

# **System Configuration Team (SCT)**

## **Reasonable & Prudent Measure #26**

### **Meeting Notes**

**June 16, 2000**

#### **Greetings and Introductions.**

The June 16 meeting of the System Configuration Team was held at NMFS' Portland offices. The meeting was chaired by Bill Hevlin of NMFS. The agenda and a list of attendees for the June 16 meeting are attached as Enclosures A and B.

The following is a distillation (not a verbatim transcript) of items discussed at the meeting, together with actions taken on those items. Please note that some enclosures referenced may be too lengthy to routinely include with the meeting notes; copies of all enclosures referred to in the minutes are available upon request from Kathy Ceballos of NMFS at 503/230-5420.

#### **I. Chief Joseph Flow Deflector Development – Update.**

Hevlin said that, about a week ago, it was brought to his attention that there may be a problem with the funding for the plans and specs portion of the Chief Joseph flow deflector project. Part of the problem, as I understand it, has to do with where that money would be coming from, and which pool of funds should be tapped to pay for this project, Hevlin said. Basically, it's a "color of money" issue, which has to do with which budget is most appropriate for this project, he explained.

Hevlin noted that the Colville Tribe is very interested in the Chief Joseph flow deflector program, as are many others here at SCT. Of all of the gas abatement measures currently on the table, he said, I think most of us would agree that this is the one that needs to be completed at the quickest

pace.

Beth Coffey said the feasibility report on this project was submitted to headquarters earlier this month. It is currently in-line, with everything else in the country, to be proposed for a Construction General restart in FY'02, Coffey said. What that means is that, in FY'02, if funding is available, we will do plans and specs, and will complete all of the modeling work as well. In FY'03, we will start the construction phase, said Coffey. Construction is expected to be completed in February 2005. Jim Athearn noted that there may be some funds available to begin construction on a limited scale in FY'02.

It sounds, then, as though it is FY'01 that's the problem, said Hevlin. That's correct, Coffey replied – essentially, we need to obtain Construction General funds in order to do the plans and specs, and that's where the FY'01 funding for this project is falling short. How much do you need in order to continue on the original schedule? Hevlin asked. Approximately \$400,000, Coffey replied. If you have that money in FY'01. Will that accelerate construction at that project? Rod Woodin asked. Yes, Coffey replied.

The group discussed where that \$400,000 might come from; Woodin suggested that CRFM funding may be a possibility, but Jim Athearn observed that, in his opinion, this project would not be covered under CRFM. Hevlin replied that anything is possible, given the fact that this is an extremely important project to the region. There are no O & M dollars available for this project in FY'01? Boyce asked. That's correct, Coffey replied.

It was reiterated that the Colville Tribes are very interested in this project, to the extent that they may be willing to lobby Congress to obtain the necessary funding. That would be welcome, said Hevlin, but time is very short if that effort is to succeed. After a few minutes of further discussion, no specific alternative funding sources for the FY'01 Chief Joseph flow deflector program were positively identified; Hevlin suggested that funding for this project be added to the FY'02 CRFM project list, in order to show regional support for this project. No disagreements were raised to this suggestion.

## **II. Turbine Survival Program – Plans and Objectives for 2000 and Beyond.**

Mark Lindgren provided an overview of the current status and future direction of the Turbine Survival Program; he noted that this is a joint study involving the Corps' Portland and Walla Walla Districts and WES, as well as the PUDs, NMFS, the Department of Energy and BPA. The goals of the program are to 1) to gain a better understanding of what is happening in the turbine environment, 2) to optimize operation of the turbine for better fish passage, 3) to identify the most promising turbine

modifications for improved fish passage and 4) to develop a strategy for incorporating this information into the Turbine Rehabilitation Program

The current minimum-gap-runner test sites are Bonneville and McNary Dams, Lindgren said; preliminary results from both sites have been favorable, but researchers are still working to develop the most fish-friendly turbine design. Lindgren spent a few minutes going through the operational changes the program has developed, as well as some of the most recent study results.

Once the optimum design is developed, the next step in the Turbine Survival Program will be to identify the dams with the greatest need for turbine modifications, Lindgren said. The program will then move to the implementation phase.

