



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION IX  
75 Hawthorne Street  
San Francisco, CA 94105

OCT 31 2003

CERTIFIED MAIL NO. 7003 1680 0002 6627 3524  
RETURN RECEIPT REQUESTED

IN REPLY: AIR-5  
REFER TO: Docket No. R9-03-03

Michael Niggli  
Chief Executive Officer  
Nevada Power Company  
6226 West Sahara Ave., P.O. Box 230  
Las Vegas, NV 89151

Re: Notice of Violation and Finding of Violation

Dear Mr. Niggli:

Enclosed is a Notice of Violation and Finding of Violation ("NOV" and "FOV", collectively "NOV/FOV") being issued by the United States Environmental Protection Agency ("EPA") to the Nevada Power Company ("NPC") for violations of the Clean Air Act (the "Act") at NPC's Clark Station electric utility generating station in East Las Vegas, Nevada (the "Facility").

The NOV component of this NOV/FOV is being issued pursuant to Section 113(a)(1) of the Act, 42 U.S.C. § 7413(a)(1), which provides in part:

Whenever, on the basis of any information available to the Administrator, the Administrator finds that any person has violated or is in violation of any requirement or prohibition of an applicable implementation plan or permit, the Administrator shall notify the person and the State in which the plan applies of such finding.

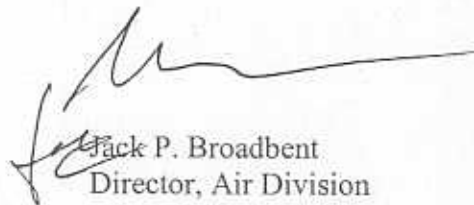
Through this NOV, EPA is notifying NPC of its determination that NPC has violated and continues to violate the Prevention of Significant Deterioration ("PSD") requirements of the Act and the federally-approved and federally-enforceable Clark County portion of the Nevada State Implementation Plan. Specifically, the NOV describes how, among other PSD related claims, NPC failed to incorporate emission control technology designed to meet the Best Available Control Technology at the time that Units 5 and 6 were upgraded in 1992 which constitutes a

violation of Section 15.13.9.2 of the SIP. The FOV component of this NOV/FOV describes NPC's failure to respond to EPA's March 16, 2001 CAA Section 114 information request.

The CAA provides that after 30 days from the date of issuance of an NOV, EPA may determine if any action will be taken pursuant to Section 113 of the Act. 42 U.S.C. § 7413(a)(1). The NOV/FOV informs NPC that a conference on the matter may be arranged by making a request to this office within 10 working days after receipt of this NOV/FOV.

If you have any questions concerning this NOV/FOV, please contact Charles Aldred of the Region 9 Air Division's Enforcement Office at (415) 972-3986.

Sincerely,



Jack P. Broadbent  
Director, Air Division

cc: Christine Robinson, DAQM  
Scott R. Campbell, Sierra Pacific Resources



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION IX  
75 Hawthorne Street  
San Francisco, CA 94105

OCT 31 2003

IN REPLY: AIR-5  
REFER TO: Docket No. R9-03-03

Christine Robinson  
Director  
Clark County Department of Air Quality Management  
500 S. Grand Central Parkway, First Floor  
Las Vegas, Nevada 89106

Re: Notice and Finding of Violation (Docket No. R9-03-03)  
In the matter of Nevada Power Company

Dear Ms. Robinson:

Enclosed for your information is a copy of a Notice of Violation and Finding of Violation ("NOV" and "FOV", collectively "NOV/FOV") that the United States Environmental Protection Agency ("EPA") recently issued to the Nevada Power Company ("NPC") for violations of the Clean Air Act (the "Act") at NPC's Clark Station electric utility generating station in East Las Vegas, Nevada (the "Facility").

The NOV component of the NOV/FOV was issued pursuant to Section 113(a)(1) of the CAA, 42 U.S.C. § 7413(a)(1), which provides in part:

Whenever, on the basis of any information available to the Administrator, the Administrator finds that any person has violated or is in violation of any requirement or prohibition of an applicable implementation plan or permit, the Administrator shall notify the person and the State in which the plan applies of such finding.

