SOUTH SUTTER WATER DISTRICT

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Bradley J. Arnold General Manager / Secretary sswd@hughes.net



December 30, 2019

Via Electronic Submittal (eFile)

Kimberly D. Bose, Secretary Federal Energy Regulatory Commission 888 - 1st Street, N.E. Washington, DC 20426-0001

Subject: Camp Far West Hydroelectric Project FERC Project No. 2997-031

Amendment #2 to Final License Application

Dear Secretary Bose:

This letter files with the Federal Energy Regulatory Commission (FERC or Commission) South Sutter Water District's (SSWD or Licensee) amendment to its June 2019 Application for New License Major Project – Existing Dam - for the Camp Far West Hydroelectric Project, FERC Project Number 2997 (Project). The amendment revises SSWD'S Proposed Measure CR1, Implement a Historic Properties Management Plan (HPMP), and files a supporting Design Report.

BACKGROUND

Appendix E2 in SSWD's June 2019 Application for New License contains eight SSWD proposed conditions for inclusion in the new license. Table E2-1 in Appendix E2 in Exhibit E of the June 2019 Application showed that SSWD, the United States Department of the Interior, Fish and Wildlife Service (USFWS), California Department of Fish and Wildlife (CDFW), and Foothill Water Network (FWN) reached agreement on four of the eight measures included in SSWD's June 2019 Application for New License. These were SSWD Proposed Measures: 1) WR1, Implement Water Year Types; 2) AR1, Implement Minimum Flows; 3) AR2, Implement Fall and Spring Pulse Flows; and 4) TR2, Implement Blue Heron Rookery Management.

On October 25, 2019, SSWD filed with FERC an amendment to its June 2019 Application for New License. The amendment showed that SSWD agencies and FWN reached agreement on revisions to two more of the eight measures included in SSWD's June 2019 Application for New License. These were SSWD's Proposed Measures AR3, Implement Ramping Rates, and RR1, Recreation Facilities Plan. In addition, SSWD's letter advised FERC that SSWD and agencies had agreed-to-disagree on a seventh SSWD Proposed Measure (i.e., Measure TR1, Implement a

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Bald Eagle Management Plan). The two agreed on revised measures were included in SSWD's October 25, 2019 letter.

The eighth and final SSWD Proposed Measure in its June 2019 Application for New License is CR1, Implement a Historic Properties Management Plan (HPMP). With regards to the HPMP, in its August 30, 2019, letter accepting SSWD's June 2019 Application for New License, FERC directed SSWD to:

Therefore, please revise the June 2019 HPMP based on our comments below, and submit it to the involved Indian tribes and SHPO for another round of reviews and comments. Allow 30 days for the involved Indian tribes and SHPO to send back any comments they may have on the HPMP, then revise it accordingly, and add a new section to the HPMP on how you addressed each comment made on the document. Then, within 120 days from the date of this letter, file the revised HPMP with the Commission.

In providing the revised HPMP to the SHPO, state that the SHPO does not necessarily have to concur in the HPMP; however, they should review and comment on it. Explain to the SHPO that in cases involving large FERC hydroelectric projects, where multiple archaeological sites are being adversely effected, it is not possible for the evaluation of all historic properties to be completed prior to issuance of a new license. Instead, a phased approach can be used through execution of a programmatic agreement (PA), (as allowed through 800.14(b) of the regulations implementing section 106 of the National Historic Preservation Act), and through implementation of a HPMP.¹ The HPMP would contain the necessary steps to complete the identification of historic properties that may be adversely affected by the project, and the necessary measures to resolve any potential project-related adverse effects to those sites determined eligible for the National Register of Historic Places (National Register). These particular steps detailed in the HPMP would be carried out during the term of the new license.

Footnote 1 in the above quote stated:

We note that this approach has been used successfully over several decades with scores of FERC hydroelectric projects in California, and as recently as July of this year, the SHPO has executed a PA under similar circumstances (See Lassen Lodge Hydroelectric Project, FERC Project No. 12496).

In addition, in its August 30, 2019, letter, FERC directed SSWD to file additional supporting information for SSWD's proposed Pool Raise. Specifically, FERC stated:

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The supporting information should include, but not necessarily be limited to, stability analyses for water retaining structures associated with the pool raise under normal, flood, and seismic loadings and be in conformance with Chapter 3 of our Engineering Guidelines. The supporting information should also include the results and recommendations of the pending Geotechnical Investigation and Design and any supporting information used to derive the flood and seismic loadings. In addition, we suggest that the stability analyses take into account the effect of any silt load in the reservoir, the effectiveness of any spillway foundation drains, cutoff walls, embankment core wall, embankment buttress berms, or any other stability-enhancing features.

