**SOUTHERN CALIFORNIA GAS COMPANY**

**CPUC-ENERGY DIVISION DATA REQUEST 4**
**RE: VENTURA COMPRESSOR STATION**
**DATE REQUESTED: June 23, 2021**
**DATE RESPONDED: July 7, 2021**

---

**QUESTION 1:**

Please provide a detailed status of the Ventura Compressor Station Replacement Project, including:

a. Schedule for the Compressor Replacement, including pre-construction staging and lay-down; demolition; removal; reconstruction; operations; and disposal.

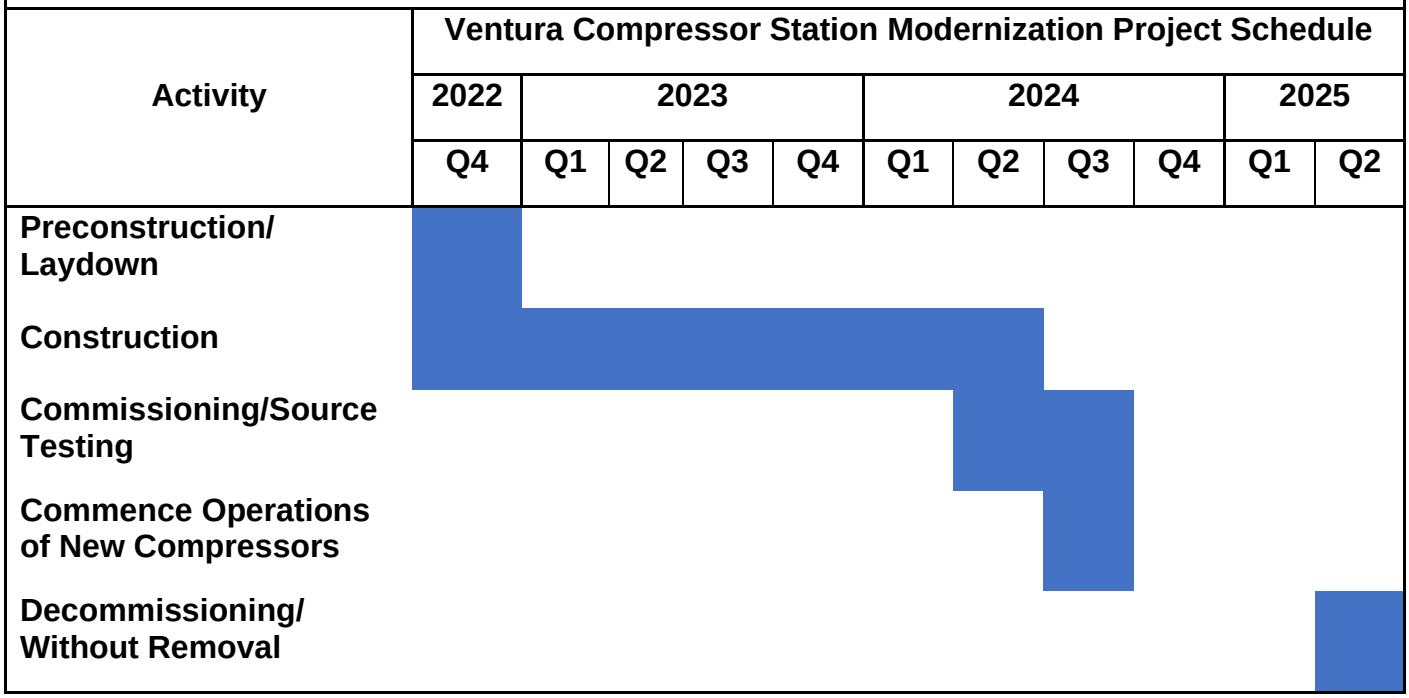
b. Status of contracts for replacement equipment and manufacturer installation.

c. Degree of required permitting completed, both discretionary and ministerial.

**RESPONSE 1:**

a. Construction of the Ventura Compressor Station Modernization Project is anticipated to begin in Q4 2022 and take approximately three years, as shown Exhibit 1.

**Exhibit 1: Preliminary Ventura Compressor Modernization Project Schedule**




Note: The existing compressor station will be removed at a later date and is outside the scope of the compressor modernization project.

