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JARED BLUMENFELD SECRETARY FOR ENVIRONMENTAL PROTECTION

State Water Resources Control Board

August 8, 2022

Ms. Kimberly D. Bose, Secretary Federal Energy Regulatory Commission 888 First Street, NE Washington, D.C. 20426 **Via e-filing** Mr. Nicholas Sher GreenGenStorage, LLC PO Box 3833 Oakland, CA 94609-2031 Sent via email: nicholas@greengenstorage.com

Mokelumne Pumped Storage Project Federal Energy Regulatory Commission Project No. 14796 Amador and Calaveras Counties Bear River, Mokelumne River, Upper Bear River Reservoir, Lower Bear River Reservoir, and Salt Springs Reservoir

STUDY REQUESTS AND COMMENTS ON THE PRE-APPLICATION DOCUMENT AND COMMENTS ON SCOPING DOCUMENT 1

Dear Secretary Bose and Mr. Sher:

GreenGenStorage, LLC (GreenGen) is proposing to own and operate the Mokelumne Pumped Storage Project (Project), also referred to as Federal Energy Regulatory Commission (FERC) Project No. 14796. On April 8, 2022, GreenGen filed its Pre-Application Document (PAD) for the Project with FERC for an original hydropower license. On June 7, 2022, FERC issued Scoping Document 1 for the Project, and held scoping meetings on June 29 and June 30, 2022. State Water Resources Control Board (State Water Board) staff attended both scoping meetings. FERC's issuance of Scoping Document 1 began a 60-day comment period in which interested parties may submit comments on the Project's PAD and request additional studies, as well as provide comments on FERC's Scoping Document 1. State Water Board staff's comments and study requests related to GreenGen's PAD are provided in Attachment A and B, respectively. State Water Board staff's comments on FERC's Scoping Document 1 are provided in Attachment C.

If you have questions regarding this letter, please contact Eric Bradbury, Project Manager, by email at Eric.Bradbury@waterboards.ca.gov. Written correspondence should be directed to:

State Water Resources Control Board Division of Water Rights Water Quality Certification Program Attn: Eric Bradbury P.O. Box 2000 Sacramento, CA 95812

Sincerely,

Parker Thaler

For: Eric Bradbury Environmental Scientist Water Quality Certification Program Division of Water Rights

Enclosures: Attachment A – Comments on the Pre-Application Document for the Mokelumne Pumped Storage Project

Attachment B – Study Plan Requests for the Mokelumne Pumped Storage Project

Attachment C – Comments on Scoping Document 1 for the Mokelumne Pumped Storage Project

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ATTACHMENT A: COMMENTS ON THE PRE-APPLICATION DOCUMENT FOR THE MOKELUMNE PUMPED STORAGE PROJECT

Pre-Application Document Comments

The following comments are provided by State Water Resources Control Board (State Water Board) staff on the Pre-Application Document (PAD) for GreenGenStorage, LLC's (GreenGen) Mokelumne Pumped Storage Project (Project), Federal Energy Regulatory Commission (FERC) Project No. 14796.

1. Section 401 of the Clean Water Act (33 U.S.C. § 1341) requires any applicant for a federal license or permit for an activity that may result in any discharge to navigable waters, to obtain water quality certification from the State that the discharge will comply with the applicable water quality requirements, including the requirements of section 303 of the Clean Water Act (33 U.S.C. § 1313) for water quality standards and implementation plans. Clean Water Act section 401 directs that water quality certifications shall prescribe effluent limitations and other conditions necessary to ensure compliance with the Clean Water Act and with any other appropriate requirements of state law, such as the Porter-Cologne Water Quality Control Act (Wat. Code, § 13000 et seq.). Conditions of a water quality certification shall become a condition of any federal license or permit subject to water quality certification. The Project will result in a discharge to navigable waters and must obtain water quality certification from the State Water Board as part of obtaining an original license from FERC.