HISTORIC PROPERTIES MANAGEMENT PLAN

As directed, SSWD revised the June 2019 HPMP based on FERC's comments and, on November 27, 2019, SSWD submitted the revised HPMP to the involved Indian tribes and SHPO for a 30-day review. On November 27, 2019, SHPO advised SSWD that it would not review the revised HPMP until the tribal review period was completed and any comments received were forwarded to SHPO. As of December 27, 2019, no comments were received from the tribes. The revised HPMP is attached (Attachment 1) to this letter. All comments received to date from tribes, SHPO, and FERC have been addressed as described in Attachment C of the revised HPMP, and copies of all consultation correspondence are provided in Attachment B of the revised HPMP. Should SSWD receive any comments from SHPO, SSWD will file the comments with FERC.

SUPPORTING INFORMATION FOR POOL RAISE

As stated in your August 30, 2019 letter, the new Auxiliary Spillway project is proceeding under an amendment to the existing license while the Pool Raise is being assessed as part of the relicense.

Prior to the pool raise a stability analysis, related to water retention structures under normal, flood, and seismic loadings in accordance with Chapter 3 of FERC's guidelines, will be performed for the embankment to ensure its safety. As part of the evaluation, a geotechnical investigation was performed in November 2018 to re-assess the strength properties of the upstream shell and alluvium foundation materials for the dam.

The results of this exploration are currently being evaluated. Once the results have been reviewed and an updated stability analysis for the embankment will be performed. The anticipated primary tasks for the embankment analysis are as follows; 1) review existing information for the embankment, 2) Estimate material properties from the 2018 iBPT shell and foundation alluvium, 3) perform liquefaction assessment of the foundation alluvium, 4) develop an analysis cross-section of the dam for use in stability and deformation analysis, 5) perform slope stability analysis for long term steady state, rapid drawdown, pseudo static, and post-earthquake conditions, 6) estimate seismically induced deformations of the dam for seismic input ground motions. In addition, the updated stability analyses will also take into account the effect of any silt load in the

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reservoir, the effectiveness of any spillway foundation drains, cutoffs, embankment zoning, drainage, or any other stability-enhancing features as recommended in your letter.

The Pool Raise will raise the existing spillway by five feet. Prior to this work, a *Spillway Design Report* will be submitted. The Auxiliary Spillway project has developed a *Geotechnical Investigation and Design Report*. The Auxiliary Spillway is directly adjacent to the existing spillway. The format and basis of design for the Pool Raise will be very similar. We have completed the 60% Geotechnical Investigation & Design Report and the 60% Hydraulic Analysis for the Auxiliary Spillway (both enclosed) which address the supporting information that will be used to derive flood and seismic loading for the existing spillway and Pool Raise.

The supporting Critical Energy Infrastructure Information is attached.

REQUEST

SSWD requests that FERC replace the HPMP in Appendix E2 in Exhibit E of SSWD's June 2019 Application for New License with the HPMP in Attachment 1 to this letter, and incorporate into SSWD's Application for New Licenses the supporting information in Attachment 2 to this letter. Attachment 1 contains Privileged and Confidential Information and Attachment 2 contains Critical Energy Infrastructure Information: neither attachment should be released to the public.

Please contact me should you have any questions or comments.

Sincerely,

Brad Arnold

General Manager / Secretary

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sswd@hughes.net

Attachment 1: PRIVILEGED AND CONFIDENTIAL Historic Properties Management Plan

dated December 2019

Attachment 2: CRITICAL ENERGY INFRASTRUCTURE INFORMATION Supporting Information for Pool Raise dated October 2019; 60% Geotechnical Investigation & Design Report and 60% Hydraulic Analysis for the Auxiliary Spillway

cc w/o attach: Quinn Emmering, FERC DC

Parties on FERC's Official Service List for the Camp Far West Hydroelectric Project Relicensing, FERC Project No. 2997-031

Relicensing Participants on Camp Far West Hydroelectric Project's Relicensing

E-Mail Contact List (via e-mail)

CERTIFICATE OF SERVICE

I hereby certify that I have this day served the foregoing document upon each person designated on the official service list compiled by the Secretary of the Federal Energy Regulatory Commission in this proceeding (Camp Far West Hydroelectric Project, FERC Project No. 2997-031).

Dated in Sacramento, CA this 30th day of December, 2019.

James Lynch, Senior Vice President HDR Engineering, Inc. Hydropower Services 2379 Gateway Oaks, Suite 200 Sacramento, CA 95833 (916) 679-8740

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ATTACHMENT 1

PRIVILEGED AND CONFIDENTIAL

Historic Properties Management Plan, dated December 2019

ATTACHMENT 2

CRITICAL ENERGY INFRASTRUCTURE INFORMATION

Supporting Information for Pool Raise, dated October 2019; 60% Geotechnical Investigation & Design Report and 60% Hydraulic Analysis for the Auxiliary Spillway