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11 September 2018

The Honorable Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
888 First Street NE
Washington, DC 20426

RE: **Lake Elsinore Advanced Pumped Storage Project**
FERC Project No. 14227
Filing of Requested Additional Information and Additional Study Plans

Dear Secretary Bose,

The Nevada Hydro Company (the "Company") filed an application for an original license for the Lake Elsinore Advanced Pumped Storage facility, FERC Project No. 14227 (the "Project") on October 2, 2017. On June 15, 2018, in response to requests for additional information and studies from stakeholders, the Federal Energy Regulatory Commission (the "Commission") issued a study plan determination letter requiring the Company to develop additional information and to prepare additional study plans by September 13, 2018 ("Letter"). This filing responds to the Commission's Letter. All materials described below are contained on the CD filed with this letter.

1.0. Contents of this Filing

Appendix A, attached hereto, includes responses to the following seven requests for additional information the Company identified in the Letter:

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| Study 9a | Updated Habitat Assessments for Federally-Listed Species and the California Spotted Owl |
| Study 16 | Special-Status Bat Study Plan |
| Study 18 | Revised Vegetation Mapping |
| Study 19 | Terrestrial Wildlife Movement Study |
| Study 25 | Availability of Mitigation Lands |
| Study 33 | Cultural Resources Update (as portion is filed as "Protected" in accordance with Commission Rules) |

Study 34a Alternative Northern Transmission Alignments Study

Appendix B includes the following final study plans required by the Commission in its Letter:

Study 2 Seismic Hazard Work Plan
Study 3 Geotechnical Study
Study 4 Total Nitrogen and Phosphorus, and Cyanotoxin Work Plan
Study 7 Operation Effects on Water Quality Plan
Study 8 Aquifer Impact Study Decker Canyon South/North Fork
Study 9b Updated Surveys for Plantago Erecta and Use by the Quino Checkerspot Butterfly
Study 28 Fire Study Work Plan
Study 30 Visual Simulations Work Plan
Study 31 Traffic Analysis Work Plan
Study 34b Proposed Transformer Operation

A proposed plan for each of the above-listed studies was prepared by the Company and its consultants, and distributed to the entities the Commission identified for consultation in its Letter. Each consulting entity had at least 30 days to review the applicable proposed study plan and to provide comments. A table identifying the comments received by the Company from consulted entities and the Company's response to the comments received, including an explanation of why the Company did not adopt recommendations provided by the consulted entity, where applicable, is provided in Attachment 1 to Appendix B. Copies of all comments received from consulted entities on the proposed study plans (organized by study plan) is provided in Attachment 2 to Appendix B.

2.0. Organization Notes

To aid the Commission in its review of this filing, the Company wishes to clarify the scope of the water quality and biological reports in the following subsections.

2.1. Water Quality Reports

The Company engaged the services of Professor Michael Anderson of the University of California, Riverside, who is an expert on the limnology of Lake Elsinore and has been involved with developing an understanding the dynamics of Lake Elsinore for many years. Because of the close interrelations between the topics for Study 4 (Total Nitrogen and Phosphorus, and Cyanotoxin) and Study 7 (Operation Effects on Water Quality Plan), the Professor prepared a

single study plan that addresses both topics and their interrelations. The results of his study will also address both sets of issues. We have therefore included his study plan for both Study 4 and Study 7.

2.2. Biological Reports

The Company has interpreted the Commission's request in Study 9 to contain two parts. Study 9a requests a habitat assessment for federally listed species and the California Spotted Owl. In Study 9b, the Commission requested a survey for *Plantago Erecta* and use by the Quino Checkerspot Butterfly. The Company's biologist addressed both requests in its Biological Resources Work Plan. The results of Study 9a appears in Attachment a, and study plan 9b appears in Attachment B

Regarding the Quino Checkerspot butterfly habitat survey and habitat assessment, Section 3.3.2 of the Biological Resources Work Plan includes a description of the survey that will be used for the habitat assessment as part of the methods section. Section 6.0 - Conclusion, has a description the results of the habitat assessment based on the survey results.

