

US EPA ARCHIVE DOCUMENT



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 6

1445 ROSS AVENUE, SUITE 1200

DALLAS TX 75202-2733

Mr. Craig R. Eckberg
Senior Manager, Environmental Business
NRG Development Company, Inc
1201 Fannin Street
Houston, TX 77002

FEB 05 2014

RE: Application Completeness Determination for NRG Development Company, Inc
Greenhouse Gas Prevention of Significant Deterioration Permit
Corpus Christi Power Generating Station

Dear Mr. Eckberg:

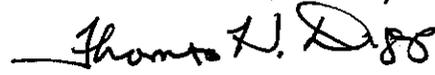
The EPA has reviewed your Greenhouse Gas (GHG) Prevention of Significant Deterioration (PSD) permit application, including supporting documentation, for NRG-Corpus Christi Electric Power Generating Station in Corpus Christi that was received by the EPA on March 3, 2013, and determined that your application is incomplete at this time. A list of the information needed from you so that the EPA can continue its completeness review is enclosed (see Enclosure). Please notify us if a complete response is not possible by February 24, 2014.

The requested information is necessary for EPA to develop a Statement of Basis and Rationale for the terms and conditions for any proposed permit. As we develop our preliminary determination, it may be necessary for EPA to request additional clarifying or supporting information. If the supporting information substantially changes the original scope of the permit application, an amendment or new application may be required.

The EPA may not issue a final permit without determining that there will be no effects on threatened or endangered species or their designated critical habitat, or until it has completed consultation under Section 7(a)(2) of the Endangered Species Act (16 USC § 1536). In addition, the EPA must undergo consultation pursuant to Section 106 of the National Historic Preservation Act (NHPA) (16 USC § 470f). As a reminder, NHPA implementing regulations require that EPA provide information to the public with an opportunity for participation in the Section 106 process. 36 CFR § 800.2(d). If you have not already submitted the Biological Assessment and Cultural Resources Reports that you have agreed to prepare for EPA, we look forward to receiving these reports and continuing to work with you to comply with these statutes.

If you have any questions regarding the review of your permit application, please contact Melanie Magee of my staff at (214) 665-7161 or magee.melanie@epa.gov.

Sincerely yours,

A handwritten signature in black ink that reads "Thomas H. Diggs". The signature is written in a cursive style with a horizontal line under the first name.

Thomas H. Diggs
Associate Director
Air Programs Branch

Enclosure

ENCLOSURE

EPA Completeness Comments for NRG Development Company, Inc Application for Greenhouse Gas Prevention of Significant Deterioration Permit NRG Corpus Christi Generating Station

1. Please provide the load efficiency curves for the proposed combustion turbines.
2. On page 15 of the application, NRG states that they will install SF₆ circuit breakers (CBs). Please provide the proposed number of SF₆ circuit breakers to be installed for this project in addition to the estimated capacity of 495 pounds of SF₆ to be used and the locations where they will be installed if known.
3. On page 21 of the permit application, NRG proposes to implement regular maintenance programs to maintain optimum efficiency and ensure reliable operation. Please provide supplemental data that discusses the details of what this program will involve.
4. NRG does not include maintenance, startups, and shut down emissions in the emissions calculation for combustion turbines. EPA needs to permit these emissions or they are unauthorized. Typically we permit these emissions by either establishing a separate alternative BACT that applies during MSS, or we roll the emissions into each emission point as part of our BACT determination for that unit with the expectation that the unit will meet BACT at all times. Please provide additional data on the proposed number of startups and shutdowns for the proposed NRG facility.
5. On pages containing Tables 3-1, 3-2, 3-3 and 3-4, NRG has proposed tons/yr annual GHG BACT emission limits for the auxiliary boilers. Please provide an output-based BACT emission limit, or a combination of an output- and input-based limit, or an efficiency-based limit. If a numerical emission limit is not feasible, please provide a rationale to support this determination. Also, please provide your preferred compliance monitoring strategy to support an output-based, combination of an output- and input-based or efficiency-based BACT limit.
6. It doesn't appear as though NRG proposed any specific degradation margins for the turbines and a percent degradation margin for the auxiliary equipment. Were any performance and/or degradation margins applied in the calculations? Please provide a basis and any supplemental manufacturer's documentation that would substantiate the applicable percentages.
7. The application does not appear to propose the installation of emergency generator and fire water pump engines. Please confirm whether or not the proposed project includes the installation of these engines. If the project is to include the installation of an emergency generator and fire pump engine, please provide supplemental design information, the BACT analysis and emission calculations.
8. The global warming potentials (GWP) have been revised by EPA. The final rule published on November 29, 2013 in the Federal Register will be effective for all permits issued on or after January 1, 2014. The methane value was increased from 21 to 25 (times more potent than CO₂),

the N₂O value was decreased from 310 to 298, and the N₂O value was decreased from 23,900 to 22,800. Due to the prospective changes in the emissions for methane in the NRG application, please provide an updated emission tables using the new GWPs so that EPA can cross-check its own calculations.