

MUNICIPAL POWER NEWS

Lebanon Utilities



IMPA
INDIANA MUNICIPAL POWER AGENCY

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These four Lebanon Utilities employees traveled to assist the community of Brookston, Indiana after it declared a state of emergency due to a town-wide power outage. Lebanon Lineworkers pictured left to right: Nick Elliott, Blade Lasley, Dustin Shirley and Perry Shoemaker.

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Lebanon Utilities Assists Community in Need

After powerful storms and straight line winds swept through parts of north central Indiana late in the evening on Wednesday, June 22nd, Lebanon Utilities' employees sprang into action to ensure that power was restored as quickly as possible. Lebanon is a public power community, meaning it owns its own electric utility, and is one of only 72 such communities within the State of Indiana. This tight knit group of electric utilities often assists one another during severe power outages, and this summer's wind storm was no different.

Lebanon Utilities lineworkers were called in to work at 3:00 a.m. as parts of Lebanon were without power after lightning had struck a few electric circuits throughout the city. Meanwhile, Corby Unroe, Electric Operations Manager for Lebanon Utilities, also received a phone call requesting help from another public power community, Brookston, as their entire town was without power due to 100

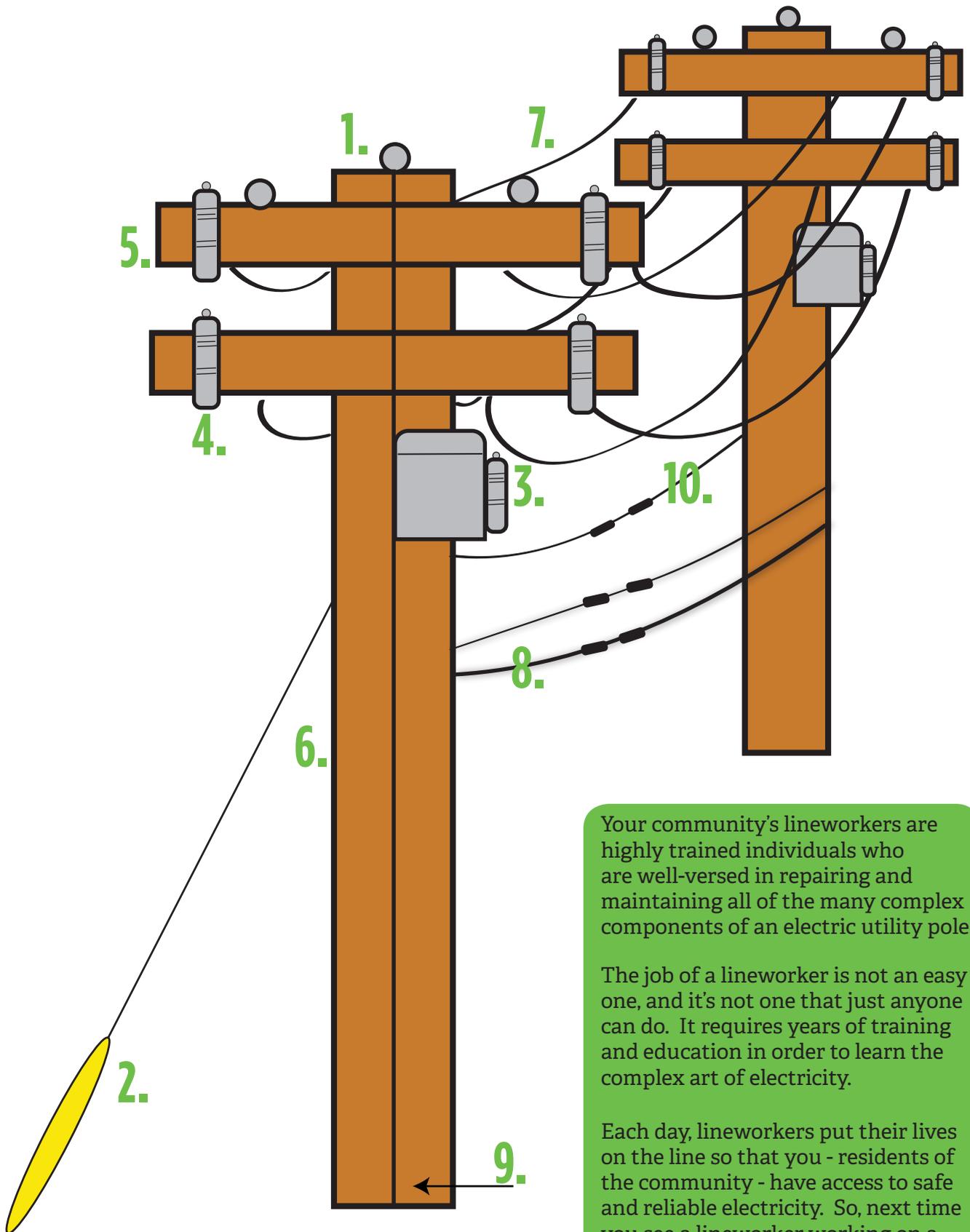
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Anatomy of an Electric Utility Pole

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.

