

Mr. Brian Jobson
Supervisor of Regulatory Affairs and Contracts
Sacramento Municipal Utility District

Testimony Before the Committee on Resources
United States House of Representatives
Hearing on Maintaining Bureau of Reclamation Facilities
July 19, 2005

Introduction

Good Afternoon,

My name is Brian Jobson and I manage the Sacramento Municipal Utility District's (SMUD) Regulatory Affairs and Contracts Department. I am also the Vice Chairman of the Central Valley Project (CVP) Operation and Maintenance Governing Board. I appreciate the opportunity to provide input to the Committee's review of the status of the Bureau of Reclamation's (Reclamation) infrastructure.

SMUD is the largest single power purchase contractor from Reclamation's CVP, buying 31 percent of the CVP's power output under a 20 year contract with the Western Area Power Administration (Western) at cost-based rates. Today I will explain why it is so important to maintain the infrastructure and performance of CVP power facilities in California, and how power contractors have partnered with Reclamation and Western, not just to maintain, but also to upgrade and improve Reclamation's power facilities using a customer "Advanced Funding" program.

The CVP Power Facilities

Congress originally authorized the CVP in 1935 for flood control, navigation, the development of hydroelectric power, irrigation and municipal and industrial water supply; protection of the Sacramento-San Joaquin River Delta from seawater encroachment; and the protection and enhancement of fish and wildlife. The project was constructed from 1939 to 1979.

The original phase of the CVP included completion of the Shasta and Keswick dams and powerplants on the Sacramento River in 1945, which had an original installed capacity of approximately 525 MW. These were followed by completion of the Folsom and Nimbus dams and powerplants on the American River in 1955, rated at 200 MW; the Trinity River and the federal share of San Luis Division powerplants in 1963, rated at 626 MW; and, finally, the New Melones Powerplant on the Stanislaus River in 1979 at 300 MW. Thus the total capacity of CVP powerplants when commissioned was approximately 1650 MW.

These facilities have been operated, maintained and upgraded by Reclamation using a combination of Reclamation employees and contractor engineering and labor. The CVP power facilities, which include 11 power plants, now have an installed capacity of 2006 MW, and generate 4,500,000 MWh in an average hydrologic year. Clearly significant improvements in these facilities have been made since their construction, both prior to and since the advent of the CVP Customer O&M Funding Program. (See Attachment A for a list of the CVP's major power facilities and their current capabilities.)

Importance of Reclamation Power

The power generated by CVP powerplants is used primarily to pump over three million acre feet of water per year to Central Valley farms, but also to municipal and industrial users in Northern and Central California. The remaining 80 percent of the generation is sold by Western under long-term power contracts to over 80 not-for-profit consumer-owned utilities and government agencies at cost-based rates, pursuant to Reclamation law.

This power is a critical resource to SMUD and other CVP power customers. The high reliability and the peaking, reserve and load following capabilities of the CVP's hydro-electric units make a large contribution to reliability in California and the Western Interconnection in general. These long-term, cost-based contracts have been a source of stability in the volatile power climate in Northern California created by the State's experiment with electricity restructuring and market based rates.

In addition, the long-term, cost-based contracts for CVP power have ensured that Reclamation has been able to repay the CVP debt allocated to power ahead of schedule, returning approximately \$440 million in repayment to the U.S. Treasury which is over 75 percent of the CVP debt allocated to power.

Status of Power Facilities in CVP

Reclamation has had in place a “review of maintenance” program for inspecting its facilities, making recommendations for maintenance and upgrades and tracking work undertaken and completed. As can be seen from the above discussion, numerous upgrades to CVP power plants have been accomplished since their construction.

However, as Congressional appropriations for the Reclamation O&M program decreased during the 1990s, Reclamation was in what I would describe as a “put-out-the fire” mode with regard to its CVP maintenance program. This means that it let needed maintenance work go and, all too often, addressed maintenance issues in an emergency mode. As a result, plant availability declined, and outages were more common.

In response to this situation, CVP power contractors worked with Reclamation and Western to develop the CVP O&M Funding Program. This which involved customers more in reviewing the condition of Reclamation power facilities, prioritizing O&M decisions, advancing needed funds, and ensuring completion of operation, maintenance and upgrade work. Before finalizing the O&M Funding Agreement (see summary of Agreement in Attachment B), the power customers conducted a six-month, independent review of all the CVP power facilities. This was done to get a detailed understanding of where the significant problems were, to gain an understanding and appreciation of the causes for reduced reliability of the CVP resource, and to develop a process to return the CVP power facilities to a highly reliable condition. A review of the report provides one with a clear impression of the condition some of the CVP facilities were in at the time.

Since then, through the cooperative participation of Reclamation, Western and customers in the CVP O&M Funding Program, the condition of these facilities has improved dramatically. Great progress has been made to complete work on upgrades and deferred maintenance, staff morale is up and outage rates are down.

Initial Projects of CVP O&M Program

The customers initially funded the O&M Program in 1998 at a modest level, by providing advance funding for the Spring Creek Powerplant annual O&M activities, and rehabilitation work on the three single-phase, step-up transformers and main circuit breakers, all of which were in poor shape and presented potential safety and environmental hazards.

