

Currents

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February 2020

www.sussexrec.com



The Repeating Cycle of Restoration

When you live in a rural area as we do, weather and vegetation often conspire to interfere with our electricity. From the flicker of a momentary interruption when a tree limb hits a wire to the complete outage from ice bringing down lines completely, weather and vegetation have a definite impact on power reliability.¹

The storm was one of the worst, if not the worst storm in recent history. Several people in the Highland Lakes, Barry Lakes, and Lake

Panorama areas have told me that this was the most severe storm they have experienced since they have lived there.² This was the first time in the collective memory of SREC employees that every member of the Cooperative was without power at the same time.³

Our line crews along with the crews we brought in did a fantastic job in safely and quickly restoring power to our members. The crews worked sixteen-hour days and we had crews working around the clock. All our



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employees worked hard as a team to have our system restored as efficiently as possible.⁴ We have numerous stories of trees coming down around our crews as they worked. Some had to cut their way both in and out of areas to get the system back in operation.⁵

One of the things we cannot always do in these situations is provide definitive restoration

The Repeating Cycle of Restoration

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times. Getting to the damage can be a challenge in itself and some damage remains hidden until we reenergize lines, making restoration estimates inaccurate.⁵ There is always a certain level of frustration when our representatives cannot give you an exact time frame. In situations like the storm, we could not tell you because the storm continued to damage the system as we worked. In more than one case, we restored power only to have additional trees and branches fall into the power line and knock it out mere minutes later.⁶

We focus on restoration of large sections first. For instance, we will put a substation back in service that provides power to several hundred customers before repairing a service to a single neighborhood. The focus on the large pieces first gets the most members back in service the fastest. From here, we focus on progressively smaller restoration efforts. The final stage is restoration of single services.⁶

Our power comes from Allegheny Electric Cooperative (AEC). It owns a portion of the Susquehanna Steam Generation facility (a nuclear plant), all of the Raystown Hydroelectric facility, and receives a share of the hydropower generated on the St. Lawrence and Niagara Seaway and distributed by the NY State Power Authority. The balance of the power needed by the cooperative owners of AEC comes from long term contracts made with other power suppliers.⁷

A national network of over 66,000 miles of transmission line to deliver power to local distribution co-ops – enough to go around the world more than two and a half times! Even so, the majority of distribution cooperatives rely on other utility power lines to complete the power delivery. For most cooperatives, Sussex Rural included, this means they are physically connected to the transmission system of another company and are subject to the quality of that utility's delivery system.⁷

Do any of the above paragraphs sound familiar? That's because you have seen these messages before, and not just in our social media and email updates. The information above is from the President & CEO column in issues of Currents from January 2003, April 2008, January 2009, September 2010, August 2011, October 2011, and December 2012.



We received a number of comments, emails, and messages regarding some dissatisfaction with Sussex Rural's response to the ice and snow storm on December 2nd. I certainly understand your frustration about being without power for a number of days. I, along with many other employees of SREC, had no power at home for most of the week. I know in no uncertain terms that nobody enjoys losing power. Our mission here is to do two things: keep rates as low as possible and keep the lights on as much as possible.

The weather plays a big role in that second part. There was no amount of tree trimming that we could do, within our rules, that could protect our lines from the huge trees that were weighed down by the ice and then snow. Our entire county itself experienced over 50,000 people without power at the height of the storm.

Were we perfect? No. We learn from each storm and try to improve and address the concerns of our members. One common question that's come up recently has been about our online outage map. Our outage map is a combination of some automated computer programs and manual (human) input. Outages are registered based on phone calls that come in to our call center and a computer algorithm is used to predict what device on our system is "open," pinpointing where the power is out. There are some default fields like outage restoration times that get attached to the outage on the map, as well. The human part comes when we get information from our crews that tell us what and where the actual problem is – perhaps a tree on the line, or a large tree that came down breaking the wire or pole. We make manual updates of the automated restoration times for better accuracy. We also manually tag the outages as to whether they are displayed as dispatched or not.

Day-to-day, this system works very well. However, during the snowstorm on December 2nd, there were over 11,000 homes without power on our system due to many, many separate outages, not just one. The outage began on December 2nd and new outages were still hitting our system into the next morning. The automated part of the outage map did its job in documenting that we had outages, a lot of them.

To give you a specific example, the outage that affected Pleasant Valley Lake in Vernon needed repairs on the lines that feed the lake first. These lines are not within the lake – they are on Cedar Ridge Rd, Up a Way Drive, Lake Pochung Rd, etc. Without having the feed to the lake area fixed, we certainly couldn't put the power on in the lake area itself. This was what was going on for most of the day on December 3rd and why you didn't see crews on the streets within the lake area immediately. They were upline of what feeds the lake, working on an outage that fed multiple areas, not just Pleasant Valley Lake. The map eventually showed the lake having been "dispatched."

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Because the initial scope was so large and we were still assessing the damage, we did not have anyone trying to update our map to state whether each outage had a crew dispatched. When the new outages finally stopped coming in by late morning December 3rd, we had supervisors and crews already spread throughout our entire territory assessing the damage that the ice and heavy wet snow caused.

We realize now, after the fact, that many of you were using just the outage map to see how long the power was going to be out.