While not part of the Ventura Compressor Station Modernization Project, other activities are currently occurring at the facility. For instance, we are constructing a temporary office building and a new communications pole at the site so that we can safely remove historical pollution in parts of

the soil associated with prior industrial uses. The City of Ventura granted the Building Permit on April 21, 2021 (Permit No. PEMO-6-21-77038 and COMP-2-21-74946, enclosed within the attachments to this response) and work began on June 21, 2021. The work is expected to continue for approximately sixweeks. The soil remediation project is expected to begin in mid- to late- July and should last six to eight weeks. DTSC evaluated the soil remediation project and issued a California Environmental Quality Act (CEQA) Notice of Exemption (NOE) and approved the Removal Action Workplan on March 2, 2021.

b. SoCalGas has retained a full-service engineering, architecture, construction, environmental and consulting services company as the engineering, procurement and construction (EPC) contractor. SoCalGas selected the contractor through a competitive bid process and executed contractual documents in April 2021. The compressor modernization project has progressed through Pre Front-End Engineering and Design and Front-End Engineering and Design (FEED), which takes engineering design to 30%. The project is currently in the process of detailed engineering design.

The contractor will be responsible for procuring and installing the replacement equipment. The long lead time items (compressor trains, gas coolers, air compressor skids, etc.) will be specified, bid and purchased in 2021 for delivery in 2023. The short lead time items such as piping or structural steel will be ordered in 2022 and 2023 for in-time delivery during construction and fabrication. Typically, at the time of purchase, the vendors will be contracted to provide personnel for commissioning, start-up and performance testing as needed prior to final completion of the project in 2024.

c. The discretionary and ministerial permits that have been completed include the following:

<u>Discretionary</u>:

- No discretionary permits are required to perform the compressor modernization project therefore none have been completed.

<u>Ministerial</u>:

- No ministerial permits have been completed at this time. See the response to Question 2.

---

**QUESTION 2:**

Please provide a detailed list of the expected federal, state, regional, and/or local permits required for the proposed Ventura Compressor Station Replacement Project.

**RESPONSE 2:**

The expected federal, state, regional and/or local permits required for the Ventura Compressor Station Modernization Project include the following:

Federal:

- None.

State:

- State Water Resources Control Board (SWRCB), Construction General Permit 2009-0009-DWQ (as amended). Requires preparation of a Stormwater Pollution Prevention Plan (SWPPP) and filing a Notice of Intent (NOI) through the Stormwater Multiple Application and Report Tracking System (SMARTS) for disturbance over an acre.
- SWRCB Statewide General Order for Discharges from Natural Gas Utility Construction, Operations and Maintenance Activities (Order WQ 2017-0029-DWQ) (Water Discharge Permit). SoCalGas already has obtained this permit for post hydrostatic test water and groundwater discharge that would address water discharges for the compressor modernization project.

Regional:

- Ventura County Air Pollution Control District (VCAPCD) Authority to Construct (ATC)/Permit to Operate (PTO).

Local (City of Ventura):

- Grading Permit
- Building and Safety Permits for:
    - Office building (includes mechanical, electrical, plumbing)
    - Warehouse building (includes mechanical, electrical, plumbing)
    - Compressor building (includes mechanical, electrical, plumbing)

- Fire/Life Safety Permits – All buildings
- Hazmat/AST Permits
- Planning Review –fences/walls, lighting, parking, etc.

SoCalGas also complies with regulatory requirements that do not trigger a permit, such as the California Department of Industrial Relations, Division of Occupational Safety and Health (Cal/OSHA) requirements regarding worker health and safety.

---

**QUESTION 3:**

Please provide the current processing status of all permits cited in response to Question No. 2 above.

**RESPONSE 3:**

Federal:

- None.

State:

- SWRCB SWPPP and NOI. The SWPPP and NOI will be filed prior to starting construction of the compressor modernization project components, which is currently forecasted to begin in Q4 2022.
- The notification for the Water Discharge Permit will be submitted prior to starting construction of the compressor modernization project components, which is currently forecasted to being in Q4 2022.

Regional:

- VCAPCD Authority to Construct/Permit to Operate (ATC/PTO). SoCalGas filed the ATC application on March 31, 2020 for the four new reciprocating internal combustion engine compressors and one stand-by engine generator for electric power. The ATC has not been issued yet. SoCalGas will apply for a PTO after construction and source testing is completed. Construction is anticipated to begin Q4 2022 and take approximately 3 years.

Local (City of Ventura):

- City permits listed in Response 2 for construction of new compressor building, permanent office and warehouse, are anticipated to be filed in Q2 2022.

---

**QUESTION 4:**

Please provide a detailed status of the existing baseline conditions at the site of the Proposed Ventura Compressor Station, including:

a. Inventory of hazardous materials and stored waste on-site.

b. Results of any site testing for soils contamination, including Asbestos, Lead, Toxics (e.g., Mercaptan) and potential legacy Hydrocarbons.

c. Current remediation activities ongoing at the Ventura Compressor Station site for hazardous or toxic materials, if any.

d. Current status of the existing Ventura Compressor Station for compliance with existing permits, including:

   i. State Water Board or RWQCB permits

   ii. Regional Air Quality Board permits

   iii. Any existing or on-going remediation related to SWPPs or Army Corps 401 and 404 permits

   iv. Local land-use regulations, zoning, and consistency determinations

   v. Noise permits

   vi. State and Federal resource agency permits, including Stream Bed Alteration Agreements, Stream Crossing Agreements, Incidental Take Permits, and the use of any Mitigation Banking Credits for endangered, listed or threatened species.

e. Population density and demographic characteristics of the adjacent and surrounding community.

