

DOCKETED

Docket Number:	07-AFC-06C
Project Title:	Carlsbad Energy Center - Compliance
TN #:	260628
Document Title:	Order Approving Post Certification Petition to Amend
Description:	N/A
Filer:	Kristine Banaag
Organization:	California Energy Commission
Submitter Role:	Commission Staff
Submission Date:	12/13/2024 9:02:24 AM
Docketed Date:	12/13/2024

STATE OF CALIFORNIA
STATE ENERGY RESOURCES
CONSERVATION AND DEVELOPMENT COMMISSION

IN THE MATTER OF:

***Carlsbad Energy Center, LLC
Post Certification Petition to Amend***

Docket No.: 07-AFC-06C

**Order Approving Post Certification
Petition to Amend**

**ORDER: Carlsbad Energy Center Project –
Petition to Amend (Docket No. 07-AFC-06C)**

I. BACKGROUND

The Carlsbad Energy Center Project is a 527-megawatt (MW) natural gas-fired, thermal power plant operating in simple-cycle configuration. The project is located in Carlsbad, San Diego County. It was certified by the CEC on July 30, 2015, and began commercial operation on December 12, 2018.

On February 3, 2020, Carlsbad Energy Center, LLC (CECL), the project owner, filed a post certification petition with the California Energy Commission (CEC) requesting to amend the Carlsbad Energy Center Project Final Commission Decision (Decision). On September 26, 2023, the CECL filed a supplemental petition (TN 252418) with the CEC in order to conform air quality conditions of certification COCs with the San Diego Air Pollution Control District (SDAPCD) amended operating permit under Title V of the federal Clean Air Act. The project owner is seeking approval to modify Air Quality (AQ) Conditions of Certification (COC).

The project owner is seeking approval to add, modify or delete the following AQ COCs:

- Modify the definition of turbine shutdown without changes in emissions and to modify the permitted carbon monoxide (CO) startup mass emission limit during turbine startup in COC AQ-40;
- Administrative changes to back-calculations for NOx emissions from the time gas flow ceases to the turbine in shutdown in COC AQ-14;
- Additional NOx and CO emission limit for periodic tuning of natural gas-fired combustion turbine generators in COC AQ-45; and

- Incorporate the new and revised AQ COCs for consistency with amended SDAPCD permit by:
- Modifying the following AQ COCs: AQ-1, AQ-2, AQ-7, AQ-9, AQ-12, AQ-14, AQ-15, AQ-17, AQ-23 to AQ-36, AQ-39 to AQ-52, AQ-54, AQ-61 to AQ-63, AQ-66, AQ-67, AQ-69, AQ-70, AQ-73, AQ-74, AQ-76 to AQ-78, AQ-80, AQ-81, AQ-83, AQ-84, AQ-87, AQ-88, AQ-94 to AQ-96, AQ-100 and AQ-101 to AQ-105;
- Adding new AQ COCs: AQ-13a, AQ-90a and AQ-90; and
- Deleting AQ COCs: AQ-SC9, AQ-SC-12, AQ-SC13, AQ-3, AQ-4, AQ-6, AQ-8, AQ-13, AQ-18, AQ-19, AQ-60, AQ-64, AQ-71, AQ-79, AQ-82, AQ-85, AQ-86, AQ-90, AQ-92, AQ-93, and AQ-106 to AQ-121.

The modification to definition of turbine shutdown and the startup mass emission limit during turbine startup in COC AQ-40 are not expected to increase short-term emissions (i.e., maximum hourly, daily, or monthly emissions) of CO. The requested change to the CO startup emission limit is necessary to reflect what the turbines can achieve in practice and under ambient conditions. The modeling results indicate that with proposed change in CO startup emission the potential emissions are anticipated to be small and not expected to cause any exceedance of CO air quality emission standards. Additionally, the project is in the area which is attainment for state and federal CO standards operating.

In addition, proposed amendments would allow periodic tuning of the natural gas-fired combustion turbine generators to ensure the emissions control systems on the turbine generators are working optimally. Tuning may include, but not be limited to, activities associated with adjusting, optimizing, rebalancing, and otherwise calibrating emissions control equipment and equipment components to ensure proper performance specification during normal operations. NO_x and CO emissions may be temporarily higher during tuning activities than during normal operations because the selective catalytic reduction and oxidation catalyst system may not be fully optimized. Staff has determined that despite a minor increase in the hourly CO emission limit, the proposed modifications to the AQ COCs would not result in significant impacts to the ambient air quality and the environment, and the facility would continue to comply with

The additional proposed revisions to AQ COCs are necessary for consistency with the project's Title V operating permit. The modifications proposed by the CEC staff to the Air Quality COCs would allow the project to continue to operate in compliance with the Decision, the SDAPCD permits requirements, and applicable laws, ordinances, regulations, and standards.

