Application for New License
Major Project – Existing Dam

Exhibit H
Miscellaneous Filing Material

Security Level: Public

Camp Far West Hydroelectric Project
FERC Project No. 2997

Prepared by:
South Sutter Water District
2464 Pacific Avenue
Trowbridge, CA 95659
www.sswd@hughes.net

June 2019

Table of Contents

Table of Contents (continued)

List of Figures

None.

List of Tables

List of Attachments

None.

EXHIBIT H

MISCELLANEOUS FILING MATERIAL

1.0 Introduction

The South Sutter Water District (SSWD or Licensee) has prepared this Exhibit H, Miscellaneous Filing Material, as part of its Application for a New License Major Project – Existing Dam – (FLA) from the Federal Energy Regulatory Commission (FERC or Commission) for the Camp Far West Hydroelectric Project, FERC Project Number (No.) 2997 (Project). This exhibit is prepared in conformance with Title 18 of the Code of Federal Regulations (C.F.R.), Subchapter B (Regulations under the Federal Power Act), Part 4 (Licenses, Permits, Exemptions and Determination of Project Costs), Subpart F and, as applicable, Part 16 (traditional process). In particular, this exhibit conforms to the regulations in 18 C.F.R. Section 4.51(i), which describes the contents of Exhibit H, Miscellaneous Filing Material. As a reference, 18 C.F.R. Section 4.51(i) states:

(c) *Exhibit H*. The information required to be provided by this paragraph (c) must be included in the application as a separate exhibit labeled "Exhibit H."

(1) *Information to be supplied by an applicant for a new license: Filing requirements.*

(i) Information to be supplied by all applicants. All applicants for a new license under this part must file the following information with the Commission:

(A) A discussion of the plans and ability of the applicant to operate and maintain the Project in a manner most likely to provide efficient and reliable electric service, including efforts and plans to:

(1) Increase capacity or generation at the Project:

(2) Coordinate the operation of the Project with any upstream or downstream water resource projects; and

(3) Coordinate the operation of the Project with the applicant's or other electrical systems to minimize the cost of production.

(B) A discussion of the need of the applicant over the short and long term for the electricity generated by the Project, including:

(1) The reasonable costs and reasonable availability of alternative sources of power that would be needed by the applicant or its customers, including wholesale customers, if the applicant is not granted a license for the Project;

(2) A discussion of the increase in fuel, capital, and any other costs that would be incurred by the applicant or its customers to purchase or generate power necessary to replace the output of the licensed Project, if the applicant is not granted a license for the Project;

(3) The effect of each alternative source of power on:

(i) The applicant's customers, including wholesale customers;

(ii) The applicant's operating and load characteristics; and

(iii) The communities served or to be served, including any reallocation of costs associated with the transfer of a license from the existing licensee.

(C) The following data showing need and the reasonable cost and availability of alternative sources of power:

(1) The average annual cost of the power produced by the Project, including the basis for that calculation;

(2) The projected resources required by the applicant to meet the applicant's capacity and energy requirements over the short and long term including:

(i) Energy and capacity resources, including the contributions from the applicant's generation, purchases, and load modification measures (such as conservation, if considered as a re-source), as separate components of the total resources required;

(ii) A resource analysis, including a statement of system reserve margins to be maintained for energy and capacity; and

(iii) If load management measures are not viewed as resources, the effects of such measures on the projected capacity and energy requirements indicated separately;

(iv) For alternative sources of power, including generation of additional power at existing facilities, restarting deactivated units, the purchase of power off-system, the construction or purchase and operation of a new power plant, and load management measures such as conservation: The total annual cost of each alternative source of power to replace Project power; the basis for the determination of projected annual cost; and a discussion of the relative merits of each alternative, including the issues of the period of availability and dependability of purchased power, average life of alternatives, relative equivalent availability of generating alternatives, and relative impacts on the applicant's power system reliability and other system operating characteristics; and the effect on the direct providers (and their immediate customers) of alternate sources of power.

(D) If an applicant uses power for its own industrial facility and related operations, the effect of obtaining or losing electricity from the Project on the operation and efficiency of such facility or related operations, its workers, and the related community.

(E) If an applicant is an Indian tribe applying for a license for a Project located on the tribal reservation, a statement of the need of such Indian tribe for electricity generated by the Project to foster the purposes of the reservation.

