MEMORANDUM

To: Bishop Creek Technical Working Group Members

FROM: Bishop Creek Relicensing Team

DATE: November 15, 2018

RE: Remaining Schedule and Process for Study Plan Finalization

During the October 2018 Technical Working Group (TWG) meeting for the Bishop Creek Hydroelectric Project (Project) relicensing, discussions arose regarding Southern California Edison's (SCE) remaining schedule prior to formally initiating the Integrated Licensing Process (ILP). This memorandum provides clarification on the process for finalizing study plans and a more detailed schedule.

Study Plan Status

Due to a successful set of October TWG meetings, the Bishop Creek Relicensing Team's (Team) proposes to cancel the planned December 2018 meeting and reschedule for a mid-January 2019 check-in. The following study plans are nearing completion and are ready for your comments and distribution, because of input from the TWG and the targeted discussions that have occurred since the October meetings:

- 1. Bishop Creek Reservoir Fish Distribution Study Plan
 - a. Bathymetry is now included in South Lake and Lake Sabrina
 - b. Sampling at Longley Lake is now included
 - c. A second season of sampling is provided
- 2. Bishop Creek Fish Distribution Baseline Study
 - a. Sampling areas have been extended above Intake 2 to include both branches of Bishop Creek
 - b. A second season of sampling is provided
- 3. Bishop Creek Operations Model Study Plan
 - a. No changes have been made to this study plan, but a modeling discussion/webinar will be scheduled for early December 2018
- 4. Sediment and Geomorphology Study Plan
 - a. TWG members reviewed the outline of this plan in October 2018; however, a complete draft study plan has not been previously presented
- 5. Project Boundary, Roads, and Lands Study Plan
 - a. Minor changes have been made to reflect terminology
- 6. Wildlife Study Plan
 - a. Study area has been expanded to show deer crossings and guzzlers
 - b. Additional details around bat surveys have been identified
 - c. Additional details on breeding bird surveys are included
 - d. A course/opportunistic survey for amphibians is described to coincide with aquatic surveys
 - e. Additional information on deer migration and use in the Project area have been added
 - f. Note that additional information on the need for Goshawk surveys is being solicited, but the scale of this study still needs discussion
- 7. Assessment of Invasive Plants Study Plan
 - a. Study plan will be modified to conduct additional analysis on existing data to better understand baseline conditions, versus surveying of the entire Project area
- 8. Assessment of Special Status Plants Study Plan
 - a. Updated species list provided by the U.S. Forest Service has been included in the study plan



- 9. Assessment of Bishop Creek Riparian Community
 - a. Study plan wording was modified to reflect emphasis on grouping species into "guilds" rather than using the existing "riparian" versus "upland" distinction and evaluating change in relation to stream flow
 - b. Maintaining the continuity of SCE's long-term data collection
 - i. Glean new insights from the existing data by reclassifying data around the guild concept
 - ii. Supplement with data that will be collected in 2018
- 10. Water Quality Technical Study Plan
 - a. Study plan was updated to describe existing information relative to fecal coliform and E. coli
 - b. SCE is not convinced of a nexus to the Project's facilities or operations, therefore additional sampling for these parameters will not be included in the study plan
- 11. Cultural Resources Study Plan
 - a. The existing plan was renamed to Archaeological and Architectural Resources Study Plan
 - i. Tables have been added to the study plan that provide sites and studies conducted in the proposed study area and Area of Potential Effect
 - ii. The study plan discusses other potential resource types that need to be studied and evaluated
 - b. A separate Traditional Cultural Properties Plan was developed to better accommodate Federal Energy Regulatory Commission's (FERC) preferences (confidentiality and potential Tribal concerns)

The following study plans need additional work and will be distributed before December 3, 2018. These include:

- 1. Recreation Facilities Condition Assessment
 - a. Signage inventory was added to South Lake, Lake Sabrina, and Intake No. 2 Recreation Areas
 - b. Visual and aesthetics evaluations were added to South Lake, Lake Sabrina, and Intake No. 2 Recreation Areas
 - c. Additional details are being added to develop the specific survey methods that will be used
- 2. Recreation Use and Needs Study Plan
 - a. Language has been added to reflect a basic inventory of all sites
 - b. Plant 2, Plant 4, and Plant 5 have been removed from angler survey site list and replaced with Forks, Big Trees, and Four Jeffrey campgrounds
 - c. The Team is developing the draft angler survey, general recreation survey, and general recreation site inventory form that will be included in the study plan as appendices
- 3. Assessment of Instream Flow Study Condition
 - a. The plan is being revisited and restructured based on feedback from the California Department of Fish and Wildlife
 - b. Appendix A to this memorandum summarizes the Team's current proposed approach for structuring the study plan

Proposed Schedule

As previously stated, the Team proposes canceling the December 2018 TWG meeting in Bishop; however, TWG members are encouraged to reach out to technical leads (and vice-versa) to resolve outstanding issue prior to comment deadline.

The following schedule is proposed (Table 1) for the remainder of the 2018 year through spring 2019, in advance of the filing of the Pre-Application Document (PAD) and Notice of Intent (NOI).



