



SOUTH FEATHER WATER & POWER AGENCY

TO: Board of Directors

FROM: Kathy Petersen, Power Division Manager

DATE: November 16, 2007

RE: General Information (regarding matters not scheduled on agenda)
11/27/07 Board of Directors Meeting

Operations

Attached is the Storage and Generation Report for October 2007, as well as a chart showing precipitation to date.

All minimum instream flows are now set at the winter levels of 5 cfs, with the exception of Slate Creek, which has a minimum requirement of 10 cfs. No diversions have been made from Slate Creek this fall because the inflows are still too low to be diverted.

Maintenance Projects

Sly Creek Powerhouse Shaft Alignment

Sly Creek Powerhouse was returned to service at the end of the annual scheduled maintenance outage, but tripped three days later due to a high turbine bearing oil level, caused by water entering the bearing tub and displacing the oil in the tub. A small amount of oil (a gallon or less) was released from the powerhouse sump to Lost Creek Reservoir when the pumps operated to lower the sump level to prevent flooding of the basement. The release was reported to the appropriate authorities and was cleaned up immediately. It appears that the root cause of the incident is a problem with the turbine and generator shaft being out of alignment, causing an elliptical rotation of the shaft. John Davis had noted this elliptical rotation problem for several months, and now PG&E has authorized the expenditures necessary to correct the problem (possibly up to \$100,000). Sly Creek Powerhouse will remain out of service throughout December while repairs are made.

Woodleaf Powerhouse Annual Outage and Runner Repair

During the routine annual outage at Woodleaf Powerhouse, John Davis noted a crack behind one of the buckets on the runner. The location of this particular crack was such that it required a special welding and de-stressing technique to avoid potential runner failure in the future, so a PG&E welding specialist was

called in to make the repairs, and a team of technicians “de-stressed” the runner afterwards by heating it slowly to 1,100° F and then slowly cooling it, a process that took more than 10 hours. The Power Division crew also re-welded the deflector shields, repaired valves in the turbine shutoff valve system, repaired the station service circuit breaker, and tested relays using new test gear borrowed from PG&E. The outage lasted a week longer than scheduled, primarily because of the runner trouble. The attached photos were provided by the PG&E welder, Paul Rodrigues, who made the repairs to the runner.

General Information

30-Year Anniversary

On November 14, the crew celebrated Scott Underhill’s 30-year anniversary with the Agency. Scott worked as a Ditch Tender and on the leak repair crew prior to coming to Power Division as an Operator in Training in February 1996. He has served as the Operations Foreman since June 2005.

PG&E System Restoration Exercise

Scott Underhill and I attended a tabletop electrical system restoration exercise conducted by PG&E in San Ramon on November 15. This is something electric utilities are required to do periodically as a result of the Northeast Blackout of August 2003. In addition to PG&E and some of the QF’s and irrigation district generators, the exercise included SMUD and the ISO. In the event of a system failure, our generators could be used for restoration of the electric grid because of their “black start” capability (they can be placed on line without requiring power from the outside to start them).

