

August 4, 2023

The Honorable Michael Regan Administrator U.S. Environmental Protection Agency EPA Docket Center Docket ID No. EPA—HQ—OAR—2023—0072 Mail Code 28221T 1200 Pennsylvania Avenue NW Washington, DC 20460

Submitted electronically via: https://www.regulations.gov/

RE: New Source Performance Standards for Greenhouse Gas Emissions From New, Modified, and Reconstructed Fossil Fuel-Fired Electric Generating Units; Emission Guidelines for Greenhouse Gas Emissions From Existing Fossil Fuel-Fired Electric Generating Units; and Repeal of the Affordable Clean Energy Rule, Docket ID No. EPA—HQ—OAR—2023—0072

Dear Administrator Regan,

On behalf of the New Mexico Environment Department (NMED), attached please find our comments in support of the subject rulemaking.

In early 2019, Governor Michelle Lujan Grisham issued Executive Order 2019-003 on Climate Change and Waste Prevention and signed into law New Mexico's Energy Transition Act, establishing New Mexico as a national leader in clean energy. I strongly support the U.S. Environmental Protection Agency (EPA)'s proposed revisions to the New Source Performance Standards (NSPS). When finalized, the proposed revisions will significantly improve public health and air quality throughout the U.S., including in New Mexico. The proposed revisions will also address climate change and will advance our efforts to meet greenhouse gas emissions reductions goals from the electricity generation sector.

In addition, New Mexico has applied for clean hydrogen hub funding from the U.S. Department of Energy (DOE) under the Bipartisan Infrastructure Law (BIL). The U.S. EPA's proposal aligns with New Mexico's ambitious application to further decarbonize the economy through public funding from the U.S. DOE and significant commitment from private sector partnerships. New Mexico recognizes the extraordinary efforts of the U.S. EPA in crafting this proposal and its alignment with U.S. DOE priorities. The Biden Administration's efforts to meaningfully coordinate across federal agencies at all levels while engaging state co-regulators is truly appreciated.

As the U.S. EPA moves forward to finalizing these proposed rules, NMED stands ready to support your efforts and we welcome the opportunity to discuss our experiences with the Office of Air and Radiation, the Office of Environmental Justice and External Civil Rights, the Office of General Counsel, or any other office that may have an equity stake in the development and implementation of these proposed rules.

As always, I look forward to further collaboration between the U.S. EPA and NMED in support of our shared mission of protecting human health and the environment.

Sincerely,

James C. Kenney Cabinet Secretary

Attachment (1)

cc: Jennifer Granholm, Cabinet Secretary, U.S. Department of Energy
Sarah Cottrell Propst, Cabinet Secretary, Energy Minerals and Natural Resources Department
Courtney Kerster, Senior Advisor, Office of Governor Michelle Lujan Grisham

New Mexico Environment Department
Comments to the U.S. Environmental Protection Agency
New Source Performance Standards for Greenhouse Gas Emissions
From New, Modified, and Reconstructed Fossil Fuel-Fired
Electric Generating Units: Emission Guidelines for Greenhouse Gas
Emissions From Existing Fossil Fuel-Fired Electric Generating Units;
and Repeal of the Affordable Clean Energy Rule

# Comment 1: The U.S. Environmental Protection Agency (EPA)'s proposed rules support New Mexico's and other states' efforts to address climate change and improve air quality across the U.S.

The U.S. EPA's proposed new rules significantly reduce the quantity of greenhouse gas (GHG) emissions from new and existing fossil fuel-fired Electrical Generating Units (EGUs) by establishing NSPS and Emission Guidelines (EGs) that are based on "cost effective and available control technologies." The proposed standards contemplate the use of emission reducing technologies such as carbon capture and storage (CCS), low-GHG hydrogen co-firing, and natural gas co-firing. In addition, the U.S. EPA suggests that the NSPS and EGs should reflect the application of the Best System of Emission Reduction (BSER), taking into account costs, energy requirements, and other statutory factors, for the purpose of reducing emissions.

