PUBLIC UTILITIES COMMISSION
505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298

August 13, 2015

Mr. Thomas Burhenn
Regulatory Affairs Department
Southern California Edison Company
2244 Walnut Grove Avenue
Rosemead, CA 91770

**Re: Data Request E for the Valley-Ivyglen Subtransmission Line Project and Alberhill System Project EIR**

Dear Mr. Burhenn:

The Energy Division of the California Public Utilities Commission is currently conducting environmental review of the Valley–Ivyglen Subtransmission Line Project and the Alberhill Project and has identified an additional data need after review of SCE's response to Data Request A2.1. As a result, the Energy Division requests the information contained in Attachment 1

We request that the response to this request be provided to us by Thursday August 27, 2015. Upon receipt of the supplemental information, the Energy Division will use the information for the analyses in the Draft EIR.

The Energy Division reserves the right to request additional information at any point in the process. Questions relating to the Valley-Ivyglen or Alberhill Projects should be directed to me at (415) 703-5484 or Jensen.Uchida@cpuc.ca.gov.

Sincerely,

Jensen Uchida
Energy Division
Transmission and Environmental Permitting
California Public Utilities Commission

Attachment 1: Data Request E

Cc: Jennifer Wolf, SCE
Alisa Krizek, SCE
Kristi Black, Ecology & Environment Inc.

# Valley-Ivyglen and Alberhill System Projects Data Gap Request 8/13/15

| DG# | Resource Area / Topic | Source / PEA Page | Data Gap Question | Request Date | Reply Date | Status | Notes |
|---|---|---|---|---|---|---|---|
| E1 | Air Quality | Follow up to question A2.1 | Table 29 of the Air Quality calculations for the Alberhill System Project reports a $SO_X$ emission factor of 14.783 lb/h for helicopters, which is derived using a fuel use of 1,118 kg/h reported from the Federal Office of Civil Aviation Guidance on the Determination of Helicopter Emission and the maximum sulfur content limit established in the standard ASTM D-1655 for Jet Fuel-A (0.30% wt). This emission factor results in $SO_X$ daily emissions that are substantially higher when compared to emissions reported by SCE for the same model of helicopter in similar 500-kV transmission construction projects evaluated by the CPUC. These similar projects used emission factors from FAA's Aircraft Engine Emission Database (FAAED). The CPUC requests that SCE revisits the use of 14.783 lb/h as the $SO_X$ emission factor because it appears to result in inflated $SO_X$ emissions for helicopters.<br><br>According to the FAA's Aviation Emissions, Impacts & Mitigation: A Primer document (http://www.faa.gov/regulations_policies/policy_guidance/envir_policy/media/Primer_Jan2015.pdf), internationally accepted standards used for Jet-A limit fuel sulfur content to 0.30% wt. (3,000 PPM S) maximum; in practice, however, "weighted mean sulfur levels for Jet A sulfur measured in the 2010 survey are well below the typical maximum specification limit. The four month averaged weighted mean sulfur level on the overall U.S. was 544 PPM S" (FAA 2015).<br><br>Further, the U.S. EPA Procedures for Emission Inventory Preparation, Volume IV: Mobile Sources (http://www.epa.gov/otaq/models/nonrdmdl/r92009.pdf) indicate that nationally, "the sulfur content of fuel remains fairly constant from year to year at about 0.05% wt. for commercial jet fuel" (EPA 1992).<br><br>Using sulfur content of 544 PPM S or approximately 0.05% wt. for Jet A fuel for the proposed projects would result in $SO_X$ daily emissions that are six times lower than those reported in SCE's Table 29 and that are comparable to those reported to similar 500-kV transmission projects evaluated by the CPUC.<br><br>Considering that $SO_X$ emissions reported for the Sikorsky S64 helicopter represent approximately 80% of the peak daily $SO_X$ emissions reported for the entire Alberhill Project, provide: | 8/13/2015 | | | |

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| | | | A. A justification of the apparent discrepancy found in $SO_X$ emissions factors for the Sikorsky Skycrane S64 helicopters in the referenced EPA and FAA documents when compared to FAAED factors.<br><br>B. If appropriate, based on the response to A, revised criteria air pollutant emissions for the Sikorsky S64 helicopter use, specifying hours, sulfur content in fuel, and emissions factors for the aircraft engine operating modes used by FAA: taxi/idle, takeoff, climbout, and approach. | | | | |