

CALIFORNIA ENERGY COMMISSION

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April 30, 1999

Mr. Seyed Sadredin
Director of Permit Services
San Joaquin Valley Unified Air Pollution Control District
2700 M Street, Suite 275
Bakersfield, CA 93301

Dear Mr. Sadredin:

PRELIMINARY DETERMINATION OF COMPLIANCE FOR THE LA PALOMA GENERATING PROJECT

Thank you for the opportunity to review the Preliminary Determination of Compliance (PDOC) for the La Paloma Generating Project (LPGP), a proposed 1,048 MW power plant located near McKittrick, California. Our comments on the PDOC are the following:

BEST AVAILABLE CONTROL TECHNOLOGY

The PDOC states on page 35 that BACT for the Gas Turbine Engines (GTEs) for NO_x is 2.5 ppmv @ 15 percent O₂ averaged over 3 hours and for CO a concentration of 10 ppmv @ 15 percent O₂, also averaged over 3 hours. In comments on the PDOCs for similar gas turbine projects - issued by the Feather River Air Quality Management District on the Sutter project and by the Mojave Desert Air Quality Management District on the High Desert Project - the EPA has stated that BACT for NO_x is 2.5 ppm averaged over one hour, not three hours. For CO, the EPA has commented that BACT is 4.0 ppmvd over an averaging time of up to 24 hours. In both cases the applicants and the respective air districts have agreed to the BACT levels recommended by EPA. We believe that the San Joaquin Valley Unified Air Pollution Control District (District) should consider these comments from EPA in their BACT determinations for the GTEs on the La Paloma project to assure that state and federal permits on the project will be consistent.

RULE 4301 – FUEL BURNING EQUIPMENT

The purpose of Rule 4301 is to limit the emission of air contaminants from fuel burning equipment. The requirement of the rule is that a piece of “non-mobile fuel burning equipment” shall not be built unless the discharge into the atmosphere does not exceed 200 pounds per hour of SO₂, 140 pounds per hour of NO₂ or 10 pounds per hour of combustion contaminants, which, according to the definition under Rule 1020, are

particulate matter. The definition of "fuel burning equipment" is "any furnace, boiler, apparatus, stack, and all appurtenances thereto, used in the process of burning fuel for the primary purpose of producing heat or power by indirect heat transfer."

The District assumes on page 41 of the PDOC that the primary purpose of the GTEs is to produce power mechanically, and that secondarily, the GTEs produce power by recovering heat from the exhaust heat which produces steam through the Heat Recovery Steam Generators (HRSGs). Thus, the District concludes that the GTEs are exempt from the emission limits of Rule 4301.

We believe that the GTEs/HRSGs are subject to this rule for the primary purpose of producing heat by indirect heat transfer. If the GTEs for the project were only used in simple cycle, that is with no HRSG, then we would agree that the primary purpose of the GTE is to produce power mechanically, since there is no appurtenance piece of equipment for indirect heat transfer. However, with the addition of a HRSG, as an appurtenance piece of equipment and as an integral part of the power generation block, there is an indirect heat transfer occurring, and thus we believe that the emission limits of Rule 4301 do apply.

There is no concern about meeting the rule limits for SO₂ and NO_x, however the limit of 10 pounds per hour (per turbine) is a limit that is lower than the proposed emission limit of 17.2 pounds per hour. However, under Section 6 of Rule 4301, the test method to determine compliance with the 10 pound per hour limit is by EPA Method 5, which requires only the in-stack particulate catch and not the condensable particulate. Therefore, we believe it may be possible to demonstrate compliance with the rule limit, although verification should be sought from the turbine vendor.

EMISSION REDUCTION CREDITS

We understand that EPA has previously expressed concerns to the District about one of the emission reduction credit (ERC) sources that are being proposed in the La Paloma application, specifically, the Newark Sierra Paperboard Corporation (NSPC). We have reviewed the correspondence between EPA (dated March 11, 1998) and the District (dated November 1998) regarding their concerns about the validity and quantities of credits available from the NSPC. We encourage the District to expeditiously resolve any concerns that EPA may still have regarding these ERCs so that it will not delay the issuance of the Final DOC.

EMISSIONS MONITORING

Permit Condition 22 requires that VOC source testing occur only during the initial source test period and not for any subsequent source test conceptually for the life of the project. We do not believe that one test to determine project lifetime compliance with hourly, daily and annual emission limits is sufficient, especially with degradation of

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equipment over time. We believe that VOC source testing should be conducted at the initial source test as proposed and at intervals of every five years thereafter for the life of the project.

There are many permit conditions that limit emissions by mass emissions for start-up and shutdown (Condition 13), hourly (Condition 14), daily (Condition 15) and annually (Condition 16). Yet the only pollutants for which continuous monitoring is required to verify compliance with emissions limits for these various time intervals are NO_x and CO (Condition 28). There are no methods proposed or required in the PDOC to determine whether the project's SO₂, PM₁₀ or VOC emissions will be in compliance with the applicable start-up, hourly, or daily emission limit. We believe that the yearly source test results, along with the fuel consumption noted during the source test be used to determine the continuous compliance of the project with the SO₂, PM₁₀ and VOC emission limits, as presently proposed in the PDOC for NO_x and CO. By correlating the fuel consumed along with the results of the source test, one can determine the start-up, hourly and daily compliance of the project with the SO₂, PM₁₀ and VOC emission limits.

We also question whether a once-a-year sample of fuel gas sulfur content (Condition 24) will be adequate monitoring for Title V emission reporting requirements. We believe the District should review the emission reporting requirements for SO₂ under Title V and reflect those minimum requirements in the frequency of sampling of the fuel sulfur content in Condition 24.

Thank you for the opportunity to provide comments on the District's PDOC for the La Paloma project. Resolution of the issues raised in comments on the PDOC and timely publication of the Final DOC is critical to completing the Commission's licensing process. If you have any questions regarding our comments, please contact Keith Golden at (916) 653-1643.

Sincerely,

ROBERT L. THERKELSEN, Deputy Director for
Energy Facilities Siting and Environmental
Protection

cc: Proof of Service, 98-AFC-2
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