeting its F&W and environmental responsibilities, he stated.

Austin listed key elements in BPA's long-term vision for 2007 that are integral to establishing an appropriate funding level, and he laid out four alternatives for funding in the next rate period: decrease to $125 million; status quo with a small increase ($139 million to $150 million); increase above status quo ($150 million to $164 million); and providing a rationale only with costs to be determined.

Delwiche presented, in more detail, three cost scenarios (see attachment) for the upcoming rate period with specific categories of expense (i.e., habitat, RM&E, etc); with the three scenarios roughly equated to the low, medium and high alternatives previously described by Bob Austin. He noted that Council staff helped develop the numb

You have subbasin plans and the new BiOp on the same line, Tony Grover (NWPCC) pointed out. Do you see a linkage? he asked. Yes, we do, Delwiche said. Joan Dukes (NWPCC) asked about the 5 percent reduction from FY 2001-04 spending based on "assumed efficiency gains." Could you share some specifics? she asked. We don't have specifics, and some say there are no efficiencies available, Delwiche responded. But from the experience you think your organization is," there are efficiencies that can be gained, he added.

Danielson asked what the assumptions are about the Northeast Oregon Hatchery (NEOH). We tried to get at that in the drivers that could push costs upward, Austin responded. NEOH is one of the costs that is likely to drive an increase in the production category of future expenses, he said.

Will you use one of these cost scenarios in the draft closeout letter for PFR? Clark asked. Yes, or something close to one of these, Delwiche responded. There is also the fourth option, which is to delay deciding upon a specific budget and instead take more time to determine costs after first developing performance standards, priorities and funding responsibilities, but "I've recommended internally against that option," he acknowledged. It would perpetuate the uncertainty and would not serve anyone well, Delwiche stated.

Carr pointed out an April 1, 2005 letter to Steve Wright and Melinda Eden stating the customer position on a F&W memorandum of understanding (MOU). On the last page, we express support for increasing the allocation for on-the-ground projects, he said. What's the process for moving the funds? Carr asked. It takes a commitment between the Council and BPA, Delwiche responded.

We are designing the project selection process for 2007, and we are looking at a more strategic and deliberate approach to RME funding, Marker said. But, he added, the allocations to RME are used to gather information we need to make decisions.

We would like to work with you to promote cost sharing, Carr said. We are working on a cost-sharing agreement, Delwiche said, adding that the Columbia Basin Fish and Wildlife Authority (CBFWA) would sponsor a workshop in June about cost sharing.

Who would be the cost sharers? Levy asked. Delwiche provided several examples, including federal agencies, such as the U.S. Forest Service, and agricultural entities, such as farm bureaus who have similar responsibilities to BPA for habitat protection and enhancement. Also, landowner cooperation is significant in many F&W projects, Marker pointed out.

Peters raised the issue of assuring that the M&E being funded under a proposed 70-25-5 split is best from a biological perspective. Delwiche pointed out that M&E costs at new facilities can be as large as the O&M. We are looking at M&E expenditures that are more focused and strategic, he said. Given the total that is being spent in the basin for M&E – it approaches $100 million annually – "it cries out for more prioritization and competition," Delwiche said. Constraining the available monies will help, but we need to ask more questions in terms of what information we need, he continued. "We are all ears" about what might be a more strategic way to get at this, Delwiche added.

There is a cost versus risk issue here – how much investment in M&E will we forego given the risk of not having the information, Marker pointed out. How this will occur and be prioritized are questions for the Council since we select projects, he added.

"It is not that M&E is bad," but we need to look at it more closely, Delwiche said. We've been at this since the 1980s, and our body of knowledge is much greater than it was then, he pointed out.

CBFWA has been funded to do a major evaluation of M&E, to develop standards and protocols, and implement them across the region, Rod Sando (CBFWA) said. We will hold a regional workshop to share our information, he added. The M&E in the basin has not been systematic, and we will be looking at options for making it more efficient, Sando said. We are aware of the issue, and "I think we are in good shape for resolving it," he stated, adding that the CBFWA evaluation is under way. We need to appreciate that "M&E is bread and butter" for many agencies – they need it to provide species regulation, Sando said.

