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Clean Hydrogen Project in Questa, New Mexico

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- Kit Carson Electric Cooperative (KCEC) received \$231 million from the U.S. Department of Agriculture’s Empowering Rural America program to build hydrogen and solar facilities with battery energy storage systems in Questa, Taos, and Peñasco, New Mexico. The funding was made available through the federal Inflation Reduction Act.
 - The Questa facility is expected to generate 104 megawatts of energy—enough to power nearly 25,000 homes annually. The facility will use solar-powered electrolysis to extract hydrogen from reclaimed water sourced from Chevron’s former molybdenum mine and tailings site. The project includes long-duration energy storage technology capable of storing energy for up to 16 hours. The on-site solar power will be generated by a solar farm owned by the Village of Questa.
 - Chevron closed the molybdenum mine in 2014, resulting in the loss of approximately 300 jobs. Remediation efforts have continued since then and are expected to last another 15 years. According to the National Renewable Energy Laboratory (NREL), there are currently 173 on-site jobs.
 - The project will expand KCEC’s renewable energy portfolio. KCEC currently operates 42 MW of distributed solar and 16.25 MW of battery energy storage across its service territory. Electricity supplied to Questa and other Taos County communities are already 100 percent solar powered during daylight hours. If completed, this would be the first clean hydrogen project developed by an electric cooperative.
 - If successful, the project will improve the resilience and reliability of KCEC’s electric system, particularly during emergencies such as wildfires and extreme weather events.
 - With funding from the U.S. Department of Energy’s Local Energy Action Program, NREL conducted an economic impact assessment of the project. The report estimates construction will support 410 jobs. Once operational, the facilities are expected to support approximately 20 permanent jobs, add \$2.5 million to New Mexico’s gross state product, and generate \$214 thousand in tax revenue for the Village of Questa.