

**ADOPTED REGULATION OF THE  
STATE ENVIRONMENTAL COMMISSION**

**LCB File No. R148-09**

Effective January 28, 2010

EXPLANATION – Matter in *italics* is new; matter in brackets ~~[omitted material]~~ is material to be omitted.

AUTHORITY: §1, NRS 445B.210.

A REGULATION relating to air quality; revising limits on the emission of sulfur dioxide from certain power-generating units of the Reid Gardner Generating Station; and providing other matters properly relating thereto.

**Section 1.** Section 4 of LCB File No. R190-08 is hereby amended to read as follows:

Sec. 4. 1. The sources listed below must install, operate and maintain the following control measures which constitute BART and must not emit or cause to be emitted NO<sub>x</sub>, SO<sub>2</sub>, or PM<sub>10</sub> in excess of the following limits:

(a) For power-generating units numbers 1 and 2 of NV Energy’s Fort Churchill Generating Station, located in hydrographic area 108:

| UNIT<br>(Boiler) | NO <sub>x</sub>  |                     | SO <sub>2</sub>  |              | PM <sub>10</sub>  |                  |
|------------------|--|---------------------|--|--------------|---|------------------|
|                  | Emission Limit<br>(lb/10 <sup>6</sup> Btu,<br>12-month rolling<br>average) | Control Type        | Emission Limit<br>(lb/10 <sup>6</sup> Btu,<br>24-hr average) | Control Type | Emission Limit<br>(lb/10 <sup>6</sup> Btu,<br>3-hr average) | Control Type     |
| 1                | 0.20   | Low NO <sub>x</sub> | 0.05   | Pipeline     | 0.03  | Pipeline natural |

| UNIT<br>(Boiler) | NO <sub>x</sub>  |   | SO <sub>2</sub>  |   | PM <sub>10</sub>  |                              |
|------------------|--|---|--|---|---|------------------------------|
|                  | Emission Limit<br>(lb/10 <sup>6</sup> Btu,<br>12-month rolling<br>average) | Control Type                              | Emission Limit<br>(lb/10 <sup>6</sup> Btu,<br>24-hr average) | Control Type                            | Emission Limit<br>(lb/10 <sup>6</sup> Btu,<br>3-hr average) | Control Type                 |
| 2                | 0.16   | burners with<br>flue gas<br>recirculation | 0.05   | natural gas<br>and/or No. 2<br>fuel oil | 0.03  | gas and/or No.<br>2 fuel oil |

(b) For power-generating units numbers 1, 2 and 3 of NV Energy's Tracy Generating Station, located in hydrographic area 83:

| UNIT<br>(Boiler) | NO <sub>x</sub>  |   | SO <sub>2</sub>   |   | PM <sub>10</sub>  |  |
|------------------|--|---|---|---|---|--|
|                  | Emission<br>Limit (lb/10 <sup>6</sup><br>Btu,<br>12-month<br>rolling<br>average) | Control Type  | Emission<br>Limit (lb/10 <sup>6</sup><br>Btu,<br>24-hr average) | Control Type  | Emission Limit<br>(lb/10 <sup>6</sup> Btu,<br>3-hr average) | Control Type                                     |
| 1                | 0.15   | Low NO <sub>x</sub>   | 0.05  | Pipeline<br>natural gas<br>and/or No. 2<br>fuel oil | 0.03  | Pipeline natural<br>gas and/or No. 2<br>fuel oil |
| 2                | 0.12   | burners with<br>flue gas<br>recirculation                                     | 0.05  |   | 0.03  |  |
| 3                | 0.19   | Low NO <sub>x</sub><br>burners with<br>selective<br>noncatalytic<br>reduction | 0.05  |   | 0.03  |  |

