

MUNICIPAL POWER NEWS

Greenfield Power & Light



IMPA
INDIANA MUNICIPAL POWER AGENCY

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Greenfield Power & Light was recently recognized by the American Public Power Association for its excellent electric reliability.

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Greenfield Power & Light Recognized on National Level

Greenfield Power & Light is passionate about providing reliable and affordable electricity to all of its customers. This year, the utility was recognized for its efforts in achieving high reliability in 2015 by the American Public Power Association (APPA), a national trade group that represents more than 2,000 nonprofit, community-owned electric utilities such as Greenfield Power & Light.

In order to assess the industry's top utilities, APPA compiled Greenfield Power & Light's

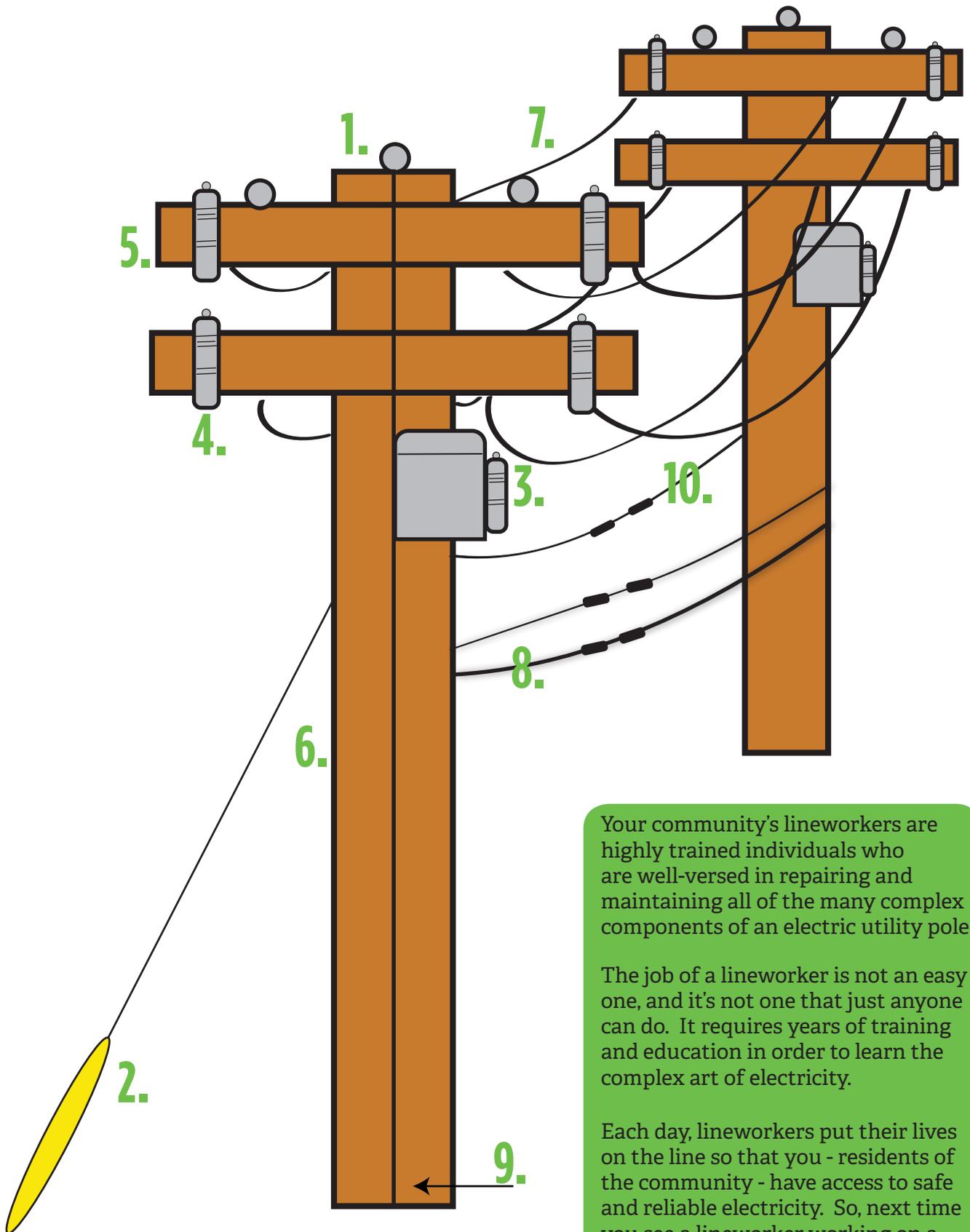
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Anatomy of an Electric Utility Pole

Utility poles are a common sight throughout the United States, as they are located adjacent to many roadways that are visible while driving. While you see these poles every day, have you ever thought about the function of the poles and the lines and attachments that hang onto them?