(F) A comparison of the impact on the operations and planning of the applicant's transmission system of receiving or not receiving the Project license, including:

(1) An analysis of the effects of any resulting redistribution of power flows on line loading (with respect to applicable thermal, voltage, or stability limits), line losses, and necessary new construction of transmission facilities or upgrading of existing facilities, together with the cost impact of these effects;

(2) An analysis of the advantages that the applicant's transmission system would provide in the distribution power; and

(3) Detailed single-line diagrams, including existing system facilities identified by name and circuit number, that show system transmission elements in relation to the Project and other principal interconnected system elements. Power flow and loss data that represent system operating conditions may be appended if applicants believe such data would be useful to show that the operating impacts described would be beneficial.

(G) If the applicant has plans to modify existing Project facilities or operations, a statement of the need for, or usefulness of, the modifications, including at least a reconnaissance-level study of the effect and projected costs of the proposed plans and any alternate plans, which in conjunction with other developments in the area would conform with a comprehensive plan for improving or developing the waterway and for other beneficial public uses as defined in section 10(a)(1) of the Federal Power Act.

(H) If the applicant has no plans to modify existing Project facilities or operations, at least a reconnaissance-level study to show that the Project facilities or operations in conjunction with other developments in the area would conform with a comprehensive plan for improving or developing the waterway and for other beneficial public uses as defined in section 10(a)(1) of the Federal Power Act.

(I) A statement describing the applicant's financial and personnel resources to meet its obligations under a new license, including specific information to demonstrate that the applicant's personnel are adequate in number and training to operate and maintain the Project in accordance with the provisions of the license.

(J) If an applicant proposes to expand the Project to encompass additional lands, a statement that the applicant has notified, by certified mail, property owners on the additional lands to be encompassed by the Project and governmental agencies and subdivisions likely to be interested in or affected by the proposed expansion.

(K) The applicant's electricity consumption efficiency improvement program, as defined under section 10(a)(2)(C) of the Federal Power Act, including:

(1) A statement of the applicant's record of encouraging or assisting its customers to conserve electricity and a description of its plans and capabilities for promoting electricity conservation by its customers; and

(2) A statement describing the compliance of the applicant's energy conservation programs with any applicable regulatory requirements.

(L) The names and mailing addresses of every Indian tribe with land on which any part of the proposed Project would be located or which the applicant reasonably believes would otherwise be affected by the proposed Project.

(ii) Information to be provided by an applicant licensee. An existing licensee that applies for a new license must provide:

(A) The information specified in paragraph (c)(1).

(B) A statement of measures taken or planned by the licensee to ensure safe management, operation, and maintenance of the Project, including:

(1) A description of existing and planned operation of the Project during flood conditions;

(2) A discussion of any warning devices used to ensure downstream public safety;

(3) A discussion of any proposed changes to the operation of the Project or downstream development that might affect the existing Emergency Action Plan, as described in Subpart C of Part 12 of this chapter, on file with the Commission;

(4) A description of existing and planned monitoring devices to detect structural movement or stress, seepage, uplift, equipment failure, or water conduit failure, including a description of the maintenance and monitoring programs used or planned in conjunction with the devices; and

(5) A discussion of the project's employee safety and public safety record, including the number of lost-time accidents involving employees and the record of injury or death to the public within the Project boundary.

(C) A description of the current operation of the Project, including any constraints that might affect the manner in which the Project is operated.

(D) A discussion of the history of the Project and record of programs to upgrade the operation and maintenance of the Project.

(E) A summary of any generation lost at the Project over the last five years because of unscheduled outages, including the cause, duration, and corrective action taken.

(F) A discussion of the licensee's record of compliance with the terms and conditions of the existing license, including a list of all incidents of noncompliance, their disposition, and any documentation relating to each incident.

(G) A discussion of any actions taken by the existing licensee related to the Project which affect the public.

(H) A summary of the ownership and operating expenses that would be reduced if the Project license were transferred from the existing licensee.

(I) A statement of annual fees paid under Part I of the Federal Power Act for the use of any Federal or Indian lands included in the Project boundary.