Through the NOV, EPA notified NPC of its determination that NPC has violated and continues to violate the Prevention of Significant Deterioration ("PSD") requirements of the Act and the federally-approved and federally-enforceable Clark County portion of the Nevada State Implementation Plan. Specifically, the NOV described how, among other PSD related claims, NPC failed to incorporate emission control technology designed to meet the Best Available

Control Technology at the time that Units 5 and 6 were upgraded in 1992 which constitutes a violation of Section 15.13.9.2 of the SIP. The FOV component of the NOV/FOV describes NPC's failure to respond to EPA's March 16, 2001 CAA Section 114 information request.

The CAA further provides that after 30 days from the date of issuance of an NOV, EPA may determine if any action will be taken pursuant to Section 113 of the Act. 42 U.S.C. § 7413(a)(1). The NOV/FOV informs NPC that a conference on the matter may be arranged by making a request to this office within 10 working days after receipt of the NOV/FOV. If such a conference is held, you will be advised and your participation would be welcome.

If you have any questions concerning this NOV/FOV, please contact Charles Aldred of the Region 9 Air Division's Enforcement Office at (415) 972-3986.

Sincerely,



Jack P. Broadbent  
Director, Air Division

cc: Scott R. Campbell, Sierra Pacific Resources

1 UNITED STATES  
2 ENVIRONMENTAL PROTECTION AGENCY  
3 REGION 9

4 In the Matter of ) Docket No. R9-03-03  
5 NEVADA POWER COMPANY )  
6 Las Vegas, Nevada ) NOTICE OF VIOLATION AND  
7 ) FINDING OF VIOLATION  
8 Proceeding Under Section )  
9 113(a) of the Clean Air Act, )  
10 42 U.S.C. § 9613(a) )  
11 )

12 NOTICE OF VIOLATION/FINDING OF VIOLATION

13 This Notice of Violation and Finding of Violation  
14 ("NOV/FOV") is issued to Nevada Power Company ("NPC"), for  
15 violations of the Clean Air Act (the "Act") at its Clark Station  
16 facility gas-fired power plant located in East Las Vegas, Clark  
17 County, Nevada ("Facility"). NPC violated the Prevention of  
18 Significant Deterioration ("PSD") and information request  
19 provisions requirements of the Act. This NOV/FOV is issued  
20 pursuant to Section 113 of the Act, as amended, 42 U.S.C.A.  
21 Section 7401-7671q. The authority to issue this NOV/FOV has been  
22 delegated to the Regional Administrator of the United States  
23 Environment Protection Agency ("EPA") Region 9 and further re-  
24 delegated to the Director, Air Division, EPA, Region 9.

25 SUMMARY OF VIOLATION(S)

26 NPC commenced commercial operation of Units 5 and 6 at the  
27 Facility in 1977. As originally configured, both units had  
28 turbines rated at 75 megawatts ("MW"). NPC performed an upgrade  
to Units 5 and 6, referred to as the W501B6 or B6 Upgrade,

1 commencing in 1992. The purpose of the B6 Upgrade was to add 2.5  
2 MW to the base load output for Units 5 and 6, which would also  
3 correlate to an increase in the exhaust temperature by  
4 approximately 30 degrees Fahrenheit. NPC completed the B6  
5 Upgrade in July 1993 and initiated start up of the upgraded  
6 turbines on July 22, 1993. The B6 Upgrade made certain changes  
7 to the turbines at Units 5 and 6, including coating the turbine  
8 blades, changing the number of vanes, and replacing components,  
9 among other things. This was a major expenditure by NPC.

10 EPA's determination that the B6 Upgrade was a major  
11 modification is based on the fact that the physical changes to  
12 Units 5 and 6 resulted in both increases of actual and potential  
13 oxides of nitrogen ("NOx") emissions after the B6 Upgrade. Since  
14 operating natural gas-fired turbines at higher temperatures  
15 results in greater NOx emissions, the B6 Upgrade resulted in  
16 greater potential to emit ("PTE") as it raised the temperature  
17 that the turbines can run at base load, which is their main  
18 operating mode. In regard to actual emission increases, NPC's  
19 uncontrolled emissions of NOx after the B6 Upgrade increased  
20 substantially, partly because NPC increased its operating hours  
21 by 5 to 10 times. EPA estimates that the source currently adds  
22 around 2,000 tons per year of actual NO<sub>x</sub> emissions to the air  
23 basin.