**RESPONSE 4:**

Please note that certain attachments provided as part of this response are considered confidential and protected material pursuant to PUC Section 583, GO 66-D, D.17-09-023 and the accompanying confidentiality declaration.

a. Please refer to the attached Hazardous Materials and Waste Inventory Matrix Report for the Ventura Compressor Station (CERS ID 10151617) for an inventory of hazardous materials and stored waste on-site. SoCalGas maintains a hazardous materials business plan (HMBP) for the Ventura Compressor Station. The HMBP is certified annually through the California Environmental Protection Agency (CalEPA) California Environmental Reporting System (CERS) portal. CERS is a statewide, web-based system to support businesses and Unified Program Agencies with electronically reporting, collecting, and managing hazardous materials-related data as mandated by the California Health and Safety Code.

b. SoCalGas received approval of a Removal Action Workplan (RAW) from the DTSC in 2009-2011 and in 2021. These reports outline completed site testing activities and can be obtained from the DTSC here:

- 2009-2011: https://envirostor.dtsc.ca.gov/public/deliverable_documents/2035938858/Ventura%20RAW%20Text.pdf
- The 2012 Removal Action Completion Report detailing the 2009-2011 soil remediation and sampling results after the soil remediation was completed may be accessed here: https://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=56490101&doc_id=6027717
- 2021: https://envirostor.dtsc.ca.gov/public/final_documents2?global_id=56490101&doc_id=60483876

Please refer to the attached sampling data for soil testing, relevant to the temporary office.

c. As noted herein, SoCalGas received approval of a RAW from the DTSC on March 2, 2021 for a soil remediation project. Soil remediation activities are anticipated to begin in mid- to late- July and will address contamination from historic industrial use that remains under existing buildings and asphalt.

Approximately ten years ago, SoCalGas remediated soil in the northern portion of the Ventura Compressor Station associated with the historic industrial use in accordance with a DTSC approved RAW (October 7, 2009, accessible at the DTSC website here: https://envirostor.dtsc.ca.gov/public/deliverable_documents/2035938858/Ventura%20RAW%20Text.pdf). Certain areas of the site were inaccessible because they were under buildings or asphalt and presented no immediate public safety risk and therefore were not remediated at that time.

SoCalGas is constructing a temporary office building within the northern portion of the Station. SoCalGas contractors identified minor amounts of localized residual manufactured gas plant (MGP) waste material. After consulting with DTSC, the residual MGP waste was containerized and will be removed from the site.

d. The current status of the existing Ventura Compressor Station for compliance with existing permits are shown below.

i. The Ventura Compressor Station is not subject to an existing State Water Resources Control Board (SWRCB) or Regional Water Quality Control Board (RWQCB) permit.

ii. The Ventura Compressor Station holds a PTO from the VCAPCD for the existing onsite equipment. The PTO is issued annually beginning October 1 through September 30. The facility is in compliance with the PTO.

iii. The Ventura Compressor Station has no ongoing remediation related to existing SWPPPs, Army Corps 401 or 404 permits.

iv. The Ventura Compressor Station is located on land designated by the Ventura General Plan as “Industry” and zoned “M-2, General Industrial.” Pursuant to the City’s Municipal Code, utility or equipment substations are permitted in the M-2 zone subject to a discretionary use permit. (City Municipal Code 24.262.030). Notwithstanding, the CPUC has general regulatory authority over public utilities such as SoCalGas. Courts have recognized that the CPUC has exclusive jurisdiction over utility matters because the construction, design, operation, and maintenance of public utilities are matters of state-wide concern and cannot be subject to a checkerboard of regulations by local governments.[1] Although the state has a strong preference for the CPUC’s exclusive jurisdiction over regulated utilities, local governments retain certain authority. The California Constitution provides that a “county or city may make and enforce within its limits all local, police, sanitary, and other ordinances and regulations not in conflict with general laws.”[2]

SoCalGas proactively engaged the City of Ventura to confirm that local zoning ordinances are inapplicable to the Ventura Compressor Station and that a conditional use permit would not be required for the modernization project. On June 15, 2020, SoCalGas submitted a letter to the City of Ventura Chief Building Official providing our position and on October 12, 2020, the City of Ventura concurred with SoCalGas’ opinion. Supporting materials attached for reference.

