

## CALIFORNIA ENERGY COMMISSION

1516 NINTH STREET  
SACRAMENTO, CA 95814-5512



May 11, 2006

Dwight E. Sanders, Chief  
California State Lands Commission  
Division of Environmental Planning and  
Management  
100 Howe Avenue, Suite 100-South  
Sacramento, CA 95825-8202

**RE: REVISED DRAFT ENVIRONMENTAL IMPACT REPORT (DEIR) FOR CABRILLO  
PORT LIQUEFIED NATURAL GAS (LNG) DEEPWATER PORT (STATE  
CLEARINGHOUSE #2004021107)**

Dear Mr. Sanders:

The California Energy Commission staff has reviewed the Revised DEIR for the Cabrillo Port LNG Deepwater Port project and offers the following comments in the areas of air quality and public safety.

**Air Quality**

The Revised DEIR provides information that Ventura and Los Angeles counties are non-attainment of both the National and California ambient air quality standards (standards) for ozone, and that the Channel Islands and Ventura and Los Angeles counties are non-attainment of the California standards for particulate matter (PM) less than 10 and 2.5 microns in diameter (PM10 and PM2.5). Further, the Revised DEIR documents the quantities of ozone precursors (nitrogen oxides and reactive organic compounds) and PM and PM precursors (nitrogen oxides, reactive organic compounds, and sulfur oxides) emissions from the project and associated equipment and processes. These emissions have the potential to adversely affect air quality in these non-attainment areas, and as such, should be mitigated.

The applicant describes a credible air pollution reduction program that includes the use of clean fuels and best available control technologies (BACT) to control emissions of project vessels, equipment and processes. Additionally, the applicant has committed to offsetting some of the air pollutant emissions despite the U.S. Environmental Protection Agency (USEPA) finding that the offshore project components fall under the jurisdiction of the Channel Islands and not the mainland air quality districts, and that the project needs neither a New Source Review nor Prevention of Significant Deterioration permit. Thus according to the Revised DEIR, the applicant is not required to provide offsets for the project's potential operational emissions impacts.

As stated in the Revised DEIR, the California Air Resources Board is concerned that emissions from the project's offshore activities can reach the California coastline and

add to the air pollution burden of downwind regions like the South Coast Air Basin. The Energy Commission staff notes that the Energy Commission has consistently required when licensing power plants under our jurisdiction that project applicants fully offset all non-attainment criteria pollutant emissions. We believe such offset requirements are appropriate for this project but defer to the recommendations of the California Air Resources Board and the local air districts.

Energy Commission staff commends the applicant for their willingness to mitigate some of the project's potential emission impacts. We recommend the early and specific identification of sources used to provide offsets to allow the public and various agencies to assess their effectiveness in mitigating some of the project's potential impacts. Accordingly, we believe that the applicant's proposed mitigation measure, AM AIR-4a, should be modified to identify the specific emission reduction sources and programs that will be used to offset the project's NO<sub>x</sub> emissions. We have provided some possible examples of emission reduction sources and programs in a modified (underline/strikeout) version of AM AIR-4a.

- 24 **AM AIR-4a. Emission Reduction Programs.** As part of air permit-to-construct  
25 application procedures, the Applicant has committed to the USEPA, the CARB, and  
26 local air districts to ~~identify a~~ provide suitable emission reductions program (in addition  
27 to reductions inherent to the Project) ~~that would reduce annual emissions of NO<sub>x</sub> by an~~  
28 amount up to the FSRU's annual NO<sub>x</sub> emissions of 273.5 tons/year via the following  
29 emission reduction sources or programs:
- 30 ○ Retrofit diesel powered school buses with particulate traps or oxidation catalysts  
31 (NO<sub>x</sub>, VOC, PM10);
  - 32 ○ Retrofit diesel powered tugboats with new, cleaner diesel engines (NO<sub>x</sub>, SO<sub>x</sub>,  
33 CO, VOC, PM10);
  - 34 ○ Replace existing diesel school buses with new alternative-fueled school buses  
35 (i.e., CNG engines) (NO<sub>x</sub>, PM10);
  - 36 ○ Repower off-road heavy-duty diesel equipment with new lower-emission diesel  
37 engines equipped with particulate traps (PM, NO<sub>x</sub>);
  - 38 ○ Replace portable diesel generators with microturbines (PM, NO<sub>x</sub>);
  - 39 ○ Provide low-sulfur diesel fuel to local passenger locomotives (SO<sub>x</sub>, PM10);
  - 40 ○ Provide low-sulfur diesel fuel to local private diesel heavy-duty truck fleets (SO<sub>x</sub>,  
41 PM10);
  - 42 ○ Expand low emission fuel options such as liquefied natural gas refueling  
43 infrastructure (NO<sub>x</sub>, PM10, SO<sub>x</sub>);
  - 44 ○ Purchase of fuel cells and electrification usage with ships at the dock (all  
45 pollutants); and/or
  - 46 ○ Procure sufficient emission reduction credits at the mainland air districts to fully  
47 offset the project emission increases on 1.2:1 ratio.