24 The Facility is located in an area that has at all relevant  
25 times been classified as attainment or unclassifiable for ozone.  
26 Accordingly, the PSD provisions of Part C, Title I of the Act  
27 apply to operations at the Facility for purposes of NOx  
28 emissions, a regulated ozone precursor. Nevertheless, NPC failed

1 to apply for a PSD permit for the B6 Upgrade nor applied any  
2 additional emission controls after the B6 Upgrade. EPA believes  
3 that the B6 Upgrade was a major modification for PSD purposes  
4 which required a PSD permit and a permit to operate requiring the  
5 application of emission controls meeting best available control  
6 technology ("BACT") for NOx emissions.

7 Moreover, NPC failed to respond to an EPA information  
8 request issued under authority of Section 114 of the Act to NPC  
9 on March 16, 2001. Question 15 of that information request  
10 required that NPC perform a BACT analysis for Units 5, 6 and 7.  
11 In its May 21, 2001 response to EPA, NPC stated that it would not  
12 respond to this particular request, and failed to provide the  
13 requested BACT analysis.

14 These violations of the Act and the State Implementation  
15 Plan ("SIP") of Nevada have resulted in the release of large  
16 quantities of NOx, among other pollutants, into the environment.  
17 Until these violations are corrected, the Facility will continue  
18 to illegitimately release large quantities of NOx and other  
19 pollutants into the environment.

#### 20 21 **STATUTORY & REGULATORY BACKGROUND**

22 1. This NOV/FOV is issued pursuant to Section 113(a)(1) of  
23 the Act, 42 U.S.C. § 7413(a)(1). Among other things, Section  
24 113(a)(1) of the Act requires the Administrator of EPA to notify  
25 any person in violation of a SIP of the violations. The  
26 authority to issue this NOV/FOV has been delegated from the  
27 Administrator to the Director of the Air Division of EPA Region  
28 9. Pursuant to this delegated authority, the Director hereby



1 notifies NPC that it has been and is in violation of the Act's  
2 PSD program, as incorporated into the Clark County portion of the  
3 federally approved SIP for the state of Nevada consisting of the  
4 Clark County Health District's<sup>1</sup> ("District") regulations  
5 ("District Regulations"), and of EPA's Section 114 information  
6 request authority.

7 2. The Administrator of EPA, pursuant to authority under  
8 Section 109 of the Act, 42 U.S.C. § 7409, has promulgated  
9 National Ambient Air Quality Standards ("NAAQS") for certain  
10 criteria pollutants, including nitrogen oxides ("NO<sub>x</sub>"). 40  
11 C.F.R. § 50.8.

12 3. Pursuant to Section 107(d) of the Act, 42 U.S.C.  
13 § 7407(d), the Administrator promulgated lists of attainment  
14 status designations for each air quality control region ("AQCR")  
15 in every state. These lists identify the attainment status of  
16 each AQCR for each of the criteria pollutants. The attainment  
17 status designations for the Nevada AQCRs are listed at 40 C.F.R.  
18 § 81.329.

19 4. The Facility is located in the Las Vegas Valley in  
20 Clark County, Nevada. Clark County was designated as an  
21 attainment area for Ozone ("O<sub>3</sub>") by operation of law under  
22 Sections 107(d)(1)(C) and 186(a) of the Act, 42 U.S.C.  
23 §§ 7407(d)(1)(C) and 7486(a). See 56 Fed. Reg. 56694 (November  
24 6, 1991).

25 5. Section 110 of the Act, 42 U.S.C. § 7410, requires each  
26

---

27 <sup>1</sup>The District's role in regulating air quality for the Clark  
28 County basin has been superceded by a new agency, the Clark  
County Department of Air Quality Management, but the District  
Regulations remain in the SIP and are fully effective.



1 state to adopt and submit to EPA a plan that provides for the  
2 implementation, maintenance, and enforcement of primary and  
3 secondary NAAQS in the state. Upon approval by EPA, the plan  
4 becomes part of the applicable SIP for the state.

