EXHIBIT 16

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Attorney for BETA OFFSHORE OPERATING, LLC

HEARING BOARD

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

In the Matter of

the Petition by Beta Offshore Operating, LLC for Extension of the Final Compliance Date and Modification of Variance Conditions of the Regular Variance Case No. 5855-7

DECLARATION OF JEFF ORTLOFF IN SUPPORT OF PETITION FOR EXTENSION OF FINAL COMPLIANCE DATE AND MODIFICATION OF VARIANCE CONDITIONS

<u>Date</u>: November 7, 2024 <u>Time</u>: 9:30 A.M.

DECLARATION OF JEFF ORTLOFF

1. I am the Director of Facilities Engineering for Amplify Energy Corp., Beta Offshore's parent company. In this position, I am responsible for the engineering and design steps necessary for air quality compliance of the oil and gas production platforms known as "the Beta Facility," situated on the Continental Shelf about nine miles off Huntington Beach, CA. Beta Offshore is headquartered at 111 W. Ocean Blvd., Suite 1240, Long Beach, CA 90802. The Facility is located on OCS Lease Parcels P300 and P301. The facts set forth herein are known personally to me to be true and correct, and I could and would so testify under oath if called as a witness.

2. <u>Facility Business</u>: Beta Offshore produces oil and gas from three platforms located about 9 miles offshore from Huntington Beach. Delivery of crude oil to the refinery by pipeline instead of tanker is a major factor in the California Air Resources Board's calculating in 2021 Beta's carbon intensity as the cleanest of all California and Worldwide oil production sent to California refineries. (1.59 grams of CO2 equivalent per megajoule of energy.)

Equipment/Activity	Application/ Permit No.	RECLAIM Permit/Device No.	Date Application/Plan Denied (if relevant, attach copy of denial letter)
Three Centaur Turbines and Associated SCRs			
Gas Turbine, NJ-01-A, Diesel Fuel, Process Gas, Solar Model Centaur GCI-CB-ID, 42 MMBTU/HR with Generator, 2.5 MW	63805	D98	Application approved on 12/28/22
Selective Catalytic Reduction (SCR), Umicore DNX-929 or Cormetech CMHCDST, with Oxidation Catalyst, Johnson Matthey, Model BX-70-D-8, 76 CU. FT. with Urea Injection System	638609	C203	Application approved on 12/28/22
Gas Turbine, NJ-01-B, Diesel Fuel, Process Gas, Solar Model Centaur GCI-CB-ID, 42 MMBTU/HR with Generator, 2.5 MW	638607	D99	Application approved on 12/28/22
Selective Catalytic Reduction, Umicore DNX-929 or Cormetech CMHCDST, with Oxidation Catalyst, Johnson Matthey, Model BX-70-D-8, 76 CU. FT. with Urea Injection System	638610	C204	Application approved on 12/28/22
Gas Turbine, NJ-01-C, Diesel Fuel, Process Gas, Solar Model Centaur GCI-CB-ID, 42 MMBTU/HR with Generator, 2.5 MW	638608	D100	Application approved on 12/28/22

3. Facility Equipment Subject to This Petition:

Selective Catalytic Reduction, Umicore DNX-929 or Cormetech CMHCDST, with Oxidation Catalyst, Johnson Matthey, Model BX-70-D-8, 76 CU. FT. with Urea Injection System Six Rig Engines and	638611	C205	Application approved on 12/28/22
Associated SCRs Internal Combustion Engine, Non-Emergency, EJ- 01A, Diesel Fuel, Caterpillar, Model, D398PCTA, with aftercooler, Turbocharger, 853 BHP with generator, Rig, 600 KW	630158	D81, Platform Ellen	Application approved on 12/28/22
Selective Catalytic Reduction, Umicore DNX- 929 or Cormetech CMHCDST, with Oxidation Catalyst, Johnson Matthey, Model BX-70-D-8, 76 CU.FT. with Urea Injection System	630226	C197	Application approved on 12/28/22
Internal Combustion Engine, Non-Emergency, EJ- 01B, Diesel Fuel, Caterpillar, Model, D398PCTA, with aftercooler, Turbocharger, 853 BHP with generator, Rig, 600 KW	630160	D82, Platform Ellen	Application approved on 12/28/22
Selective Catalytic Reduction, Umicore DNX-929 or Cormetech CMHCDST, with Oxidation Catalyst, Johnson Matthey, Model BX-70-D-8, 76 CU.FT. with Urea Injection System	630230	C918	Application approved on 12/28/22
Internal Combustion Engine, Non-Emergency, EJ-01C, Diesel Fuel, Caterpillar, Model, D398PCTA, with aftercooler, Turbocharger, 853 BHP with generator, Rig, 600 KW	630161	D83, Platform Ellen	Application approved on 12/28/22 <u>Beta respectfully requests</u> <u>that this Engine be removed</u> <u>from the Variance</u> .

