

# MUNICIPAL POWER NEWS

Thorntown Utilities



**IMPA**  
INDIANA MUNICIPAL POWER AGENCY

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Thorntown Utilities is working to update its water and electric meters from a traditional analog meter (left) to one that utilizes automated meter reading technology (right).

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## Thorntown Utilities to Install New Utility Meters

After receiving approval from the Thorntown Town Council a few months ago, Thorntown Utilities began the process of ordering and installing all new radio read water and electric meters. These types of meters utilize automatic meter reading (AMR) technology, which transmits meter data through radio waves. A utility employee would simply use a data collection device, usually a wand or probe, and drive by homes and businesses to record meter data. The signal is automatically transmitted from the meter to the wand, and the data can then be easily uploaded to a computer.

Before the utility decided to update its meter technology, an employee of Thorntown Utilities

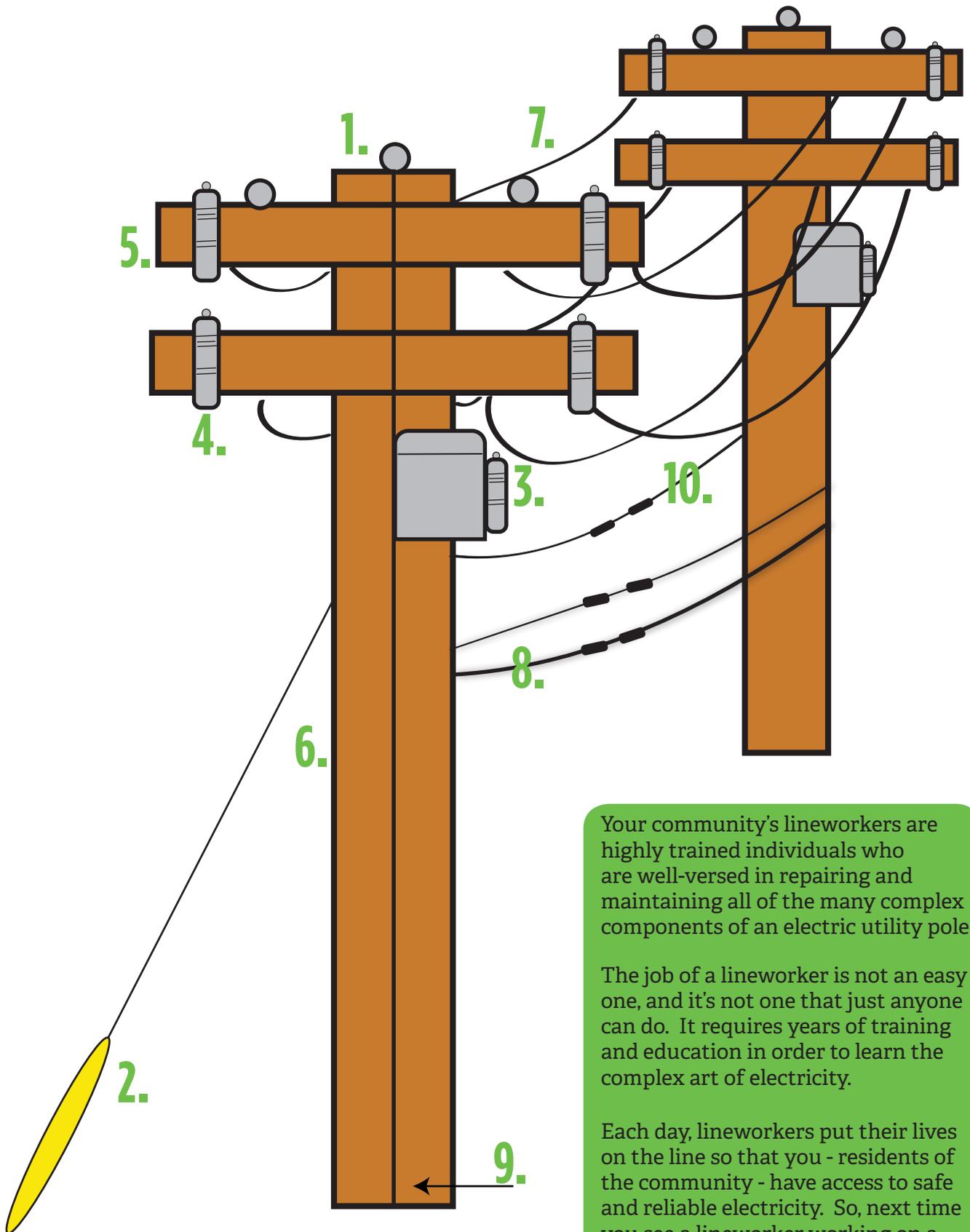
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# Anatomy of an Electric Utility Pole

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.