5 6. Section 110(a)(2)(C) of the Act, 42 U.S.C.  
6 § 7410(a)(2)(C), requires that each SIP include a PSD permit  
7 program as provided in Part C of Title I of the Act, 42 U.S.C.  
8 §§ 7470-7491. Part C sets out requirements for SIPs for  
9 attainment areas to ensure maintenance of the NAAQS.

10 7. Pursuant to Section 161 of the Act, 42 U.S.C. § 7471,  
11 the Administrator promulgated regulations in 40 C.F.R. § 51.166,  
12 which establishes requirements for PSD programs submitted by  
13 states to EPA for inclusion in SIPs.

#### 14 15 The District's PSD Rules 1, 15 & 16

16 8. Sections 1 (Definitions), 15 (Source Registration) and  
17 16 (Operating Permits) of the District Regulations are part of  
18 the federally enforceable SIP submitted by the State of Nevada  
19 and approved by EPA pursuant to 42 U.S.C. § 7410 and Part C of  
20 the Act.<sup>2</sup> See 47 Fed. Reg. 26,620 (June 21, 1982), 46 Fed. Reg.  
21 43,141 (August 27, 1981) and 46 Fed. Reg. 21,758 (April 14,  
22 1981).

23 9. Rule 15.6.1 of the District Regulations prohibits any  
24 person from constructing a new source or making modifications to  
25

---

26 <sup>2</sup>Sections 0 (Definitions) and 12 (Preconstruction Review For  
27 New Or Modified Stationary Sources) had been approved as part of  
28 the SIP, 64 Fed. Reg. 25210 (May 11, 1999), replacing Sections 1  
and 15, but that approval was recently vacated and remanded.  
Hall v. U.S. EPA, 273 F.3d. 1146 (9th Cir. 2001).

1 an existing source of air pollution without first obtaining a  
2 permit issued by the District (referred to in Rule 15 as an  
3 Authority to Construct Certificate ("ATC")), in accordance with  
4 the procedures and requirements set forth in Rule 15.

5 10. Rule 1.52 of the District Regulations defines the term  
6 "Modification" as "any physical change in or change in the method  
7 of operation of an existing stationary source which increases or  
8 may increase the Potential to Emit of any Air Contaminant by any  
9 Emission Unit in the Stationary Source... ."

10 11. Rule 15.13.9.2 provides that a new or modified  
11 stationary source shall apply best available control technology  
12 ("BACT") for each pollutant subject the PSD requirements.

13 12. BACT is defined in Section 1.15 as:

14 an emission limitation . . . based on the maximum  
15 degree of reduction of each pollutant subject to  
16 regulation under the Act . . . which the [District]  
17 Control Officer, on a case-by-case basis taking into  
18 account energy, environmental, and economic impacts and  
19 other costs, determines is achievable for such source  
20 or modification through application of production  
21 processes or available methods, systems, and techniques  
22 . . . for control of such pollutant. In no event shall  
23 application of best available control technology result  
24 in emissions of any pollutant which would exceed the  
25 emissions allowed by any applicable federal or local  
26 standards.

27 13. Section 16.2 of the District Regulations prohibits the  
28 operation of any source of air contaminants requiring a  
Registration Certificate (defined in District Regulation Section  
1.76 as an ATC for those sources requiring ATCs) unless the  
source has a current and valid Operating Permit issued by the  
District's Control Officer.

1        **Section 114 Clean Air Act Information Request Authority**

2        14. The Administrator, or the authorized representative of  
3 the Administrator, has authority under Section 114 of the Act, 42  
4 U.S.C. § 7414, "for the purpose of determining whether any person  
5 is in violation of a CAA standard or SIP requirement, to require  
6 any person who owns or operates any emission source... or who is  
7 subject to any requirement of this chapter on a one-time,  
8 periodic or continuous basis to (A) establish and maintain such  
9 records; (B) make such reports;... or (G) provide other such  
10 information as the Administrator may reasonably require."

11        15. The Air Division Director for Region 9 has been duly  
12 delegated the Administrator's authority to issue requests for  
13 information pursuant to Section 114 of the Act.