Selective Catalytic Reduction, Umicore DNX-929 or Cormetech CMHCDST, with	630231	C199	Application approved on 12/28/22
Oxidation Catalyst, Johnson Matthey, Model BX-70-D-8, 76 CU.FT. with Urea Injection			
System			
Internal Combustion Engine, Non-Emergency, EN-010-E2, Diesel Fuel, Caterpillar, Model, D398PCTA, with aftercooler, Turbocharger, 853 BHP with generator, Rig, 600 KW	630221	D84, Platform Eureka	Application approved on 12/28/22
Selective Catalytic Reduction, Umicore DNX-929 or Cormetech CMHCDST, with Oxidation Catalyst, Johnson Matthey, Model BX-70-D-8, 76 CU.FT. with Urea Injection System	630266	C200	Application approved on 12/28/22
Internal Combustion Engine, Non-Emergency, EN-020-E2, Diesel Fuel, Caterpillar, Model, D398PCTA, with aftercooler, Turbocharger, 853 BHP with generator, Rig, 600 KW	630022	D85, Platform Eureka	Application approved on 12/28/22
Selective Catalytic Reduction, Umicore DNX-929 or Cormetech CMHCDST, with Oxidation Catalyst, Johnson Matthey, Model BX-70-D-8, 76 CU.FT. with Urea Injection System	630267	C201	Application approved on 12/28/22
Internal Combustion Engine, Non-Emergency, EN-030-E2, Diesel Fuel, Caterpillar, Model, D398PCTA, with aftercooler, Turbocharger, 853 BHP with generator, Rig, 600 KW	630224	D86, Platform Eureka	Application approved on 12/28/22
Selective Catalytic Reduction, Umicore DNX-929 or Cormetech CMHCDST, with Oxidation Catalyst, Johnson Matthey, Model BX-70-D-8, 76 CU.FT. with Urea Injection System	630268	C202	Application approved on 12/28/22

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4. <u>Rules, Permit Conditions and Variance Conditions from Which Beta is</u> <u>Requesting Relief</u>: The District Rules and permit conditions under this Petition to Modify remain the same as those for the original Variance Petition. As detailed below in Paragraph 6, Beta respectfully requests the Hearing Board to grant the following relief:

- Condition 5.c: Remove date specific deadline for retrofitting the third Centaur Turbine; and extend the number of days by which the third Centaur Turbine must retrofitted from sixty (60) days after the prior turbines are retrofitted to one hundred twenty-five (125) days.
- Condition 7: Extend the time period for source testing after all three Centaur Turbines are retrofitted from 30 to 60 days, and start that time clock after not only the retrofit but also the commissioning of the three Centaur Turbines.
- Remove Rig Engine D83 from the Variance: Significant mechanical issues require diagnosis and repair prior to commissioning and source testing. D83 will only be run for testing until final passing source test results are submitted to the District.
- Extend the Final Compliance Date to March 24, 2025. With the requested deadline modifications, Beta will remain bound at every step by the number of days allowed to complete the next step toward compliance after completion of the prior step.

5. <u>Steps Taken Since the April 23, 2024 Hearing and Compliance with Existing</u> <u>Conditions</u>:

Summary:

- a. The Saturn Turbines have all been removed from service.
- b. The first three Rig Engines (on Platform Eureka) have been retrofitted with SCR and final source test results have been provided to the District. (One Engine failed its source test by a narrow margin. Beta quickly determined the origin of the failure, installed a new fuel metering system to the engine, and will have the engine re-tested as soon as scheduling is possible, now pre-scheduled for November 21, 2024.)
- c. The first Centaur Turbine completed retrofit on August 27, 2024 and was source tested on or about September 10, 2024. Preliminary indications from the manufacturer and Alliance, the source testing contractor, are that the turbine tested below the NOx emission limit in Rule 1134.

- d. The next three Rig Engines (on Platform Ellen) were retrofitted by September 9, 2024 and were source tested on September 10, 2024. Beta anticipates providing the final source test results to District Staff on or before November 26, 2024.
- e. The second Centaur Turbine completed retrofit and commissioning on or about September 27, 2024 and is pre-scheduled to be source tested on or about November 18, 2024. Based on recent experience, there remains some uncertainty whether the only currently available offshore source testing contractor will be able to complete testing on or about November 18, 2024. If the source testing contractor is not able to complete testing on or about that prescheduled date, source testing would be delayed until January 2025, per the source testing contractor's projection of its availability.