Besides this introductory material, this exhibit includes 20 sections. Section 2.0 provides SSWD's plans to maintain and operate the Project in an efficient and reliable fashion. Section 3.0 describes SSWD's need for the power generated by the Project. Section 4.0 describes alternatives to generate the power and cost for such alternatives. Sections 5.0, 6.0 and 7.0 relate to industrial facilities, the need for Project power by Native American tribes and effects of the Project on the transmission system, respectively. Section 8.0 addresses the comprehensive development of the waterway. SSWD's financial and personnel resources to operate the Project are described in Section 9.0. Section 10.0 documents SSWD's notification to land owners potentially-affected by SSWD's plan to expand the existing FERC Project Boundary. Section 11.0 describes SSWD's existing and proposed electricity consumption efficiency programs. The names and mailing addresses of potentially-affected Native American tribes are included in Section 12.0. Section 13.0 describes SSWD's plans to manage, operate and maintain the Project in a safe manner. Section 14.0 describes SSWD's current operation of the Project including any constraints. Section 15.0 presents the Project's history. Section 16.0 lists lost Project power instances over the past 5 years due to unscheduled outages. SSWD's compliance record is described in Section 17.0. Section 18.0 describes operations of the Project that may affect the public. Section 19.0 describes the effects of transferring the license to a third party on SSWD's ownership and expenses. Section 20.0 presents the annual fees paid by SSWD for use of federal and Indian lands. Section 21.0 includes a list of references cited in this Exhibit H.

See Exhibit A for a description of Project facilities and features, Exhibit B for a description of proposed Project operations and resource utilization, Exhibit C for a construction history and a proposed construction schedule, Exhibit D for costs and financing information, and Exhibit E for a discussion of potential environmental effects and SSWD's proposed resource management measures. Project general design drawings and maps are included in Exhibits F and G, respectively.

All elevation data in this exhibit is in United States Department of Commerce (USDOC), National Oceanic and Atmospheric Association (NOAA), National Geodetic Survey Vertical Datum of 1929 (NGVD 29), unless otherwise stated.

2.0 Efficient and Reliable Electric Service

SSWD has consistently demonstrated its capability to manage, operate and maintain the Project in a manner that delivers efficient and reliable electricity. The Project has consistently been operated to generate power in compliance with applicable reservoir operation restrictions for environmental and recreational purposes and consumptive water supply.

2.1 Increase in Capacity or Generation

SSWD's Proposed Project includes raising the normal maximum water surface elevation (NMWSE) of Camp Far West Reservoir by 5 feet (ft) from an elevation of 300 ft to an elevation

of 305 ft, which would increase Camp Far West Reservoir storage by 9,857 acre-feet (ac-ft) to a capacity of 102,868 ac-ft at Camp Far West Reservoir's new NMWSE of 305 ft.[1] The Pool Raise would involve demolition of the concrete cap on the existing Camp Far West Dam spillway, the addition of approximately 1,730 cy of concrete to raise the existing spillway crest from an elevation of 300 ft to an elevation 305 ft, and anchoring of the new concrete with steel dowels. SSWD estimates the Pool Raise would increase average annual power generation by 905 megawatt-hours (MWhrs), a 4.4 percent increase in average annual generation, with most of this increase occurring during April through August as reservoir storage would be higher leading to greater head on the powerhouse and, thus, increased power production.

2.2 Project Coordination with Other Water Resources Projects

SSWD actively coordinates Project operations with seven water projects: four upstream of the Project and three downstream of the Project.

2.2.1 Coordination with Upstream Water Projects

The upstream water projects are Pacific Gas and Electric Company's (PG&E) 190-megawatt (MW) Drum-Spaulding Project, FERC Project No. 2310; Nevada Irrigation District's (NID) 79.3-MW Yuba-Bear Hydroelectric Project, FERC Project No. 2266; NID's 1.5-MW Lake Combie Project, FERC Project No. 2981; and NID's 0.35-MW Combie North Aqueduct Project, FERC Project No. 7731.

