

MUNICIPAL POWER NEWS

Richmond Power & Light



IMPA
INDIANA MUNICIPAL POWER AGENCY

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Richmond Power & Light lineworkers worked on various maintenance projects this summer, all aimed at increasing electric reliability for the utility's customers.

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Richmond Power & Light Completes Infrastructure and Maintenance Projects

As temperatures warmed during the spring and summer months, routine maintenance projects increased for employees of Richmond Power & Light (RP&L). Because it's difficult to work on power lines and other utility equipment during the winter months, the utility takes advantage of warmer weather to complete projects that will improve utility infrastructure and also keep the utility running smoothly.

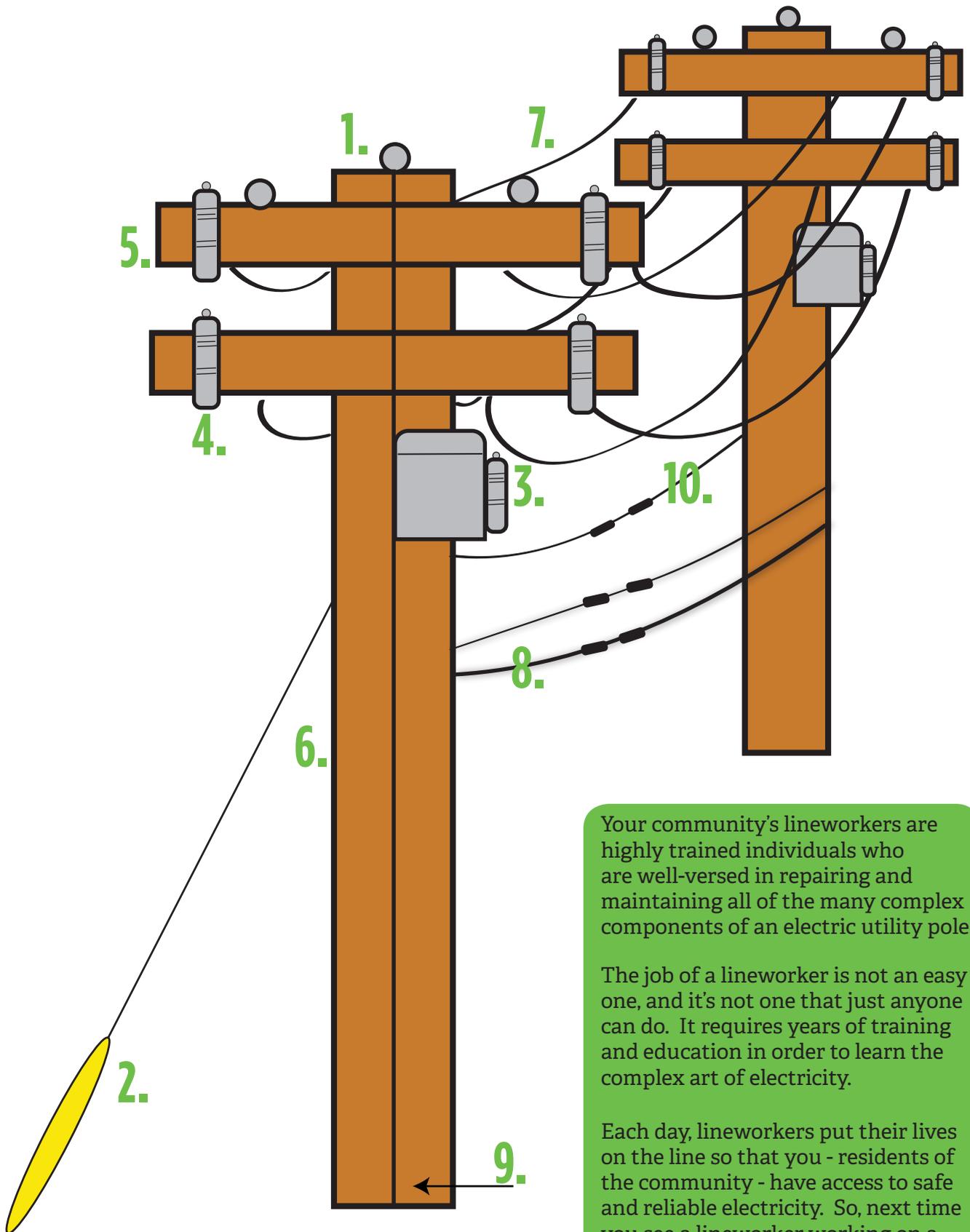
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Anatomy of an Electric Utility Pole

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.

Projects

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One such project consisted of moving overhead electric lines and burying them underground. Moving the electric infrastructure underground reduces the chance of a power outage due to inclement weather, and can also save money by not having to maintain the utility poles that an overhead electric line would be housed on.

In addition to burying electric lines, RP&L also worked to rebuild primary circuits and performed routine maintenance on power lines in the downtown area to continue providing customers with reliable electric power.●



RP&L crews worked in the Woodlawn area of Richmond, converting overhead power lines to underground.



Crews also worked to replace cable lines in manholes located throughout downtown Richmond.

Richmond Power & Light Brings Home Awards from Statewide Lineworkers Event

Richmond Power & Light (RP&L) walked away from the 6th annual Indiana Municipal Electric Association Lineworkers' Rodeo with several awards. The rodeo, held in Lawrenceburg, Indiana, is a unique event designed to showcase the skills and knowledge of lineworkers from municipal electric utilities in Indiana, as well as surrounding states. The rodeo featured a variety of competitive events, including team, apprentice, individual, senior and mutual aid. Events are judged on safety, work practices, neatness, ability, equipment handling and speed.

Nick Maurer placed second in the mutual aid event as well as third place in the apprentice obstacle course. Another RP&L lineworker, Michael Berger, placed third in the overall apprentice category. Lineworker Chris Wagner competed in the individual category, placing first in the 12 kV

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Lineworkers

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pole top insulator change out, third in the hurtman rescue, and third overall in the individual category.

RP&L and the utility's wholesale power provider, the Indiana Municipal Power Agency (IMPA), would like to congratulate Maurer, Berger and Wagner for representing Indiana's municipal electric utilities at the IMEA Rodeo. Additionally, RP&L and IMPA would like to thank all of the utility's lineworkers for their hard work, dedication and safe practices in their challenging line of work. ●



RP&L lineworker, Nick Maurer, placed second in the mutual aid event as well as third place in the apprentice obstacle course.

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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Chalmers	Frankton	Lewisville	Rockville	Williamsport
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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.



RICHMOND POWER & LIGHT

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IMPA Commissioner: Randy Baker

Save Energy This Fall!

As the summer months wrap up and temperatures begin to cool, take action to ensure that your house and habits are as energy efficient as possible. Read on for helpful tips to save money this fall:

- Schedule regular maintenance for your heating system.
- Take shorter showers. This can save hundreds of gallons of hot water and also reduce water heating costs.
- Replace the air filter in your furnace on a monthly basis. A dirty air filter makes the heating and cooling system work harder, causing wear and tear on the equipment.
- Turn off kitchen and bath ventilation fans after use. If left on, the fans can blow the warm air from inside your home to the outside.

The best way to reduce your electric bill is to do everything you can to make your home more energy efficient. ●