



**Southern California Edison Company 2025 GRC**

**A.23-05-010**

**TURN HEARING EXHIBIT**

**TURN-702**

SCE response to TURN Data Request 98, Q20  
SCE response to TURN Data Request 117, Q32, 33, 34, 35

*Southern California Edison*  
*A.23-05-010 – SCE 2025 GRC*

**DATA REQUEST SET T U R N - S C E - 0 9 8**

**To: TURN**

**Prepared by: Krystal Stangeland**

**Job Title: Sr. Proj Mgr**

**Received Date: 2/12/2024**

**Response Date: 2/23/2024**

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**Question 20:**

Refer to response to TURN-52, Q16a. For each permit listed in this response (including the coastal development permit), please provide SCE's estimate of the amount of time between applying for the permit and obtaining the permit. Has SCE applied for similar permits on Catalina in the past? If so, please indicate how long it took to obtain these permits. Please provide documents to support your response.

**Response to Question 20:**

SCE objects to the question on the basis that the term "similar permits" is vague and ambiguous. Subject to and without waiving that objection, SCE responds as follows: Considering that the Catalina Solar Carport project is still conceptual, and detailed design has not been confirmed, the permit requirements and estimated timelines for obtaining them remain undefined at this time.

*Southern California Edison*  
*A.23-05-010 – SCE 2025 GRC*

**DATA REQUEST SET T U R N - S C E - 1 1 7**

**To: TURN**  
**Prepared by: Krystal Stangeland**  
**Job Title: Sr Project Manager**  
**Received Date: 4/24/2024**

**Response Date: 5/1/2024**

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**Question 32.a-c:**

Refer to page 81-82 of Ex. SCE-16, where SCE discusses its Title V permit condition F67.1 for the Pebbly Beach Generating Station. Please respond to the following questions:

- a. Assume there is a forced outage of the NaS battery system unrelated to the BCS and that at least 50% of the operating capacity of the microturbines are integrated with the generating system and in operable condition. Would that mean that SCE is in violation of the Title V permit condition F67.1?
- b. What is the expected forced outage and maintenance outage rates for each individual microturbine?
- c. How many microturbines would have to be offline in order to violate permit condition F67.1 if the NaS battery is offline?

**Response to Question 32.a-c:**

- a. No, SCE would not be in violation of Title V permit condition F67.1 in this hypothetical scenario because at least 50% of the operating capacity of the microturbines are integrated with the generating system and in operable condition.
- b. A forced outage is an unplanned outage that requires immediate removal of a unit from service, another outage state, or a reserve shutdown state. SCE does not calculate a forced outage rate for each individual microturbine, and therefore SCE does not have an expected forced outage rate. SCE generally follows the manufacturer recommendations regarding proper corrective and preventive maintenance. In addition, SCE maintains sufficient viable redundancy within the microturbine fleet to allow for replacement of unexpected failure of components with minimal operational impact (including adherence to environmental compliance requirements). As such, SCE does not calculate a maintenance outage rate for each individual microturbine.
- c. There are a total of twenty-three microturbines. If the NaS battery was unavailable and less than 50% of the microturbines were available, then SCE would be in violation of Title V permit condition F67.1 (except during maintenance or during other unforeseen circumstances that would prevent such integration or operable condition).

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**DATA REQUEST SET T U R N - S C E - 1 1 7**

**To: TURN**

**Prepared by: Krystal Stangeland**

**Job Title: Sr Project Manager**

**Received Date: 4/24/2024**

**Response Date: 5/1/2024**

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**Question 33.a-b:**

Refer to page 81 of Ex. SCE-16. SCE states that "...analysis indicated that the battery has approximately five more years of useful life, the BCS has reached the end of life and requires replacement." Respond to the following questions:

- a. What year did the BCS reach the end of its useful life?
- b. What year does SCE predict that the NaS battery will reach the end of its useful life?

**Response to Question 33.a-b:**

- a. SCE would like to clarify that the current BCS is inoperable because the manufacturer no longer makes the necessary parts. As such, although components of the BCS have reached their "end of life," the overall system has not.
- b. When SCE submitted its testimony in May 2023, SCE indicated that the NaS battery has approximately five years of useful life remaining (see page 261 of Exhibit SCE-05., Vol. 1). Currently, SCE cannot predict the year that the NaS battery will reach its end of useful life until a full diagnostic test on the battery system is performed by the manufacturer, which is scheduled to be performed once the BCS is returned to service.

