UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
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January 22, 2007

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

Tim Filler
California State Lands Commission
100 Howe Ave., Suite 100 South
Sacramento, CA 95825

Subject: Draft Environmental Impact Statement/Environmental Impact Report (DEIS/EIR) and Draft Land Use Plan Amendment for the North Baja Pipeline Expansion Project, FERC Docket Nos. CP06-61-000 and CP01-23-003
CA State Clearinghouse No. 2006081127

Dear Secretary Salas and Mr. Filler:

The U.S. Environmental Protection Agency (EPA) has reviewed above-referenced document pursuant to the National Environmental Policy Act (NEPA), Council on Environmental Quality (CEQ) regulations (40 CFR Parts 1500-1508) and Section 309 of the Clean Air Act. We are providing our comments after the close of the public comment period, as stated in our request to the Federal Energy Regulatory Commission (FERC) on December 20, 2006 (Docket Nos. CP06-61-000 and CP01-23-003).

North Baja Pipeline, LLC (North Baja) proposes to expand its existing natural gas transmission pipeline system in La Paz County, Arizona and Riverside and Imperial Counties, California. The expanded system would be capable of transporting natural gas from planned liquefied natural gas (LNG) storage and vaporization terminals located in Baja California, Mexico to customers in California and Arizona.

Based on our review, we have rated the DEIS as Environmental Concerns – Insufficient Information (EC-2) (see enclosed "*Summary of Rating Definitions*"). We have concerns about the scope of the air quality analysis, indirect impacts on air quality, and water quality impacts. EPA is particularly concerned about indirect air quality impacts on the South Coast and Imperial County air basins, given their current nonattainment status for several criteria pollutants. We recommend revisiting the indirect air quality analysis in the Final EIS and providing mitigation measures, as appropriate. Please see the enclosed Detailed Comments for a complete description of these concerns and our recommendations.

We are aware of the bilateral complexities of evaluating the proposed project under NEPA. Environmental protection along the United States/Mexico Border is a regional priority

for EPA, and we recognize that energy development in this region provides an opportunity to meet bi-national needs. Consistent with our agency's mission, we also seek to ensure that energy development in the border region promotes domestic and bi-national environmental goals. Our recommendations are provided with this intent.

We appreciate the opportunity to review this DEIS. When the FEIS is released for public review, please send one (1) hard copy to the address above (mailcode: CED-2). If you have any questions, please contact me at (415) 972-3846 or Ann McPherson, the lead reviewer for this project. Ann can be reached at (415) 972-3545 or mcpherson.ann@epa.gov.

Sincerely,

/s/

Nova Blazej, Manager
Environmental Review Office

Enclosures: Summary of EPA Rating Definitions
Detailed Comments

Cc: Stephen L. Birdsall, Imperial County Air Pollution Control District
Dr. Barry Wallerstein, South Coast Air Quality Management District
Bill Powers, Border Power Plant Working Group
Col. Alex C. Dornstauder, U.S. Army Corps of Engineers

EPA DETAILED COMMENTS ON THE DRAFT ENVIRONMENTAL IMPACT STATEMENT/ENVIRONMENTAL IMPACT REPORT (DEIS/EIR) AND DRAFT LAND USE PLAN AMENDMENT FOR THE NORTH BAJA PIPELINE EXPANSION PROJECT, JANUARY 22, 2007

Air Quality

Indirect Impacts on Air Quality

EPA is concerned that the DEIS does not fully consider the indirect impacts on air quality resulting from the construction of the North Baja Pipeline Expansion Project. This issue is of concern to EPA because of the nonattainment status of the South Coast and Imperial County air basins. In accordance with the Council on Environmental Quality's (CEQ's) National Environmental Policy Act (NEPA) Regulations and *CEQ's Guidance on National Environmental Policy Act (NEPA) Analyses for Transboundary Impacts, July 1, 1997,* the EIS should consider the reasonably foreseeable environmental effects that may occur as a result of this project. "Reasonable foreseeable" includes indirect effects, which are caused by the action, are later in time or farther removed in distance (40CFR 1508.8(b)). Additionally, case law interpreting NEPA has reinforced the need to analyze impacts regardless of geographic boundaries within the United States.