The target amount of NO<sub>x</sub> emission reduction is based on Tables 4.1-12, -13 and -14. Except for bulleted item number 2 above, the proposed emission reduction sources and programs are taken directly from the February 16, 2006 South Coast Air Quality Management District Initial Study regarding the proposed amendment of their Rule 1309.1. Our suggested revisions to AM AIR-4a are only meant as demonstrations of the changes that we believe are necessary. The actual condition should include a specific target reduction amount, a list of preferred reduction proposals (including a contingency if all the proposals fail), a reporting requirement, and the procedure for calculating emission reductions achieved.

Please note that staff believes that the conclusion regarding the efficacy of AM AIR-4a (page 4.6-33, lines 30-33) to “reduce impacts to below significance criteria[.]” is not supported by the discussion and mitigation measures. Both NO<sub>x</sub> and ROCs are identified as potential ozone precursors, but the measure and discussion only address NO<sub>x</sub> and its contribution to onshore ozone. Staff recommends that the conclusion (lines 32 – 33) be deleted and that the discussion be limited to mitigation of NO<sub>x</sub> contribution to onshore ozone. Additionally, some of the mitigation measures listed above will provide PM and PM precursor emission reductions that could be used to mitigate the project’s potential PM impacts.

**Mitigation Measure (MM) AIR-5c Consultation with CARB to Identify Emission Reduction Opportunities.** Since emission reductions have not yet been identified, staff concurs that “this impact from the Project, as presently proposed, cannot be determined at this time.” [page 4.6-35 lines 28 and 29]. Staff encourages the early and specific identification of emission reductions as potential mitigation to address this uncertainty.

### **Public Safety**

As stated on page 4.2-28 of the Revised DEIR, the U.S. Coast Guard (USCG) has developed post-9/11 security measures to prevent hijacking of any vessel carrying hazardous cargo and to stop (i.e., interdict) such hijacked vessels before they can approach shore. According to the document, these security measures will be included in the security plan for the FSRU operations. This plan will be provided to appropriate Federal, State, and local agencies and elected officials with safety and security responsibilities and clearances.

Page ES 12 of Volume II, Appendix C1 of the Revised DEIR states that the Port Security Plan will include measures to “Monitor all vessels on approach to the FSRU within a certain range using all reasonable means.” This statement addresses, in part, staff’s concern regarding takeover and use of a vessel as a weapon. Procedures should also specify protocols for notification of the USCG. The objective of this monitoring should be to detect any unexpected action by the vessel as quickly as possible. Development of highly effective procedures will provide the maximum time for interdiction by the USCG.

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In light of the maximum speed of the vessels, the distance to shore, and the distance to which impacts could extend, it is essential that such monitoring be continuous and that USCG notification of deviation from expected behavior be immediate. The distance from shore where such continuous monitoring will commence should also be specified. In addition, all procedures for interdiction of aberrant vessels should be finalized and clarified prior to operation of the FSRU.

We wish to thank you for this opportunity to comment on the Revised DEIR for the proposed Cabrillo Port LNG Deepwater Port project. Should you have any questions regarding our comments, please call Terrence O'Brien, Deputy Director of the Systems Assessment & Facilities Siting Division, at (916) 654-3924, or Eric Knight, Energy Facilities Siting Project Manager, at (916) 653-1850.

Sincerely,



B. B. BLEVINS  
Executive Director