The Drum-Spaulding Project is located on the South Yuba River, Bear River, North Fork of the North Fork American River and tributaries to the Sacramento River Basin in Nevada and Placer counties, California. Major project reservoirs include Lake Spaulding (74,773 ac-ft) on the South Yuba River and Fordyce Lake (49,903 ac-ft) on Fordyce Creek. In addition, the Drum-Spaulding Project includes numerous smaller reservoirs on tributaries to the South Yuba River, and diversions from the South Yuba River to Deer Creek via the South Yuba and Chalk Bluff Canals (maximum capacity of 107 cubic feet per second, or cfs) and to the Bear River via the Drum Canal (840 cfs).

The Yuba-Bear Hydroelectric Project includes a storage reservoir on the Middle Yuba River (Jackson Meadows Reservoir) with a gross storage capacity of 69,205 ac-ft, and five storage reservoirs on Canyon Creek (Jackson, French, Faucherie, Sawmill and Bowman reservoirs) with a combined gross storage capacity of 90,790 ac-ft. The project also includes a diversion with a maximum capacity of about 450 cfs via the Milton-Bowman Diversion Dam from the Middle Yuba River to Bowman Lake on Canyon Creek, and a diversion with a maximum capacity of about 300 cfs via the Bowman-Spaulding Canal from Bowman Lake on Canyon Creek to PG&E's Fuller Lake on the South Yuba River.

[1] For the purpose of this exhibit, this is referred to as the "Pool Raise."

The Lake Combie Project along with the Combie North Aqueduct Project form Lake Combie on the Bear River. The dam was originally constructed in 1928. Lake Combie has a gross storage capacity of 5,555 ac-ft. The North Aqueduct Project diverts up to 200 cfs of Bear River water into NID's Combie Phase I Canal.

The upstream projects import water into the Bear River watershed from the Yuba River, and export water from both the Yuba and Bear River watersheds into the American and Sacramento River watersheds. The operations of the upstream projects have a significant effect on the timing and magnitude of inflow into Camp Far West Reservoir. Informal communication occurs in the spring and throughout the irrigation season between SSWD and the upstream project operators regarding the expected rate and timing of inflow into Camp Far West. There is no formal process for coordination, nor established method to forecast upstream operations and inflow to Camp Far West Reservoir. Camp Far West is operated independently from the upstream projects and vice versa.

2.2.2 Coordination with Downstream Water Projects

The downstream water projects are SSWD's water supply project; the Camp Far West Irrigation District's (CFWID) water supply project; and the Bay-Delta.

Up to 475 cfs of the water released from Camp Far West Reservoir is re-diverted from the Bear River during the irrigation season (i.e., typically, from mid-April through mid- October) at a 38-ft-high, non-Project diversion dam located approximately 1.25 mi downstream from Camp Far West Dam into SSWD's Conveyance Canal, which is located on the south bank and runs predominately north to south along the higher eastern border of SSWD's service area. Typically, water deliveries begin low in mid-April, peak in July, and then gradually decrease through mid-October. Through turnouts and head gates, water is directed from SSWD's Conveyance Canal into improved canals, one pipeline, and natural channels running from east to west, and distributed to water users. Depending upon the anticipated reservoir yield, the water user's allocations may range from 0.5 ac-ft per ac of irrigated land during a drought year to as much as 2.5 ac-ft per ac during a wet year. Perennial crops such as orchards and pasture receive a higher priority of allocation over seasonal crops, with rice growers receiving the lowest priority.

Approximately 40 cfs of that water that is diverted into SSWD's Conveyance Canal is re-diverted from the first 0.5-mi of the canal to CFWID. In addition, CFWID diverts up to 35 cfs of Bear River water at the non-Project diversion dam into CFWID Camp Far West Canal on the north bank.

SSWD releases up to 4,400 ac-ft of water from Camp Far West Reservoir in dry and critical years to implement the objectives in the *Water Quality Control Plan for the San Francisco Bay/ Sacramento-San Joaquin Delta Estuary* adopted May 22, 1995 (SWRCB 1995).

2.3 Project Coordination with Other Electrical Systems to Minimize Cost of Production

SSWD does not currently own or operate an independent electrical transmission system.

SSWD's Camp Far West Powerhouse is connected to the Power Grid at the Camp Far West Switchyard via PG&E's Camp Far West Transmission Line Project (FERC Project No. 10821).

