

DOCKETED

Docket Number:	98-AFC-01C
Project Title:	Pittsburg District Energy Facility - Commission Adoption Order (Order No. 99-0817-01)
TN #:	237658
Document Title:	Petition for Post-Certification Modification for Los Medanos Energy Center Mineralization and Carbon Capture Project
Description:	Staff's Data Requests, Set 1, A1 Through A9.
Filer:	Marichka Haws
Organization:	California Energy Commission
Submitter Role:	Commission Staff
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May 4, 2021

Ms. Barbara McBride
Director of Strategic Origination
Calpine Corporation
3003 Oak Road
Walnut Creek, CA 94597

**RE: PETITION FOR POST-CERTIFICATION MODIFICATION FOR LOS
MEDANOS ENERGY CENTER (98-AFC-01C) MINERALIZATION
AND CARBON CAPTURE PROJECT
STAFF'S DATA REQUESTS, SET 1, A1 THROUGH A9**

Dear Ms. McBride,

Pursuant to Title 20, California Code of Regulations, section 1769, Calpine Corporation submitted a post certification petition for the Los Medanos Energy Center (LMEC) to allow for piping treated stack gas from LMEC to a neighboring carbon capture and utilization project being developed by San Francisco Bay Aggregates. California Energy Commission staff is requesting the information specified in the enclosed data requests to: 1) more fully understand the proposed changes to the facility, 2) assess whether the changes would be constructed and the facility would continue to operate in compliance with applicable regulations, 3) assess whether the changes will result in significant environmental impacts, and 4) assess potential mitigation measures.

These data requests, numbered A1 through A9, are being made in the technical areas of Cultural Resources, Socioeconomics and Traffic and Transportation.

Written responses to the enclosed data requests are due as soon as possible.

If you have any questions regarding the enclosed data requests, please call me at (916) 628-5566 or email me at John.Heiser@energy.ca.gov.

Sincerely,

John Heiser
Compliance Project Manager

Enclosure (Data Request Packet)

cc: Docket (98-AFC-01C)
POS List

PETITION FOR POST-CERTIFICATION MODIFICATION FOR LOS MEDANOS ENERGY CENTER (98-AFC-01C)

MINERALIZATION AND CARBON CAPTURE PROJECT

ENERGY COMMISSION STAFF'S DATA REQUESTS SET 1, A1 – A9

Technical Area: Cultural Resources

Author: Melissa Mourkas

BACKGROUND:

The project owner is proposing to install both a 48-inch pipe and an 8-inch pipe to transfer stack gas from the Los Medanos Energy Center (LMEC) to a carbon capture and utilization facility located on a neighboring property, San Francisco Bay Aggregates. For the demonstration phase, approximately 1% of the stack gas would be transferred for CO₂ removal. Flow through the flue gas pipe will be controlled by a damper installed at the point of interconnection between the pipe and the stack. The flue gas pipe would be supported on a new pipe rack/support within LMEC for a short distance and then will align with existing steam and condensate lines that leave LMEC to support its cogeneration thermal host. The pipe would interconnect into the stack, run the length of the property (approximately 80 feet) and interconnect to the San Francisco Bay Aggregate pipe at the fence line of the facility (Calpine 2021, page 1).

The project owner's petition for post certification project change does not propose any significant physical changes to the site or major equipment. The petition states that there would be no new ground disturbance at the LMEC site, no new buildings, and no changes to project operations. The modification would require only the installation of a new pipe rack/support a 48-inch pipe and an 8-inch pipe to transfer the flue gas (Calpine 2021, cover page).

The engineering plan states the racks/supports are to be designed and located during the detailed design phase with proposed 8-inch pipeline, and that no additional supports and/or pipe bridges are anticipated other than at the 3rd Street crossing, to be confirmed during detailed design (Worley Parsons 2021, Sketch 1). Clouded area on Sketch 3 currently indicates the piping to be routed

overhead. Evaluation to route piping within the existing trench will be performed during detailed design (Worley Parsons 2021, Sketch 3).

