

## Why Is My Current Power Bill Higher Than Normal?



If you thought the month of August seemed a lot hotter than normal, you are right. Temperature data from August shows that it was one of the hottest August months on record. How does that affect your electric bill? Your current Wayne-White Counties Electric Cooperative bill that is due and payable on October 10<sup>th</sup> is actually reflecting your energy usage for August. The bill you pay today always reflects actual kilowatt usage from two months ago. So if your current bill seems unusually high, there is a direct correlation between

the August temperature extremes we recently experienced and the kilowatt usage consumed to cool your home during that hot time period.

How hot was it in August? According to data acquired from the NWS and NOAA, the daily average high temperature in Fairfield during the month of August is normally 85.5 degrees. However, this year the high temperature actually reached at least 90 degrees on 28 of the 31 days in August. It also reached a high temperature of 100 degrees or more in Fairfield on 10 of the 31 days in August, 2007. In fact, it was only a normal 85 degrees for a high temperature on 1 of the 31 days in August. All the remaining 30 days of the month were well above normal in August. As a result, everyone used more energy than normal in August to cool their homes & businesses.

Let's crunch the data another way. NOAA puts out monthly data for several cities based on a term called "cooling degree days." They take the mean daily temperature (average of the daily maximum and minimum temperatures) and use 65 degrees as a baseline to calculate summations of positive differences from the base. These cooling degree day computations are tracked and recorded on a monthly and a yearly basis with comparison data available. The final number represents the deviation from the baseline (cooling degree days). Let's look at two nearby cities with cooling degree day data available for the month of August. In Evansville, IN the data for August shows a normal deviation of 218. In 2006, the deviation for August was 159 because it was cooler than normal a year ago. In August of 2007, the deviation was 574 which indicates how much hotter than normal it was this year. The data for St. Louis is similar. The normal (cooling degree day) deviation in August is 215, last year it was 137, and this year it was 611. **In summary, higher temperatures mean higher energy bills for cooling.**

Remember, the electric bill you are paying today (due October 10<sup>th</sup>) is actually for your kilowatt usage in August. If you are concerned about higher cooling bills in the summer, maybe it's time to look at a more energy efficient cooling system for your home. An Air-source heat pump provides very energy efficient cooling in the summer and efficient heating in the winter. It's the 2<sup>nd</sup> best option on the market for cooling & heating your home, yet very affordable in upfront purchase cost. The #1 best option is still a geothermal heat pump which cools and heats your home in the most energy efficient manner possible utilizing mother earth. Geothermal heat pumps will cost you more upfront than an Air-Source Heat Pump, but the payback in energy savings is still just 7 to 9 years. To get a list of Air-Source Heat Pump or Geothermal Heat Pump dealers and installers in southern Illinois, contact us at Wayne-White Counties Electric Cooperative. Call us at 842-2196.



### Official High Temp in Fairfield, Illinois for each day in August '07

- 1—95 degrees
- 2—95 degrees
- 3—95 degrees
- 4—99 degrees
- 5—98 degrees
- 6—100 degrees
- 7—100 degrees
- 8—103 degrees
- 9—100 degrees
- 10—96 degrees
- 11—101 degrees
- 12—104 degrees
- 13—97 degrees
- 14—97 degrees
- 15—105 degrees
- 16—95 degrees
- 17—90 degrees
- 18—90 degrees
- 19—94 degrees
- 20—92 degrees
- 21—95 degrees
- 22—99 degrees
- 23—102 degrees
- 24—100 degrees
- 25—89 degrees
- 26—93 degrees
- 27—97 degrees
- 28—101 degrees
- 29—98 degrees
- 30—86 degrees
- 31—85 degrees

### The Cooperative Connection

Is a Monthly Publication of  
Wayne-White Counties  
Electric Cooperative  
2501 W. Main Street  
Fairfield, Illinois 62864  
(618) 842-2196

Randy Olson, Editor  
Submit your Recipes, story  
ideas, & classified ads to us.  
[www.WayneWhiteCoop.com](http://www.WayneWhiteCoop.com)