14  
15                    **FINDINGS OF FACT**

16                    **Modification to Turbine Units 5 and 6**

17        16. NPC is the owner and operator of the Facility, an  
18 electric power generating station known as the Clark Station,  
19 which is located at 5640 Stephanie Street, East Las Vegas, Clark  
20 County, Nevada.

21        17. The Facility includes at least four combustion  
22 turbines, which combust natural gas or fuel oil in order to  
23 generate electricity.

24        18. The combustion of natural gas or fuel oil at the  
25 turbines produces emissions of NO<sub>x</sub> which are released to the  
26 atmosphere.

27        19. NPC constructed two identical 75 MW-rated combustion  
28 turbine units at the Facility, Units 5 and 6, commencing in 1977.

1  
2 20. NPC performed an upgrade to Units 5 and 6, referred to  
3 as the W501B6 or B6 Upgrade, commencing in 1992. NPC completed  
4 the B6 Upgrade in July 1993 and initiated start up of the  
5 upgraded turbines on July 22, 1993.

6 21. As part of the B6 Upgrade, NPC (through its contractor  
7 Siemens Westinghouse Power Corporation), made the following  
8 changes to Units 5 and 6: (1) changed 1<sup>st</sup> stage turbine nozzles  
9 from a three-vane cluster to a single-vane design; (2) changed  
10 1<sup>st</sup> stage turbine blade ring; (3) installed stronger row 2  
11 compressor diaphragms; (4) coated compressor blades; (5) replaced  
12 transition pieces; (6) replaced combustor baskets; (8) replaced  
13 inner & outer transitional seals; and (9) conducted a full rotor  
14 inspections.

15 22. Completion of the B6 Upgrade allowed NPC to operate  
16 Units 5 and 6 at higher temperatures during base load operations.

17 23. The ability of Units 5 and 6 to operate at higher  
18 temperatures during base load operations because of the B6  
19 Upgrade resulted in an increase in potential NO<sub>x</sub> emissions from  
20 Units 5 and 6. Actual emissions of NO<sub>x</sub> from Units 5 and 6 also  
21 greatly increased after the B6 Upgrade.

22 24. NPC neither applied for nor obtained an ATC or PTO for  
23 the upgraded Units 5 and 6.

24 25. NPC never installed BACT-level emission controls for  
25 NO<sub>x</sub> emissions from Units 5 or 6.

26  
27 **Response to Section 114 Information Request**

28 26. EPA issued NPC a request for information pursuant to

1 Section 114 of the Act on March 16,, 2001 ("March 2001 Information  
2 Request"). The March 2001 Information Request in Question 15  
3 required that NPC "conduct a separate BACT analysis of NO<sub>x</sub>, SO<sub>2</sub>,  
4 CO, and PM<sub>10</sub> for units 5, 6, 7, and 8 that evaluates emissions  
5 reduction for each unit."

6 27. In its May 21, 2001 response to EPA, NPC stated that  
7 "EPA's request for a BACT analysis is premature," and willfully  
8 failed to conduct or provide a BACT analysis as requested by EPA.  
9

#### 10 NOTICE OF VIOLATION

##### 11 The District's PSD SIP Rules of Sections 15 & 16

12 28. The construction of the B6 Upgrade was a "modification"  
13 to the Facility, as defined by District Rule 1.58.

14 29. NPC's failure to install and operate emission control  
15 technology designed to meet BACT-level emission controls for  
16 Units 5 and 6 after the B6 Upgrade constitutes an ongoing  
17 violation of District Rule 15.13.9.2, the SIP, and the Act.

18 30. NPC's failure to seek and obtain an ATC from the  
19 District incorporating BACT-level emission controls for Units 5  
20 and 6 before commencing construction of the B6 Upgrade  
21 constitutes a violation of District Rule 15.6.1, the SIP, and the  
22 Act.

