

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

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| In The Matter of: |) | |
| |) | Case No. 5855-7 |
| BETA OFFSHORE OPERATING, LLC |) | |
| |) | |
| Order Granting Modification to a Regular Variance |) | |
| |) | |
| Section 42350 of the California Health and Safety Code |) | |
| _____ |) | |

[PROPOSED] FINDINGS AND DECISION OF THE HEARING BOARD

Petitioner’s request for modification to conditions to a regular variance was heard on the Hearing Board’s Consent Calendar on **July 18, 2024**, as ordered pursuant to notice and in accordance with the provisions of California Health and Safety Code Section 40826. The following members of the Hearing Board were present: Micah Ali, Chair; Robert Pearman, Esq., Vice Chair; Jerry P. Abraham, M.D., MPH, CMQ; Mohan Balagopalan and Cynthia Verdugo-Peralta. Petitioner, Beta Offshore Operating, LLC (hereinafter also referred to as "Petitioner" or “Beta Offshore” or “Beta”), represented by Ivan Tether, Attorney, Tether Law, did not appear. The Executive Officer of the South Coast Air Quality Management District ("District"), represented by Josephine Lee, Senior Deputy District Counsel, did not appear. The parties filed with the Hearing Board a Joint Stipulation to Have This Matter Placed on the Consent Calendar of the Hearing Board. Petitioner filed with the Hearing Board the Declaration of Jeff Ortloff (Director of Facilities Engineering for Amplify Energy Corp., Beta Offshore’s parent company) and the Declaration of Ivan Tether, both declarations in support of the Hearing on modification of variance conditions for a regular variance. The parties submitted Proposed Findings and Decision of the Hearing Board. The public was given an opportunity to testify. The matter was submitted and evidence received. The Hearing Board finds and decides as follows:

Nature of Business and Location of Facility

1. Petitioner, with a facility located on OCS Lease Parcels P300/P301 of the Outer Continental Shelf, approximately nine miles offshore from Huntington Beach, CA

(Facility ID No. 166073), is an oil and gas producer. Beta Offshore includes three offshore platforms, Ellen, Elly and Eureka.

Equipment and Permit to Construct/Operate

2. On December 7, 2023, the Hearing Board granted Beta Offshore a regular variance until November 16, 2024 from certain requirements under District Rules 1110.2, 1134, 1100 and 2012 and 3002, as well as permit conditions detailed below in Paragraph 6. The variance was granted for the following equipment: Six Internal Combustion (Rig) Engines: Devices D81 through D86, Application/Permit Numbers (A/N) 630158, 630160, 630161, 630221, 630222, and 630224; Six Selective Catalytic Reduction (SCR) systems to be retrofitted to those six IC (Rig) Engines: Devices C197 through C202, A/N 630226, 630230, 630231, 630266, 630267 and 630268; Three Centaur Gas Turbines: Devices D98 through D100, A/N 638605, 638607 and 638608; and Three SCR systems to be retrofitted to those three Centaur Turbines: Devices C203 through C205, A/N 638609, 638610 and 638611. The variance was also granted for Three Saturn Turbines, Devices D95 through D97, A/N 516038, 516039 and 516040, which have since ceased operation in compliance with Variance Condition 1.

SUMMARY OF THE CASE FOR THE REGULAR VARIANCE

3. Beta delivers the crude oil produced from the Platforms to the refinery by pipeline. Beta relies on the six internal combustion (IC) engines and six turbines (now only the three Centaur Turbines) referenced above to operate the platforms. Amendments to District Rules 1110.2 on November 1, 2019 and 1134 on February 4, 2022 require substantial NOx reductions from these engines and turbines. (The three Saturn Turbines have now been replaced by electric motors and that element of compliance has been completed.)

4. While Beta began its Air Quality (AQ) Compliance Project in August 2018 in anticipation of the rule amendments, that progress was interrupted in the fall of 2021 (until April 2023) when the impact of prohibited anchor dragging by two third-party container vessels that snagged and ruptured Beta's pipeline manifested into an oil spill.

