



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF
AIR AND RADIATION

Frank Luchetti
Sierra Pacific Power Company
6100 Neil Road, P.O. Box 10100
Reno, NV 89520-0400

Dear Mr. Luchetti:

This letter represents EPA's official determination of applicability for four units that will operate at the synthetic gas manufacturing portion of the Piñon Pine Power Project ("Piñon Pine"), ORISPL 7419, which is owned and operated by Sierra Pacific Power Company (SPPC). This determination is made in response to your December 8, 1995 petition for a formal determination of applicability for Piñon Pine under 40 CFR 72.6(c), which provides for the petitioning of the Environmental Protection Agency (EPA) Administrator for formal applicability determinations under the Acid Rain Program.

EPA agrees with the petitioner that the gasifier, fines combustor, sulfator and startup heater units at the gas manufacturing facility are not affected units under the Acid Rain Program. Although all four of these portions of the facility are units as defined under 40 CFR 72.2 ("fossil-fuel fired combustion devices"), the gasifier, fines combustor, and sulfator are cogeneration units, which (as defined under 40 CFR 72.2) "produce electric energy and forms of useful thermal energy (such as heat or steam) for industrial, commercial, heating or cooling purposes, through the sequential use of energy." The gasifier is a cogeneration unit because waste heat from the production of synthetic gas will be used to produce steam for electric generation at a 46.336 MW unit and some waste steam from the electric generation will then be returned for use in the gasifier. The fines combustor is a cogeneration unit because it will produce steam used to generate electricity at the same 46.336 MW unit and some waste steam from the electric generation will in turn be used in the gasifier. The sulfator is a cogeneration unit because waste heat created by the process of removing sulfur from solids produced by the gasifier will be used in the fines combustor. As discussed below, the startup heater is not a utility unit or cogeneration unit.

Under 40 CFR 72.6(b)(4)(ii), a cogeneration unit for which construction commenced after November 15, 1990 and that supplies no more than one-third of its potential electrical output capacity or 219,000 MWe-hours of actual electric output to a utility power distribution system on an annual basis is not considered a utility unit and is therefore not considered an affected unit under the Acid Rain Program. Construction commenced on the Piñon Pine facility in February 1995.

The gasifier, fines combustor, and sulfator cogeneration units will supply steam or heat for a generator with 46.336 MW capacity, capable of producing 405,903 MWe-hours (46.336 multiplied by 8760 hours, the number of hours in a year) of actual electric output annually. The generator requires about 464.85 mmBtu/hr heat energy to operate at capacity. Each of these cogeneration units will be contributing a portion of the total heat energy supplied to the generator. The heat energy contributed by the gasifier is about 98.8 mmBtu/hr (about 21% of total heat energy) producing a maximum of 9.731 MW gross generation (21% of 46.336 MW) or 85,244 MWe-hours per year (9.731 multiplied by 8760 hours), well below the 219,000 MWe-hours threshold necessary for a cogeneration unit to be considered a utility unit, as mentioned above. Since the gasifier is not a utility unit, it is not an affected unit under the Acid Rain Program.

The heat energy contributed by the fines combustor and sulfator together is about 64.2 mmBtu/hr (about 14% of total heat energy), producing a maximum of 6.487 MW gross generation (14% of 46.336 MW) or 56,826 MWe-hours per year (6.487 MW multiplied by 8760 hours), again well below the 219,000 MWe-hours threshold necessary for either cogeneration unit to be considered a utility unit. Since neither the fines combustor nor the sulfator is a utility unit, neither is an affected unit under the Acid Rain Program.

Although the start up heater is a unit as defined in 40 CFR 72.2, it does not serve a generator (e.g., it will provide heat to start up the gasifier and the sulfator and will not produce heat that is transferred to water, steam, or other medium for use in a generator) that produces electricity for sale, and therefore is not a utility unit or an affected unit under the Acid Rain Program.

If, for any three calendar year period, the gasifier unit, fines combustor unit, or sulfator unit supplies an annual average of more than 219,000 MWe-hours of actual electric output and more than one-third of its potential electrical output capacity to any utility power distribution system, that unit will be considered a utility unit and therefore an affected unit. As an affected unit, the unit will have to comply with all applicable requirements under the Acid Rain Program, including the requirement to apply for and receive an acid rain permit (under 40 CFR part 72) and to monitor and report emissions (under 40 CFR part 75).

This determination is based on the representations in your letter and attachments of December 8, 1995, is made in reliance on the accuracy and completeness of those representations, and is appealable under 40 CFR part 78. The applicable regulations require you to send copies of this letter to each owner or operator of Piñon Pine (40 CFR 72.6(c)(1)). If you have further questions regarding the Acid Rain Program, please contact Robert Miller at (202) 233-9077.

Sincerely,

/s/ (August 13, 1996)

Brian J. McLean, Director
Acid Rain Division