

Filed Electronically

April 30, 2024

Debbie-Anne A. Reese Acting Secretary Federal Energy Regulatory Commission 888 First Street, NE Washington, DC 20426

Subject: Kern River No. 3 Hydroelectric Project, FERC Project No. 2290-122; Initial Study Report—Additional Response to Comments

Dear Acting Secretary Reese:

Southern California Edison (SCE) is the owner and operator of the Kern River No. 3 (KR3) Hydroelectric Project (Project), Federal Energy Regulatory Commission (FERC) Project No. 2290. Pursuant to the FERC staff's letter dated February 1, 2024, in the above-referenced docket,¹ SCE is filing this additional response to comments on the Initial Study Report (ISR), including comments on the Technical Memoranda filed with the ISR, ISR Meeting Summary, requests for modifications to approved studies, and requests for new studies.

A copy of this cover letter will be distributed to Stakeholders via email with a link to the ISR Additional Response to Comments filing and will be posted on SCE's public relicensing website at <u>www.sce.com/kr3</u>.

BACKGROUND

In accordance with the Code of Federal Regulations, Title 18, Section 5.15(c) (18 CFR § 5.15(c)(1)), SCE filed its ISR with FERC on October 9, 2023, which described the overall progress in implementing the 20 FERC-approved Technical Study Plans, including a summary of study results that were available at that time, together with a description of any variances and proposed modifications to the FERC-approved plans. As many of the studies were a work-in-progress at the time of the ISR (and will continue with data collection through spring/summer 2024), SCE provided a summary of data collection efforts to date in the form of Interim Technical Memorandum as part of the ISR.

On February 1,2024¹, FERC staff requested that SCE file additional study data for Stakeholders to review pertaining to the Level 1 Structured Interview Questionnaire results associated with the *REC-1 Whitewater Boating* Study and a summary of the spot and calibration count data collected as part of the *REC-2 Recreation Facilities Use Assessment* Study. Included with the February 1 letter, FERC also revised the Process Plan and Schedule, extending the public comment period to provide additional time for comments on the information requested above and the recently filed

¹ Letter from Nicholas Jayjack, FERC, to Wayne Allen, SCE, Project No. 2290-122, Accession No. 202040201-3018 (issued February 1, 2024). <u>eLibrary | File List (ferc.gov)</u>

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public version of the *OPS-1 Water Conveyance Assessment* Study. SCE filed the additional requested information on March 1, 2024.²

Additionally, as part of SCE's January 9, 2024,³ Response to Comments on the October 9, 2024, ISR filing, SCE committed to providing study results to Stakeholders outside of the Integrated Licensing Process reporting process. On March 29, 2024,⁴ SCE filed additional data pertaining to the REC-1 Whitewater Boating Level 3 Single Flow Survey results, REC-2 Recreation Facilities Use Assessment (summer 2023 data), and the OPS-1 Water Conveyance Assessment-Phase 2 Hydraulic Assessment.

INITIAL STUDY REPORT: ADDITIONAL RESPONSE TO COMMENTS

This filing is to address the three Stakeholder comment letters filed with FERC regarding the extended comment period to address additional study results filed by SCE for the REC-1 and REC-2 studies.⁵ SCE's response includes the comments received (with figures and tables removed to conserve space), followed by SCE's response to the comment.

SCE has evaluated the comments and study requests recently submitted by Stakeholders and the previous comments provided in December 2023. As detailed in the response, SCE has concluded that none of the proposed new studies or study modifications are warranted. In an effort to find common ground and resolve several outstanding concerns, however, SCE has agreed to accommodate concerns expressed in Stakeholder comments, as follows:

- 1. SCE will provide both median and mean flow statistics in either a tabular or graphical format when presenting hydrology data in Draft License Application (DLA).
- 2. When presenting data analyses, SCE will indicate outage periods so that FERC can clearly identify when the Project was off-line for extended periods of time associated with non-routine maintenance work when completing their environmental analysis.
- SCE will make available the QA/QC'd data for the WR-1 Water Quality, WR-2 Hydrology, REC-1 Whitewater Boating, and REC-2 Recreation Facilities Use Assessment (which also include components of the AES-1 Aesthetics and ANG-1 Enjoyable Angling Flows) studies available to Stakeholders concurrently with the distribution of the Final Technical Memorandum.

² SCE. 2024a. Kern River No. 3 Hydroelectric Project (FERC Project No. 2290), Request to File Study Results. March 1, 2024, (FERC Accession No. 20240301-5315). <u>eLibrary | File List (ferc.gov)</u>

³ SCE. 2024b. Kern River No. 3 Hydroelectric Project (FERC Project No. 2290), Response to Comments on Initial Study Report. January 9, 2024. (FERC Accession No. 20240110-5011). <u>eLibrary | File List (ferc.gov)</u>

⁴ SCE. 2024c. Kern River No. 3 Hydroelectric Project, FERC Project No. 2290-122; Addendum to Initial Study Report. March, 29, 2024. (FERC Accession No. 20240329-5136). <u>eLibrary | File List (ferc.gov)</u>

⁵ Regrettably, SCE's response comments is lengthier than anticipated as a result of Kern River Boaters' decision to respond to the entirety of SCE's January 9, 2024 Response to Comments on the Initial Study Request—in violation of FERC staff's directive that "[p]reviously filed comments and study requests on the ISR do not need to be reiterated or resubmitted." (Request to File Study Results, FERC Accession No. 202040201-3018). To protect the integrity of the administrative record in this proceeding and assist staff in its upcoming study plan determination, SCE had no other choice but to respond to KBR's new comments.

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NEXT STEPS

As provided in the Revised Process Plan and Schedule issued by FERC staff in their February 1, 2024, letter, FERC staff will consider all these filings and issue a determination on disagreements and study requests on or before May 31, 2024.

SCE is continuing the second study season data collection in spring/summer 2024 for ongoing/outstanding study elements and per FERC's resolution of any disagreements. SCE will provide updated study results when available, either with the DLA, which will be filed with FERC no later than July 3, 2024,⁶ or the Updated Study Report filed with FERC by October 11, 2024 and/or the Final License Application due November 30, 2024.

SCE looks forward to continuing to work with FERC staff and Stakeholders as the relicensing of the KR3 Project proceeds. If you have any questions regarding this filing, please contact David Moore, SCE Project Manager via email at <u>david.moore@sce.com</u>.

Sincerely,

DocuSigned by: Wayne Allen 106CF18A73D445F

Wayne P. Allen Principal Manager

Enclosures:

Attachment A:	Additional Response to Comments

Attachment B: Distribution List

⁶ FERC's regulations authorize a potential applicant to elect to file a DLA instead of a Preliminary Licensing Proposal (PLP), provided that its Updated Study Report (USR) provide notification of the proposed applicant's intent to file a DLA instead of a PLP. See 18 CFR § 5.16(c). In this case, however, the USR will be filed by October 11, 2024, *after* the July 3, 2024, deadline for filing the DLA or PLP. For this reason, SCE provided notice of its intent to prepare a DLA instead of a PLP in the ISR filing (FERC Accession No. 20231010-5229).

Attachment A: Additional Response to Comments

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1.0 NATIONAL PARK SERVICE (NPS)

COMMENT NPS-1: A. NPS COMMENTS ON ADDITIONAL STUDY RESULTS

The NPS submits the following comments on the additional study results filed for REC-1 Whitewater Boating and REC-2 Recreation Facilities Use Assessment that SCE filed on March 1, 2024, as well as the public version of the OPS-1: Water Conveyance Assessment Study filed on February 1, 2024.

On October 10, 2023, SCE filed its Initial Study Report (ISR) for the Kern River No. 3 Hydroelectric Project. On December 11, 2023, the NPS filed comments on the ISR recommending that SCE provide progress reports on two recreation studies where data has been collected but not summarized in the ISR and that FERC provide additional time for stakeholders to review and comment on the progress reports. The NPS and other stakeholders also requested that SCE file a redacted version of the OPS-1: Water Conveyance Assessment Study that was filed as CEII. On January 10, 2024, SCE filed a letter responding to comments on the ISR. As part of this filing, SCE included a public version of OPS-1 but did not file requested recreation study progress reports. On February 1, 2024, FERC sent SCE a letter requesting additional results from ongoing recreation studies and provided additional time for comments on these results, as well as the public version of OPS-1.5. On March 1, 2024, SCE responded to FERC's request by filing additional study results for ongoing recreation studies.

SCE Response

The Federal Energy Regulatory Commission (FERC) February 1, 2024, letter did not direct Southern California Edison (SCE) to file the recreation study progress reports at that time, as these studies are a work-in-progress. SCE is in the process of completing the studies and developing technical study memoranda that summarize the study results as studies are completed. These technical study memoranda will be included with either the Draft License Application (DLA; due July 3, 2024) or the Updated Study Report (USR; due October 11, 2024). Stakeholders will have the opportunity to review and comment on the technical study memoranda and study results following the DLA and USR filings.

COMMENT NPS-2: 1. REC-1 WHITEWATER BOATING STUDY: LEVEL 1 STRUCTURED INTERVIEW ANALYSIS

The NPS requests that SCE provide the results from the Level 3 single flow survey to stakeholders to review prior to launching the Level 3 comparative flow survey. The ISR included results from the Level 2 limited reconnaissance site visit and SCE's February 1 filing included the results of the Level 1 structured interview questionnaire. Having both the Level 1 and Level 2 study results will allow stakeholders to identify possible information gaps to be addressed before proceeding with the Level 3 Intensive Study. SCE has already partially completed the Level 3 Intensive Study by implementing a Level 3 single flow survey, which was launched in April 2023 and remained open through December 2023. SCE has not provided stakeholders the results from the Level 3 single

flow survey. Since the analysis of the Level 3 single flow survey is necessary to inform the Level 3 comparative flow survey, the NPS requests that SCE provide the single flow survey results to stakeholders prior to implementing the comparative flow survey.

SCE Response

SCE provided the Level 3 Single Flow Survey results on March 29, 2024 (SCE, 2024c).

COMMENT NPS-3: 2. REC-2 RECREATION FACILITIES USER SURVEYS: CALIBRATION AND SPOT COUNT SUMMARY

a. Request for additional REC-2 Study Results

The NPS requests that SCE provide the REC-2 survey results for stakeholders to review and determine the adequacy of the results. In our comments on the ISR, the NPS requested that SCE provide the results of the 2-hour calibration and spot counts for stakeholders to review and determine if the study plan variance is acceptable and appropriate or if a study modification is needed. SCE provided the spot and calibration count data in response to FERC's request for additional study results. However, FERC alluded to the need to also provide the REC-2 survey results in their request: "The survey results are unique from the spot and calibration count results, and both should be included in the appended technical memorandum for the Recreation Facilities Use Assessment Study consistent with the requirements of the SPD." The survey results are the last component of the REC-2 study that stakeholders had not had a chance to review and comment on. The NPS requests that SCE file the survey results and FERC allow additional time for stakeholders to review.

SCE Response

SCE provided REC-2 survey results for the summer period (Memorial Day 2023 through Labor Day 2023) on March 29, 2024 (SCE, 2024c). SCE will provide the REC-2 Final Technical Memorandum for the full study period (April 2023 through March 2024) with the DLA that is due July 3, 2024, and as part of the USR (due October 11, 2024). Stakeholders will have the opportunity to review and comment on the REC-2 Final Technical Study Memorandum and study results following the DLA filing and USR filings.

COMMENT NPS-4: 2. REC-2 RECREATION FACILITIES USER SURVEYS: CALIBRATION AND SPOT COUNT SUMMARY

b. Request for Study Modification

NPS review finds that the spot and calibration count data does not provide sufficient information to analyze the use of existing recreation facilities and requests that this portion of REC-2 Recreation Facilities Use Assessment be modified to include the use of trail cameras or another data collection method that provides sufficient information to analyze recreation use impacted by Project operations.

FERC issued a Study Plan Determination (SPD) for the Project on October 12, 2022, and recommended SCE install trail cameras that would provide information on visitors accessing the river. FERC asserted that the trail cameras would collect information on recreation activity in the Project study area compared to relying solely on spot counts. After SCE proceeded to set up cameras at all 25 recreation sites after stakeholder input, they received a notice from Sequoia National Forest to remove all trail cameras from their permitted recreation facilities (i.e., campgrounds). Without stakeholder input, SCE revised the recreation use data collection to include two-hour calibration counts and additional spot counts.

The NPS reviewed the calibration and spot count data and finds that the revised methodology does not adequately capture river-related recreation activities in the Project study area. The resultant data is not comprehensive enough to ensure FERC has adequate information to analyze environmental effects and inform license conditions. The request from Sequoia National Forest to remove trail cameras focused on campgrounds managed by the Forest's concessionaire and does not necessarily include boating access sites and trails not associated with hosted campgrounds.

The data gathered using calibration and spot counts does not fully quantify recreation users and user types on the North Fork Kern River. The data gathered does not distinguish between type of river recreationists (private boaters or commercial passengers) or type of boat used (e.g., kayak, canoe, raft, cataract, tube, etc.). This information is important because different types of river recreationists have different riverflow preferences and needs, and river flow levels are directly impacted by Project operations. Use of trail cameras at river access points would have provided the data needed to estimate the number and types of river recreationists within the Project study area.

In addition, whitewater recreationists are likely undercounted when using spot and calibration counts because their on-water recreation activity inherently makes them harder to count using a "terrestrial" spot/calibration count (i.e., counting vehicles and people on land). Private whitewater boaters generally spend very little time near their vehicles and are more likely to not be included in spot/calibration counts compared to recreationists who are picnicking, camping, fishing, or partaking in other forms of land-based recreation activities. In comparison, commercial boating passengers are typically dropped off in large groups in vans and busses, and then later picked up at river take out points. The transport vehicles spend little time at either site and can easily be missed during spot counts.

Pursuant to 18 CFR 5.15(d)(1), one of the criteria for requesting the modification of an ongoing study is to prove that the approved studies were not conducted as provided for in the approved study plan. The use of spot and calibration counts in place of trail cameras for characterizing types and numbers of on-river recreation users is a variance from the FERC's approved study plan. As described above, the study variance does not provide sufficient information to analyze on-river recreation use in the Project study area. The NPS requests that SCE engage in further consultation with Sequoia National Forest to determine if trail cameras can be used at river access sites not associated with

concessionaire-managed campgrounds or if another viable alternative for collecting reliable on-river recreation use can be determined. We recommend that this consultation also include other stakeholders who have shown interest in the collection of such data.

SCE Response

In its October 9, 2023, Initial Study Report (ISR) filing, SCE provided the rationale for why the trail cameras were removed (SCE, 2023). SCE implemented 2-hour calibration counts and additional spot counts to capture additional data regarding recreational use to account for the removal of cameras. These methods have been used in other hydropower relicensing proceedings also tasked with collecting information on recreation use and activities, as noted in SCE's January 9, 2024 filing (SCE, 2024a). This calibration and spot count data is part of the larger comprehensive data set that includes intercept surveys, online surveys, existing available recreation use data, and specific whitewater boating data as conducted under the REC-1 Study. Together, each of these data sets provide a robust picture of recreation use in the study area that will be adequate to characterize existing recreation use, analyze potential Project effects, and support the development of proposed license conditions, as needed.

On March 1 and March 29, 2024, SCE made filings to FERC that provided additional information on both the whitewater boating activities (REC-1 Study) and general recreation use (REC-2 Study) (SCE, 2024b and 2024c). These studies follow standard methodologies and include multi-pronged data collection methods. The REC-1 and REC-2 Studies, as well as the ANG-1 Enjoyable Angling Flow Study provide information regarding recreational use (including types of activities) and visitor preference information related to both general and riverine-based recreation use occurring within the study area to inform the environmental analysis.

As part of the REC-1 Study, commercial and individual boaters of different skill levels and watercraft types have participated and continue to provide direct feedback on their preferred flow recommendations. The REC-1 Interim Technical Memorandum filed with the ISR in October 2023 summarizes annual number of passengers on the North Fork Kern River (NFKR) as reported to the U.S. Forest Service Sequoia National Forest (SQF), and the annual number of passengers launching at the Kern River No. 3 (KR3) Powerhouse Put-in/Take-Out recreation site, as reported by commercial whitewater outfitters (SCE, 2023). In the 18-year period from 2004 to 2022, commercial passenger numbers on the NFKR ranged from a low of 120 in 2015 (dry water year) to a high of 7,510 in 2017 (wet water year) (SCE, 2023). The March 1, 2024, REC-1 Study filing summarized the results of the Level 1 Structure Interview Questionnaire (SIQ), which provided information pertaining to whitewater boating use and preferences, including type of watercraft used, typical trip length, boating period, and input on estimated acceptable and optimum flow preferences (51 SIQ responses were received) (SCE, 2024b). Additional information on whitewater boating activities was obtained from the Single Flow Survey (SFS) that was conducted from April through December 2023 and collected information from boaters shortly after boating an individual flow. A total of 404 SFS responses were received and results were summarized in the March 29, 2024, filing made to FERC (SCE, 2024c).