However, with a storm of this magnitude, it was too soon for accurate information about restoration times and in hindsight, we should have had that disabled. In the first 24 hours for a large storm like this, it is best to check our updates on Facebook, Twitter, or our email blast. It was there that we were saying as early as the first day that this was going to be a multi-day outage.



The map is a useful tool for individual outages, for sure, but when there is a major storm, we make sure to provide multiple daily written updates for all members to give more specific information about the situation as it develops. We stated early on that this was a big storm and was going to take multiple days for everyone to get power back. This is why we already had called in mutual aid crews from Pennsylvania on the night of December 2nd—to hasten restoration as much as possible.

With the context of Sussex County's history with storms in mind, we cannot promise that this won't happen again. We can promise, however, that we learn from every storm and make improvements where we can to make the next restoration easier, safer, and less severe.

Chris



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+ Staying Safe Until Power is Restored

How long it takes to get your power restored depends on:

- the extent of the storm's destruction
- the number of outages **#?**
- when it becomes safe for utility personnel to get to the damaged areas

There are many steps in the assessment and restoration process—clearing downed power lines; ensuring public health and safety facilities are operational; checking power stations and transformers; repairing transmission lines, substations, and distribution lines; and getting power restored to consumers within the various damaged areas.

Storm Safety Kit

- Drinking water & food
- Blankets, pillows, & clothing
- Basic first-aid supplies
- Prescriptions
- Basic toiletries
- Flashlights
- Battery-operated radio
- Battery-operated clock
- Extra supply of batteries
- Phone
- Cash and credit cards
- Emergency numbers
- Important documents (in a waterproof container)
- Toys, books, & games
- Baby supplies
- Pet supplies

Stay safe until we can restore power to you. We and our partner Safe Electricity recommend the following safety precautions:

- Stay far away and keep others away from downed power lines. Just because they are damaged **does not mean they are dead!**
- Never enter a flooded room if electrical outlets are submerged. **The water could be energized.**
- **Do not** turn power off if you must stand in water to do so.
- Before entering storm-damaged buildings, **make sure electricity and gas are turned off.**
- If you clean-up outdoors after a storm, **do not use electric equipment** when it is wet out.
- If you are driving and come upon a downed power line, **stay away and keep others away.** Contact emergency personnel or your utility company to address the downed power line.
- If your vehicle comes in contact with a downed power line, **do not leave the car!** Wait for utility professionals to make sure the power line is de-energized before exiting the car.

IF YOU HAVE ANY QUESTIONS ON OUTAGES, VISIT OUR FREQUENTLY ASKED QUESTIONS PAGE
WWW.SUSSEXREC.COM/FAQS

The preceding article contained excerpts from the following issues of Currents:

- 1“How We Restore Power,” By Jim Siglin, August 2011
- 2“Thanks for Your Patience,” By William Smith, January 2003
- 3“Hurricane Irene Recap,” By Jim Siglin, October 2011
- 4“Sandy,” By Jim Siglin, December 2012
- 5“Ice Storm Brings 2008 to a Close,” By Jim Siglin, January 2009
- 6“Weathering the Storm... - Lessons Learned,” By Jim Siglin, April 2008
- 7“Where Does My Power Come From?,” By Jim Siglin, September 2010

OUR OFFICE WILL BE CLOSED ON MONDAY, FEBRUARY 17 FOR PRESIDENT'S DAY

IN CASE OF AN OUTAGE OR EMERGENCY
DURING THIS TIME, PLEASE CALL 877-504-6463



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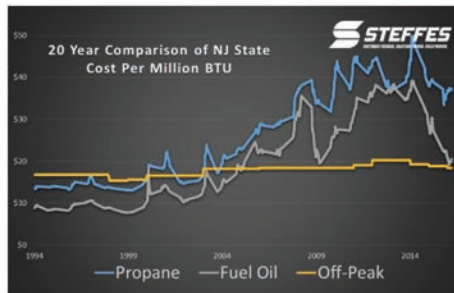


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call 973.875.5101



Energy Efficiency Tip of the Month

Are you using your fireplace efficiently? Remember to turn down the thermostat when burning a fire, and close the damper when a fire is not burning.

Source: *energy.gov*



College Education



Trade School or Certification



Whatever path you choose, we have a scholarship for you!

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Applicants must be members of
Sussex Rural Electric Cooperative

Father John's Animal House Collection Drive

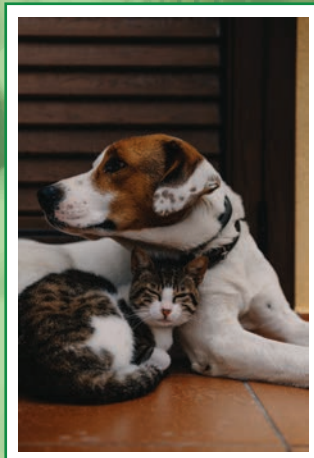
102.3
WSUS

Tune in to 103.7 WNNJ on Thursday, February 6th
and Thursday, March 5th for the Pet of the Week
segment, recorded on-site at SREC's office!



From February 6th - March 5th, we will be collecting
donations of pet supplies for Father John's Animal House
in Lafayette. When members donate, they will receive a
free LED light bulb!

For a list of requested items, please visit
www.sussexrec.com/collection-drives



Sussex Rural Electric Cooperative
Concern For Community