MUNICIPAL POWER NEWS

Brooklyn Utilities

IMPA
INDIANA MUNICIPAL POWER AGENCY

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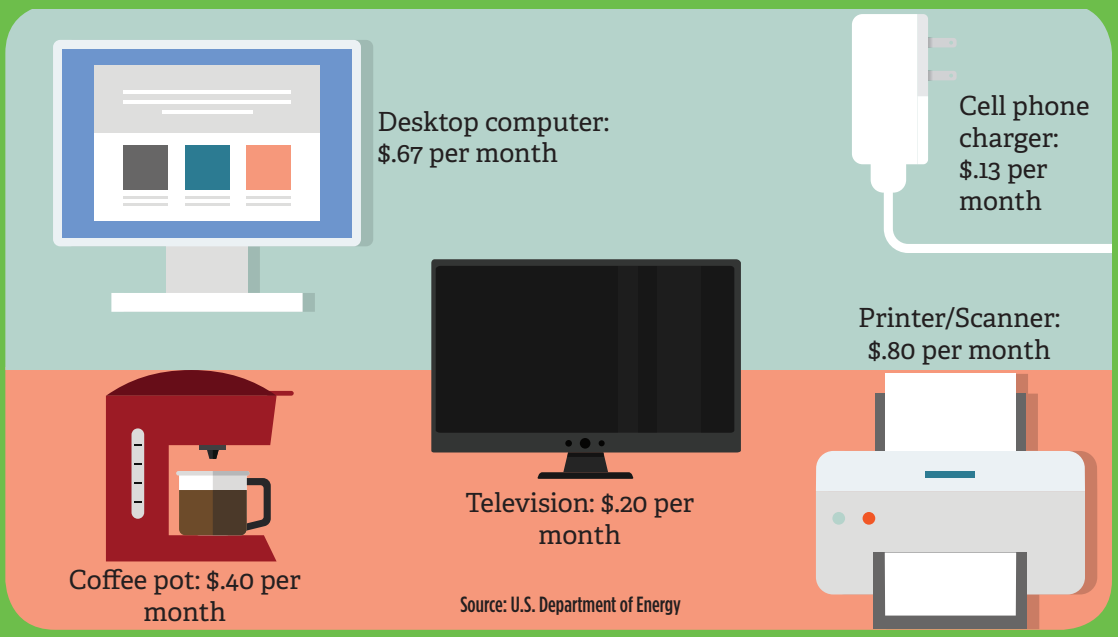


This chart details how much money per month is spent on these everyday items when turned off and not in use. Unplugging these devices has the potential to help save money on a monthly electric bill.

The Anatomy of a Utility Pole
Page 2

What's in a Bulb?
Page 4

IMPA Solar Park Update
Page 6

How to Prevent Phantom Loads

While Halloween may be just around the corner, a phantom load is not part of the seasonal fun. Also referred to as vampire power, this describes any sort of electronic device that still uses power, even when that device is turned off. There are a variety of different electronics that produce a phantom load, and it can range anywhere from a television to a cell phone charger to a microwave. While these devices may be turned off or are not supplying a charge to another device, they are still on standby, ready to be turned on at a moment's notice. The devices' readiness uses a small amount of energy that, over time, can add up to a costly electric bill.

One way to counteract this phantom load is simply to unplug items such as cell phone or laptop chargers, coffee makers or microwaves when not in use. Another easy solution is to plug all electronics

-continued on page 5

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.

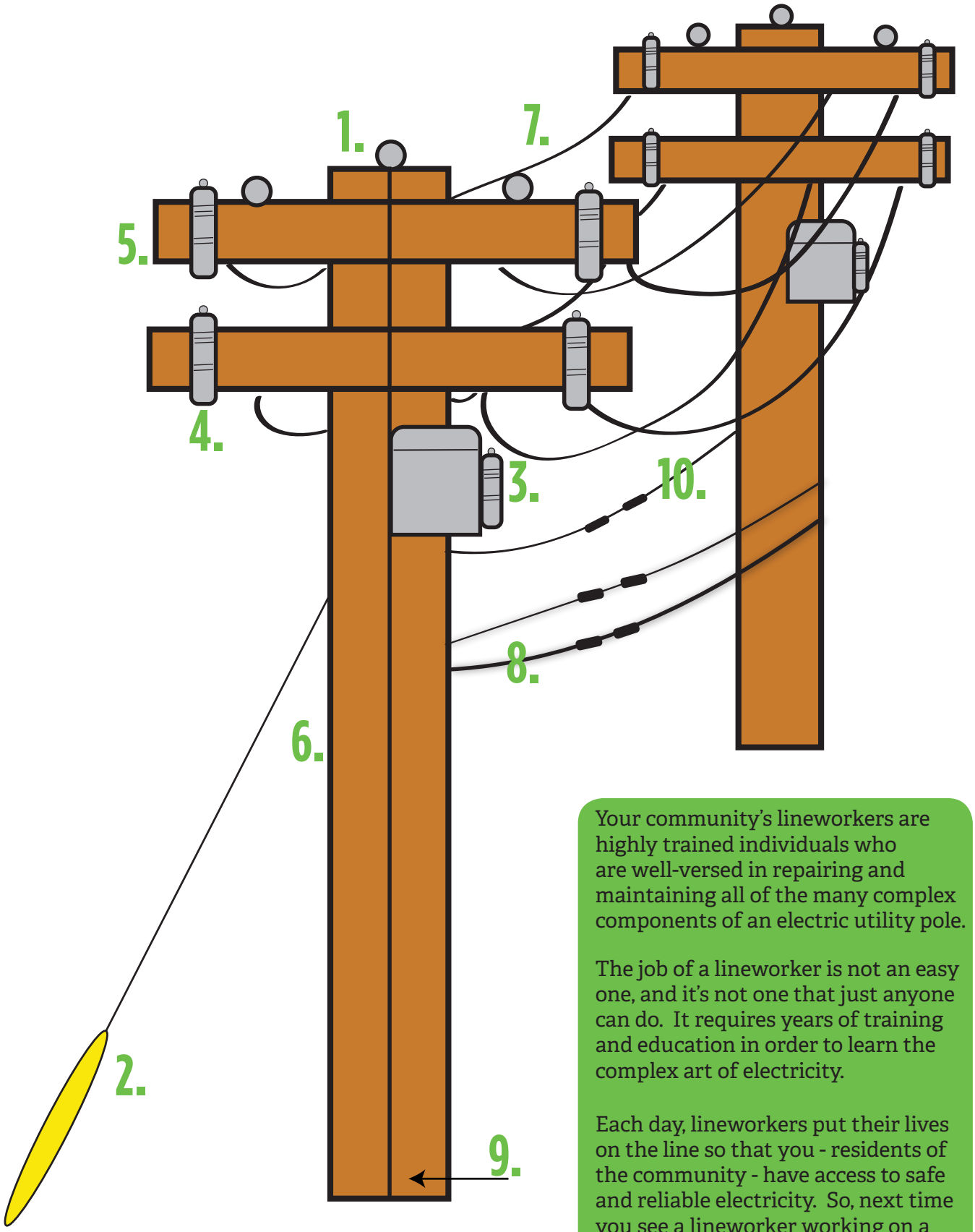
6. Utility pole: The utility pole is typically made of wood or steel, and can range in height from 30 feet to more than 100 feet. The pole serves as the backbone for the electric line and holds all of the components and equipment.

