

Report to the Upper Colorado River Commission
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Mr. Chairman and Commissioners:

Thank you for inviting me to provide a report to you today.

Drought and Hydro Generation

The drought continues in the upper Colorado River basin. Reclamation is projecting WY2004 inflows to Lake Powell to be in the neighborhood of 42% of average. This follows the four previous years of 62, 59, 25 and 51% inflows. Releases from Glen Canyon were 8.23MAF in WY03 and will be 8.23MAF in WY04. As of the end of September 2003 the elevation of Lake Powell was 3603.8 feet and storage was at 50% capacity. As of June 14th the elevation of Lake Powell was 3587.3 feet and storage was at 43% capacity. Blue Mesa and Flaming Gorge reservoirs are at just under 70% capacity. This lower elevation at Lake Powell has caused a loss of generator efficiency resulting in loss of approximately 365 MW of capacity (nearly 30% of plant capacity.) Total generation in WY03 was 4300 GWh, a record low since the filling of the reservoirs.

Purchase Power and the Basin Fund

The Colorado River Storage Project Management Center (CRSP MC) delivered capacity and energy to the level of its contractual obligations in FY03 (6007 GWh plus project use.) Because hydro generation was so low, the CRSP MC purchased approximately 2,400 GWh of firming energy to meet its delivery requirements, 35% of the total energy requirements. The cost of these firming purchases was approximately \$90,000,000, resulting in a significant impact to the Basin Fund.

At the end of September 2003 the Basin Fund balance was approximately \$19M. The current balance of the fund is approximately \$24M. The

projected fiscal year end balance is approximately \$24M (this includes approximately \$11M of accrued expenses.)

Energy Deliveries in FY04

In the early months of 2003 the CRSP MC recognized that due to the drought, declining forecasts of generation, and expected purchase power costs, if nothing was done to increase revenues and/or reduce expenses the Basin Fund would be depleted in FY04. The CRSP MC began a consultation process with its customers and Reclamation to determine the best way to address the issue. As a result of these consultations the CRSP MC notified customers in August 2003 that energy deliveries would be reduced in FY04 to 4460 GWh, a 26% reduction. These reductions will result in the CRSP MC making significantly less firming purchases in FY04. The CRSP MC has purchased about \$32M of firming energy through May and expects to spend approximately \$13M more through September.

Post-2004 Marketing

The CRSP MC also has completed consultations with customers on the long term marketable resource available from the Salt Lake City Area Integrated Projects (SLCA/IP). The resource marketed to customers under the Post-89 marketing plan is 6007 GWh each year plus project use. Reclamation forecasts of water releases and reservoir storage recovery are such that the projected 20-year average generation is forecasted to be 5600 GWh. After consulting with customers, Reclamation, and interested parties, the CRSP MC has reduced the marketable resource for the 20-year term of the contracts which begin October 1, 2004 (Post 2004 Marketing Plan.) The new marketable level is 4558 GWh in 2005, plus project use. Deliveries will increase 98 GWh per year through 2009 when the level will remain at 4949 GWh for the remaining contract period.

Outlook for Near Term

Lake Powell only has approximately 6.6 MAF remaining in the usable power pool. There is about 14 MAF of empty space in the reservoir.

Minimum power elevation is 3490 feet – we have about 97 feet to go and it will probably go down another 27 feet (3560') by April 2005.

Reclamation has forecasted a 22% probability that Lake Powell will reach the minimum power pool elevation. There are two scenarios that could cause this to occur. First, if we have two more consecutive winters of 50% runoff the lake would likely hit the minimum elevation in late 2006 to early 2007. Second, if the winter of 2004-5 has hydrology similar to that of 2002 (25% of average) the lake would likely hit the minimum elevation in early 2006.

Western is looking at options for dealing with continued drought. If Lake Powell reaches the level where power cannot be produced, it will be unprecedented. That situation would have tremendous impacts to not only power customers but the entire CRSP project. CRSP power could be priced out of the market.

Western is forecasting about 4300 GWh of energy production in FY05. Of that amount, about 3200 GWh comes from Glen Canyon. That leaves only 1100 GWh produced by other plants. If Western only had these other plants to serve load we would have to purchase over \$200M to firm contractual commitments. That would break the bank (the Basin Fund would run out of money). The SLCA/IP rate which is now \$20.72 would likely be over the market rate and customers would most likely not purchase our product.

CRSP has an annual revenue requirement of \$143M. This includes O&M, purchase power, interest, and principle payments. If we didn't firm (if we only sold the hydro output) and only collected revenue to cover O&M we would still need a rate of at least \$70/MWh. (\$78M/1100GWh and assuming project use customers paid same rate) Again this is above the market rate and customers would most likely not purchase our product.

The Basin Fund would most likely be depleted and CRSP would not be able to meet payroll. This would affect Reclamation and Western personnel. It would also affect environmental programs such as the Adaptive Management Program and the Upper Colorado RIP that rely on funding from power revenues.

Currently the minimum objective release through Glen Canyon is 8.23 MAF per year. One way to keep Glen Canyon generating is to release less water. However there would be a corresponding loss of generation with lower releases. Less releases may be an alternative to soften the impacts and to get through the drought but the only thing that will get us out of this situation is runoff near average or greater.

SLCA/IP Firm Power Rate Adjustment

This morning members of the Colorado River Storage Project, Management Center held a rate discussion to provide an update on the FY 2004 preliminary Salt Lake City Area Integrated Projects (SLCA/IP) firm power rate. The long-term SHP reductions are included in the study as well as updated future forecast of revenue and expenses. Purchase power costs have been included for the next five years based upon the most probable estimates. More detail discussions of the purchased power costs will be a topic for discussion on July 8, 2004 Operations Meeting. It is likely that Western will start a formal rate process this fall, with the adjusted rate becoming effective October 1, 2005.

Experimental Flows

Two experimental flow regimes were scheduled to occur this water year. The first is designed to deposit sediment onto beach areas of the Colorado River below Glen Canyon Dam. This flow is triggered by sediment input from the Paria River and includes an alternating pattern of low steady flows and low fluctuating flows in the fall months followed by a beach habitat building flood (BHBF) flow the first week of January 2004. The BHBF would release 45,000 cfs (approximately 20,000 cfs bypass) at its peak for two days and be followed by a low flow period to do aerial photography of the river. The sediment trigger was not reached and the experiment did not occur.

The second flow regime is designed to help native fish such as the humpback chub by impacting the spawning success of non-native fish (trout). This flow has a high fluctuation pattern ranging from 5000 cfs to 20,000 cfs. These flows took place in January, February and March 2004.

We do not have an estimate of what the WY2004 experiments cost in terms of firming purchases. Reclamation had prepared for the possibility of a trigger by reducing release volumes in the fall of 2003. Western estimates that the cost of the experiments in 2002 due to reduced water volumes and the “fish flows” experiment was approximately \$5M.

Experimental Flows at Glen Canyon Dam, Long-Term

Western and the other members of the Glen Canyon Dam Adaptive Management program are working on developing a program of experimental flows, and other management actions, to be conducted over a long-term period. The purpose of this is to improve the condition of the Grand Canyon population of Humpback Chub and to conserve sediment in the Glen and Marble Canyon reaches.

The Grand Canyon Monitoring and Research Center (GCMRC) recently proposed a sixteen-year plan of experimental flows. Western is working with the participants of the Adaptive Management Program to modify the proposal in order to reduce the impacts on CRSP electrical generation of a long-term program of experimental flows.

This concludes my report and I will now take questions.

Brad Warren
CRSP MC Manager