A water quality certification issued by the State Water Board for the Project must ensure compliance with water quality standards in the Central Valley Regional Water Quality Control Board's Water Quality Control Plan for the Sacramento and San Joaquin River Basins (SR/SJR Basin Plan). Water quality control plans designate the beneficial uses of water that are to be protected, water quality objectives for the reasonable protection of the beneficial uses and the prevention of nuisance, and a program of implementation to achieve the water quality objectives. (Cal. Wat. Code, §§ 13241, 13050, subds.(h), (j).) The beneficial uses, together with the water quality objectives contained in the water quality control plans, and applicable antidegradation requirements, constitute California's water quality standards for purposes of the Clean Water Act. In issuing water quality certification for a project, the State Water Board must ensure consistency with the designated beneficial uses of waters affected by the project, the water quality objectives developed to protect those uses, and antidegradation requirements. (PUD No. 1 of Jefferson County v. Washington Dept. of Ecology (1994) 511 U.S. 700, 714-719.)

The Project facilities are proposed to be located on Salt Springs Reservoir and either Lower Bear River Reservoir or Upper Bear River Reservoir, which are in

the "Sources to Pardee Reservoir" Hydrologic Subarea for the Mokelumne River as identified in the SR/SJR Basin Plan. The SR/SJR Basin Plan sets forth water quality standards for water bodies in the region including Project related water bodies in the "Sources to Pardee Reservoir". Beneficial uses established by the SR/SJR Basin Plan for Project related waters include: municipal; power; contact recreation; canoeing and rafting; other non-contact recreation; warm and cold freshwater habitat; warm migration; warm and cold spawning; and wildlife habitat. In addition to beneficial uses, the SR/SJR Basin Plan includes narrative and numeric surface water quality objectives that aim to preserve and protect the beneficial uses listed above.

GreenGen must file an application for water quality certification within 60 days of FERC's issuance of a Notice of Application Ready for Environmental Analysis. The State Water Board may request additional information to clarify, amplify, correct, or otherwise supplement the contents of the application (Cal. Code Regs., tit. 23, § 3836.). A complete application for a water quality certification must include a description of any steps that have been, or will be taken to avoid, minimize, or compensate for loss of or significant adverse impacts to beneficial uses of water. (Cal. Code Regs. tit. 23, § 3856, subd. (h)(6)). State Water Board staff look forward to working with GreenGen, FERC, and other licensing participants during the licensing process to ensure the Project meets water quality standards.

- 2. The Project involves the construction and operation of a new hydroelectric facility on Salt Spring Reservoir and either Lower Bear River Reservoir or Upper Bear River Reservoir. For the Project to operate, it must obtain a water right. During the water right application process, GreenGen must make a showing of unappropriated water available in the system for the proposed appropriation of water related to the Project. (Wat. Code, § 1375, subd. (d).) The State Water Board may issue a permit to appropriate water if the proposed appropriation is in the public interest. (Wat. Code, §§ 1255-1257.) State Water Board staff strongly encourage GreenGen to begin the process of obtaining a water right for the Project.
- 3. Compliance with the California Environmental Quality Act (CEQA) (Pub. Resources Code, § 21000 et seq.) is required as part of the water quality certification process. CEQA requires the lead agency to evaluate a project's potential impacts to environmental resources as well as identify mitigation measures to reduce project impacts. CEQA also requires public input on identified impacts and mitigation measures. CEQA documentation must analyze and evaluate the Project's impacts to all relevant resources, including aquatic biological resources, special status species, water quality standards, and water

quality control plans. Information from studies and data gathering during FERC licensing informs CEQA document development.

CEQA Guidelines define the lead agency as "the public agency which has the principal responsibility for carrying out or approving a project." (Cal. Code Regs., tit. 14, § 15367.) It is State Water Board staff's understanding that the State Water Board will act as the CEQA lead agency for Project licensing. State Water Board staff request GreenGen confirm in writing its understanding on whether the State Water Board will be the CEQA lead agency.