From April 11 through 14, 2024, SCE conducted enhanced flow studies to collect flow evaluations from boaters rating the quality of whitewater boating opportunities at target flows ranging from approximately 450 cubic feet per second (cfs) up to 900 cfs where knowledge gaps existed based on boater input from the Level 1 SIQ study and the Level 2 Limited Reconnaissance Site Visit.

For these reasons, SCE believes the methods SCE employed following the SQF directive to remove cameras are sufficient to analyze on-river recreation use in the Project study area. Contrary to National Park Service (NPS) concern, the on-river use data collected by SCE's studies (REC-1: SIQ, SFS, and enhanced flow studies; REC-2 visitor use questionnaires; and the ANG-1 Study) provides a robust data set to adequately characterize recreation use within the study area and the Fairview Dam Bypass Reach. This data will be used to identify and analyze potential Project effects and support the development of proposed license conditions, as needed.

COMMENT NPS-5: 3. OPS-1 WATER CONVEYANCE ASSESSMENT, APPENDIX A: POWER TUNNEL HYDRAULIC MODEL RESULTS (PUBLIC)

The NPS requests that SCE file a public version of the Phase 2 analysis for the OPS-1 Water Conveyance Assessment for stakeholder review and that FERC provide additional time for review. In response to the ISR, the NPS requested that SCE refile a redacted version of the OPS-1 Water Conveyance Assessment with CEII removed for stakeholder review. Other stakeholders made similar requests. SCE concurred and filed a public version of OPS-1 Water Conveyance Assessment on February 1, 2024. This filing did not include the results of the Phase 2 initial hydraulic assessment, which was in development at the time the ISR was filed, but SCE stated that they will share the results of the Phase 2 analysis with stakeholders upon completion. Stakeholders need to review the OPS-1 study results in their entirety (Phase 1 and Phase 2) to gain a comprehensive understanding of possible operational constraints of the Conveyance system that would limit whitewater flow releases so they can incorporate such constraints in their recommendations. Without both Phases of the OPS-1 study available for review, stakeholder comments filed by the April 1 deadline may be incomplete.

SCE Response

SCE provided this information on March 29, 2024 (SCE, 2024c). While the full technical report was filed with FERC as Critical Energy Infrastructure Information (CEII), a summary of the conclusions and recommendations was provided in the public portion of the OPS-1 Interim Technical Memorandum at a sufficient level of detail for Stakeholder review.

2.0 AMERICAN WHITEWATER (AW)

COMMENT AW-1: III. COMMENTS - TIMELINE

Since filing the Additional Study Results, SCE has since filed additional study results on the REC-1, REC-2, and OPS-1 studies. We anticipate that additional stakeholder comments will be necessary for these filings with particular interest in the OPS-1 filing. We suggest that FERC consider extending the deadline in the Process Plan Schedule in order to capture discussion, particularly on the final results of OPS-1 but also the other studies. In the event that these studies do not adequately capture resource information and provide the data necessary to inform license conditions, additional study may be needed outside of the current study season. The inherent mismatch between the April 1 Process Plan Schedule modification for stakeholder comments and SCE's commitment to filing certain study results within Q1 2024 means that many stakeholders and most agency participants to relicensing will not have an opportunity to make timely comments. We further suggest that FERC staff incorporate comments filed after April 1 on these study results to the extent that they are able.

SCE Response

SCE will be completing technical study memoranda that summarize results as studies are completed. These technical memoranda will be included with either the DLA (due on July 3, 2024) or the USR (due October 11, 2024). Stakeholders will have the opportunity to review and comment on the technical study memoranda and study results following the DLA and USR filings.

COMMENT AW-2: REC-1

SCE identified several whitewater segments where some paddlers believed there were knowledge gaps at certain (generally lower) flows. The Additional Study Results describe the flow ranges where Level 1 and Level 2 respondents indicated information was missing in their knowledge of the reach. At the time of the March 1 filing, information was not provided related to the Level 3 Single Flow Survey which may have demonstrated paddler experiences within those lower flows. For this reason, we support SCE making modifications to their operations within 2024 in order to provide those identified knowledge gap flows for paddlers to experience the reach at them.

SCE Response (AW-2a)

The SFS was conducted from April through December 2023, and the results were provided on March 29, 2024 (SCE, 2024c).

The results of the Level 1 SIQ and Level 2 Limited Reconnaissance Site Visit identified knowledge gaps in boater flow preference between 200 to 800 cfs. Based on forecasts for inflow to Fairview Dam, SCE scheduled enhanced flow boating opportunities for April 11 through 14, 2024, targeting bypass reach flows on 200, 400, 600, and 800 cfs where

knowledge gaps existed. SCE's ability to control flows in the bypass reach is limited to the approximately 600 cfs capacity of the water conveyance system.

Between 10 a.m. on April 11 and 10 a.m. on April 14, inflows to Fairview Dam ranged from 1,006 cfs to 1,368 cfs and boaters were able to evaluate four bypass reach flows at approximately 450 cfs, 770 cfs, 835 cfs, and 860 cfs. SCE was not able to provide flows less than 450 cfs for boaters to evaluate because the running day average for inflows above Fairview Dam from April 11 (Thursday) through April 13 (Saturday) exceeded 1,000 cfs, triggering whitewater flow requirements under License Article 422.

SCE plans to schedule additional enhanced flow opportunities in 2024 (most likely on the descending limb of the hydrograph) when inflows coupled with limited flow control through the water conveyance system presents suitable conditions for boaters to evaluate lower flow knowledge gaps between approximately 200 to 400 cfs and approximately 600 cfs.

SCE began recruiting for a notification email list on 13 March 2024 in order to let paddlers know that they would be providing these flow enhancements. Due to the corresponding timelines of study information becoming available, study comments being due, and that recruitment effort, we suggest that SCE attempt to provide as much lead time as possible for these enhanced flows. This might simply involve relating an approximate target timeline for providing these flows to the stakeholders that sign up and the entities that were identified during the Study Planning process (AW, LAKC, KRB, ...) in advance of formal scheduling (e.g. we anticipate attempting to provide these flows on the descending limb of the hydrograph and will communicate any target dates as they become available). We further suggest that SCE reopen the Level 3 Single Flow Survey for participants to directly evaluate these lower flows.

SCE Response (AW-2b)

On March 11, 2024, SCE distributed an electronic communication to the KR3 Relicensing Stakeholder List and boating organizations (American Whitewater [AW], Gold Country Paddlers, Kern River Boaters [KRB], and Los Angeles Kayak Club [LAKC]) informing them about the plan to provide enhanced flow opportunities at the KR3 Project in 2024. The LAKC forwarded the electronic communication to the American Canoe Association California and Idaho chapters. SCE provided a form for boaters to sign up to participate in the enhanced flow opportunities and receive notification updates on the schedule. The participant sign-up form remains open for boaters to register for updates. A total of 76 boaters used the online form to sign up to participate in the enhanced flow opportunities. SCE used the participant list, boating organizations, and the KR3 Relicensing Stakeholder List to communicate when inflow conditions at Fairview Dam looked favorable for controlling flows into the water conveyance system to create enhanced flow opportunities in the Fairview Dam Bypass Reach.

In early April, the 10-day weather and flow forecasts looked favorable for creating enhanced flow opportunities between April 11 to 14 (Thursday through Sunday). On April 3, 2024, SCE notified the boater participant list, boating organizations, and the KR3 Relicensing Stakeholder List of the proposed schedule to provide enhanced flow opportunities from April 11 to 14. On April 9 and April 10, SCE provided electronic notification updates to the participant list, boating organizations, and KR3 Relicensing Stakeholder List confirming the enhanced flow opportunities schedule as well as additional details for daily check-ins and focus group meeting time and location. SCE sent daily electronic notifications to the participant list between April 11 to 14, updating them on the schedule, flow forecast, and the link to the enhanced flow evaluation form.

SCE plans to schedule additional enhanced flow opportunities in 2024 (most likely on the descending limb of the hydrograph) when inflows coupled with limited flow control through the water conveyance system presents suitable conditions for boaters to evaluate flow knowledge gaps between approximately 200 to 400 cfs and approximately 600 cfs. SCE's ability to control flows in the Fairview Dam Bypass Reach is limited to approximately 600 cfs capacity of the water conveyance system. Therefore, to provide enhanced boating opportunities within the 200 to 400 cfs range, river inflows above Fairview Dam must be between 800 to 1,000 cfs. SCE will provide as much advance notice as reliable weather and flow forecasts allow to inform the participant list, boating organizations, and KR3 Relicensing Stakeholder List of these additional enhanced flow opportunities.

SCE developed the enhanced flow evaluation form designed specifically for boaters to evaluate the enhanced flow opportunities. Refer to SCE's Response Comment AW-2a above for a summary of the April enhanced flow releases.

COMMENT AW-3: REC-2

The REC-2 study had a significant interim study modification implemented during the first study season. Stakeholders commented on the ISR and during the ISR meeting that this modification should have been conducted in concert with the Recreation Technical Working Group, stakeholder entities, and additional agency inclusion outside of USFS SQF staff. Stakeholders and FERC also identified that the in-person survey results gathered during the first study season were not provided in the ISR and they do not appear to have been provided in the Additional Study Results filing from 1 March. Unless this information was provided in the 29 March filing, it is still missing and constitutes a gap in stakeholders' ability to review the REC-2 findings from the ISR and Additional Study Results.

SCE Response (AW-3a)

SCE provided REC-2 survey results for the summer period (Memorial Day 2023 through Labor Day 2023) on March 29, 2024 (SCE, 2024c). SCE will provide the REC-2 Final Technical Memorandum for the full study period (April 2023 through March 2024) with the DLA that is due July 3, 2024. Stakeholders will have the opportunity to review and comment on the REC-2 Final Technical Study Memorandum and study results following the DLA and USR filings.

We continue to be concerned that the spot/calibration count methodology that was adopted may inherently misrepresent the demographics and recreation user types at various access points. While trail/game cameras are particularly well-suited to quantifying recreation user types (e.g. carrying a boat and drysuit, hiking with trekking poles and a backpack, carrying lunch and picnic supplies, etc.), spot and calibration counts will tend to represent only recreation users available at the location at the time that surveyors reach it. Information about the type of recreation user (commercial raft passenger, noncommercial kayaker, noncommercial rafter, etc) is absent from the survey results which were filed. We are unaware of surveyors conducting spot or calibration counts from watercraft and for that reason believe that the modification methodology may not accurately capture recreation users sufficiently to adequately inform license conditions.

SCE Response (AW-3b)

The REC-2 Study is structured to obtain information related to general recreation use, activities, and visitor preferences within the study area, including both land-based and riverine-based recreation activities. The REC-2 survey was available via in-person intercept surveys and online on the KR3 public website for any visitors wishing to provide feedback. In addition, notification of the surveys (including QR codes) was posted at the study area recreation sites, local businesses in Kernville, and distributed via windshield flyers on vehicles in the study area.

Over 1,700 surveys (including both intercept and online surveys) were completed during the April 2023 through March 2024 study period, obtaining information on the type of recreation use activities, frequency and duration of stay, and other site-specific information.

Calibration and spot counts were conducted throughout the study period, resulting in 56 data collection days, including weekday, weekend, and holiday weekend periods monthly to further document recreation use and use patterns. SCE is collecting additional spot counts and 2-hour calibration counts at the non-fee day use/dispersed camping recreation sites in the study area for an additional 5 days (1 weekday/weekend day in April and May 2024 and 1 day of the 3-day Memorial Day weekend).

During the April 2023 through March 2024 study period, over 20,000 individuals were observed participating in recreation activities within the study area. In the March 29, 2024, filing, SCE provided preliminary results of the spot and calibration counts and survey data for the summer period (Memorial Day 2023 through Labor Day 2023) (SCE, 2024c). SCE will provide the REC-2 Final Technical Memorandum for the full study period as part of the DLA filing in July 2024.

Whitewater recreation use information was collected by the REC-1 Whitewater Boating Study. As part of this study, SCE implemented the Level 1 Structured Interview Questionnaire (SIQ) with 51 survey responses, the Level 2 Limited Reconnaissance Site Visit, and the Level 3 Single Flow Survey (SFS) with 404 survey responses and analyzed commercial use annual number of passengers on the NFKR as reported by the commercial outfitters to the SQF. This large volume of use and user information collected by the REC-1 Study is more than sufficient to characterize the whitewater recreation in the Fairview Dam Bypass Reach. For these reasons, SCE does not share AW's concern that the methodologies employed by SCE following the SQF directive to remove the trail cameras may misrepresent the demographics and recreation user types at various access points. Contrary to this claim, the REC-2 calibration and spot count data, intercept surveys, online surveys, and existing available recreation use data combined with the REC-1 specific to whitewater boating data are all methods that are generally accepted in the scientific community to gather recreation user data, and these data provide a robust picture of recreation use in the study area that will be more than adequate to characterize existing recreation use, analyze potential Project effects, and support the development of proposed license conditions, as needed.

See also response to Comment NPS-4.

The USFS request for removal of cameras in campgrounds specifically referred to reasonable expectation of privacy in campgrounds and vehicles. It did not require that SCE remove all cameras and did not indicate that a discussion about more optimal siting of those cameras was not possible. On this basis we request that SCE consult with Recreation stakeholders and the SQF to determine suitable locations for cameras that adequately capture recreation user type. This might be on access trails to the river, parking lots without campsites in frame, or other locations suitable to both meet the needs of the USFS and also information needs of the relicensing process. This would not constitute a study modification but rather the conduct of the study as given in the Study Plan Determination.

SCE Response (AW-3c)

Prior to the request by the Forest Service to remove the cameras, SCE was consulting with the SQF District Ranger regarding suitable locations for the placement of cameras with a focus on parking areas. However, the layout and landscape of the recreation sites (i.e., wide open spaces or main driveways and parking areas adjacent to many campsites) does not lend itself to focus only on parking areas. Therefore, SCE removed the cameras when requested by the Forest Service and then expanded study to include 2-hour calibration and spot counts to increase the amount recreation use data collected (in lieu of cameras). The calibration and spot counts methods are accepted in the scientific community for collecting the same data for which the cameras were originally intended to be used. In fact, trail cameras are a fairly recent technological alternative; calibration and spot counts have been used by FERC for many years in hydropower relicensing and are a proven method for obtaining recreation user information.

As described in the responses to Comment NPS-4 and Comment AW-3b, the use data collected by the REC-2 Study (calibration and spot count data, intercept surveys, online surveys, existing available recreation use data) combined with the REC-1 Study specific to whitewater boating data provide a robust picture of recreation use in the study area that will be more than adequate to characterize existing recreation use, analyze potential Project effects, and support the development of proposed license conditions, as needed.

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COMMENT AW-4: OPS-1

The results of the second half of the OPS-1 study were still outstanding at the time of the 1 March 2024 filing. This study is critical to understanding the capacity of the KR3 conveyance system and to accurately inform license conditions. We anticipate further discussion being necessary and possibly additional study needs being identified once those results become available. Should technical information be obscured as the result of CEII filing or the study outcomes or process be flawed, additional water conveyance study may be required. We have previously and continue to request that this study thoroughly describe the magnitude, frequency, and rate of flow changes which the conveyance can safely support. This information is critical to understanding what types of whitewater flow regimes might be possible through dewatering of the conveyance. In the absence of that information, it will be impossible to accurately inform license conditions and prospective mitigations of the project's impact on whitewater recreation. FERC clearly identified the need for stakeholder engagement and timeline for review of this information in the Study Plan Determination and also their AIR. We hope that FERC staff will review comments through April on the 29 March 2024 OPS-1 additional results filing and welcome additional discussion on the conveyance system in general.

