



SOUTH FEATHER WATER & POWER AGENCY

TO: Board of Directors

FROM: Alex C. Brown, Regulatory Compliance Manager

DATE: March 17, 2010

RE: General Information (regarding matters not scheduled on agenda)
3/23/10 Board of Directors Meeting

Dam Safety and Security

Emergency Action Plan Time Sensitivity Analysis

Per the request of the Federal Energy Regulatory Commission (FERC), SFWPA has completed a Time Sensitivity Analysis of the Emergency Action Plans for Little Grass Valley, Sly Creek and Lost Creek Dams. Further such analysis of Miners Ranch Dam is to follow in April. The goal of this analysis is to ensure the effectiveness of SFWPA's Emergency Action Plans. This analysis was based on the Sudden Failure Assessment, a method of calculating the time allotted for notification of non-project facilities and the response time to these facilities by Emergency Management Agencies, such as CalFIRE and the Butte County Sherriff.

Vulnerability Analysis

FERC has made changes to security classifications of FERC-project features (dams) throughout the country. These changes have necessitated a review and updating of the appropriate assessments and plans for the critical infrastructure of SFWPA. These assessments and plans may include a Vulnerability Assessment, Security Assessment, Security Plan, Internal Emergency Response and Recovery Plan, and annual certification letters as needed. Previous security analysis of the SFWPA dams was developed by FERC after the terrorist attacks on September 11, 2001. The new guidelines address more security issues, and concerns which may be of interest to dam owners in rural settings. Training will include a discussion of the security grouping changes, new security requirements, and use of FERC software in the security analysis of dams. In order to better facilitate the formulation and approval of these assessments and plans I will be attending one-day training with FERC at its Portland office.

Stability Analysis of Slate Creek Dam

An evaluation of sediment loading and associated structural stability of Slate Creek Diversion Dam (SCDD) has been requested by FERC. SFWPA is currently seeking a qualified structural engineer to provide this required analysis.

Under FERC'S dam safety program, annual dam safety operations inspections of the dams of SFWPA, including SCDD, are performed. These inspections typically result in recommendations to improve the understanding of factors that might affect performance of the dams. Based on the 2009 dam safety and operations inspections, FERC recommended that the structural stability of SCDD be evaluated for loading appropriate to the current sedimentation.



SCDD is operated by SFWPA to divert water from the Slate Creek watershed (Yuba River basin) to Sly Creek Reservoir (Feather River basin) for hydropower production purposes. Much of SCDD impoundment is filled with cobble, gravel, sand, and silt. The high rate of sedimentation is related to past hydraulic mining in the upstream source area. Delivery of material from upstream hydraulic mine sites and aggraded channel reaches to the SCDD impoundment was exacerbated in the 1950's by the breaching of the St. Louis Debris Dam, located approximately one mile upstream of SCDD on Forest Service-owned land. Sediment pass-through events have been attempted in 2002, 2003, 2004 and 2005. Most of these events were unsuccessful at moving any significant amount of sediment due to hydraulic conditions at the dam. The build-up of sediment and the upstream face places a potentially higher-than-desirable structural load on SCDD.

A Request for Proposal has been delivered to several firms that routinely perform structural analysis of dams. Work tasks include determination of original structural loading capacity of SCDD, field investigations, structural stability analysis, and the preparation of a report of findings for review by SFWPA and to be filed with FERC.

Recreation

2010 Recreation Season

The 2010 recreation season is quickly approaching for SFWPA facilities. This year SFWPA will continue operating Sly Creek and Strawberry campgrounds, but will not yet be responsible for the recreational facilities around Little Grass Valley Reservoir (this will not occur until the new FERC license is issued). Sly Creek Reservoir campgrounds will be closed during this season due to the Sly Creek Dam crest raise project. Strawberry campground and car-top boat launch will remain open. SFWPA will assume the responsibility of operations of Little Grass Valley Campgrounds in the 2011 recreation season.