Other listed species were discussed in the Biological Resources Work Plan since they all have previously established protocols that will be utilized during the spring. Any deviation from these protocols will require consultation and approval from USFWS/CDFW. This information was included as additional information but was not specifically requested in the Commission's letter.

In addition, Figure 7 of Biological Resources Work Plan provides the revised vegetation mapping requested in Study 18. Based on the revisions, suitable habitat for those species identified in Section 9 has not changed. The Company's biologist conducted surveys for these species previously and will be conducting surveys for those same species. The changes in the vegetation community map under Study 18 did not change the results of the original habitat assessment for those listed species identified in Study 9.

The main reason the Biological Resources Work Plan includes the Protocol Level Surveys is because the revised habitat assessment did not change the requirements for conducting surveys. There are no additional species that require surveys based on the revised vegetation mapping nor did any species require removal due to a lack of suitable habitat. Some boundaries of the habitats may have shifted, but overall, the previous vegetation mapping has not changed the areas that require surveys. Although the recent Holly fire has removed a good portion of the habitat along the alignment, the habitat will eventually revert to the previous conditions over time (mostly northern mixed chaparral). This habitat will only affect the amount of surveys necessary for sensitive plant surveys, but the individual plants that require surveys will not change, just how much area will require surveys. The biologist has concluded that this shouldn't affect their evaluation.

3.0. Timing for Studies

This section provides a summary of the timing for completion of all studies.

3.1. Study 2 - Seismic Hazard

The objective of this Study Plan for the Study 2 - Seismic Hazard Study is to describe the tasks to be performed to address questions raised by the USFS, and to develop seismic design parameters that are needed to support the preliminary engineering and design phase of the LEAPS project. It is recognized that review and approval by the FERC of this Study Plan is required and it is anticipated that the activities to be conducted under this Study Plan will commence after issuance of a license from the FERC.

Consultation with State of California Division of Safety of Dams (DSOD) is anticipated after issuance of a FERC license. A separate Study Plan for Study 2 as related to the Upper Reservoir and Dam will be submitted to the DSOD once the FERC license is issued. The company believes that DSOD approval is also needed before any field work is started for the Upper Reservoir and Dam. It is important to note that field work that is needed to complete Study 2 will be performed as part of the field work for Study 3 – Geotechnical Study. The estimated duration of the time to perform Study 2 is about 9 months from the date that we have received all approvals and permits to perform the work, and this includes the time needed to perform the fault investigation field work during the beginning part of the field work for Study 3.

3.2. Study 3 – Geotechnical

The objective of this Work Plan for the Geotechnical Study is to describe the investigations needed to support the preliminary engineering and design phase of the LEAPS project. It is anticipated that the activities to be conducted under this Work Plan will commence after issuance of a license from FERC. As noted in the above discussion for Study 2, Consultation with DSOD is also anticipated after issuance of a FERC license. A separate Work Plan will be submitted to the DSOD for the Upper Reservoir and Dam once the license is issued, and DSOD approval is needed before any field work is started for the Upper Reservoir and Dam. The estimated duration of the time to perform Study 3 is about 18 months from the date that we have received all approvals and permits to perform the work.

3.3. Studies 4 and 7 – Water Related

In his study, Professor Anderson noted that his model would be fully calibrated and results available over the next few months, with Objective 1 being available first, followed in succession by Objectives 2 and 3. The Company is hopeful that all results will be available to the Commission by early November.

3.4. Study 8 – Aquifer

Upon approval of the study plan by the Commission, the field effort will take 2 days. Ideally, this should occur in the spring - late March/early April and the hydrologist will be accompanied by a biologist to verify plants for the field investigation. Then, roughly three to four weeks will be required to complete the report. Assuming an early spring start, the Aquifer Report should be available by mid-May.