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*A.23-05-010 – SCE 2025 GRC*

**DATA REQUEST SET T U R N - S C E - 1 1 7**

**To: TURN**  
**Prepared by: Krystal Stangeland**  
**Job Title: Sr. Project Manager**  
**Received Date: 4/24/2024**

**Response Date: 5/1/2024**

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**Question 34:**

Provide a copy of the January 4, 2022 SCAQMD abatement order for Unit 15 referenced on page 78 of Ex. SCE-16.

**Response to Question 34:**

See attached.

**BEFORE THE HEARING BOARD OF THE  
SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT  
MINUTE ORDER**

South Coast AQMD vs. Southern  
California Edison (SCE), Pebbly Beach  
Generating Station  
1 Pebbly Beach Road  
Avalon, CA 90704

Case No: 1262-115

Facility ID: 4477

Hearing Date: 01/04/2022

Hearing Type: Order for Abatement

Consent Calendar:

Next Hearing: 7/19/22

**HEARING BOARD ACTION**

Action: ISSUED

Starting Date: 01/04/2022

Ending Date: 01/04/2024

**RULES**

1470(c)(4)(A)

**EQUIPMENT DESCRIPTION**

**DEVICE/APPLICATION/PERMIT**

Diesel ICE Unit No. 15  
SCR System Unit 15  
CO Oxidation Catalyst – Unit 15

A/N #595203/D42  
A/N #548965/C58  
A/N #548965/C82

**CONDITIONS**

Respondent shall comply with the conditions set forth in the Order for Abatement and Finding and Decision of the Hearing Board, attached

**REMINDER**

The Board scheduled a hearing for **July 19, 2022**, to receive a status report and/or consider a modification of the Order for Abatement.

**Present:**

Cynthia Verdugo-Peralta, Chair  
Mohan Balagopalan, Vice Chair  
Dr. Allan Bernstein, DPM  
Micah Ali, Alternate  
Adrienne Koniger-Macklin, Alternate

**Representing the Petitioner:** Mary Reichert, Senior Deputy District Counsel

**Representing the Respondent:** Kelly Henderson, Senior Attorney, SCE

**Witnesses for the Petitioner:** Uyen-Uyen Vo, Program Supervisor  
Chris Perri, Air Quality Engineer II

**Witnesses for the Respondent:** Casey Scott, Senior Advisor, Program Manager  
Matthew Zents, Major Construction Project Manager

**Petitioner's Exhibit:** #1 - Proposed Findings

**Respondent's Exhibits:**

- A - Timeline, "Key Dates" and Petition with Title V Excerpts (2018) and Rule 1470 Excerpt
- B - Oxide of Nitrogen (NOx) Megawatt/hour (MW/hr) graph
- C - Title V Permit (2016)
- D - Draft Proposed Amended Rule 1135 dated 12/8/21
- E - Rule 1470
- F - Statement of Basis
- G - Engine Data Sheet
- H - Johnson-Mathey Email

**Motion:** Balagopalan/Verdugo-Peralta

5-0

Board  
Review/Approval

  
Mohan Balagopalan, Vice Chair

Dated: 1-6-2022

Prepared by: Altheresa Rothschild  
Attachment: Findings and Decision of the Hearing Board

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7  
8 BEFORE THE HEARING BOARD OF THE  
9 SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT  
10

11 In the Matter of

12 SOUTH COAST AIR QUALITY  
13 MANAGEMENT DISTRICT,

14 Petitioner,

15 vs.

16 SOUTHERN CALIFORNIA EDISON –  
17 PEBBLY BEACH GENERATING STATION

18 Facility ID No. 4477

19 Respondent.

CASE NO. 1262-115

**FINDINGS AND DECISION FOR AN  
ORDER FOR ABATEMENT**

District Rule 1470

Date: January 4, 2022

Time: 9:00 a.m.