Where is the Fish Passage Center (FPC) budget? Drummond asked. It's included in the "Information Management, Coordination, and Administration" (IMCA) category, Marker responded. Is the review of overlap between the FPC and other entities still going on? Drummond asked. We are looking at the relationship between FPC and DART and StreamNet, Sando said. Will the review be done in time for the BPA budget proposal? Drummond asked. Yes, but I don't expect to see much change – there's not much overlap, Sando responded.

Asked whether funding option four, establishing the rationale only, means the F&W budget might be set in the rate case, Delwiche said it did not. This PFR process is about setting the funding level – we won't revisit it in the rate case proceeding, he stated.

UCUT Presentation

Warren Seylor (STOI/UCUT) said as chair of the Upper Columbia United Tribes (UCUT) he had asked staff and UCUT members to put together a proposal for the region to use in developing a package for funding F&W mitigation in the Upper Columbia. We wanted to develop something everyone could work from – our proposal doesn't have all the answers, but we felt the upriver issues were not given the merit they deserve, he said. We wanted to get out that message, Seylor stated.

Mary Verner (UCUT) explained the proposal, calling it a comprehensive approach to implementing subbasin plans in the Upper Columbia Ecoregion. We developed the proposal to show people a comprehensive proposal to address subbasin plans and move from plans to implementation, she said. And we wanted to get going on BPA's mitigation responsibilities, Verner stated. She outlined the steps UCUT went through, starting with submittal of subbasin plans to the NWPCC for adoption and submittal of measures to be implemented. The UCUTs also submitted a 10-year estimate of costs to implement the plans at a reasonable pace, Verner continued.

The UCUT proposal is based on biological outcomes, she said. It includes only measures that are BPA's responsibility, according to Verner. Our determination in that regard is based on institutional knowledge of BPA's obligations under the Northwest Power Act, she said. Verner pointed out that the tribes seek other sources of funding to carry out activities that are not related to the power system. She provided examples and said all five UCUT tribes use cost sharing to further their work.

UCUT estimates its proposal will cost an annual average of $45.3 million for 10 years, Verner said, noting this represents both expense and capital. The average would go down if stable funding is provided over 10 years, in part because there would be less process – "we could get managers out of meetings and into on-the-ground work," she said.

Verner said the UCUT cost estimate is part of the Integrated Program budget and would remain the same regardless of the direction that budget takes in the future. If there is no increase, she acknowledged, our proposal would require shifting funds currently being used elsewhere in the basin. Verner offered a method for equitable allocation of funds to the Upper Columbia Ecoregion, and she said mitigation funds should be proportional to F&W losses and relative to the benefits derived from each dam.

The UCUT proposal supports a 70-15-15 split among anadromous fish, resident fish, and wildlife, as well as the BPA goal of a 70-25-5 split among on-the-ground projects, RME, and coordination, she continued. It also supports the Council's F&W program goal of mitigation in the blocked area, she said. Verner listed ways in which the proposal moves

toward achieving goals and closing out BPA's obligation, including restoring habitat and resident fish substitution. She said it also addresses species bordering on an ESA listing.

Could you speak to how this proposal has been received by other F&W managers? Banister asked. CBFWA is looking at an allocation formula, Verner responded. We've asked for response to our proposal, she said, adding that people are struggling with the 70-15-15 split overlaid with the 70-25-5 split. The challenge is the lack of money, Verner stated. If there is not enough money, we are asking the region to address the unmet needs that exist above the Upper Columbia dams, she said.

Sheets said he is working with CBFWA on the allocation formula, and the UCUT costs "are in our estimates." We intend to finalize our work this week, so if you have more information to offer, "we're eager for it," he stated.

How do you fit this program under a $139 million budget? Carr asked. We've heard (from recent CBFWA estimates) it could take hundreds of millions of dollars to implement subbasin plans, he added. There isn't enough money to do all that is required, Verner responded. Our proposal is based on a worst-case scenario – a frozen budget, she said.

What we are proposing is no higher overall spending, but higher spending in the Upper Columbia, Ron Peters (Coeur d'Alene Tribe) stated. We are talking about funding shifts into the Upper Columbia, which has been undermitigated, he said. The proposal represents an increase in emphasis on undermitigated habitat units, Peters explained.

We don't just look at $139 million, we look at the $700 million total F&W expense, Banister pointed out. That is what's behind our drive toward efficiency, he said. We've seen increases in the F&W program that outpace the rate of inflation, Banister added.

