

September 10, 2009

Mr. Kevin Geraghty
Designated Representative
Nevada Power
P.O. Box 98910
Las Vegas, NV 89151-0001

Re: Petition for Extension of CEMS Certification Deadline at the Clark Station
(Facility ID (ORISPL) 2322), Units 17A and 17B

Dear Mr. Geraghty:

The United States Environmental Protection Agency (EPA) has reviewed Nevada Power Company's (Nevada Power) November 6, 2008, petition under §75.66 of the Acid Rain Program regulations. The petition requests an extension of the deadlines to complete certification of the continuous emission monitoring system (CEMS) for Clark Station Units 17A and 17B to December 31, 2008. EPA approves the petition, with conditions, as discussed below.

Background

Nevada Power owns and operates the Clark Station, which is located in The facility's Units 17A and 17B are the two engines of a Pratt & Whitney Model FT-8 SwiftPac, known jointly under Clark County DAQEM Authority to Construct as Turbine Unit 17. Turbine Unit 17 is one of twelve new SwifWacs being commissioned at Clark Station in 2008, each of which is considered by the Clean Air Markets Program as two units with a common generator and common stack.

Nevada Power learned in September that the CEMS probe initially installed in the stack of Turbine Unit 17 is not long enough to satisfy the probe siting criteria in the Acid Rain Regulations. Nevada Power had not yet finished certifying the CEMS for this unit at the time the issues with the probe was determined. Nevada Power then decided to stop the certification testing, replace the probe, and then complete the initial CEMS certification. Although the other SwiftPacs commissioned at Clark Station have all passed their CEMS certification testing this year, Nevada Power has concerns relating to stratification on these simple cycle units with very low emission limits (2.0 ppm CO and 5.0 ppm NOx), oxidation catalyst, SCR with ammonia injection, and noise dampening baffles in the stack. Therefore, Nevada Power determined that the ideal CEMS probe would pull stack exhaust from a grid across the entire stack.

Nevada Power contacted a manufacturer of custom CEMS probes and commissioned them to design a custom probe for this application. The end design consists of six probes, each with three ports, manifolded together to one sample line. Due to the late determination of the need for a new probe and the fabrication time required for the custom probe, Nevada Power cannot meet the CEMS certification deadline (180 calendar days/90 operating days) as required under CFR 75.4(e). The 180 day deadline fell on November 14, 2008, based on a commencement date of May 18, 2008.

Since Unit CT-1 had fewer than 90 operating days prior to the mechanical failure, the certification deadline for the unit is 180 days after commencement of commercial operation, or October 8, 2003. However, Calpine cannot meet this deadline because the unit will be inoperable until December, 2003. In view of this, Calpine requested an extension of the CEMS certification deadline in its August 19, 2003 petition. Calpine proposed to complete CEMS certification testing within 60 calendar days of the first day of operation following the transformer rebuild.

EPA's Determination

Nevada Power has encountered issues with the new probe which prevented the CEMS certification deadline from being met. Nevada Power has documented these problems in the November 6, 2008 petition. It appears that Nevada Power has taken reasonable and timely measures to resolve the problems. Therefore, EPA approves a CEMS certification deadline extension of December 31, 2008 to complete the CEMS certification.

The approved CEMS certification deadline extension for these units is conditioned on Nevada Power reporting emissions and heat input data starting from the original CEMS certification deadline for the unit. That is, Nevada Power shall report SO₂, CO₂ emissions data and unit heat input, beginning with the first operating hour after the original certification deadline, the first operating hour after November 14, 2008 through December 31, 2008 (or earlier date, if completed before December 31).

In order to ensure that emissions from Unit CT-1 are not under-reported, Nevada Power shall report the maximum potential NO_x emission rate (calculated in accordance with Part 75, Appendix A, Section 2.1.2.1) for each operating hour until the required CEMS certification tests of the NO_x monitoring system have been successfully completed. In a telephone conversation with EPA on September 3, 2003, Calpine confirmed that the fuel flow meters on Unit CT-1 have met the initial certification requirements of Part 75, Appendix D. Therefore, when the unit recommences operation, Calpine shall either report quality-assured fuel flow rates, or, if the flow meters are not in service, the appropriate Appendix D missing data values, and shall use these flow rates to quantify the SO₂ and CO₂ emissions and the unit heat input.

EPA's determination in this letter relies on the accuracy and completeness of the information provided by Nevada Power in the November 6, 2008 petition and through the discussion with CAMD staff, and is appealable under Part 78. If you have any questions or concerns about this determination, please contact Edgar Mercado at (202) 343-9440.

Sincerely,

/s/

Samuel Napolitano, Director
Clean Air Markets Division

cc: Wilson Haynes, EPA Region III
Tracy Peace, ADEM - Air Division
Edgar Mercado, EPA CAMD

The unit has currently had 71 operating days, but many more operating days will be required for testing and adjustment of the unit with the new probe installed (due partially to the fact that the CEMS system provides feedback to the ammonia injection control system) and a full range of CEMS certification tests. Therefore, NV Energy requests that Acid Rain Units 17A and 17B be granted an extended deadline of December 31, 2008 to complete the initial CEMS certification.