DATA REQUESTS:

- A1. The petition states no ground disturbance will be required for the project. Please provide the following descriptions:
- a) Please describe the new pipe racks/supports to which the 8-inch gas pipe will be attached.
 - b) Please describe the horizontal extent (length) of the new pipe and pipe racks/supports that are required for the project.
 - c) Please describe how the new sections of pipe rack/supports would be installed and specifically, how that is accomplished without ground disturbance. If ground disturbance is required to install the new sections of pipe rack/supports, please identify the number and extent of horizontal and vertical excavations that would be required to install the pipe racks/supports, the ground surface to which they will be attached or mounted, and any below-grade elements that would be required for the installation of the pipe racks/supports.
 - d) Please describe the existing trench referred to on Sketch 3. The clouded area appears to be in an area where the pipe would be elevated above grade. Would ground disturbance be required to work within the existing trench? If so, please describe the specifics of the ground disturbance that would be required.
- A2. Please provide a figure depicting the new 8-inch pipe where it would interconnect to the stacks and its relationship to the surface at grade or confirm the specifications on Sketch 1. Sketch 1 seems to indicate the connection to be at 34-feet 2-inches above grade and sloping generally at 1/8-inch per foot.
- A3. Please provide a site plan on an aerial base that shows the new 8-inch pipe connection at the stack and the entirety of the pipe line to the connection at the adjacent property.
- A4. Please describe the ground disturbance and pipeline connection on San Francisco Bay Aggregate's property required to accomplish the CO₂ removal.

- A5. Please provide the Assessor's Parcel Number and address of the San Francisco Bay Aggregate property.
- A6. The petition does not mention crossing 3rd Street as part of the project description, which is noted in Sketch 1. Please clarify the extent of the project as it relates to crossing 3rd Street.

REFERENCES:

Calpine 2021- Calpine Corporation. Los Medanos Energy Center (98-AFC-01C) Petition for Staff Approved Modification to Support San Francisco Bay Aggregates Carbon. TN 237030. March 8, 2021. Available online at: <https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=98-AFC-01C>

Worley Parsons 2021- Worley Parsons Sketch Maps 1-4, Los Medanos Energy Center, Pittsburg, California. Submitted by Calpine to CEC Project Manager. March 2021.

Technical Area: Socioeconomics

Author: Lisa Worrall

BACKGROUND:

The project owner is proposing to install both a 48-inch pipe and an 8-inch pipe to transfer stack gas from the LMEC to a carbon capture and utilization facility located on a neighboring property, San Francisco Bay Aggregates. The flue gas pipe would be supported on a new pipe rack/support within LMEC.

DATA REQUESTS:

- A7. Would the pipe and racks/supports be installed by existing LMEC workers, or would workers need to be employed for this work? If workers would need to be employed, approximately how many workers would be required?
- A8. How long would the installation of pipe and racks/supports take and when do you estimate the installation would occur?

Technical Area: Transportation**Author:** Lisa Worrall**BACKGROUND:**

The project owner is proposing to install both a 48- inch pipe and an 8-inch pipe to transfer stack gas from the (LMEC to a carbon capture and utilization facility located on a neighboring property, San Francisco Bay Aggregates. The pipe would interconnect into the stack, run the length of the property (approximately 80 feet) and interconnect to the San Francisco Bay Aggregate pipe at the fence line of the facility (Calpine 2021, page 1).

The engineering plan shows the racks/supports would cross over 3rd Street to connect to the San Francisco Bay Aggregates property, to be confirmed during detailed design (Worley Parsons 2021, Sketch 1). Clouded area on Sketch 3 currently indicates the piping to be routed overhead. Per California Vehicle Code Section 35250, no vehicle or load shall exceed a height of 14 feet, measured from the surface upon which the vehicle stands.

DATA REQUEST:

A9. What is the lowest clearance of any new structure over 3rd Street?