For eighteen months Beta shut down all production and had little if any idea whether it would ever be able to resume normal operations. During that time, Beta was required by federal law to maintain personnel and facility safety systems on the platforms, yet had no revenue from the platforms. Beta primarily devoted resources to investigating and repairing damage to the pipeline. Beta did timely apply for the District permits required for the AQ Compliance Project.

5. On or about April 7, 2023, three federal agencies, with input from the California State Lands Commission, authorized Beta to resume use of the pipeline which allowed Beta to return to production. Immediately upon receipt of pipeline authorization, Beta reinstated and expedited the AQ Compliance Project, yet determined in the summer of 2023 that the Project could not be completed by the end of the year and that Beta would require variance relief.

Rules and Permit Conditions for Which Beta Is Out of Compliance

6. As of January 1, 2024, Beta's Saturn Turbines and Centaur Turbines were out of compliance and as of December 31, 2023, Beta's Rig Engines were out of compliance. With the exception of the equipment detailed in Paragraph 7 as having achieved compliance, below, Beta's equipment continue to be out of compliance with the following Rules and Permit Conditions because of the interruption in operations triggered by the third-party anchor dragging and pipeline rupture:

- Rule 1134(d)(3), (e)(2) and (e)(3) -- The reduced NOx emission limits cannot be achieved by 01/01/2024
- Rule 2012 – Cannot comply until after SCR retrofit for reporting lower NOx limits
- Rule 11110.2(d), (e)(2), (e)(4), (e)(10), (f)((1)(C) and (f)(1)(D) -- The RECLAIM facility cannot meet the applicable NOx emission limit by 12/31/2023
- Rule 1303 (a)(1)-BACT -- Operator cannot comply with equipment being equipped with BACT until SCR are installed

- Rule 1100(d)(1)(B) -- Operator cannot meet the RECLAIM transition requirements for Rule 1110.2 by 12/31/2023, as required by this reference in Rule 1100.
- Permit Condition (PC) A63.15 – NOx emissions may exceed 6.1 lb/day limit for Rig Engines.
- PC A63.16 – NOx emissions may exceed 117.5 lb/day for gas turbines
- PC D12.8 – Temperature gauge cannot be monitored and maintained until SCR is installed to Rig Engines
- PC D12.9 – Pressure gauge cannot be monitored and maintained until SCR is installed to Rig Engines
- PC D12.10 – Flow meter cannot indicate the urea injection flow rate until SCR is installed to Rig Engines
- PC D12.11 -- Flow meter cannot indicate the urea injection flow rate until SCR is installed (rig engines)
- PC D12.12 -- Temperature gauge cannot be monitored and maintained until SCR is installed (gas turbines)
- PC D12.13 -- Pressure gauge cannot be monitored and maintained until SCR is installed (gas turbines)
- PC D12.14 -- Flow meter cannot indicate the urea injection flow rate until SCR is installed (gas turbines)
- PC D29.5 -- Source test at the outlet of the SCR serving the equipment cannot be performed until SCR is installed (rig engines)
- PC D29.6 -- Source test at the outlet of the SCR serving the equipment cannot be performed until SCR is installed (gas turbines)
- PC E193.2 -- Cannot assure compliance with backpressure limit until equipment is installed and operating
- PC E448.4 -- Rig engines will be in noncompliance of the I&M plan
- PC E448.9 -- Operator may not be able to comply with timeline requirements of the I&M plan submittal
- PC H23.10 -- Rig engines cannot comply with requirements in Rule 1110.2 by 12/31/2023
- PC H23.9 -- Gas turbines cannot comply with requirements in Rule 1134 by 1/1/2024

Rules, Permit Conditions and Variance Conditions for Which Beta Achieved

Compliance

7. As of January 27, 2024, Beta's Saturn Turbines ceased operation and were no longer in noncompliance with the following Rules and Permit Conditions:

- Rule 1134(d)(3), (e)(2) and (e)(3) -- The reduced NOx emission limits cannot be achieved by 01/01/2024 (still applies to the Centaur

