



# The Questa Hydrogen Project: A Bright Spot in Rural Economic and Energy Development - Frequently Asked Questions

## Project Background

Over the past decade, Northern New Mexico's regional energy provider, Kit Carson Electric Cooperative (KCEC), has been creating a roadmap for delivering safe, reliable energy to its 30,000 customers. To meet growing energy demand and local co-op members' priorities, KCEC and community leaders began examining the potential to use a former molybdenum mine and Superfund site in the Village of Questa, New Mexico, as a potential hub for hydrogen development. The project will use electrolysis to separate hydrogen from reclaimed water located at the former mine site and develop long-duration (up to 16 hours) energy storage technology. Ultimately, the project will generate enough energy to power 25,000 homes annually, bringing reliability and stability to the region's energy needs, and generating \$298 million in economic benefit to the region. After assessing the technical feasibility, energy production potential, and economic impact, KCEC applied for and was awarded \$231 million in federal funding to create the hydrogen hub. KCEC has a signed contract with the U.S. Department of Agriculture. As such, Village leaders and KCEC are moving forward under the terms of the signed agreement to create this innovative hydrogen production facility.

## Frequently Asked Questions About the Questa Hydrogen Project

*What is hydrogen and how is it used as an energy source?*

Hydrogen is a colorless, odorless gas that occurs naturally and abundantly. In fact, it is the most common element in the universe, making up 75 percent of all matter. It can be produced from various sources like natural gas, renewable energy (solar, wind), or through electrolysis (splitting water molecules using electricity), and can be used to power vehicles, generate electricity, or provide heat in homes and businesses, with the potential for zero emissions.

*What specific type of hydrogen will be developed at this site and how is it produced?*

The process of developing hydrogen at the Questa site will rely on the process of electrolysis (again, splitting water molecules using electricity) to separate hydrogen from oxygen in the water currently being held at the former molybdenum mine site in Questa. The process results in hydrogen that can be safely stored in containers for future use.

*Is this a safe source for fuel and energy?*

Yes. This project will use first-in-class safety procedures, including strict leak detection and monitoring systems, storage that uses specialized materials resistant to breakdown from hydrogen exposure, proper ventilation throughout the process, and the rigorous safety training for personnel. Further when handled responsibly like this, hydrogen is safer than other flammable fuels we rely on today. For example, hydrogen is nontoxic, unlike gas. And because hydrogen is much lighter than air, it dissipates rapidly when it is released, which means if there is a leak, it will dissipate quickly, reducing the likelihood of an explosion.

*Why is this project considered a “green hydrogen” project?*

The co-op's hydrogen project is green in several ways: (1) it uses electricity derived from solar power to in the electrolysis process; (2) it uses reclaimed water from either the shuttered Chevron Mine Superfund Site or the Taos Valley Regional Wastewater Treatment and Reclamation Facility in the electrolysis process; and (3) the process is emissions-free, meaning it's not putting carbon, methane, or other greenhouse gases into the air. Unlike other hydrogen generation processes that rely on nonrenewable resources to isolate or burn hydrogen, this project is end-to-end renewable.

*Where will this development take place?*

The proposed hub in Questa will be located near the Superfund site associated with the former molybdenum mine.

*What is the timeline for construction and production?*

Project implementation is just getting underway. The construction will take place in 2025–2026 with operations expected to begin in 2026 or 2027.

*What did USDA award and to whom?*

On Jan. 10, the U.S. Department of Agriculture's Rural Utility Service announced several awards to rural electric cooperatives, including Kit Carson Electric Cooperative (KCEC), to increase the

availability of reliable energy for rural communities. The \$231 million funding to Kit Carson Electric Cooperative is a mixture of grants and low-interest loans that will be used for the establishment of a hydrogen production hub in Questa. The facility will produce 104 megawatts of energy (that's enough to power 25,000 homes annually) from hydrogen produced via electrolysis along with battery energy storage systems.

*What are the economic benefits of this project?*

This project will provide substantial direct, indirect, and induced economic activity in northern New Mexico and beyond.

- The project will provide an additional \$289 million in economic impact in the region over five years.
- The Village of Questa, population of 1,800, will see most of that: \$206 million. This economic activity will also generate new tax revenue that will support critical public services (like a full-time, paid fire department and additional public safety officers) that have been difficult to provide with a depressed tax base following the molybdenum mine closure.
- Across all jurisdictions, this project is likely to generate upward of \$44 million in tax revenue, again, with the majority of that revenue staying in Questa and able to support expanded public safety services.
- The project will also create more than 350 jobs during construction and scores of additional ongoing jobs going forward.