- 4. GreenGen is proposing to use Salt Spring Reservoir and either Upper Bear River Reservoir or Lower Bear River Reservoir for Project operations. Given that both Upper Bear River Reservoir and Lower Bear River Reservoir are being considered, State Water Board staff request that all studies conducted during FERC licensing include both reservoirs so that adequate environmental information is collected to inform the Project's future CEQA and water quality certification processes.
- 5. Both Upper Bear River Reservoir and Lower Bear River Reservoir are operated by dams that are owned by Pacific Gas and Electric Company (PG&E) as part of the Mokelumne Project which is subject to requirements of its FERC license (FERC Project No. 137). Section 4.2 of the PAD discusses that as part of the Project, Upper Bear Dam (which impounds Upper Bear River Reservoir) or Lower Bear Dam (which impounds Lower Bear River Reservoir) would need to be raised by 10 feet or 2.5 feet, respectively. It is unclear if the Project's proposed modifications to PG&E's Mokelumne Project facilities would result in PG&E being unable to comply with requirements of its FERC license such as instream flow, water temperature, and other water quality objectives. An evaluation of the Project's effects to PG&E's Mokelumne Project should be conducted during licensing.
- 6. Section 4.1.1 Project Boundary and Project Land Ownership in part states, "Land ownership within the proposed Project boundary (85.7 total acres) is shown in Figure 4-3. Lands within the proposed Project boundary include 83.4 acres of USFS [United States Forest Service] lands and 2.3 acres of privately owned lands." Land ownership shown in Figure 4-3 and Section 4.1.1 appear to only pertain to the Project's tunnels and intake/outlet. Project construction, operation, and maintenance has the potential to affect Salt Spring Reservoir, Lower Bear River Reservoir, Upper Bear River Reservoir, river reaches below each reservoir, rivers and tributaries flowing into each reservoir, and wetlands and riparian areas surrounding the reservoirs and reaches. Therefore, State Water Board staff request that the Project boundaries be expanded to include all

lands potentially affected by the Project, especially those that would be inundated by raising either Upper Bear Dam or Lower Bear Dam.

- 7. Section 6.1.5 Reservoir Shorelines, in part, states, "Potential landslides, unstable slopes, weak or soluble foundation materials, and dam abutments pose very low threats to the dams and water storage at Upper and Lower Bear River and Salt Springs Reservoirs" (MWH, 2008). The information provided in this section pertains to existing conditions and does not evaluate the potential for landslides, unstable slopes, weak or soluble foundation materials, and dam abutments risks with operations of the Project which will result in daily reservoir level fluctuations are needed to better assess slope stability issues related to Project operations.
- 8. Section 6.1.5 Reservoir Shorelines, in part, states, "Frequent raising and lowering of the pool elevation in a reservoir could contribute to increased amounts of erosion and therefore sediment load." Project operations involve daily fluctuations of up to 5.1 feet (Lower Bear River Reservoir) and 16.4 feet (Upper Bear River Reservoir). Increased reservoir level fluctuations can increase shoreline erosion and associated sediment discharge to reservoir surface waters, which may adversely impact water quality and associated beneficial uses. Additional studies and/or evaluations are needed to better assess potential shoreline erosion.

Additionally, the Project involves the raising of Upper Bear Dam or Lower Bear Dam by 10 or 2.5 ft, respectively, which will increase water storage and raise the maximum water surface elevation of either reservoir. Raising either reservoir will inundate additional lands and potentially sections of Bear River which may further contribute to water quality impairments through sedimentation. Studies and/or evaluations are needed to better assess potential water quality impacts from inundating additional lands and seasonally converting riverine habitat to reservoir habitat.

