



Alan C. Lloyd, Ph.D.  
Agency Secretary

# Air Resources Board

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Arnold Schwarzenegger  
Governor

November 10, 2005

Magalie R. Salas, Secretary  
Federal Energy Regulatory Commission  
888 First Street, NE, Room 1A  
Washington, DC 20426

Re: FERC Docket No. CP04-58-000, et al. and POLB Application No. HDP 03-079

Dear Secretary Salas:

Thank you for the opportunity to comment on the Draft Environmental Impact Statement (EIS)/Environmental Impact Report (EIR): Long Beach Liquefied Natural Gas (LNG) Import Project.

The Air Resources Board (ARB) staff support efforts to secure natural gas supplies to meet California's current and future natural gas demands. Natural gas is a clean air strategy that has significantly contributed to the air quality improvements California has achieved. We believe that natural gas needs to continue to be a clean air strategy in order for California to meet our air quality goals.

In regards to the Long Beach LNG Import Project, we have two concerns that the Draft EIS/EIR should address. These concerns focus on: 1) the potential adverse impact that may occur resulting from the quality of LNG that is imported to California; and 2) the mitigation of emissions that are associated with the proposed project.

The proposed project could potentially supply California on average with about 700 million cubic feet of natural gas per day. This supply equates to about 11 percent of California's natural gas demand or about 19 percent of the demand in the Southern California Gas (SoCal Gas) service territory where the proposed project would be located. This significant amount of imported natural gas entering into California can affect the quality of natural gas in the region.

As you may know, most LNG on the world-wide market has higher energy content than the natural gas to which California is accustomed. Available data indicates that significant differentials in energy content of natural gas can adversely affect the operation and emissions of stationary and mobile sources that are fueled on natural gas

*The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption. For a list of simple ways you can reduce demand and cut your energy costs, see our website: <http://www.arb.ca.gov>.*

California Environmental Protection Agency

(e.g., higher energy content natural gas typically generates higher levels of oxides of nitrogen (NO<sub>x</sub>) emissions). We understand that Sound Energy Solutions (SES) has proposed to remove portions of the natural gas liquids (NGLs) from the LNG in order to meet the SoCal Gas Rule 30 specifications for pipeline natural gas and the LNG specifications for motor vehicle fuel established by ARB. (Please note: ARB does not have LNG specifications but rather compressed natural gas (CNG) specifications for motor vehicle fuel.) However, meeting these standards does not ensure that the quality of the natural gas after removal of NGLs will not adversely impact the quality of natural gas that is consumed in the South Coast Air Basin.

Historically, natural gas in the South Coast Air Basin has on average an energy content of about 1020 BTU/scf and a wobbe number of about 1332.<sup>1</sup> This is significantly lower than the upper range of energy content and wobbe number that is allowed under the existing SoCal Gas Rule 30 specifications. Also, it is possible to comply with the existing ARB CNG specifications with natural gas that has higher BTU and wobbe values than the existing averages for the Basin. If the proposed project were to produce natural gas at the higher end of the range of these specifications, NO<sub>x</sub> emissions could increase in the South Coast Air Basin. Therefore, the draft EIS/EIR should recognize the historic quality of natural gas used in the South Coast Air Basin and assess possible impacts, if any, that may result from the use of LNG-derived natural gas. If significant adverse impacts are identified, mitigation measures should be implemented (e.g., require further NGL's removal to a level that would not significantly increase the average energy content or wobbe number of natural gas in the South Coast Air Basin).

In regards to the mitigation of emissions that are associated with the proposed project, we believe all emissions that could adversely affect California's air quality should be mitigated to the extent feasible.