SCE Response

As noted in SCE's January 9, 2024, Response to Comments filing, SCE committed to providing additional study results in the first quarter of 2024 (SCE, 2024a). SCE provided this information on March 29, 2024 (SCE, 2024c). While the full technical report was filed with FERC as CEII, a summary of the conclusions and recommendations was provided in the public portion of the OPS-1 Interim Technical Memorandum.

3.0 KERN RIVER BOATERS (KRB)

INTRODUCTION

As a preliminary matter, SCE notes that FERC staff, in its February 1, 2024 (FERC, 2024) letter revising the process plan and schedule, recognized that relicensing participants already had a full and fair opportunity to respond to the ISR by submitting requests for modified and new studies on or before December 11, 2023. KRB took full advantage of that opportunity—submitting on December 11, 2023, a 121-page request for FERC to modify 20 of the previously approved studies and direct SCE to conduct 5 entirely new studies (KRB 2023). And because SCE fully addressed each of KRB's requests in its January 9, 2024 Initial Study Report Response to Comments, FERC staff's February 1 letter deliberately extended an additional opportunity for comment *only* with respect to OPS-1 and the other information that SCE submitted to the FERC record on March 1, as FERC staff directed in its February 1 letter. FERC staff's February 1 letter expressly directs: "Previously filed comments and study requests on the ISR do not need to be reiterated or resubmitted."

KRB completely ignored FERC staff's directive. Instead of focusing its supplemental comments on OPS-1 and the other information submitted by SCE on March 1, KRB abused FERC staff's supplemental comment period by submitting an unauthorized response to SCE's January 9, 2024 Initial Study Report Response to Comments— reiterating and embellishing upon its prior request for 20 study modifications and 5 new studies (KRB, 2024). KRB's highly inappropriate filing is not only a transparent attempt to gain an undue advantage in this relicensing process—as FERC's regulations clearly contemplate a single comment-response opportunity by both participants and the applicant—but it has burdened FERC staff with the task of responding to a whole new set of comments at a time when staff has only a short, 30-day period for their issuance of the determination on study plan modifications. It is entirely disingenuous for KRB to accuse SCE of not producing study results quickly enough to its liking, while simultaneously abusing FERC's directives and forcing SCE to shift resources to preparing a response to an unauthorized filing.

For these reasons, FERC staff would be we well within its discretion to protect the integrity of process in this relicensing effort by rejecting the additional comments submitted by KRB in its April 1 filing—and signaling to KRB that these attempts to abuse the relicensing process will not be tolerated in this proceeding.

Out of an abundance of caution, SCE responds to KRB's new requests below. It is not SCE's intent to exacerbate the burdens placed on FERC staff created by KRB's improper filing, but rather to protect the administrative record in the event FERC staff decides to consider KRB's inappropriate additional comments. As demonstrated below, SCE has accommodated KRB's supplemental comments where appropriate, but most lack merit and should not be accepted by FERC staff in their determination on study plan modifications.

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COMMENT KRB WR-1.1 WATER QUALITY. BACTERIAL MONITORING, MODIFICATION

EDISON: KRB has not satisfied FERC's criteria for a modified study by demonstrating that the approved study was not conducted as provided for in the approved study plan or that the study was conducted under anomalous environmental conditions. (ISR Reply at 7.)

KRB: As KRB showed from the KR3 Hydrology Dataset (KRB ISR at 5), the anomalous environmental condition on each date was that Edison was not appreciably dewatering the river below Fairview Dam — less than 2 cfs on each testing date. The KR3 diversion is an all-too important degrading contributor to the environment below that dam, and its effects are the thing we are supposed to be studying. Edison has not shown such a de minimis diversion to be a typical environmental condition of the type aimed at by the approved study. The September bacterial tests should accordingly be re-run per our request.

SCE Response

SCE objects to this requested Study Plan modification. SCE has collected bacterial samples in September 2022 and August through September 2023. These two sampling events represent a range of river flow conditions in a dry water year (2022) and a wet water year (2023) and are representative of water year types that occur historically in the hydrologic record with periods of both back-to-back dry and wet years.

The bacterial samples collected in September 2022 are representative of flow conditions that occur during dry years on the NFKR upstream and downstream of Fairview Dam regardless of Project operations (whether the Project is diverting water or not). During the fall 2022 sampling effort, instream flows upstream of Fairview Dam ranged between 110 and 192 cfs. The minimum instream flow (MIF) in September is 100 cfs; therefore, SCE only had the ability to divert between 2 to 90 cfs during the sampling event. KRB correctly identifies that the Project was diverting less than 2 cfs during this time period; however, this was due to the naturally occurring low flow conditions that are representative of dry water year conditions that occur on the NFKR.

Per the FERC-approved study plan in the Study Plan Determination (SPD), SCE will be conducting bacterial sampling in July 2024 since the July 2023 sampling could not be conducted due to high river flow conditions greater than 5,000 cfs. Based on the 2024 snowpack conditions, it is anticipated that flow conditions will be representative of an average water year.

With the completion of the three sampling events, SCE will have collected bacterial samples across a range of river flow conditions (dry, average, and wet water year conditions).

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COMMENT KRB WR-2.1 HYDROLOGY. MANAGEMENT GOALS, MODIFICATION

EDISON: [U]pdated or expanded reference documents describing resource agency goals are not a study variance or request for a new or modified study. (ISR Reply at 7.)

KRB: The failure to include current management goals in the CEFF summary — as committed in the ISR — is so plainly at variance with generally accepted and approved study methods as to be unremarkable. We accordingly ask that those be included to implement the approved CEFF.

SCE Response

SCE reiterates that it appreciates the identification of this additional information. The updated/expanded goals referenced by KRB will be reviewed and included in the California Environmental Flows Framework (CEFF) assessment, as applicable, and reported in the USR due October 11, 2024.

COMMENT KRB WR-2.3 HYDROLOGY. MEDIAN FLOWS, MODIFICATION

Edison: WR-2 includes flow reporting typically used and accepted by state and federal resource agencies as commonly used scientific methodologies [and they] report monthly flow data as a mean (sometimes with minimums and maximums), and almost never as a median. (ISR Reply at 8.)

KRB: If Edison's assertion is true, it has completely failed to explain why it did not follow that assertion and instead employed the median rather than the mean as the statistical measure of monthly hydrological effects in the PAD:

[Figure removed]

KRB freely acknowledges there are many proper uses of monthly means in river science — such as, potentially, characterizing flows in a single month from a single year, or flows over a set of years without meaningful outliers, or water volumes between water years. The key is whether the data set to be characterized is riddled with outliers. Here, the question is which statistical method best represents the monthly hydrological effects over this storageless, run-of-river diversion given the asymmetrical historical variations in snowpack and resultant flows above and below Fairview Dam.

Edison makes no effort to argue against our central analytical point: namely, that the median best represents the central tendency of an asymmetrical distribution. In the case of KR3, the data set is heavily skewed by the presence of outlier high water years. Applied to such an asymmetrical distribution, the mean gives undue weight to a small proportion of extremely large values — in this case, a small proportion of high-water years.

Nor does Edison contend that the distribution of water years on the NFKR is symmetric, for it cannot: just look at the values on the right side of the following chart1:

[Figure removed]

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Here is the same chart divided into thirds, representing Dry, Moderate, and Wet water year types2:

[Figure removed]

Consider what the chart shows: More than two-thirds the water years are below the mean, the mean is more than 50% higher than the median, and the maximum water year flow is more than four times greater than the median. The distribution of flows by water year in the NF Kern watershed is skewed heavily by the presence of outlier high water years. As a result, median values — as used by Edison in the PAD (and thus which we expected to be used in the ISR) — best represents the central tendency of KR3's effect on this waterway.

Edison offers no reason to dispute what we have argued, no reason to prefer the mean over the median here, and no example of any of the authorities it casually invokes actually using the mean over the median to represent an asymmetrical water year distribution at a storage-less run-of-river diversion. Those examples do not exist. As US Fish and Wildlife has explained: "What is the justification for using the median? The data are very variable and the median and mean are considerably different from each other. Because the median is a more robust measure of central tendency when outliers are present in a dataset, the median was used for all analyses in Appendix 3 rather than the mean." Each of those elements is found here: outliers, large variation, and a mean which strays far afield of the median. Take another look at the histogram of water years on the NF Kern. It shows an asymmetrical bunching of water years towards the left and a small handful of high-water years reaching out far, far to the right:

[Figure removed]

The central tendency of project effects in this watershed — i.e., those effects most likely to be faced by the living things dependent on the quantity of water flowing below Fairview Dam — are best represented in monthly increments by the monthly median, not the monthly mean. Edison recognized this in the PAD and offered no reason to stray from it since.

Had Edison employed the mean as its monthly graphical representation in the PAD, we could have objected then, for the median is the best science in the context of KR3 hydrology. Edison's change of methodology be should accordingly be deemed a variance — the median was implied by its prior usage and best science status — and the study should be modified to require graphical representations using the median, not the mean.

SCE Response

Although the FERC-approved study does not require SCE to present median flow statistics, SCE will provide both median and mean flow statistics in either a tabular or graphical format in the DLA.

COMMENT KRB WR-2.4 HYDROLOGY. AUTHORIZED FLOWS TABLES, NEW STUDY

EDISON: KRB attempts to justify the request by implying the Project will avoid outages in the future. This statement defies the reality of scheduled outages for maintenance activities and the reality of unanticipated events. Although SCE maintains the Project in good working order, these types of outages are inevitable over a 30–50-year license term. Because every powerhouse can experience unanticipated outages, an accurate description of current operations (including outages) marks the best predictor of future operations that SCE has to assess the proposed Project in their License Application. KRB's suggestion that the Project will never experience an outage demonstrates a lack of understanding of the realities of operating a power plant. (ISR Reply at 8.)

KRB: Edison characterizes the reasons for all of KR3's extraordinary rate of outages — more than 23% of all hours in its data set — as "maintenance and unanticipated events," suggesting that such an incredibly high rate of outages is typical. The characterization is false, and the rate of outages for the last license term is abnormally high.

The biggest outage KR3 sustained in the current license term was not for routine maintenance or other contingency, but rather for the "rehabilitation" of Fairview Dam and its 13-mile conveyance. That rehabilitation project resulted in a complete and total outage of the project for 16 consecutive months in 2013 & 2014. That project was more akin to overhaul and reconstruction — i.e., a capital improvement of deteriorating assets. Indeed, Edison said the purpose of the project was to "improve the structural integrity of the dam, tunnel, and sandbox." The rehabilitation project required five contemporaneous FERC submissions involving "more than 175 engineering drawings." With no evidence in the record suggesting otherwise, this massive rehabilitation project is unlikely to be repeated in the next license term and was self-identified as being aimed at "improving" project reliability — i.e., decreasing the rate of outages going forward.

[Figure removed]

Furthermore, repair techniques and technology, both in their implementation and the robustness of their results, should be expected to improve over time. There is no reason to think these factors do not apply to KR3 or that KR3's managers will not seek to use them to improve project reliability. Indeed, unlike here — where Edison argues that a 23% rate of outages is somehow typical and capital improvements never occur — Edison has boasted to the California Public Utilities Commission that its hydro fleet sustains outages at a rate of just 13% — and that figure includes the pro-rating of generation outages. The 23% figure includes no pro-rating. Edison also boasts to CPUC: "Capital projects performed during this period have been effective in improving the performance of SCE's Generation fleet." That is quite different from the picture Edison paints to the Commission.

Edison has provided no evidence that KR3's excessive rate of outages will be repeated in a coming license term. Rather, Edison offers hand-waving assertions about maintenance and insinuations ["lack of understanding"] about groups that use evidence to challenge those assertions. Edison is capable of providing an evidence-based estimation of outages going forward. It has not. Absent such evidence, our proposed authorized flows study fills an essential knowledge gap in project effects as KR3 recovers from a particularly ineffective period of time during which the environment was spared the full force of the project diversion. The authorized flows hydrology is at minimum a bookend of potential project effects when coupled with the hydrology of flows from this last term. The truth going forward may lie in between the two, but decisionmakers at a minimum should be aware of how much more damage this project is capable of doing to the river hydrology below Fairview Dam. Indeed, we simply cannot presume that a similar outage rate will occur in the next license term — just look at the blue linear trendline over Edison's hourly data set

[Figure removed]

So it is not true, as Edison urges, that "data collected and summarized under Study WR-2, along with other existing operational information will be sufficient to complete the analysis of effects and to develop license requirements." (ISR Reply at 38.) To the contrary, with the past rate of outages so incredibly high — and with that rate decreasing over time after an intensive deployment of capital to improve project reliability — Edison's current term hydrology grossly understates project effects going forward. Baseline "current conditions" include capital projects already completed to improve reliability. Current operations include those improvements, and past outages suffered to obtain greater current reliability should not improperly influence the analysis of baseline project effects going forward.

Finally, Edison contends that "several" (ISR Reply at 38) negative months of generation represented in a PAD table put the world on notice that the project's prior hydrology was not a faithful indicator of project effects going forward. Significantly, Edison refuses to count those months — and for good reason, from its perspective, for there are only 28 (see Table 4.6-2 at PAD 4-25)— less than 10% of all months in the data set. Ten percent is a far, far cry from the 23% figure that Edison revealed post-PAD in the hydrology dataset. If Edison had been upfront with that figure — and the recent reduction in rate of that figure — interested managing agents could have asked for an authorized flows hydrology as well. We ask that the authorized flows study be performed in line as described in our ISR request.

SCE Response

SCE continues to object to this requested new study. The new rationale provided by KRB does not meet the criteria for new studies under 18 CFR § 5.15(e). The requested study is not needed for SCE to complete an assessment of potential effects of the proposed Project compared to current (baseline) conditions and is not relevant for FERC to complete its environmental analysis. Project outages for maintenance and repair are routine and required for continued operation of any hydropower project and are not unique to the Project. The timing, duration, and frequency of outages are not always known and are thus necessary to include in the summary of current operating conditions. Additional information on Project operation and resource utilization will be provided to FERC as part of the license application, in accordance with the reporting requirements for Exhibit B (18 CFR § 4.51(c)).

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However, when appropriate in presenting data analyses (i.e., REC-1 Whitewater Boating Study, annual number of boating days), SCE will indicate outage periods so that FERC can clearly identify when the Project was off-line for extended periods of time associated with non-routine maintenance work when completing their environmental analysis.

COMMENT KRB WR-2.5 HYDROLOGY. CEFF BELOW FAIRVIEW DAM, NEW STUDY

In the study design process, KRB proposed using the already collected and existent hydrology datasets from immediately above Fairview Dam (unimpaired) and immediately below Fairview Dam (impaired) to calculate and compare the CEFF functional flow metrics for each data set in an effort to use the best contemporary environmental science to understand and characterize project effects on the 16-mile dewatered stretch.

These flow metrics are a set of calculations and characterizations that can be applied to a known hydrograph — like the hydrographs SCE has readily available for both the above and below Fairview Dam. Calculating the CEFF functional flow metrics on both the unimpaired flow hydrograph and impaired flow hydrograph make it possible to compare the functional flow metric differences for each — i.e., to see what the best contemporary river science available has to say about the effects of the project diversion.

KRB has requested this data analysis methodology from the outset. SCE has conveniently avoided the full request by throwing out the impaired flow metrics and comparative elements, thereby precluding the application of the best available science for characterizing the diversion's effects. Responding to KRB's proposal:

1) SCE objects that "KRB is incorrect when stating that the Study WR-2 analysis was completed for the reach above Fairview Dam."

SCE seems to be intentionally misreading the KRB study request and misunderstanding their own project hydrology. The request is for both unimpaired and impaired functional flow metrics.

•KRB agrees that in WR-2, SCE has already retrieved and provided the natural flow estimates developed by the CEFWG's Natural Flows database. This data uses machine learning models to estimate natural, unimpeded flow metrics for any given location of interest (LOI).

•KRB agrees that the LOI chosen in WR-2 is in the reach immediately downstream of Fairview Dam.

•However, the fact remains that these natural flow estimates represent the unimpaired flow of the river: they "provide information on the timing, magnitude, and ranges of natural flows" and "approximate flow conditions in the absence of all human activity".

•It is also the case that under current conditions, the natural unimpaired flow of the river is present only ABOVE Fairview Dam.

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•Therefore, these flow metrics for unimpaired flows will also necessarily provide the current flows metrics above Fairview Dam.

SCE has performed an analysis of unimpaired flows, using a location below Fairview Dam for the data model. KRB requests the functional flow metrics also be calculated for the impaired flows as currently exist below Fairview Dam under baseline current operations.