Place: Hearing Board  
South Coast Air Quality  
Management District  
21865 Copley Drive  
Diamond Bar, CA 91765

20  
21 **FINDINGS AND DECISION OF THE HEARING BOARD**

22 This petition for a Stipulated Order for Abatement was heard on January 4, 2022, pursuant to  
23 notice and in accordance with the provisions of California Health and Safety Code Section 40823  
24 and District Rule 812. The following members of the Hearing Board were present: Cynthia Verdugo-  
25 Peralta, Chair; Mohan Balagopalan, Vice-Chair; Dr. Allan Bernstein; Micah Ali; alternate, and  
26 Adrienne Koniger-Macklin, Alternate. Petitioner, Executive Officer, was represented by  
27 Mary J. Reichert, Senior Deputy District Counsel. Respondent, Southern California Edison – Pebbly  
28 Beach Generating Station (hereinafter referred to as “Respondent” or “SCE”), was represented by



1 Kelly Henderson. The public was given the opportunity to testify. The matter was submitted and  
2 evidence received. The Hearing Board finds and decides as follows:

3 **FINDINGS OF FACT**

4 1. Petitioner is a body corporate and politic established and existing pursuant to Health  
5 and Safety Code §40000, *et seq.* and §40400, *et seq.*, and is the sole and exclusive local agency with  
6 the responsibility for comprehensive air pollution control in the South Coast Basin.

7 2. Respondent owns and operates the facility located at 1 Pebbly Beach Road, Avalon,  
8 CA 90704 ("Facility") within the District's jurisdiction and subject to the District's regulations.

9 3. Respondent maintains and is responsible for the operation of equipment described in  
10 SCAQMD A/N 595203 as INTERNAL COMBUSTION ENGINE, LEAN BURN, NON-  
11 EMERGENCY, UNIT NO. 15, DIESEL FUEL, EMD, MODEL 16-710G4B, TWO CYCLE, WITH  
12 AFTERCOOLER, TURBOCHARGER, 3900 HP WITH GENERATOR, 2800 KWA, hereinafter  
13 "Unit 15." Unit 15 is vented to air pollution control equipment consisting of a selective catalytic  
14 reduction module and a CO oxidation catalyst module, operated pursuant to SCAQMD A/N 548965.  
15 Unit 15 is one of six diesel engines providing electric power to Santa Catalina Island.

16 4. In 2017, Respondent performed a zero-time overhaul on Unit 15, which resulted in a  
17 "reconstruction" of the engine. Under various federal and SCAQMD rules, including Rule  
18 1470(b)(47)(B), a reconstructed engine is considered a "new" engine if the costs of reconstruction  
19 equal 50% or more of the lowest-available purchase price of a new, comparably-equipped engine.  
20 The costs of the 2017 zero-time overhaul of Unit 15 exceeded this 50% threshold, and thus Unit 15  
21 was subject to the emission limits and other requirements for "new" engines under those federal and  
22 SCAQMD rules.

23 5. When the permit to construct was issued for the zero-time overhaul in 2017, the permit  
24 conditions related to Rule 1470 were not changed from those in the then-existing permit to operate,  
25 and the 0.01 g/bhp-hr particulate matter (PM) emission limit for new engines under Rule  
26 1470(c)(4)(A) was inadvertently omitted from the emission limits applicable to Unit 15 in the permit.

27 6. Petitioner and Respondent agree that the 0.01 g/bhp-hr PM emission limit for "new"  
28 engines under Rule 1470 should have been included in the permit conditions applicable to Unit 15

1 after the 2017 zero-time overhaul. However, even if a permit were issued correcting the omission,  
2 Unit 15 would not have been able to meet the 0.01 g/bhp-hr PM emission limit, and still cannot.

3 7. Even though it cannot meet the applicable PM emission limit under Rule 1470, Unit  
4 15 is the lowest-emitting engine for NOx and CO among the six engines at the Facility, and  
5 preferential operation of Unit 15 allows the Facility to meet a lower facility-wide NOx limit than  
6 would otherwise be possible. While Respondent could operate the other five engines located at the  
7 Facility in lieu of Unit 15, this would increase overall emissions and Respondent would be unable to  
8 comply with the facility-wide NOx limit in its Title V permit.

9 8. Petitioner and Respondent agree that a stipulated order for abatement should be issued  
10 to assure that (i) operation of the Equipment be done with appropriate conditions, including  
11 monitoring, recordkeeping, and reporting to the District; and (ii) a feasible plan for achieving  
12 compliance be developed, approved, and implemented as expeditiously as practicable.

### 13 CONCLUSION

14 1. The operation of the Equipment will result in a violation of the PM limit for “new”  
15 engines in District Rule 1470 whenever Unit 15 is operated.