23 31. NPC's failure to seek and obtain a PTO from the  
24 District incorporating BACT-level emission controls for Units 5  
25 and 6, as contained in an appropriate ATC, after the B6 Upgrade  
26 is an ongoing violation of District Rules 16.1 and 16.3.1, the  
27 SIP, and the Act.  
28

1 FINDING OF VIOLATION

2 Failure to Respond to Section 114 Information Request

3 32. NPC's failure to respond to Question 15 of the March  
4 2001 Information Request request is an ongoing violation of  
5 Section 114 of the Act.  
6

7 ENFORCEMENT

8 33. For any violations of a SIP, Section 113(a)(1) of the  
9 Act, 42 U.S.C. § 7413(a)(1), provides that at any time after the  
10 expiration of 30 days following the date of the issuance of this  
11 NOV/FOV, the Administrator may, without regard to the period of  
12 violation, issue an order requiring compliance with the  
13 requirements of the SIP, issue an administrative penalty order,  
14 or bring a civil action pursuant to Section 113(b) for injunctive  
15 relief and/or civil penalties of not more than \$25,000 per day  
16 for each violation that occurs on or before January 30, 1997, and  
17 not more than \$27,500 per day for each violation that occurs  
18 after January 30, 1997. 42 U.S.C. § 7413(a)(1); Federal Civil  
19 Penalties Inflation Adjustment Act of 1990, Pub. L. 101-410, as  
20 amended; 40 C.F.R. Part 19.

21 34. Section 113(c) of the Act, 42 U.S.C. § 7413(c),  
22 provides for criminal penalties, imprisonment, or both for  
23 persons who knowingly violate any federal regulation or permit  
24 requirement. For violations of the SIP, a criminal action can be  
25 brought 30 days after the date of issuance of a Notice of  
26 Violation.

27 35. Section 306 of the Act, 42 U.S.C. § 7606, the  
28 regulations promulgated thereunder (40 C.F.R. Part 32), and



1 Executive Order 11738 provide that facilities to be utilized in  
2 federal contracts, grants and loans must be in full compliance  
3 with the Act and all regulations promulgated pursuant to it.  
4 Violations of the Act may result in the Facility being declared  
5 ineligible for participation in any federal contract, grant, or  
6 loan.

#### 8 **PENALTY ASSESSMENT CRITERIA**

9 36. Section 113(e)(1) of the Act, 42 U.S.C. § 9613(e)(1),  
10 states that the Administrator or the court shall determine the  
11 amount of a penalty to be assessed by taking into consideration  
12 such factors as justice may require, including the size of the  
13 business, the economic impact of the penalty on the business, the  
14 violator's full compliance history and good faith efforts to  
15 comply, the duration of the violation as established by any  
16 credible evidence (including evidence other than the applicable  
17 test method), payment by the violator of penalties previously  
18 assessed for the same violations, the economic benefit of  
19 noncompliance, and the seriousness of the violation.

20 37. Section 113(e)(2) of the Act, 42 U.S.C. § 9613(e)(2),  
21 allows the Administrator or the court to assess a penalty for  
22 each day of violation. This section further provides that for  
23 purposes of determining the number of days of violation, where  
24 the EPA makes a prima facie showing that the conduct or events  
25 giving rise to the violation are likely to have continued or  
26 recurred past the date of an NOV, the days of violation shall be  
27 presumed to include the date of the NOV and each and every day  
28 thereafter until the facility establishes that continuous




1 compliance has been achieved, except to the extent that the  
2 facility can prove by the preponderance of the evidence that  
3 there were intervening days during which no violation occurred or  
4 that the violation was not continuing in nature.

5  
6 **OPPORTUNITY FOR CONFERENCE**

7 38. NPC may confer with EPA regarding this NOV/FOV if it so  
8 requests. A conference would enable NPC to present evidence  
9 bearing on the finding of violation, on the nature of violation,  
10 and on any efforts it may have taken or proposes to take to  
11 achieve compliance. If NPC seeks such a conference, it may  
12 choose to be represented by counsel. If NPC wishes to confer  
13 with EPA, it must make a request for a conference within 10  
14 working days of receipt of this NOV/FOV. Any request for a  
15 conference or other inquiries concerning the NOV/FOV should be  
16 made in writing to:

17  
18 Ivan Lieben Office of Regional Counsel  
19 U.S. EPA (ORC-2)  
20 75 Hawthorne Street  
21 San Francisco, CA 94105  
22 (415) 972-3914

23 Dated: 10/29/03

24   
25 Jack P. Broadbent  
26 Director, Air Division  
27  
28