

New York State Department of Environmental Conservation

Division of Environmental Permits, 4th Floor

625 Broadway, Albany, New York 12233-1750

Phone: (518) 402-9167 • FAX: (518) 402-9168

Website: www.dec.ny.gov



February 8, 2008

Murray Sondergard
Broadwater Energy LLC
c/o Robert Alessi
LeBoeuf, Lamb, Greene & MacRae LLP
99 Washington Avenue, Suite 2020
Albany, NY 12210-2810

Re: Broadwater Energy Project
DEC No. 1-4799-0007/00001
Comments on General Conformity Analysis
NOTICE OF INCOMPLETE APPLICATION

Dear Mr. Sondergard:

The New York State Department of Environmental Conservation (the Department; DEC) has assessed the general conformity sections of the Federal Energy Regulatory Commission's Final Environmental Impact Statement (FEIS) for the Broadway project. This included review of the FEIS's Appendix K, titled, General Conformity Analysis Broadwater LNG Project (revised December 31, 2007). The Department Our comments on the conformity analysis are provided below.

In addition, DEC has reviewed the information provided in your January 23, 2008 letter, which responds in part to my December 21, 2007 letter/Notice of Incomplete Application (NOIA). Our analysis of your letter and the accompanying documentation, and our continued evaluation of the project's permit applications, identified the need for clarification and information relative to the SPDES and Air applications - in addition to that requested in the December letter. The data we are seeking are also listed further down.

Relative to the Section 401 Water Quality application and SPDES application, Broadwater responds to the Department's recommendation of changes to the FSRU's intake structure to reduce the intake's impingement impacts by proposing a smaller

external spacing size of one inch on the grate structure for the FSRU's intake. Your letter notes this change will limit access for "larger" marine life to the internal areas of the water intake. The change will have no effect on the projected entrainment of aquatic eggs and larvae into the FSRU's water intake and system. No action is proposed to ameliorate the entrainment impacts of the LNG carriers' seawater withdrawal. Taken together these intakes are projected to destroy approximately 274 million aquatic organisms annually.

As stated in my December 21, 2007 letter, the Department believes this to be a significant adverse impact to the aquatic environment and fishery of Long Island Sound, requiring further consideration of design changes and mitigation measures. Absent steps to eliminate, minimize or otherwise mitigate this effect, the Department will consider whether the project is inconsistent with the statutes and regulations governing the WQC and SPDES permit. This may result in denial of these authorizations, or the imposition of conditions requiring regulatory compliance.

Pending receipt from Broadwater of all the information requested in this letter the applications are considered incomplete, in accordance with 6NYCRR Part 621 (Uniform Procedures). And the applications will remain incomplete if Broadwater responds with only some of the information requested. Reiterating what was stated in my December, please remember that all the applications must be deemed complete before technical review; public review and comment; and final decision-making.

Following are the Department's comments on the applications.

General Conformity Analysis

1. Both the construction and operation emissions associated with the Project have changed since the Department reviewed the Draft Environmental Impact Statement (DEIS) and the supporting emissions calculation documentation. The FEIS lacks emissions calculation documentation to support emissions referenced throughout the document. Before final determinations can be made, the Department requires documentation explaining how and why the emissions were changed, and calculations supporting the new emissions values.
2. Page 3-236 of the FEIS states that the project's construction emissions would exceed the General Conformity threshold of 25 tons per year (tpy) for each year of construction. It is further stated that New York's current 1-hour State

Implementation Plan (SIP) for ozone includes a goal of reducing ozone precursor emissions by limiting construction activities to the non-ozone season control period. This section concludes with a recommendation that "Broadwater should conduct all activities associated with construction of the proposed Project outside of the ozone season control period (May 15 through September 15), unless otherwise allowed by NYSDEC."

The NOx emissions from construction activities for the project are 269 and 471 tpy for the first and second years of construction, respectively. Since the project area is in nonattainment for ozone and fine particulate matter (PM_{2.5}), and NOx is both an ozone and PM_{2.5} precursor, the Department disagrees with the proposal to shift construction activities to the non-ozone season; Broadwater should offset all of the project's NOx emissions.

3. On page 5-13 of the FEIS it is stated that "However, the D.C. Circuit Court recently clarified its position with respect to the 8-hour ozone implementation rule, essentially ruling that conformity only needs to be demonstrated to the 8-hour ozone standard." While the document accurately uses the 25 ton per year 1-hour thresholds for ozone for determining general conformity applicability, the Department disagrees with this statement and believes it should be removed. While the New York City metropolitan area is classified as moderate nonattainment for ozone under the eight-hour ozone standard, the one-hour ozone classification of severe is still controlling, based on the December 22, 2006 decision by the U.S. Court of Appeals for the DC Circuit in *South Coast v. EPA* (04-1200). The reference to conformity in the clarification dated June 8, 2007 is specifically limited to the use of one hour MVEBs for transportation conformity determinations until 8-hour MVEBs are available. The one-hour classification is, therefore, still applicable per the decision through the anti-backsliding provisions of the Clean Air Act.

If a project is to undergo general conformity review in the New York City ozone nonattainment area, the Department believes it appropriate to use the 25 tpy thresholds for NOx and VOC that apply to severe ozone nonattainment areas.

4. All nonattainment references in Appendix K should be consistent. The New York Metropolitan Area (NYMA) is in nonattainment for ozone and PM_{2.5}. General conformity applies to both designations and all applicable thresholds should be evaluated and all construction and operation emissions that exceed

those thresholds should be addressed. The inclusion of both 1-hour and 8-hour ozone nonattainment thresholds is correct, however the Department notes that the 1-hour thresholds, which are more stringent, apply in this application.