3.5. Study 9 - Biological Studies

Regarding timing for the focused surveys:

- **Bat** surveys can occur year-round, but conditions are usually optimal from April through July.
- **Coastal California gnatcatcher** surveys can occur year-round, but protocols require either that 6 surveys be completed between March 15 and June 30 and or 9 surveys be completed between July 1 and March 14.
- **Quino Checkerspot Butterfly** – During the flight season, which varies from year to year, but is typically from February to the end of May, surveys are conducted weekly with a minimum of 5 surveys required.
- **Least Bell's Vireo** – Protocol requires 8 surveys conducted between April 10 and July 31.
- **Southwestern Willow Flycatcher** – Protocol requires 5 surveys between May 15 and July 17, 1 survey in May, 1 in June, and 3 in July.
- **Arroyo Toad** – 6 surveys conducted 7 days apart, from March 15 to July 1 with at least one survey each in April, May, and June.
- **Red-Legged Frog** – Protocol requires 8 surveys total. 2 day and 4 night surveys in the breeding season from January 1 to June 30 and 1 day and 1 night survey in the non-breeding season from July 1 to September.
- **California Spotted Owl** – A minimum of 3 surveys must be conducted between April and June. One survey must be conducted in each month, April, May, and June. A full protocol survey consists of two years of surveys or six site visits.
- **Fairy Shrimp** – 1 survey every 2 weeks during the raining season, November to June. Typically between 5-8 surveys. Any survey requires one wet season and one dry season to be considered a full USFWS protocol survey. Surveys may stop if sensitive species are found, the ponds have dried up, or it has been more than 120 days of continuous inundation. However, if the ponds fill again in the same survey season, then surveys must start up again.

- **Plants** – Plant surveys can be completed during a 1-day survey during the appropriate flowering period. Based on the list of plants requiring surveys, three sets of surveys will be required to account for the early, mid, and late blooming periods. At least one survey should be completed in March, May, and July. The number of surveys will be determined based on the amount of suitable habitat, the pace of the botanist conducting the surveys, and the quality of habitat. But regardless, surveys will be completed no later than the end of July.

3.6. Study 28 - Fire Study

The following steps will be required to implement the Fire Work Plan once Commission approval is received:

- Mobilize to the field one week after approval of the final work plans or authorizing to proceed.
- Complete draft reports two weeks after returning from the field (assumes no sampling for springs is conducted during the field work).
- Assume one week for Nevada Hydro review of draft reports.
- Complete final reports one week after receiving comments on the draft.

The Company estimates that it should take about 5 weeks to complete and the fire study, which can be completed at any time.

3.7. Study 30 - Visual Simulations

Initial photography has already commenced, and the Company expects to meet with the City and County in the near future to agree on the specific images needed. The Company understands that it could take up to two weeks to complete each rendering, so the total time to complete the visual study will be dependent upon the number of specific renderings to which the parties agree.

3.8. Study 31 - Traffic Study

For the traffic study, Nevada Hydro believes that it will require the following information and approvals in place prior to undertaking the actual study:

- Although not required by the Commission, the company will try to obtain approval on the scope of work from the City of Lake Elsinore, County of Riverside, Caltrans, and Wildomar;
- The Company will also seek to obtain information on cumulative projects (other projects in the area) from these agencies that may be needed to be included in our study; and,

- Obtain traffic count data. This usually requires takes about two weeks to collect and get the results back.

Once this information is in place, it would take about 45 to 60 business days to complete the study.

4.0. Study 34b - Proposed Transformer Operation

To implement the proposed study, the Company see the following steps:

1. Convene a meeting among all parties to better define the cases and contingencies to be studied
2. Redraft the study plan to include these cases and contingencies
3. Conduct the study and write a draft report
4. Submit the report to the Commission, SCE, SDG&E and CAISO
5. Resolve any concerns expressed
6. Submit the final report to the Commission

The Company believes that once the initial meeting has occurred and cases and contingencies have been locked down, that the study can be completed within 30 days.

5.0. Conclusion

Notwithstanding the broad scope of issues the Commission presented to the Company to address, the Company herein has provided to the Commission the requested study plans and information. Further, and notwithstanding this broad scope of issues addressed, the Company received only 11 comments in total. As a result, the Company urges the Commission to now accept this license application and move quickly to license the Project.

Please let me know if you have questions.

Sincerely,

David Kates
On behalf of The Nevada Hydro Company
David Kates