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 their ever-falling prices, IMPA encourages you to consider purchasing these types of lights to power your 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 everyone who wants to save money and be more energy efficient.

Phantom Load

-continued from page 1

such as TVs, DVD players and gaming consoles into one power strip and turn off the power strip when the devices are not in use. Examples of electronics that can produce phantom loads are:

- TVs
- DVD players and DVRs
- Clock radios
- Answering machines
- Printers
- Laptops and computers
- Cordless phones
- Audio systems
- Any other device with a clock or power light

Do a short survey of your home and see how many devices you can find that may produce a phantom load. Then, either unplug that device, or plug into a power strip. Making these simple changes can affect your electric bill, putting you more in control over the price that you pay each month.

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 an economic, 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.

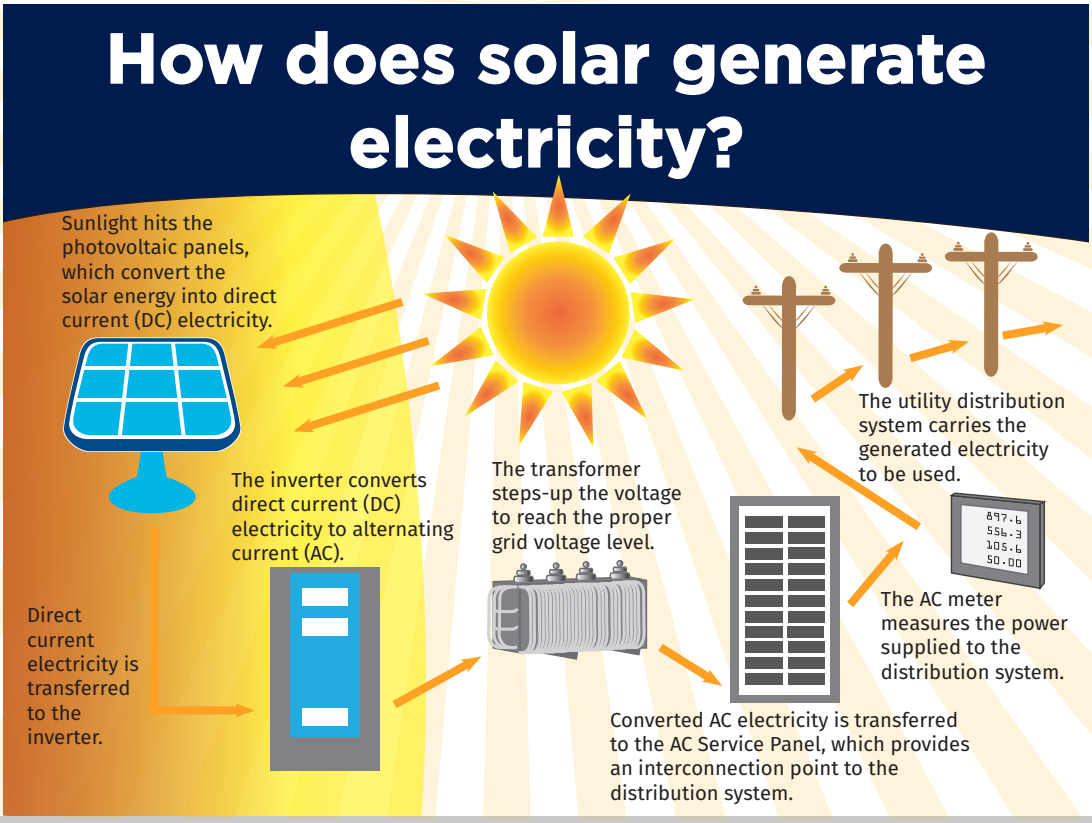
IMPA Continues Building Solar Parks in Local Communities

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.



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

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 a periodic publication of the Indiana Municipal Power Agency and the 60 communities that it serves with wholesale power.

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IMPA Commissioner: Ray Young

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.
- 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.
- Take shorter showers. This can save hundreds of gallons of hot water and also reduce water heating costs.
- 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.