The California Environmental Quality Act (CEQA) requires consideration of all potential adverse environmental impacts of a project, along with alternatives and mitigation measures to eliminate or lessen those impacts. As required by CEQA, a complete and accurate analysis must be performed on the project (See *No Oil v. City of LA* (1974) 13 Cal. 3d 68). From an air quality perspective, all emissions associated with the project must be included in the analysis. Directly associated emissions are those that would not occur "but for" the project. With the proposed LNG project, vessel emissions

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<sup>1</sup> "RESPONSIVE TESTIMONY OF SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT TO TESTIMONY AND PROPOSAL OF SAN DIEGO GAS AND ELECTRIC COMPANY AND SOUTHERN CALIFORNIA GAS COMPANY", submitted to the California Public Utilities Commission, September 23, 2005.

of visiting tankers are direct emissions. These emissions must be counted in determining the impact of the proposed project and whether the impact has the potential to have a significant adverse effect on air quality.<sup>2</sup>

We understand that South Coast Air Quality Management District's (SCAQMD) regulations require the offset of emissions from the stationary aspects of the proposed project. However, all emissions associated with LNG carriers and support vessels operating within California Coastal Waters do not appear to be addressed. ARB established the California Coastal Waters definition as the boundary within which emissions that are released are transported on-shore. A map defining the boundaries of California Coastal Waters is enclosed for your information. It is the position of ARB staff that it has jurisdiction within California Coastal Waters as discussed in the documents "Report to the California Legislature on Air Pollutant Emissions from Marine Vessels, June 1984, Volume 7, Appendix H and Appendix J."

In Table 4.9.5-2, Volume 1 of the Draft EIS/EIR, NOx emissions from LNG carriers and support vessels are estimated to be about 46 tons per year. This estimate assumes that LNG carriers operate on a combination of LNG boil-off and residual No. 6 fuel oil. Also the estimate considers emissions from marine operations in an area defined as within the "CEQA boundary" (note: CEQA boundary was not defined) and within SCAQMD waters only. It is not clear from the discussion in the Draft EIS/EIR that all emissions from marine operations within the boundaries of California Coastal Waters have been considered. It also appears that the estimated NOx emissions of 46 tons per year may be underestimated. ARB staff's review of a competing proposed California LNG project using LNG carriers and support vessels fueled exclusively on boil-off LNG and natural gas indicates that estimated NOx emissions from marine operations are significantly greater.<sup>3</sup> Therefore, the draft EIS/EIR should provide more detail in describing how emissions were calculated. As discussed above, we believe that

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<sup>2</sup> Counting vessel emissions in an LNG project is directly analogous to counting vehicular emissions that are part of an overall project in a land-based project. Courts have struck down the CEQA analysis in cases where such vehicular emissions were not addressed. (See Kings County Farm Bureau v. City of Hanford (1990) 221 Cal. App. 3d 692. In this case, the lead agency wrongly concluded that the effects of a cogeneration plant were less than significant by failing to consider the onsite and vehicular emissions together in assessing the impact of the project. Because the lead agency did not consider the combined effect of all pollution sources, the agency had no evidentiary basis for supporting the conclusion that air quality impacts were less than significant. The mere fact that a project may comply with an applicable regulatory standard for a stationary source does not negate the need to consider the emissions from all vehicular sources associated with the project.)

<sup>3</sup> Draft Environmental Impact Statement/Environmental Impact Report for the Cabrillo Port Liquefied Natural Gas Deepwater Port, October 2004.

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emissions within California Coastal Waters can reach the California coastline and add to the air pollution burden of downwind regions (e.g., South Coast Air Basin) and should be addressed in the Draft EIS/EIR as required by CEQA.

For purposes of this project, ARB staff believes it is appropriate to mitigate the emissions from marine operations that occur within 25 nautical miles from the California mainland coastline. We believe this will address the majority of emissions from the proposed project and maximize the potential on-shore benefits. Possible mitigation measures that may be applicable and should be considered include, but are not limited to, retrofit of the engines of vessels that regularly operate in California Coastal Waters with selective catalytic reduction or the conversion from diesel fuel to natural gas. Although ARB has not established relevant significance criteria, these emissions clearly exceed the "significance threshold" of 55 pounds per day for NOx emissions that the SCAQMD, the District most affected, has established.

If you or your staff have any questions regarding our comments, please contact me at (916) 322-6020, or Mr. Gary M. Yee, Manager, Industrial Section at (916) 327-5986.

Sincerely,

/s/ by DCS

Dean C. Simeroth, Chief  
Criteria Pollutants Branch

Enclosure

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bcc: Michael H. Scheible, EO  
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