3.0 SSWD's Need for the Project

3.1 Power to Northern California

SSWD entered into a Contract for the Sale and Purchase of Electricity with the Sacramento Municipal Utility District (SMUD) in August 1981. At this time, SSWD plans to continue to sell all Project power to SMUD through June 2031, when the SMUD Contract expires. SMUD uses the power to meet its electricity needs within its service territory.

Upon termination of the SMUD Contract, SSWD plans to negotiate a new lease/power purchase contract or multiple contracts with an unknown (at this time) third-party. The new buyer may sell the Project power into the market or use the power for its own needs. If the third-party is SMUD, the electricity output of the Project will continue to be used to meet the electricity needs in SMUD's service territory. Power generated from the Project will be scheduled through the California Independent System Operator (CAISO) wholesale energy markets.

The CAISO operates most of California's power grid, comprising some 124,000 square mi, or three-quarters of the State of California. In addition to operating the Power Grid, the CAISO operates wholesale energy markets comprised of distinct day-ahead and real-time processes that include both energy and ancillary services. The energy products and services traded in the CAISO markets allow the CAISO to meet reliability needs and serve load. The CAISO day-ahead and real-time market processes clear based on the generator bids and system load. A major component of the market is the full network model, which analyzes the active transmission and generation resources to find the least cost energy to serve demand. The model produces prices that show the cost of producing and delivering energy from individual nodes, or locations on the grid where transmission lines and generation interconnect.

3.2 Cost and Availability of Alternative Sources of Power

Exhibit D includes a detailed discussion of the cost and availability of alternative sources of power.

3.3 Effects of Alternative Source of Power

It is unlikely that SSWD would develop a new power Project to replace the Project power, though the power would need to be replaced by a third party to continue to meet California's power needs.

3.4 Effects on SSWD to Purchase or Generate Replacement Power

If SSWD is not granted a new license for the Project, SSWD would continue to operate the Project facilities, excluding the power generating facilities, outside of FERC jurisdiction as water supply facilities (i.e., no electricity generation facilities). SSWD would not enjoy the revenue from power sales, so SSWD's water customers would be affected. Furthermore, SSWD's debt that is being used to fund the relicensing effort is secured with hydro revenue. If revenue is not being obtained from the Project, this would put a large financial burden onto SSWD's water customers.

If a new license is not issued, it is unlikely that SSWD would develop a new power Project to replace the Project power, so SSWD would not incur any increase in fuel, capital or other related costs.

SSWD anticipates, though, that a third party would likely develop a power source to replace the power lost to California. That party would incur new costs related to development and operations of a new source of power and fuel costs related to operations of the new source. Since that third party would pass these costs onto retail customers and given that the Project power is relatively inexpensive, it is possible that electricity costs for the communities served would increase.

4.0 Cost of Production and Alternative Sources of Power

4.1 Average Annual Cost of Project Power

Exhibit D includes a detailed estimate, including the basis for the calculations, of SSWD's cost of electricity production under both the No Action Alternative and SSWD's Proposed Project Alternative.

4.2 Projected Resources to Meet SSWD's Capacity and Energy Requirements

As stated above, SSWD does not support an electricity service territory and, consequently, does not have any electricity capacity or energy requirements. Therefore, this item is not applicable.

5.0 Effect on Industrial Facility

SSWD does not use the Project power for its own industrial facility. Therefore, this item is not applicable.

6.0 Indian Tribe Need for Electricity

SSWD is not a Native American tribe. Therefore, this item is not applicable.

7.0 Effect on Transmission System

SSWD does not own or operate an electric transmission system. Therefore, this item is not applicable, except with regards to a single-line diagram. A single-line electric diagram is included in Volume VI of SSWD's Application for New License. This information is considered Critical Energy Infrastructure Information (CEII), and is not made available to the public.

8.0 Comprehensive Development of the Waterway

At the outset of the current relicensing process, SSWD considered potential Project modifications that would enhance the Project's contribution to the comprehensive improvement and development of the waterway and for other beneficial public uses that were within SSWD's means to implement. The study did not identify any necessary modification to Project facilities that, in conjunction with other developments in the area, are needed to conform with comprehensive plans for improving or developing the waterway and other beneficial public uses as described in Section 10(a)(1) of the FPA, other than the Pool Raise, which SSWD includes in its Proposed Project. Refer to Section 7.0 of Exhibit E for a detailed discussion regarding Project consistency with comprehensive plans.