- Turbines)
- PC A63.16 – NOx emissions may exceed 117.5 lb/day for gas turbines (still applies to the Centaur Turbines)
 - PC E448.9 -- Operator may not be able to comply with timeline requirements of the I&M plan submittal (still applies to the Centaur Turbines)
 - PC H23.9 -- Gas turbines cannot comply with requirements in Rule 1134 by 1/1/2024 (still applies to the Centaur Turbines)

Ceasing operation of the Saturn Turbines completed compliance with Variance Condition 1 (Ceasing operation of the three Saturn Turbines) and Variance Condition 2 (Only gave Beta discretion to decide the sequence). Timely submittal of a Form 200-C to inactivate the Permits for the Saturn Turbines complied with Variance Condition 3.

Beta complied with Variance Condition 11 by timely submitted the source test protocol to the District to determine Rule 1110.2 compliance of the Rig Engines on February 5, 2024. Beta completed retrofit of three of the six Rig Engines, timely complying with Variance Condition 12, subparts a, b and c.

Variance Condition 5 and Requested Modification

8. Under the Regular Variance, Beta is subject to twenty-two (22) Conditions (Number 13 of 23 was omitted) detailed in the December 15, 2023 Minute Order recording the Hearing Board's granting of the regular variance on December 7, 2023. At the April 23, 2024 Hearing, the Hearing Board granted limited calendar date extensions for Beta to complete retrofitting the three Centaur Turbines (Variance Condition 5, subparts a, b and c) and for retrofitting the fourth Rig Engine (Variance Condition 12, subpart d). The Hearing Board also clarified the breadth of the emergency exception to the limit in Variance Condition 9 on operating more than two of the three Centaur Turbines at a given time.

In their petition for the July 18, 2024 hearing, Beta requested modification of Conditions 5.a and 5.b, to extend only the calendar date deadlines to complete the retrofitting of the first two Centaur Turbines. To be sure that Beta will have adequate time to comply with the Centaur retrofitting calendar date deadlines, Beta requested an additional sixty (60) days (to August 29, 2024) to complete the retrofitting of the first Centaur and an additional

thirty (30) days (to September 29, 2024) to complete the retrofitting of the second Centaur. Beta made a request of this duration out of an abundance of caution to provide time for any further unanticipated events, including potential future extreme weather. Directly below are the underlined specific changes Beta requested to Variance Condition 5:

Variance Condition 5. Petitioner shall complete the retrofit of the Centaur Turbines according to the following schedule:

- a. Within seventy-five (75) days of receipt of the selective catalytic reduction (“SCR”) system for at least one of the three Centaur Turbines and no later than ~~June 30, 2024~~ August 29, 2024.
- b. For the second of the three Centaur Turbines, within sixty (60) days of completing the commissioning of the first Centaur Turbine and no later than ~~August 30, 2024~~ September 29, 2024. (Commissioning is required to ensure the safety and reliability of each device, and includes processes and tests to ensure all systems and components have been installed, hooked up, and programmed properly. This also includes management of change (MOC), pre-start safety review (PSSR) and quality assurance/quality control (QA/QC) sign-offs by the company.)

Beta will be able to comply with the parts of Variance Condition 5 that specify the time allowed for retrofit after a specific event, i.e., (a) “Within seventy-five (75) days of receipt of the selective catalytic reduction (‘SCR’) system” for the first retrofit and (b) for the second retrofit “within sixty (60) days of completing the commissioning of the first Centaur Turbine.” Beta has not, however, been able to meet the June 30, 2024 date deadline for the first retrofit and is concerned that further unanticipated events, such as extreme weather, may delay meeting the August 30, 2024 deadline for the second retrofit.