The scope of the air quality analysis should include the following issues: *a*) emissions from the two compressor stations in Mexico (upstream facilities); *b*) the higher energy content of the imported natural gas in downstream areas; *c*) mitigation of indirect air quality impacts; *d*) general conformity analysis, including direct and indirect emissions; and *e*) emissions from off-highway vehicle (OHV) use.

a. Emissions from the two Compressor Stations in Mexico

The Executive Summary states that the capacity of the Gasoducto Bajanorte pipeline system in Mexico will be expanded and that two new compressor stations will need to be constructed, including the Algodones Compressor Station, located 2.5 miles south of the California-Mexico border and 3 miles west of the Arizona-Mexico border, and the Mexicali Compressor Station, located near Mexicali, Mexico. The potential exists for operating emissions to affect air quality in the United States because of their proximity to the United States border. The DEIS states that the Agency Staffs (FERC, California State Lands Commission (CSLC), and Bureau of Land Management (BLM)) conducted an analysis of the operating emissions from the Mexicali and Algodones Compressor Stations and determined that no emitted pollutants at these compressor station sites would result in a predicted concentration above an established significant impact level (page ES-23).

EPA recognizes that compressor stations can be sources of large amounts of nitrogen oxides (NOx). According to table 4.15.8-3, the Mexicali Compressor Station would have NOx emissions of 235 tons/year (t/yr) and the Algodones Compressor Station will have NOx emissions totaling 355.7 t/yr, for a combined total of 570.7 t/yr. Emissions from the existing power plants west of Mexicali (the La Rosita Power Complex (LRPC) and the Termoelectrica de

Mexicali Power Plant (TMD Plant)) are estimated to be 608 tons/year. Emissions from the two compressor stations are approximately equivalent to emissions from the two power plants in Mexicali. Because the wind blows in a northerly direction a significant part of the year, it is likely that the NOx emissions will affect air quality in Imperial County. Imperial County is in non-attainment of EPA's 8-hour ozone standard. NOx is a precursor to ozone.

The Agency Staffs have concluded that they have no jurisdiction over the associated upstream facilities (two compressor stations) to require an environmental analysis of their impacts in connection with the North Baja Pipeline Expansion project. These upstream facilities are subject to the Mexican environmental regulatory review process and standards (page 1-19).

If the compressor stations were located in the United States in a nonattainment area, each would be considered a Major Source and would require a permit to operate. The permit would require Lowest Achievable Emission Rate (LAER) technology to be installed and maintained and also would require sufficient offsets of emissions at a ration depending upon the classification of the nonattainment area, but no less that 1:1. If the project were located in an attainment area, the permit would require Best Available Control Technology (BACT). The federal general conformity rule trigger level is 100 t/yr for NOx in a marginal area such as Imperial County. In accordance with *CEQ's Guidance on NEPA Analyses for Transboundary Impacts*, it is within FERC's control and responsibility to extend its environmental review to include the associated facilities.

Recommendation:
EPA recommends that FERC address emissions from the associated upstream facilities, including the two compressor stations located in Mexico, in the environmental review. To limit NOx emissions to Imperial County, EPA recommends BACT be required at the two compressor stations in Mexico. Examples of BACT include the use of selective catalytic reduction (SCR) for nitrogen oxide control and catalytic oxidizers for carbon monoxide (CO) reduction on the two compressor stations. This requirement could be stipulated within FERC's Amendment to the Presidential Permit.

b. Energy Content of the Imported Natural Gas

The DEIS does not describe, analyze, or mitigate, as appropriate, the significant air quality impacts that would result from burning increased quantities of hotter natural gas. FERC states that the terms of the precedent agreements between North Baja Pipeline, LLC (North Baja) and its shippers require that the gas delivered to the North Baja system meet the most stringent gas quality standard of any of the pipeline to which the North Baja system might ultimately deliver the gas (page 4-207) but does not provide additional information about the standard.

During the scoping process, the Imperial County Air Pollution Control District (ICAPCD) raised concerns about the energy content of the imported natural gas. Natural gas with a higher Wobbe Index has the potential to increase NOx, CO, and unburned hydrocarbon emissions. The South Coast Air Quality Management District (SCAQMD) and the ICAPCD are concerned that the introduction of the hotter gas in California and the southwestern United States

will substantially increase emissions of the ozone and fine particulate matter (PM2.5) precursor NOx, making attainment of the federal air quality standards more difficult to meet, especially in basins with pre-existing attainment problems. This issue has the potential to impact the highly compromised urban airsheds of Los Angeles, Phoenix, and San Diego, where a significant amount of the natural gas will be used. The Los Angeles and San Joaquin Valley areas have the worst ozone and PM2.5 problems in the country, and attainment of the National Ambient Air Quality Standards (NAAQS) for those pollutants will require massive reductions from all controllable emissions categories. Any increase in existing emissions levels, such as those associated with combustion of natural gas with a higher Wobbe Index, would make attainment of the public health standards still more difficult.