<u>Variance Conditions and Final Compliance Date - Details</u>: Bringing the Facility into air quality compliance requires Beta's action toward equipment subject to revised emission limits from amendment to District Rules 1110.2 and 1134.

Variance Conditions 1 through 3 for the three Saturn Turbines:

Condition 1: <u>Compliance achieved</u>: Cease operation of the Saturn Turbines. All three Saturn Turbines, subject to Rule 1134, have been permanently removed from the Facility and their function has been replaced by electric power from the onshore utility.

Condition 2: Selection of sequence is at the discretion of Petitioner.

Condition 3: <u>Compliance achieved</u>: Petitioner to submit a form 200-C to request inactivation of permits for the three Saturn Turbines. (Devices: D95, D96, D97.)

Variance Conditions 4-11 for the three Centaur Turbines:

Condition 4: <u>Compliance achieved</u>: Beta timely submitted the source test protocol to the District to determine Rule 1134 compliance on February 5, 2024.

Condition 5: <u>Modification requested</u>: <u>Condition 5.c</u>: Beta requests modification to Condition 5.c to remove the date deadlines for completing the retrofitting of the

remaining third Centaur Turbine. In addition, as explained below, Beta will not be able to comply with the Condition's requirement to complete retrofit of the third Centaur Turbine "within sixty (60) days of completing the commissioning of the prior two Centaur Turbines and no later than October 15, 2024."

Beta is not currently on track to meet the October 15, 2024 date deadline to retrofit the third Centaur. Beta needs to be sure that the second Centaur Turbine is in good running order before taking the third Centaur Turbine our of service for retrofitting. The second Centaur Turbine was retrofitted and commissioned on September 27, 2024. While the source testing contractor worked offshore for Beta on October 16, 2024, that time was devoted to a re-test of the first Centaur Turbine, which had exceeded the ammonia limit for its SCR retrofit (1.2 ppm over). Upon completing that test, the source testing contractor insisted it had other pressing work and could not remain to source test the prescheduled second Centaur Turbine. (The source testing contractor made reference to high demand for source testing because of the tighter emission limits under District Rules 1110.2 and 1134.) The next scheduled source test date for the second Centaur Turbine is November 18, 2024. Beginning this date the source testing contractor is scheduled to perform multiple source tests, and as experienced on October 16, 2024, this creates uncertainty. If the source testing contractor is not able to test the second Centaur Turbine on November 18, 2024, then, according to the source testing contractor the next available date is in January 2025. Accordingly, in order to avoid the need for further modifications, and to preserve Hearing Board resources, Beta requests that the Board extend the deadline for retrofit of the third Centaur Turbine consistent with the potential delay in source testing the second Centaur Turbine, i.e., for one hundred and twenty-five (125) days after retrofit and commissioning of the second Centaur Turbine. The requested changes are as follows:

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 August 29, 2024. [*No modification requested.*]

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 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) signoffs by the company.) [*No modification requested*.]

c. For the third of the three Centaur Turbines, within sixty (60) one hundred and twenty-five (125) days of completing the commissioning of the prior two Centaur Turbines and no later than October 15, 2024.

Condition 6: Grants Beta the discretion to select the sequence of Centaur Turbine retrofits.

Condition 7: Deadline for source testing, Modification requested:

Because of the increased time, up to six weeks, required to schedule the only offshore source testing firm that Beta had been able to establish communication with, Beta requests that the time allowed to source test be extended from 30 days to 60 days. In addition, because accomplishing commissioning of a Turbine after its retrofit is can also be time-demanding, Beta requests that the trigger for the 45-day source test requirement be the completing the commissioning as well as the retrofit.

With these modifications, Condition 7 would be:

"At any time after the retrofit of a Centaur Turbine is completed, but no later than thirty (30) sixty (60) days after completing the retrofit and commissioning for all three Centaur Turbines, Petitioner shall conduct a source test pursuant to the requirements of the approved source test protocol to demonstrate Rule 1134 compliance."

Further information is provided below in Paragraph 6, below.

Condition 8: Compliance achieved and continuing. Deadline for submittal of source test

results within 60 days of completion, compliance anticipated with modification requested to Condition 7.

Condition 9: <u>Compliance</u>. Requires Beta to operate no more than two of the three Centaurs Turbines at any one time, except in certain situations. At the April 23, 2024 hearing, the Board clarified that maintenance, source testing and commissioning of new or retrofitted Centaur Turbines, which all require various periods of running three turbines simultaneously, are necessary to protect safety of personnel and the environment. The Board clarified that these activities fit within the existing emergency exception to the limit on running more than two turbines at a time.

