ACE Cogeneration Company

Trona Operating Partners

June 3, 2010

DOCKET
86-AFC-1C
DATE JUN 03 2010
RECD. AUG 31 2010

Mr. Dale Rundquist
Compliance Project Manager
Energy Facilities Siting Division
California Energy Commission
1516 Ninth Street
Sacramento, CA 95814-5512

Subject: Proposed Temporary Connection to Pilot Program at ACE Cogeneration Facility (86-AFC-1C); Request for Concurrence

Dear Mr. Rundquist:

One of the biggest challenges facing California's coal-fired facilities is what, if anything can be done to reduce the amount of greenhouse gases (GHGs) in their exhaust. Utilities are allowed to enter long term electricity purchasing contracts only with power plants that emit the equivalent GHG emissions (in tons CO_2/megawatt hour) as a combined-cycle gas turbine plant. ACE Cogeneration Company is the largest (106 MW) coal-fired facility, and was recently approached by Calera, a company based in northern California, who may have a viable, cost effective solution to this problem. After a series of meetings between ACE Cogeneration Company (ACE) and Calera, a pilot project was proposed.

ACE is seeking concurrence from the California Energy Commission (CEC) staff that:

- CEC has jurisdiction over the construction and temporary evaluation of a carbon sequestration pilot project of between 3-6 months in duration.
- The pilot project will not require an amendment of the Commission's license of formal approval.

ACE proposes to temporarily withdraw up to 10% of the stack flue gas and transfer it to the pilot plant process. Cement will be produced by a reaction which reduces greenhouse gas emissions by combining the CO_2 into the cement product. A 42 inch flue gas pipe will connect to the stack and run to a 2,500 SCFM fan, which will pull the flue gas to the pilot project. The temporary pilot plant is ancillary to the operation of ACE; no change in plant operation, load, or air pollution emissions will result from evaluation of the temporary pilot plant.

The proposed temporary connection allows the pilot project to remove carbon dioxide from the flue gas andconvert it to calcium and magnesium carbonate , which are separated and further processed to

produce cement or other building materials. The building materials will be distributed to the local building industry, sequestering the carbon dioxide in the cement and also displacing conventional materials such as Portland cement, whose production also emits carbon dioxide.

At the end of the temporary testing the pilot scale plant will be completely removed from the ACE facility. Assuming the temporary pilot plant demonstrates successful CO_2 removal from the flue gas (to a level consistent with that from a combined cycle gas turbine plant), permitting (including with CEC) would commence to install a permanent full scale Calera CO_2 absorption system.

The pilot program will file for all necessary Mojave Desert AQMD permits. The temporary pilot project would not have any significant adverse environmental impact. In addition, the Moss Landing facility is conducting a similar pilot scale project (also allowed without modifying their CEC permit by Donna Stone,-see attached letter).

The proposed flue gas connection to the pilot plant would not cause ACE to alter its power-generating operations in any way. We have reviewed current CEC conditions and determined that there are no current CEC conditions of certification which would be affected by the proposed project. As such, this proposed temporary connection does not constitute a material change to ACE.

Based on the temporary and beneficial nature of this proposed action, and the fact that it does not alter the ACE power-generating operations, we respectfully request that the CEC concur that the project can proceed without an amendment of the ACE license or further review. The proposed pilot project seeks to begin construction by July of this year and run for three to six months to test the carbon sequestration process. Accordingly, it is important to obtain CEC staff's agreement that this project does not require further Commission actions as soon as possible.

Thank you for your assistance in this matter. If you have any questions concerning the pilot program, please contact Dr. Guth at 619-987-1111.

Sincerely,

Dave Boward
Facility Manager

Attachment

Cc: Maggie Estrada, Constellation Energy
Dr. Ted Guth, Consultant
Facility files

CALIFORNIA ENERGY COMMISSION
1516 NINTH STREET
SACRAMENTO, CA 95814-5112

December 9, 2009

DOCKET	
99-AFC-4C	
DATE	2009
RECD	DEC 0 2009

James Dodson, Plant Manager
Dynegy Moss Landing Power Plant, LLC
Highway 1 & Dolan Road
P.O. Box 690
Moss Landing, CA 95030-0690

SUBJECT: Moss Landing Power Plant (99-AFC-4C)
Pilot Carbon Sequestration Project

Dear Mr. Dodson:

We have reviewed the October 20, 2009 letter from your attorney Christopher Ellison to Arlene Ichien, Assistant Chief Counsel of the Energy Commission. In that letter, Mr. Ellison explained your intent to participate in a pilot carbon sequestration project adjacent to the Dynegy Moss Landing Power Plant (MLPP). The participation would entail allowing Moss Landing Cement Company (MLCC) to temporarily draw flue gas from Unit 1's Heat Recovery Steam Generator (HRSG) Stack No. 2 and/or Unit 2's HRSG Stack No. 4 to a pilot process for producing cement with carbon sequestration to reduce greenhouse gas emissions. It is our understanding that a 36-inch flue gas pipe will be connected to the MLPP HRSG stacks and run along the surface of the Moss Landing site and then under Dolan Road to the MLCC pilot plant.

Specialists in all technical areas have reviewed your request and determined that the proposed project is temporary, and will not constitute a change in the design, operation, or performance requirements for the power plant. Therefore, it will not be necessary for you to file a petition for the change under §1769 of the Commission's Siting Regulations.

If you have any questions, do not hesitate to call me at (916) 654-4745.

Sincerely,

Donna Stone

Donna Stone
Compliance Project Manager
Siting, Transmission & Environmental
Protection Division

cc: Chris Ellison