TABLE 1. PROPOSED SCHEDULE FOR STUDY PLAN FINALIZATION THROUGH PAD/NOI FILING

DATE	EVENT	RESPONSIBLE PARTY
November 15, 2018	Revised Study Plans distributed	SCE
December 3, 2018	Revised Instream Flow Condition Assessment SCE	
	distributed, Recreation Use and Needs Study, and	
	Facilities Condition Assessment distributed	
January 7, 2019	Comments on Study Plan	TWG Members
January 12, 2019	Revised PAD issued	SCE
Week of January 21, 2019	TWG Meeting (in person or phone, TBD)	All
February 15, 2019	Comments on PAD, finalization of Study Plans	TWG
March 29, 2019	File PAD/NOI and Proposed Study Plan	SCE

Post Filing Process

Table 2 is the anticipated study plan determination schedule following the filing of the PAD and NOI. One area of uncertainty (based on experience) is the degree to which FERC may provide for an accelerated study plan determination. Therefore, the schedule represented below is a conservative estimate, based on ILP regulations.

It is SCE's intent to request FERC to waive the request to expedite the Study Plan Determination Process and waive FERC's regulations in 18 Code of Federal Regulation (CFR) §5.11 (Potential Applicant's Proposed Study Plan and Study Plan Meetings) and 18 CFR §5.12 (Comments on Proposed Study Plan) for the relicensing of the Bishop Creek Project. This request would occur following the scoping meeting that FERC will schedule after the issuance of the Scoping Document 1. It is expected that FERC will request comments on the proposed waivers described above.

TABLE 2. ANTICIPATED POST PAD/NOI STUDY PLAN DEVELOPMENT MILESTONES AND FERC PROCESS THROUGH STUDY PLAN DETERMINATION

TASK	RESPONSIBLE ENTITY	SCHEDULE MILESTONES	FERC REGULATION
File NOI/PAD with FERC	SCE	03/29/19	§5.5; §5.6
FERC Tribal Meeting	FERC	04/28/19 (no later than)	§5.7
FERC Notice of Commencement of Proceeding and Scoping Document 1 Issued	FERC	03/29/19 - 05/28/19	§5.8(a)(c)
FERC holds Scoping and Site Visit	FERC	05/30/19 - 06/29/19	§5.8(b)(viii)
All Comments and Study Requests due from all Stakeholders on NOI, PAD and Scoping Document 1	Stakeholders	06/29/19 – 07/29/19	§5.9(a)(b)
FERC issues Scoping Document 2, if necessary	FERC	07/29/19 – 09/12/19	§5.1
Applicant Files Proposed Study Plan	SCE	07/29/19 - 09/12/19	§5.11(a)
Applicant Hosts Study Plan Meeting	SCE	09/12/19 - 10/12/19	§5.11(e)
All Comments on Proposed Study Plan Due	Stakeholders	09/12/19 - 12/11/19	§5.12
Applicant Files Revised Proposed Study Plan	SCE	12/11/19 - 1/10/20	§5.13(a)
All Comments on Revised Proposed Study Plan Due	Stakeholders	12/30/19- 1/27/20	§5.13(b)
FERC Director's Study Plan Determination	FERC	01/10/20 - 02/09/20	§5.13(c)

APPENDIX A: Instream Flow Condition Assessment Revised Approach

MEMORANDUM

To: Aquatic Resources TWG

From: Brandon Kulik

Date: November 9, 2018

RE: Bishop Creek Instream Flow Needs study plan status

Based on our ongoing discussions with California Fish and Wildlife Department (CDFW) SCE is in the process of revising the Instream Flow Needs study plan. This memo summarized SCE's understanding of the issues and proposed scope approach.

SCE had originally hoped to utilize elements of the existing study¹ to evaluate minimum flows in Bishop Creek as a platform to assess new instream flow and habitat issues. The scope contemplated first validating that historic mesohabitat distribution, transects, and related hydraulics are still reasonably representative of existing conditions. However, CDFW has expressed concerned that the 1986 Physical Habitat Simulation (PHABSIM) model documentation included with the related report is not adequately robust for purposes of validation or further model refinement. Therefore, it may be difficult to assess whether the Bishop Creek channel has remained adequately stable since the time of the past study to accurately support current analytical needs².

SCE is continuing to search old project files to attempt to relocate paper copies of the PHABSIM modeling data that could provide a reliable baseline for model validation. If files cannot be relocated SCE proposes to move forward with the TWG to scope a conventional PHABSIM model that will be focused on the following reach-specific aquatic habitat management goals expressed by CDFW:

- 1. **Bishop Creek below Plant 4**. Manage habitat below targeted diversion dams with priority for native species including Owens sucker and speckled dace, and secondarily to support the existing brown trout fishery.
- 2. **Bishop Creek upstream from Plant 4**. Manage habitat to support brown trout

Other scope elements would include:

- 1. Mesohabitat mapping as an initial step to inform study sites and transect selection,
- 2. Research and apply more current Habitat Suitability Criteria (HSC) to apply rating curves to hydraulic data for trout, sucker and dace,
- 3. Collect hydraulic calibration data to support simulating flows between 2 and 75 cfs.

¹ The past study used over 100 transects distributed in a number of study segments between the reservoirs and Plant 5 in Bishop Creek to simulate trout habitat suitability between approximately 2 to 75 cfs. Results were used to provide reach-specific habitat protective flows that are incorporated into the existing license.

² Riparian and sedimentation monitoring studies that are ongoing through 2009 include transects surveyed over time that in some cases were in, or near some of the historic PHABSIM transects. Some of the transect pins are still intact (*Edith Read, personal communication, Nov 2, 2018*) and will be reviewed in the field by SCE to evaluate the extent to which channel conditions have remained in equilibrium.