Utility poles play an important role in electrical distribution, which is a fancy term for how electricity travels to your home or business. All of the lines and attachments that sit on the utility pole play an essential role in this process. Read on to learn more about the different parts that make up your everyday electric power pole.

- 1. Insulator:** The insulator prevents wires from coming into contact with each other on the utility pole, which could cause fires, outages and other dangerous conditions.
- 2. Guy wire:** The guy wire is a tensioned wire that helps to stabilize the utility pole to the ground.
- 3. Transformer:** An electrical device, typically in a metallic enclosure, that converts high voltage electricity to a lower voltage for use in homes and businesses.
- 4. Fuse cutout:** A combination of a fuse and a switch, the fuse cutout is used to protect power lines and other equipment from surges or overloads by disconnecting the power line from a transformer.
- 5. Crossarm:** This horizontal piece of the utility pole is typically made of high-quality wood and holds power lines and other equipment, such as transformers, onto the pole.
- 6. Utility pole:** The utility pole is typically made of wood or steel, and can range in height from 30 feet to more than 100 feet. The pole serves as the backbone for the electric line and holds all of the components and equipment.
- 7. Primary wire:** These wires are on the very top of the utility pole, and usually carry high voltage electricity from a substation.
- 8. Lowest wires:** Utility poles don't just hold electric wires; other wires, such as telephone or cable wires, are also attached to these poles. Typically, these wires are found closest to the ground and are the lowest wire on the utility pole.
- 9. Ground wire:** This wire runs the entire length of the utility pole, directing any electricity on the pole safely into the ground.
- 10. Secondary wire:** Once the high voltage electricity has been converted to a lower voltage, the secondary wire carries that electricity to homes and businesses.



Your community's lineworkers are highly trained individuals who are well-versed in repairing and maintaining all of the many complex components of an electric utility pole.

The job of a lineworker is not an easy one, and it's not one that just anyone can do. It requires years of training and education in order to learn the complex art of electricity.

Each day, lineworkers put their lives on the line so that you - residents of the community - have access to safe and reliable electricity. So, next time you see a lineworker working on a utility pole, stop and thank them for their service to the community.

Greenfield Utilities Updates Meters, Billing Software

Both Greenfield's water and electric departments are seeing major upgrades when it comes to tracking customer's usage of water and electricity. Both utilities recently updated all of their water and electric meters with a more advanced metering technology: Advanced Metering Infrastructure (AMI). AMI meters allow for automated, two-way communication between a customer's meter and Greenfield Municipal Utilities, which results in greater accuracy and efficiency. The new meters utilize radio frequency to determine usage, and that data is then submitted back to the utilities in order to monitor for usage, issues and to assist with billing.

An AMI meter provides a significant amount of real-time information to the utility, which allows for improved operations and customer management. Because this data is presented in real-time, the utility may be able to identify issues such as water leaks or spikes in electrical usage before the issue gets out of control and results in an expensive utility bill. In addition, it also allows utility staff members to focus on reliability and maintenance projects, as they won't have to spend as much time reading individual meters.

In addition to the new meters, the utility is also in the process of implementing new billing software, which is focused on improving the customer's experience. This new software will enable customers to monitor and manage their own usage, allowing them to have more control over their bill. By having the ability

to monitor usage, customers can better track how much water and electricity they use throughout a given month, and can change their habits in order to lower their bill. In addition, customers can compare usage from month to month, easily pay their utility bill online and have access to other helpful information.

"The new meter technology, as well as the new billing software, are both aimed at providing our customers with a better experience," stated Michael Fruth, Director of Utilities. "We are always looking for ways that we can improve, and we are excited to introduce these new features to our customers."

The utility is currently working to train staff on the new software, and expects that the software will be installed and available to the customer in March 2017.●

Recognition

-continued from page 1

reliability data and then compared it with other utilities as well as with the top quartile of system outage duration data, which was compiled by the Energy Information Administration. After examining both sets of data, APPA found that Greenfield Power & Light significantly outperformed the electric industry's national average for the duration of power outages. The data and its ultimate results means that your local utility is on the frontlines of electric reliability, ensuring that customers who rely on the affordable power distributed by Greenfield Power & Light will have access to some of the nation's most reliable electricity.

"We work hard to keep the lights on day-in and day-out," stated Nelson Castrodale, Manager of Greenfield Power & Light. "It's really nice to see our hard work pay off with this kind of national recognition."

The Indiana Municipal Power Agency, Greenfield's wholesale power provider, congratulates Greenfield Power & Light on this impressive accomplishment! ●

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-Nelson Castrodale, Manager of Greenfield Power & Light

Tidbits & Trivia

Question: Which type of wire on a utility pole carries the high voltage electricity from a substation?