2) SCE objects, "The requested study is not needed for SCE to complete an assessment of potential effects of the proposed Project compared to current (baseline) conditions."

On the contrary-- with their continued refusal, SCE is currently failing to capture "current (baseline) conditions". KRB agrees that an assessment of potential effects should include current conditions. Further, KRB suggests that the only way to assess current baseline conditions in the diverted stretch, where flows are impaired by the project diversion, is to also calculate the functional flow metrics on the current, impaired hydrograph. Indeed, the impaired hydrograph is the current condition. KRB simply requests that the functional flow metrics on the current, impaired flows be calculated and provided alongside the natural unimpeded functional flow metrics already estimated.

3) Finally, SCE objects that "CEFF Section A analysis does not include this type of comparison."

KRB agrees. That is why this was written up as a new study request, and not a variance or omission to the existing study request. Unfortunately, through the study plan revision process, SCE eliminated all sections except for Section A of CEFF from the proposed study WR-2 (unimpaired flow metrics). While KRB agrees that it was reasonable to remove the recommendations portion of CEFF from the study, there was no ground or explanation given for why the impaired flow metrics or comparative analysis were excluded.

These functional flow metrics are indicative of important streamflow functionality, and changes are captured in this alteration assessment which are not visible in zoomed out linear- or log- scale plots of annualized flows or flow durations. It is important that all stakeholders are working from the same starting point and have a clear understanding of the current state of the system as we enter the recommendations portion of the FERC ILP. "Water managers need a consistent statewide approach that can help transform complex environmental data into scientifically defensible, easy-to-understand environmental flow recommendations that support a broad range of ecosystem functions and preserve the multitude of benefits provided by healthy rivers and streams" and that is exactly what this completed functional flow metrics and alterations study is meant to provide. For these reasons, we ask that the Commission implement our new study request to permit the comparison of functional flow metrics on the unimpaired vs impaired flows below Fairview Dam.

SCE continues to object to this requested new study. The new rationale provided by KRB does not meet the criteria for new studies under 18 CFR § 5.15(e). SCE has completed Section A of CEFF, as required under the FERC-approved study. The Study WR-2 Technical Memorandum includes the ecological flow criteria (determined in CEFF Section A, Step 2) and approximates flow conditions in the absence of all human activity (i.e., unimpaired flows). The data collected and summarized in the Study WR-2 Technical Memorandum Section 5 (including the statistical summary of the data from both U.S. Geological Survey [USGS] gages 11185500 and 11186000 as well as the functional flow metrics from the California Natural Flows Database [Table 5.2-4] and other existing operational information) fulfills the requirements of FERC-approved Study WR-2 Hydrology and is sufficient to provide data needed to assess potential effects of the proposed Project in SCE's license application and to inform future license conditions.

The requested study is not needed for SCE to complete an assessment of potential effects of the proposed Project compared to current (baseline) conditions. KRB states that "the point of this exercise is to determine functional flow ranges for this river system and compare those ranges to flows impaired by project operations". This is not part of the CEFF approach (only the functional flow ranges are included in the CEFF Section A analysis). The CEFF Section A data are intended to provide information on the timing, magnitude, and ranges of natural flows; they are not streamflow release recommendations. SCE will use the CEFF Section A results in its license application to assess Project-related hydrologic effects on the timing, magnitude, and ranges of natural flows of the timing, magnitude, and ranges of natural flows of the timing for the timing for the timing for the timing.

Additionally, KRB is incorrect when stating that the Study WR-2 analysis was completed for the reach above Fairview Dam; Study WR-2 selected the reach immediately downstream of Fairview Dam as the location of interest for the CEFF analysis, as discussed in the WR-2 Hydrology Technical Memorandum Section 5.2.1 and shown in Figure 5.2-1 (SCE, 2023).

COMMENT KRB WR-2.6 HYDROLOGY. 2018 PRELIMINARY FLOWS, NEW STUDY

Edison: (ISR Reply at 40-41.)

KRB: We tried to get this data directly from Edison outside of this process in a spirit of cooperation — i.e., without calling the compliance office, without the filing of a complaint, and without the present study request — and Edison unwaveringly rebuffed us. We acknowledged both to Edison directly and in our study request to FERC that rec flows are based on hourly preliminary flow data. There is no confusion or disagreement on that point. However, eight days after that preliminary data is published in real time, Edison removes it from public view forever. Thus, it is impossible for the public to go back and establish whether there was compliance when, as here, a final dataset offers prima facie evidence of noncompliance. Surely Edison understands these facts notwithstanding its offense at belatedly providing this preliminary flow data. We are satisfied with it. But let

this be a cautionary tale: This incident has (1) shown preliminary data to be ineffective in providing recreational flows commensurate with actual flow conditions, (2) shown the need for an open and public repository of KR3 flow data that can be used to establish recreational and environmental compliance, and (3) shown Edison's unwillingness to cooperate with stakeholders on a simple, reasonable, evidence-based query.

SCE Response

SCE continues to object to this requested new study. The new rationale provided by KRB does not meet the criteria for new studies under 18 CFR § 5.15(e). The requested study is not needed for SCE to complete an assessment of potential effects of the proposed Project compared to current (baseline) conditions and is not relevant for FERC to complete its environmental analysis.

SCE does not agree with KRB's assessment. KRB continues to make unfounded complaints of noncompliance, as it has done for years, while SCE has consistently demonstrated to FERC its compliance with license obligations.

This is not an example of KRB identifying "prima facie" evidence of noncompliance. Rather, it is yet another instance in which KRB has inaccurately alleged noncompliance, only to be proven wrong by the data.

SCE's assessment of potential Project effects will use hydrologic records checked for quality assurance (QA) / quality control (QC) and reviewed by the USGS to ensure accuracy. The hydrology data, upon approval by the USGS, becomes the official hydrologic record and is used to for the potential Project effects analysis that will be presented in the DLA and Final License Application (FLA). The preliminary flow data is considered provisional, as acknowledged by KRB, and is used to verify real time compliance with MIFs and recreation flows.

COMMENT KRB BIO-5.1 WESTERN POND TURTLE. SUDDEN INUNDATION, COMMENT

Edison: Potential Project effects to the western pond turtle will be analyzed in the License Application, based on information produced from the FERC-approved study plan. (ISR Reply at 47.)

KRB: Having not rejected the question's propriety, we expect it to be answered: Aren't the turtles or similarly-situated species in this drainage at risk of decimation — or elimination if the population is small enough — from the sudden operation of the KR3 emergency spillway, which can inundate that creek with 600 cfs of water in an instant and cannot be stopped for several hours given the water travel time between Fairview Dam and the spillway?

SCE Response

SCE will complete the effects analysis to the northwestern pond turtle and provide results in the DLA (due July 3, 2024).

COMMENT KRB REC-1.1 BOATING. SIQ, MODIFICATION

EDISON: The REC-1 Whitewater Study RSP, which FERC staff approved in its SPD, does not include a requirement to complete all of the Level 1 Desktop Review of Existing Information by the filing date of the ISR. (ISR Reply at 11.)

KRB: Under any reasonable construction of the RSP, this is false. The RSP stated that the ISR would "include L1 results" (RSP REC-1 at 9) and that those results would include "estimated range of preferred flows and knowledge gaps" developed from the Structured Interview Questionnaire ("SIQ"). (RSP REC-1 at 5.) The SPD approved the REC-1 RSP with no modifications to this reporting requirement. (SPD at B-22 through B-26.) Importantly, there is no provision in the RSP or the SPD for the reporting of REC-1 Level 1 results in the USR. Edison's variance from the study plan on this important reporting requirement — and its failure to admit the variance — remains problematic, notwithstanding its belated reporting four months late. That delay — again, from an unadmitted variance by the applicant — has pushed the resolution of ISR issues back into June. Although it may be in Edison's interest to run out the clock on its application and squeeze stakeholders of their fair share of time to analyze study data and develop compelling license conditions, it is not in the public's interest.

SCE Response (KRB REC-1.1a)

SCE disagrees with KRB. KRB's allegations of SCE's supposed intent are not only false, but they are also unnecessarily combative and counter-productive in establishing a setting in which reasonable participants can come together to resolve complex and competing relicensing issues in a respectful and professional manner. In any event, the SIQ information was provided to FERC on March 1, 2024, in response to the Request for Additional Information (SCE, 2024b).

EDISON: KRB in its comment incorrectly interprets the phased approach described in Flows and Recreation: A Guide to Studies for River Professionals (Whitaker et al., 2005). KRB incorrectly assumes there must be a hard stop in data collection between levels in a sequential approach. (ISR Reply at 11.)

KRB: Our comment does not rest on the necessity of hard stops in Whittaker. Rather, it rests on the language of the Edison's own RSP — namely, that the ISR would "include L1 results" including "estimated range of preferred flows and knowledge gaps," with no provision for additional L1 reporting in the USR. It rests further on Whittaker's goal to "allow information to be shared earlier in the process" with governing agents and stakeholders — and specifically, with regard to the L1 SIQ: "the earlier this report can be completed and distributed, the better" to facilitate shareholder input in the design and implementation of further studies. Edison has instead put forth a panoply of study techniques with no indication on how it will validate, aggregate, integrate, and report the data it obtains. We reiterate our concern that this degree of research freedom is ripe for conscious or subconscious p-hacking.

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The variance has prejudiced stakeholders in the timing of this proceeding. As such, we again ask that the Commission require Edison to post on its website all survey data — both the table data used to generate Edison graphical representations and the raw data underlying it — in usable, sortable spreadsheet (.xlsx) form in order to facilitate independent analysis. Data that has been reported on to date should be posted within weeks of the ISR determination; the balance should be posted contemporaneously with the publication of additional study reports. We no longer have the luxury of time to engage in a back-and-forth with Edison over trying to obtain this data; the FLA quickly approaches.

Transparency in the relicensing process is paramount for ensuring that decisions are informed, fair, and reflective of a comprehensive understanding of environmental, recreational, and operational impacts. Access to Edison's raw and tabulated data is essential for KRB and other stakeholders to participate meaningfully in this process. Without this data, our ability to contribute constructively to the dialogue around KR3's future operations and potential license conditions is significantly hindered.

The variance from the study plan introduced by Edison, and the subsequent delays in the process, underscores the urgency of making study data available to stakeholders. Time is of the essence, and every day that passes without access to this data limits our opportunity to prepare informed, evidence-based proposals for the relicensing. As the process advances, the window for stakeholders to influence outcomes narrows, making immediate data sharing not just beneficial but necessary.

FERC's oversight of the relicensing process includes ensuring that all participants are afforded a fair opportunity to engage. This is compromised when stakeholders are denied access to data crucial for their analyses and proposals. Mandating Edison to share the data would reinforce the integrity of the process and uphold stakeholder trust. Shared access to Edison's data also facilitates a richer decision-making environment. It enables stakeholders like to offer insights, identify potential oversights or biases in initial analyses, and propose solutions that balance developmental and non-developmental values. FERC's commitment to a transparent and inclusive relicensing process is both a legal and ethical obligation, particularly given the public interest in KR3's operations and impacts. A directive from FERC for data sharing aligns with these obligations, ensuring the licensee operates transparently and in the public interest.

SCE Response (KRB REC-1.1b)

SCE objects to this requested Study Plan modification as unnecessary. SCE will make the QA/QC data for the WR-1 Water Quality, WR-2 Hydrology, REC-1 Whitewater Boating, and REC-2 Recreation Facilities Use Assessment (which also include components of the AES-1 Aesthetic and ANG-1 Enjoyable Angling Flows) studies available to Stakeholders concurrently with the distribution of the Final Technical Memorandum. The Final Technical Memorandum will be prepared once the field data collection has been completed and a QA/QC process is completed, which includes a review of the complete data set to ensure the integrity and accuracy of the data prior to initiating a comprehensive data analysis and summary, which may also include tabular or

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graphical representation. Depending on the timing of study completion, the Final Technical Memorandum, including release of the QA/QC data, may be included with either the DLA (due July 3, 2024) or the USR (due October 10, 2024) that will be filed with FERC.

COMMENT KRB REC-1.2 BOATING. ANNUAL BOATING DAYS, MODIFICATION

EDISON: It is premature to perform that level of hydrology analysis in the Level 1 Desktop Review of Existing Information prior to developing flow preference curves for each watercraft type in the respective river segments. (ISR Reply at 11.)

KRB: This response is self-refuting. Edison deemed it a ripe time to produce its L1 "boating days" analysis in the ISR; now it asserts such to be "premature." We have explained why Edison's use of the 700 cfs figure was not based on the "whitewater release requirement," was not "based on the 1994 whitewater study," and is contrary to the published results of the L2 focus group. (KRB ISR REC-1.2 at 50-58.) It is now also at odds, as we predicted, with the L1 SIQ. That study reveals that on the most popular whitewater segment of the dewatered reach, the minimum acceptable flow is 300 cfs. (ISR Attachment A at 9 & 18.)

This is an important issue. It is in Edison's interest to keep the definition of a "boating day" at a higher level rather than a lower one: project effects in removing boating days increase dramatically as the flow definition of a boating day decreases. Consider WY 2022, whose hourly data was recently released by Edison. In that year, the project removed 14 of 17 "boating days" at 700 cfs, but 49 of 53 boating days defined at 500 cfs:

[Figure removed]

Edison also fails to account for the fact that project effects on boating are felt more strongly in dry years than wet: In dry years, the project takes away almost every boating day, in moderate years about half, and only a quarter in wet years:

[Figure removed]

Finally, as we discussed in our initial comments, Edison's boating days analysis fails to inform its readers that the project was offline 23% of the time during its data set. For these reasons, Edison's current boating days analysis in the ISR is extremely inaccurate and misleading in its favor — consequences that cannot reasonably coexist with the approved study.

We again ask that the Commission direct Edison to modify the ISR and the remaining REC-1 study to require graphical summaries based on an accurate flow definition of a boating day, account for project effects in dry and moderate water years, and account for the time the project was offline.

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SCE objects to this requested Study Plan modification. The analysis in the REC-1 ISR Interim Technical Memorandum (Table 5.1-8) was part of the Level 1 Desktop Literature Review that uses information to report the existing conditions (SCE, 2023). The 700 cfs value used to compare flows above and below Farview Dam is based on the existing conditions for whitewater releases in Article 422 of the current FERC license. SCE acknowledged in the ISR that the 700 cfs threshold was contested by some members of the boating community and needed to be updated.

SCE is conducting the Level 2 and Level 3 study efforts to collect information to update boater flow preferences for minimum acceptable and optimum flows. As stated in the Revised Study Plan (RSP) approved by FERC (SCE, 2022), SCE will use the revised boater flow preferences from information collected in 2023 and 2024 to complete a similar analysis as presented in Table 5.1-8 in the ISR (SCE, 2023). Additionally, the analysis will be modified summarizing data by year (see also SCE response to Comment KRB WR-2.4). The REC-1 Final Technical Memorandum will be provided with the USR (due October 11, 2024) and will summarize the results of the Level 3 studies including the flow preferences.

COMMENT KRB REC-1.3 BOATING. MONTHLY BOATING DAYS, MODIFICATION

EDISON: The statistical median will be included in the comparative frequency analysis of the monthly number of days above and below Fairview Dam. (ISR Reply at 11.)

KRB: We fail to see how this response invalidates our comment. If the median will be included in the USR, why was it not used in ISR, where first impressions on study data are made? We have shown the distribution of water years in the NF Kern watershed is not of a symmetrical nature suited to analysis by the mean. Rather, it is asymmetrical, skewed by outlier high water years up to four times greater in water volume than the median that push the mean almost 50% higher than the median. The central tendency of such a system is inarguably represented best by the median. Again, a comparison of median monthly boating days above and below Fairview Dam paints a much different picture of project effects than Edison's ISR REC-1 Figure 5.1-9 — what follows is a look at the mean, then the median:

[Figure removed]

Wet years add undue, large numbers of available boating days to the average because the project is capped at removing 600 cfs from the river. Those figures are undue since wet years are infrequent and accordingly should not be afforded inordinate weight by padding the stats, so to speak, in favor of Edison. The more typical project effect confronting boaters is best represented by the median. The REC-1 ISR "mean monthly boating days" summary is accordingly at variance with the approved study and should be corrected.

Although the FERC-approved study does not require SCE to present median flow statistics, SCE will provide mean and median summaries by month in the Final Technical Memorandum that will be included with the USR due October 11, 2024, as requested by KRB.