Condition 10: <u>Compliance achieved and continuing</u>. Beta maintains a monthly usage log for the Centaur Turbines according to the criteria enumerated in this condition, including any emergency usage under Condition 9 and timely submits the log for the prior month to District Staff.

Conditions 11 through 18 for the six Rig Engines required to be retrofitted and source tested:

Condition 11: <u>Compliance</u>: Beta timely submitted the source test protocol to the District to determine Rule 1110.2 compliance on February 5, 2024.

Condition 12: <u>Compliance achieved</u>: Petitioner shall retrofit the six Internal Combustion Rig Engines to demonstrate compliance with Rule 1110.2(d)(1) according to [the stated schedule]. At the April 23, 2024 hearing, the Board extended the deadline for retrofit of the sixth Rig Engine under Condition 12.6 from fourteen (14) days to thirty (30) days from completion of structural modification and deck extension on Platform Ellen to thirty (30) days from that completion.

Beta has now retrofitted all six Rig Engines, and has source tested five of the six. As discussed below under "Request: Remove Rig Engine D83," one of the six Rig Engines, Device D83 on Platform Ellen, is experiencing mechanical problems that prevent

commissioning and source testing for an as yet undetermined period. Beta requests removal of Device D83 from the Variance.

Rig Engine D86 on Platform Eureka was source tested on July 11, 2024. Final source test results submitted to the District indicate that D86 narrowly failed its source test under the new Rule 1110.2 emission limit, despite a substantial emission reduction from the pre-SCR level.¹ By quickly diagnosing the problem and replacing D86's fuel meter, Beta has taken steps expected to reduce D86's emissions, and a source re-test is pre-scheduled for November 21, 2024.

Request: Remove Rig Engine D83 on Platform Ellen from the Variance: Because Rig Engine D83, for which SCR retrofit is completed, is experiencing mechanical problems that prevent commissioning and source testing for a significant period, Beta respectfully requests that Engine D83 be removed from the variance. Removal will avoid disruption of the steady move toward final compliance. As soon Beta completes diagnostics for D83, and all parts and materials that are needed for the repairs can be obtained, the repair will be completed and D83 will be source tested. Engine D83 is not operable at present, and Beta will not operate Engine D83 other than for mechanical testing and source testing until final passing source test results are provided to the District.

Condition 13: NUMBER OMITTED.

Condition 14: Grants Beta the discretion to select the sequence of Rig Engine retrofit.

Condition 15: <u>Compliance achieved</u>, for source testing Rig Engines. Except for Rig Engine D83, for which Beta requests removal from the Variance, all Rig Engines have been retrofitted, commissioned and source tested.

¹ The source test determined a reading of 13.37 ppmv; the limit is 11 ppmv.

Rig Engine D83: Beta requests that the Hearing Board remove Rig Engine D83 from the variance. Significant mechanical issues require diagnosis and repair prior to commissioning and source testing, and time is currently uncertain. D83 will only be run for testing until final passing source test results are sent to the District.

Condition 16: <u>Compliance achieved so far and anticipated to continue</u>: Sixty-day deadline for submittal of Rig Engine source test results to District Staff.

Condition 17: <u>Compliance achieved so far and anticipated to continue</u>: Beta will not operate more than three of the Rig Engines at one time, except in the event of emergency, as defined and clarified under Condition 9.

Condition18: <u>Compliance achieved so far and anticipated to continue</u>: Beta maintains a monthly usage log for the Rig Engines according to the criteria enumerated in this condition, including any emergency usage under modified Condition 17 and timely submits the log for the prior month to District personnel.

Generally applicable Conditions 19 through 23:

Condition 19: <u>Compliance achieved so far and anticipated to continue</u>: Beta requested expedited review when submitting the Source Test Protocols and will comply when submitting the Source Test Reports.

Condition 20: <u>Compliance</u>: Status/modification hearing in April 2024, that was scheduled for April 23, 2024. The Hearing Board granted Beta's request that this hearing be held on the Hearing Board's Consent Calendar.

Condition 21: <u>Compliance achieved so far and anticipated to continue</u>: Excess emission fees. Beta has complied and will continue to comply with calculation and payment of excess emission fees according to the stated schedule.

Condition 22: <u>Compliance anticipated</u>: Petitioner shall notify the Clerk of the Board in writing at clerkofboard@aqmd.gov when final compliance has been achieved. Beta will comply as directed.

Condition 23: <u>Compliance achieved</u>: As a Title V facility, Petitioner shall notify US EPA after the issuance of the order. Beta provided this notification to US EPA on or about February 28, 2024.

