NEVADA DIVISION OF ENVIRONMENTAL PROTECTION Workshop to Solicit Comments on Proposed Amendment to NAC 445B: Air Controls

October 15, 2024 10:00 AM

Bonnie B. Bryan Boardroom 1st Floor 901 South Stewart Street Carson City, NV 89701 Warm Springs Conference Room Suite 200 375 East Warm Springs Road Las Vegas, NV 89119

The workshop was also held virtually and was publicly accessible by video conference and phone

MEETING NOTES

ATTENDEES:

Workshop Chair:

Ken McIntyre, Supervisor, BAQP

NDEP Staff:

Andrew Tucker, Chief, BAQP Patricia Bobo, Environmental Scientist, BAQP Katherine Hanson, Environmental Scientist, BAQP Nicholas Schlafer, Environmental Scientist, BAQP

Public:

Carson City: Chris Heintz, NV Energy

Las Vegas:

Brigid McHale, NV Energy

*Virtual*¹:

Franklin E Giles, BLM Emma Lintz, BAQP Debra C Miller, NPS Matt Mannens Scott Joshua Legrande, Universal Engineering Sciences Heather Borgen, Switch Chris Peterson, Comstock Inc. Tori Supple Alex, Fireflies.ai Notetaker

¹ Participants are listed using their online registration. Last name and/or affiliation may not have been provided.

CALL TO ORDER

Mr. McIntyre called the meeting to order at 10:01 AM, explained the purpose of the Public Workshop, and introduced the staff present. Mr. McIntyre explained that the names of attendees would be collected for the record and that the meeting was being recorded. Mr. McIntyre reviewed the workshop agenda. There were no questions or changes to the agenda. Mr. Schlafer explained that virtual attendees would be muted by the moderator and how they could signal to the moderator that they had a question or comment so they could be unmuted. Mr. Schlafer explained that a copy of the proposed regulation, and State Environmental Commission (SEC) Forms 1 and 4, could be found on the Nevada Division on Environmental Protection's (NDEP) website.

Mr. McIntyre explained how the regulation adoption process works. The regulation adoption timeline was explained, specifying that there would be a 30-day public comment period prior to the SEC hearing for each set of proposed amendments. Mr. McIntyre stated that unless there are substantive changes based on feedback from this workshop, permanent regulation R138-24 is expected to be heard before the November 19th SEC hearing. Any information about the hearing can be found on the SEC website. If the regulations are adopted by the SEC, they are submitted to the Legislative Commission. If the Legislative Commission approves the regulations, they are filed with the Secretary of State and become effective. Mr. McIntyre paused and asked if there were any questions about the regulation adoption process.

There being no questions, Mr. McIntyre moved on to present the petition.

R138-24 SUMMARY

NDEP is proposing to amend Nevada Administrative Code (NAC) 445B by adding a new section that pertains to emission limits and control measures required for Nevada Energy's Valmy Generating Station Units (1 & 2) and Tracy Generating Station Unit 4 Piñon Pine. This new section is needed to meet the federal Regional Haze Rule (RHR) and the Clean Air Act requirements. If adopted, this regulation will be sent to the U.S. Environmental Protection Agency (USEPA) for approval into the Nevada State Implementation Plan (SIP).

This regulation is being proposed as part of Nevada's Regional Haze State Implementation Plan for the second planning period. In 1999, the USEPA announced a major effort to improve air quality in national parks and wilderness areas. The Regional Haze Rule (RHR) calls for state and federal agencies to work together to improve visibility in 156 national parks and wilderness areas.

In Nevada, there is one designated Class I area, the Jarbidge Wilderness Area in the northeast corner of the State. Visibility and sources of impairment at each Class I area are reviewed as part of the RHR. The primary visibility impairing pollutants are NO_X, SO₂, PM₁₀, NH₃, VOC, and PM_{2.5}.

NDEP has coordinated with, and requested input from, the USEPA, National Park Service, U.S. Fish and Wildlife Service, the U.S. Forest Service, Bureau of Land Management, Local Governments, NV Energy, other facilities impacted by the RHR, conservation groups, and the public, through meetings like this one. The development of Nevada's Regional Haze SIP, along with other air pollution control plans managed by NDEP, reduces pollution that causes visibility impairment in the State of Nevada.

All states are required to submit periodic updates to their Regional Haze SIP for the second planning period. Nevada submitted its Regional Haze SIP for the second planning period in August of 2022. As part of this process NDEP worked with affected facilities on how they could reduce emissions and comply with the RHR.

NV Energy completed a four-factor analysis to determine how best to meet the requirements of the RHR. This analysis reviewed the cost of compliance, time necessary for compliance, energy and non-air quality environmental impacts of compliance and the remaining useful life of the source. After completing the four-factor analysis NV Energy concluded that the closure of North Valmy Generating Station (units 1 & 2), and Tracy Generating Station Unit 4 Piñon Pine was the best way to reduce emissions at these facilities.

Tracy Generating Station is approximately 17 miles west of Reno on I-80 while North Valmy is approximately 38 miles west of Winnemucca on I-80 as can be seen on this map. Jarbidge wilderness area can be found north of Elko just below the Idaho border.

NV Energy notified NDEP of plans to amend its Integrated Resource Plan (IRP) July 13, 2023. These new plans included the cancelation of closure for North Valmy and Tracy Unit 4 Piñon Pine, conversion of North Valmy to natural gas firing, and included funding to pursue modifications and appropriate emissions controls at these units. Nevada's 2022 Regional Haze SIP was partially withdrawn on July 27, 2023, to further evaluate the new conditions at North Valmy and Tracy Generating Stations.

