

MUNICIPAL POWER NEWS

Town of Brookston



IMPA
INDIANA MUNICIPAL POWER AGENCY

Volume 22, Issue 2 | Summer 2016



IMPA Service Corporation, the engineering and operations subsidiary of the Indiana Municipal Power Agency, was one of the many crews that arrived in Brookston to assist with the community's town-wide power outage.

Anatomy of a Utility
Pole
Page 2

IMPA Solar Park
Update
Page 4

Apple Popcorn
Festival
Page 8

Brookston Recovers from Major Wind Storm

After straight line wind gusts of more than 100 miles per hour swept through the Town of Brookston during the early morning hours of Thursday, June 23rd, the town was paralyzed by tree debris blocking streets as well as a town-wide power outage. Adding to the already difficult situation, Brookston's Utilities Superintendent, Max Eldridge, was out of town visiting family when the storm hit. When he learned of the damage, he immediately put a call out for assistance and began driving home to Brookston in the middle of the night. Fortunately, the town was able to ask for and receive help from other local municipal electric utilities in order to restore power to the town.

Brookston is a public power community, meaning the town owns its own electric utility.

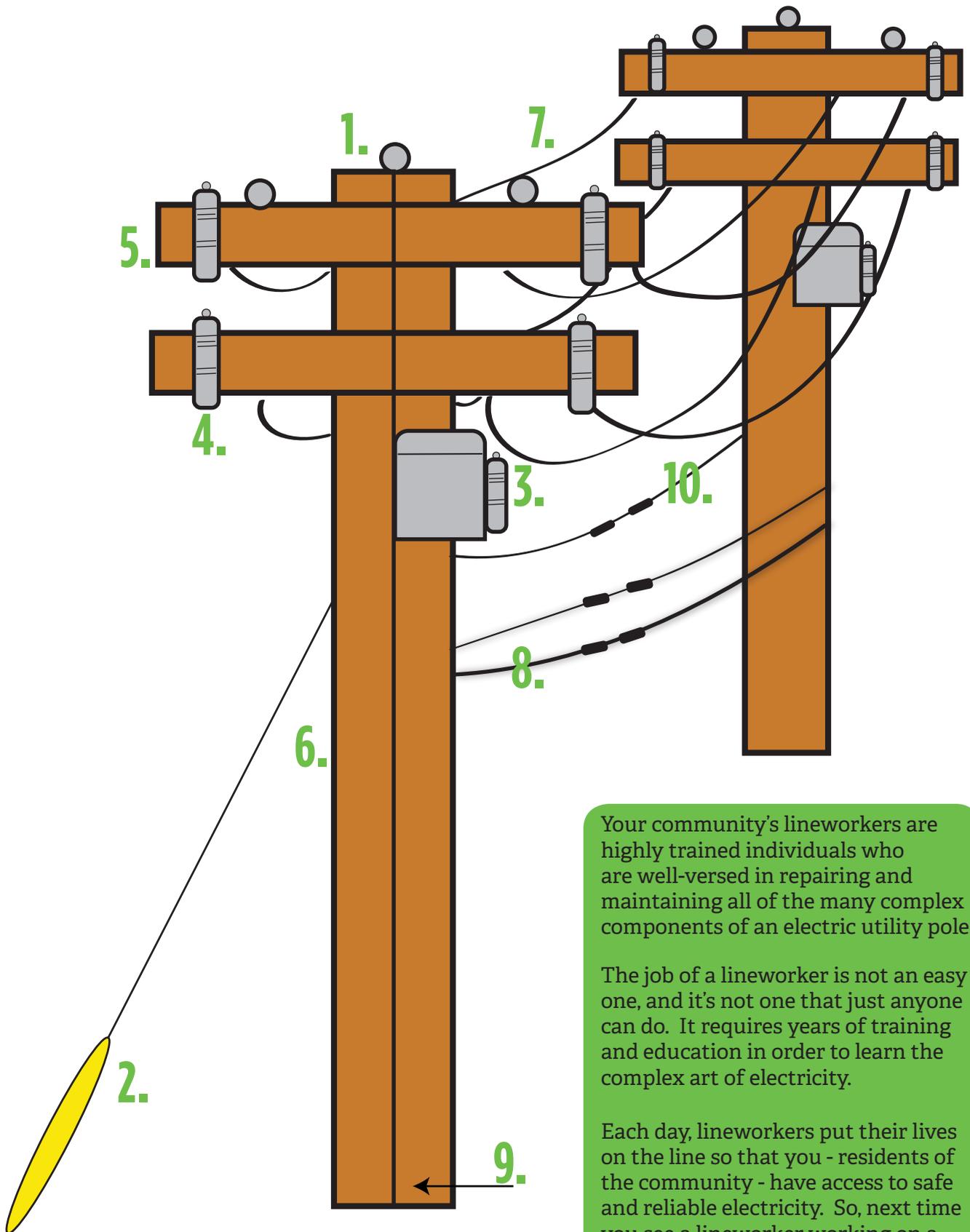
-continued on page 4

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.