[1] *San Diego Gas & Electric v. City of Carlsbad,* 64 Cal.App.4th 785, 798 (1998).
[2] Cal. Const. Art. XI, Sec. 7.

SoCalGas intends to follow all ministerial permit requirements that are otherwise consistent with the CPUC's authority.

v. The Ventura Compressor Station is not subject to any noise permits.

vi. The Ventura Compressor Station does not trigger any State and Federal resource agency permits, including Stream Bed Alteration Agreements, Stream Crossing Agreements, Incidental Take Permits, and the use of any Mitigation Banking Credits for endangered, listed or threatened species.

e. SoCalGas does not maintain population density and demographic characteristic data for the adjacent and surrounding community of the Ventura Compressor Station (or for any of the communities adjacent to our compressor stations). Notwithstanding, SoCalGas accessed the US Census Bureau QuickFacts website for the City of San Buenaventura (Ventura).[3] Census data is provided in Table 1: US Census Bureau Data for City of San Buenaventura (Ventura).

[3] United States Census Bureau QuickFacts, San Buenaventura (Ventura), accessed online June 26, 2021: https://www.census.gov/quickfacts/fact/table/sanbuenaventuraventuracitycalifornia,venturacountycalifornia/PST045219

| **Table 1: US Census Bureau Data for City of San Buenaventura (Ventura)** | |
|---|---|
| **Population estimates, July 1, 2019 (V2019)** | 109,106 |
| **Race and Hispanic Origin** | **Percent** |
| White alone | 84.5% |
| Black or African American alone | 1.8% |
| American Indian and Alaska Native alone | 0.9% |
| Asian alone | 3.8% |
| Native Hawaiian and Other Pacific Islander alone | 0.1% |
| Two or More Races | 5.0% |
| Hispanic or Latino | 36.0% |
| White alone, not Hispanic or Latino | 55.7% |
| **Notes:** Includes persons reporting only one race | |

Source: US Census Bureau, 2021

---

**QUESTION 5:**

Please provide a detailed summary of SoCalGas' outreach to the local community regarding the proposed Ventura Compressor Station Replacement Project. Include or attach any presentation, communication, or engagement materials used in the community outreach effort.

**RESPONSE 5:**

Please note that certain attachments provided as part of this response are considered confidential and protected material pursuant to PUC Section 583, GO 66-D, D.17-09-023 and the accompanying confidentiality declaration.

SoCalGas safely maintains its natural gas system by collaboratively working with the communities and local municipalities in which our facilities are located and with regulatory agencies who have oversight of our facility. As a long-time community partner in the City of Ventura, SoCalGas has safely and reliably operated the Ventura Compressor Station for many years. We regularly and routinely engage the community through various methods to share information about our operations and pending projects. SoCalGas has dedicated public affairs managers across our service territory to act as a primary point of contact for the public to share information. Our public affairs manager has been in contact with the City of Ventura regularly via phone, email and virtual meetings about both the compressor modernization project and soil remediation project since 2019.

February 13, 2019: SoCalGas met in-person with City of Ventura officials including Yolanda Bundy, Chief Building Official; Don Nielsen, Associate Planner; Scott Kolowitz, Principal Planner and Foster McLean; Fire Prevention Supervisor and briefed them about the Ventura Compressor Modernization Project and discussed City permitting requirements for the placement of a temporary office building and other auxiliary equipment.

April 22, 2020: SoCalGas met virtually with Ventura City representatives including Ian Livingston, Chief Building Official; Brett Reed, Fire Prevention Specialist; Jared Rosengren, Principal Planner and Mark Wilde, Senior Civil Engineer and provided a Ventura Compressor station project status update and discuss City's permitting requirements. SoCalGas communicated with city staff about the project throughout the year.

April 7, 2021: SoCalGas provided a letter to the Westside Community Council regarding the modernization project and future SoCalGas community workshops. This is in addition the multiple phone calls and emails that our public affairs manager has exchanged with the Westside Community Council.

April 16, 2021: SoCalGas representatives provided a virtual briefing about the compressor modernization project and soil remediation project to City of Ventura Staff including the City Manager, Assistant City Manager, City Attorney, Community Development Director and Mayor Sofia Rubalcava.