- a) Secondary wire
- b) Primary wire
- c) Ground wire
- d) None of the above

Send your answer to the question to IMPA, and we will randomly select winners from all of the correct entries to receive an energy efficiency prize pack. Please send your name, e-mail address and address with your answer to:

newsletter@impa.com

OR

MPN Energy Efficiency Quiz
11610 North College Avenue
Carmel, IN 46032

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 member utilities purchase their power through IMPA and deliver that power to the residents and companies within the community.

Substation

noun.

A facility used for switching and/or changing or regulating the voltage of electric energy. A substation may tie generating stations to transmission systems or transmission systems to distribution systems.

IMPA Continues Building Solar Parks in Local Communities

Throughout the last two years, the Indiana Municipal Power Agency (IMPA) has constructed nine solar parks in large and small IMPA communities throughout Indiana. This year, the Agency is in the midst of constructing four additional solar parks in the communities of Anderson, Huntingburg, Waynetown and Washington. These solar parks are all aimed at adding more renewable and economical energy resources to IMPA's power portfolio.

When energy is created by the solar parks, it is then placed onto the local distribution system in whichever town or city the solar park is located in. As the solar power is produced, it becomes a part of all of the electric generation that is supplying the system, which is typically a mixture of power produced via coal, natural gas, solar, wind and nuclear.

The process of generating electricity from the sun may seem to be a complex one, but in reality, is really quite simple. When sunlight

hits the solar panels, the panels convert that energy into direct current electricity. That electricity is transferred to an inverter, located within the solar park. The inverter then takes the direct current electricity and converts it into alternating current (AC) electricity. Once converted to AC, the transformer steps-up the voltage to the proper level, and is then transferred to the interconnection point on the distribution system. The AC meter measures the energy from the solar park prior to its connection to the distribution system and ultimately the customer.

IMPA plans to add approximately 10 megawatts of solar capacity into its overall power portfolio each year, meaning more and more IMPA member communities will have solar parks within the coming years. For more information on IMPA's solar parks, visit www.impa.com.

How does solar generate electricity?



Cooking Corner

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

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Centerville	Frankfort	Lebanon	Rising Sun	Waynetown
Chalmers	Frankton	Lewisville	Rockville	Williamsport
Coatesville	Gas City	Linton	Scottsburg	Winamac

Chicken and Dumpling Casserole

Recipe submitted by Vicky Hicks-Spear of Tell City, Indiana.

- 1 pound chicken breasts
- 2 cups chicken broth
- 1/4 cup butter
- 2 cups Bisquick
- 2 cups whole milk
- 1 can cream of chicken soup
- 3 tsp. chicken bouillon
- 1/2 tsp. sage
- 1 tsp. black pepper
- 1/2 stick butter

Preheat oven to 350 degrees. In a 9x13 baking pan, melt 1/2 stick butter. Shred chicken and spread over butter. Sprinkle black pepper and sage over the chicken. Do not stir. In a small bowl, mix milk and Bisquick. Slowly pour over chicken. In another medium bowl, whisk together 2 cups of chicken broth, chicken bouillon and soup. Once blended, slowly pour over the Bisquick layer. Bake casserole for 30 to 40 minutes, or until golden brown.

Strawberry Delight

Recipe submitted by Burdett Parsons of Washington, Indiana.

- 1 pre-made angel food cake
- 8 oz. cream cheese
- 16 oz. strawberry glaze
- 16 oz. tub whipped cream
- 1 ^{1/3} cup sugar
- 1 qt. fresh strawberries

Tear angel food cake into pieces and mix with 1/3 of the tub of whipped cream. Put whipped cream mixture into the bottom of a serving dish. Mix the rest of the whipped cream with the cream cheese and the sugar and place on top of the cake. Slice strawberries into quarters and mix with the strawberry glaze. Then, spread the strawberry mixture over the top of the cake.



The Municipal Power News is published by the
Indiana Municipal Power Agency and Greenfield
Power & Light.

IMPA Commissioner: Michael Fruth

What to Do in Case of a Power Outage

If you experience a power outage, it's important to call Greenfield Power & Light at 1-800-377-5807 so that the utility is aware of the outage and can work to restore power within your home and the neighborhood. When outages do occur, rest assured that Greenfield Power & Light crews and other personnel will be working to restore the lost power. Even though line crews may not be visible in your area, this does not mean that they are not working to restore your power.

Crews work to restore power to the most customers in the shortest amount of time. Should your neighbors' power be restored before yours, you may be connected to a different transformer, but you will have power soon. If there are downed power lines near your home, stay away, as the lines could still be energized and pose a safety hazard.

The process of restoring power does take time, and it's important to be prepared in case of a prolonged power outage. If you have medication or food that must stay refrigerated, have a cooler and ice available to ensure that the items stay fresh. Access to a flashlight or a lantern is also important.

Greenfield Power & Light works hard to prevent power outages from occurring, but the utility is no match for severe weather events such as tornados, thunderstorms and ice storms. Lineworkers and other utility personnel must follow proper power restoration protocol to ensure the safety of both the customer and the lineworker. ●