6. Parts of the Existing Variance Which Beta is Unable to Comply with:

<u>Condition 5.c</u>: As discussed in Paragraph 5, Beta respectfully requests modification to Condition 5.c to remove the date deadline for completing the retrofitting of the remaining third Centaur Turbines. In addition, as explained in Paragraph 5, Beta will not be able to comply with the Condition's requirement to complete retrofit of those Turbines "within sixty (60) days of completing the commissioning of the [first Centaur Turbine or the prior two Centaur Turbines, respectively]...."

Beta is not currently on track to meet the October 15, 2024 date deadline to retrofit the third Centaur. Beta needs to be sure that the second Centaur Turbine is in good running order before taking the third Centaur Turbine out of service for retrofit. The second Centaur Turbine was retrofitted and commissioned on September 27, 2024. While the source testing contractor worked offshore for Beta on October 16, 2024, that time was devoted to a re-test of the first Centaur Turbine, which had exceeded the ammonia limit for its SCR retrofit (1.2 ppm over). Upon completing that test, the source testing contractor insisted it had other pressing work and could not remain to source test the second Centaur Turbine. (They made reference to high demand for source testing because of the tighter emission limits under District Rules 1110.2 and 1134.) The next scheduled source testing contractor is scheduled to perform multiple source tests, and as experienced on October 16, 2024, this creates uncertainty. If the source testing contractor is not able to test the second Centaur Turbine on November 18, 2024, then, according to the source testing contractor the next available date is in January 2025. Accordingly, in order to avoid the need for further modifications, and to preserve Hearing Board resources, Beta requested that the Board extend the deadline for retrofit of the third Centaur Turbine consistent with the potential delay in source testing the second Centaur Turbine, i.e., for one hundred and twenty-five (125) days after retrofit of the second Centaur Turbine.

Delays, earlier due to conditions and events onshore, are now primarily due to the difficulty of working offshore, particularly the acute spatial limitation placed on staffing and equipment assembly. There are only so many living quarters offshore, and there is only so much deck space. Beta is working toward compliance at maximum expedition. Because the personnel teams cycle on and off weekly, their workdays when on the platforms are permissibly long – 15 to 17 hours per day. It is not possible to provide more personnel or increase hours. Additional delay has arisen as the cumulative impacts of earlier delays come to roost, an evolving circumstance not fully realized at the time of petitioning for the July 18, 2024 modifications. Beta can admit to being overly even aggressively optimistic in its efforts to achieve compliance as quickly as possible. Incidentally, Beta cannot commission the SCR System until Beta receives approval from the federal Bureau of Safety and Environmental Enforcement (BSEE) for the new equipment installed on the offshore platforms.

Beta requests the following specific modifications to Variance Condition 5:

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 August
29, 2024. [No modification requested.]

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 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) signoffs by the company.) [*No modification requested*.]

c. For the third of the three Centaur Turbines, within sixty (60) one hundred and twentyfive (125) days of completing the commissioning of the prior two Centaur Turbines and no later than October 15, 2024.

<u>Condition 7</u>: Because of the increased time, up to six weeks, required to schedule the only currently available offshore source testing firm, Beta requests that the time allowed to source test Centaur Turbines be extended from 30 days to 60 days. In addition, because accomplishing commissioning of a Turbine after its retrofit is can also be time-demanding, Beta requests that the 60-day source test requirement not begin to run until completion of the commissioning as well as the retrofit.

Beta respectfully requests the following specific modifications to Variance Condition 7:

7. At any time after the retrofit of a Centaur Turbine is completed, but no later than thirty (30) sixty (60) days after completing the retrofit and commissioning for all three Centaur Turbines, Petitioner shall conduct a source test pursuant to the requirements of the approved source test protocol to demonstrate Rule 1134 compliance."

Rig Engine D83: Beta respectfully requests that the Hearing Board remove Rig Engine D83

<u>from the Variance</u>. Significant mechanical issues require diagnosis and repair prior to commissioning and source testing, and time is currently uncertain. D83 will only be run for testing until final passing source test results are sent to the District.

Final Compliance Date:

Beta had been able to maintain compliance with the within the number of days after a prior step, as specified in Variance Conditions 5 and 12 for retrofit of the Centaur Turbines and the Internal Combustion Rig Engines. It has been more difficult to meet the specific date deadlines, however, and the Hearing Board has seen requests for extensions of those specific dates and now a request to eliminate the remaining date deadlines for retrofit of the second and third Centaur Turbines. The delays giving rise to Beta's need for extensions <u>had been</u> caused primarily by extreme weather (in one case, by flooding of a factory and destruction of a key SCR component) and

mismatched parts acquired from different manufacturers. Delays, earlier due to conditions and events onshore, are <u>now</u> primarily due to the difficulty of working offshore, particularly the acute spatial limitation placed on staffing and equipment assembly. There are only so many beds on the offshore platforms for the construction crews, and there is only so much deck space. Beta is working toward compliance at maximum expedition. Because the personnel teams cycle on and off weekly, their workdays when on the platforms are permissibly long – 15 to 17 hours per day. It is not possible to provide more personnel or increase hours.

