

Technical Support Document For a Title V Amendment

November 30, 2006

Company Name: Nevada Power Company (NPC)
Facility Name: Sunrise Station
Location: 6300 East Vegas Valley Drive, Las Vegas, NV 89122
Facility: 8
Title V Modification: 1

Permitting Action:

On June 30, 2006 Nevada Power Company (NPC) was issued and Authority to Construct/Operate (ATC/OP) Modification 1, Amendment 2 to its Sunrise Station facility. This ATC/OP amendment included an update to the short-term PM₁₀ emission rates associated with the simple-cycle turbine (EU 801), and a change to the reporting requirements from monthly to quarterly.

NPC requested these changes be reflected in its Title V Operating Permit. This Modification incorporates the changes made to the NSR document into the Title V Operating Permit.

Background:

Nevada Power Company (NPC) requested amendments to its ATC/OP for Sunrise Station (Facility 8). In January 9, 2004 the source requested an update to the short-term PM₁₀ emission rates associated with the simple-cycle turbine (EU 801). On February 28, 2006, NPC requested that the source only be subject to quarterly and annual reporting requirements, in that the current permit (ATC/OP Modification 1, Revision 1) requires monthly and annual reporting. Both of these requests were granted with an amended permit issued on June 30, 2006.

Performance testing conducted in 2003 by Horizon Air Measurement Services, Inc., Newbury Park, CA demonstrated conformance with the short-term emission factors and rates for NO_x, CO and VOC. Measured PM₁₀ emissions were slightly higher than the emission factor and rate set forth in the existing permit.

According to the report, the PM₁₀ emission rate for each test run exceeded the short-term emission rate (lbs/MMBtu and lbs/hour) listed in Table III-A-1 of the permit. Section III-G-8 of the current permit states, "Should any DAQM-approved performance test show that any existing turbine emission factor underestimates emissions, the relevant emission factor and associated annual PTE shall be adjusted accordingly, pursuant to administrative permit revision procedures."

Based on the PM₁₀ results of the 2003 performance testing, DAQEM revised the short-term emission rate and Potential to Emit (PTE) from 0.0066 pounds per MMBtu, 7.80

pounds per hour and 34.17 tons per year to 0.0089 pounds per MMBtu, 10.5 pounds per hour and 45.99 tons per year.

With regard to the reporting frequency change, Air Quality Regulation (AQR) § 19.4.1.3 requires quarterly reporting, and there is no indication where the monthly reporting requirement came from. DAQEM, therefore, revised the reporting requirement from monthly and annually to quarterly and annually.

On September 6, 2006 NPC submitted comments on a draft Title V amendment for this facility. All of their comments were incorporated except the following:

“Condition III-G-8, which was in the previous version of the Part 70 Operating Permit (issued on October 4, 2002) has been omitted from the current permit. Please restore this condition to the permit.”

This condition in the October 4, 2002 permits states, “DAQM-approved performance test results shall be used to verify turbine emission factors used to determine compliance. Should any DAQM-approved performance test show that any existing turbine emission factor underestimates emissions, the relevant emission factor and associated PTE shall be adjusted accordingly, pursuant to administrative permit revision procedures.”

This condition was put into the October 4, 2002 Title V permit based on discussions with facility representatives at the time. In that some of the emissions had never been stack-tested, it was understood that what was being proposed was an estimate. The stack testing has since been conducted and emissions have been properly adjusted. There is no reason for this condition to continue in this version of the permit and this request is being denied.