April 21-28, 2021: SoCalGas representatives also provided virtual briefings about the compressor modernization project and soil remediation project to the following entities/individuals:

- Several members of the Ventura City Council, including Deputy Mayor Joe Schroeder (4/21/2021), Councilmember Jim Friedman (4/21/2021), Councilmember Jeannette Sanchez-Palacios (4/23/2021).
- Ventura County Supervisor Matt LaVere (4/28/2021)
- Staff of Senator Monique Limon and Assemblymember Steve Bennett (4/22/2021)
- Superintendent Dr. Roger Rice, Assistant Superintendent Rebecca Chandler, School Board President Velma Lomas and Boardmember Sabrena Rodriguez of the Ventura Unified School District (4/26/2021)

April 26, 2021: SoCalGas representatives presented at the regularly scheduled Ventura City Council hearing and responded to questions from Councilmembers. Members of the public also attended and were able to comment. SoCalGas responded in writing to questions raised at the hearing and subsequent community workshops (see below) in a letter to Mayor Rubalcava and Councilmembers on May 12, 2021.

April 28 - May 5, 2021: SoCalGas hosted eight virtual community workshops via Zoom. Four workshops were hosted in English on April 28 and May 5 at 1 pm and 6 pm and four workshops were hosted in Spanish on April 29 and May 4 at 1 pm and 6 pm. Representatives from DTSC participated at the May 5, 2021, 1 pm workshop and answered participant questions.

Meeting participation was as follows:

**Table 2: SoCalGas Community Workshop Participation**

| Date | Time | Language | No. of Participants |
|---|---|---|---|
| April 28, 2021 | 1 pm | English | 6 |
| | 6 pm | English | 2 |
| April 29, 2021 | 1 pm | Spanish | 0 |
| | 6 pm | Spanish | 0 |

| | | | |
|---|---|---|---|
| May 4, 2021 | 1 pm | Spanish | 0 |
| | 6 pm | Spanish | 1 |
| May 5, 2021 | 1 pm | English | 16 |
| | 6 pm | English | 11 |

May 4 and 7, 2021: SoCalGas established a dedicated project webpage in both English (5/4/2021) and Spanish (5/7/2021), providing information about the compressor modernization project, soil remediation project and other routine operations and maintenance projects. The website also lists an email and phone number to contact with additional questions. The websites links are:

- www.socalgas.com/ventura - English
- www.socalgas.com/es/ventura - Spanish

May 6-13, 2021: SoCalGas ran print and digital ads in the Ventura County Star and Vida Newspaper.

June 14, 2021: SoCalGas regional public affairs contacted community stakeholders, including but not limited to local elected officials and community leaders, via email with a newsletter that provided an update on the project. Also contacted via phone and email were the Ventura Unified School District and the City of Ventura.

June 15-26, 2021: SoCalGas placed social media posts in English and Spanish informing the public about the Ventura Compressor Station Modernization Project and other project work near and at the station. June 17, 2021: SoCalGas completed community canvassing within a 1,500-foot radius of the Ventura Compressor Station. We provided a fact sheet with an overview of the various activities happening near and at the Ventura Compressor Station to residents and answered questions.

June 22, 2021: SoCalGas representatives presented at the Ventura Chamber of Commerce to provide an overview of the Ventura Compressor Station Modernization Project and soil remediation projects and answer questions.

SoCalGas will continue to routinely update the community with information regarding the Ventura Compressor Station as well as other projects within the vicinity of the station and within the City of Ventura.

Presentation, communication, and engagement materials are attached for reference.

---

**QUESTION 6:**

Please provide a detailed summary of SoCalGas' outreach to Federal and State resource and permitting agencies regarding the proposed Ventura Compressor Station Replacement Project. Include or attach any presentation, communication, or engagement materials used in the community outreach effort.

**RESPONSE 6:**

The Ventura Compressor Station Modernization Project does not require any permits or authorizations from federal agencies and as such, no outreach efforts have been undertaken with federal agencies.

As described in the response to Question 2 above, SoCalGas anticipates filing a SWPPP and a NOI with the SWRCB and RWQCB through the SMARTS for disturbance over an acre related to the compressor modernization project. However, no outreach to the SWRCB or RWCQB has been performed at this time because construction activities are not anticipated to start until Q4 2022. Once the onset of construction activities is closer in time, we will proactively reach out to the SWRCB and RWQCB to brief them on the compressor modernization project.

---

**QUESTION 7:**

Please describe in detail the process SoCalGas used to evaluate the feasibility of engineering alternatives for the Ventura Compressor Replacement Project, including:

a. Compressor Alternatives: Gas-Driven; Electric-Driven; Reciprocating.

b. Evaluation of gas and electric supply options for the replacement compressors – including required additional or upgraded infrastructure such as new electric facilities (transmission lines; substations; switch gear; etc.); new gas facilities (piping; valving; gauging; etc.); and new telecommunications facilities.

c. Evaluation of feasibility of Compressor Replacement Project options with respect to impacts such as: traffic; noise; aesthetics; local land-use; and construction impacts.

d. Evaluation of existing conflicts or compatibility with community values, zoning, and local land-use restrictions and codes.

e. Evaluation of the potential effects and risks of Climate Change, Wildfire, and Energy Supply on the feasibility of engineering alternatives to the Ventura Compressor Replacement Project.

f. Evaluation of the long-term Operations & Maintenance impacts that would follow from any given feasible engineering alternative.