*What is the status of the project as it stands today?*

Kit Carson Electric Cooperative and USDA's Rural Utility Services have an executed, obligated contract. Thus there is a signed agreement with the federal government to fund the project. That said, the federal actions related to freezing federal funding at USDA and other agencies have thrown a degree of uncertainty into the release of those funds and the future of the project in general. The most relevant executive order that has created a degree of uncertainty over the funding for this project requires all agencies (including the USDA's Rural Utility Service, which approved the Questa hydrogen project) to pause disbursement of funds appropriated through the Inflation Reduction Act (IRA) or the Infrastructure and Investment and Jobs Act (IIJA) and review all grants, loans, contracts, and programs for alignment with the new administration's energy priorities. Within 90 days (which would be April 19), all agency heads must submit a report to the Office of Management and Budget (OMB) and the National Economic Council (NEC) with recommendations for changes to any programs to align with the administration's priorities. The executive order states that no funds can

be disbursed by an agency until the Director of the OMB and the Assistant to the President for Economic Policy determine that those disbursements are consistent with the new administration's priorities.

*What happens if USDA attempts to cut this funding or cancel the contract?*

There is a fully executed contract between Kit Carson Electric Cooperative and USDA, so the funding and project are fully obligated. KCEC and Village leaders are committed to bringing this project to life. If existing funding is no longer available, different funding sources to launch the project would need to be identified, which would complicate the timeline, scope, cost, and breadth of economic and energy benefits compared to the current contract.

*How can we ensure USDA does not cut this funding or cancel the contract?*

The Village, Kit Carson, and other supporters are actively educating community members and interested parties about the economic and energy benefits of this project. Continuing to highlight what this project means for Questa and the entire northern New Mexico region will be important in ensuring its successful implementation. Kit Carson Electric Cooperative holds a contract with the U.S. Department of Agriculture's Rural Utility Service to implement the project. This \$231 million award is under the purview of this agency (not the U.S. Department of Energy). As such, leaders within the agency, and the relevant policymakers that oversee the agency's work, are the key decision-makers. The United States Department of Agriculture's (USDA) Rural Development program is overseen by the Under Secretary for Rural Development and the Deputy Under Secretary for Rural Development.

*Who is USDA and the Rural Utility Service?*

The Rural Utilities Service (RUS) is overseen by the U.S. Department of Agriculture's (USDA) Rural Development agency. The RUS is a division of this agency. Key leaders include:

- Brooke Rollins, Secretary of Agriculture (confirmed Feb. 13, 2025)
- Gary Washington, Previous Acting Secretary of Agriculture
- Jacqueline Ponti-Lazaruk, Acting Deputy Under Secretary for Rural Development
- Chris McLean, Acting Administrator for the Rural Utilities Service
- Roger Glendenning, Chief Operating Officer for Rural Development
- Eric Vigil, Deputy State Director, New Mexico Rural Development.

### *What are the Rural Utility Service's responsibilities and history?*

USDA's Rural Utility Service has worked to support rural communities for over 30 years. The agency is required to:

- Provide public utilities to rural areas, such as water, waste disposal, electricity, and broadband internet.
- Administer loans, loan guarantees, and grant programs to eligible populations.
- Provide infrastructure improvements to rural communities.

### *Who supports this project?*

The Village of Questa and KCEC have received letters of support from a wide array of community members, businesses, elected officials, local jurisdictions, and partners. These project supporters include:

- Village of Questa Town Council
- Questa Economic Development Fund
- Town of Taos
- Taos County
- Taos Ski Valley
- Linda Calhoun, Mayor, Town of Red River
- Questa Independent School District
- Taos High School
- University of New Mexico - Taos
- University of New Mexico - Taos HIVE
- Holy Cross Medical Center
- New Mexico Municipal League
- Taos Community Foundation
- Hon. Governor of New Mexico, Michelle Lujan Grisham
- Hon. Sen. Roberto "Bobby" J. Gonzales, State Senator
- Hon. Rep. Kristina Ortez, State Representative
- Hon. Rep. Joseph Sanchez, State Representative
- State of New Mexico, New Mexico Economic Development Department
- State of New Mexico, Department of Workforce Solutions
- Centinel Bank
- Taos County Chamber of Commerce

- Taos Ski Valley Chamber of Commerce
- Bond Plumbing and Heating
- Green Meadow Roofing and Construction
- Valverde Energy
- LOR Foundation
- Taos Housing Partnership
- Taos County Historical Society
- Taos Feeds Taos
- True Kids 1