NV Energy testified to Nevada's Public Utilities Commission that changes in the energy landscape along with transmission system reliability considerations in Nevada necessitated reconsideration of the intent to retire North Valmy Units 1 and 2 by December 31, 2028, and Tracy Unit 4 Piñon Pine by December 31, 2031. After a public hearing, NV Energy's IRP was approved by the Public Utilities Commission on March 1, 2024.

A four-factor analysis was updated for both units at the Valmy Generating Station to include the fuel conversion to natural gas. SO₂ emissions were found to be effectively controlled by conversion to natural gas. The installation and operating costs of selective non-catalytic reduction (SNCR) and flue gas re-circulation (FGR) were below the \$10,000 per ton threshold set by NDEP and therefore cost effective. An emission rate of 0.1029 lb/million Btu (30-day rolling average) was set based on achievable limits at North Valmy with SNCR.

Selective catalytic reduction (SCR) was above the \$10,000 cost per ton threshold but is being included in the regulation to provide flexibility with current and future national regulations that affect electricity generating units.

As part of North Valmy Generating Station's conversion to natural gas, low NO_X burners will be installed, along with either SNCR, FGR, or SCR for the control of NO_X. Since the controls at North Valmy Generating Station are dependent on the conversion of the facility to natural gas, a compliance date of June 1, 2027, is being set for completion of the conversion.

Controls will be installed and operating no later than 36 months after approval by the USEPA of Nevada's determination of reasonable progress towards achieving natural visibility conditions.

A four-factor analysis was updated for Tracy Unit 4 Piñon Pine to reflect the removal of closure. This analysis found that the installation and operating costs of SCR was below the \$10,000 per ton threshold set by NDEP and therefore cost effective. A NO_X emission rate of 0.0151 lb/million Btu (30-day rolling average) was set based on achievable limits at North Valmy with SCR.

Pipeline quality, natural gas, and steam injection are currently used at Tracy Unit 4 Piñon Pine and have been included in this regulation since continued use will control SO2 and NOX emissions respectively. These controls have been determined necessary to achieve reasonable progress under the Regional Haze Rule.

Controls will be installed and operating no later than 36 months after approval by the USEPA of Nevada's determination of reasonable progress towards achieving natural visibility conditions.

The conversion to natural gas at Valmy and installation of controls at Valmy and Tracy Unit 4 Piñon Pine will result in combined emission reductions of 1,369 tpy NO_X, 2,309 tpy SO₂, and 16 tpy PM₁₀. The reductions in SO₂ are primarily achieved by the conversion to natural gas while the reductions in NO_X are driven by the installation of SCR and SNCR controls.

Monitoring, record keeping, and reporting requirements associated with this regulation include:

- Install, calibrate, maintain and operate a continuous monitoring system.
- Maintain a log of monitoring and recordkeeping.
- Annually submit a report in accordance with the reporting requirements of this chapter and Title 40 Part 75 of the Code of Federal Regulations (40 C.F.R. Part 75).

These requirements are currently incorporated into NV Energy's Title V operating permit for both Tracy and North Valmy.

As part of this regulation NDEP is proposing to amend NAC 445B.221 to adopt 40 C.F.R. Part 75 as part of this regulation, this process is known as adopt by reference.

Part 75 establishes requirements for the monitoring, recordkeeping, and reporting of sulfur dioxide (SO₂), nitrogen oxides (NO_X), and carbon dioxide (CO₂) emissions, volumetric flow, and opacity data from affected units under the Acid Rain Program.

The adoption by reference of federal regulations allows NDEP to request delegated authority from the USEPA for the compliance and enforcement of air regulations.

The decision not to retire North Valmy and Tracy Unit 4 Piñon Pine results in a slight decline in modeled visibility at Jarbidge wilderness area during the most impaired days and no change in visibility during the clearest days.

This decrease in visibility is represented by a 0.001 deciview increase in the 2024 revised reasonable progress goal (RPG) from the 2022 RPG.

Nevada's modeled 2028 reasonable progress goal of 7.76 deciviews is below the 8.20 deciview value calculated by the uniform rate of progress glidepath (URP), for observations during the most impaired days (MID). This glidepath projects a value of 7.39 deciviews, during the most impaired days in 2064, which is the goal set by the regional haze rule to attain natural visibility conditions. At the bottom of the chart, you can see that the 2028 projection of 1.72 deciviews during the clearest days is well below the clearest days baseline of 2.56 deciviews.

In conclusion, the cancellation of closure of North Valmy and Tracy Unit 4 Piñon Pine from NV Energy's IRP was deemed necessary by Nevada's Public Utilities Commission March 1, 2024. The conversion to natural gas and emission controls listed in R138-24 will ensure North Valmy and Tracy Unit 4 Piñon Pine meet Nevada's reasonable progress goals outlined by the Regional Haze Rule. Nevada is on track to meet visibility goals by 2028 and natural conditions by 2064.

Mr. McIntyre paused and asked if there were any questions or comments on R138-24.

COMMENTS AND QUESTIONS

There were no questions or comments regarding R138-24.

CLOSING REMARKS AND ADJOURMENT

Mr. McIntyre asked if there were any other comments or questions, there being none, Mr. McIntyre thanked everyone for their time and participation in the public workshop and the meeting was adjourned at 10:20 AM.