Recommendation:
The FEIS should address what the composition, quality, and British Thermal Unit (BTU) content of the imported natural gas will be. The FEIS should include a discussion of the current BTU content normally found in California's natural gas supply; SoCalGas and California Air Resources Board (CARB) existing specifications; and current efforts to revise those specifications in accordance with the California Public Utilities Commission (CPUC). The FEIS should discuss the potential impacts of increasing the BTU content of the gas supply, and address the North Baja's commitment to provide a supply of natural gas within a specific quality range. One alternative is to require that the natural gas meet, within some reasonable level of variability, the quality of natural gas currently flowing in the Southwest natural gas transmission pipeline system.

c. Mitigation of Indirect Air Quality Impacts

To ensure that there will not be increased concentrations of ozone precursor pollutants in the air basin from the compressor stations in Mexico or from burning "hotter" natural gas, mitigation projects to reduce basin-wide pollutant emissions should be implemented.

Recommendation:
EPA recommends that FERC consider mitigation options in response to these issues. The FEIS should address how these mitigation measures could be implemented, and evaluate the related effects on air quality. EPA recommends that FERC collaborate with the ICAPCD, the Border Power Plant Working Group, and the SCAQMD to prioritize which measures would be most effective in reducing air quality impacts. EPA recommends that FERC include mitigation commitments, as appropriate, in the Record of Decision.

d. General Conformity

The General Conformity requirement of the Clean Air Act (CAA) mandates that the Federal government not license, permit, or approve any activity not conforming to an approved CAA implementation plan. The FEIS should address the applicability of CAA Section 176 and EPA's general conformity regulations at 40 CFR Parts 51 and 93. Emissions authorized by a CAA permit issued by the State or the local air pollution control district would not be assessed under general conformity but through the permitting process. The DEIS concludes that project

emissions would be below general conformity *de minimis* levels; therefore, a general conformity determination is not required (page 4-201).

Imperial County, California, is designated as marginal non-attainment for the 8-hour ozone NAAQS. The Imperial Valley is also designated as serious non-attainment for particulate matter with a diameter of 10 microns or less (PM10). The South Coast Air Basin nonattainment designations under the Federal CAA are as follows: CO – serious nonattainment; 8-hour ozone – severe-17 nonattainment; PM10 – serious nonattainment; and particulate matter with a diameter of 2.5 microns or less (PM2.5) – nonattainment.

Recommendation:
A complete analysis is required to determine if the emissions associated with the proposed project (both construction and operational emissions) are subject to the requirements for a formal conformity determination under the General Conformity rule codified at 40 CFR 93, subpart B. The "applicability" analysis involves quantification of emissions caused by the proposed project that are generated within nonattainment or maintenance areas, that are reasonably foreseeable, and that the Federal agency can practicably control and will maintain control over due to a continuing program responsibility.

e. Off-Highway Vehicle (OHV) Use

EPA is concerned with the generation of PM10 associated with the proposed project. Large amounts of PM10 emissions are generated by off-road traffic on the current North Baja Pipeline right-of-way. To reduce the potential for interference between pipeline construction activities and OHV users and inappropriate OHV use of the pipeline right-of-way, North Baja has developed an OHV plan that addresses the initial siting, construction, and operation of the proposed North Baja Pipeline Expansion project (page P-1). This plan was developed in consultation with BLM. Although North Baja has no plans to maintain a permanent road on the right-of-way, they do plan to maintain access to all portions of the permanent right-of-way by four-wheel drive vehicles in order to conduct emergency and periodic maintenance (page ES-16). PM emissions will be generated as a result of maintenance activities and OHV use in the future. Levels may become an impediment for ICAPCD to reach PM10 attainment.

Recommendation:
EPA recommends that OHV plan be revised to include the following issues: 1) agency or agencies responsible for implementation and enforcement of the OHV plan; 2) frequency of monitoring; 3) methodology for reassessing the implemented measures in the future; and 4) enforcement measures.

Water Resources

Clean Water Act Section 404

The project applicant (North Baja) should coordinate with the U.S. Army Corps of Engineers to determine if the proposed project requires a Section 404 permit under the Clean Water Act (CWA). Section 404 regulates the discharge of dredged or fill material into waters of the U.S., including wetlands and other special aquatic sites. If a permit is required, EPA will review the project for compliance with *Federal Guidelines for Specification of Disposal Sites for Dredged or Fill Materials* (40 CFR 230), promulgated pursuant to Section 404(b)(1) of the CWA ("404(b)(1) Guidelines"). Pursuant to 40 CFR 230, any permitted discharge into waters of the U.S. must be the *Least Environmentally Damaging Practicable Alternative* (LEDPA) available to achieve the project purpose. In addition, no discharge can be permitted if it will cause or contribute to significant degradation of the waters of the U.S.