Additional delay has arisen as the cumulative impacts of earlier delays began to cascade and introduce delay to subsequent steps in the compliance chain, an evolving circumstance not fully realized at the time of petitioning for the July 18, 2024 modifications. Beta can admit to being overly optimistic or even aggressive in its efforts to achieve compliance as quickly as possible.

Beta agrees with District Counsel that while no specific date deadlines were set under the Variance for source testing and provision of final source test results to the District, those steps need to be completed under variance coverage. Given the delays, that fact alone calls for an extension of the final compliance date.

Beta also has a growing concern arising from the considerable difficulty in scheduling source tests, requiring up to six weeks in advance to set a date. To respond to this difficulty, Beta has already scheduled all the remaining source tests required for final compliance. As set out above regarding Variance Condition 7, Beta is requesting that the "within a certain number of days deadlines" for performing source tests be extended from 30 to 45 days, and that this period not begin until the equipment to be tested has been not only retrofitted but also commissioned. Commissioning time can vary, and it can also be difficult to schedule the outside commissioning tech contractors required for this step.

These and other extensions and uncertainties have pushed the feasible final compliance date into 2025. In order to avoid the need for further modifications and extensions, and to preserve Hearing Board resources, Beta respectfully requests that the Board extend the final compliance date to **March 24, 2025**.

With the modifications concurrently requested, Beta will remain bound at every step by the number of days allowed to complete the next step toward compliance after completion of the prior step.

8. <u>Achieving Final Compliance, extension requested to March 24, 2025</u>: Bringing the Facility into final air quality compliance requires Beta's work on equipment subject to revised emission limits from amendment to District Rules 1110.2 and 1134. Three Saturn Turbines, subject to Rule 1134, have been permanently removed from the Facility and their function has been replaced by electric power from the onshore utility. This achieves compliance with Variance Conditions 1 through 3.

All six Rig Engines, subject to Rule 1110.2, have been retrofitted with SCR Systems. The first set of three Rig Engines, on Platform Eureka, have been source tested and the final source test results were provided to District Staff on or about August 28, 2024. One of the three, while achieving a substantial reduction in NOx emissions as compared to its pre-retrofit state, failed the NOx source test by a narrow margin. Beta determined the origin of the failure, installed a new fuel metering system to the engine, and had the engine re-tested on November 18, 2024. The second set of three Rig Engines, on Platform Ellen, has been retrofitted, and two of the three have been commissioned and source tested. The third, Equipment ID D83 is experiencing significant mechanical issues that require diagnosis and repair prior to commissioning and source testing. Timing is difficult to project. Beta requests that the Rig Engine be removed from the variance. D83 will only be run for testing until final passing source test results are submitted to the District.

Beta retrofitted and commissioned the first Centaur Turbine before August 29, 2024. Final test results are anticipated to be provided to District Staff on or about November 9, 2024. Beta retrofitted and commissioned the second Centaur Turbine on September 27, 2024 and had a source test pre-scheduled. Unfortunately, Beta's source testing contractor, when present offshore for testing on October 16, 2024, re-tested the first Centaur Turbine for the SCR's ammonia, and insisted that it did not have time to test the second Centaur Turbine. The source testing contractor is now scheduled to test the second Centaur Turbine on or about November 18, 2024. That test period will be devoted to multiple tests and if the source testing contractor is unable again to test the second Centaur Turbine, the source testing contractor will not be available again until January 2025.

To achieve final compliance, Beta will retrofit and commission the third Centaur Turbine, and complete and report the Turbine's and any other pending source tests or re-tests. Timing of this third Centaur Turbine retrofit is dependent on the source test schedule for the second Centaur Turbine and Beta requested that the deadline be set for one hundred twenty-five days after the third Centaur Turbine is retrofitted and commissioned.

9. <u>Estimated and Actual Excess Emissions</u>: When the Variance Petition was filed, total estimated excess emissions were 3,495 lbs/day of NOx. Beta's Report of Excess Emissions and Fees for the Month of September 2024 showed actual excess emissions of 595 lbs/day, and mitigation of 2,900 lbs/day. Beta's September 2024 Report is attached to this Declaration at **Attachment A**. There is no (0%) Excess Opacity.