9. Section 6.2.3 – Existing Water Quality Data, in part, states, "From 2001-2009 detailed reservoir profiles of water temperature and dissolved oxygen were collected within the Lower Bear River and Salt Springs reservoirs between April and October to meet the Stream Ecology Monitoring Program (SEMP) requirements of the FERC P-137 license (PG&E, 2002, 2005-2010). Following the 2009 monitoring season, it was determined that data collected through 2009 were sufficient to evaluate the extent of the cold water pool in Lower Bear and Salt Springs Reservoirs (PG&E, 2010)." The PAD provides averages of the above discussed data, but does not include the raw data numbers which would better inform existing water quality conditions. State Water Board staff requests

that this data (and all existing water quality data that will be used to evaluate Project impacts) be provided in this Project's FERC record for licensing participant review and consideration.

10. Section 6.5 – Wetlands, Riparian, and Littoral Habitat, in part, states: "The layout of riparian habitat within the Project area generally follows stream corridors, such as Cole Creek and its tributaries. Littoral habitat and fringe wetlands are generally found at the margins of the Project reservoirs, while wetlands and wet meadow habitats can be found at reservoir inflows...The extent of these habitats was determined based on the CALVEG map created for the Project area, and includes the following: willow (scrub), wet meadows, perennial lake or pond, river/stream/canal, reservoir, and water (general) (USFS, 2020)." Project construction, operations, and maintenance (e.g., reservoir elevation changes) have the potential to adversely impact wetland and riparian habitat and possibly result in the loss of habitat. Therefore, State Water Board staff request that GreenGen perform a delineation and analysis of wetlands and riparian zones surrounding the Project affected reservoirs, river reaches, and tributaries. Information on existing wetlands and riparian habitat can then be used to inform potential impacts to wetlands and riparian habitat associated with Project implementation.

Please note, the State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State (Dredge or Fill Procedures) (State Water Board 2019)¹ provide California's definition of wetland, wetland delineation procedures, and procedures for submitting applications for activities that could result in discharges of dredged or fill material to waters of the state. The Dredge or Fill Procedures ensure that State Water Board regulatory activities will result in no net loss of wetland quantity, quality, or permanence, compliant with the California Wetlands Conservation Policy, Executive Order W-59-93. GreenGen must comply with the Dredge or Fill Procedures when conducting dredge or fill activities that may impact waters of the state, including wetlands.

11. Section 7.2 – Geology and Soils, discusses that investigations of rock properties along the proposed tunnel alignment are needed to evaluate potential bracing, lining, and other tunnel support features. State Water Board staff agree that further investigations are needed to better assess tunnel structures and request that investigations also include constituents relevant for water quality such as soluble minerals present and the effects of tunnel erosion to water quality in Project affected reservoirs.

¹ The State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State can be found at:

https://www.waterboards.ca.gov/water_issues/programs/cwa401/docs/wrapp/rs2021_00 12.pdf Last accessed on July 29, 2022.

ATTACHMENT B: STUDY PLAN REQUESTS FOR THE MOKELUMNE PUMPED STORAGE PROJECT

Section 7.0 – *Preliminary List of Potential Issues and Study Needs* of the Pre-Application Document (PAD) filed by GreenGenStorage, LLC. (GreenGen), in part states, "GreenGen has developed a list of potential studies, by resource area, that may be needed during the study program to inform the license application and further refine the development of the appropriate Project layout and operational scenario. The primary studies listed below may consist of a series of itemized tasks intended for synthesis during the analysis phase to answer a fundamental question." Section 7.0 then contains a list of study plan concepts that provide limited information on what data collection efforts will occur to inform potential impacts of the Mokelumne Pumped Storage Project (Project).

Following its filing of the PAD, on July 18, 2022, GreenGen hosted a licensing participant meeting to provide additional information on studies that it plans to conduct as part of Project licensing. State Water Resources Control Board (State Water Board) staff appreciate GreenGen's efforts to better refine its study plans and to work collaboratively with licensing participants to ensure adequate information is collected. State Water Board staff will continue to participate in the collaborative process to refine studies with GreenGen and other licensing participants.

However, the current comment period provide by the Federal Energy Regulatory Commission (FERC) pertains to the PAD and Scoping Document 1. As such, State Water Board staff are providing the below study requests to better inform Project impacts.