# What's in a Bulb?

Over the past few years, changes in the light bulb industry have been vast. 2013 marked the beginning of the phase out for 40, 60, 75 and 100-watt incandescent light bulbs, as was mandated by the Energy Independence and Security Act, which was signed into law by President George W. Bush in 2007. Since that time, consumers have seen a rise in popularity between two types of bulbs: compact fluorescent light bulbs (CFL) and light-emitting diode light bulbs (LED).

Consumers have not only seen a rise in popularity of these two types of bulbs, but have also seen a fall in prices. According to CNET, a technology and consumer review site, Home Depot sold a 12-watt LED light for around \$40 in 2010. Today, that same bulb can be purchased for anywhere between \$1 and \$3, which shows a dramatic price decrease and makes these types of lights more accessible to the general public.

So, what are the advantages to using CFL and LED light bulbs? Both types provide different advantages, but either will provide your home with a more energy efficient mode of lighting when compared to the original incandescent light. One of the main advantages to using LED lights are that they are long lasting. Even though one might pay more in purchasing the light, fewer bulbs are bought over time, saving money in the long run. Also, LED lights do not contain mercury and are more efficient than even the CFL light bulb. A CFL light bulb produces a glow more similar to the incandescent light bulb, but is more efficient. It's also a cheaper alternative to the LED light; however it does not last quite as long.

Both types of lights save almost 90% in energy consumption when compared to the previous incandescent light bulb. LED lights are the newest technology, and with its ever-falling prices, IMPA encourages its readers to consider purchasing these types of lights to power homes and businesses.●



CFL lightbulbs are easy to identify by their characteristic look. Though not as efficient as LED lights, they do still provide a more efficient way to light a home than traditional incandescents.



Now that the prices for LED lights have dramatically dropped, these types of lights are more accessible to everyday individuals who want to save money and be more energy efficient.

# Save the Date: Festival of the Turning Leaves

A long-running Thorntown community event, the Festival of the Turning Leaves is scheduled for September 23-25, 2016. This event takes place on Main Street in downtown Thorntown and consists of live entertainment, craft and food vendors, a parade, museum tours, a 5K/10K walk and run and much more. Registration forms for the 5/10K as well as more information about the festival itself can be found at [www.thorntownfestival.org](http://www.thorntownfestival.org).



## 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](mailto: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](http://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](mailto:newsletter@impa.com)

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Centerville	Frankfort	Lebanon	Rising Sun	Waynetown
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 <sup>1/3</sup> 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.

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IMPA Commissioner: Gary Moody

## Utility Meters

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had to manually read each water and electric meter, walking from house to house and recording the reading in a written log. Not only was that process extremely time consuming, but the reads were also prone to error, whether due to inability to read the meter or because of human error. The new AMR technology will not only be more efficient, but will also give the utility and the customer a more accurate reflection of the amount of water and electricity being used. In addition, it will also be easier to catch leaks and other issues that sometimes cause high water and electric bills before the situation gets out of control.

“Installing these new radio read meters is huge for Thorntown,” said Gary Moody, Utilities Superintendent for Thorntown Utilities. “It was really hard physical work reading these meters, and it also took a long, long time. With this new technology, reading meters will go from taking several days to just a few hours.”

Before beginning this process, Moody said that he traveled to the Town of Veedersburg, another IMPA community that had recently installed radio read meters, to get pointers on how to best tackle this project. Moody is also assisting the nearby town of Jamestown, as that community is also looking to install the same type of meters. “It’s nice that we’re able to help each other out,” said Moody. “It makes it easier when I can get hints and advice from someone else who has already been through it.”

The town has roughly 685 water meters and 890 electric meters that need to be removed and then installed with the new meter and technology. Moody plans to first update the water meters, and then begin on the electric meters. He hopes that all meters will be installed by the end of the summer or early fall. ●