5. In the last paragraph on page K-1, to be consistent "specified PM_{2.5} precursors" should be clearly identified (i.e., NO_x and SO₂).
6. In the last paragraph on page K-4, reference is made to Appendix A for the detailed construction emission estimate study for the project. This document is not included in the CD reviewed nor is it available on line. As noted in comment 1 above, before the Department will be able to make final determinations, a revised version of Appendix A with the new emissions calculations must be submitted for our review.
7. The Operational Emission Summary for General Conformity, Table 2 on page K-6, does not include LNG carrier transit emissions as highlighted in table 3.9.1-13 on page 3-239. Please provide an explanation as to why these tables are different and which emissions should be used as part of this general conformity determination.
8. In the second full paragraph on page K-7, the discussion highlights the fact that the region is nonattainment for ozone. This paragraph should be modified to note that the area is also in nonattainment for PM_{2.5}.
9. The Department agrees with the statement in the third and fourth paragraphs on page K-7 that we will not exclude NO_x emissions as a precursor for PM_{2.5} but stresses that the full amount of the NO_x emissions during the two-year construction period will need to be further mitigated under General Conformity. Movement of the construction activities to outside the ozone season has been allowed on a case-by-case basis as an ozone mitigation measure to satisfy general conformity. However, the entire area is now nonattainment for PM_{2.5} and any shift of activities will not eliminate the NO_x emissions impact associated with those construction activities.
10. In the second paragraph on page K-8, there is a reference that the Department's commercial marine vessel inventory for the NYMA is based on the "Starcrest" Report (Port Authority NYNJ 2003). While this statement is correct for most of the inner harbor, further review of the report, performed in the development of

the 8-hour ozone state implementation plan (SIP) indicates that updates were not included for Long Island Sound and that the 8-hour emissions inventory is currently reflective of the 1990 Radian Report.

11. Page K-9 notes that Broadwater has initiated discussions with the Department in regard to project emissions and inclusion of those emissions into the appropriate budget for the relevant SIP. As noted above, before the Department can act on an emissions data, a revised Appendix A with all supporting calculations will need to be reviewed. The Department is interested in updating the SIP budgets to include the emissions associated with the Broadwater project however this will require a complete analysis of the commercial marine vessel inventory for the project area as the project emissions alone increase the annual emissions of NO_x considerably.
12. In the first full paragraph on page K-11 there is no mention of PM_{2.5} and the fact that the area is nonattainment for PM_{2.5}. As noted above, the Department has allowed for construction to be shifted outside of the ozone season as a general conformity mitigation measure for ozone. Since the entire area is nonattainment for PM_{2.5} a shift of activities will not address the NO_x emissions impact associated with the construction activities. This paragraph should be revised to reflect the need to offset emissions as a mitigation measure.

Air Emissions Application

1. Applicability of Air Regulations. Section 3i of the application includes a one-page table listing the Federal and State air regulations which Broadwater believes are inapplicable to the facility. A more comprehensive regulatory review must be included in this section, with the respective regulations discussed in greater detail. This section should include all major regulatory programs, with an explanation of how the FSRU is affected by each program. The section should also include a table of the thresholds for each program and a reference to which table in the emissions calculations (section 3c of the application) demonstrates that the rule does or does not apply.
2. Part 231 Emissions Offsets. Section 3e of the application includes a Use of ERC's Form to procure the NO_x offsets that are required under Part 231. In the form, Broadwater states that the offsets will be procured prior to commencement of operations. The source of NO_x offsets must identified in the application, and the

offsets must be acquired before a final decision is made.

3. References for PM Emissions Calculations. Section 3c of the application shows the calculations done to produce the emissions estimates used throughout the application. We request more information on the sources of the emissions factors used for emissions from the LNG carriers.
4. Please provide the full output files for the AERMOD analysis (not just the summary of maxima) for the analysis results presented in the permit application. In addition, provide all AERMOD input and output files associated with response to FERC EIR-4 contained in your January 23, 2008 response letter.

SPDES Application

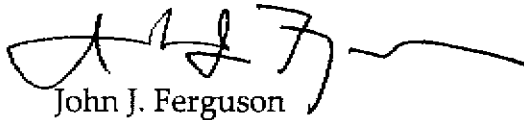
1. Outfall 009 Hydrostatic Test Water. This one-time discharge of approximately 4 million gallons of seawater treated with biocide needs to be detailed more specifically (see page 2-14 and 2-15). The biocide is not specified, nor is the method of detoxification of the proposed discharge (discharged at a rate of 4000gal/min).
2. Outfall 006 - IG Scrubber overboard, approximately 11 million gallons every 5 years, temperature and pH are the only items identified on page 2-13, please specify how the unit uses water, what pollutants/additives may be used, and give approximate concentrations of any Priority Pollutants that may be present in the discharge.
3. Industrial Application Form NY-2C Section III (page 1-12 to 1-14) should be completed for all outfalls to allow development of permit limits - if the project is approved - based on expected concentrations of parameters in the individual discharges (001-010).

As mentioned above and articulated in these comments the Department finds the applications to be incomplete at this time. Pending receipt and review of all the information requested herein the applications will remain incomplete. Please be aware that DEC may request additional information at any time during its review of the project and applications.

If you wish to discuss the comments or have any other questions please contact

me at the above number.

Very truly yours,

A handwritten signature in black ink, appearing to read 'John J. Ferguson', with a long horizontal flourish extending to the right.

John J. Ferguson
Project Review Coordinator

- cc: Sara Allen-Mochrie, Ecology & Environment, Inc.
Steven Riva, USEPA
Annamaria Coulter, USEPA
Eric Tomasi, FERC-Office of Energy Projects
James Martin, FERC-Office of Energy Projects
NYS DOS Division of Coastal Resources
Alan Bauder, NYS Office of General Services
William G. Little, Associate Counsel, NYSDEC