CPUC - CEQA AND ENERGY PERMITTING

(DR-002)

DATE REQUESTED: June 26, 2025 RESPONSE DUE: July 11, 2025

The following questions pertain to the Supplemental Electric-Driven Compressor Installation Only Alternative (Supplemental EDC Alternative) described by SoCalGas in PEA Section 4.3.1 and Section 6.2.2.

The Supplemental EDC Alternative would retain the existing compressor station in its current state and install two new electric compressors and associated infrastructure at the existing site.

For the CPUC CEQA review of the proposed Ventura Compressor Modernization Project (A.23-08-019), this Data Request (DR) No. 2 is related to the following issue(s):

- · Comparison of Alternatives
- · Hazards and Public Safety

SoCalGas' General Approach for Supplemental EDC Alternative:

SoCalGas' proposed approach will include the following steps to respond to this data request and perform the required preliminary engineering design and environmental assessment:

- Using engineering data from previous Front End Engineering Design (FEED) for the proposed project, which is not anticipated to change for this alternative with respect to the office and warehouse building and perimeter fencing security features. As needed additional preliminary engineering will be performed to address this data request.
- All identified features and proposed infrastructure presented in preliminary engineering will be subject to validation in the subsequent engineering design phases,
- Using preliminary engineering design, SoCalGas will strive to provide the information requested on the environmental conditions to support the comparative analysis of potential environmental impacts for each alternative.

SOUTHERN CALIFORNIA GAS COMPANT (SOCALG

CPUC - CEQA AND ENERGY PERMITTING (DR-002)

DATE REQUESTED: June 26, 2025 RESPONSE DUE: July 11, 2025

QUESTION 2.1: General Information about Supplemental EDC Alternative

The CPUC requests additional details and plans identifying the necessary site improvements for the Supplemental Electric-Driven Compressor Installation Only Alternative (Supplemental EDC Alternative) described by SoCalGas in PEA Section 4.3.1.

The conceptual site plan for the Supplemental EDC Alternative provided (November 2023) in response to the PEA completeness review indicates up to three electric-driven compressor units and an on-site electrical substation. The PEA comparison of alternatives indicates two electric-driven compressor units would be included.

- a) Under the Supplemental EDC Alternative, please confirm the number of and specifications for the electric-driven compressor units included with this alternative, including the design power rating for each of the electric compressors and the design summer and winter daily volume flow rate capacities for the electric units and the station as a whole.
 - **Response 2.1a:** Using the general approach described above and after preliminary engineering is completed, SoCalGas will provide preliminary specifications for the two electric-driven compressor units including summer & winter estimated volume flowrates for the electric compressors and the station as a whole.
- b) Under the Supplemental EDC Alternative, please confirm the scope of other necessary site improvements, where different from those of the Proposed Project, including but not limited to the square-footage and height of the compressor building, the square-footage and components of the on-site electrical substation, blowdown stack dimensions, and standby generator enclosure.
 - **Response 2.1b:** Based on preliminary engineering and information developed for the Supplemental EDC, SoCalGas will confirm the scope of other necessary site improvements and highlight any differences between the proposed project and the supplemental EDC alternative.
- c) Please provide an updated conceptual site plan for the Supplemental EDC Alternative depicting the components.
 - **Response 2.1c:** SoCalGas will provide an updated conceptual site plan for the Supplemental EDC Alternative.
- d) Please describe the scope and identify the location of any off-site electrical system upgrades that would be needed by the electric utility or SoCalGas to provide reliable electric service to the Supplemental EDC Alternative.

CPUC - CEQA AND ENERGY PERMITTING

(DR-002) ATE REQUESTED: June

DATE REQUESTED: June 26, 2025 RESPONSE DUE: July 11, 2025

Response 2.1d: SoCalGas will describe the scope and identify the location of any off-site electrical system upgrades that would be needed by the electric utility or SoCalGas to provide reliable electric service to the Supplemental EDC Alternative that can be identified based on applicable preliminary engineering and information gathered from the development of the proposed project.

e) Please identify the necessary backup generator technology and the generator engine power rating that would be needed for site standby power under the Supplemental EDC Alternative.

Response 2.1e: SoCalGas will provide the information being requested.

CPUC - CEQA AND ENERGY PERMITTING (DR-002)

DATE REQUESTED: June 26, 2025 **RESPONSE DUE: July 11, 2025**

QUESTION 2.2: Effects of Operating the Supplemental EDC Alternative

The CPUC requests additional details on the anticipated operations of the Supplemental EDC Alternative to refine the PEA comparison of alternatives.

