



Message from the President: *State of the Industry*

The electric industry has always been defined by steady progress and evolution, but now, the pace of transformation in our sect is accelerating rapidly. The challenges and opportunities ahead of us require wise decision-making and measured action, two things that IMPA has excelled at since the Agency's inception in 1980.

One of the most discussed issues facing our industry continues to be the influx of data center projects due to the growth of artificial intelligence. Data centers make up about 2% of the nation's electric load, but that amount is forecasted to grow to 12% by 2028. While the impacts of data centers are being debated, IMPA strives to support our members in what they believe is best for their communities. To protect the interests of our members while keeping options open for large load users like data

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Water Project Completed at IMPA Combustion Turbines

The Indiana Municipal Power Agency (IMPA) owns seven combustion turbine (CT) units that can offer dispatchable power at any time during peak demands or to support reliability of the transmission system. These units, capable of operating on both natural gas and ultra-low sulfur fuel oil, help to keep IMPA's power supply portfolio low-cost and reliable. In the last few months, five of IMPA's CT units at two sites underwent a significant upgrade to incorporate reverse osmosis (RO) systems into the plants to ensure longevity and efficiency of their operation.

The use of ultrapure, deionized water is imperative in the safe and efficient operation of CTs. CTs require ultrapure water to cool the flames of their burners to effectively reduce

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centers, IMPA established a Large Power User Rate (LPUR) that ensures all costs attributed to new large customers, including transmission and distribution upgrades, are paid by the large power user. With protections like the LPUR in place, IMPA and our members can remain flexible to the demand of data centers.

In conversations regarding growing demand, nuclear power is beginning to reenter the conversation of potential fuel resources. The Palisades Nuclear Generation Station in Michigan has returned to operational status, Three Mile Island has been renamed and Unit 1 is expected to come online in 2027, and the Tennessee Valley Authority is planning for four small modular nuclear reactors at its Clinch River Nuclear Site. Approximately 19% of IMPA's power supply portfolio is comprised of nuclear power, which is supplied through a long-term power purchase agreement. As technology develops

and perceptions of nuclear energy transform, IMPA plans to monitor the practicality of this generation resource and whether it could be an economical and reliable resource in IMPA's future power supply portfolio. Currently, new nuclear power has too many risks related to regulatory timelines and cost uncertainty for IMPA to participate. However, this may change in the future.

We have also been an active participant in Indiana Governor Mike Braun's Strategic Energy Task Force, which brings multiple parties together from utilities and other groups to discuss the issues facing the electric industry today. Through the Task Force, IMPA is helping the state create a strategic plan that ensures reliable and affordable energy for Hoosiers now and for decades to come.

The one constant in life is change, and through tireless collaboration with our members, state and federal legislators, and utility leaders, IMPA remains well positioned for all that is to come. Our proven adaptability continues to be one of the Agency's strongest characteristics, and I look forward to the bright future that we will create together. •

Utility Careers

Across the country, public power utilities employ more than 100,000 people in hometown jobs. Career opportunities in public power range from customer service representatives, to lineworkers and plant system operators. The personal experience, perspectives, and unique background of each staff member help IMPA and its member communities thrive.

Interested in working for a municipal utility or the Indiana Municipal Power Agency? Explore the opportunities currently available at www.impa.com/careers. •



Project Completed

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the amount of nitrogen oxide (NOx) emissions. This pollution control mechanism ensures that the CT units meet strict air permit requirements and remain environmentally responsible while providing much needed power. Only water that is free of ions, compounds, bacteria, and other contaminants can be used in this process to prevent corrosion inside the turbine, making water quality management a significant priority in the operation of CTs.

When the two upgraded CTs sites were first constructed in 1992, they were equipped with demineralizer systems that produced ultrapure water for the units. Over time, these demineralizers became burdensome and obsolete.

“Demineralizers are complicated systems with a lot of valving, controls, and relays,” said Harrison Estep, IMPA Senior Generation Engineer. “Therefore, anytime the equipment breaks, all the troubleshooting we have to do is quite complicated. Additionally, the demineralizers depend on materials like sulfuric acid and sodium hydroxide to regenerate the resin, so, there was a lot of work with hazardous chemicals. As the systems aged and maintenance became more difficult, our CT operators had to start relying on portable demineralizers brought to our facilities by outside water treatment companies when the systems were out of service. This created some logistical uncertainties, so we started considering other options.”

Through investigating new technologies and the price of investing in an RO system to replace the demineralizers, IMPA staff realized that the RO upgrade would be a cost-effective solution. IMPA had investigated RO systems for the CT plants over the past ten years. In recent years, costs for the technology decreased and operational flexibility of the current systems on the market improved. This helped IMPA to decide to move forward with the RO projects. As a result, the RO system in Richmond was commissioned



in mid-2025, and the system in Anderson was commissioned by the end of 2025.

“Building the RO systems was the least expensive option, and we were inclined to go that way so that we could receive the benefits of asset ownership and reduce rental expenses,” said Estep.

Now, the CT units are utilizing the RO systems to create ultrapure water through a process like that of RO systems installed in homes. IMPA’s units take water from the local city where staff introduce sodium bisulfite to the water to remove chlorine before introducing an antiscalant to protect the RO equipment. Then, the water is pushed through the RO system’s several membranes of fine filters at 200-250 PSI to remove as many impurities as possible. The water is cycled through the system a second time to produce the required ultrapure water.

IMPA’s RO systems are easier to maintain and troubleshoot than the prior demineralizers, thanks to their simplicity in design and modern controls that help identify issues. The sodium bisulfite and antiscalant chemicals are significantly less hazardous than the materials required before, making the CT plant operations safer and more easily maintained.

The RO investment decisively improved these peaking power plants, helping IMPA maintain asset control, safety, and reliability. IMPA’s CTs are a crucial component of the Agency’s power supply portfolio, and upgrades like the RO project allow IMPA to keep electricity flowing to its member communities when they need it most. •

IMPA’s third Anderson CT was constructed in 2004. This third CT benefits from the new RO system, though it only requires water injection when operating on fuel oil. IMPA’s other two CT units in Indianapolis are maintained and operated by AES Indiana.



11610 N. College Ave.
Carmel, Indiana 46032

The IMPA Wire is published by the
Indiana Municipal Power Agency

Dick Justice, Chairman

Jack F. Alvey, President

Send submissions/suggestions to:

Whitney Hicks • IMPA Wire
Indiana Municipal Power Agency
11610 N. College Ave.
Carmel, IN 46032
(317) 573-9955
whitneyh@impa.com

www.impa.com

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