**RESPONSE 7:**

At the foundation of every SoCalGas project is the safety of our employees, customers and the public. The Ventura Compressor Station modernization project is a critical upgrade that will enhance safety and reliability and deliver affordable and reliable energy to critical facilities like schools, hospitals, and local industries on the Central Coast. A compressor station has been in use at the project site since 1923. The proposed compressor modernization project is the result of more than seven years of careful evaluation and assessment of our pipeline systems' current and future needs.

Our evaluation of the Ventura Compressor Station began in 2013 when SoCalGas retained a consultant to evaluate three compressor stations on SoCalGas' integrated transmission system, specifically Blythe, Moreno and Ventura. Compression equipment at Ventura in 2013 consisted of three natural gas driven compressors at 1,100 horsepower each, the same equipment that is presently onsite. The results of the engineering analysis concluded that future operations will likely require a wide range of operating points, making flexibility for the station paramount. Additional

horsepower is needed for daily fluctuations in loads,[4] not to expand the system beyond existing levels of service.

The conclusions of the 2014 engineering analysis guided SoCalGas' 2016 general rate case (GRC) application filed with the CPUC in November 2014 (Application A.14-11-004). The 2016 rate request included a detailed projection of estimated cost to deliver natural gas from 2016 to 2019. In the direct testimony of Raymond K. Stanford (Gas Engineering), the proposed improvements at the Ventura Compressor Station include an increase in horsepower from 3,300 to 15,000. As described on page RKS-70:

*"Future utilization of this station is to meet Goleta's summer injection requirements and to meet the summer load gas demand on the coastal system impacted by a reduction in local gas production, namely from Pacific Offshore Production Company site. Meeting these needs will require 15,000 horsepower at the Ventura Station."*

Upon adoption of several settlement agreements in 2015, the 2016 GRC revenue requirement was authorized.

Subsequent to the 2016 GRC filing, additional FEEDresulted in cost and scope revisions compared to the scope of work and cost provided in the 2016 GRC.

In October 2017, SoCalGas filed the 2019 GRC application with the CPUC (Application A-17-10-008). As described in the Joint Direct Testimony of Michal A. Bermel and Beth Musich (Gas Transmission) dated October 6, 2017, engineering review concluded that:

"[C]*ontinued reliance upon sixty-year old mechanical and supporting infrastructure would not yield the forward-looking reliability metrics to support SoCalGas' operational needs… The results of the FEED reviews commissioned by SoCalGas suggested that SoCalGas' objectives could better be achieved by replacing much of the supporting infrastructure at the plants in addition to the base compressor units.*"

(See the Joint Direct Testimony of Michal A. Bermel and Beth Musich (Gas Transmission) page MAB-21).

As noted in Commission Decision D.19-09-051 on SoCalGas' 2019 GRC application, the CPUC authorized the compressor modernization project and the necessary funding, recognizing the importance of maintaining operational reliability and safety of the gas transmission system, and finding that:

*"With respect to the requested amounts for this GRC, we note that other largescale projects are being planned specifically for the* ***Ventura Compressor Station*** *and the Honor Rancho*

[4] SPEC Services, Inc. Sempra Utilities Station Study, Blythe Moreno, & Ventura Stations Project No. 5690. January 22, 2014.

*Compressor Station (and the Moreno Compressor station for SDG&E). Because we recognize the importance of the proposed projects and the role of compressor stations in maintaining operational reliability and safety of the gas transmission system, we find that it is prudent and reasonable to authorize the proposed projects and for SoCalGas to have the necessary funding to conduct these projects (and Moreno Compressor station for SDG&E). At this point, we do not find it necessary to deviate from current GRC practice and authorize funding only for specific projects because of the large scope covered in the GRC and because of the many challenges associated with planning and executing multiple and large projects within a specified timeframe. We do however encourage SoCalGas to place a high priority on critical projects under this category as most of its compressors are over 50 years old and because of key risks that need to be mitigated in this area. Therefore, we find that the requested amounts for Compressor Stations should be authorized."* [emphasis added] (D.19-09-051 at pps. 116-117).

Additional detail is provided to expand upon the background information above in order to address questions 7.a. through 7.f:

a. Compressor Alternatives

SoCalGas considers project alternatives based on safety, reliability, environmental and community consideration, and cost in relationship to SoCalGas' objectives. As stated in the 2016 GRC testimony and workpapers, SoCalGas' objectives of the compressor modernization project include meeting Goleta's summer injection requirements; meeting the gas demand on the coastal system impacted by a reduction in local gas production; replacing aging equipment and providing redundancy and reliability.