(c) For power-generating units numbers 1, 2 and 3 of NV Energy's Reid Gardner Generating Station, located in hydrographic area 218:

| UNIT<br>(Boiler) | NO <sub>x</sub>  |                                  | SO <sub>2</sub>  |  | PM <sub>10</sub>  |               |
|------------------|--|----------------------------------|--|--|---|---------------|
|                  | Emission<br>Limit (lb/10 <sup>6</sup><br>Btu,<br>12-month<br>rolling<br>average) | Control Type                     | Emission<br>Limit (lb/10 <sup>6</sup><br>Btu,<br>24-hr<br>average) | Control Type                                 | Emission Limit<br>(lb/10 <sup>6</sup> Btu,<br>3-hr average) | Control Type  |
| 1                | 0.20   | Rotating                         | <del>{0.25}</del> 0.15   | Wet soda ash flue<br>gas<br>desulphurization | 0.015   | Fabric filter |
| 2                | 0.20   | Opposed Fire                     | <del>{0.25}</del> 0.15   |  | 0.015   |               |
| 3                | 0.28   | Air with<br>Rotamix <sup>1</sup> | <del>{0.25}</del> 0.15   |  | 0.015   |               |

(d) For power-generating units numbers 1 and 2 of Southern California Edison's Mohave Generating Station, located in hydrographic area 213:

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<sup>1</sup> Rotamix is a technology for adding selective noncatalytic reduction using ammonia or urea-based reagent.

| UNIT<br>(Boiler) | NO <sub>x</sub>  |  |   | SO <sub>2</sub>  |   | PM <sub>10</sub>   |  |
|------------------|--|--|---|--|---|--|--|
|                  | Emission<br>Limit<br>(lb/10 <sup>6</sup> Btu,<br>12-month<br>rolling<br>average) | Mass<br>Emission<br>Rate (lb/hr,<br>1-hr<br>average) | Control Type  | Emission<br>Limit<br>(lb/10 <sup>6</sup> Btu,<br>30-day<br>rolling<br>average) | Control Type                                  | Emission<br>Limit (lb/10 <sup>6</sup><br>Btu,<br>3-hr average) | Control Type                                     |
| 1                | 0.15   | 788  | Low NO <sub>x</sub><br>burners with<br>over-fire air<br>and<br>conversion to<br>pipeline<br>natural gas<br>only | 0.0019   | Conversion to<br>pipeline natural<br>gas only | 0.0077   | Conversion to<br>pipeline<br>natural gas<br>only |
| 2                | 0.15   | 788  |   | 0.0019   |   | 0.0077   |  |

2. The control measures established in subsection 1 may be replaced or supplemented with alternative technologies approved in advance by the Director, provided that the emission limits in subsection 1 are met. The established or approved control measures must be installed and operating:

(a) For NV Energy's Fort Churchill, Tracy and Reid Gardner generating stations:

(1) On or before January 1, 2015; or

(2) Not later than 5 years after approval of Nevada's state implementation plan for

regional haze by the United States Environmental Protection Agency Region 9,

↪ whichever occurs first.

(b) For Southern California Edison's Mohave Generating Station, at the time that each unit resumes operation.

3. If the ownership of any BART regulated emission unit changes, the new owner must comply with the requirements set forth in subsection 2.

4. For purposes of this section, emissions of  $PM_{10}$  include the components of  $PM_{2.5}$  as a subset.

## Permanent Regulation - Filing Statement

### Nevada Division of Environmental Protection Bureaus of Air Pollution Control and Air Quality Planning

Legislative Review of Adopted Regulations as Required  
by Administrative Procedures Act, NRS 233B.066

#### State Environmental Commission (SEC)

LCB File No. R148 - 09

SEC # P2009-05

**Regulation R148-09; Revision to Air Emissions Limits at NV Energy's Reid-Gardner Generating Station:** This regulation revises the requirement for sulfur dioxide (SO<sub>2</sub>) emission limits at NV Energy's Reid Gardner [electrical power] Generating Station, located in the California Wash northeast of Las Vegas. The regulation lowers the emission limits from 0.25 lb/10<sup>6</sup> Btu to 0.15 lb/10<sup>6</sup> Btu, on a 24-hour average, for units 1, 2 and 3. This limit becomes effective on January 1, 2015 or 5 years after approval of Nevada's regional haze state implementation plan by the U.S. Environmental Protection Agency (EPA), whichever occurs first.