The increase in operational hours required changes to the project's Title V operating permit under the federal Clean Air Act which is under the authority of the SDAPCD.

II. STAFF RECOMMENDATION

Staff recommends the CEC approve the petition.

Staff has reviewed the petition for potential environmental effects and consistency with applicable laws, ordinances, regulations, and standards pursuant to California Code of Regulations, title 20, section 1769. Staff concludes that, with the addition of new or amended conditions of certification (AQ-1, AQ-2, AQ-7, AQ-9, AQ-12, AQ-13a, AQ-14, AQ-15, AQ-17, AQ-23 to AQ-36, AQ-39 to AQ-52, AQ-54, AQ-61 to AQ-63, AQ-66, AQ-67, AQ-69, AQ-70, AQ-73, AQ-74, AQ-76 to AQ-78, AQ-80, AQ-81, AQ-83, AQ-84, AQ-87, AQ-88, AQ-90, AQ-90a AQ-94 to AQ-96, AQ-100, AQ-101 to AQ-105) the effect on the environment would be less than significant. Staff also concludes that the project would continue to comply with all applicable laws, ordinances, regulations, and standards and that the findings specified in California Code of Regulations, title 20, section 1748(b), do not apply to the proposed changes. Staff also concludes the proposed new or modified AQ COCs do not meet any of the criteria requiring the preparation of subsequent or supplement review pursuant to Public Resources Code section 21166 or California Code of Regulations, title 14, sections 15162 and 15163. Finally, staff concludes that the updated conditions of certification are consistent with the requirements contained in permits issued by the SDAPCD. Staff's assessment of the petition was subject to a 45-day comment period and no substantive comments were received.

III. ENERGY COMMISSION FINDINGS

Based on the record, including staff's analysis, the CEC concludes that the proposed modifications will not result in any significant impacts to public health and safety, or to the environment. The CEC finds that:

- The petition meets all the filing criteria of California Code of Regulations, title 20, section 1769(a), concerning post-certification project modifications.
- The modifications will not change the findings in the CEC's Final Decision, pursuant to California Code of Regulations, title 20, section 1748.
- The project will remain in compliance with all applicable laws, ordinances, regulations, and standards, subject to the provisions of Public Resources Code section 25525.
- Any environmental impacts will be less than significant with the addition of new or amended conditions of certification: (AQ-1, AQ-2, AQ-7, AQ-9, AQ-12, AQ-13a, AQ-14, AQ-15, AQ-17, AQ-23 to AQ-36, AQ-39 to AQ-52, AQ-54, AQ-61 to AQ-63, AQ-66, AQ-67, AQ-69, AQ-70, AQ-73, AQ-74, AQ-76 to AQ-78, AQ-80, AQ-81, AQ-83, AQ-84, AQ-87, AQ-88, AQ-90, AQ-90a AQ-94 to AQ-96, AQ-100, AQ-101 to AQ-105).
- The proposed new or modified AQ COCs do not meet any of the criteria requiring the preparation of subsequent or supplement review pursuant to Public

Resources Code section 21166 or California Code of Regulations, title 14, sections 15162 and 15163.

- Notice of the staff assessment was mailed to the CEC's list of interested parties and property owners of all parcels within 500 feet of any affected project linears and 1,000 feet of the project site as well as emailed to the CECL subscription list.
- The staff assessment was subject to a 45-day comment period.

IV. CONCLUSION AND ORDER

The CEC hereby adopts staff's recommendations and approves the petition and amended conditions of certification to the Commission Decision as set forth in the staff analysis (TN 259209) and errata (TN 260255).

IT IS SO ORDERED.

CERTIFICATION

The undersigned Secretariat to the CEC does hereby certify that the foregoing is a full, true, and correct copy of a resolution duly and regularly adopted at a meeting of the CEC held on December 11, 2024.

AYE: Hochschild, Gunda, Monahan, Gallardo

NAY: NONE

ABSENT: McAllister

ABSTAIN: NONE

Dated: December 12, 2024

SIGNED BY:

Kristine Banaag
Secretariat