

Municipal Power News



Columbia City Electric Department

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Electric Utility Completes Major Upgrades

After years of local planning and collaborating with American Electric Power (AEP), a national energy company, Columbia City's municipally-owned electric utility recently completed work on an extensive system upgrade in the community. The project was triggered by AEP's endeavor to strengthen their electric infrastructure that exists throughout the Western Fort Wayne Area. When AEP planned to upgrade their system leading up to Columbia City's local infrastructure, the city's utility decided to improve the connection points with AEP's infrastructure in tandem. This process lasted approximately two years, with both AEP and the Columbia City utility rebuilding major infrastructure points, mostly concluding in just the last few months.

The project primarily concerned the areas where AEP's transmission system and Columbia City's distribution system meet. In the electric industry, a transmission system transports electricity at high voltages from power plants to communities that need electricity. A distribution system

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Look through reader responses from the last edition of *Municipal Power News*.

IMPA Celebrates 10 Years of its Solar Program

With the goal to expand the diversity of its power supply portfolio with economically feasible renewable generation sites, the Indiana Municipal Power Agency (IMPA) launched its solar program to construct solar parks within its member communities in 2014. At the time, solar power was just emerging as a cost-effective fuel resource for utilities, but IMPA embraced the challenge of incorporating this resource into its power supply portfolio to further diversify its resources and prepare for the future. Now, 10 years and 50 solar parks later, IMPA is proud of the numerous accomplishments made through its solar program and the nearly 200 megawatts of power that it contributes to all 61 member communities served by the Agency.



IMPA began its program cautiously, only constructing three demonstration solar parks in Frankton, Rensselaer, and Richmond, Indiana in its first year. Each site was housed on about eight acres of land and with 4,000 solar panels, and by the end of the year, the three sites generated 1.5 million kilowatt hours.

Through this process, IMPA expanded its knowledge of solar power and the steps needed to successfully develop parks of this scale in the most cost-effective way possible. Besides relying on in-house expertise, IMPA worked with local contractors in each of the three member communities to keep costs down and support local businesses. When construction of the three solar parks came in under budget while reliably providing environmentally-responsible electricity, IMPA and its Board of Commissioners started to envision the vast possibilities of building solar in several member communities. A spark was lit, and by 2015, six more solar parks were constructed in member communities, adding over 9 megawatts (MW) of solar capacity to the Agency's power supply portfolio.

In the ensuing years, IMPA increased its renewable footprint by building solar in collaboration with its member communities. As time progressed, so did the Agency's proficiency in constructing solar parks. By 2017, IMPA was constructing each of its solar parks with a single-axis



tracking system, allowing solar panels at each site to effectively track the movement of the sun throughout the day and generate more electricity as a result. The program continued to expand with new solar parks being constructed in member communities throughout the state, as well as additional parks being added to some communities whose infrastructure were able to handle more than one solar park . With the help of this program, IMPA achieved at least 30% low or no carbon resources by 2020 while still offering some of the lowest wholesale electric rates in the state of Indiana.

The success of IMPA’s solar program continues to thrive in recent years. In 2023, IMPA had its most prolific year yet for its solar park program as the Agency brought seven solar parks online in member communities. The agency’s largest park – at 9.9 MW – was completed, and IMPA celebrated a milestone as the Agency’s 50th solar park came online late in the year. From a small, idealistic program that started with three, 1-MW parks in 2014,

the Agency’s solar park program has grown exponentially in under 10 years. The Agency now has over 196 MW of solar power in member communities. Plans are already underway for four additional parks, and the Agency expects to surpass 209 MW of solar capacity by the end of 2025. The solar park program plays a key role in IMPA’s diverse power supply portfolio, and with its proven success rate, the Agency continues to provide a diverse fuel mix that benefits both consumers and the environment. •



IMPA’s 50th Solar Park Ribbon Cutting

Reader Feedback

The **Indiana Municipal Power Agency** (IMPA) is a not-for-profit organization that provides a low-cost, reliable, and environmentally-responsible power supply to its members. IMPA provides this wholesale power to 61 communities in Indiana and Ohio, who collectively make up the Agency's membership.

What does having reliable electricity mean to you and your family?



Send your answer to newsletter@impa.com, along with your name, e-mail address, and address for a chance to win an energy efficiency prize pack!

Topic Survey

Is there more about your community that you would like to know? Do you have questions about how public power or your municipally-owned utility works? Would you like to learn more tips and tricks as to how you can improve your home's energy efficiency?

Reach out to newsletter@impa.com to suggest topics for future *Municipal Power News* newsletters and let us know what articles you enjoy most, and what you'd like to see next!



Major Upgrades

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is the network of infrastructure in these communities that takes electricity from the transmission system, lowers the voltage for safer delivery to homes and businesses, and carries the power directly to consumers. Since Columbia City is a public power community, the utility owns and operates all of the city's distribution system, while larger utilities like AEP jointly own and operate the transmission system that carries power to the community.

Around 2020, AEP began the process of rebuilding 11 miles of power lines and constructing 14 miles of new power lines in both Allen and Whitley counties. This undertaking resulted in converting the transmission system to a higher voltage, increasing from 34.5 kilovolts (kV) to 69 kV. In response, Columbia City also upgraded



their substations—the local facilities that bring electricity off of the grid and lower the voltage for delivery through the distribution system—from 34.5 kV to 69 kV.