10. <u>Mitigation of Excess Emissions</u>:

As noted in Paragraph 9, immediately above, Beta's steps toward compliance have now reduced excess emissions from 3,495 lbs/day of NOx to 595 lbs/day of NOx.

Among other things, Beta will only operate 2 of 3 Centaur electricity-generating turbines during the period of non-compliance, except when maintenance or source testing of these Turbines requires operation of three Turbines, during commissioning of a new Centaur Turbine, during commissioning after retrofit of a Centaur Turbine, or in the event of another emergency that creates a risk to the health or safety of personnel and/or environment, thus mitigating emissions from these turbines.

In August 2023, Beta began shifting substantial electrical load from the Centaurs to the municipal power grid, reducing natural gas and diesel usage and emissions. This created a 50 to 80 percent reduction in fuel consumed and substantially reduced emissions. This has been

sufficient to allow complete removal of the Saturn Turbines from the Facility. Further shift to shore power is ongoing.

Beta will only operate three of the six Rig Engines at any one time unless an emergency situation (for which the definition is clarified in Variance Condition 9) arises and creates a risk to personnel and/or environment that cannot be avoided without operating additional Rig Engine(s).

Beta has been able to shift most of the fueling for the Centaur Turbines from diesel to cleanerburning produced gas, accomplishing an additional reduction in emissions.

11. <u>Monitoring Emissions</u>: The Petition's requests for modification and extension of the Variance do not create any new monitoring issues. Beta will continue to utilize existing CEMS/ CPMS. The relief requested will not interrupt ongoing monitoring. Beta will continue to comply with the monitoring and other requirements of RECLAIM, which is expected to remain in effect throughout the Variance period. Fuel flow and engine operating hours are available, and reported to District Staff, and can be relied on for monitoring.

12. <u>Harm to Beta's Business if Relief Not Granted</u>: If the requested modifications and extension to the existing variance are not granted, Beta would no longer be able to operate the second (not yet source tested) and third Centaur Turbines, which are relied on to power Platform operations, and no longer able to operate any of the Rig Engines for which final source test results had not been reported to District Staff. This would result in a substantial or complete shutdown of production and a substantial reduction 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 air quality compliance. If the requested modifications and extension are not granted and this results in noncompliance and full 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.

13. <u>Public Complaints Within Six Months?</u>: Beta has not received any complaints from any Member of the Public within the last six months.

14. <u>Contact with District personnel</u>: Beta contacted Senior Deputy District Counsel Josephine Lee about the issues raised and the relief requested in its Petition for Modification of Variance Conditions. Attorney Lee can be reached at extension 2913.

15. <u>Respectful Request</u>: Beta Offshore respectfully requests that the Hearing Board grant Beta's Petition for Modifications to and Extension of the Final Compliance Date under the Variance.

I declare under penalty of perjury, under the laws of the State of California and the United States of America, that the foregoing is true and correct to the best of my knowledge and that this affidavit was executed this 23rd day of October 2024 at Houston, Texas.

Jeff Ortloff Director, Facilities Engineering Amplify Energy Corp., Parent Company to Beta Offshore Operating, LLC

Attachments: A. Beta's Report of Excess Emissions and Fees for the Month of September 2024 B. Source Testing Timeline, past achievements and anticipated dates for future steps

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Beta Offshore, Case No. 5855-7 Declaration in support of Petition to Modify Variance Conditions and Extend Final Compliance Date November 7, 2024

Attachment A

Beta's Report of Excess Emissions and Fees for the Month of September 2024

Attachment A

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EXCESS EMISSIONS FEES DUE TO SCAQMD¹

NEW RATE OF \$4,589.18 PER TON STARTING JULY 1, 2024

EQUIPMENT	Jan-24	Feb-24	Mar-24	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	T	Nov-24	Dec-24
Saturns	\$ 4,523.18	\$ -											
Rig Engines	\$ 9,430.21	\$ 8,525.57	\$ 12,739.08	\$ 10,224.36	\$ 10,885.20	\$ 8,504.83	\$ 4,665.92	\$ 1,521.95	\$ 1,641.71				
Centaurs	\$ 21,601.40	\$ 32,744.27	\$ 33,371.36	\$ 30,781.14	\$ 27,737.99	\$ 32,995.85	\$ 38,559.28	\$ 40,893.35	\$ 39,329.14				
TOTAL	\$ 35,554.80	\$ 41,269.84	\$ 46,110.44	\$ 41,005.50	\$ 38,623.20	\$ 41,500.68	\$ 43,225.20	\$ 42,415.30	\$ 40,970.85		T		