COMMENT KRB REC-1.4 BOATING. FOCUS GROUP COMPOSITION, MODIFICATION

EDISON: Members of the boating community were allowed to nominate themselves to participate in the Level 2 Limited Reconnaissance site visit. SCE encouraged the boating community to nominate participants representing diverse age, gender, skills, watercraft, and geographic areas. SCE did not select the participants. Thirteen boaters nominated themselves to participate in the Level 2 Limited Reconnaissance site visit. SCE invited all 13 individuals to participate as well as interested agency staff. In the end, 10 boaters attended the Level 2 Limited Reconnaissance site visit. Clearly, SCE did not establish this panel but rather the boating community did. SCE cannot force boaters to volunteer and/or participate in focus groups. (ISR Reply at 12.)

KRB: In the ISR REC-1, Edison stated that the panel "represented a broad cross-section of the whitewater boating community on the NFKR." (ISR REC-1 at 33.) Now Edison simply contends that it did not "establish" the panel. We take issue with both contentions. It is obvious that the study panel was not a cross-section of the boating community: Of the nine participants with experience over the range of flows, six were local business owners. Eight of the nine participants live in the Kern River Valley. Of the five participants who kayak, three are willing to trade flows from this proceeding in exchange for their pet project. Finally, there were no minority participants. (Compare with participants in NF Kern videos at KRB sister site: socalwhitewater.com.) This was not a representative panel.

Edison avers it did not establish the panel. To the contrary: unlike what it did to pull off its L1 SIQ and L3 SFS, Edison did not reach out to the general community for its L2 focus group; rather, it used an email list of uncertain distribution. Stakeholders at the October 17, 2023 ISR meeting expressed frustration about L2 focus group process, composition, and timing. Further, it is not true that Edison's hand was uninvolved in the establishment of the group. Edison did not attempt to fill three cancellations through community outreach but did allow a fourth cancellation to irregularly nominate a replacement beyond the nomination deadline. Edison revealed neither the vacancies nor the irregularity to the community until the ISR.

Edison's failure to obtain a representative panel for its L2 focus group is at variance with the approved study plan, which per Whittaker requires that panels be representative. Due to this variance, we request that REC-1 be modified so that all panels going forward are established with the opportunity for stakeholder comment and review and require stakeholder agreement prior to implementation, and that any disputes be resolved by FERC or its W&SR recreation advisor, NPS.

SCE objects to this requested Study Plan modification. SCE disagrees with KRB's assertion that the representation of focus group in the Level 2 Limited Reconnaissance Site Visit survey was a variance. Consistent with FERC's direction in the SPD, FERC recommended that the study be modified to require up to 12 participants nominated by the boating community, with no minimum participant requirement. SCE did not select the participants. On the contrary, participation in the Level 2 Limited Reconnaissance was open to anyone in the boating community, as well as agency staff. SCE distributed a form to the KR3 Relicensing Stakeholder List (which included members of the boating community and agency staff), instructing individuals to nominate themselves to participate in the Level 2 study. SCE described the nomination process in the REC-1 Whitewater Boating Interim Technical Memorandum included in the ISR (SCE, 2023). A total of 13 individuals signed up to participate in the Level 2 Limited Reconnaissance. Three individuals informed SCE the morning of the event that they were unable to attend. In the end, 10 boaters participated in the site visit. The participants included a cross-section of watercraft types, genders, whitewater skill levels, and primary residence locations as well as commercial and private boaters consistent with the SPD.

SCE will convene focus groups as part of the Level 3 Intensive Study enhanced flow opportunities. Participation in the focus groups will be open to boaters with direct experience on the whitewater river segments from Fairview Dam to Riverside Park in Kernville. The focus groups will coincide with the enhanced flow opportunities, allowing boaters that have traveled specifically for the enhanced flow opportunities to also participate.

COMMENT KRB REC-1.5 BOATING. FOCUS GROUP OMISSIONS, MODIFICATION

EDISON: The participants provided input on all the river segments responding to an established set of questions repeated for all the river segments. (ISR Reply at 12 (emphasis added).)

KRB: The bolded language refers to yet another iteration of the SIQ, which most participants had already filled out online. Participants were most assuredly not informed that study activities were to take place inside the shuttles — another irregularity.

SCE Response (KRB REC-1.5a)

SCE objects to this requested study plan modification. During the Level 2 Limited Reconnaissance Site Visit, study participants provided input on all the river segments responding to an established set of questions repeated for all the river segments. Participant verbal responses were summarized in real time on poster paper for participants to review and clarify for documentation purposes. Participant responses are documented in the narrative and tables in Section 5.2.2 of the REC-1 Whitewater ISR (SCE, 2023). The facilitator asked each participant prior to transitioning to a new river segment if they wanted to tour that segment prior to responding to the questions. The facilitator checked with each individual participant, emphasizing that the field effort would

meet the needs of any single person before launching into the questions. Every participant confirmed their preference to complete question review for all the river segments at a single location. The study participants indicated they were familiar with the river segment being evaluated and therefore touring the segment was not necessary prior to answering the Level 2 Limited Reconnaissance questions. After confirming with each study participant that they did not need to tour the river segment, the facilitator asked the series of questions for the segment and recorded the responses on poster paper for all participants to review.

SCE provided a shuttle affording boaters the opportunity to view the river segments that day as the van traveled upstream to start at the Fairview River segment at the Road's End river access site. Most of the participants chose to ride in the SCE van. During the van ride along the river, study participants voluntarily shared information about the river segments such as river access locations, key rapids, cobble bars that impede downstream navigation at lower flows, physical markers in the channel used to estimate flow, and whitewater use patterns.

The Level 2 Limited Reconnaissance Site Visit conforms to the study methods in the REC-1 RSP and is not a variance or modification (SCE, 2022). The additional information provided by study participants as the van traveled along the river segment was helpful and consistent with this level of study effort. None of the river segment specific Level 2 Limited Reconnaissance questions were asked during the van ride and were only asked when all study participants were present.

Edison: SCE queried the boaters to list their favorite river segments to see if there was a way to aggregate the eight river segments in the bypass along some common interests. (ISR Reply at 12.)

KRB: Once again, Edison fails to learn from its studies. Both the L1 and L2 studies reveal that three of Edison's purported eight segments in the dewatered reach are always boated in conjunction with another segment. No one boats Sidewinder/Bombs' Away, Salmon Falls, or Riverkern Beach in isolation; the three are always boated in combination with stretches directly above or below. That leaves just five meaningful segments in the dewatered reach: from top to bottom, Fairview, Chamise, Ant, Thunder & Cables.

The old guidebooks used to refer to a combination of Ant and Thunder as "Goldledge," the name of an alternate put in that has been superseded in use over the decades by the Ant Canyon put in, which adds three rapids to Ant, or Corral Creek, which is shorter and includes only the Thunder run. "Camp 3" is an alternate put in for the Cables run that avoids the first rapid, which is the run's namesake, Cable rapid. Edison's continued use of "Goldledge" and "Camp 3" in this proceeding is anachronistic. (And "Lickety Split" is the name of the segment below the KR3 powerhouse. Calling that segment "Powerhouse," as Edison does, is confusing since "Powerhouse Rapid" is above and outside the Lickety run.

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A contemporary guidebook cited by (but ignored by) Edison (See ISR REC-1 at 11) confirms KRB's positions on both the names and numbers of river segments (note that "Limestone" and "Lickety" are outside the diverted stretch, leaving just the five segments we have identified):

[Figure removed]

So does a third guidebook (five dewatered segments / same naming conventions).

Edison's unconventional naming system and identification of eight dewatered river segments only serves to confuse and confound the issues in this proceeding. We ask that their recreation analysis be informed by the study process and bear some resemblance to the facts on the ground.

Again, this is a major Edison tactic: to proliferate issues rather than narrow and distill them to falsely suggest this river is too complex for and thus incompatible with a controlled flow study. As the existence of the 1994 study demonstrates, such a contention is untenable. The facts on the ground also show its falsity. Boaters routinely paddle multiple segments in the dewatered reach a day, given adequate flows, or paddle multiple "laps" of the same segment or two when flows are lower (or extremely high). This phenomenon of picking and choosing from a handful of 1-hour paddling segments — unfamiliar to paddlers from most other rivers — is a function of the incredible access and variety afforded by the 16-mile contiguous, dewatered stretch and its dozen or so roadside access points. Since each of the five segments can be paddled in about an hour — all of which can be combined with contiguous segments given adequate flows — it is more than ripe for a controlled flow study. More on that to come.

Edison's irregular conference room proceeding at the end of the L2 day was an attempt at division. There is simply no way to rank segment preferences in isolated, absolute terms. Those preferences depend on watercraft, skill level, and (equally if not more important) flow level — and some preferences may be equal, a result irrationally precluded by Edison's L1 SIQ. Even expert boaters who prefer the Thunder Run start choosing different segments when flows get too high. The same can be said of advanced boaters who otherwise prefer Chamise or Ant: when flows get too high, those boaters seek out another segment. Similarly, less skilled boaters may prefer Chamise or Ant when flows are on the lower side, and then return to Cables when flows reach more moderate levels. The variations in preference induced by craft, skill, and flow are endless and not capable of being represented in a single list.

SCE Response (KRB REC-1.5b)

SCE agrees and acknowledges with KRB's assertion that boaters on the NFKR often combine many of these river segments. SCE agrees that boaters may boat individual segments or combine various segments in the Fairview Dam Bypass Reach, and that boaters typically do not boat the entire bypass reach as one continuous reach. The eight river segments and naming conventions identified by SCE are based on named river access locations in combination with distinct differences in river character and whitewater

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difficulty, which may result in distinct differences in flow preferences. The naming conventions are consistent with printed guidebooks and online sources referenced in the ISR (SCE, 2023, including some of the same sources KRB cites.

Collecting flow preference information for all of the eight river segments is prudent for data analysis because some of the segments with distinct differences in whitewater difficulty may have distinctly different flow preferences compared to an adjacent segment. The flow preferences for individual segments can then be overlaid on whitewater use patterns that do differ among subgroups of whitewater boaters. Collecting flow preference information for all eight river segments in the bypass provides the highest level of data resolution. These eight river segments were identified in the REC-1 Whitewater Boating Study Plan approved by FERC in the SPD (FERC, 2022).

Edison says it was seeking "common interests" among boaters. If it was, it is not fairly recounting them. Notwithstanding personal disagreements on flow preferences, every boater agreed that the current rec flow regime was unsatisfactory in scope and design a non-starter going forward. Rather each participant agreed the next regime should be a fixed calendar of days (focused on the runoff season) during which the project would go offline regardless of inflow — whether daily with bubble releases or for long weekends if the tunnel could not supply bubbles. Boaters on the NF Kern are a sophisticated user base used to navigating the ever-changing hydrograph of impaired flows below Fairview Dam. They are not like those on the South Fork American, who paddle the same release level over and over again. Unimpairing flows in the dewatered reach based on a calendar during the runoff season with no regard for inflows was unanimously supported. Such a regime, when focused on the times water would be available (the runoff season) at levels nature intended, would maximize the incidence of everyone's preferred levels. Edison's failure to report this critical point obscures the fundamental "common interest" takeaway from this study group. We again ask that Edison append these unfairly omitted details to the ISR and USR reports.

[Figure removed]

SCE Response (KRB REC-1.5c)

As noted in our January 9 filing (SCE, 2024a), SCE opposes this study modification. However, SCE acknowledges that boaters are unhappy with the current license condition. The current license condition does not provide predictability, and Stakeholders have expressed that they prefer fixed calendar days for releases. The purpose of the REC-1 Whitewater Study is to identify the flow preferences for respective watercraft types in the river segments. The information obtained from the REC-1 Whitewater Study will be used to support the development of a whitewater boating flow proposal.

Upon completion of the study and data collection, SCE will prepare a Final Technical Memorandum that will be included with the USR (due October 11, 2024) for Stakeholder review and comment. The Final Technical Memorandum will summarize and analyze the

data collected and identify flow preferences that will facilitate the development of the whitewater boating flow proposal. SCE appreciates KRBs input and recommendations regarding future proposed boating flows such as "fixed calendar days" that will be considered in the development of a future boating proposal following the completion of the study.

COMMENT KRB REC-1.6 BOATING. LEVEL 3 MISCHARACTERIZATIONS, MODIFICATION

EDISON: Neither approach [L3 single flow or L3 flow comparison] recommends limiting group size to a single panel of experts. (ISR Reply at 13.)

KRB: We agree that experts are not required, and we have never contended they are. However, the balance of Edison's assertion is flatly contradicted by Whittaker; Whittaker's Level 3 study approaches do require persistent panels.

The L3 Multiple Flow Reconnaissance Assessment (MFRA) approach — upon which Edison has based its Single Flow Survey (SFS) — requires, according to Whittaker, "assessing multiple flows... by panels or experts," the use of experts being preferred when "constraints make it difficult to assemble or maintain an evaluation panel." That is far different from Edison's SFS, which polls the general public.

The L3 Flow Comparison Surveys (FCS) requires, according to Whittaker, that the recreation consultant "identify [a] panel of knowledgeable users and develop contact information." "Panel development is critical," according to Whittaker, and this panel is "depend[ant] on the availability of knowledgeable users and an existing gage to which they are calibrated." That is far different from Edison's FCS, which Edison has stated will be open online and poll the general public — not a representative panel. The results of Edison's approaches cannot rise to the level of resolution promised by a "Level 3" study — that's why we are asking the Commission to direct Edison to stop characterizing their SFS and FCS as "Level 3" studies.

EDISON: On the contrary, these approaches are recommended where it is difficult to maintain a consistent panel to evaluate a range of flows. (ISR Reply at 13.)

KRB: That's not what Whittaker says. To the contrary, Whittaker specifically suggests restricting the panel to a group of experts when panel persistence is an issue; and when persistence is not at issue, a panel — not a public poll — is required. Edison has not shown it difficult to maintain a consistent panel here, nor could it given the large volume of boating and boaters on the North Fork Kern.

SCE Response (KRB REC-1.6a)

SCE objects to this requested Study Plan modification. SCE disagrees with KRB's assertion that the terminology used to describe the Level 3 Intensive Study is a modification. SCE is conducting the study in accordance with the FERC-approved study

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in the SPD (FERC, 2022) and is consistent with the methods described in Whittaker et al. (2005). FERC's regulations only authorize a Study Plan modification if the study (1) was not conducted as provided for in the approved Study Plan or (2) was conducted under anomalous environmental conditions or environmental conditions have changed (18 CFR 5.15(d)). Thus, the appropriate reference point is FERC's approved Study Plan, not Whittaker et al. (2005).

Boaters completing a trip on the NFKR are experts because they have direct experience using their watercraft on the respective river segments. KRB characterizes these boaters as the general public lacking expertise to evaluate flow conditions for boating. KRB's implied definition of "expert" is in complete opposition to the methods described in Whittaker et al. 2005.

EDISON: This approach is recommended where there is an inability to control flows. (ISR Reply at 13.)

KRB: Edison's arguments are routinely populated with sweeping assertions without citation to authority or supporting analysis. Whittaker never says that the inability to control flows somehow weakens the requirement of a persistent, knowledgeable panel for a Level 3 study. Nor does Whittaker state that an "inability to control flows" requires an SFS or FCS approach. Whittaker specifically states that controlled flow studies may be performed where there is "Lack of upstream storage [constraining] flow control" — so lack of storage can't be a reason we can't have a controlled flow study. Moreover, Edison maintains a significant and meaningful ability to control flows below Fairview Dam, as it acknowledges with its "flow enhancement" proposal:

[Table removed]

Call those targeted flows or enhanced flows or shaped flows or whatever you like, but at the end of the day the proposed flows as described by Edison are being controlled by Edison. It has the ability to do that up to 600 cfs, just like it does to comply with the current rec regime (example from May 2018):

[Figure removed]

SCE Response (KRB REC-1.6b)

SCE objects to this requested Study Plan modification. SCE acknowledges that it does have the ability to control flows in the Fairview Dam Bypass Reach, but it is limited to about 600 cfs (the approximate capacity of the water conveyance system). SCE demonstrated this limited ability to control flows in the bypass reach by conducting enhanced flow opportunities to evaluate flows for whitewater boating during the April enhanced flow opportunity. Lower flows ranging from 200 to 800 cfs were identified as a knowledge gap based on information obtained from boaters in the Level 1 SIQ and Level 2 Limited Reconnaissance Site Visit.