The U.S. EPA's proposed rules will complement the proactive steps the State of New Mexico has already taken to reduce GHG emissions and are aligned with our state-wide climate policy. Governor Michelle Lujan Grisham set New Mexico's ambitious climate goals when she issued an executive order in 2019 (EO 2019-003) committing the state to the 2015 Paris Agreement and directing applicable state agencies to take aggressive steps to reduce emissions. Consistent with that direction, New Mexico has set goals to reduce GHG emissions by at least 45% by 2030 as compared to 2005 levels. Further, the Governor also committed to achieving net-zero carbon emissions by 2050. Our state accomplishments to date include:

- 1) Establishment of a Climate Change Task Force, led by the Cabinet Secretary of the New Mexico Energy, Minerals and Natural Resources Department and the Cabinet Secretary of NMED, that is responsible for proposing, planning, and implementing strategies to reduce GHG emissions and enhance New Mexico's ability to adapt to climate change.
- 2) The Energy Transition Act of 2019 which set renewable energy and zero-carbon emissions standards for electricity providers in the state (80% renewable energy by 2040 and 100% zero-carbon by 2045 for investor-owned utilities and 80% renewable and 100% zero-carbon by 2050 for rural electric cooperatives).
- 3) The Healthy Soil Act of 2019 established a program for farmers and ranchers to improve soil health and keep lands vegetated which, in turn, will create larger biological carbon sequestration areas throughout the state.
- 4) Amending the authority of the Environmental Improvement Board, which adopts rules on behalf of the NMED, to allow it to create more stringent standards for air pollutants.
- 5) Implementation of aggressive methane rules, including:

- a) The Ozone Precursor Rule that requires significant reductions of ozone precursor emissions from equipment and sources throughout the oil and gas industry and encourages the use of fuel cells and other technologies for energy generation from potential waste streams. Fuel cells have the potential to chemically convert methane and other VOCs, using sustainable energy sources, to electricity, which could then be used to power equipment at the well pad, power microgrids, or even be sold to utilities for consumer distribution. This rule also incentivizes use and development of new technologies for leak detection and repair such as remote monitoring via satellite, plane or airship, to increase the accuracy and speed of reporting.
- b) The Natural Gas Waste Rule that bans the routine venting and flaring of produced natural gas and requires operators to achieve 98% gas capture by the end of 2026.

Consistent with New Mexico's leadership in reducing GHG emissions, the U.S. EPA proposal recognizes that many states have adopted binding programs under their own authorities that have significantly reduced GHG emissions from multiple sectors, including the power sector. The U.S. EPA further states the importance of state programs and their potential to reduce power sector GHG emissions through a range of strategies broader than those proposed here pursuant to Clean Air Act (CAA) Section 111(d). To this end, the economic analysis may over-estimate the cost of compliance given that states, like New Mexico, have already taken bold action to reduce emissions through law and policy. The U.S. EPA should ensure the true cost of compliance of the proposed rules is accurately discounted for state actions already required by law or policy.

## Comment 2: New Mexico encourages the U.S. EPA to consider tightening its carbon dioxide emission standards for coal-fired electric generating facilities to align with New Mexico's standard.

The New Mexico Energy Transition Act of 2019 amended the authority of the Environmental Improvement Board to establish standards of performance that limit carbon dioxide emissions for new or existing electric generating facilities with an original installed capacity exceeding three hundred megawatts and that use coal as a fuel source.

The corresponding state regulation, 20.2.101 NMAC, Carbon Dioxide Emission Standards for Coal-Fired Electric Generating Facilities, became effective January 1, 2023, and limits carbon dioxide emissions to no more than 1,100 pounds per megawatt-hour on a 365-operating-day rolling average basis. New Mexico's carbon dioxide emission standard is more stringent than the U.S. EPA's current proposal, and New Mexico encourages the U.S. EPA to following New Mexico's leadership by tightening the proposed GHG emission standards to align with our state rule.

