



Heating and cooling degree-days

Key to understanding bills

Despite how well your home is insulated, weather conditions determine how hard your air conditioner and furnace must work to maintain a comfortable indoor temperature. Knowing the daily temperatures during a usage period helps to understand why your electric bill fluctuates each month.

Historical weather temperatures and heating and cooling degree-days are now available at www.cecmo.com. The information, provided from the National Weather Service in St. Louis, is updated monthly. From CEC's home page, select "Your Home" and click on "Understanding Your Bill." Then click on the link to [heating and cooling degree-day analysis](#).

What are heating and cooling degree-days?

Heating and cooling degree-days are calculated by comparing the average temperature for the day to 65°, the temperature at which people are least likely to use their heaters or air conditioners. When you compare the daily average with 65°, you can determine if that date was a heating or cooling degree-day.

Example: If the daily low temperature was 40° and the high was 70°, the average would be 55° (40°+70°=110° divided by 2). Since 55° is 10 degrees colder than 65°, there would be 10 heating degree-days on that date.

If the average was 75° (10 degrees warmer than 65°), there would be 10 cooling degree-days.

Sun, humidity, precipitation and wind also impact heating and cooling system operations. Heating and cooling degree-days do not take these factors into consideration.

Spend your time wisely in 2010

Why waste time paying your electric bill when Citizens Electric offers Auto Pay as a **free** payment option? When your electric bill is automatically paid by the due date, you don't have to worry about being late or writing a check and delivering it to Citizens' Office.

Now there are 50 more reasons to sign up for Auto Pay by bank draft or credit card. That's because five Auto Pay participants will be randomly selected on April 1, 2010 to receive \$50 each. All members currently using Auto Pay and those who sign up before the deadline will have a chance to win!

Signing up for Auto Pay is as easy as checking the box on the front of your payment remittance stub, completing the information on the back and returning the stub with your current payment. The Auto Pay enrollment process is complete when your bill states, "Draft will occur on (date)."

So, make the most of your time in 2010, and do what really matters, like making memories with the special people in your life.

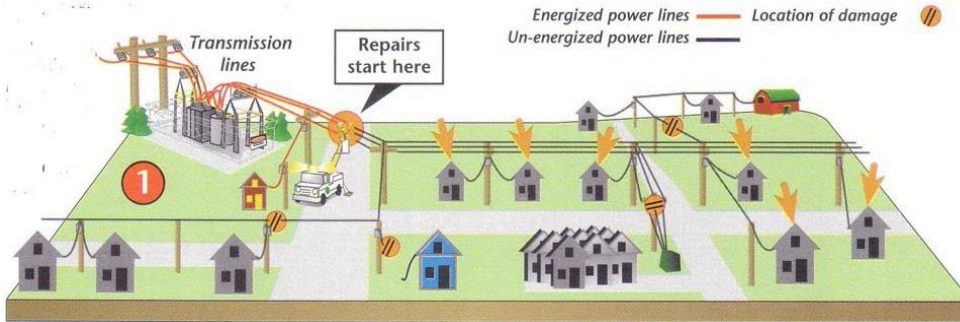


Who's On First?

Citizens Electric's number one priority is to provide safe, reliable electricity to our members. Unfortunately, power interruptions can occur due to storms, vehicle accidents, animals and failed equipment. In the event of a large outage, electricity is restored in a method that is consistent with the electric industry standard.

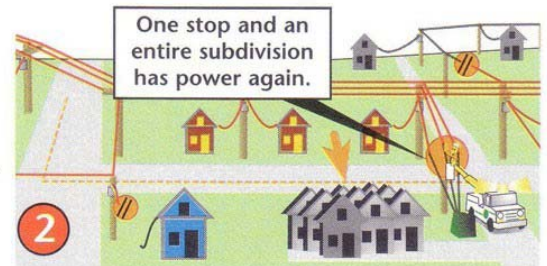
This methodical process usually begins with the main lines from the substations, which can restore service to several hundred people. Next, the tap lines are repaired, which may affect 30-200 members, followed by individual service lines affecting one to five members.

Here's how it works:



Step 1: The substation is energized, but a main distribution line is damaged near the substation, leaving most members without power. All repairs start with the main line. A large number of members will have power returned once the main line is fixed. All other repairs would be pointless until this line is restored, as it feeds all the other lines.

Step 2: With the main line restored, the line crew can isolate other damage and prioritize repairs. Though a couple of repairs were closer, fixing the line that serves this subdivision down the road will get a larger number of members power more quickly.



Step 3: Moving back down the road to fix this tap line will restore electricity to the three homes marked with arrows.

Step 4: A smaller tap line serving a number of homes and the farm on the hill is next on the list for the line crew. The move probably doesn't make the folks in the lone house too happy. They've seen the crew driving by their home and working right across the road. They see lights in the homes of all their neighbors, but they still don't have power! That's because even though electricity is coming to their pole, the service line from their pole to their meter is damaged. Individual repairs can be made only after all distribution and tap lines are restored.



Step 5: So even though the crew has gone past the lone house a number of times, the crew moves down the road to restore power to dozens of homes before spending hours to fix a single outage.

Electric Consumer graphic by Richard G. Bieber

Energy Tip

Foam insulating gaskets are an easy and inexpensive way to block air that comes through electrical outlets and light switch plates on exterior walls. **While quantities last, complimentary foam insulators are available at CEC's offices.**