PTE EXCESS EMISSIONS WITH NO MITIGATION, LBS/DAY

EQUIPMENT	Jan-24	Feb-24	Mar-24	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24
Saturns	262.17	262.17	262.17	262.17	262.17	262.17	262.17	262.17	262.17			
Rig Engines	1,468.43	1,468.43	1,468.43	1,468.43	1,468.43	1,468.43	1,468.43	1,468.43	1,468.43			
Centaurs	1,764.62	1,764.62	1,764.62	1,764.62	1,764.62	1,764.62	1,764.62	1,764.62	1,764.62			
TOTAL	3,495.21	3,495.21	3,495.21	3,495.21	3,495.21	3,495.21	3,495.21	3,495.21	3,495.21			

NET EMISSION AFTER MITIGATION EMISSIONS, LBS/DAY¹

Days per Month	31	29	31	30	31	30	31	31	30	31	30	31
EQUIPMENT	Jan-24	Feb-24	Mar-24	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24
Saturns	65.81	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
Rig Engines	137.21	132.61	185.36	153.73	158.38	127.87	65.60	21.40	23.85			
Centaurs	314.31	509.30	485.57	462.81	403.60	496.10	542.08	574.89	571.33			
TOTAL	517.33	641.90	670.92	616.53	561.98	623.98	607.67	596.29	595.18			

REDUCTION IN EMISSIONS DUE TO MITIGATION, LB/DAY¹

EQUIPMENT	Jan-24	Feb-24	Mar-24	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24
Saturns	196.36	262.17	262.17	262.17	262.17	262.17	262.17	262.17	262.17			
Rig Engines	1,331.21	1,335.82	1,283.07	1,314.70	1,310.04	1,340.55	1,402.83	1,447.03	1,444.58			
Centaurs	1,450.31	1,255.32	1,279.05	1,301.81	1,361.02	1,268.51	1,222.54	1,189.73	1,193.29			
TOTAL	2,977.88	2,853.31	2,824.29	2,878.68	2,933.23	2,871.24	2,887.54	2,898.93	2,900.03			

 Note 1:
 D84 successful compliant source test 7/11/24 below 11 ppmv @15% oxygen; begin no excess emissions on 8/1/24

 D85 successful compliant source test 7/11/24 below 11 ppmv @15% oxygen; begin no excess emissions on 8/1/24

 D86 source test 7/11/24 at 13.57 ppmv @ 15% oxygen; begin excess emission factor of 1.37 lb/mgal on 8/1/24 until next source test

Beta Offshore, Case No. 5855-7 Declaration in support of Petition to Modify Variance Conditions and Extend Final Compliance Date November 7, 2024

Attachment B

Source Testing Timeline, past achievements and anticipated dates for future steps

Attachment B

Beta Offshore Operating, LLC Attachment B to Exh 16 Declaration-J Ortloff Source Testing Timeline -- past and projected

SCAQMD Hearing Board Case No 5855-7

17-Oct-24

Completed

Completed

Completed

Planned/Best	
Case Scenario	ESTIMATED
(Pre-	Completion Date if
scheduled	pre-schedule
Tests)	missed

10-Jul-24

11-Jul-24

28-Aug-24

Final Compliance Date

Eureka Rig Engines (3)
Retrofit, Commission
Source Test Completed

Centaur 1

Source Test Results

Retrofit, Commission	9-Sep-24	Completed
Source Test Completed	10-Sep-24	Completed
Source Test Results	9-Nov-24	9-Nov-24

Ellen Rig Engines (2)

Retrofit, Commssion	24-Sep-24	Completed
Pre-Scheduled Source Test	27-Sep-24	Completed
Source Test Results	26-Nov-24	26-Nov-24

Centaur 2

Retrofit, Commssion	27-Sep-24	Completed
Pre-Scheduled Source Test	18-Nov-24	28-Nov-24
Note: If Pre-Sched Source Test is missed, may require up to six weeks to reschedule with only Contractor available and capable of working offshore.		
Source Test Results	17-Jan-25	27-Jan-25

Centaur 3

Retrofit, Commssion	15-Nov-24	27-Jan-25
Pre-Sheduled Source Test	20-Nov-24	1-Feb-25
Note: If Pre-Sched Source Test is missed, may require up to six weeks to reschedule with only Contractor available and capable of working offshore.		
Source Test Results	19-Jan-25	24-Mar-25

Eureka 3rd Engine Re-test

Pre-Scheduled Source Test	21-Nov-24	5-Jan-25
Note: If Pre-Sched Source Test is missed, may require up to six weeks to reschedule with only Contractor available and capable of working offshore.		
Source Test Results	20-Jan-25	6-Mar-25

24-Mar-25