16 2. The issuance of the prayed-for Stipulated Order for Abatement is not expected to  
17 result in the closing or elimination of an otherwise lawful endeavor, but if it does result in such  
18 closure or elimination, it would not be without a corresponding benefit in reducing air contaminants.

19 3. This Stipulated Order for Abatement is not intended to be nor does it act as a  
20 variance.

21 4. The issuance of this Stipulated Order for Abatement upon a fully noticed hearing  
22 will not constitute a taking of property without due process of law.

23 5. There is good cause to issue this Stipulated Order for Abatement to assure that  
24 operation of the Equipment is done in a manner that will minimize and mitigate excess emissions  
25 and bring the Facility into compliance as expeditiously as practicable.

**ORDER**

THEREFORE, subject to the aforesaid statements and good cause appearing, the Hearing Board hereby orders Respondent to immediately cease and desist from violating District Rule 1470, or in the alternative comply with the following conditions and increments of progress:

**CONDITIONS AND INCREMENTS OF PROGRESS**

1. Respondent shall provide the following to South Coast AQMD (cperri@aqmd.gov) no later than January 4, 2022:

- a. The manufacturer specification sheet showing the maximum allowable back pressure for Unit 15;
- b. The current measured back pressure on Unit 15 at minimum, average, and maximum load;
- c. All correspondence to date from Johnson Matthey and EMD concerning SCE's inquiry as to the feasibility of a diesel particulate filter (DPF) on Unit 15.

2. Respondent shall begin to investigate the feasibility of installing an active DPF on Unit 15 by contacting at least one active DPF manufacturer no later than January 4, 2022. Respondent shall provide South Coast AQMD (cperri@aqmd.gov) with all correspondence from the DPF manufacturer concerning that inquiry within one week after the initial contact and every two weeks thereafter as long as discussions with the DPF manufacturer are continuing. Respondent shall provide a report to South Coast AQMD (cperri@aqmd.gov) by January 18, 2022, detailing the findings of the investigation of the feasibility of installing an active DPF on Unit 15, including all technical details relating to the conclusion as to feasibility, any supporting documentation, and any other information necessary for South Coast AQMD to evaluate the validity of the conclusion.

3. If either an active or passive DPF is jointly determined by South Coast AQMD and SCE to be technically feasible for Unit 15, Respondent shall submit required permit applications no later than 14 days after the feasibility determination is made, with expedited processing requested and paid for. Respondent shall place a purchase order for the DPF within 7 days of receipt of the South Coast AQMD permit, and shall request and pay for expedited processing by the manufacturer,

1 if available. Respondent shall commence installation of the DPF on Unit 15 within 10 days of receipt  
2 of the DPF and shall achieve final compliance no later than 60 days after installation is commenced.

3 4. If SCE and South Coast AQMD do not reach agreement as to whether either an active  
4 or passive DPF is feasible, SCE and South Coast AQMD agree to bring the issue back to the Hearing  
5 Board for consideration.

6 5. Beginning January 10, 2022, Respondent shall: (a) assess the feasibility and the  
7 environmental, service, and operational impacts of increasing the use of the microturbines that are  
8 both permitted and currently operational at the Pebbly Beach facility; and (b) shall report the results  
9 of that assessment to the South Coast AQMD by March 18, 2022. The assessment shall include a  
10 conclusion regarding whether at least 1,270,000 kWh of power can be generated by the  
11 microturbines each calendar year until Unit 15 is brought into compliance, and if not, the maximum  
12 kWh/year of electric power production that can be reasonably and reliably achieved using those  
13 microturbines.

14 6. Respondent shall, by January 18, 2022, begin investigating the feasibility of the  
15 following:

- 16 a. Using biodiesel or renewable diesel fuel for Unit 15 by contacting at least one  
17 biodiesel or renewable diesel supplier and provide South Coast AQMD with all  
18 correspondence from the biodiesel or renewable diesel supplier concerning that  
19 inquiry;
- 20 b. Installing DPFs on all other engines at Pebbly Beach by contacting at least one DPF  
21 manufacturer and provide South Coast AQMD with all correspondence from the  
22 DPF manufacturer concerning that inquiry;
- 23 c. Installing a 100kW-250kW fuel cell at the Pebbly Beach facility;
- 24 d. Installing a 100kW-400kW PV solar system at the Pebbly Beach facility and provide  
25 South Coast AQMD with the preliminary results of that investigation.
- 26 e. Respondent shall calculate daily PM-10 emissions from each of the engines based  
27 on the source test data presented in the Petition. Petitioner will evaluate how the  
28 engines operate to reduce approximately 6 pounds of diesel PM-10 daily.