The following is the list of three studies requested by State Water Board staff:

- 1) Water Quality Monitoring Study; and
- 2) Water Balance/Operations Model Study; and

Study plan requests by State Water Board staff are described using the study plan criteria outlined in the Code of Federal Regulations (CFR), title 18, section 5.9(b), as follows:

1. <u>Water Quality Monitoring Study</u>

<u>Goal and Objective of the Water Quality Monitoring Study (CFR, title 18, section</u> <u>5.9(b)(1)</u>

The goal and objective of the Water Quality Monitoring Study is to collect water quality data to characterize existing water quality conditions in the Project reservoirs and Project affected reaches of the Mokelumne River and Bear River. Existing data will be used to inform water quality certification conditions and potential water quality impacts associated with construction, operation, and maintenance of the Project.

Specifically, State Water Board staff request that GreenGen monitor:

- In-situ water quality parameters (dissolved oxygen, pH, temperature, turbidity, and specific conductance).
- General water quality parameters including but not limited to: 1) suspended sediment; 2) metals (e.g., mercury, copper, and arsenic); and 3) nutrients (e.g. nitrate, phosphorus).
- Stratification of Upper Bear River Reservoir, Lower Bear River Reservoir, and Salt Springs Reservoir.

Monitoring locations and frequency should be collaboratively determined with licensing participants to ensure adequate information is collected. At a minimum, monitoring locations should include:

- Inflow and outflow locations for Upper Bear River Reservoir.
- Inflow and outflow locations for Lower Bear River Reservoir.
- Inflow and outflow locations for Salt Springs Reservoir.
- Representative locations within Upper Bear River Reservoir, Lower Bear River Reservoir, and Salt Springs Reservoir at various elevations to inform current stratification and water quality parameters at different depths. Representative locations should include proposed intake/outlet locations and depths.

Resource Management Goal of the State Water Board (CFR, title 18, section 5.9(b)(2)

The State Water Board has broad authority under the federal Clean Water Act (33 U.S.C. § 1251-1387), the state constitution, and the state water code and regulations to restore and maintain the chemical, physical and biological integrity of the state's waters, and to regulate water diversion and use through the water right priority system in accordance with the State Water Board's reasonable use and public trust responsibilities. Section 401 of the federal Clean Water Act allows for broad application of appropriate state and federal environmental laws when entities apply for new or renewed federal licenses that may result in a discharge to navigable water of the state. (33 U.S.C. § 1341.)

Throughout FERC's licensing process the State Water Board maintains independent regulatory authority to condition the construction and operation of the Project to protect water quality and beneficial uses consistent with section 401 of the federal Clean Water Act, the *Water Quality Control Plan for the Sacramento River Basin and San Joaquin River Basins* (SR/SJR Basin Plan), State Water Board regulations, California Environmental Quality Act, and any other applicable state laws. The Project as described has the potential to impact water quality and beneficial uses in the Upper Bear River Reservoir, Lower Bear River Reservoir, Salt Springs Reservoir, Mokelumne River, and Bear River. The analysis of these potential impacts requires information on current water quality conditions of Upper Bear River Reservoir, Lower Bear River Reservoir, Salt Springs Reservoir

Existing Information (CFR, title 18, section 5.9(b)(4)

GreenGen's PAD Sections 6.2.2 and 6.2.3 describe existing information related to water quality and the Project. PAD Tables 6.2-6.11 provides ranges (low and high) for outflows from Project reservoirs and limited water quality information including temperature and dissolved oxygen but does not provide specific values. The data provided also excludes other water quality parameters that may be affected by the Project (e.g., turbidity, suspended sediment, pH, nutrients, and metals). State Water Board staff finds this information insufficient for developing a complete understanding of existing water quality conditions and to inform Project potential impacts to water quality and beneficial uses.