Columbia City’s distribution system includes two entry points from AEP’s transmission system to the community’s system through a loop fed system. This means that the two different entry points feed into one large loop that goes around

the entire community and connects to itself. Since the distribution is constructed in this way, the utility was able to take each entry point offline and rebuild it while the other entry point continued to feed electricity to the community. With this method, electric department staff converted each substation to 69 kV, reenergized it and tested it without any impact to the community’s service.

“While we switched to 69 kV, we were also able to upgrade the entry points with new communication relay switches,” said Shawn Lickey, Columbia City Electric Superintendent. “These new switches will help with reliability of our system because if one of the entry points loses power, the system will automatically switch to rely on the other entry point while we figure out any issues. We used to have to do this manually, which could take a couple of hours, especially if the outage happened in the middle of the night. Now, the switch can occur in a matter of seconds.”

Not only will the conversion speed the restoration of power when outages do occur, but it will also reduce the likelihood of outages happening in the first place. Additionally, an increase in voltage on the system increases efficiency. As electricity is transmitted across

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What’s the Word?

Investigating Power Terminology

Watt

A watt is a unit of measurement used to show the rate of energy transfer over one second of time. Consequently, a kilowatt is equal to 1,000 watts, a megawatt is 1 million watts, and a gigawatt equals 1 billion watts.

You may have heard of a kilowatt hour (kWh), which is a common billing unit used by most utilities in the electric industry. Essentially, a kWh simply shows the energy use per hour of an appliance, device, or entire home measured in kilowatts. For example, a space heater rated at 1.5 kWh consumes 1500 watts of power in one hour of continuous use!

Watts are named after James Watt, an inventor and engineer born in 1736 who also created the concept of horsepower.

Cooking Corner

Meatloaf

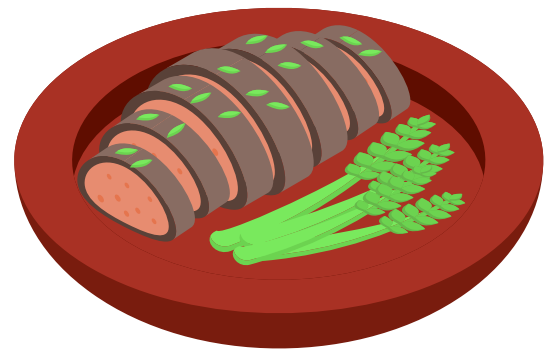
Recipe submitted by Marcie of Richmond, Indiana

- 2 lbs hamburger
- 2 eggs
- 10 to 12 crackers (crumbled)
- 1 onion diced
- 1 tsp baking soda
- 1/2 cup milk
- 2 pkgs instant oatmeal
- 2 to 3 squirts of ketchup

Mix all ingredients well. Form into a loaf and put into a greased loaf pan. Cover with ketchup. Refrigerate for 20 to 30 minutes covered to help the loaf firm up. Preheat oven to 350 degrees. Remove loaf from refrigerator and bake in preheated oven for 1 to 1 1/2 hours.

Once meatloaf is baked, remove from oven. Let rest on top of the stove for 30 minutes before cutting into so that it won't fall apart.

This recipe serves about 4 to 6 people. Invite your friends and family over to enjoy!



For a chance to be featured in the newsletter and win a prize, send your recipe to:

MPN Recipes
11610 N. College Ave.
Carmel, IN 46032
or
newsletter@impa.com

The MUNICIPAL POWER NEWS is a periodic publication of the Indiana Municipal Power Agency and the 61 communities that it serves with wholesale power.

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What are the Benefits of Public Power?

In the last issue of the *Municipal Power News*, we asked you what some of the benefits of public power are. As a reader of this newsletter, you live in a public power community, which means the electric utility that serves your power needs is a not-for-profit utility, owned and operated by your municipality.

The benefits of public power are numerous. Here is what some of our readers had to say about the advantages of living in a public power community.

“By being a part of the community, public power utilities can boost investment in the community, support local education, and be involved with charitable programs. They also care about the overall well-being of the communities they serve.”

– Fred

“Since public utilities are nonprofit organizations, their main focus is on providing affordable services rather than maximizing profit. This often leads to lower rates for customers, as any surplus revenue is reinvested into the improvement and expansion of services. Public power

also eliminates the need for shareholders and dividends, further reducing costs. Consequently, individuals and businesses can save money on essential utilities, allowing them to allocate their resources more efficiently.”

– Chris

“There are many benefits to public power, such as being able to be provided with economic advantages. IMPA makes sure all electric needs of the community are met, as well. It boosts community investments, supports local education, and gets involved with beautification.”

– Bridgette

These are all great answers that highlight how public power improves your community to help it thrive. Additionally, public power is affordable. According to a 2021 American Public Power Association (APPA) comparison, public power customers of Indiana and Ohio typically saved an average of more than 40% when compared to other types of electric utilities. APPA also reports that nearly 80% of projects currently under construction by public power utilities are solar and wind generating sources. This shows that public power utilities also recognize the importance of environmental stewardship and continue to invest in sustainable power sources.

Public power communities, including yours, consistently work to provide low-cost, reliable, and environmentally-responsible power to their consumers.

To learn more about public power, visit www.impa.com/publicpower!

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IMPA Commissioner: Shawn Lickey

Major Upgrades

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utility lines, there are unavoidable energy losses along the way, but a higher operating voltage reduces the amount of energy loss, increasing the cost-effectiveness and reliability of utility operations.

“It was a substantial project for us, but it’ll really improve our system overall and help us prepare for the large influx of commercial and industrial consumers that are coming into the city,” said Lickey. “With better communication relays and newer equipment, all of the electric users in the community will benefit from the work put into this conversion.” •