Wind Storm

-continued from page 1

Brookston is unique in this way, as only 71 other communities throughout the State of Indiana are also considered public power communities. This tight knit group of electric utilities often assists one another during severe power outages, and this summer's wind storm was no different. Once Eldridge made the call, other utilities were notified and began planning to arrive in Brookston. Through the Indiana Municipal Electric Association's (IMEA's) Mutual Aid Program and with assistance provided by IMPA's Service Corporation, Brookston received all of the help it needed.

Crawfordsville Electric Light & Power's Assistant General Manager Robert Stephens was the first person on the scene in Brookston. He evaluated the town's condition, and made the decision to call for more backup once he realized how severe the situation really was. Crews from Crawfordsville, Lebanon, Logansport, Richmond and Greenfield all arrived throughout the next several days to help clear debris and restore power. The IMPA Service Corporation assisted both Brookston and the nearby community of Chalmers with power restoration.

"There is no way that we could have restored power and cleared debris as quickly as we did if not for the help from other municipal electricians throughout the state," said Eldridge. "Because I was out of town, Robert Stephens from

Crawfordsville really took the lead, arrived at 3:00 a.m. and provided excellent leadership to help restore power."

Eldridge said that while the power outage was widespread, the fallen trees, limbs and debris were the worst part. Groups of local volunteers helped to clear much of the debris, along with the municipal electricians and the Indiana Department of Transportation. It took over two days to clear and haul all the brush, and even still, remnants of the storm are still visible. The Red Cross also set up camp at the Federated Church of Brookston, providing food, water and shelter to those who needed it.

Power was restored to much of the town, including its water and wastewater plant and senior center complex, by 6:30 p.m. on Thursday. All power throughout the town, with the exception of a few houses that had suffered personal damage, was restored by 9:30 p.m. on Saturday. Eldridge said that Crawfordsville provided crews from start to finish, and had someone there every day until power was restored. Overall, the town had to replace 19 utility poles, 12 transformers and countless power lines.

The Town of Brookston cannot thank the other Indiana municipal electricians enough for sending crews to assist. The community also appreciates all of its local volunteers who banded together to help clear debris and care for one another.



The storm caused severe damage to many trees throughout the town. Utilities Superintendent Max Eldridge stated that this storm was one of the worst that he had seen and that the amount of debris was unprecedented.

The Town of Brookston would like to thank the many lineworkers and electric crews who traveled across the state to assist the community with power restoration:

Crawfordsville Electric Light & Power

Greenfield Power & Light

IMPA Service Corporation

Lebanon Utilities

Logansport Municipal Utilities

Richmond 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 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

The **MUNICIPAL POWER NEWS** is a periodic publication of the Indiana Municipal Power Agency and the 60 communities that it serves with wholesale power.

Editor: Niki Dick
Manager of Marketing Communications
niki@impa.com

Correspondent:
Meredith Sauter
Communications Specialist
meredith@impa.com

Send submissions and comments to:
11610 N. College Ave.
Carmel, IN 46032 or
newsletter@impa.com.

IMPA
Members

Advance	Columbia City	Greendale	Middletown	South Whitley
Anderson	Covington	Greenfield	Montezuma	Spiceland
Argos	Crawfordsville	Huntingburg	New Ross	Straughn
Bainbridge	Darlington	Jamestown	Paoli	Tell City
Bargersville	Dublin	Jasper	Pendleton	Thorntown
Blanchester, OH	Dunreith	Kingsford Heights	Peru	Tipton
Bremen	Edinburgh	Knightstown	Pittsboro	Veedersburg
Brooklyn	Etna Green	Ladoga	Rensselaer	Walkerton
Brookston	Flora	Lawrenceburg	Richmond	Washington
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 the Town of Brookston.

IMPA Commissioner: Steve Putt

Save the Date: Apple Popcorn Festival

Mark your calendars for the 38th Annual Apple Popcorn Festival, scheduled for Saturday, September 17th from 7:00 a.m. to 6:00 p.m. This free event takes place on Third Street, and consists of craft booths, contests, entertainment, music and a variety of food booths. For more information about the event, visit www.applepopcornfestival.org.

