PE MATTERS STATE NEWS

NSPE-FL

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State News for NSPE Members

Duke Energy to Construct First US Green Hydrogen Facility in Florida

The United States' first end-to-end green hydrogen facility will be constructed in Florida, *International Business Times* reports. The Charlotte, N.C.-based power utility's new energy creation, storage and combustion demonstration facility will be constructed in conjunction with General Electric's GE Verona and management consultancy firm Sargent and Lundy. The system will be located at Duke's existing solar energy facility in DeBary, Florida, about 25 miles northeast of Orlando.

The proposed demonstration plant aims to display the commercial feasibility of similar facilities throughout the country. Construction is expected to last approximately one year, with the plant fully operational by the end of 2024. Duke Energy's plans for the nation's first green hydrogen facility has the potential to mark a turning point in the transition to using liquid hydrogen as a fuel source in the US.

The location of Duke Energy's hydrogen facility is no coincidence: Florida is an ideal location for growing the large-scale solar energy plants necessary for eventually transitioning away from natural gas-fired power plants using green hydrogen. Florida receives more sunlight than any other Southeastern state outside of Texas; it is already the #3 US state by solar panel installations, with residential and utility installations increasing steadily since 2015. Read more.

Air Force Awards $5 Million to Florida Universities for New Research Center of Excellence

Florida State University has announced that The FAMU-FSU College of Engineering and the Herbert Wertheim College of Engineering at the University of Florida will collaborate on a new Air Force Office of Scientific Research Center of Excellence focused on high-speed flight and morphing aerospace vehicles, which can change shape while in flight.

The Florida State University-headquartered Florida Center for Advanced Aero-Propulsion (FCAAP) will manage the center, named “AEROMORPH: Aerospace Morphing via Integrated Sense, Assess and Respond.” The Air Force Research Laboratory (AFRL) and Air Force Office of Scientific Research awarded the universities $5 million for the project.

Researchers will conduct fundamental research into morphing structures, conventional distributed sensing, state estimation and control systems that are crucial to aerospace morphing technology.

“This new Center of Excellence on morphing structures for aerospace applications will significantly enhance our research collaboration with the FCAAP partner institutions and Air Force Research Laboratories,” said FCAAP Director Rajan Kumar. “The consortium will allow our students, postdoctoral researchers and faculty to interact with AFRL engineers and scientists and develop technologies for next-generation high-speed flight vehicles.”

The interdisciplinary work will combine insights from information theory, network science, fluid-structure interactions, experimental aerodynamics, and other disciplines. Read more.

Stay up to date on legislative issues through the ***NSPE Advocacy Center*** .

Check Out the Latest Issue of *PE*

Future Forward

Emerging technologies such as artificial intelligence and nanotechnology are revolutionizing the world. But these technologies are developing at a pace much faster than can be effectively absorbed into critical engineered infrastructure. The NSPE Emerging Technologies Committee is laser focused on ensuring that new technologies can benefit society and the profession with minimal risk to safety and security.

Claiming a Seat at the Table

Does it ever seem like your ideas go unnoticed? Do you sometimes feel like you have stalled in your organization? Does it seem like your team is not getting the support it needs? If you want to “claim a seat at the table,” how you show up, use your influence, and communicate can be the difference between winning opportunities or not.

Access the full issue online. Members who subscribe to the digital edition of *PE* can also access the current and back issues.

Engineers Week 2024 — Welcome to the Future!

Founded by NSPE in 1951, Engineers Week (February 18–24, 2024) is dedicated to ensuring a diverse and well-educated future engineering workforce. The latest theme for Engineers Week — **Welcome to the Future!** — seeks to inspire the next generation to play a vital role in innovating solutions to global challenges that impact future generations. By working together to develop new technologies, products, and opportunities, engineers create new possibilities that make the world a better place.

Engineers Week is a time for you to:

- Celebrate how engineers make a difference in our world.
- Add your voice to the conversation about the need for engineers, technicians, and technologists.
- Engage students in engineering.

Access promotional resources.

Share Your Views: Outreach to the Next Generation

What are you doing to promote the engineering profession to young people? Send your comments (250 words or less) to pemagazine@nspe.org.

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