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Based on forecasts for inflow to Fairview Dam, SCE scheduled enhanced flow boating opportunities for April 11 through 14, 2024, targeting bypass reach flows on 200, 400, 600, and 800 cfs where knowledge gaps existed.

Between 10 a.m. on April 11 and 10 a.m. on April 14, inflows to Fairview Dam ranged from 1,006 cfs to 1,368 cfs and boaters were able to evaluate four bypass reach flows at approximately 450 cfs, 770 cfs, 835 cfs, and 860 cfs. SCE was not able to provide flows less than 450 cfs for boaters to evaluate due to the running day average for inflows above Fairview Dam from April 11 (Thursday) through April 13 (Saturday) exceeded 1,000 cfs, triggering whitewater flow requirements under License Article 422

SCE plans to schedule additional enhanced flow opportunities in 2024 (likely on the descending limb of the hydrograph) when inflows upstream of Fairview Dam coupled with limited flow control through the water conveyance system presents suitable conditions for boaters to evaluate lower flow knowledge gaps between approximately 200 to 400 cfs and approximately 600 cfs in the bypass reach.

EDISON: These approaches encourage broad outreach to ensure a larger heterogenous sample size representative of the whitewater users. (ISR Reply at 13.)

KRB: Again, the ability of Level 3 studies to get greater degrees of reliability and resolution than Level 1 surveys of the general public is founded on their use of a persistent panel of representative boaters personally familiar with the flows at issue. Panels of boaters, moreover, should not be heterogeneous for heterogeneity's sake — Whittaker never says that — but should instead strive to be representative of the boaters who use the river and are most squarely affected by the project's dewatering of this river. On the issue of minimum acceptable flows, for example, it makes no sense in the evaluation of real-world project effects to equally value the opinion of a person who live far away and would only travel to the Kern under ideal conditions and that of a Southern Californian — especially when tens of thousands of Southern Californians would gladly paddle under less-thanideal flow conditions if that's all nature was providing. Hence, Whittaker's touchstone of representative panels.

SCE Response (KRB REC-1.6c)

SCE objects to this requested Study Plan modification. SCE disagrees with KRB that the broad outreach for the Level 3 Intensive Study to ensure a larger heterogenous sample size representative of the whitewater users is a modification. Rather, SCE is conducting the study in accordance with the FERC-approved study in the SPD (FERC, 2022) and is consistent with the methods described in Whittaker et al. (2005). FERC's regulations only authorize a Study Plan modification if the study: (1) was not conducted as provided for in the approved study plan; or (2) was conducted under anomalous environmental conditions or environmental conditions have changed. (18 CFR 5.15(d)). Thus, the appropriate reference point is FERC's approved study plan; or (2) was conducted under in the approved study plan.

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anomalous environmental conditions or environmental conditions have changed. (18 CFR 5.15(d)). Thus, the appropriate reference point is FERC's approved study plan, not Whittaker (2005).

The approved Level 3 Intensive Study includes the following components: (1) an online whitewater SFS allowing participants with direct experience on the river segments to evaluate individual flows; (2) an online whitewater flow comparison survey to obtain information on flow preferences for respective river segments; (3) whitewater focus groups; and (4) a hydrology analysis to quantify annual number of days of whitewater boating using flow preference curves developed from data collected in the online single flow and flow comparison survey, and the whitewater focus group.

The online single flow and flow comparison surveys and the enhanced (controlled) flow boating survey are open to all individuals with experience boating on the river segments on the NFKR. In fact, Whittaker et al (2005) encourage increasing the sample size whenever feasible by including more participants to avoid potential bias with small sample sizes. These individuals have direct experience boating on the river segments in the bypass and should be permitted to participate in the Level 3 flow evaluations.

SCE agrees with KRB's assertion that individual flow preferences will likely vary among participants based in part on their distance from the river. Accordingly, each survey tool asks respondents to report their primary zip code so data analysis can be aggregated by variables such as distance from the river.

COMMENT KRB REC-1.7 BOATING. CONTROLLED FLOW STUDY, MODIFICATION

Edison: The REC-1 Whitewater Study proposes using flow enhancements to target information gaps in boater knowledge of flow preferences. SCE objects to labeling this approach as a controlled flow study because it fails to meet the criteria described in Whittaker et al. (2005). (ISR Reply at 13.)

KRB: This comment (KRB REC-1.7) is not directed at Edison's proposed "flow enhancements"; rather, it is squarely directed at Edison's lengthy contention in the ISR that a controlled flow study is not feasible in the diverted reach. We take this opportunity to point out that any purported problem of "knowledge gaps" — again, a phrase never uttered by Whittaker — disappears with the performance of a controlled flow study, since participants actually paddle the flows at issue.

SCE Response (KRB REC-1.7a)

SCE objects to this requested Study Plan modification. SCE acknowledges that it does have the ability to control flows in the Fairview Dam Bypass Reach, but it is limited to approximately 600 cfs (the capacity of the water conveyance system). SCE demonstrated this limited ability to control flows in the bypass when conducting enhanced flow opportunities to evaluate flows for whitewater boating in April when the lowest flow opportunity for evaluation was 450 cfs.

Refer to SCE response to Comment KRB REC-1.6b

Edison: Controlled flow studies are best suited for short bypass reaches where flows can be controlled to provide a range of flows in a 2- to 3-day period for a team of boaters to evaluate each flow in succession under similar conditions to eliminate other variables (Whittaker et al., 2005) The Project is not able to meet these requirements for a controlled flow study. (ISR Reply at 13.)

KRB: This is false. Whittaker states plain as day that "Three to four flows are commonly assessed in these studies." That is more than two or three, and his use of the word "commonly" implies that more may be in order and compatible with the term "controlled flow study." Whittaker, again: "Choosing the number and increments of flows is a case-by-case decision." At no point does Whittaker state a controlled flow study may only involve two or three flows and must be performed over a long weekend.

Nevertheless, we believe that just three flows would be needed to set the minimum acceptable flow for various watercraft on the NFKR. Optimal flow curves have not been raised as a pressing issue in this proceeding — no one has challenged the optimal flow results of the 1994 study — and we believe optimal flow curves can be produced from Edison's survey methodologies.

Whittaker says, "Controlled flow studies work best when they are focused on discrete flow ranges where more precision is needed, and where boating is expected to be possible and safe." Those criteria are met here; this incredibly popular and important river for Southern California needs a reliable, 40-year resolution of the minimum acceptable flow issue, and one can be obtained with a controlled flow study. Edison has budgeted \$6.1 million, and estimated study costs — many of which appear exaggerated — amount to less than \$2.2 million:

[Table removed]

Edison: Fairview Dam is incapable of controlling the full range of flows or setting a date for a consistent team of boaters to evaluate each of the flows using a single flow survey form and then complete a final flow comparison survey form. Fairview Dam can only enhance a narrow range of flows and, at best, provide a 2- to 3-day advance notice. As a result, this should not be described as a controlled flow study. Incorrectly calling this a controlled flow study when it fails to meet the definition will add further confusion for future hydroelectric license proceedings. Adhering to definitions in the literature will help improve standardized approaches and consistency with data collection standards. (ISR Reply at 13.)

KRB: Contrary to Edison's argument, the configuration of Fairview dam does not preclude a controlled flow study fully compliant with Whittaker. Whittaker specifically states that controlled flow studies may be performed where there is "Lack of upstream storage [constraining] flow control" — so lack of storage can't be the reason we can't have a controlled flow study. As noted above, Whittaker calls for the study of three or four flows — we believe three are required here but would be happy to submit to the examination of more. Edison avers that it can only provide two- or three-days' notice of targeted flows. But that is a bare assertion unsupported by evidence or analysis. Edison retains the ability to change water levels below Fairview Dam by 600 cfs — that's significant. KRB took the daily average flow data from the last 25 years and found the following average numbers of days upon which different flow ranges could be tested annually:

[Table removed]

To this day, Edison has failed to engage these facts. Further, short notice is not, as Edison asserts, incompatible with a controlled flow study. As Whittaker says, "Many [controlled flow] studies require careful timing and contingency plans" and "close coordination with stakeholder groups." And, as Whittaker pointed out above, a controlled flow study can take place on a dewatered reach that lacks upstream storage, which necessarily requires shorter notice than a study of a reach with massive storage. Finally, Edison's current REC-1 consultant touted the 1994 study to this Commission as a shining example of a "Controlled Flow Whitewater Stud[y]" like others that "have been undertaken in the relicensing of numerous FERC projects" — if a controlled flow study has been performed before, it can be performed again:

[Figure removed]

We reiterate that the dewatered reach of the NF Kern deserves the best science available to determine its potential for recreational use. No one can deny that this is a world-class whitewater resource designated Wild & Scenic serving 25 million Southern Californians. We have seen that the central tendency of this project is to remove more than half the boatable days from this population — most of which occur during the spring runoff when the NF Kern is the only river running for Southern Californians. It also denies boaters more almost all natural flow days. The boaters who know the NF Kern best and bear the lion's share of project effects — those locally and those from Southern California — show up weekend after weekend during the runoff season when impaired flows are sufficient. Many are available to be there on short notice and for extended weekends. Edison can form a representative panel from that group with our help, and we can help identity some volunteers to represent Northern California and beyond — who, it must be conceded, do not bear the full brunt of project effects because they have far closer alternatives. Southern Californians do not.

Finally, Edison again proposes to "opportunistically" "enhance flows" at "specific flow ranges" and "give notice" to "encourage additional boater use." (ISR REC-1 at 8 & 52.) Edison's flow enhancement scheme has most of the core elements of a controlled flow study: a typically dewatered reach, eager boaters from which a panel could be established, an evaluation tool, and a range of flows identified for study, and the provisions of those targeted ranges provided by the utility. What's missing is only Edison's willingness to ensure a persistent, representative panel and bear the cost of administering a real controlled flow study instead of ever-more bites at survey data? Edison has set

aside \$6.1 million for this relicensing from proceeds of the diversion at Fairview Dam. It should have to spend what it takes on the best science available for determining flow preferences on the river it dewaters.

SCE Response (KRB REC-1.7b)

SCE objects to this requested Study Plan modification. In the FERC-approved RSP, SCE clearly stated that "SCE will attempt to enhance flows where potential gaps may exist in user experiences of flow conditions. Flow enhancement may include diverting a portion of flow over Fairview Dam to target specific flow ranges where knowledge gaps were identified in Levels 1 and 2 of the study. Enhanced flows will be opportunistic, not scheduled in advance, and subject to available inflows and tunnel flow needs" (SCE, 2022). SCE initiated enhanced flow opportunities on April 11, 2024, with the limited control of flows into the bypass reach using the water conveyance system as described in response to Comments KRB REC-1.6.b and KRB REC-1.7a above.

COMMENT KRB REC-1.8 BOATING. SFS REOPENING, MODIFICATION

Edison: In the first quarter of 2024, SCE will provide an addendum to the REC-1 Whitewater Technical Memorandum that includes analysis of the single flow survey and structured interview questionnaire. This analysis, coupled with the information reported for the Level 2 Limited Reconnaissance in the ISR, will be used to determine if gaps exist in boater experiences for specific flow ranges impeding their ability to assess minimum acceptable and optimum flows in the respective river segments. If boater knowledge gaps are identified then SCE will utilize flow enhancements, as described in the REC-1 Whitewater Study, to target flows where boaters lack direct experience to determine flow preferences. The single flow survey tool is necessary for boaters to rate the individual flows they boat that are designed to target knowledge gaps. Without the single flow survey, SCE would have no way to document boater's evaluations of the targeted flows. Using the Level 3 single flow survey in 2024 is consistent with the FERC-approved study plan and not a study modification as KRB suggests. The single flow survey is not a separate study unto itself as KRB asserts, but rather part of the Level 3 Intensive Study continuing into 2024 as specified in the REC-1 Whitewater Study RSP. Furthermore, there are no restrictions in the REC-1 Whitewater Study RSP limiting the opening and closing of the single flow survey. The purpose of the single flow survey tool is to collect boater evaluations of flow conditions in the river segments. It is odd that KRB opposes SCE collecting these flow evaluations from the boating community. Using the single flow survey tool for this purpose is consistent with the FERC SPD for the REC-1 Whitewater Study. (ISR Reply at 13.)

KRB: Since this was written, Edison has stated it will reopen the single flow survey in conjunction with "enhanced flows targeting knowledge gaps in boater experience." (ISR Attachment A at 27.) This proposal remains at odds with the approved study plan. The single flow survey (SFS) — as described in the RSP, approved by the SPD, and reaffirmed in the ISR — was only supposed to be open "through the remainder of 2023."

(ISR REC-1 at 50) The RSP never mentioned the prospect of reopening the SFS, nor did the SPD. Reopening that methodology this year — and only at levels where there are purported "knowledge gaps" — amounts to a second bite at survey data. It is plain that Edison does not like the results of its L1 SIQ. (See ISR Attachment A at 14 ["The minimum acceptable flow estimates from respondents should be used with caution. Respondents provided estimates to an open-ended question"].) Nor does it like the results of the 2023 SFS, which shows an overwhelming number of responses at flows below 700 cfs, yet Edison neglects to publish the resultant preferences. Edison has simply not shown those results to be inadequate and in need of second-bite supplementation.

Edison is currently saying that purported "knowledge gaps" are to be determined solely with reference to the results of the L1 SIQ and L2 focus group (more SIQ) studies: "Based on the data collected in Levels 1 and 2, SCE will provide enhanced flows designed to target knowledge gaps in boating flows," it says. (ISR Attachment A at 27.) However, we have had a full range of boating flows on the NFKR since Edison collected the data from those L1 & L2 studies. During that full range of flows, Edison continued collecting data through the SFS. For some unstated reason, Edison has unilaterally determined not to use the data from the SFS in the identification of knowledge gaps — even though many (and potentially, most) boaters who initially identified gaps in their SIQ responses. Edison has made no effort to report on the SFS data to determine whether purported "knowledge gaps" have been filled.

The record indicates gap-filling is likely. Edison's chart of SFS responses shows the highest rate of response in September, when flows were in the "knowledge gap" range it currently seeks to re-study:

[Figure removed]

(ISR REC-1 at 51.) Edison's consultant announced during the October 17, 2023 ISR meeting that he'd never collected as many survey responses as he had in this SFS. And the recently reported 2023 SFS shows a disproportionate share of responses at flows below 700 cfs. (SFS Addendum at 16-17.) The record accordingly reveals no basis for reopening the SFS save for Edison's dislike of the results to date and its desire for a second shot at data collection — the essence of p-hacking.

This conclusion is further underlined by Edison's belated exclusion of the SFS as a basis for determining knowledge gaps. As noted above, the ISR L1 Supplement states that only the L1 and L2 SIQs will be used to determine gaps. Edison had a much different take in the ISR, specifically stating: "SCE will analyze the single flow survey data, in combination with results from Levels 1 and 2, to determine if there are gaps in the boating community's knowledge or experience to evaluate specific flows." (ISR REC-1 at 52 (italics added).) Edison offers no reason for its decision not to use the 2023 SFS for determining whether knowledge gaps exist. This — its decision not to use the 2023 SFS to infer "knowledge gaps" — is at variance from the plan.

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At bottom, Edison has provided no evidence that the SFS needs reopening. We have "the largest number of responses ever" in the 2023 SFS and the bulk of them were at flows Edison targets for reopening. Edison offers no analysis that "quantitative data does not exist for developing flow preference curves," which is the standard it set for reopening. (ISR REC-1 at 52.) In fact, based on participation rates in the SFS, it is far more reasonable to infer a need for qualitative data at flows higher than the flows it proposes for reopening. Edison's proposed reopening is nothing but an attempted second bite at the apple for data at flow ranges Edison has from the earliest moments of this proceeding fought to exclude as boating days lost to the project. That is not science.

Edison: Interestingly, KRB opposes SCE collecting additional flow evaluations from the boating community using the single flow survey but in a previous comment advocates for a controlled flow study. Controlled flow studies utilize a single flow survey to document participant responses to individual flows following each release and a flow comparison survey at the end of the study to document participant evaluations across a range of flows (Whittaker et al., 2005). The inconsistency in KRB's requests clearly demonstrates their lack of command and knowledge of the different levels of study and associated approaches described in the publication, Flows and Recreation: A Guide to Studies for River Professionals (Whittaker et al., 2005). Acquiescing to KRB's uninformed request for a controlled flow study that fails to meet the definition will add further confusion for future hydroelectric license proceedings. (ISR Reply at 14.)