Current research is concentrating on ways to improve escapement, Lindgren continued, including a relief pipe that could allow fish to bypass the turbine altogether. The researchers are also looking at better ways of tracking fish movement through the turbines; tag size has been a problem in the past but this problem has now been resolved. Some areas of concern, in the fish injury arena, are the wicket gates, tip gap, hub gap and draft tube pier. Researchers are looking at ways to improve all of them, Lindgren said. In general, he said, the testing at McNary has yielded consistent results; what they show is a 2% improvement in passage, lower than expected. Injury rates range from 3%-5%, with the tip gap being the highest-injury area. At Bonneville, preliminary research indicates that current minimum-gap runner technology can improve turbine survival by about 1%.

In terms of next steps, said Lindgren, the Corps is working to finalize the Phase 1 report; that report will include recommendations for Phase 2. The issues Phase 2 will cover include actual testing of draft tube egress, as well as any necessary follow-up testing. The Corps will also try to test whatever turbine design is judged to be best during Phase 2, Lindgren said. In terms of schedule, the second turbine workshop has just been completed and went very well; we're hoping to complete the population extrapolation model in September; we will be doing the McNary tracking study in October, and plan to do the McNary biological test in the December-January time-frame, to try to match up with a planned turbine outage. The final draft Phase 1 report is due out in September 2001.

Lindgren spent a few minutes going through the various costs components for this program in 2001; the total cost is expected to be about \$2.8 million. Hevlin thanked Lindgren for a very lucid presentation

### **III. Update on Emergency Auxiliary Water Supply at Lower Monumental and Ice Harbor.**

Kevin Crum said Ice Harbor is the project whose emergency auxiliary water supply is currently at the highest risk of failure; and that new pumps are needed at that project. Realistically, it would be unreasonable to expect that all three pumps would fail at that project simultaneously, he said; most likely, one of the three pumps would fail, reducing capacity in the system for up to one month. New pumps cost approximately \$1 million each; there would also be a need to upgrade the electrical panel to accept the new pumps. Crum said he plans to report back at the July SCT meeting with detailed plans and specs; at this point, the best available estimate is that it would cost \$4.8 million to upgrade the emergency auxiliary water supply at both Lower Monumental and Ice Harbor.

#### **IV. Update on Juvenile Collection Channel Permanent Bulkhead Work at McNary.**

Jim Ceballos reminded the SCT that a construction contract was awarded in FY'00 to replace the existing ice and trash sluiceway regulating gates at McNary; during the September 1-February 29 construction window, the contractor was able to complete only 10 of the 42 bulkheads. Since then, the Corps has designed new dewater bulkheads, and the contractor is fabricating one for testing this summer. The Corps is requesting a construction window from October 1, 2000 through February 28, 2001 to ensure that the contract can be completed, Ceballos said; NMFS is concerned about the potential impacts on adult passage during the month of October.

Personally, said Ceballos, I would prefer to see construction begin in November, rather than October. However, he said, it appears that adequate precautions are being taken to protect adult passage, and hopefully there will be no problems. It was noted that the SCT does support the bulkhead work at McNary; it was agreed that the Corps will furnish periodic updates as this work progresses.

#### **V. Scoring the FY'01 CRFM Project List.**

Hevlin distributed Enclosure C, the most recent CRFM measures worksheet. The group devoted the remainder of the meeting to a discussion of this list, comparing the state, federal and tribal scores for each line-item.

There was some discussion of the potential effects of the possible drawdown of the Lower Snake River projects on the SCT's priorities; Hevlin observed that all of the recommendations in the current version of the CRFM spreadsheet were made under the assumption that any such changes would not be implemented any sooner than five to seven years. In the interim, he said, it makes biological sense for many of these Lower Snake passage improvements to go forward.

The group devoted a considerable portion of the meeting to an item-by-item discussion of the FY'01 CRFM spreadsheet; a number of comments and suggestions were offered. Ultimately, Hevlin and John Kranda agreed to incorporate all of this input into a new version of the spreadsheet, which they will then distribute to the other SCT members via email.

#### **VI. Next SCT Meeting Date and Agenda Items .**

The next meeting of the System Configuration Team was set for Friday, July 28 from 9 a.m. to 4 p.m. at NMFS' Portland offices. Meeting notes prepared by Jeff Kuechle, BPA contractor.