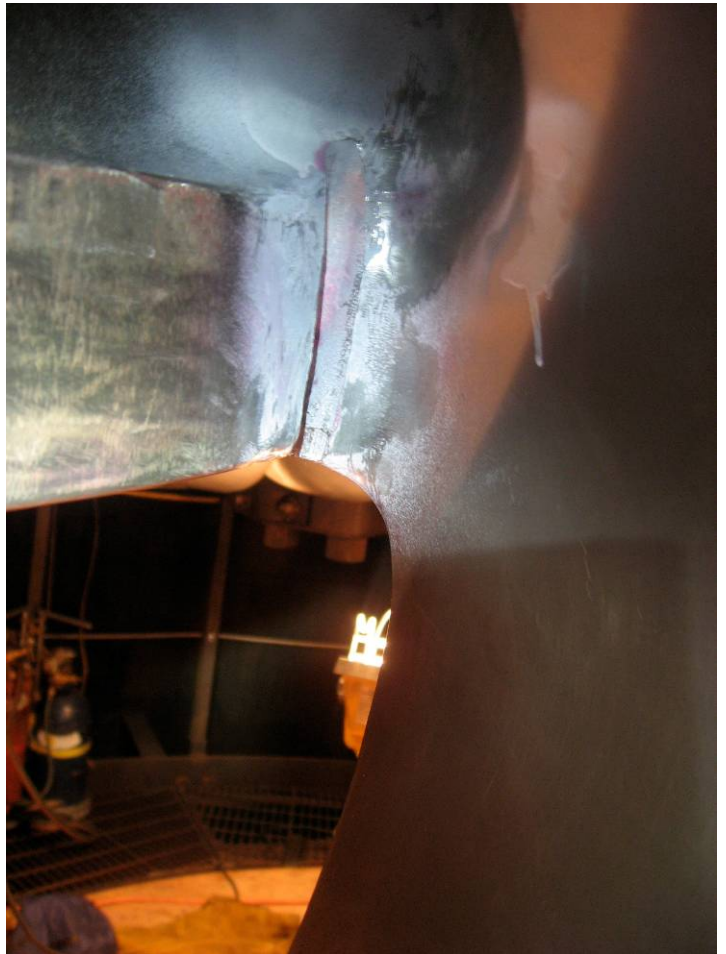
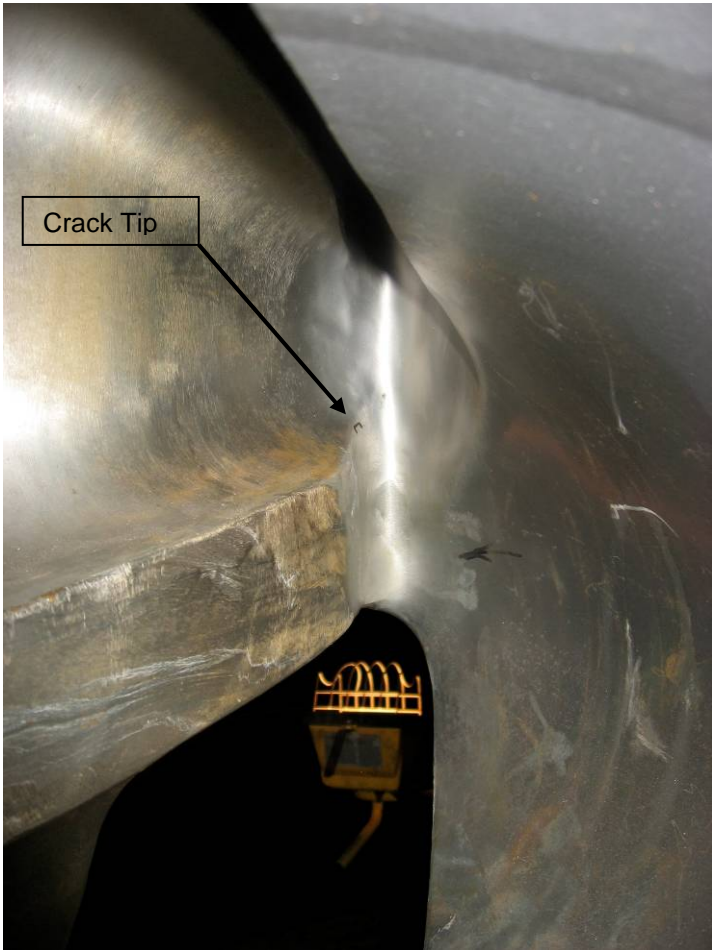


Photo 1: Crack location in rib between buckets 5&6

Photo 2: Start of crack grindout with red PT dye



Photo 3: Bottom view of final grindout



Photo 4: Side view of final grindout



Photo 5: Final weld before grinding



Photo 6: Final weld repair after polishing

**SOUTH FEATHER WATER AND POWER
SOUTH FEATHER POWER PROJECT
October 2007
STORAGE**

RESERVOIR	MAXIMUM CAPACITY	STORAGE ON 10-31-07	STORAGE ON 10-31-06
Little Grass Valley	94,660 AF	50,046 AF	49,130 AF
Sly Creek	65,650 AF	18,295 AF	34,794 AF
Lost Creek	5,750 AF	4,530 AF	4,782 AF
Forbestown Diversion	358 AF	303 AF	309 AF
Ponderosa	4,750 AF	4,241 AF	4,387 AF
Miners Ranch	896 AF	788 AF	818 AF
TOTAL	172,064 AF	78,203 AF	94,220 AF
Slate Creek Tunnel	800 CFS	N/A CFS	N/A CFS
South Fork Tunnel	600 CFS	3 CFS	260 CFS
Miners Ranch Canal	303 CFS	39 CFS	260 CFS

MONTHLY NET GENERATION

	FOR October 2007	YEAR TO DATE ON 10-31-07	YEAR TO DATE ON 10-31-06
Woodleaf P.H.	18,266,680 KWH	148,560,850 KWH	297,621,540 KWH
Forbestown P.H.	9,817,350 KWH	86,197,840 KWH	136,475,290 KWH
Kelly Ridge P.H.	6,950,757 KWH	63,492,386 KWH	64,614,405 KWH
Sly Creek P.H.	943,200 KWH	17,551,200 KWH	47,267,500 KWH
TOTAL	35,977,987 KWH	315,802,276 KWH	545,978,735 KWH

South Feather Power Project - Forbestown Precipitation

