

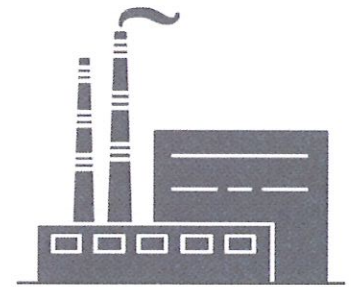
June 15, 2022

## New Mexico's Hydrogen Hub Initiative

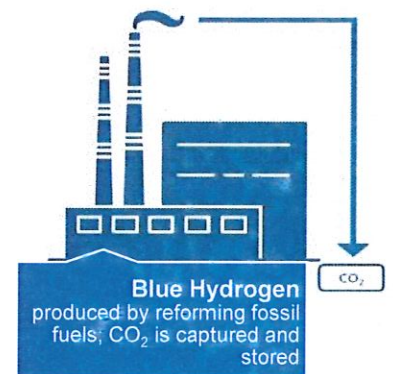
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James Kenney, Secretary, Environment Department  
Sarah Cottrell Propst, Secretary, Energy, Minerals and Natural Resources Department  
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### Conversion of the Retired Escalante Generating Station to Hydrogen Energy Production

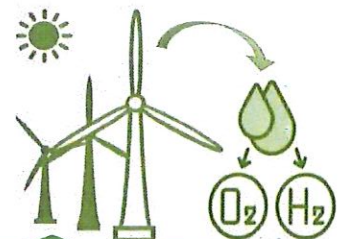
- The Escalante Generating Station in Prewitt, New Mexico, could become the first facility in the nation to be converted from a coal-fired power plant to a hydrogen-based power plant, utilizing existing pipeline infrastructure and stem-methane reformation to convert natural gas into hydrogen.
- Newpoint Gas, LLC – a multi-fuels processing, conversion, and purification company – and Brooks Energy – a natural gas and helium exploration company – partnered to create Escalante H<sub>2</sub> Power (EH<sub>2</sub>) for the purpose of transforming the Escalante facility into a hydrogen-fired power plant. Tallgrass Energy, owned by global investment firm Blackstone Group, acquired a 75 percent membership interest in EH<sub>2</sub> in August 2021.
- Supported by Tallgrass, EH<sub>2</sub> intends to buy the Escalante plant and is currently performing due diligence on the related assets and evaluating the market potential for clean hydrogen and power in New Mexico. Assessments are also still being done on the geologic sequestration (underground injection and storage in subsurface rock formations) of carbon dioxide in the northwest region.
- EH<sub>2</sub> is working with partners to select the best technology and find an estimated cost of retrofitting the facility for hydrogen production.
- EH<sub>2</sub> plans to combine pre-combustion carbon capture with geologic sequestration to create a low-emissions energy source: by isolating carbon dioxide from the methane in natural gas and storing it underground,



Gray Hydrogen produced by reforming fossil fuels; creates CO<sub>2</sub> emissions



Blue Hydrogen produced by reforming fossil fuels; CO<sub>2</sub> is captured and stored



Green Hydrogen produced by splitting water molecules using clean energy



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hydrogen is produced with minimal emissions and then can be used as fuel that emits only water vapor when combusted. This process creates what is known as “blue” hydrogen.

- EH<sub>2</sub> intends to eventually transition from blue to green hydrogen production, eliminating the need for natural gas and instead using water electrolysis to create hydrogen.

## Western Interstate Hydrogen Hub Agreement

- The federal Infrastructure Investment and Jobs Act (IIJA, also known as the Bipartisan Infrastructure Law) included \$8 billion for the development of four hydrogen hubs across the country. Interested states and regions must compete for grants from that funding by submitting proposals for a hydrogen hub to the U.S. Department of Energy (DOE).
- New Mexico entered into a Memorandum of Understanding (MOU) with Colorado, Utah, and Wyoming to coordinate the development of a regional clean hydrogen hub that meets the criteria for funding from the IIJA.
- By participating in the interstate agreement, the states commit to one collaborative proposal submitted to the DOE on behalf of the region and will not submit individual proposals or cooperative proposals with other states.
- An executive committee was formed under the MOU to strategize and build capacity through working groups that focus on technical aspects of developing a hydrogen hub, stakeholder engagement, workforce and economic development, and environmental justice and equity.

## Environmental Regulation and Other State Agency Responsibilities

- Executive Order 2022-013 directs the departments of Economic Development (EDD), Energy, Minerals and Natural Resources (EMNRD), Environment (NMED), Taxation and Revenue (TRD), and Indian Affairs (IAD) to provide necessary support to the interstate executive committee to ensure the states put forward the most robust federal grant application possible.
  - Those agencies are required to provide recommendations to the governor, no later than one week before the 2023 legislative session, on additional programs or incentives that can contribute to the development of a “robust and environmentally responsible hydrogen industry” in New Mexico.
  - The executive order also directs those agencies to consult with any Indian nation, tribe, or pueblo in New Mexico on potential programs to support hydrogen development on Indian land or resources.

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- EMNRD and NMED are instructed to develop a proposal for consideration by the Public Regulation Commission to include no-carbon hydrogen electric generation facilities in the definition of “zero carbon resources” as used in statute.
  - EMNRD is further directed to develop recommendations concerning the resources necessary to support the development and operation of carbon sequestration, including:
    - State-level primacy under the federal Safe Drinking Water Act rules governing Class VI Underground Injection Control wells;
    - Pore space ownership and development; and
    - Long-term and short-term ownership of sequestered carbon dioxide, including potential financial assurance requirements.
  - EDD must include hydrogen in the state’s key economic sectors, support the development of clean and zero-carbon hydrogen production, and review its existing programs and authorities to identify those that can be used to support the economic development of the sector.