SoCalGas evaluated a range of reasonable alternatives that would feasibly obtain the basic objectives of the compressor modernization project.

SoCalGas made an initial determination as to which alternatives are potentially feasible and merit in-depth consideration, and which do not. Those alternatives that do not meet the objectives were rejected.

**Equipment Configuration Alternative**

SoCalGas evaluated combinations of gas engine driven and gas turbine driven reciprocating or centrifugal compressors[5]. Engineering analysis considered operational needs, which generally dictate the type of compressor used in a particular location. In certain locations, operational flexibility may be critical whereas in other locations, equipment may need to run continuously for

[5] Reciprocating engines convert pressure into rotating motion using pistons, while a gas turbine engine, or a combustion turbine, uses the pressure from gases to turn the blades in the turbine. Centrifugal compressors use a rotating impeller to increase the pressure of a fluid.

long periods. The selected option for the Ventura Compressor Station must also meet the air quality requirements of VCAPCD while performing gas compression per the operational needs.

Centrifugal compressors, typically driven by an electric motor or gas turbine, were evaluated and not chosen due to the difficulty in meeting the facility's operating range for minimum and maximum flowrate and pressure. Reciprocating compressors, which were selected, are driven by either a gas engine or an electric motor and are designed to meet the operating requirements. Air emission control equipment can be installed on the reciprocating compressor engines in compliance with VCAPCD's requirements, which include the requirement for Best Available Control Technology (BACT) for the new emissions units. Additionally, the reciprocating compressors can be accommodated within the existing property boundary. Finally, reciprocating compressors can meet the reliability needs.

**Electric Driven Compressor Alternative**

SoCalGas did not consider the use of electric driven compressors at our Ventura facility due to the location of the compressor station. If SoCalGas lost electric power with electric-driven compressors installed, SoCalGas could impact customers due to the inability to move gas up the central coast and replenish the Goleta storage field. With increasing frequency, Public Safety Power Shutoffs on the Southern California Edison electric grid destabilize the energy delivery system and compromise reliability. Additionally, the electrical load requires more onsite infrastructure and potentially offsite infrastructure and due to the property boundary constraints, space is not available. The use of natural gas compressors at the Ventura Compressor Station provides essential redundancy and ensures that SoCalGas customers have reliable natural gas even if there is a power outage.

**Preferred Alternative**

Based on careful consideration of a reasonable range of alternatives in consideration of the basic project objectives, SoCalGas determined that the equipment configuration alternative, and specifically the use of reciprocating compressors, is the preferred alternative. This alternative (i.e., the CPUC authorized project) meets safety and reliability needs while minimizing air emissions and other potential environmental impacts and optimizing a property that has been a compressor station since 1923.

b. Evaluation of gas and electric supply options for the replacement compressors – including required additional or upgraded infrastructure such as new electric facilities (transmission lines; substations; switch gear; etc.); new gas facilities (piping; valving; gauging; etc.); and new telecommunications facilities.

Please see the response to Question 7.a.

c. Evaluation of feasibility of Compressor Replacement Project options with respect to impacts such as: traffic; noise; aesthetics; local land-use; and construction impacts.

**Traffic** – The compressor station has two vehicular access points on Olive Street, the main gate and a secondary gate closer to the northern property line. During construction and operation of the compressor station, vehicular traffic would use the same site access points with construction traffic using State Route 33 to Stanley Avenue to Olive Street. Impacts would be similar with any selected compression equipment at the facility.

**Noise** – The FEED included a noise study of the gas engine driven option and determined noise mitigation measures were needed to meet the City noise ordinance. The measures are being incorporated during detailed design. Overall, there would be no difference in impact regardless of selected compression equipment at the facility during either construction or operations given the noise mitigation measures installed per design on the gas engine exhaust stacks.

**Aesthetics** – Construction impacts would be substantially similar in any compressor configuration at the facility since the construction equipment would be similar. Operational aesthetics impacts result from the emission stacks that would be visible from outside the facility for the equipment configuration alternative.

**Local land use** – A compressor station has been located onsite for almost 100 years - since at least 1923 – and in its current configuration since the 1980s. Industrial uses surround the compressor station on the north, west and south of the site. The EP Foster Elementary School was constructed across from the compressor station in 1929 and has been a neighbor of the facility for 92 years. The project site is designated by the Ventura General Plan as “Industry” and zoned “M-2 General Industrial.” Energy facilities are generally classified as industrial uses and would typically be found consistent with industrial zoning.