Electric Operations Building Now Completed and in Use

After years of utilizing multiple antiquated buildings for all electric utility operations, Lebanon Utilities dedicated its new Electric Operations Building on Wednesday, April 27th, and immediately began utilizing the space for all electric utility operations. The dedication of the building was attended by almost 100 people, including Senator Phil Boots, Representative Tim Brown and Lebanon Mayor Matt Gentry, as well as representatives from the Indiana Municipal Power Agency (IMPA), Lebanon's wholesale power provider. Lebanon Utilities General Manager Mike Whitman gave an overview of the project, and also dedicated the building to all of Lebanon's past, present and future lineworkers.

The facility provides 18,000 square feet of usable space for the Lebanon Utilities electric department, including 14 bay doors that will accommodate the department's bucket trucks and other large electrical equipment. The building also boasts ample office space as well as a locker room with showers and restrooms, specifically for the lineworkers.

"This building is a huge improvement over what we used to have," said Corby Unroe, Electric Operations Manager. "Before, we were in several different buildings and our equipment was scattered all over the place. Now, we have this one large building that has enough storage for all of our needs."

In addition to the impressive amount of space and storage, the building was also designed with energy efficiency in mind. 30 solar panels sit on top of the building's front canopy, and the lights in the parking lot are a mixture of traditionally powered and solar powered high-efficiency LED fixtures. Both the solar panels and the parking lot lights are designed to use the sun's natural rays to help keep energy costs low in the new facility. In addition, the large garage area of the building contains 25 skylights that allow for an abundance of natural light to flow into the area. Lebanon Utilities is proud to provide a state-of-the-art space for its electric department, and looks forward to providing a higher level of service to its customers. ●



Lebanon Utilities held a ribbon cutting ceremony for the new Electric Operations Building on Wednesday, April 27th. General Manager of Lebanon Utilities, Mike Whitman, cut the celebratory power line.



The outside of the Lebanon Electric Operations Building contains 30 solar panels, located on the front of the building's canopy.

Community in Need

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mph straight line winds that had swept through town. Once Lebanon's power was restored around 8:00 a.m., a crew of Lebanon Utilities lineworkers departed for Brookston, after working for several hours in the middle of the night in their own community.

"We sent two different crews, and were in Brookston on both Thursday and Friday, helping that community restore power back to its residents," stated Unroe. "We helped to put wire back up that had been torn down by trees, we replaced broken poles and just generally helped out where needed."

Unroe said that Lebanon tries to send out crews to assist other communities when possible, as "it's just the right thing to do". In this case, the Town of Brookston was completely without power, and was declared a state of emergency, meaning all hands on deck were needed.

Lebanon lineworkers who assisted Brookston in their time of need included Nick Elliott, Blade Lasley, Dustin Shirley and Perry Shoemaker. These men worked more than 12 hour shifts, multiple days in a row to ensure that power was restored as quickly as possible to both Lebanon and Brookston residents.

As exhibited by this summer's storms, whenever there is a power outage, lineworkers and other utility personnel are typically the first people on the scene. These individuals put their lives on the line each time they go to work, especially during extreme weather conditions. The City of Lebanon is extremely appreciative of all of its employees, but especially the lineworkers in the electric department who worked diligently through inclement conditions to care for their home city of Lebanon as well as the other communities in need. ●

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 from 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
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
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IMPA Commissioner: Mike Whitman

Lebanon Utilities Looks Ahead to Future Projects

After taking the reins as General Manager of Lebanon Utilities late last year, Mike Whitman is excited to continue planning for projects that will help to increase electric reliability as well as bolster the customer experience for all of those served by the utility. One such project that is in the works is the construction of a new 69 kilovolt (kV) line.

This project has been in the planning stages for well over a year, and is ultimately aimed at increasing the electric reliability within the city. Currently, the three main power lines that provide electricity to the city all meet at one central point, meaning if there was an unfortunate weather disaster such as a tornado or other strong storm, the entire city could potentially lose power for an extended period of time. This new 69 kV line will detour around that central point, allowing the city to remain powered even if the other lines were to go down. Construction on this project is not expected to begin until late this year, and the utility aims to arm the public with as much information about the project as possible.

In addition to the 69 kV line, the utility is also researching other projects to complete over the next few years. Some such projects include self-healing circuits – another project aimed at reliability – as well as an outage management service. This service would provide customers of the utility with an automated messaging service, informing customers of when a power outage had occurred, and its expected restoration period.

Lebanon Utilities is passionate about providing reliable and affordable electricity. All of these projects are being carefully considered and evaluated for both their benefits and their costs. For more information about ongoing utility projects, visit www.lebanon-utilities.com.