PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE SAN FRANCISCO, CA 94102-3298



April 6, 2020

Alex Gutierrez Senior Advisor - Infrastructure Licensing Southern California Edison

Via email to <u>Alex.Gutierrez@sce.com</u>

RE: CPUC Supplemental Data Request 3 for the Southern California Edison Alberhill System Project, A.09-09-022

Dear Mr. Gutierrez,

Upon further review of Southern California Edison's supplemental data response to the additional analyses requested in Decision 18-08-026, the Energy Division requests the information contained in Attachment 1 to this letter. Many of the questions are in follow up to March 3, 2020 in-person discussions.

Responses should be submitted to the Energy Division and Ecology and Environment, Inc. in electronic format. We request that SCE respond to this data request by April 20, 2020. Inform us as soon as possible if you cannot provide specific responses by this date. Delays in responding to this data request may cause delays in the supplemental analysis review process.

Direct questions to Joyce Steingass at (415) 703-1810 or by e-mail (address below). Please copy the CPUC's consultant, Amy DiCarlantonio, Ecology & Environment, Inc., on all communications (ADiCarlantonio@ene.com). Energy Division reserves the right to request additional information at any point during the proceeding and subsequently during project construction and restoration should Application (09-09-022) be approved.

Sincerely,

Joyce Steingass, P.E.

CPUC Project Manager

California Public Utilities Commission

505 Van Ness Avenue

San Francisco, CA 94102-3298

Joyce.Steingass@cpuc.ca.gov

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CC: Amy DiCarlantonio, Project Manager, Ecology and Environment, Inc. Grant Young, Deputy Project Manager, Ecology and Environment, Inc.

Attachment 1: 2020-0406_Data Request No. 03_Table

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| DG# | Resource | SCE Data Submittal | Data Gap Question | Response |
|---------|---------------------------|---|---|----------|
| DG # | Areas/ Topic | Item/Page | | |
| DG-C-6 | Cost Benefit | 3/3/2020-SCE Alberhill System Project-half day meeting. Data Request Item C – Planning Study ED- Alberhill-SCE-JWS-4: Item C/ | What contingencies were studied and what probabilities for each were used in the Planning Study and what durations (and why) (Planning Study – pg 4 of Planning Study)? Are the probabilities for existing lines based upon historical performance? Are the probabilities for new lines based on industry averages (in-line with historical performance)? Does SCE use a 4-hour duration to calculate line outages? What is used to calculate flex outages? | |
| DG-C-7 | Cost Benefit | 3/3/2020-SCE Alberhill System Project-half day meeting. Data Request Item C – Planning Study ED- Alberhill-SCE-JWS-4: Item C/ | What are the values (absolute) for the "No Project" for the 4 columns in table ES-1 (not) the percentage values? | |
| DG-C-8 | Cost Benefit | 3/3/2020-SCE Alberhill System Project-half day meeting. Data Request Item C – Planning Study ED- Alberhill-SCE-JWS-4: Item C/ | In the Planning Study, the definition of "Flexibility 1 (Flex-1) – accumulation of EENS for all possible combinations of N-1-1 (or N-2) contingencies related to line outages. System tie-lines are utilized when needed and available." Does N-1-1 mean an outage for planning followed by a forced outage? | |
| DG-C-9 | Cost Benefit | 3/3/2020-SCE Alberhill System Project-half day meeting. Data Request Item C – Planning Study ED- Alberhill-SCE-JWS-4: Item C/ | List and describe what N-1-1, and what N-2 events were studied for the Planning Study? | |
| DG-C-10 | Cost Benefit | 3/3/2020-SCE Alberhill System Project-half day meeting. Data Request Item C – Planning Study ED- Alberhill-SCE-JWS-4: Item C/ | Provide savings by year not on an NPV basis and by the four metrics. | |
| DG-C-11 | Cost Benefit | 3/3/2020-SCE Alberhill System Project-half day meeting. Data Request Item C – Planning Study ED- Alberhill-SCE-JWS-4: Item C/ | Does the B/C include the risk introduced when the spare is used for mitigation? | |
| DG-C-12 | DER proposed alternatives | 3/3/2020-SCE Alberhill System Project-half day meeting. Data Request Item C – Planning Study ED- Alberhill-SCE-JWS-4: Item C/ | During the in-person meeting on 3/3, it was discussed that the creation of tie-lines is a main priority of the project. What alternative solutions are being considered to create tie lines now and augment with behind the meter storage systems later on? | |

Attachment 1: 2020-0406_Data Request No. 03_Table

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| DG-A-1 | Sensitivity Analysis | 3/3/2020-SCE Alberhill System Project-half day meeting. Data Request Appendix B_Quanta Technology - Load Forecasting for Alberhill System Project V1 12182019 | During the in-person meeting on 3/3, the sensitivity analysis performed on the proposed alternatives was discussed. On which scenario was the analysis run (e.g. Spatial forecast)? | |
| DG-C-13 | Cost Benefit | 3/3/2020-SCE Alberhill System Project-half day meeting. Data Request Item C – Planning Study ED- Alberhill-SCE-JWS-4: Item C/ | Are the uncertainty scores and costs in Table 8-2 factored into the cost-benefit analysis? | |
| DG-C-14 | Cost Benefit | 3/3/2020-SCE Alberhill System Project-half day meeting. Data Request Item C – Planning Study ED- Alberhill-SCE-JWS-4: Item C/ | Confirm that battery capital costs \$/kWh and \$/kW are considered at the year the battery is needed, not based on present costs. Explain how the cost sensitivity (50% reduction) at year it was applied (what does "arbitrarily" here refer to - the % reduction in cost chosen?). | |
| DG-C-15 | Cost Benefit | 3/3/2020-SCE Alberhill System Project-half day meeting. Data Request Item C – Planning Study ED- Alberhill-SCE-JWS-4: Item C/ | Explain the large nominal capital cost requirement of Alternative (X) (Valley South to Valley North and Centralized BESS in Valley South and Valley North) compared to Alternative (Y) (Valley South to Valley North and Centralized BESS in Valley South), and its relatively lower accrual of benefits (only \$137m more than Alternative (Y)? | |
| DG-MISC-41 | Power Flow Data | N/a | Provide regional system maps showing all relevant information about substations, transmission lines, subtransmission lines and distribution circuits for the area encompassed by both the Alberhill study area and all related Electrical Needs Areas. | |
| DG-MISC-42 | Power Flow Data | N/a | Provide relevant load and power flow data for the substations, transmission lines, subtransmission lines and distribution circuits for the area depicted on the regional system maps as described above. | |
| DG-G-1 | Cost Benefit | A.09-09-022 CPUC- JWS-4 Q.01g Attachment 4 of 5_Appendix A_Quanta Technology_Cost Benefit Analysis of Alternatives Page 146 | Page 146 of Quanta's "Cost Benefit Analysis of Alternatives" states that "the cost for each project is provided by SCE, in the PVRR and Aggregated (Total Capital Expenditure) representation." Provide SCE's breakout by main categories of Construction Capital and Operational expenditures (and timing of proposed spending) for each alternative. | |