

DOCKETED

Docket Number:	99-AFC-08C
Project Title:	Blythe Energy Project Compliance & Blythe Transmission Line Modification
TN #:	205198
Document Title:	Blythe Energy Inc., Project Owner Comments on Staff Analysis
Description:	N/A
Filer:	Sarah Madams
Organization:	Sierra Research
Submitter Role:	Applicant Consultant
Submission Date:	6/30/2015 4:11:21 PM
Docketed Date:	6/30/2015

June 30, 2015

Ms. Mary Dyas, Compliance Project Manager
California Energy Commission
1516 Ninth Street
Sacramento, CA 95814-5512

**Re: Blythe Energy Project (99-AFC-08C)
Project Owner's Comments on the June 3, 2015 Revised Staff Analysis of Amendment
Proposal for the Blythe Energy Project**

Dear Ms. Dyas:

Blythe Energy Inc. (Project Owner) submits the following comments and requests for corrections to the June 3, 2015, Revised Staff Analysis of Amendment Proposal (SA) (TN#204864) for the Blythe Energy Project. Specific proposed changes to the Staff Analysis are shown with additions in **Bold Underline** and deletions in ~~striketrough~~.

1. Pages 14-15 of the SA, Condition of Certification (COC) AQ-T2 and AQ-T3, first sentences. The words "content" and "turbines" were inadvertently deleted from the redline versions of AQ-T2 and AQ-T3, respectively. However, the final clean version of the conditions in Appendix A shows the conditions correctly.

AQ-T2: The turbines shall be exclusively fueled with pipeline quality natural gas with a sulfur **content** not exceeding 0.5 grains per 100 dscf on a rolling twelve month average basis. The turbines shall be operated and maintained in strict accord with the recommendations of its manufacturer or supplier and/or sound engineering principles.

AQ-T3: The **turbines** are subject to the federal NSPS codified at 40 CFR Part 60, Subparts A (General Provisions) and GG (Standards of Performance for Stationary Gas Turbines). The turbines are also subject to the Prevention of Significant Deterioration (40 CFR 51.166) and Federal Acid Rain (Title IV) programs. Compliance with all applicable provisions of these regulations is required.

2. Page 17 of the SA, COC AQ-T5. Please revise the text from "**and**" to "**or**" in item b of the COC, so that the Staff Analysis is consistent with the Title V Permit, Condition 5 for the units identified in Permits #B007953 and #B007954. The wording change proposed by Staff would change the meaning of the condition in a manner that is not consistent with the amendment proposed by the Project Owner or with the corresponding condition adopted by the Mojave Desert Air Quality Management District (MDAQMD) in the Title V permit. The sample calculations provided by the Project Owner in the air permit

application and the Petition to Amend were not intended to be applied as permit conditions, as stated in the District's Preliminary Decision/Preliminary Determination for the significant modification:¹

To demonstrate that the new facility emission caps are achievable as a practical matter, the applicant submitted example calculations showing that NO_x and CO emissions from the gas turbines/duct burners under various operating scenarios, all of which can be considered typical ***but none of which impose enforceable limits on actual plant operation.*** [emphasis added]

In addition, please remove the first sentence within the verification language as it does not apply once the correction has been made within item b.

AQ-T5: Emissions of CO and NO_x from the turbines shall only exceed the limits contained in AQ-T4 during startup and shutdown periods as follows:

- a. Startup is defined as the period beginning with ignition and lasting until either the equipment complies with all condition AQ-T4 4 operating permit limits for two consecutive 15-minute averaging periods or four hours after ignition, whichever occurs first. Shutdown is defined as the period beginning with the lowering of equipment from base load and lasting until fuel flow is completely off and combustion has ceased.
- b. The emissions from each startup ~~or and~~ shutdown event shall not exceed the following, verified by CEMS:
 - i. NO_x - 376 lb
 - ii. CO - 3600 lb
- c. Effective May 7, 2016, the CO emissions from all startup and shutdown events at both power blocks, averaged over a rolling 12-month period, shall not exceed 750 lb/event, verified by CEMS.

Verification: ~~The emission limits defined in this condition apply to one combined startup/shutdown event (one cycle).~~ The project owner shall include a detailed record of each startup and shutdown event in the Quarterly Operations Report. Each record shall include, but not be limited to: duration; fuel consumption; total emissions of NO_x and CO; average CO emissions from all startups and shutdowns of the gas turbines on a per event basis calculated on a rolling 12- month basis; and the date and time of the beginning and end of each startup and shutdown

¹ See Attachment 3 to the Supplement to Petition to Amend, May 6, 2015.

event. Additionally, the project owner shall report the total plant operation time (hours), number of startups, hours in startup and shutdown, and average plant operation schedule (hours per day, days per week, weeks per year).

3. Page 20 of the SA, COC AQ-T11. The condition was deleted in the Staff Analysis, but not replaced with the corresponding condition in the Title V Permit. Please add Condition 11 from the Title V Permit for the units identified in Permit #B007953 and #B007954 so that the two documents are consistent.

AQ-T11: The o/o shall provide stack sampling ports and platforms necessary to perform source tests required to verify compliance with District rules, regulations and permit conditions. The location of these ports and platforms shall be subject to District approval.

Verification: Prior to the first firing of natural gas in either turbine the owner/operator shall provide to the District and the CEC CPM as built drawings of the stack or other suitable documentation of the correct and complete installation of all necessary sampling ports and access platforms.

4. Page 21 of the SA, COC AQ-T14, first paragraph, last sentence. Please correct the spelling of the word "required" as follows:

The project owner shall perform the following annual compliance tests in accordance with the MDAQMD Compliance Test Procedural Manual. The test report shall be submitted to the District no later than six weeks prior to the expiration date of this permit. The following compliance tests are ~~required~~ **required...**

5. Page 23 of the SA, COC AQ-T17, subsection i. Please delete the proposed change of "NO_x" to "NO₂" so that the condition requires the operator to report average NO_x concentration. This will ensure that the condition remains technically correct and consistent with the MDAQMD permit. The CEMS measures total NO_x (NO and NO₂), and not just NO₂. Further, the emissions limitations in the permit are expressed in terms of total NO_x.

- i. Average NO₂~~x~~ concentration and average CO mass emission rate, for all operating periods except during startup, shutdown and malfunction, for each gas turbine and associated duct burner, calculated on a rolling 12-month basis.

6. Page 26 of the SA, COC AQ-CT1. Please revise the word "compliance" to "accordance" to ensure consistency with Condition 1 in the Title V Permit for the units identified in Permit #B007957 and #B007958.

Ms. Mary Dyas, Compliance Project Manager
California Energy Commission
June 30, 2015
Page 4

Operation of this equipment the cooling towers shall be conducted in accordance ~~compliance~~ with all data and specifications submitted with the application under which this permit is issued unless otherwise noted below.

Thank you for the opportunity to provide these comments. If you have any questions or require additional information regarding the changes we are proposing, please do not hesitate to contact Gary Rubenstein of Sierra Research at (916) 273-5126.

Sincerely,

A handwritten signature in black ink, appearing to read "Chris Doyle", written in a cursive style.

Christopher J. Doyle
Vice President
Blythe Energy Inc.

cc: K. Banbury, AltaGas Power Holdings (U.S.) Inc.
M. Foster, Stoel Rives LLP
G. Rubenstein, Sierra Research
N. Matthews, Sierra Research