Corps and Reclamation F&W O&M

Paul Ocker (Corps) explained the Corps' expense budget for F&W O&M, describing how projects are prioritized into four categories. The priority 3 and 4 items don't always get funded, he said. About 85 percent of the budget goes toward anadromous fish O&M, 10 percent toward wildlife and resident fish, and 5 percent toward water quality, Ocker said. He went over the expense history and where the budget is expected to head through 2011. The budget is beginning to level off as we meet BiOp requirements, Ocker stated.

He listed items that have changed the budget in the past and those that could affect the future, and he explained how cost-effectiveness and biological effectiveness are addressed in developing measures and budgets. Ocker described the role of the Regional Forum in deciding where money is directed, and he said the Corps prepares comprehensive planning documents on its F&W O&M activities.

I'd like to encourage you to coordinate your research with what is happening in the Integrated Program, Banister suggested. He also encouraged the Corps to look for

redundancies among programs and gain efficiencies. Ocker explained that not all activities are funded from the same budgets, but the expenditures are funneled through a central body where they are linked up.

What is your request for dollars associated with the Willamette BiOp? Carr asked. The Corps total estimate for the 07 to 09 rate period is $36.9 million per year, of which a small amount is allocated for use in future Willamette BiOp coordination activities. Alder responded.

Is there coordination on cost-effectiveness between your program and BPA's Integrated Program? Mark Stauffer (NWE) asked. Where is the highest benefit? he asked. A lot of the Corps costs are at the dams on the mainstem, Austin pointed out. There may be some overlap with the Integrated Program, but we have not looked at a comparison, he added.

Dave Lyngholm (Reclamation) described the Leavenworth Fish Hatchery Complex, which provides mitigation for Grand Coulee Dam. The complex of three hatcheries is operated by USFWS and produces spring chinook for release into Icicle Creek, and the Entiat and Methow rivers, he explained. Lyngholm went over the percent of the budget allocated to various activities and a history of Reclamation's F&W O&M expense.

Marker said the Colville Tribe has asked the Council to support a new facility for Grand Coulee mitigation. Lyngholm said he was not aware of the facility, but if it were to be constructed, it would be funded through Congressional appropriations and repaid by BPA. Delwiche said he understood the Colville proposal to be additional mitigation for Grand Coulee and that four hatcheries are envisioned. Ratepayers pay either way whether the funding is through appropriations or the Integrated Program, but the amortization schedule would differ, he said.

Asked about goals for the Leavenworth hatcheries, Delwiche said the goal is to have enough broodstock to release an established number of smolts. Marker said the Council's website has goals, identified as part of the Artificial Production Review and Evaluation (APRE), for all hatcheries, and Delwiche said a lot of information about hatcheries is also on the BPA website.

Is there a plan to develop a single yardstick to measure the effectiveness of hatcheries? Peters asked. Marker said the Council is working to integrate the subbasin plans and APRE into an amendment to its F&W program. He acknowledged that it is difficult to find a uniform measure since hatcheries are operated under different statutes to meet different objectives.

CRFM

John Kranda (Corps) described the Columbia River Fish Mitigation Project (CRFM), providing background about the purpose and authority. The project was initiated in 1991, predating the BiOps, and is expected to be complete in 2014, at a total estimated cost of $1.5 billion to $1.6 billion, he said.

How do you define completion? Clark asked. We are tied to the BiOps now, and they are guiding our project, Kranda responded. The passage objectives in the BiOp drive our investments in improvements at the dams, he said. The CRFM is made up of programs to design and complete juvenile passage improvements at Corps dams, Kranda explained. Juvenile passage was not thought about when the original dams were built, and "we are now paying the piper for that," he added.

Kranda explained that BPA repays the power share of construction and O&M costs once a project is transferred to "plant-in-service." There are research and study components of the CRFM that are not usually seen in a Construction General project, and the money spent on those components has grown quite significant, he acknowledged. A lot of that expense has not been transferred to plant-in-service, and the Corps' accountants think the issue ought to be revisited, Kranda said.

He outlined the history of CRFM transfers to plant-in-service since 1997 and went over two scenarios for future transfers through 2009. He noted that one of the transfer scenarios is aggressive and the other less so. Of the $300 million related to the CRFM mitigation analysis that is outstanding, how much is interest that has accumulated? Carr asked. I will get that figure for you, Kranda offered.

What is your normal guidance for these transfers? Clark asked. We would not normally have this level of studies under our Construction General program, Kranda responded. This is an unprecedented situation, he indicated.