Project Nexus (CFR, title 18, section 5.9(b)(5)

The Project proposes to use two reservoirs, one along the Mokelumne River (Salt Springs Reservoir) and one along the Bear River (Upper Bear River Reservoir or Lower Bear River Reservoir). As explained in the PAD, GreenGen is currently evaluating which reservoir (Upper Bear River Reservoir or Lower Bear River Reservoir) the Project will use with Salt Springs Reservoir. The Project would transfer water from either Upper Bear River Reservoir or Lower Bear River Reservoir to Salt Springs Reservoir for energy production during times of peak demand.

Project construction and operations have the potential to adversely impact water quality. Collection of existing water quality data will inform potential water quality impacts of the Project. Additionally, current water quality data will inform conditions of the Project's future water quality certification which will become mandatory conditions at the issuance of a FERC license.

Study Methodology (CFR, title 18, section 5.9(b)(6)

Monitoring existing water quality conditions as part of a FERC licensing process is a standard practice used in most California FERC licensing and relicensing proceedings to inform project impacts to water quality and conditions of a water quality certification.

The Water Quality Monitoring Study should be performed in eight general steps: (1) select specific water quality parameters; (2) select sampling/monitoring locations; (3) collect water quality data; (4) perform laboratory analyses using standard methods adequately sensitive to determine consistency with state and federal water quality standards; (5) prepare quality assurance/quality control review; (6) determine consistency with SR/SJR Basin Plan objectives and beneficial uses protections; (7) consult with licensing participants; and (8) prepare a report summarizing results. The report should be made available to licensing participants.

Level of Effort and Cost (CFR, title 18, section 5.9(b)(7)

The water quality monitoring study should be conducted for a minimum of two consecutive years to collect data during different water year conditions and include specific monitoring items described in the goals and objectives section (above). In addition, GreenGen working collaboratively with licensing participants to further refine the water quality monitoring study will take additional effort and costs. Based upon previous licensing processes in California that have conducted similar water quality monitoring, State Water Board staff estimate the cost to be between \$200,000 to \$300,000, with cost dependent on collaborative development of study specifics such as monitoring locations and frequency.

2. Water Balance / Operations Model Study

<u>Goal and Objective of the Water Balance / Operations Model Study (CFR, title 18, section 5.9(b)(1)</u>

The goal of the Water Balance / Operations Model Study is to develop a water balance and operations computer model (Operations Model) that can be used by all licensing participants to simulate potential future operations of the Project. The Operations Model should also be able to simulate basic decisions made during Project operations including the management of reservoir level elevations for Salt Spring Reservoir, Lower Bear River Reservoir, and Upper Bear River Reservoir; hydropower generation; water supply; water temperature/reservoir stratification; and minimum instream flows as regulated by Pacific Gas and Electric Company's Mokelumne Hydroelectric Project. Information developed through the Operations Model will be used to inform water quality certification conditions and potential water quality impacts associated with construction and operation of the Project.

Resource Management Goal of the State Water Board (CFR, title 18, section 5.9(b)(2)

The State Water Board has broad authority under the federal Clean Water Act (33 U.S.C. §§ 1251-1387), the state constitution, and the state water code and regulations to restore and maintain the chemical, physical and biological integrity of the state's waters. In accordance with the State Water Board's reasonable use and public trust responsibilities, the State Water Board may regulate water diversion and use

through the water right priority system. Section 401 of the federal Clean Water Act allows for broad application of appropriate state and federal environmental laws when entities apply for new or renewed federal licenses that may result in a discharge to navigable water of the state. (33 U.S.C. § 1341.)

Throughout the FERC licensing process, State Water Board staff maintains independent regulatory authority to condition the operation of the Project to protect water quality and beneficial uses of stream reaches consistent with section 401 of the federal Clean Water Act, the Basin Plan, State Water Board regulations, California Environmental Quality Act, and any other applicable state laws. The Project as described has the potential to impact water quality and beneficial uses in the Upper Bear River Reservoir, Lower Bear River Reservoir, Salt Springs Reservoir, Mokelumne River, and Bear River. The analysis of these potential impacts requires information on future operations of the Project.

