

US EPA ARCHIVE DOCUMENT

Fryer, Tim

From: Fuerst, Sherry
Sent: Friday, September 12, 2014 3:53 PM
To: Fryer, Tim
Subject: FW: LCH GHG Application
Attachments: 2014-03-19 LCH Expansion Calcs (CCS Costs).pdf; 2014-03-19 Response to Questions 4 and 5.docx

Here is the e-mail from 3/19/14. Please put it on the public website for Lon C. Hill. The attachments I've already sent you.

Thanks!

From: Mona Johnson [mailto:mjohnson@camesparc.com]
Sent: Wednesday, March 19, 2014 8:31 PM
To: Fuerst, Sherry
Subject: RE: LCH GHG Application

Sherry-

Attached to this email are the responses to Questions 4 and 5. I look forward to speaking to you soon.

-Mona

From: Fuerst, Sherry [mailto:fuerst.sherry@epa.gov]
Sent: Thursday, February 06, 2014 2:31 PM
To: Mona Johnson
Cc: Gary Clark; Robinson, Jeffrey
Subject: LCH GHG Application

Ms Johnson,

I am reviewing the LCH application for a PSD Air Quality permit for GHG emissions. During the initial review, I noticed that some items were not discussed thoroughly enough for me to complete my evaluation, to prepare the Statement of Basis, or to write the permit. In order to continue development of the permit, I thought it would be best to request these items as I became aware I would need additional information. I would like to request the following information:

1. Please provide the projected capital cost of the project.
2. When is it anticipated that the turbines will be selected?
3. What is the specific operational purpose of the project (ex. intermediate load following unit or baseload unit)?
4. Please expand the discussion on the plant startup system and operations. Please explain your ramp up power generation in relation to the 2628 hours per year (more than 7 hours per day) auxiliary boiler operation you've requested for startup/shutdown. Typical startups are about 30 minutes per day. Please provide the technical basis for when your startup and shutdown ends for the specific turbine model that may be selected and pollution control equipment you are planning to utilize. Please provide additional information about the number of startups and shutdown per year.
5. To date, EPA Region 6 has not eliminated carbon capture sequestration from its BACT determinations based on technical infeasibility for combined cycle power plants. Since this is a proposed natural gas combined cycle power plant, please provide additional details, for BACT purposes, on the economics of installing a CCS system at the plant. Specifically, please provide the site-specific information on the estimated concentration of CO₂ that is in the waste stream. Also, please provide site-specific cost calculations including, but are not limited to, size and distance of pipeline to be installed for potential enhanced oil recovery (EOR) opportunities, estimated costs for a capture system (pumps, compressors, amine solution) that specifically identifies the equipment necessary to employ a post-combustion CCS system. Please include the estimated cost of construction, operation and

maintenance, on an annual basis. Feel free to provide an estimated cost per ton of CO₂ removed for the CCS system and/or the percentage of increased costs of a CCS system above your estimated non-CCS capital costs for the project. Please discuss in detail any site specific safety or environmental impacts associated with installation and operation of the CCS system.

6. It would be helpful to have a jpeg site map file to drop in both the Statement of Basis and the permit. If you have one I would appreciate you sending it to me.

I will advise you if I become aware of additional information needs. Please acknowledge receipt of this email with a reply e-mail. I look forward to hearing from you.

Sherry Fuerst
Environmental Engineer
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(214)665-6454

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