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

In the Matter of  
**AES ALAMITOS, LLC**  
Order Granting a Short Variance  
Section 42350 of the California  
Health and Safety Code

Case No. 5278-3  
Facility ID No. 115394  
**(Proposed) FINDINGS AND DECISION  
FOR AN ORDER GRANTING A  
SHORT VARIANCE AND (Proposed)  
ORDER**  
Hearing Date: February 21, 2024

**FINDINGS AND DECISION OF THE HEARING BOARD**

This petition for a short variance was heard on the consent calendar on February 21, 2024, pursuant to notice and in accordance with the provisions of California Health and Safety Code Section 40823 and District Rule 510. The matter was placed on the Consent Calendar pursuant to the Joint Stipulation to Place Matter on Consent Calendar. The following members of the Hearing Board were present: Cynthia Verdugo-Peralta, Chair; Robert Pearman, Vice Chair; Jerry P. Abraham, MD; Micah Ali; and Mohan Balagopalan. Petitioner AES, Alamos LLC (“Petitioner”), represented by Noah Perch-Ahern, of the law firm Greenberg Glusker Fields Claman & Machtinger LLP, did not appear. Respondent, Executive Officer, represented by Daphne Hsu, Principal Deputy District Counsel, did not appear. The public was given the opportunity to testify. The Joint Stipulation to Place Matter on Consent Calendar, Declaration of Jose Perez, and the Proposed Findings and Decision of the Hearing Board was received as evidence, and the case submitted. The Hearing Board finds and decides as follows:

1 **Nature of Business and Location of Facility**

2 Petitioner operates a natural gas-fired, combined-cycle gas turbine (“CCGT”) electric  
3 power generating facility located at 690 N. Studebaker Road, Long Beach, CA 90803 (“Facility”)  
4 that provides a critical supply of electric energy to the Southern California power grid.

5 **Equipment and Permit to Construct/Operate**

6 The equipment at issue in the subject variance petition includes two Selective Catalyst  
7 Reduction (SCR) units (i.e., device nos. C170 and C178) connected to two high-efficiency 237-  
8 MW combined-cycle gas turbine generators, CCGT-1 and CCGT-2 (i.e., device nos. D165 and  
9 D173) operated pursuant to the Facility’s Title V/RECLAIM permit, ID# 115394.

10 The pressure gauges are installed at the inlet and outlet of both SCR units to continuously  
11 measure differential pressure (“DP”) across the catalyst beds pursuant to Permit Condition  
12 D12.11. DP generally indicates when maintenance of a SCR unit may be appropriate.

13 **SUMMARY**

14 Petitioner will be in noncompliance with South Coast AQMD Rules 203(b), 2004(f)(1),  
15 and 3002(c)(1) based on a temporary exceedance of the allowable monthly average DP limit  
16 required by the Facility’s Title V Permit Condition D12.11. Petitioner intends to achieve  
17 compliance by diligently monitoring DP during the variance period and then performing  
18 necessary maintenance on both SCR units during a forthcoming maintenance outage scheduled in  
19 April 2024. An interim variance was granted at a hearing held on Tuesday, January 30, 2024.

20 **FINDINGS OF FACT AND CONCLUSIONS**

21 Following are the facts and conclusions supporting the findings set forth in Health and  
22 Safety Code Section 42352 necessary to grant the variance. The Executive Officer did not  
23 oppose the granting of the variance.

24 **a. The petitioner for a variance is, or will be, in violation of Section 41701 or of any  
rule, regulation or order of the District.**

25 1. Title V Permit Condition D12.11 requires, in relevant part, that, based on a  
26 monthly average “[t]he pressure differential shall not exceed 1.6 inches water column.”

27 2. Beginning in late December 2023, Petitioner first detected an anomalous spike in  
28 the differential pressure recorded for both SCR units.

1           3.       From late December 2023 to mid-January 2024, Petitioner investigated the cause  
2 of the anomalous spike, including verifying the proper functioning of equipment and  
3 instrumentation.

4           4.       In mid-January, Petitioner’s investigation confirmed that the anomalous spike is an  
5 accurate measurement and was likely to cause noncompliance with the monthly average  
6 differential pressure monitoring limit set forth in Permit Condition D12.11.

7           5.       Absent a variance, Petitioner would be in noncompliance with South Coast  
8 AQMD Rules 203(b), 2004(f)(1), and 3002(c)(1), which require compliance with permit  
9 conditions, as Petitioner will need to temporarily exceed the allowable monthly average  
10 differential pressure limit required by the Facility’s Title V Permit Condition D12.11.

11           **b(1). Non-compliance with South Coast AQMD Rule(s) is due to conditions beyond the  
12 reasonable control of the petitioner.**

13           1.       The Facility’s temporary exceedance of the monthly average DP limit is beyond  
14 Petitioner’s reasonable control because it arose suddenly and the Facility has never experienced  
15 any prior exceedance until now. Prior routine maintenance had kept the DP within permit limits.

16           2.       Petitioner could not have reasonably discovered the potential violation any sooner  
17 because there were no prior anomalous DP measurements until late December 2023 at which time  
18 the Petitioner quickly investigated the underlying cause and confirmed a potential violation  
19 shortly thereafter in mid-January 2024.

20           3.       Petitioner has assessed options for avoiding noncompliance while performing the  
21 necessary corrective action, but there are no options within Petitioner’s reasonable control or  
22 means other than a forced maintenance outage or curtailment (addressed below) that would  
23 require loss of electricity supply and more than \$1 million in costs to Petitioner.

