



ON THE GRID

PROJECT: THE PRODUCTION CAPACITY OF THE FIRST PROJECT OF THE FIFTH PHASE OF THE MOHAMMED BIN RASHID AL MAKTOUM SOLAR PARK IN DUBAI, WHICH WILL EVENTUALLY BE THE LARGEST SOLAR PARK IN THE WORLD, HAS BEEN INCREASED.

SIZE: The first project of the first phase of the project will be increased from 300 megawatts (MW) to 330 MW.

BACKGROUND: The greater power production is a result of using the latest solar photovoltaic bifacial technologies with single axis tracking. The 900 MW fifth phase is 60 percent complete with 4.225 million safe working hours without injuries.

BENEFITS: The Dubai Electricity and Water Authority (DEWA), which is part owner of the project, is working to promote sustainability and innovation and transform to a sustainable green economy by increasing the share of clean and renewable energy. This achieves the Dubai Clean Energy Strategy 2050 and the Dubai Net Zero Carbon Emissions Strategy to provide 100 percent of Dubai's total power capacity from clean energy sources by 2050. The Mohammed bin Rashid Al Maktoum Solar Park, the largest single-site solar park in the world, is the biggest project to achieve this vision. It has a planned capacity of 5,000 MW by 2030. The clean energy share of Dubai's energy mix is currently 11.38 percent, and it will reach 13.3 percent in Q1 of 2022. The current capacity at the Solar Park is 1,527 MW using solar photovoltaic panels. DEWA is implementing more projects with a total capacity of 1,333 MW using solar photovoltaic and Concentrated Solar Power (CSP) in addition to future phases, to reach 5,000 MW by 2030. The fifth phase will provide clean energy for more than 270,000 residences in Dubai and will reduce 1.18 million tonnes of carbon emissions annually. It will become operational in stages until 2023.

PROJECT: ALLETE CLEAN ENERGY HAS STARTED COMMERCIAL OPERATIONS AT ITS CADDO WIND SITE IN SOUTHERN OKLAHOMA.

SIZE: The output from the 303-megawatt Caddo site is contracted to provide renewable energy to McDonald's Corp., Hormel Foods and Oshkosh Corporation through separate renewable energy sales agreements.

BACKGROUND: ALLETE Clean Energy was able to finalize development of Caddo and brought it to safe and successful commercial operation during a global pandemic. The effort builds on the company's reputation for creating cost-effective renewable solutions for customers while driving growth in the expanding clean-energy sector, it says.

BENEFITS: Caddo and ALLETE Clean Energy's Diamond Spring Wind site, also in Oklahoma and serving Fortune 500 companies, are the company's two largest wind sites at 303 megawatts each. Together, they produce enough energy to power about 210,000 homes. Caddo also increases the company's total wind capacity to more than 1,300 megawatts. McDonald's joined the United Nations Race to Zero campaign in 2021 and has pledged to reach net zero greenhouse gas emissions by 2050. Once all of McDonald's transacted U.S. renewable energy projects are online, including Caddo, the energy generated will be equivalent to over 8,000 U.S. restaurants' worth of electricity and is expected to contribute to a 22 percent reduction from the company's 2015 baseline. Hormel Foods recently announced its goal to match 100 percent of its energy with renewable sourcing by 2030. The Caddo wind site will help the company achieve about 50 percent of its goal. Oshkosh Corporation's sustainability efforts include a goal of a 25 percent reduction in normalized greenhouse gas emissions at its facilities by 2024 when compared with 2014.

PROJECT: STANDARD SOLAR AND U.S. LIGHT ENERGY HAVE COMPLETED A SOLAR PROJECT FOR THE MEMBERS OF THE TRI-COUNTY ENERGY CONSORTIUM, IN THE NORTH COUNTRY REGION OF NEW YORK STATE.

SIZE: The 11.5 MW solar project will help more than 28 municipalities and school districts across Jefferson, Lewis and St. Lawrence counties in New York to reduce their electricity costs, and boost the state's clean energy portfolio with solar power.

BACKGROUND: The approximately \$7.6 million project received more than \$1 million in funding from the New York State Energy Research and Development Authority (NYSERDA) through NY-Sun, the state's signature \$1.8 billion initiative to advance the scale-up of solar and make solar energy more accessible to homes, businesses, and communities. With its focus on accelerating the adoption of solar power, Tri-County Energy Consortium is setting the standard for other communities to follow, it says. This project's success is underscored by the variety of challenges the team had to overcome, including changes in New York's solar policy and the pandemic. Building the project has been a challenging three-year process, says the consortium, but U.S. Light Energy and Standard Solar successfully delivered the project.

BENEFITS: Each participating school district and local government will receive savings on their electric bills in proportion to the percentage of electricity they use out of the total for all participants. Members of the consortium are expected to save between \$400,000 and \$500,000 annually from the solar project.