KRB: There is no inconsistency. We oppose reopening the SFS for a second bite at data collection at ranges where Edison dislikes the results to date. We instead favor a controlled flow study, as we and every other boater who has commented on the issue have from the outset of this process. A controlled flow study promises the most reliable resolution of flow preferences through use of a representative, persistent panel of boaters who have floated each flow. Casting about aspersions such as "uninformed" and "lack of command" underlines the weakness of Edison's position. Commission staff have properly failed to apply the "Level 3" characterization to Edison's open survey methodologies, for they fail to comport with the sine non qua of Level 3 studies — persistent, representative panels that produce far more accurate results than open surveys. Edison acts as if it can overcome this core deficiency by improperly calling its study methodologies "Level 3 Intensive" over and over again and by appealing to Commission staff outside the stakeholder process to the same end. We again ask that the Commission reject Edison's attempt to reopen the SFS study for a second bite at data collection.

SCE Response

SCE objects to this requested Study Plan modification. Contrary to KRB's accusations of data shopping, SCE did not reopen the SFS. SCE was satisfied with the data collected using the SFS in 2023 and reported the results to Stakeholders in the ISR Addendum distributed March 29, 2024, to KR3 Stakeholders (SCE, 2024c). In spring 2024, SCE implemented the enhanced (controlled) flow opportunities. The enhanced (controlled) flow opportunities were designed to investigate the knowledge gaps at low flows approximately between 200 and 800 cfs identified by boaters in the Level 1 and Level 2 investigations. The decision to implement the enhanced (controlled) flow opportunities

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was based solely on adhering to the next steps in the FERC SPD and not because SCE disliked the results from the SFS, as KRB asserts

Refer to response to Comments KRB REC-1.6.b and KRB REC-1.7a above.

COMMENT KRB REC-2.1 Use. TRAIL CAMERAS, MODIFICATION

Edison: Throughout May 2023, SCE consulted with the USFS-SQF regarding the placement and location of the cameras to identify suitable locations for installation, with a focus on parking areas. (ISR Reply at 26.)

KRB: Edison has provided no evidence of its May 2023 consultation with the Forest focused on parking areas. In fact, this assertion of consultation is undermined by the demand letter from Forest Supervisor Benson: "It has come to my attention that [Edison] has installed video cameras" at eleven SQF "campgrounds," she wrote in late August that year. (ISR REC-2 at.pdf p. 687 (italics added).)

Edison: As the landowner, the USFS has the right to request removal of cameras on their lands.... However, the recreation site layout and landscape (i.e., wide open spaces or main driveways and parking areas adjacent to many camp sites) does not lend itself to focus only on parking areas. (ISR Reply at 26.)

KRB: USFS is the manager, not owner, of the lands in guestion, and is open to persuasion in the public interest. Edison has produced no evidence that it either (1) attempted to argue in favor of the public interest to the Forest, correcting its mistaken understanding of the two-party law or (2) attempted to reconfigure the camera network so that only parking lots and trail and river access points - no tent sites or restrooms; no place where there could be any expectation of privacy — were filmed and thus be acceptable to the Forest. What we have learned is that Edison was not interested in the camera scheme from the outset. In December 2023 — a half-year before the campsite privacy issue was raised — Edison arranged an irregular ex parte teleconference with Commission staff in an attempt to eliminate the SPD's camera requirement absent any stakeholder input. When that failed, Edison tried to offer stakeholders an unacceptable scaling down of the camera requirements to six from an initial requirement of between 26 and 30. (ISR REC-2 at.pdf. pp. 680 & 685.) Only then did the privacy issue arise and, on this record, Edison took no steps to pursue and secure the public interest, for it had no motive to do so. In this context, Edison's unsupported assertions about the feasibility of monitoring parking areas should be rejected. We ask that the Commission direct Edison to carry out the REC-2 trail camera mandate in the public interest as directed in the SPD with the modifications described in our initial ISR comments.

[Figure removed]

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SCE Response

SCE objects to this requested Study Plan modification. The Forest Service as the federal land management agency required removal of the cameras. SCE evaluated the camera placement locations and determined that the layout and landscape of the recreation sites (i.e., wide open spaces or main driveways and parking areas adjacent to many campsites) did not lend itself to focus only on parking areas. Therefore, SCE adapted to this variance by expanding the study to include 2-hour calibration and spot counts to increase the amount recreation use data collected (in lieu of cameras).

As described in the responses to Comment NPS-4 and Comment AW-3, the use data collected by the REC-2 Study (calibration and spot count data, intercept surveys, online surveys, and existing available recreation use data) combined with the REC-1 Study specific to whitewater boating data provide a robust picture of recreation use in the study area that will be more than adequate to characterize existing recreation use, analyze potential Project effects, and support the development of proposed license conditions, as needed.

COMMENT KRB REC-2.2 USE. ATYPICAL YEAR, MODIFICATION

Edison: [A]nother season of recreational use data collection (through September 2024 as requested by KRB) is unlikely to result in findings that are substantially different than the previous 12 months (i.e., the current 12-month study period). (ISR Reply at 27.)

KRB: Edison's assertion that results would not be substantially different is conjecture and offered with neither evidence nor analysis. It is uncontroversial that the project's peak effects on recreation are seen near or at the MIF. Last year — the highest water year by far over the current license term — the diversion at Fairview Dam did not drop flows below it to MIF levels until the last half of September. That is wholly unlike median years where fish flows set in by early July, and low water years where they set in early June. Campers, hikers, sightseers, angler, and boaters are thus typically confronted with flows near the MIF (130 cfs + buffer) for most or all of the summer. That was far from the case during last year's anomalously high snowpack and lengthy runoff season. To take but one example, flows below Fairview Dam are typically around 150 cfs in August but remained well over 500 cfs that month last year:

[Figure removed]

For a broader perspective, we used the KR3 hydrology dataset (WY1997-2022) and USGS data (WY2023) to obtain daily mean flows below Fairview Dam. We then segregated those 27 water years into three equal groups of nine — wet, moderate, and dry years. We then calculated the mean flow below Fairview Dam for each of the summer months within each water year type and compared those figures with those from 2023. Here is the result:

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[Figure removed]

As vividly apparent, the figures for 2023 are well above even the "wet" year averages and absolutely dwarf the moderate and dry year averages.

We applied the same methodology to determine the percentage of days per month flows were at or near fish flow (under 160 cfs), by summer month and water year type:

[Figure removed]

This data shows that flows near the MIF generally set in below Fairview Dam by early June in dry years and by early July in moderate years. They did not set in during 2023 until late September — two to three months later than usual, and well after the summer recreation season was over. Results from summer 2023 REC-2 studies are accordingly results from a river that, quite literally, almost never exists. The data shows that a vast majority of the time summer recreators are confronted with hydrology near or at fish flow — far, far, far below the levels they were gifted in 2023. Conditions in summer 2023 were extremely anomalous and merit the extension of the REC-2 study through September 2024, at a minimum. FERC specifically tells the public: "section 5.15 (d) of the ILP permits stakeholders to request additional years of study if good cause is shown. Good cause could include equipment failures, drought, new endangered species listings, etc." Surely a 50-year deluge as seen in WY2023 is as anomalous or out of the ordinary as drought, which occurs with much greater frequency. Edison's assertion to the contrary should carry the weight of the evidence and analysis it is based on — none.

SCE Response

SCE objects to this requested Study Plan modification. Studies conducted during the relicensing process are intended to collect data and record observations during a specific snapshot in time and are representative of the period in which the study was conducted. Data collected during the 2023 season is representative of the recreation during that year, regardless of the water year type. Another season of recreational use data collection (through September 2024, as requested by KRB) is unlikely to result in findings that are substantially different than the previous 12 months (i.e., the current 12-month study period).

SCE's March 29, 2024, filing of the REC-2 Updated Interim Technical Memorandum for the summer period demonstrates that a robust data collection effort occurred and that there is ample information to describe recreation activities along the bypass reach and to evaluate potential Project effects as required for the license application (SCE, 2024c). The ongoing analysis has demonstrated that there is more than sufficient data and that extending the surveys through September 2024 would not provide additional benefit. Spot and calibration counts have been extended to be conducted for 2 additional months in April and May 2024.

See also response to Comment AW-3.

COMMENT KRB AES-1.1 AESTHETICS. L1 SURVEY PARTICIPANTS, MODIFICATION / KRB ANG-1.1 ANGLING. L1 SURVEY PARTICIPANTS, MODIFICATION

EDISON: The REC-2 visitor questionnaire was expressly and intentionally designed to capture input from actual, current visitors to the Project area. (ISR Reply at 27.)

KRB: The SPD could not have been more clear that the survey was supposed to "reach a greater number of respondents, who live locally but also who live in other areas of California, that are familiar with the... character and flows of the bypassed reach." (SPD at B-31.) The L1 REC-2 survey excludes visitors "familiar with the area" if they chose not to visit during the study period. In stark contrast, the L1 REC-1 survey did not: It was open to the general public and polled their perceptions even if they had not visited the dewatered reach during the study period. Edison's argument fails to confront these facts.

EDISON: Since the REC-2 study, including its aesthetics and angling components, is still being implemented consistent with the approved study plan, it is premature to initiate a Level 2 or 3 study at this time. (ISR Reply at 27.)

KRB: We understand the phased approach recommended by Whittaker (which Edison did not follow in REC-1), but it is now too late to implement an online survey capable of fairly informing the question of whether to proceed to a L2 investigation. Since Edison designed the online survey instrument in a manner that improperly limited public participation, the Commission should direct the commencement of an L2 study.

SCE Response

SCE objects to this requested Study Plan modification. The REC-2 Study is structured to obtain information related to general recreation use, activities, and visitor preferences within the study area, including both land-based and riverine-based recreation activities. By design, and as approved by FERC, the REC-2 methodologies (consistent with best practices for survey research) help ensure that the results of the visitor survey are representative of actual public recreation in the Project area. SCE understands KRB's concern that individuals who have not visited the recreation sites may hold opinions about recreation use. However, the purpose of the study was not to gather general viewpoints from the public, but rather to seek the viewpoints of individuals who have actually visited the public recreation areas in the Project Area. This intentional method—again, approved by FERC—helps yield representative and accurate results for angling and aesthetic preferences of visitors who have visited the Project Area recently, and whose views reflect current conditions of these recreation areas.

The survey was available via in-person intercept surveys and available online with notification of the surveys posted at the study area recreation sites, local businesses in Kernville, and distributed via windshield flyers on vehicles within the study area. Surveys were extended for 1 full year based on feedback from Stakeholders and FERC to capture a wide range of actual visitors throughout the year.

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Over 1,700 surveys (including both intercept and online surveys) were completed during the April 2023 through March 2024 study period, obtaining information on the type of recreation use activities, frequency and duration of stay, and other site-specific information. As reported in the March 29, 2024, filing based on review of survey data for summer period (Memorial Day 2023 through Labor Day 2023) approximately 97 percent indicated California as home zip code, with the majority (67 percent) indicating they had travelled over 100 miles to reach the site (SCE, 2024c). This demonstrates that the survey respondents included information collected from those who are both local and those who live in other areas of California.

COMMENT KRB REC-2.4 USE. SURVEY LOCATIONS, MODIFICATION / KRB AES-1.2 AESTHETICS. L1 SURVEY LOCATION, MODIFICATION / KRB ANG-1.2 ANGLING. L1 SURVEY LOCATION, MODIFICATION

EDISON: There is no variance.... [T]he first question of the survey lists all 25 sites within the FERC Project Boundary, including the sites upstream of Fairview Dam (Johnsondale Bridge River Access, Brush Creek Campground, Limestone Campground, and Willow Point Take-Out), as required by FERC's direction in the SPD. (ISR Reply at 29.)

KRB: This answer does not prove the absence of a variance. Edison buried the fact the online survey was applicable to sites above Fairview Dam in a drop-down menu that had to be clicked to be read. But no reasonable person who recreated above Fairview Dam would have had occasion to click that drop-down menu because both (1) in the survey description (both online and on the QR code flyer) and (2) in the first page of the survey itself, Edison plainly stated that the survey only applied to recreation below Fairview Dam. The fact that Edison has subsequently corrected those two variances only serves to corroborate our claim that they were in variance with the SPD.

Edison has consistently shown hostility to the prospect of fairly studying project effects above Fairview Dam. It did not include the study of such in its proposals; it objected to stakeholder requests for such study; and after the SPD required cameras above Fairview Dam, Edison proposed placing just one — and placing it in a location that would miss the entire story of project effects. (See ISR REC-2 at.pdf p. 668-670.) That hostility spilled over into its execution of the online survey — until KRB unearthed it and Edison belatedly corrected it. We are facing yet another season of overcrowding above Fairview Dam due to project effects so severe that the Forest has proposed limiting parking at Johnsondale Bridge to boaters only — to the exclusion of and at the expense of the general public, including hikers, campers, anglers, and day users. We again ask that this variance be corrected by immediately proceeding to a Level 2 investigation into angling and aesthetics. Good cause exists in that Edison was wholly at fault for this critical variance from the study plan and the direction of the SPD. It is too late to conduct a corrected oneyear online survey, report on it (including a L2/L3 decision), take stakeholder comment, rule on the report and comments, and still have time to implement meaningful L2/L3 studies with stakeholder input prior to the FLA. For these reasons, the Commission should grant our request.

SCE Response

SCE does not recognize this as a variance to the study and objects to this requested Study Plan modification as it does not demonstrate that the study was not conducted as provided for in the approved study plan (18 CFR 5.15(d)). Furthermore, SCE has been responsive and accommodating to numerous Stakeholder comments and recommendations that are reasonable and appropriate when collecting relevant and applicable information to support the relicensing effort, and KRB's comment that SCE "has consistently shown hostility" is unfounded.

The recreation sites above Fairview Dam were part of the robust year-long roving survey route for both in-person intercept surveys and for spot and calibration counts. Additionally, for the small population of respondents that utilized the online survey (approximately 3%), the recreation facilities listed the sites above the dam when prompted to select a particular facility and the map accompanying the survey were also depicted.

This appears to be yet another effort by KRB to circumvent FERC's SPD, proceeding haphazardly with further study efforts without the directional insight from the Level 1 Technical Memorandum, which includes results from the desktop analysis, interviews and results from the REC-2 visitor intercept surveys.

The REC-2 Final Technical Memorandum, ANG-1 Enjoyable Angling Level 1 Technical Memorandum, and AES-1 Level 1 Aesthetic Flow Technical Memorandum will provide results for the full study season, including results related to participants responses to questions regarding aesthetics and angling use within the study area and will be filed with the DLA and USR. The ANG-1 and AES-1 Technical Memorandum will also include a recommendation for proceeding to Level 2 study if additional data collection is needed.

COMMENT KRB AES-1.3 AESTHETICS. L1 DESKTOP REVIEW, MODIFICATION

EDISON: We are proceeding in accordance with FERC's SPD, and the Level 1 angling study is still actively collecting relevant data through the REC-2 visitor survey, as well as other desktop methods consistent with best practices. (ISR Reply at 35.)

KRB: Edison sidesteps our argument — namely, that the L1 desktop review did not meet the standards of Whittaker as approved in the SPD. We maintain that the existing desktop review amounts to a variance under the approved study plan.

The Whittaker methodology mandates a literature review process that is both systematic and comprehensive. It emphasizes the importance of including a wide array of documents and perspectives to ensure that the review fully captures the range of impacts associated with a hydro project, in this case, on aesthetics. The exclusion of documented opinions and feedback from relevant agencies and stakeholders on the aesthetic impacts of the project — as we highlighted in our initial comment — undermines the literature review's comprehensiveness. These perspectives are crucial for understanding the broader community and regulatory concerns regarding the project's visual and environmental footprint. The systematic exclusion of these sources from the L1 desktop review undermines the review's ability to adequately inform the question of whether to proceed to subsequent stages of the study process. We accordingly request that FERC mandate Edison to incorporate those overlooked agency opinions, stakeholder feedback, and other analyses concerning the aesthetic impacts of the project.