9.0 Financial and Personnel Resources

9.1 Financial Resources

SSWD's sources of financing and revenue are sufficient to meet the continuing O&M needs of the Project. Historically, SSWD's O&M, capital and debt service costs related to power production were paid by SMUD in exchange for the power produced by the Project. As described above, the SSWD/SMUD contract continues through June 2031 unless otherwise terminated by SMUD and SSWD, after which SSWD plans to negotiate a new lease/power purchase contract or multiple contracts with, at this time, an unknown third-party, which could be SMUD. The revenues from these sources will be used to support the Project.

9.2 Personnel Resources

SSWD has extensive experience operating and maintaining the Project in a safe, efficient and reliable manner. SSWD has been operating and maintaining the Project for over 35 years. SSWD, through SMUD, has had responsibility for generating wholesale electricity that historically has been delivered to SMUD. SSWD is confident that its hydro resources will continue to be critical to providing efficient and reliable electric service to consumers in California.

SSWD currently has staff of about nine full-time employees, with all of those staff dedicated to the safe and efficient operation of the Project. The staff are headquartered near the Project at SSWD's Trowbridge, California, office.

10.0 Project Boundary Expansion Notification

As described in Exhibit G, SSWD proposes to modify the existing FERC Project Boundary. This modification would entail reducing the boundary in certain locations and expanding it in other locations. While most of the boundary changes would affect SSWD-owned lands, some private property owners would be affected. SSWD has notified, by certified mail, property owners on the additional lands to be encompassed by the Project. No governmental agencies, tribal lands, or subdivisions would be interested in or affected by the boundary expansion. The private property owners that would be affected are listed in Table 10.0-1. All are in Yuba County, CA.

Table 10.0-1. List of property owners who would have 0.5 acres or more of land impacted by SSWD's proposed expansion of the FERC Project boundary.

Assessor's Parcel Number	Acres Added to Project Boundary	Owner's Name
5403009000	0.7	SPLINTER MICHAEL TRSTE
5403010000	1.1	SPLINTER MICHAEL TRSTE
5403015000	2.6	SPLINTER MICHAEL TRSTE
5403013000	0.9	JENSON PETE & STACY
018020015000	0.7	LASSAGA ALBERT J ET AL
026010003000	1.4	PINEBROOK VILLAGE L P

11.0 Electricity Consumption Efficiency Improvement Program

SSWD does not currently serve a retail load from the Project. Therefore, this item is not applicable. However, SSWD does encourage energy efficiency improvements especially in regards to agricultural users within its Service Territory. For example, the District recommends use of variable speed pumps.

12.0 Indian Tribes Names and Mailing Addresses

The names and mailing addresses of local Native American tribes who would likely be interested in this Project relicensing are included in the Initial Statement of SSWD's Application for New License.

13.0 Safe Management, Operation and Maintenance of the Project

All facilities are maintained to ensure safe and reliable operation. Each Project facility is visited at least several times weekly by SSWD's personnel who are experienced and familiar with the Project. Potential problems are identified and corrected, or scheduled for repair as they are discovered, in order of the severity of the potential problems. Project operations personnel are on duty as needed.

In addition, remote operation and monitoring of the Camp Far West Powerhouse is automatically controlled by SMUD's Supervisory Control and Data Acquisition (SCADA) system that is staffed 24 hours a day 7 days a week. Reservoir levels and power facilities are continuously monitored and any parameters out of the normal operating range are brought to SSWD's attention. SSWD evaluates and determines further action including call-out of operations and maintenance personnel.

If a hazardous situation develops at Camp Far West Dam, SSWD follow the current Emergency Action Plan (EAP) guidelines and notification flowcharts to provide early warning of an emergency condition to emergency management agencies. The EAP guidelines include requirements for dam monitoring in the event of an emergency.

SSWD has implemented other public safety measures at Project facilities. Potentially hazardous areas (e.g., Camp Far West Powerhouse) are secured, to the extent practicable, against public entry. Warning devices (e.g., signs, fences and barriers) have been installed to warn the public. Both FERC and the California DWR, Division of Safety of Dams (DSOD) inspects Camp Far West Dam annually.

13.1 Operation during Flood Conditions

The Camp Far West Dam does not include any requirements for flood control.

