# Making Sense of Winter 2018 Electric Bills

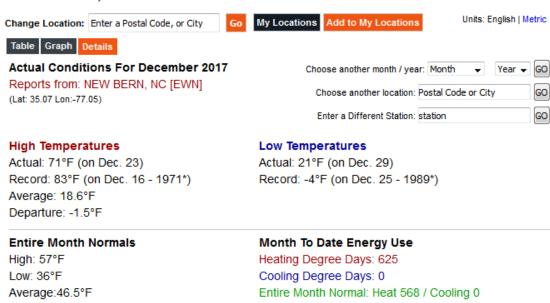
## December 2017 factors

- Required 10% more home heating than the historical average
  - Required 14% more home heating than December 2016
- There was a 16.5% increase in the billed kWh rate from December 2016 to December 2017 due to changes in the WPCA from a credit of \$10.70 per 1,000 kWh to a charge of \$4.99 per 1,000 kWh. We had an unprecedented 52-months straight that we issued WPCA credits before it reverted to a charge in April 2017. That charge peaked at \$7.49 but as of January 2018 has now dropped to \$2.50 per 1,000 and is expected to drop again in February and zero out by March.

(We discussed the WPCA changes in detail in our member newsletter: <a href="http://www.tidelandemc.com/system/resources/W1siZiIsIjIwMTcvMDcvMTAvMTVfN">http://www.tidelandemc.com/system/resources/W1siZiIsIjIwMTcvMDcvMTAvMTVfN</a>
DZfMDZfMzVfVGlkZWxhbmRfMDcxNy5wZGYiXV0/Tideland-0717.pdf)

• Other considerations: Christmas lights and decorations; holiday baking; guests; Examples: Inflatables 2.5¢ per hour (each) so if you had one and it ran 6 hours per day for the month of December that would be \$4.65. A modest Christmas lighting display (about 10 strands of LED lights) plugged in 6 hours a day would cost about \$8.15 for the month.

# New Bern, NC



# January Polar Plunge

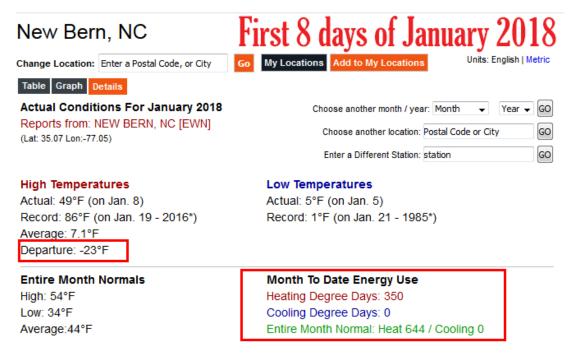
- Seven new low temperature records set in the first 8 days of January
- In the first 8 days of January, members' home heating requirements were more than double what a single week in January would usually require
- There was a 13.7% increase in the billed kWh rate from January 2017 to January 2018 due to changes in the WPCA from a <u>credit of \$10.56 per 1,000 kWh</u> to a <u>charge</u> of \$2.50 per 1,000 kWh.
  - Snow and ice kept many Tideland members home rather than at school or work which contributed to even higher residential energy use
- Not only did heat pumps operate longer during the polar plunge, they also predominantly ran in Auxiliary or Emergency heat mode which costs 3 times more than normal heat pump operation
- Members with water wells had higher pump energy use if they dripped faucets
- Dripping hot water faucets without cutting off the water heater breaker would result in an extra 108 kWh of energy use per day (\$11.69 per 24 hours); also water heating costs overall increased due to much colder incoming water temperatures
- The co-op set a new peak demand record the morning of Jan. 7 and sold a record 11.4 million kWh in the first 7 days of January
- Electric Space Heater Use: When used at the 1,500 watt setting, an electric space heater costs 16¢ per hour to operate. So just 1 space heater used 12 hours a day costs \$1.92; 24 hours a day would cost \$3.84 a day. In many cases members used multiple space heaters and some reported using ovens to supplement home heat.

### Seven New Low Temperature Records Set



#### **Heating Degree Days**

Look at the heating degree day (HDD) requirements for the first 8 days in January. In a normal January, the HDD total is 644. In the first 8 days of the month, 54% of that total had already been exceeded and we were only one-quarter into the month.



## January 2017 was unusually warm

For the ENTIRE month of January 2017 there were 496 heating degree days (HDD); this year we had 350 HDD in just the first 8 days of the month.

