



SOUTH FEATHER WATER & POWER AGENCY

TO: Board of Directors

FROM: Kathy Petersen, Power Division Manager

DATE: February 20, 2008

RE: General Information (regarding matters not scheduled on agenda)
2/26/08 Board of Directors Meeting

Operations

Attached is the Storage and Generation Report for January 2008. Also attached is a chart showing precipitation as of February 19, 2008. The month of January ended with precipitation totals close to average, but February has been relatively dry to date. The snow surveys conducted at the beginning of February measured average snow depths of 109.6, 111.4 and 114.2 inches at Pilot Peak, Lexington Hill and Gibsonville, respectively. The density at Lexington and Gibsonville was fairly low with water content of only 13.1 and 10.5 inches, respectively, while the water content at Pilot Peak was higher at 38.5 inches. The February 1 runoff forecast, prepared by DWR, predicted 82% of average runoff for the South Fork Feather River.



The photo (above left) shows Sly Creek Reservoir on February 11 when it was about 100 feet below the maximum water-surface level.

Maintenance Projects

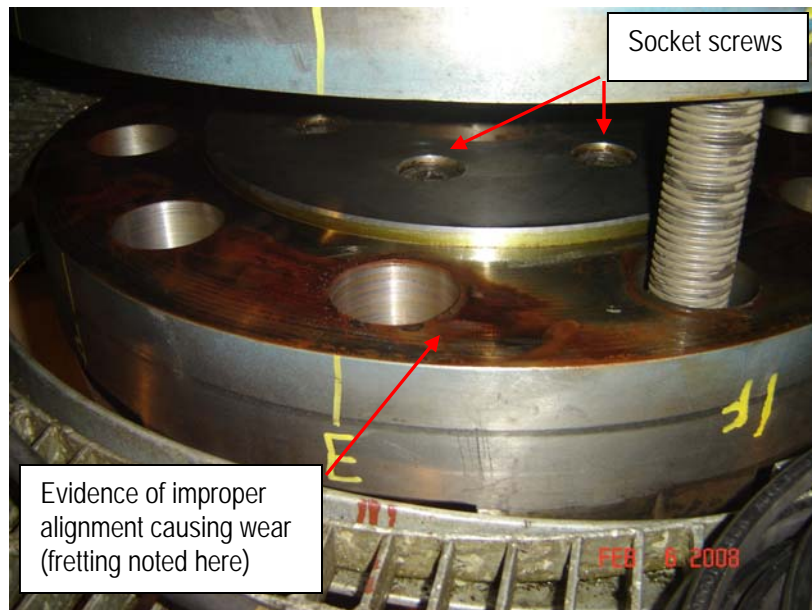
Sly Creek Powerhouse Shaft Alignment

The picture at right is similar to the one in last month's report, because the shaft coupler turned out to be the source of the misalignment. Instrumentation determined that there was a "dog-leg" in the shaft at the coupler.

When the powerhouse was constructed it used a turbine-



generator from PG&E's old Melones Powerhouse. The original turbine shaft was cut shorter to fit the design for Sly Creek, and a set of special alloy socket screws were used to attach the pieces. The manufacturer's specifications recommended that these be coated with "Loctite #271" and torqued to 2,000 foot-pounds so they would not loosen. Once the two shaft sections were de-coupled and the turbine shaft was dropped down, John Davis checked the screws and found the first two turned fairly easily when he applied the socket wrench. When removed, they were found to have been coated first with "Never-seize" which prevented the "Loctite" from setting and working properly. Therefore, it appears that the alignment problem resulted from improper installation procedures at the time the powerhouse was constructed. Had the shaft alignment not been investigated at this time the problem would have continued to grow worse the longer the unit remained in service.



New socket screws have been delivered from the manufacturer and installed. The outer 3-inch coupling bolt holes are being re-bored by Weld Mart, a contractor doing in-place machining, and new bolts will be built to exact hole sizes. The alignment checks were completed on February 17 and the shaft is now plumb. The unit will be reassembled as soon as the in-place machining work is completed.

General Information

DSOD Inspection

Alex Brown and I accompanied an engineer from the California Division of Safety of Dams on an inspection of Miners Ranch and Ponderosa dams on February 14. The only significant follow-up item noted was the need to replace the gate hoist cables at Ponderosa Dam, a job that was already planned for later this year.

**SOUTH FEATHER WATER AND POWER
SOUTH FEATHER POWER PROJECT
January 2008
STORAGE**

RESERVOIR	MAXIMUM CAPACITY	STORAGE ON 1-31-08	STORAGE ON 1-31-07
Little Grass Valley	94,660 AF	43,492 AF	50,446 AF
Sly Creek	65,650 AF	16,046 AF	17,682 AF
Lost Creek	5,750 AF	3,966 AF	4,907 AF
Forbestown Diversion	358 AF	308 AF	306 AF
Ponderosa	4,750 AF	3,428 AF	3,711 AF
Miners Ranch	896 AF	770 AF	767 AF
TOTAL	172,064 AF	68,010 AF	77,819 AF
Slate Creek Tunnel	800 CFS	52 CFS	27 CFS
South Fork Tunnel	600 CFS	29 CFS	17 CFS
Miners Ranch Canal	303 CFS	240 CFS	250 CFS

MONTHLY NET GENERATION

	FOR January 2008	YEAR TO DATE ON 1-31-08	YEAR TO DATE ON 1-31-07
Woodleaf P.H.	8,230,350 KWH	8,230,350 KWH	16,876,650 KWH
Forbestown P.H.	5,170,030 KWH	5,170,030 KWH	9,722,310 KWH
Kelly Ridge P.H.	5,552,725 KWH	5,552,725 KWH	7,816,051 KWH
Sly Creek P.H.	0 KWH	0 KWH	1,562,700 KWH
TOTAL	18,953,105 KWH	18,953,105 KWH	35,977,711 KWH

South Feather Power Project - Forbestown Precipitation