Respondent shall implement this procedure if it determined feasible to reduce daily PM-10 emissions.

7. By April 1, 2022, Respondent shall submit to the South Coast AQMD (cperri@aqmd.gov and mreichert@aqmd.gov) a report and preliminary action plan describing options determined to be infeasible and evaluating feasible options resulting from the analyses described in Conditions 5 and 6 (and any other options or combinations of options considered by Respondent) and outlining the strategy selected from these options. In evaluating these options and designing a strategy, Respondent shall examine whether some subset or smaller version of the option(s) would be feasible and shall endeavor in good faith to find one or more options feasible for implementation. The report shall include for all options considered, whether determined to be feasible or infeasible, all technical details relating to the analysis, all supporting documentation, and any other information necessary for South Coast AQMD to independently evaluate Respondent's determinations and conclusions.

8. By July 8, 2022, Respondent shall submit to the South Coast AQMD (cperri@aqmd.gov and mreichert@aqmd.gov) a final plan including detailed descriptions of the proposed solution and associated increments of progress and deadlines by which each of the stated milestones shall be met in the form of a Gantt Chart. Respondent shall offer to consult with the South Coast AQMD by early August 2022.

9. If the South Coast AQMD does not object to Respondent's final selection by August 5, 2022, Respondent shall submit complete applications to South Coast AQMD no later than August 19, 2022 for a Permit to Construct as necessary for any new equipment needed to achieve the selection. Respondent shall request the application be reviewed on an expedited basis and pay all applicable fees at the time the application is submitted. Respondent shall also submit and request and pay for expedited processing, if available, any required applications to local, state, or federal agencies for necessary permits by August 19, 2022.

10. Respondent shall complete and issue all necessary purchase orders for any equipment necessary to achieve the strategy set forth in Conditions 8 and 9 within 30 days of the issuance of the last of all required agency approvals, including the South Coast AQMD Permit to Construct.

11. If Respondent will be implementing a plan developed under Conditions 5-10, Respondent shall install all necessary equipment and have the equipment fully operational within six months of either receiving a South Coast AQMD Permit to Construct and all necessary permits from other agencies, or receiving the required equipment, whichever comes later.

12. The Parties shall return to the Hearing Board for a status and modification hearing on July 19, 2022.

13. The Hearing Board may modify this Order for Abatement without the stipulation of the parties upon a showing of good cause therefore, and upon making the findings required by Health and Safety Code Section 42451(a) and District Rule 806(a). Any modification of the Order shall be made only at a public hearing held upon 10 days published notice and appropriate written notice to Respondent.

14. Unless terminated earlier, the Hearing Board shall retain jurisdiction over this matter until January 4, 2024, at which time this Order for Abatement, if it has not been properly extended, shall expire.

15. This Order for Abatement does not act as a variance, and Respondent is subject to all rules and regulation of the District, and with all applicable provisions of California law. Nothing herein shall be deemed or construed to limit the authority of the District to issue Notices of Violation, or to seek civil penalties, criminal penalties, or injunctive relief, or to seek further orders for abatement, or other administrative or legal relief.

**FOR THE BOARD:**

Mohan Balagopalan, Vice Chair

**DATED:**

1-6-2022

Reviewed by Kelly Henderson, Attorney for Respondent

Prepared by Mary J. Reichert, Attorney for Petitioner

*Southern California Edison*  
*A.23-05-010 – SCE 2025 GRC*

**DATA REQUEST SET T U R N - S C E - 1 1 7**

**To: TURN**

**Prepared by: Krystal Stangeland**

**Job Title: Sr Project Manager**

**Received Date: 4/24/2024**

**Response Date: 5/1/2024**

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**Question 35:**

Refer to page 78 of Ex. SCE-16. Provide any communications with SCAQMD indicating that the first or second abatement order for Unit 15 requires any onsite solar installed at the Pebbly Beach Generating Station to be owned by SCE.

**Response to Question 35:**

SCE and SCAQMD did not discuss ownership of the required onsite solar at PBGS.