As noted in response 4.d.iv., the CPUC has general regulatory authority over public utilities such as SoCalGas. SoCalGas proactively engaged the City of Ventura to confirm that SoCalGas would not need a Conditional Use Permit to modernize the facility. On June 15, 2020, SoCalGas submitted a letter to the City of Ventura Chief Building Official providing our position and on October 12, 2020, the City of Ventura concurred with SoCalGas’ opinion.

**Construction impacts** – The number of deliveries and types of construction equipment would likely be very similar between alternatives. However, the exhaust stacks for gas engine drives would require extra crane operations to place them on their foundations. Typically, construction impacts are associated with traffic, noise and dust. As noted above, traffic and noise would be similar in any alternative considered. Dust generation would also be similar and managed in accordance with VCAPCD rules under any alternative. Construction impacts to natural resources would be negligible under any alternative because the only vegetation onsite consists of non-native

trees and ornamental grass along Olive Street. A nesting bird survey was performed on June 24, 2021 and no nests were observed. There are no creeks, streams or other waterbodies onsite or within 500-feet of the site's perimeter.

d. Evaluation of existing conflicts or compatibility with community values, zoning, and local land-use restrictions and codes.

The Ventura Compressor Station is sited specifically to support the Central Coast and meet reliability needs. It is the last compressor station on SoCalGas' system and the main feed to customers in Ventura and on the Central Coast.

Over time, land use densities in proximity to the Ventura Compressor Station have changed, from primarily industrial and agriculture to the subsequent residential development. Industrial uses surround the compressor station on the north, west and south of the site. The EP Foster Elementary School was constructed across from the compressor station in 1929 and has been a neighbor of the facility for 92 years.

The project site is designated by the Ventura General Plan as "Industry" and zoned "M-2 General Industrial." Energy facilities are generally classified as industrial uses and would typically be found consistent with industrial zoning.

Relocation of the compressor station would necessitate relocating offsite infrastructure, potentially causing greater community and environmental impact.

SoCalGas incorporates Code of Federal Regulations (CFR) requirements, Department of Transportation Pipeline and Hazardous Materials Safety Administration (PHMSA) requirements, National Code Standard requirements and CPUC General Orders and regulations when engineering, designing, and constructing compressor stations. SoCalGas also incorporates best available technology and safety systems when retrofitting or redesigning its facilities and equipment to provide multiple layers of redundancy when it comes to system safety and reliability.

e. Evaluation of the potential effects and risks of Climate Change, Wildfire, and Energy Supply on the feasibility of engineering alternatives to the Ventura Compressor Replacement Project.

The proposed project meets safety and reliability needs and potential alternatives were, or would have been engineered, to meet all air emissions permitting requirements set forth by VCAPCD.

The basis for natural gas requirements and supplies in California are mandated by the California Public Utilities Commission (CPUC) in Decision 95-01-039 (CGEU 2020), which defined the

requirement for utilities[6] to publish the California Gas Report. The most recent edition is the *2020 California Gas Report*, which forecasts natural gas usage through 2035, accounting for energy efficiency and building electrification (reach codes). The report states that "utility-driven, statewide natural gas demand is projected to decline at an average rate of 1.0 percent each year through 2035" but "[n]evertheless, gas-fired generation and energy storage will continue to be primary technologies to support long-term increases in electricity usage and integrate increasing quantities of intermittent renewable electric generation into the electric grid" (CGEU 2020). The Ventura Compressor Station is a critical asset on SoCalGas's integrated transmission system that provides the necessary pressure to move gas north to communities on the Central Coast, where local gas supply from producers has dropped.

Wildfire risk is an ever-present threat in Southern California. The Ventura community was affected by the Thomas Fire that began in December 2017, resulting in damage to more than 280,000 acres and destroying more than 1,000 buildings. With increasing frequency, proactive fire mitigation strategies like Public Safety Power Shutoffs on the Southern California Edison electric grid destabilize the energy delivery system. The use of natural gas compressors at the Ventura Compressor Station provides essential redundancy and ensures that SoCalGas customers have reliable natural gas even if there is a power outage.

f. Evaluation of the long-term Operations & Maintenance impacts that would follow from any given feasible engineering alternative

The operating requirements of the gas transmission infrastructure and compressor facility determined the engineering option selected for the modernization. Then, the appropriate equipment is selected to minimize all impacts on the adjacent areas. As an example, a noise study was performed using the selected option. It determined that an improved silencer design was required to meet the local noise ordinance for Ventura. The engines were also specifically chosen for their ability to meet the VCAPCD requirements.

[6] The California gas and electric utilities include Southern California Gas Company, Pacific Gas and Electric Company, San Diego Gas and Electric Company, Southwest Gas Corporation, City of Long Beach Energy Resources Department, and Southern California Edison Company (2020 California Gas Report, 2020).