13.2 Warning Devices for Public Safety

Public safety warning signs are provided at locations where changes in Project operations have the potential to quickly alter water levels. Exclusion buoy lines are in place at Camp Far West Reservoir to prevent boating access near the intake and spillway.

13.3 Emergency Action Plan

SSWD completed a comprehensive revision of its Project EAP in 2017. SSWD conducts Tabletop and Functional exercises on a 5-year cycle. The last Tabletop and Functional exercises were in 2017. The EAP is reviewed annually to ensure that all information is up to date.

13.4 Monitoring Devices

The civil structures are outfitted with a variety of monitoring devices to detect settlement or displacement movement and leakage in dams, and to protect from conduit failure. Devices installed and maintained include: leakage weirs, survey pedestals, level sensors, and loss of pressure alarms.

SSWD monitors civil structures by conducting regular, periodic visual observations and by reviewing and analyzing data collected from various instruments throughout the Project. This monitoring measures critical indicators of structural behavior. Data are collected, observations are made, and qualified personnel evaluate and make recommendations based on the collected data. Results are presented in reports and distributed to FERC and the DSOD. All facilities are observed and attended weekly. Periodic scheduled inspections are made less frequently (i.e., monthly, quarterly, or annually) for collection of monitoring data. The results of these inspections are recorded and placed into databases used for tracking history of the measurements.

Annual inspections are conducted with a Field Engineering Inspector from FERC and DSOD.

An integral part of the maintenance and monitoring program includes the Part 12D Independent Consultant's Inspection and reports completed every 5 years. These inspections and reports provide an independent, third party assessment of the instrumentation and performance-monitoring program. These reports also include recommendations by the independent inspector for any additional instrumentation that would improve monitoring. The devices used for monitoring civil structures and water conduits are described below.

As required by FERC regulation at Section 12.41, *Dam Safety Surveillance Monitoring Plan*, SSWD also completes and files with FERC periodic surveillance monitoring reports.

13.4.1 Leakage Weirs

Leakage weirs are located throughout Camp Far West Dam. The data are tabulated and provided to FERC in SSWD's periodic surveillance monitoring reports.

13.4.2 Survey Pedestals

Camp Far West Dam survey pedestals consist of 6-inch long steel pipes secured by concrete.

13.4.3 Level Sensors

Sensors provide for Camp Far West Reservoir elevations and are monitored by Sacramento SMUD P.S.O., including monitoring for high and low water conditions.

13.4.4 Loss of Pressure Alarm

There is a pressure sensor that provides a loss of pressure alarm to SCADA for the Camp Far West Powerhouse penstock.

13.5 Employee Safety and Public Safety Record

Based on California Division of Occupational Safety and Health Form 300 annual reports, from 2009 through 2016, there have been no lost-time accidents and therefore, no days away from work involving SSWD's Project operations employees.

From 2012 through 2017, there were no fatalities related to Project activities.

Table 13.5-1 lists non-Project related public safety incidents that occurred within the FERC Project Boundary.

Table 13.5-1. Public safety incidents occurring within the FERC Project Boundary not caused by Project related activities.

Date of Incident	Description of Incident
9/9/2015	Traffic Accident
10/14/2015	Traffic Accident
5/29/2016	Boating Accident
5/31/2017	Vehicle Accident

14.0 Current Operations

Current Project operations and constraints are described in Exhibit B.

15.0 History of the Project

Established in 1954, SSWD, located in Trowbridge, California, is a State of California public agency formed under California Water District Law, California Water Code Section 34000 et seq. to develop, store, and distribute surface water supplies for irrigation uses in SSWD's service area. In addition, Section 34000 et seq. authorizes SSWD to develop hydroelectric power in connection with SSWD's projects. SSWD is governed by a Board of Directors, whose seven members are elected by landowners within SSWD's service area.

SSWD's service area encompasses a total gross area of 63,972 acres (ac), of which 6,960 ac are excluded, for a net area of 57,012 ac. Approximately 40,107 ac are in Sutter County and 16,905

ac are in Placer County (Figure 1.1-1). In a normal year, over 35,500 ac within SSWD's service area are under irrigation, with approximately 29,110 ac (82%) in rice production, 3,905 ac (11%) in orchards, 2,130 ac (6%) in irrigated pastures, and 355 ac (1%) in miscellaneous row and field crops.