Kranda described the primary focus of the CRFM studies along with the 2005 program highlights, including passage and predation research, and RSW construction and design. He explained the approach to cost-effectiveness and said comprehensive decision documents are prepared for improvements. Our decision documents have gone through Independent Scientific Advisory Board (ISAB) review, Kranda added.

The Corps coordinates with its Regional Forum partners to identify and prioritize, he said, explaining how that process works. Kranda described the steps in project execution and the reviews that take place along the way.

The list of anticipated future actions includes surface bypass improvements, transportation analyses, as well as continued work on biological performance issues, he said. The CRFM cost through 2004 is $930 million; $75 million has been appropriated for 2005 and $89 million was requested for 20006, Kranda reported. The annual estimate for costs from 2007 to 2014 is $70 million to $90 million, he wrapped up.

Clark asked where issues related to extra-ordinary maintenance at Corps dams and CRFM expenses come together. We bring that together across districts at the division level, Witt Anderson (Corps) responded. To the extent that division has discretion about putting CRFM into plant-in-service, we could have "more head room" to fund extra-ordinary maintenance, Clark stated.

We could discuss that with BPA, but we are working to meet BiOp-driven performance objectives, Anderson said. "We want to stay out of jeopardy," he stated. But if there is discretion to choose between the two, we could have more dollars if the plant-in-service transfer is slower, Clark reiterated. The driver for us is good accounting practices, Anderson replied. Those principles will drive our recommendations, he said.

What the customers want is a way to mitigate the effects of the plant-in-service transfers, Carr said. In the end, this has to hang on accounting principles, Delwiche stated.

On April 18, there is a management level discussion of F&W costs and risk, Manary said. That will conclude the F&W topic in the PFR, she said. We'll put out our draft closeout letter May 2, comments close May 20, and we'll have final program levels out the week of June 13, Manary announced.

Borrowing for F&W Capital

Ron Homenick (BPA) explained the mechanisms available to BPA for funding F&W capital investments: bonds issued to the Treasury and capital appropriations. He described both mechanisms, as well as the capital components of the F&W investment, including depreciation, amortization, and net interest. These items are a direct result of the decisions made on capital investments, Homenick said.

Rettenmund asked about the period of depreciation. A hatchery funded through appropriations is depreciated over 75 years, but a hatchery funded through the Integrated Program is depreciated over 15 years, he pointed out. Why the difference? Rettenmund asked. Part of it is the difference in our view of ownership and whether the investment is an asset to the agency or to someone else, Homenick said.

Section 4(h)(10)(b) is the law on amortization, and it provides for a period longer than 15 years, Clark said. Section 4(h)(10)(b) guides our capital policy – it is guidance, according to Phillip Key (BPA). When a project is funded using our borrowing authority, there is an interest in seeing amortization occur more quickly to restore borrowing authority, he added.

Homenick went over the F&W-related net interest, depreciation, and amortization estimates for FY 2007-2009 and listed risks for increase, opportunities for reduction, and drivers of change. He also went over historic levels of CRFM transfers to plant-in-service, F&W Integrated Program investment, and capital expenses. There is considerable investment listed under the individual hydro projects that is fish related, Homenick noted. The accounting "can shuffle the deck" and make it difficult to follow all of the F&W expenses, he added. Homenick concluded with possible scenarios for plant-in-service transfers from 2005 to 2009, a base case and options A and B, and the interest and depreciation associated with each.

Would accounting policies justify either A or B? Carr asked. Yes, Homenick said.

It would be helpful to have a coordinated customer position on the plant-in-service schedule by April 18, Delwiche said. We will need the background on the scenarios in order to develop a position, Carr responded. We also have to understand the implications for the repayment study, he said. And how this interacts with BPA's other debt service, Homenick added.

The meeting adjourned at 4 p.m.

Follow-up questions and information requests

Responses to questions and requests for information received throughout this process will be posted on the Power Function Review Web site on an ongoing basis. The Web address is www.bpa.gov/power/review.

1. Provide the math behind the calculation of the $356.9 million in hydro operations effects.
2. The Northwest Power and Conservation Council's (NWPCC) annual budget is estimated to be $9.1 million, of which F&W pays 50 percent. How does that figure compare to the statutory limit on the NWPCC's budget? Have they reached the cap?
3. How is it determined who funds new hatchery capital – BPA or the Corps?