



SOUTH FEATHER WATER & POWER AGENCY

TO: Board of Directors

FROM: Kathy Petersen, Power Division Manager

DATE: August 14, 2006

RE: General Information (regarding matters not scheduled on agenda)
August 22, 2006 Board of Directors Meeting

Operations

Attached for your information is the Storage and Generation Report for July 2006. Also attached are charts showing the elevations of Little Grass Valley and Sly Creek reservoirs. The draft from Little Grass Valley is currently set at about 90 cfs.

Ponderosa Dam spill gate testing

On August 10 we set up conditions to try to replicate the harmonic condition that John Davis and the FERC inspector noticed on June 20 when the reservoir was spilling over the top of the gates by a few inches. At the time, they noted that the north gate appeared to be bowing and vibrating in a cyclic manner, and that this continued for about half an hour, until the water reached a certain elevation over the top of the gate. Because we weren't sure if this would cause structural damage, we lifted the south gate by six inches so that spill would flow under the gates until we could have a structural engineer evaluate the condition.

The Division of Safety of Dams sent two engineers to observe the test on August 10, one of them having considerable expertise in structural vibration evaluations. As the reservoir elevation rose, harmonic cycles in both gates appeared, with the wave motion and duration varying at the different reservoir elevations. The preliminary recommendation of the engineers is that we try to modify the top of the spill gates somewhat to force flows to miss the downstream gate girder, and that we inspect all welds for signs of fatigue. At the completion of the test, we again left the south spill gate open six inches. If you are interested, at your meeting I can sketch on the white board how the harmonic conditions manifested themselves.

Maintenance Projects

South Fork Diversion Dam

Henry Reeson and a team from North State Diving recently replaced the hydraulic lines to the 60-inch sluice gate at South Fork Diversion Dam. This gate had been inoperable for about a year when the old lines broke. Henry had installed all of the new piping that he could above the water surface last fall, but had to wait until the flows in the river dropped enough for divers to work safely to complete the job. He and Norm Williams are now working on repairs and hydraulic line replacement at Slate Creek Diversion Dam.

Miners Ranch Canal

Jerry Littleton has been constructing new work platforms along Miners Ranch Canal. He is replacing the old wooden platforms with steel, so they should last much longer and require less maintenance in the future.

Road Work

Joe Gibson and Gary Daley have continued their road repair projects. This past month they worked on the road to South Fork Diversion, repairing much of last winter's damage. They replaced culverts on the roads to the Sucker Run gauging station and to the Lost Creek downstream gauge.

General Information

25-year Anniversary

We recently celebrated Jola Battershell's 25-year anniversary in the Power Division. Since she apparently started working right after kindergarten, we expect that she will be around for many more years.



