

DOCKETED	
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Document Title:	CEC Response for Kerry Siekmann's Complaint for Alleged Violation of Air Quality Condition of Certification AQ-SC9
Description:	CEC Response for Kerry Siekmann's Complaint for Alleged Violation of Air Quality Condition of Certification AQ-SC9
Filer:	Anwar Ali
Organization:	California Energy Commission
Submitter Role:	Commission Staff
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August 28, 2022

Kerry Siekmann
Terramar Community Association
5239 El Arbol Drive
Carlsbad, California 92008

**CARLSBAD ENERGY CENTER PROJECT (07-AFC-06C) – ALLEGED
VIOLATION OF AIR QUALITY CONDITION OF CERTIFICATION AQ-SC9**

Dear Kerry Siekmann:

Thank you for your interest in ensuring operational compliance of the Amended Carlsbad Energy Center Project (ACECP). In your filed complaint to the California Energy Commission (CEC) dated January 8, 2021, you ask whether the project violated the Condition of Certification **AQ-SC9** throughout 2019 and the first three quarters of 2020.

CEC staff reviewed your inquiry and provided our response on April 21, 2021, which was docketed on ACECP webpage (TN 237517).

On April 22, 2021, and in subsequent communications regarding the ACECP you submitted the following additional questions:

- Could you point out to me where in **AQ-SC9** that it states that the spin up and down can occur outside the approved times of 6:00 a.m. to 12 midnight?
- How many minutes are needed for spin up and down?
- Don't you think that there should be communication somewhere that explains the issues with the change of time for daylight savings time?



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Question: Could you point out to me where in **AQ-SC9** that it states that the spin up and down can occur outside the approved times of 6:00 a.m. to 12 midnight?

Response: The condition of certification **AQ-SC9** states that "the gas turbines shall only be operated between the military time hours of 0600 to 2400, except in the event of a California Independent System Operator (CAISO) declared emergency." **AQ-SC9** does not address spin up or down, however, as discussed below, starting and stopping periods, so that the facility can be generating power between 0600 and 2400 is covered in NOISE-4. This ramp up and ramp down is consistent with the settlement agreement between the Carlsbad Energy Center LLC (CECL) and the City of Carlsbad (City) which states in Article 4, Section 4.1(C) "*...CECP will not operate between the hours of midnight and 6 am, except to the extent reasonably required for reliability-related purposes or as otherwise required by the ISO Tariff...*"

CECL is under a long-term power contract with San Diego Gas & Electric (SDG&E), pursuant to which SDG&E is the Scheduling Coordinator (SC) interface with the California Independent System Operator (CAISO) for CECL. As the SC, SDG&E is required to provide CAISO with energy price bids into CAISO's day-ahead (DA) and real-time (RT) markets. SDG&E submits DA price bids beginning at 0600. CAISO runs its market software each day and provides DA operating schedules, which are for full clock hours only. The RT market adjusts dispatch every five minutes during the delivery day. When CAISO issues a dispatch order for 0600, CECL's respective units must be online at the designated operating load by 0600, which necessitates starting about 10 minutes prior to 0600, although no net power is being generated until the last few minutes of that 10-minute period. Most of the 10 minutes is preparatory and consists of starting auxiliary equipment. DA bids and schedules are for full clock-hours, so it is not possible to participate in CAISO's DA market starting at 0610. If CECL is unable to start its units until 0600, then it would be unable to accept DA schedules until 0700, which is contrary to the intended operating condition in **AQ-SC9**. This would be detrimental to grid reliability, particularly in months during which morning customer loads ramp up before 0700 but solar generation has not yet kicked in.



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Likewise, dispatch orders that go to 2400 require the unit to stay online at the designated operating load until then, requiring CECL to commence its up-to 13-minute shutdown at 2400 and not before.

While operation is not specifically defined in the Settlement Agreement, CAISO Tariff or CECP license, the Settlement Agreement and the corresponding license provisions align with CECP operations between 2400 and 0600 for reliability-related purposes or as required by the CAISO Tariff, which is reasonably interpreted to permit start-up in the minutes before 0600 and shutdown in the minutes after 2400 when dispatched by CAISO to deliver generation to grid. Condition of Certification **NOISE-4** addresses the intent of the Settlement Agreement to acknowledge the operation of CECP before 0600 or after 2400 for reliability purposes. To reiterate, startup and shutdown minutes are necessary to meet the CAISO Tariff for reliability purposes. The CAISO Tariff (i.e., Appendix A, Definitions) does not define "operations" but does require CECL to comply with all Dispatch Instructions. CECL often receives Dispatch Instructions that specify a Dispatch Operating Target that must be met beginning at 0600 or until 2400. Startup prior to 0600 or shutdown after 2400 is required to comply with such Dispatch Instructions.

Question: How many minutes are needed for spin up and down?

Response: Spin up (Startup) takes approximately 10 minutes and spin down (shutdown) takes approximately 13 minutes.

Question: Don't you think that there should be communication somewhere that explains the issues with the change of time for daylight savings time?

Response: CECL addresses the difference in standard time vs. daylight savings time as a footnote in the CEMS compliance reports filed with the CEC. The Continuous Emission Monitoring System (CEMS) is consistent across the country for CEMS users. CECL would not be able to have CEMTEK, the manufacturer of CEMS system, make a one-off modification of the CEMS internal clock for this circumstance. CECL will continue addressing the difference in standard time vs. daylight savings time in the CEMS compliance reports.

The Commission Decision presented the maximum project impacts for full load operation i.e., 24-hour per day for 365 days. While the operational time restrictions **AQ-SC9** were not considered in the ambient air quality impacts assessment, operation outside the hours listed in **AQ-SC9** would not result in impacts beyond what was analyzed as part of the Commission Decision.

I want to assure you that the CEC's process for review and approval of proposed project changes verifies that they will comply with the project's conditions of certification, and applicable laws, ordinances, regulations, and standards in order to prevent any significant environmental impacts.

If you have any questions or concerns, please contact Anwar Ali, Compliance Project Manager, at (916) 698-7498, or via e-mail at anwar.ali@energy.ca.gov

Sincerely,



Elizabeth Huber
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Unit
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cc: Shawn Pittard, Deputy Director, CEC STEP Division
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