Several factors contribute to the delay: Components for the Centaur retrofits are produced by manufacturers in Florida, Connecticut, New Jersey, Maine, Oklahoma and Louisiana. Beta consistently pressed these vendors to expedite manufacturing and delivery. Once all components were gathered at the Amplify Facility in Broussard, Louisiana, however, it soon became clear that certain components did not fit together properly or were otherwise defective, and required significant rework before shipping to Beta Offshore’s facility. Rather than creating additional delay by going back to the

original manufacturers and/ or vendors for this rework, Amplify took responsibility to make and pay for the necessary alterations to the defective components. Beta provided to the Hearing Board annotated photographic examples of the types of defects causing the delay in receipt of the SCR Systems by Beta in California. During its quality assurance/quality control (QA/QC) and rework of the received SCR components, Beta experienced additional delay from extreme weather events in Broussard, Louisiana and Houston, Texas. Beta provided to the Hearing Board news reports about this extreme weather in or very near the location of Amplify's component assembly facility and Amplify's Houston headquarters, and a timeline, starting at the April 23, 2024 Status and Modification hearing, and listing the events causing delay and Amplify's responses to minimize delay in getting the SCR Systems to Beta in California.

Beta received in California the repaired and now-matched SCR components for retrofit of the first Centaur Turbine on June 19, 2024. Please note that the first Centaur to be retrofitted is not operating and will not be operating until the retrofit is completed, so no additional emissions will result from the delay.

Additional Findings:

9. **Final Compliance:** Beta can reasonably be expected to achieve compliance by November 16, 2024.

10. **Excess Emissions:** Beta's actual excess emissions, which are calculated, reported to the District and paid for month-by-month have proven to be substantially less than calculated in their Petition for the regular variance. Beta's Report of Excess Emissions and Fees for the Month of May 2024 showed actual excess emissions of 568 lbs/day, and mitigation of 2,937 lbs/day. There will be no (0%) Excess Opacity under the requested relief.

11. **Harm to Beta if Modifications Not Granted:** If the requested modifications to the existing variance were not granted, Beta would no longer be able to operate the Centaur Turbines, which are relied on to power Platform operations. This would result in

a complete shutdown of production and termination of production revenues. While substantial, the expected economic losses for Beta are extremely variable and dependent on multiple factors, including but not limited to commodity prices, operating expenses, and required capital investments. The revenues currently generated from Beta production continue to be critical to funding the large investment required to achieve the compliance discussed in this petition. If the requested modifications are not granted and this results in noncompliance and shutdown of operations, about eighty-five (85) employees would be laid off, and many supply chains would be negatively impacted or closed. These services directly impact the local community and taxable state revenue. In the community, the following would be among those negatively affected: marine / dock services, local transportation, skilled laborers and professionals, such as engineers and consultants, as well as local manufacturing and material suppliers. Additionally, the royalties paid by Beta to the Federal government help fund local offices and personnel at the Bureau of Safety and Environmental Enforcement (BSEE) and the Bureau of Ocean Energy Management (BOEM). Beta also works closely with the University of Southern California, NASA and NOAA by supporting their oceanic and atmospheric research as they utilize Beta offshore equipment when that equipment is operating.

ORDER

THEREFORE, good cause appearing, the Hearing Board orders as follows:

A. Petitioner is granted the following modifications to Variance Condition 5 imposed by the Regular Variance granted on December 7, 2023 and modified on April 23, 2024:

Variance Condition 5 is modified to read: Petitioner shall complete the retrofit of the Centaur Turbines according to the following schedule:

a. Within seventy-five (75) days of receipt of the selective catalytic reduction (“SCR”) system for at least one of the three Centaur Turbines and no later than ~~June 30, 2024~~ August 29, 2024.

b. For the second of the three Centaur Turbines, within sixty (60) days of completing the commissioning of the first Centaur Turbine and no later than ~~August 30, 2024~~ September 29, 2024. (Commissioning is

required to ensure the safety and reliability of each device, and includes processes and tests to ensure all systems and components have been installed, hooked up, and programmed properly. This also includes management of change (MOC), pre-start safety review (PSSR) and quality assurance/quality control (QA/QC) sign-offs by the company.)

B. Other than the modifications immediately above, Petitioner is subject to the Conditions imposed upon Petitioner under the Regular Variance granted on December 7, 2023 and modified on April 23, 2024 to the extent these Conditions remain applicable.

BOARD MEMBER: _____

DATED: _____

Prepared by Ivan Tether, Attorney for Petitioner
and Reviewed by Josephine Lee, Senior Deputy District Counsel