**SOUTH FEATHER WATER AND POWER
SOUTH FEATHER POWER PROJECT
July 2006**

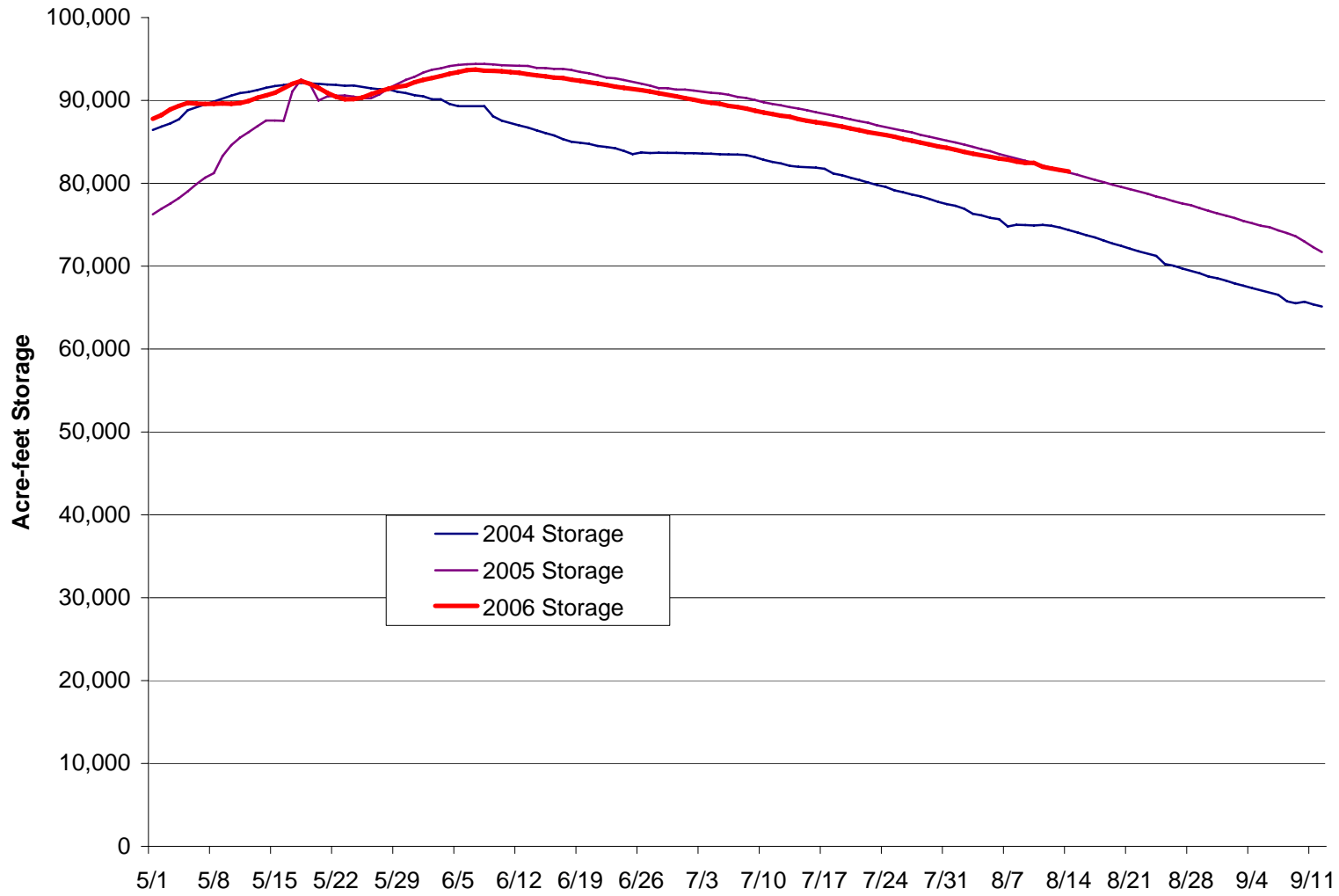
STORAGE

RESERVOIR	MAXIMUM CAPACITY	STORAGE ON 7-31-06	STORAGE ON 7-31-05
Little Grass Valley	94,660 AF	84,286 AF	85,139 AF
Sly Creek	65,650 AF	42,918 AF	50,694 AF
Lost Creek	5,750 AF	5,313 AF	5,381 AF
Forbestown Diversion	358 AF	310 AF	310 AF
Ponderosa	4,750 AF	4,302 AF	4,834 AF
Miners Ranch	896 AF	741 AF	706 AF
TOTAL	172,064 AF	137,870 AF	147,064 AF
Slate Creek Tunnel	800 CFS	0 CFS	N/A CFS
South Fork Tunnel	600 CFS	99 CFS	110 CFS
Miners Ranch Canal	303 CFS	278 CFS	283 CFS

MONTHLY NET GENERATION

	FOR July 2006	YEAR TO DATE ON 7-31-06	YEAR TO DATE ON 7-31-05
Woodleaf P.H.	28,052,630 KWH	246,655,040 KWH	135,892,570 KWH
Forbestown P.H.	16,226,000 KWH	109,495,310 KWH	105,567,350 KWH
Kelly Ridge P.H.	7,628,209 KWH	54,088,295 KWH	51,478,057 KWH
Sly Creek P.H.	4,176,200 KWH	40,762,400 KWH	22,383,700 KWH
TOTAL	56,083,039 KWH	451,001,045 KWH	315,321,677 KWH

Little Grass Valley Storage



Sly Creek Storage