The customers then elected to fund FY1999 and FY2000 O&M activities. One of the unique projects that customers funded was the Keswick Trash Rake. This project was designed in-house by Reclamation engineers, fabricated by a local contractor and cost the customers a mere \$150,000. Yet, its benefit-to-cost ratio was very high. When the trash rake was put into service, it immediately increased the output at Keswick by 10 MW, and allowed the passage of another 1500 cubic feet of water per second through the generators. This is water that, otherwise, was spilled around the powerplant during higher flow conditions and did not produce electricity.

Another project that was funded initially was cleaning the 12-mile long, 17-foot diameter Clear Creek Tunnel that supplies water to the Judge Francis Carr Powerplant. Once again, an O&M project that cost the customers only \$250,000 resulted in a 12 MW jump in the output of the Judge Francis Carr Powerplant.

CVP power customers also have funded the installation of high-tech flow meters that aid in the monitoring, evaluation, and control of the CVP facilities. The flow-meters installed at the Carr Powerplant will allow Reclamation to monitor the gradual deterioration of the output of Carr Powerplant, due to the build-up of chemical and biological deposits on the walls of the Clear Creek Tunnel.

By FY2004, the power contractors had ramped up the CVP O&M Program to a level that funds all the CVP Powerplants' O&M activities. By then, the program was also funding some hardware and software needs for Western to help the agency implement its Post-2004 Marketing Plan (See Attachment C for a list of the projects completed during the first few years of the O&M Program).

The CVP O&M Program has provided over \$56 million in advance funding through the current fiscal year. Power customers have also approved final or preliminary Customer Funding Plans of \$33 million in FY2006, \$34 million in FY2007, \$42 million in FY2008, and \$39.5 million in FY2000.

Importance of Collaborative O&M Plans

The CVP O&M Program has significantly improved the availability of the CVP powerplants and enhanced the operation and reliability of the CVP system as a whole, which benefits the federal government, CVP power contractors and electricity consumers. These accomplishments have also helped increase the morale of Reclamation and Western workers,

and reduced the maintenance and operation costs of the CVP.

Given the importance of Reclamation's power facilities to the energy portfolio of California and the Western states in general, SMUD believes that implementation of collaborative OM&R funding and work plans are an extremely effective way to ensure that these facilities are maintained and enhanced.

The Committee is no doubt aware that is more than one approach to solve the O&M funding problem, and has in fact considered such proposals in the past and likely will in the future. We feel that the CVP O&M Program best meets our needs because the concurrence of the power customers, Reclamation and Western on how operation, maintenance and upgrades are prioritized is required. It ensures that an agreed-upon level of work is fully funded, and completed in a timely manner. This will guarantee a dependable, long-term funding source that meets agency work programming needs and fits into the federal budget process. By ensuring that power contractors have equal voice on prioritization, funding and completion of maintenance and upgrades, more control is exercised over the O&M costs of which are fully recovered through the power rates paid by these customers.

How can Congress help?

Clearly, it is in the best interests of the federal government and the power customers of multi-purpose Reclamation projects that project facilities be properly maintained to preserve the value of the assets and the benefits they provide. To that end, we recommend that Congress:

- Maintain active oversight of Reclamation facilities, as the Committee is doing in this hearing, to ensure that any problems with O&M activities at these valuable federal assets are promptly identified and remedied;
- Support active customer involvement in review and prioritization of OM&R activities and schedules. As I described above, the CVP O&M Program has resulted in quantifiable operational and reliability improvements and cost savings; I am aware that other types of customer involvement processes, such as the Memorandum of Agreement that the power customers, Reclamation and Western have at the Colorado River Storage Project have also worked extremely well;
- Support appropriations of federal funds for the Bureau and the power marketing administrations specifically targeted to performance of power O&M activities, so customer funding can focus their advanced funding capability on needed replacements and upgrades. There is a limit to what customers can advance fund and still get their advanced funds credited back in their following month's power bills. We believe that customer resources can be better used for upgrades and replacements. Adequate funding for O&M is needed not only to protect the value of the facilities, but also to retain the talented Reclamation mechanics, electricians and other craftsmen that perform the O&M work;
- Continue to encourage voluntary customer funding of replacements and upgrades, within a clear framework, wherein funding customers have an equal role in decision making as Reclamation and Western, rather than just an advisory role. This is necessary to ensure those paying the bills have control over how their funds are spent.
- Ensure that federal funds allocated for O&M activities are actually spent for those activities and not diverted to other Reclamation programs, such as counterterrorism and site security activities; and
- Maintain oversight of power customer advance funding for O&M activities, so that the Committee stays well informed about the non-federal contributions to these critical programs as well as overall funding for O&M..

In closing, I would like to thank the Committee for rejecting the proposals in the Administration's FY2006 budget to move away from cost-based rates to market rates for federal power. We are trying to keep electricity costs lower in California, not higher, and cost-based federal hydropower is an important part of many municipal utilities' resource portfolio.

We also believe that the current CVP O&M process for customer participation in OM&R decision making is working well and that no other OM&R funding program is needed.

