



11th Edition March 23, 2021

General Manager Report: Energy Trends That Will Shape the Future

During the March Board of Directors meeting, UAMPS CEO & General Manager Doug Hunter reported on energy trends he believes will impact UAMPS and shape the energy future. He developed the summary from seminars and conferences he has attended, and discussions with experts.



Doug Hunter

- Policymakers are starting to better understand that achieving 100% “renewable” energy is extremely difficult, but we CAN achieve 100% "clean" energy.
- Experts are saying time is of the essence to fight climate change. The 2050 climate goals need to be moved to 2035.
- Recognition is growing that solar, wind and storage will max out at about 80% of the overall energy mix. But that’s optimistic. A lot of experts believe renewables will max out at 60%. The balance of energy needs will need to come from nuclear and other dispatchable clean sources.
- The next decade will see dramatically higher electric energy demand with the electrification of transportation and other sectors, and
- Modernization of developing countries.
- A positive development is that grid reliability and resiliency are increasingly recognized as extremely important to policymakers and the industry.
- Distributed renewable generation (rooftop solar), coupled with storage, is essential to decarbonization. It is customers’ investment that will benefit utilities.

- States will not decarbonize on their own. Regional and national programs are essential.
- The longer we wait to move into a non-carbon future, the more onerous government regulations will become.

Government Affairs Director Mike Squires Promotes Good Public Policy

UAMPS is impacted by many government policies at the federal, state and local government levels. Therefore, it's important for UAMPS to have an effective government affairs strategy.

UAMPS organized the Government and Public Affairs (GPA) Project to advance the interests of UAMPS in the government arena. Mike Squires, who has multiple years of experience in managing political campaigns and working for state and federal officials, heads up UAMPS' GPA. His law degree complements his public affairs experience.



Mike Squires

Much like the energy landscape, politics are dynamic and introduce numerous variables that impact any government affairs strategy. Mike's focus includes: 1) Understand the public affairs needs of UAMPS members and UAMPS projects, 2) Be present, engaged and informed on the issues impacting UAMPS and its members, 3) Learn the needs of policymakers and earn their trust, and 4) Invest time to educate and advocate.

It starts with a knowledge of UAMPS and the issues impacting the organization. Effectively engaging with policymakers, opinion leaders, and other stakeholders requires Mike to speak intelligently and truthfully and in manner that makes sense to them. It also requires hustle. Even the most polished, intellectual, and thoughtful politicians will disengage if a message is not delivered concisely. In Mike's 15 years of politics, he has learned that there is never a bad time to educate and advocate, and every relationship matters.

Update: Carbon Free Power Project

Project Management Committee Hears Update. At the March project committee meetings, members of the CFPP received an upbeat progress report.

Here are highlights:

- UAMPS has received further refinements of Project Cost Estimates (PCEs) for both a 6 module and 8 module plant. UAMPS staff is reviewing the PCEs to ensure all costs are covered. The PCEs will be used to calculate the Levelized Cost of Energy LCOE over the 40-year life of the plant for the 8 module plant configuration. Analysis will include Economic Competitiveness Tests to ensure the project meets the target level for LCOE. The review and results will be presented to project participants in an interim meeting in early April.
- Work on the Combined Operating License Application (COLA) is moving forward with UAMPS contracting with Fluor Corp to assist with the COLA. Contracts are being prepared for COLA subcontractors. Schedule and cost estimates are being prepared for COLA development.
- Site work at Idaho National Laboratory is also moving forward. The Senior Seismic Hazard Analysis Committee work is progressing and core boring for both 6 module and 8 module configurations are being developed to preserve options, depending on which plant configuration is selected.
- Discussions are being held with qualified and experienced firms to operate the CFPP.
- On the subscription front, UAMPS is engaging with six Pacific Northwest utilities who are interested in the project, along with California and Arizona utilities. Transmission delivery options are being addressed.



Industry Articles & Developments

Bill Gates: Nuclear Power Will 'Absolutely' be Politically Acceptable Again — it's Safer Than Oil, Coal, Natural Gas. [In a CNBC interview](#), billionaire philanthropist, technologist and climate change evangelist [Bill Gates](#) said correcting nuclear naysayers is a necessary, worthy and surmountable challenge.

That's because the need for clean energy is dire, and the operation of nuclear power plants produces no greenhouse gas emissions. Gates said new innovations in nuclear technology are making nuclear energy safer and more affordable, and countries around the world are starting to adopt nuclear power.



Bill Gates

"Nuclear has actually been safer than any other source of [power] generation," Gates said. "You know, coal plants, coal particulate, natural gas pipelines blow up. The deaths per unit of power on these other approaches are — are far higher," a [fact](#) he also references in his new book, "[How to Avoid a Climate Disaster.](#)"

Advanced Nuclear Technology Builds on Decades of Experience. Nuclear Energy Institute's Matt Wald [writes in Revista Nuclear](#) that advanced nuclear reactors, such as NuScale Power's small modular reactors (SMRs) "will break the mold of how we think about nuclear energy." However, the new reactors will be optimized with lessons learned from the current fleet of reactors.

Wald notes that NuScale Power is working with UAMPS to construct a nuclear plant at the Department of Energy's Idaho National Laboratory. The article describes how NuScale's nuclear engineers were able to greatly downsize and simplify traditional nuclear technology and make SMRs dramatically safer.

Fluor: Engineering With a Nuclear Twist. [The investment web site MoneyShow](#) features UAMPS partner Fluor Corp and discusses NuScale's SMR and references UAMPS' plan to build the Carbon Free Power Project, the first SMR project in the United States.

Viewpoint: Nuclear Power Can Weather Any Storm. [An article in World Nuclear News](#) notes that, "The ability of nuclear energy to stabilize electricity systems and secure the grid is all the more essential in an increasingly unpredictable weather world." The article notes that, "Nuclear power and renewables can, if planned properly, be exemplary partners as we strive towards building a clean energy world . . ."

Nuclear Energy is Integral to Clean Energy Transition. [An article in World Nuclear News](#) notes that global carbon emissions are rising and global electricity demand will double by 2050. Nuclear energy is key to slowing emissions while keeping grids stable. International Energy Agency Director Fatih Birol said that, "Globally, nuclear energy is the second source of clean electricity today. It provides uninterrupted electricity service without providing emissions around the world . . . So, therefore, when we think of electricity security, when we think of clean electricity to reach our climate targets, in my view nuclear should have an integral part."

In Other News . . .

Jack Taylor, long-time public utilities director for the city of Santa Clara, is retiring after 27 years. He has also served on the UAMPS board for 23 Years and will continue to serve until the end of the year. Farewell open houses will be held for Jack on March 25, 2:00-4:00 p.m. and March 27, 6:30-8:30 p.m., 2603 Santa Clara Drive. We wish Jack well in his retirement.



Jack Taylor

Six UAMPS members have earned the 2021 Reliable Public Power Provider (RP3) designation from the American Public Power Association. This prestigious designation recognizes operational excellence based on industry-recognized leading practices in four important disciplines: reliability, safety, workforce development, and system improvement. A RP3 designation is a sign of a utility's dedication to operating an efficient, safe and reliable distribution system. It shows a commitment to employees, customers and community. Currently, only 274 of the nation's more than 2,000 public power utilities hold an RP3 designation.



2021 designees include:

- Heber Light & Power: Diamond
- Idaho Falls Power: Diamond
- Truckee Donner Public Utility District: Diamond
- Kaysville City Power and Light: Platinum
- Lehi City Power: Platinum
- Springville City Electric Department: Platinum

If you have questions about UAMPS' plans for a carbon-free future, please email them to jackie@uamps.com.