A total of two perennial waterbodies, 70 irrigation canals and drains, and 265 ephemeral washes would be crossed by the proposed pipeline facilities resulting in temporary impact to 35.7 acres of wetlands and permanent impact to 3.0 acres of wetlands (table 4.4.2-1). Impacts to waters include clearing and grading of streambanks, trenching and dewatering in waters, increased sedimentation, increased turbidity, decreased dissolved oxygen concentrations, and clearing of aquatic habitat. Given the extent of the impacts associated with the proposed project, North Baja bears the burden of clearly demonstrating that the preferred alternative is the LEDPA that achieves the overall project purpose, while not causing or contributing to significant degradation of the aquatic ecosystem.

Identification of the LEDPA is achieved by performing an alternatives analysis that estimates the direct, secondary, and cumulative impacts to jurisdictional waters resulting from each alternative considered. Project alternatives that are not practicable and do not meet the project purpose are eliminated. The LEDPA is the remaining alternative with the fewest impacts to aquatic resources, so long as it does not have other significant adverse environmental consequences. Only when an analysis is correctly structured can the applicant or the permitting authority be assured that no discharge other than the practicable alternative with the least adverse impact on the aquatic ecosystem has been selected (40 CFR 230.10(a)). In addition, the applicant must clearly demonstrate that alternatives that do not result in the discharge of dredged or fill material in aquatic sites are either not practicable, or have other significant adverse environmental consequences.

Based on our review of the DEIS, the alternatives analysis does not demonstrate compliance with the 404 (b)(1) Guidelines. On page 4-67, the DEIS states that North Baja did not incorporate one measure of FERC's Procedures into its Construction, Mitigation, and Restoration (CM&R) Plan – the provision to limit the width of the construction right-of-way in wetlands to 75 feet or less. In addition, the DEIS states that the North Baja is requesting a variance from FERC's Procedures which requires that all extra workspaces (such as staging areas and additional spoilage storage areas) be located at least 50 feet away from wetland boundaries (page 4-67). Under Section 404 of the CWA, the Guidelines require authorization of

the LEDPA. To minimize direct, indirect and secondary impacts to waters, the North Baja must demonstrate it is not practicable to reduce the construction right-of-way to 75 feet or less and stage outside of wetlands.

EPA offers the following recommendations to help facilitate compliance of the project with the Section 404 Guidelines:

Recommendation:
The FEIS should include an evaluation of the project alternatives in order to demonstrate the project's compliance with the 404(b) (1) Guidelines and authorization of LEDPA. The alternatives analysis should include a reasonable range of alternatives that meet the project purpose while avoiding and minimizing damage to waters of the United States, including wetlands (waters). If, under the proposed project, dredged or fill material would be discharged into waters of the US, the FEIS should discuss alternatives to avoid those discharges.

Recommendation:
North Baja should demonstrate that it is not practicable to reduce the construction right-of-way to 75 feet or less and stage outside of wetlands. This information should be included in the FEIS.

Recommendation:
With the exception of Rannell's Drain, North Baja proposes to cross all wetlands using the horizontal directional drill (HDD) or bore method, or the pipeline would be installed between the drain culverts and a road bed. While these methods will minimize impacts to waters, North Baja must demonstrate it is not practicable for them to conduct the bore method for all waters encountered in the alignment. The FEIS should evaluate whether modification of the alignment can avoid additional waters, as well.

Recommendation:
The FEIS should include additional information regarding indirect and secondary impacts from the bifurcation of wetlands.

Recommendation:
The FEIS should clarify whether the impact acreage in table 4.4.2-1 includes impacts to crossing 265 ephemeral washes.

Pursuant to the 404 Guidelines, North Baja must mitigate for unavoidable impacts to waters. Based on a review of the DEIS, North Baja proposes natural revegetation of the areas following construction. However, the DEIS states that few native species were able to colonize impact areas affected during construction of the A-Line, due to the high concentration of salts and the presence of non-native tamarisk propagules in the wetland topsoil.

Recommendation:
Based on this information, EPA does not support natural revegetation. A mitigation and monitoring report for the planting of native revegetation in the impact areas should be required, consistent with the 404 Guidelines.

Recommendation:
For permanent impacts to wetlands, DEIS states a 10-foot wide maintained corridor would result in the permanent conversion of wetlands, but North Baja does not anticipate annual vegetation maintenance in this corridor. Given the potential for future maintenance, North Baja should mitigate for permanent impacts through compensation of acreage and function.