



ON THE GRID

PROJECT: ENERGY COMPANY CONSTELLATION HAS STARTED PRODUCTION AT A DEMONSTRATION SCALE NUCLEAR-POWERED CLEAN HYDROGEN FACILITY IN NEW YORK STATE.

SIZE: 1 MW

BACKGROUND: Hydrogen production has commenced at the first demonstration scale, nuclear-powered clean hydrogen production facility in the U.S., at Constellation's Nine Mile Point Nuclear Plant in Oswego, New York. The project is an advancement that will help demonstrate the potential for hydrogen to power a clean economy, says the company. When produced at scale, clean hydrogen can be used to make next-generation energy for otherwise hard-to-decarbonize industries like aviation, long haul transportation, steelmaking and agriculture. Last year, the U.S. Department of Energy (DOE) approved moving forward with construction and installation of an electrolyzer system at Nine Mile Point with an award of \$5.8 million. The Hydrogen Generation System's Proton Exchange Membrane (PEM) electrolyzer, manufactured by Nel Hydrogen, utilizes clean, emissions-free electricity generated at Nine Mile Point Nuclear Station to separate hydrogen and oxygen atoms in water.

BENEFITS: Hydrogen will be an indispensable tool in solving the climate crisis, and Nine Mile Point is going to show that nuclear power is the most efficient and cost-effective way to make it from a carbon-free resource, said Joe Dominguez, President and CEO of Constellation. "In partnership with DOE and others, we see this technology creating a pathway to decarbonizing industries that remain heavily reliant on fossil fuels, while creating clean-energy jobs and strengthening domestic energy security." The Hydrogen Generation System operating at Nine Mile Point uses 1.25 megawatt of zero-carbon energy per hour to produce 560 kilograms of clean hydrogen per day, more than enough to meet the plant's operational hydrogen use. It will also help set the stage for possible large-scale deployments at other clean energy centers in Constellation's fleet that would couple clean hydrogen production with storage and other on-site uses.

PROJECT: OCI SOLAR POWER, ONE OF THE LEADING UTILITY-SCALE SOLAR DEVELOPERS IN TEXAS, RECENTLY SERVED AS THE EPC TO UPGRADE ITS ALAMO 2 SOLAR FARM TO MAXIMIZE PERFORMANCE AND RELIABILITY.

SIZE: 4.4 MW

BACKGROUND: OCI Solar Power's Alamo 2 Solar Farm is located northeast of San Antonio. The project sits on 45 acres of land and began operating in March 2014. After eight years of maintaining the solar farm, responding to a steady number of mechanical failures, says the company, and witnessing new and emerging tracker technology in action, OCI Solar Power undertook a second months-long upgrade in which it also performed the EPC scope of work. "We found ourselves repairing trackers and then fixing them again days later because of mechanical issues. It was very similar to what our Alamo 1 solar farm located south of San Antonio was experiencing a few years ago. Now both solar farms have state-of-the-art trackers from Array Technologies, Inc. and increased production," said Jason Thompson, Construction Manager for OCI Solar Power.

BENEFITS: OCI Solar Power finished a first-of-its-kind renovation to its 39.2 MWac Alamo 1 solar facility in 2019 and completed its 6-month upgrade at Alamo 2 in Q4 2022. Similar to the previous upgrade project at Alamo 1, the upgrade at Alamo 2 was done in sections. That allowed the solar farm to stay partially energized so that it could continue providing power to CPS Energy.

PROJECT: AVANGRID'S LUND HILL PROJECT, WASHINGTON STATE'S LARGEST UTILITY-SCALE SOLAR FARM, HAS ACHIEVED COMMERCIAL OPERATION.

SIZE: 150 MW

BACKGROUND: AVANGRID, a leading sustainable energy company and member of the Iberdrola Group, has achieved commercial operation at its Lund Hill solar farm in Klickitat County, Washington. The facility will supply Puget Sound Energy's Green Direct program, which allows large commercial and governmental participants the ability to purchase 100 percent of their energy from dedicated, local renewable energy resources. "It's exciting to see utility-scale renewable energy generation come online, and with our efforts this upcoming session, this should be the first of many clean energy projects that bring good-paying jobs and affordable, zero-emission energy to Washingtonians," said Washington Governor Jay Inslee.

BENEFITS: AVANGRID's facility will supply the solar for PSE's second round offering of their Green Direct program, for which more than 40 customers have already signed up, among them six Washington state government agencies, including the Departments of Health, Ecology, and Transportation (WSDOT), among others.