By way of background, the EPA published the federal Regional Haze Rule (RHR) on July 1, 1999, requiring states to establish emission reduction strategies for improving visibility in all Class I national parks and wilderness areas in the United States. One of the strategies required by the RHR is the application of best available retrofit technology (BART) to certain existing sources. Electrical generating units 1, 2 and 3 at NV Energy's Reid Gardner Generating Station are subject to the BART requirement.

Nevada's original BART regulation was adopted on February 11, 2009 to address the federal RHR requirements. The regulation requires certain electric generating units to install BART and meet emission limits for three pollutants: NO<sub>x</sub>, SO<sub>2</sub> and PM<sub>10</sub>. In late 2008 and early 2009, additional emission controls were installed at the Reid Gardner Generating Station, resulting in a new dataset to evaluate the SO<sub>2</sub> BART emission limit. The new data reflect operation of the new controls installed upstream of the existing sulfur controls for each unit. Based on the new emission information, lower emission levels than previously anticipated are able to be achieved. After consultation with NV Energy, the NDEP has revised the SO<sub>2</sub> emission limits at Reid Gardner downward from 0.25 lb/MM Btu to 0.15 lb/MM Btu on a 24 hour basis.

The original BART regulation and R148-09 were submitted to the EPA on November 18, 2009 as part of the *Nevada Regional Haze State Implementation Plan*.

**1. A description of how public comment was solicited, a summary of public response and an explanation of how other interested persons may obtain a copy of the summary.** The Nevada Division of **Environmental** Protection, Bureau of Air Quality Planning (NDEP-BAQP) worked closely with NV Energy in setting the new SO<sub>2</sub> emission standard for their facility at Reid Gardner. NDEP-BAQP held a public workshop on the above referenced regulation in

Carson City on November 4, 2009 at the Bryan Building (901 South Stewart Street).

Following this workshop, the State Environmental Commission (SEC) held a public hearing to consider the regulation on Wednesday, December 09 2009. The hearing was held at the Nevada Department of Wildlife's Conference Room A, 1100 Valley Road, Reno, Nevada. The SEC hearing agenda was posted at the meeting location, at the State Library in Carson City, and at the Offices of the Division of Environmental Protection in Carson City and Las Vegas. Copies of the agenda, the public notice, and the proposed regulation were also made available to all public libraries throughout the state as well as to individuals on the SEC electronic and ground-based mailing lists.

The public notice for the regulation was published on Monday November 23 and 30, 2009, and on December 7, 2009 in the Las Vegas Review Journal and Reno Gazette Journal newspapers. Information about the regulation was also made available on the SEC website at: [http://www.sec.nv.gov/main/hearing\\_1209.htm](http://www.sec.nv.gov/main/hearing_1209.htm).

**2. The number of persons who attended the SEC Regulatory Hearing:**

- (a) Attended December 09, 2009 hearing; 20 (approx.)
- (b) Testified on this Petition at the hearing: 1 (1 NDEP Staff)
- (c) Submitted to the agency written comments: 0

**3. A description of how comment was solicited from affected businesses, a summary of their response, and an explanation of how other interested persons may obtain a copy of the summary.**

Comments were solicited from affected business as indicated in number 1 above.

**4. If the regulation was adopted without changing any part of the proposed regulation, a summary of the reasons for adopting the regulation without change.**

The State Environmental Commission adopted the regulation with out any changes.

**5. The estimated economic effect of the adopted regulation on the business which it is to regulate and on the public.**

The proposed regulation will not have an economic effect on the public or the business community.

**6. The estimated cost to the agency for enforcement of the adopted regulation.**

There will be no additional costs to the Division of Environmental Protection for the administration of this regulation.

**7. A description of any regulations of other state or government agencies which the proposed regulation overlaps or duplicates and a statement explaining why the duplication**



**or overlapping is necessary. If the regulation overlaps or duplicates a federal regulation, the name of the regulating federal agency.**

This regulation does not duplicate any other federal, state or local regulation.

**8. If the regulation includes provisions which are more stringent than a federal regulation, which regulates the same activity, a summary of such provisions.**

The regulation is not more stringent than any local or federal laws and regulations.

**9. If the regulation provides a new fee or increases an existing fee, the total annual amount the agency expects to collect and the manner in which the money will be used.**

The regulation does not address fees.