Existing Information (CFR, title 18, section 5.9(b)(4)

Section 6.2 and 6.2.3 in the PAD summarizes existing data on the hydrology of the Mokelumne and Bear Rivers, and Upper Bear River Reservoir, Lower Bear River Reservoir, and Salt Springs Reservoir including area-storage-elevation information; historical reservoir temperature data; historical operations data; reservoir releases; power generation; and flows downstream of each reservoir. GreenGen also has access to United States Army Corps of Engineers' flood control requirements and objectives. The existing FERC license for the Mokelumne River Hydroelectric Project specifies historic required releases and flows downstream of the Project. Information on physical capacities of the reservoirs, outlets, and powerhouses is also known by GreenGen and listed in the PAD. Though this information is beneficial in understanding existing conditions, it does not provide a consistent tool for licensing participants to model future Project operations.

Project Nexus (CFR, title 18, section 5.9(b)(5))

The Project proposes to use two reservoirs, one along the Mokelumne River (Salt Springs Reservoir) and one along the Bear River (Upper Bear River Reservoir or Lower Bear River Reservoir). As explained in the PAD, GreenGen is currently evaluating which reservoirs (Upper Bear River Reservoir or Lower Bear River Reservoir) the Project will use with Salt Springs Reservoir. The Project would transfer water from either Upper Bear River Reservoir or Lower Bear River Reservoir to Salt Springs Reservoir for energy production during times of peak demand.

Project construction and operations have the potential to adversely impact water quality and beneficial uses. Development of an Operations Model will inform potential water quality impacts and water quality certification conditions associated with Project construction and operations.

Study Methodology (CFR, title 18, section 5.9(b)(6))

The study area should include Lower Bear River Reservoir, Upper Bear River Reservoir, and Salt Springs Reservoir; and Project proposed intake and outlet structures. The Operations Model should also include Project-affected stream reaches below each reservoir.

The specific type of model should be developed collaboratively with GreenGen, resource agencies, and other licensing participants. The Operations Model should be developed in five general steps that include: (1) model development; (2) model validation; (3) base case development; (4) model documentation; and (5) final report.

Development of an Operations Model is a standard practice during FERC licensing/relicensing efforts as it provides valuable information on Project operations and its effects to water supply, reservoir elevation levels, and minimum instream flows.

Level of Effort and Cost (CFR, title 18, section 5.9(b)(6))

State Water Board staff estimate cost of Operation Model to be in the range of \$200,000 to \$300,000 with cost dependent on collaborative development of study specifics.

ATTACHMENT C: COMMENTS ON SCOPING DOCUMENT 1 FOR THE MOKELUMNE PUMPED STORAGE PROJECT

Scoping Document 1 Comments

The following comments are provided by State Water Resources Control Board (State Water Board) staff on Federal Energy Regulatory Commission's (FERC) Scoping Document 1 for GreenGenStorage, LLC's (GreenGen) Mokelumne Pumped Storage Project (Project), FERC Project No. 14796.

- Items 1 and 3 of the *Pre-Application Filing Activities Under the Integrated Licensing Process (ILP)* section of the Memorandum of Understanding (MOU) executed between FERC and the State Water Board on November 19, 2013¹ apply to this phase of the ILP process. Based upon the Process Plan and Schedule GreenGen put forth in its PAD, State Water Board staff provides the following initial estimate of process milestones for water quality certification:
 - Application for water quality certification: Within 60-days of FERC's issuance of the Ready for Environmental Analysis (estimated for first quarter of 2025).
 - Issuance of draft water quality certification for public review: Approximately six to eight months following GreenGen's application for water quality certification.
 - Issuance of final water quality certification: Within the reasonable period of time set by FERC, which is estimated to be one-year following GreenGen's certification application.
- 2. In conducting its National Environmental Policy Act analysis, State Water Board staff request that FERC consider the comments and information needs identified in this letter.

¹ A copy of the MOU is available online at:

http://www.waterboards.ca.gov/waterrights/water_issues/programs/water_quality_cert/fe rc_mou/index.shtml