# Comment 3: New Mexico supports the U.S. EPA's proposal to include clean hydrogen in the proposed rule.

New Mexico supports the U.S. EPA's efforts to include clean hydrogen in the proposed rules. The U.S. EPA must include clean hydrogen options in its final rules.

In April 2023, New Mexico, along with Colorado, Utah, and Wyoming, submitted a joint grant application to the U.S. Department of Energy (DOE) to implement a regional strategy for the safe, clean and sustainable use of hydrogen. The four states, collectively known as the Western Inter-State Hydrogen Hub (WISHH), developed a strategy with the support of the private sector to help meet the region's diverse energy needs and policy goals, including reducing greenhouse gas emissions, using a broad range

of feedstock to develop a clean hydrogen economy across New Mexico, ensuring our economic competitiveness, and supporting communities on the front lines of the energy transition.

The EPA's proposed rules on combusting hydrogen in certain electrical generating units align with the WISHH strategy. For example, Tallgrass Energy, a WISHH project partner, is studying carbon sequestration in Western New Mexico for a former 200+ megawatt coal-fired powerplant that will soon be re-fired with clean hydrogen.

## <u>Comment 4: The U.S. EPA has an obligation to inform the U.S. DOE of clean hydrogen comments</u> received on the proposed rule.

The Bipartisan Infrastructure Law (BIL) was signed into law by the President on November 15, 2021, and Subtitle B of the BIL, titled Hydrogen Research and Development, acknowledges that hydrogen plays a critical part in the comprehensive energy portfolio of the U.S. Further, Section 40315 of the BIL amended the Energy Policy Act of 2005 to add Section 822, which includes the following pertinent provisions:

The term "clean hydrogen" is defined as hydrogen produced with a carbon intensity equal to or less than 2 kilograms (kg) of carbon dioxide equivalents (CO2e) per kg of hydrogen (H2) at the site of production.

Per the BIL, the U.S. DOE, in consultation with the U.S. EPA and accounting for input from industry and other stakeholders, will determine whether the initial clean hydrogen standard should be adjusted below 2 kg CO2e/kg H2. The clean hydrogen standard shall apply to production from renewable, fossil fuel with carbon capture, utilization, and sequestration technologies, nuclear, and other fuel sources using any applicable production technology.

There is a nexus between the U.S. EPA's proposed rules, the U.S. DOE clean hydrogen hub funding under the BIL, and the U.S. EPA's consultative role with the U.S. DOE in setting the future definition of clean hydrogen. To the extent the U.S. EPA receives supportive or adverse comments on the use of clean hydrogen from U.S. DOE clean hydrogen hub grant applicants or project partners, the U.S. EPA must provide this information to the U.S. DOE.

#### Comment 5: New Mexico supports carbon capture and storage.

Research undertaken by the Los Alamos National Lab and other parties confirms the state's potential for CCS given its favorable geology. These factors have led New Mexico's Oil Conservation Division, which is part of the New Mexico Energy, Minerals and Natural Resources Department, to take steps towards applying for Class VI primacy from the EPA. A timely and predictable pathway to support CCS deployment is key to utilizing this favorable geology and to achieving/implementing some of the proposed rules technological standards.

In May 2023, New Mexico Tech secured a U.S. DOE grant to study the potential for storing carbon dioxide within basaltic rocks and mining waste (geologic carbon sequestration). The primary objectives of this research are to: (1) identify and access statewide resources for potential carbon dioxide storage via mineralization processes, (2) identify and characterize potential targeted storage sites, and (3) provide insights and understanding on carbon dioxide storage capacity. This type of research is paramount to identify the safest geologic location to store carbon dioxide, limiting the environmental risks of potential seismic disturbances, deformation of the land surface, contamination of potable water supplies, and adverse effects on ecosystems and human health.