24           **b(2). Requiring compliance would result in either (1) an arbitrary or unreasonable  
25 taking of property, or (2) the practical closing and elimination of an unlawful business.**

26           1.       Denial of the variance would necessitate an immediate three-day outage for both  
27 CCGT units to clean the catalyst beds, which would involve significant maintenance costs and  
28 electric sale losses in excess of \$1 million, as well as loss of electric energy supply to the  
Southern California power grid during the outage period.

1           2.       Petitioner already has a plant-wide maintenance outage scheduled in April 2024 at  
2 which time maintenance of the two SCR units has been scheduled to be performed with a deep  
3 cleaning of the catalyst beds and will be able to fully resolve the underlying cause of the DP  
4 exceedance. This pre-scheduled maintenance will be performed regardless of whether an  
5 immediate maintenance is performed because it is part of an annual maintenance overhaul that  
6 will involve more extensive SCR maintenance and deep cleaning of catalyst components that  
7 would not practicably be performed as part of an immediate outage and maintenance; further, the  
8 annual maintenance has already been scheduled, budgeted, and approved by the grid operator  
9 (CAISO). Denial of the variance would instead require an additional earlier and unanticipated  
10 power outage spanning at least three days to perform superfluous maintenance on the SCR units.

11           3.       Denial of the variance would therefore result in an unreasonable taking of  
12 Petitioner's property and the temporary closure of the Facility.

13           **c. The closing or taking would be without a corresponding benefit in reducing air  
14 contaminants.**

15           1.       Petitioner does not anticipate any increase in air contaminants during the variance  
16 period because the DP merely indicates when maintenance of the SCR catalyst bed may be  
17 appropriate and therefore does not have any impact on air contaminants from the Facility.

18           2.       The Facility complies with emissions limits for the subject emission units in  
19 accordance with other permit conditions and expects to continue to do so.

20           3.       At the interim variance hearing, the Board determined that allowing the Facility to  
21 operate under variance would not lead to an increase in air contaminants.

22           4.       At the interim variance hearing, the Board determined that a denial of the variance  
23 would not result in a corresponding benefit in reducing air contaminants.

24           **d. The applicant for the variance has given consideration to curtailing operations of the  
25 source in lieu of obtaining a variance.**

26           1.       Petitioner has given consideration to curtailment; however, Petitioner has  
27 determined that curtailment would not be a reasonably viable alternative because it would create  
28 an undue burden on Petitioner of over \$1 million in economic losses and impact to the public  
from loss of electric supply to the power grid.

1           2.       Petitioner determined that curtailment would be even less practical and feasible  
2 than a maintenance outage because the curtailment period could exceed three months, may be  
3 denied by the grid operator (CAISO) altogether, may not fully resolve the underlying issue, and  
4 would create substantial economic loss and significant loss of electric supply.

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6           **e. During the period the variance is in effect, that the applicant will reduce excess  
emissions to the maximum extent feasible.**

7           1.       Petitioner does not anticipate any excess emissions during the variance period  
8 because the monthly average DP limit does not have any impact on the Facility's emissions and  
9 instead merely indicates when maintenance of the SCR units may be appropriate. Any increased  
10 emissions would be detected by the continuous emissions monitoring system and appropriately  
11 mitigated.

12           2.       AES is subject to emissions limits pursuant to other Title V permit conditions,  
13 with which it is fully in compliance, including: A195.8 (hourly average NOx emission  
14 concentration limit), A195.9 (hourly average CO emission concentration limit), A195.10 (hourly  
15 average VOC emission concentration limit), A195.15 (stack ammonia slip emission concentration  
16 limit), C1.3 (startup and shutdown duration and mass emission limits), and D12.9 (hourly average  
17 ammonia injection rate limit). This will ensure no excess emissions will be created due to the  
18 temporary exceedance of the SCR DP limit. Petitioner has not had any issues to date in meeting  
19 emissions limits for the subject emission units at the Facility.

20           3.       During the period the variance is in effect, by complying with the conditions of the  
21 Order, Petitioner will reduce excess emissions (if any) to the maximum extent feasible; there are  
22 no anticipated excess emissions.

23           **f. During the period the variance is in effect, that the applicant will monitor or  
24 otherwise quantify emissions levels from the source, if requested to do so by the  
25 District, and report these emission levels to the District pursuant to a schedule  
26 established by the District.**

27           1.       Petitioner has been and will continue to be in compliance with all emissions  
28 monitoring, emissions limitations, and other Title V permit conditions during the variance period.



1 emissions from that turbine exceed the permit limit as a direct result of an elevated pressure  
2 differential across the SCR.

3 5. Petitioner shall comply with Condition No. D12.9. If there are any deviations  
4 from this permit condition during the variance period, Petitioner shall promptly notify the South  
5 Coast AQMD by sending emails to AQ Inspector II Patricia Ramirez ([pramirez@aqmd.gov](mailto:pramirez@aqmd.gov)) and  
6 Supervising AQ Inspector Thomas Lee ([tlee2@aqmd.gov](mailto:tlee2@aqmd.gov)).

7 6. The Petitioner shall notify the Clerk of the Board and Principal Deputy District  
8 Counsel Daphne Hsu ([dhsu@aqmd.gov](mailto:dhsu@aqmd.gov)) in writing when final compliance is achieved.

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11 FOR THE BOARD: \_\_\_\_\_

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13 DATE SIGNED: \_\_\_\_\_  
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