NEWS RELEASE

Mitsubishi Power Marks Successful Validation, Installation and Operation of Large-Scale Electrolyzers

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- Validation performed at two locations – the Takasago Hydrogen Park (Japan) and the Herøya Industrial Park (Norway)
- First commercial operation of the 5.5 MW electrolyzer slated for the Advanced Clean Energy Storage Project in Delta, Utah
- Demonstrates Mitsubishi Power's unique approach to ensuring its technology is fully tested in real-world conditions before entering commercial operation

LAKE MARY, Fla.--(BUSINESS WIRE)-- Underscoring its commitment to advancing hydrogen technology in the energy industry, Mitsubishi Power has successfully completed the permanent installation of its large-scale electrolyzer at the company's state-of-the-art Takasago Hydrogen Park in Japan. The unit now operates at full load and in real-world conditions as the long-term validation begins.

Takasago Hydrogen Park: Takasago Hydrogen Park is divided into sections according to three hydrogen-related functions: hydrogen production, storage, and utilization. (Image credit: Mitsubishi Power)

The large-scale 5.5 MW single stack pressurized alkaline electrolyzer is being validated in two stages. First, a single unit was installed and tested at the Herøya Industrial Park in Norway; extensive operational parameters were tested and the short-term validation culminated in a 96-hour baseload run of safe and reliable operation. From there the technology is now undergoing long-term validation at a permanent installation in the Takasago Hydrogen Park.

Takasago Hydrogen Park is the world's first center dedicated to the validation of hydrogen-related technologies. It is

designed for the long-term operation of these electrolyzers at one location and under the same conditions as they would operate commercially. Full-scale validation of a technology is a method championed by Mitsubishi Power for more than 30 years and aims to minimize technology risk for customers. The objectives include performance, operations, start-ups, shutdowns, gas quality, safety, and digital control integration.

While this disciplined validation process extends the overall product development schedule, Mitsubishi Power's philosophy is to invest time to achieve high reliability which translates to fewer troubleshooting issues once the product is commercial, and it helps reduce unplanned downtime for the owner - saving costs, minimizing forced outages, and increasing unit availability.

This electrolyzer design will be used in the production of green hydrogen at North America's largest hydrogen energy project under construction, the Advanced Clean Energy Storage (ACES Delta) project in Delta, Utah, a joint venture between Chevron and Mitsubishi Power Americas, with equipment arriving on-site starting in fall 2023.

ACES Delta is a utility-scale energy project that will produce, store, and deliver green hydrogen. Scheduled to begin operations in 2025, the ACES Delta project will use renewable energy-powered electrolyzers to split water into oxygen and hydrogen. The green hydrogen produced using electrolysis will be stored in two massive salt caverns, each the size of the Empire State Building, and each capable of storing 150-gigawatt hours (GWh) of energy for dispatch back to the grid when it is needed.

Kent Rockaway, Vice President, Hydrogen Production, Mitsubishi Power Americas, said, "These validation units are significant milestones for our electrolyzer technology and a testament to how we approach the development of our products for our customers. The electrolyzers will soon arrive at the ACES Delta project, a benchmark project that will help decarbonize the western U.S., and we are excited to watch its progress."

Additional Press Releases:

- **Mitsubishi Power Signs Purchase Contract with HydrogenPro for Large Scale Electrolyzer System**
- **US DOE Closes $504.4 Million Loan to Advanced Clean Energy Storage Project for Hydrogen Production and Storage**
- **Takasago Hydrogen Park, the World's First Integrated Validation Facility for Technologies from Hydrogen Production to Power Generation, Enters Full-Scale Operation -- Electrolysis Hydrogen Production Begins**

About Mitsubishi Power Americas, Inc.

Mitsubishi Power Americas, Inc. (Mitsubishi Power) headquartered in Lake Mary, Florida, employs more than 2,700 power generation, energy storage, and digital solutions experts and professionals. Our employees are focused on

empowering customers to affordably and reliably combat climate change while also advancing human prosperity throughout North, Central, and South America. Mitsubishi Power's power generation solutions include gas, steam, and aero-derivative turbines; power trains and power islands; geothermal systems; PV solar project development; environmental controls; and services. Energy storage solutions include green hydrogen, battery energy storage systems, and services. Mitsubishi Power also offers intelligent solutions that use artificial intelligence to enable autonomous operation of power plants. Mitsubishi Power is a power solutions brand of Mitsubishi Heavy Industries, Ltd. (MHI). Headquartered in Tokyo, Japan, MHI is one of the world's leading heavy machinery manufacturers with engineering and manufacturing businesses spanning energy, infrastructure, transport, aerospace, and defense. For more information, visit the **Mitsubishi Power Americas website** and follow us on **LinkedIn**.

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