SCE Response

SCE objects to this requested Study Plan modification. By design and as contemplated under FERC's regulations, the ISR is an interim product intended to provide FERC and Project Stakeholders an initial opportunity to review a work-in-progress document (i.e., an early working draft of a study report). Only those documents and sources of information that were reviewed and properly summarized to date were included in the ISR. Additional documents and sources of information will be incorporated into a Final Level 1 Technical Memorandum that represents the "existing, relevant, and reasonably available information" (Whittaker et al., 2005). As this study has progressed since the ISR, the Technical Memorandum presenting the results of the Level 1 study will be included in the DLA due July 3, 2024.

Per KRB's previous AES-1.3 comment, at least two of the documents not included in the ISR were the 1994 USFS Wild and Scenic River Final Environmental Impact Statement and the 1994 USFS North and South Forks Kern River Wild and Scenic River Record of Decision and Comprehensive Management Plan. Both of these documents will be incorporated into the Final Level 1 Technical Memorandum.

As noted in previous relicensing documents, the Project pre-dates the enabling legislation and all subsequent regulatory documents and management plans for the NFKR Wild and Scenic River. This is particularly pertinent as these documents and plans were cognizant of and developed under conditions that included Project facilities and operations. This is not to say that the Project should not play a role in the continued management and enhancement (where feasible) of aesthetic opportunities. Instead, it is an acknowledgement that the NFKR Wild and Scenic River designation includes the Project and thus should be considered the baseline against which current and future operations are evaluated.

COMMENT KRB ANG-1.3 ANGLING. L1 DESKTOP REVIEW, MODIFICATION

EDISON: We are proceeding in accordance with FERC's SPD, and the Level 1 angling study is still actively collecting relevant data through the REC-2 visitor survey, as well as other desktop methods consistent with best practices. (ISR Reply at 35.)

KRB: Edison again sidesteps our argument. We maintain that the existing desktop review amounts to a variance under the approved study plan. We discussed immediately above how the Whittaker methodology mandates a literature review process that is both systematic and comprehensive. The exclusion of critical sources of information — specifically angler comments, our analyses, fish monitoring studies, and insights from a

published angler group blog, as we pointed out in our initial comments — represents a significant variance from the comprehensive and inclusive approach mandated by the Whittaker methodology for literature reviews. These omissions not only narrow the review's scope but also potentially biases its conclusions by favoring information supporting the status quo, contrary to the methodology's objective of a balanced and comprehensive overview. It also undermines the review's ability to fairly inform the question of whether to proceed to subsequent stages of the study process. We accordingly request that FERC mandate Edison to incorporate those overlooked agency opinions, stakeholder feedback, and other analyses concerning the aesthetic impacts of the project.

SCE Response

SCE objects to this requested Study Plan modification. As noted in the response to Comment KRB AES-1.3 above, the ISR is a work-in-progress document that provides an initial opportunity for FERC and Stakeholders to review the preliminary, but not complete findings of the ANG-1 Enjoyable Angling Flows Study. Since the ISR was filed, work on the Final Technical Level 1 Memorandum has continued and incorporates additional sources of data and information about enjoyable fishing flows in the Fairview Dam Bypass Reach. The updated Technical Memorandum that includes the results of the Level 1 study will be included as part of the DLA filing.

As a reminder, the goals of the ANG-1 Enjoyable Angling Flows Study (per the SPD) are to (1) document types of angling use and patterns of use in the Fairview Dam Bypass Reach under current flow conditions and, (2) quantify angling flows in the bypass reach suitable for spin fishing, bait fishing, and fly fishing. While KRB's previous comments on the availability of angling flows and unenjoyable fishing experience have been noted, they are one of many sources of information and input that are considered in the ANG-1 Study. The sources reviewed and summarized in the Technical Memorandum include not only existing information, but also information compiled from structured interviews and survey responses from visitors about their angling experience. This design method and approach not only protects the integrity of the study, but it enhances the credibility of the data and ensures that the results are applicable and relevant to the study question at hand, 1 and not based on isolated, subjective anecdotal reports. A full suite of comments and opinions on enjoyable angling flows will be presented in the Final Level 1 Technical Memorandum, as well as the DLA and FLA.

Additionally, angling is one of many recreational activities available in the Fairview Dam Bypass Reach. The licensing process provides an opportunity to evaluate all recreational activities and the tradeoffs that may be required to enhance one or more of these activities (e.g., angling flows vs. boating flows, angling flows vs. aesthetic flows, etc.) under the new license. Furthermore, these tradeoffs extend to other resource areas (e.g.,

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¹ Per FERC's SPD, "[d]ata collected on anglers' perceptions of comfortable flows for angling would ensure staff has adequate information to analyze potential project effects on angling, and the preferences of anglers within the bypassed reach, and would inform the development of license conditions [sections 5.9(b)(4) and (5)]." (FERC, 2022)

recreational flows vs. fishery flows), as well as power generation. Ultimately, the conditions of the new license will be crafted based on these tradeoffs (not just the needs of one resource or activity) and the licensing studies that informed this decision-making process.

COMMENT KRB NRG-1. VOLTAGE STEPPING COSTS, NEW STUDY

EDISON: However, KRB does not identify any material change in law or regulations applicable to the information request, why the goals and objectives of this study could not be met with the approved study methodology, that the proposal has changed significantly or that significant new information has become available. (ISR Reply at 41.)

KRB: Edison injected the issue of voltage stepping into this proceeding after its production and dissemination of the PAD. That is "significant new information" justifying a study request at this point.

EDISON: A market study on voltage stepping is not needed to inform FERC's decision on Project operational conditions relative to effects on natural and social resources.... FERC routinely rejects studies—like the voltage stepping cost study requested by KRB that focus on project economics and market conditions. (ISR Reply at 42.)

KRB: Again, Edison injected the issue of voltage-stepping into this proceeding in an effort to shore up the public interest/need for power portion of its application. It has accordingly set itself up to rebut any proposed license condition impinging on generation on the grounds that replacement energy entails "significant" transmission costs. We are asking for a quantifiable, evidence-based handle on how, and under what conditions, and whether those costs are indeed "significant." Absent that information, stakeholders are at an unfair disadvantage in forming their license proposals to withstand Edison's "significant cost" objection; nor are stakeholders able to craft those proposals in a manner that best serves the (asserted) public interest: i.e., in manners that least involve additional cost (for instance, a proposal that attempts only to limit that portion of KR3 generation that is exported to Vestal or other substations). Edison's objection does not withstand analytical scrutiny and we ask that the proposed study be approved.

SCE Response

SCE objects to this requested new study. KRB is mistaken in its allegation that information raised by SCE in the PAD satisfies the criteria set forth in 18 CFR § 5.15(e). To the contrary, KBR's admission that SCE presented information in the PAD that prompted its untimely new study request demonstrates conclusively that KRB had every opportunity to request this study in a timely manner during the initial development of the Study Plan, yet it did not. Under FERC's Integrated Licensing Process regulations, it is far too late for KBR to advance this study. KRB provides no good cause for this new study request.

Aside from the procedural deficiencies of KRB's new study request, it fails to advance any substantive basis for the study. KRB has not identified any other relicensing proceeding in which FERC has required the applicant to conduct this type of economic

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study, nor has it explained any basis for FERC to depart from FERC's standard economic analysis that has been applied in every relicensing proceeding since 1995 and upheld upon judicial review. See Mead Paper Co., 72 FERC ¶ 61,027 (1995); City of Tacoma v. FERC, 460 F.3d 53, 72-74 (D.C. Cir. 2006).

Finally, KRB's most recent comments in support of this new, untimely study request do not address SCE's other objections appearing in the January 9, 2024, Initial Study Report Response to Comments, pages 41-43 (SCE, 2024a).

COMMENT KRB NRG-2. CAISO BID HISTORY, NEW STUDY

EDISON: KRB repeatedly urged FERC to require SCE to conduct this same study, but FERC staff did not require this requested study as part of its SPD. (ISR Reply at 43.)

KRB: Edison misstates the record. KRB asked for bid history information as an information request, not as a study request, perhaps due to our misunderstanding on the manner of acquiring this objective information. We are uncertain why our request was overlooked. Contrary to the implication of Edison's comment, FERC did not pass on our request; its issuances are silent on the matter. Given the importance of what should be routinely- and freely-shared information, we ask that it be provided now through this request.

EDISON: The requested market valuation study will not provide any further information helpful to FERC when assessing Project effects and considering potential license conditions. (ISR Reply at 44.)

KRB: This is an unserious objection. Under the current license, project operations are curtailed on occasion for recreational mitigation between the hours of 10 a.m. and 5 p.m. providing a seven-hour "bubble" of additional flows for recreation. The result of the current rec schedule is that KR3 generation is reduced approximately between the hours of 1 p.m. and 8 p.m. based on the results of OPS-1 to date. That obviously includes the CAISO evening net ramp, where intra-day wholesale energy prices are at their absolute highest. Wouldn't it be better from a public interest standpoint if the rec bubble only limited KR3 generation during hours of low (or negative) wholesale prices and during the curtailment of renewable generators? The KR3 bid history can show stakeholders how to formulate the timing of the rec flow bubble in the next license term to better conform with societal need as revealed by market pricing. Moving the bubble back several hours may allow for both recreation and KR3 contribution to the evening net ramp at optimal times, unlike the current regime. That would plainly be in the public interest — an interest we are trying to help identify and get right.

Stakeholders also require this information to so as to be able to quantify the economic cost to generation of their specific license condition proposals — a real-world requirement imposed on PMEs by FERC — and to tailor those proposals in a manner to limit their cost and thus improve their chances for inclusion in the next license.

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EDISON: KRB's attempt to argue that due to the potential for curtailment, the Project "is not useful to society from February through May and September through November" only serves to demonstrate KRB's significant bias against this Project and an astounding oversimplification of policies, market rules, and grid operator rules governing the complex issue of curtailment. (ISR Reply at 45.)

KRB: This is a low, dishonest quotation of KRB's position. KRB wrote that the data on curtailment suggested "the energy KR3 produces between 10am and 5pm is not useful to society from February through May and September through November." (KRB ISR NRG-2 at 117.) Edison's misleading elision of our "between 10am and 5pm" qualifier is not well-received. Edison is fully aware (we would hope) that those are the hours of the solar glut that is responsible for the belly of the duck curve. Nor does Edison deny that renewable generators are curtailed — sidelined into non-generation — at those times during those months in an amount that is 57 to 169 times the average energy KR3 produces. They cannot deny that fact because that's what CAISO's data shows. The only "significant bias" in this proceeding has been shown by Edison's managers and consultants, whose jobs are funded by this project and who would not be making such contemptible elisions — or be anywhere near this proceeding, in all honesty — if they were not so employed. We, on the other hand, are here as public interest volunteers putting forth evidence-based analyses of real-world project contexts and impacts in the hope that our managing agents find the highest potential use of this incredible resource of the common treasury — not just a narrowly-focused use we are paid to promote.

EDISON: FERC has determined that the public interest is well served by the important ancillary services provided by hydropower facilities such as the Project provides to stabilize and secure the electric grid.... [FERC has said:] "hydroelectric projects offer unique operational benefits to the electric utility system, including their ability to help maintain the stability of a power system, such as by quickly adjusting power output to respond to rapid changes in system load; and to respond rapidly to a major utility system or regional blackout by providing a source of power to help restart fossil-fuel based generating stations and put them back online." (ISR Reply at 45.)

KRB: Again, this study request is simply to find the most beneficial time during the day to have a recreational flow bubble — a bubble that already exists under the current FERC license. But let's be clear: contrary to the sleight of hand in Edison's argument, not all hydropower is created equal — especially with regard to ancillary services.

KR3 is not a dispatchable resource; it is a run-of-river "price taker" and as such, contrary to Edison's argument, is not operated in a manner that makes it able to "respond to rapid changes in system load" like storage-based hydropower can. KR3 neither ramps up to meet demand nor ramps down to assuage the threat of overgeneration. Sister investor-owned utility Pacific Gas & Electric has stated to this agency that run-of-river hydro has "no ability to optimally choose when to generate."52 CAISO has acknowledged the same: "Run-of-river hydro resources are similar in nature to variable energy resources. Variable energy resources, such as wind and solar resources, are also generally considered price takers, in that when the wind is blowing or the sun is shining they produce energy and sell it in the market."53 KR3 is wholly unlike storage-based hydroelectric generators that

are flexible and dispatchable. Those are the most socially useful generators in the modern grid because they are able to respond to rapid changes in system load. Edison's attempt at lumping the two types of hydropower together is misleading at best.

As for supplying power to fossil generators during a blackout, Edison ignores the fact that recreational flows in the current license (and, we will propose, in the next) are always suspended during stage 2 or greater power emergencies. (166 FERC ¶ 62,049.) Edison also ignores the fact that the low market pricing and curtailment phenomena at issue occur while wind and solar threaten over-generation — so much so that exceedingly vast amounts of renewable generators are sidelined from the grid and sit idly by.54 It strains credulity for Edison to assert a potential loss of load event due to under-generation in that environment. With this study request, we are trying to pin down exactly when and to what degree these phenomena occur under current operations. Edison's inapposite citation of FERC informs an argument that is out-of-touch with the highly attenuated at times nature of KR3's contribution to the social good and the modern grid. Edison has failed to mount a serious rebuttal to our study request — again, for data that Edison should not be afraid to subject to the light of day — and we ask that it be performed.

Our study seeks a foundational means to optimize KR3's operational schedule to greatly enhance recreational opportunities on the NFKR without undermining its contribution to the grid, particularly during peak demand periods. The current licensing conditions inadvertently reduce KR3's generation capacity during the evening net ramp, a period of high wholesale energy prices and societal need for stable energy supply. By examining the project's bid history, we aim to identify a more beneficial timing for the recreational flow "bubble," ensuring that societal needs for both recreation and energy are met more effectively. The economic implications of adjusting the recreational flow timing are significant. With an in-depth analysis of bid history, we can better understand how to align KR3's operations with market demands, potentially improving the project's economic viability while also addressing recreational and environmental goals. Understanding the market valuation of energy generated by KR3 is essential for a fair and informed balancing of developmental and non-developmental values. This understanding will enable stakeholders to propose license conditions that reflect real-world economic and environmental considerations, enhancing the project's alignment with both. The phenomenon of low and negative wholesale pricing leading to renewable curtailments continues to grow over time:

[Figure removed]

SCE Response

SCE objects to this requested new study. KRB's attempts to further justify this study do not overcome SCE's concerns stated in its January 9, 2024, Initial Study Report Response to Comments, pages 43-45 (SCE, 2024a). Simply stated, FERC has a proven method for evaluating the economics of a project that it has used consistently for over 25 years. KRB provides no compelling reason why FERC staff should treat the relicensing of KR3 any different than all other projects across the nation—particularly as FERC has rejected similar study requests from other Stakeholders in other relicensing proceedings.

4.0 REFERENCES

- KRB (Kern River Boaters). 2023. Kern River Boaters' Comments and Study Requests in Response to the KR4 Initial Study Report and ISR Meeting (FERC Accession No. 20231211-5183). <u>eLibrary | File List (ferc.gov)</u>
- _____. 2024. Kern River Boaters' Comments and Study Requests in Response to ISR Supplements. April 1 (FERC Acession No. 20240401-5656) <u>eLibrary | File List</u> (ferc.gov)
- FERC (Federal Energy Regulatory Commission). 2022. *Study Plan Determination for the Kern River No. 3 Hydroelectric Project*. 20221012-3024. October 12.
- Letter from Nicholas Jayjack, FERC, to Wayne Allen, SCE, Project No. 2290-122, Accession No. 202040201-3018 (issued February 1, 2024). eLibrary | File List (ferc.gov)
- SCE (Southern California Edison). 2022. Kern River No. 3 Hydroelectric Project (FERC Project No. 2290), Revised Study Plan. July.
 - ____. 2023. Kern River No. 3 Hydroelectric Project (FERC Project No. 2290), Initial Study Report. October 9.
 - _____. 2024a. Kern River No. 3 Hydroelectric Project (FERC Project No. 2290), Response to Comments on Initial Study Report. January 9.
 - __. 2024b. Kern River No. 3 Hydroelectric Project (FERC Project No. 2290), Request to File Study Results. March 1.
 - _____. 2024c. Kern River No. 3 Hydroelectric Project (FERC Project No. 2290), Addendum to Initial Study Report. March 29.
- Whittaker, Doug, Bo Shelby, and John Gangemi. 2005. Flows and Recreation: A Guide to Studies for River Professionals. Washington, DC: Hydropower Reform Coalition and National Park Service Hydropower Recreation Assistance Program.

Attachment B: Distribution List

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