One of the first acts by SSWD when it was formed was to enlarge the existing Camp Far West Dam and Reservoir and to develop a water distribution system to augment and provide alternatives to a declining groundwater table that was being tapped by private agricultural wells within SSWD's service area. The first Camp Far West Dam was constructed in 1924-1925. SSWD's enlargement of the dam occurred in 1963-1964, and was part of the California State Water Plan to enhance water supply in California's Central Valley. Camp Far West Dam and Reservoir are not currently part of the State Water Project (SWP). Today, the annual available water supply in the enlarged Camp Far West Reservoir is totally allocated each year, but still represents only a portion of SSWD's users' demands.

In 1981, SSWD received from FERC a license to add the Camp Far West Powerhouse to the Project. The powerhouse was constructed in 1984-1985, and began commercial operation in 1986.

As described in Exhibits A, B and C of this Application for New License, at the direction of FERC and DSOD, SSWD is in the process of modifying the existing Camp Far West Dam Spillway to assure the spillway could accommodate the probably maximum flood wherein water would flow over the spillway rather than overtop the dam embankment thereby avoiding the risk of dam failure along with sudden and significant downstream flooding. SSWD anticipates that the spillway modification would be constructed of the course of 3 months in fall 2018 and 8 months in spring-summer 2019.

16.0 Generation Lost Over the Last Five Years

SSWD typically takes scheduled outages for about 2 to 3 weeks per powerhouse in the fall for annual maintenance. Work includes equipment maintenance, testing and inspecting, and cleaning and repair of water conduits. SSWD schedules the outages in this period because in the fall consumptive demands for irrigation water are minimal, power values are low, and there is a low probability of rain.

Unscheduled outages that impact the Project's power production may be caused by a variety of factors, many of which are beyond SSWD's control. "Momentary" outages may be caused by transmission trouble; SMUD is usually able to quickly restore the Project to service shortly after these occur. Unscheduled outages may also occur so that SSWD may respond to emergency conditions (e.g., response to equipment failure).

Table 16.0-1 lists unscheduled outages that extended for more than 24 hours from Calendar Years 2012 through 2017.

Table 16.0-1. Dates when the Camp Far West Powerhouse was shut down for unscheduled (forced) outages for more than 24 hours from Calendar Years 2012 through 2017 and the reason for each outage.

Period	Duration of Shut Down	Reason for Shut Down
1/16/16-2/13/16	28 days	Lost bearing due to high temperatures
Total	**28 days**	

17.0 SSWD's Compliance Record

SSWD is in compliance with terms and conditions of the existing license. During the annual FERC Project inspections and the 5-year environmental inspections, various remedial actions are recommended as a result of the inspections. SSWD initiates actions to correct any issues of safety, compliance or other issues as recommended from the inspections and provides written confirmation of the actions taken. In the event of a non-compliance action such as deviation from the required minimum flows, SSWD immediately notifies FERC, initiates an investigation and provides a written report to FERC regarding the incident and corrective action.

From 2012 through 2017, there were no non-compliance actions.

18.0 Actions Taken by SSWD Affecting the Public

The operation of Project reservoirs has the most significant direct benefit to the public by providing flat-water recreation opportunities. The operation of Camp Far West Reservoir for power generation, water supply and environmental purposes generally result in declining reservoir levels at the end of summer and into the winter, thus reducing the convenience and opportunity for recreation.

19.0 Ownership and Operating Expenses if License Is Transferred

Estimates of the Project O&M, administration, capital improvements and proposed mitigation costs are described in Exhibit D. If the license were transferred, the costs for future operations estimated would not be necessary, although some costs of operating the facilities for irrigation and consumptive water supply would remain. Other costs that would not be incurred include future capital improvements and the costs of proposed mitigation measures described in Exhibit D.

20.0 Annual Fees for Federal or Indian Lands

No federal lands or Native American tribal lands are included within the existing or proposed FERC Project Boundary.

21.0 List of Attachments

None.

22.0 References Cited

California State Water Resources Control Board (SWRCB). 1995. Water Quality Control Plan Report. Sacramento, California. Nine volumes.