- a) Please describe foreseeable changes in operations of the existing compressor engines that would be retained under the Supplemental EDC Alternative. This should provide quantification of foreseeable changes in baseline annual-total hours of operation relative to the foreseeable annual hours of operation for these engines after the potential installation of electric-driven compressor units at the site.
 - Response 2.2a: SoCalGas will provide a description of the foreseeable changes in operations of the existing compressor engines that would be retained under the Supplemental EDC Alternative.
- b) Please quantify the foreseeable changes under the Supplemental EDC Alternative for criteria pollutant emissions rates and toxic air pollutant scores relative to 2021-2022 operations (PEA Table 5.3-4a and Table 5.3-4b), greenhouse gas emissions (PEA Table 5.8-3), and noise levels.
 - Response 2.2b: SoCalGas will quantify the criteria pollutant emissions rates, toxic air pollutant scores and greenhouse gas emissions rates relative to the 2021-2022 baseline data provided in the PEA. Additionally, SoCalGas will quantify noise levels for the operation of the compressor station under the Supplemental EDC alternative.
- c) Please quantify foreseeable changes in consumption of electricity at the site and indirectly generated greenhouse gas emissions related to the power supply for the electric-driven compressors in the Supplemental EDC Alternative.
 - Response 2.2c: SoCalGas will provide the information being requested.
- d) Please quantify if the potential explosion site (PES) scenarios would change, and provide risk quantification due to the changes in operating hours of the natural gas engines for the Supplemental EDC Alternative.
 - Response 2.2d: Using the general approach and after the necessary preliminary engineering is completed, SoCalGas will perform a quantitative risk analysis (QRA) for the supplemental EDC which will include PES scenarios and risk quantification.
- e) Please provide risk quantification for the foreseeable changes in hazard impacts for the full Project Site under the Supplemental EDC Alternative. This should amend or update the Quantitative Risk Analysis (QRA) to cover the Supplemental EDC Alternative, including figures

CPUC - CEQA AND ENERGY PERMITTING

(DR-002) QUESTED: June 26

DATE REQUESTED: June 26, 2025 RESPONSE DUE: July 11, 2025

depicting Location Specific Individual Risk (LSIR) contours and explosion overpressure injury risk.

Response 2.2e: Using the general approach and after the necessary preliminary engineering is completed, SoCalGas will perform a quantitative risk analysis (QRA) for the supplemental EDC alternative, including figures depicting Location Specific Individual Risk (LSIR) contours and explosion overpressure injury risk.

CPUC - CEQA AND ENERGY PERMITTING

(DR-002)
DATE REQUESTED: June 26, 2025
RESPONSE DUE: July 11, 2025

QUESTION 2.3: Additional Emission Controls for the Supplemental EDC Alternative

The CPUC requests additional information on emission control options for the engines that would be retained under the Supplemental EDC Alternative.

• Please evaluate and describe the feasibility of modifying the three 1,100 horsepower existing compressor engines that would be retained under the Supplemental EDC Alternative to include retrofit air pollution control devices. This should describe the existing engines, controls, and performance relative to existing permitted emission limits. For rich-burn natural gas engines, a retrofit option for reducing nitrogen oxides (NOx) appears to be demonstrated as 'best available control technology' at the SoCalGas Aliso Canyon gas storage facility (South Coast Air Quality Management District, Application No. 571478).1

RESPONSE 2.3:

SoCalGas would like to clarify that the existing three 1,100 horsepower Cooper Superior gas compressor engines are lean burn natural gas engines. For the Supplemental EDC alternative, SoCalGas will evaluate and describe the feasibility of modifying the three 1,100 horsepower existing compressor engines that would be retained under the Supplemental EDC Alternative applicable to lean burn natural gas engines for emission reductions.

Please note that the 'best available control technology' (BACT) demonstrated at Aliso Canyon gas storage facility under SCAQMD, Application No. 571478 is only applicable to rich-burn engines.

¹ Available at: https://www.aqmd.gov/docs/default-source/bact/bact-guidelines/bact-guidelines-2021-test/part-b---socalgas_571478-ic-enginestatnonemergelecgen.pdf

CPUC - CEQA AND ENERGY PERMITTING

(DR-002)
DATE REQUESTED: June 26, 2025
RESPONSE DUE: July 11, 2025

QUESTION 2.4: Risk Contour Mapping for Comparison of Alternatives:

The CPUC requests additional data to facilitate mapping potential impacts related to hazards and public safety.

- Please provide grid data in electronic format from "CANARY" for mapping each of these development scenarios: the existing compressor station (No Project Alternative), the Proposed Project, and the Supplemental EDC Alternative:
 - Annual Fatality Location-Specific Risk for Outdoor Persons (high flow case, described in Risk Assessment prepared by Quest Consultants, July 2024)
 - Annual Fatality Location-Specific Risk for Outdoor Persons ("combined" flow modes, described in Risk Assessment prepared by Quest Consultants, July 2024)
 - 1.0 psi Overpressure Injury Risk Contours (described in SoCalGas Response to Second PEA Completeness Review, July 2024)

RESPONSE 2.4:

SoCalGas is requesting CPUC to identify the electronic format of the 'CANARY' output needed.

The requested data can be provided in the requested "grid data" in the following 3 formats:

- 1. As Adobe Acrobat (pdf) images of contours overlaid on aerial photo images
- 2. As .kmz files which can be imported into Google Earth or GIS programs
- 3. As flat text files, comma delimited, which will include:
 - The grid cell numbers in X and Y directions
 - o The grid cell coordinates (in meters) for the QRA computational grid
 - The risk values in each grid cell

For option #3, a reference location for the southwest corner of the computational grid can be provided in latitude/longitude or similar coordinates.

SoCalGas will provide the QRA results, including LSIR contours for the high flow and combined flow scenarios, as well as 1.0 psi overpressure injury risk contours in the selected electronic format. After the analysis is completed and the requested grid data format type is identified from the options above, SoCalGas will deliver the appropriate files accordingly.