

## AN EXPECTATION OF RELIABLE SERVICE – RECOVERING FROM AN OUTAGE

In the mid-1930s, cooperatives were developed because investor-owned utilities did not believe that rural electrification was profitable. However, once the Rural Electrification Administration (REA) was

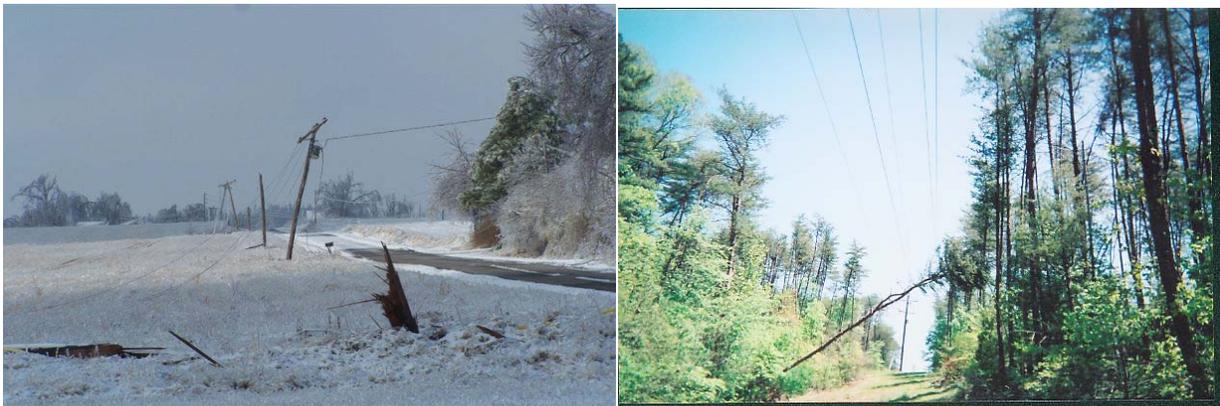
created, people living in those rural areas saw the need for electric power. These rural dwellers were responsible for the birth of non-profit electric cooperatives.



Southside Electric Cooperative's territory is one of the largest in the State and very rural in nature. Unlike the larger utility companies, like Dominion and AEP, Southside averages approximately 6.6 meters per mile of line versus Dominion Power's 38.7 meters per mile of line

(approximate). Southside has grown from the initial 160 members in 1936 to 54,176 at present and from 2 substations to 39 substations.

Some of the biggest challenges SEC faces are trees, weather and the existing terrain, which makes it difficult to access the rights-of-way for line maintenance. Trees are our biggest enemy when it comes to keeping the power on. They account for approximately 22.3% of all system outages. Thunderstorms, winter storms and wind (combined) account for approximately 33.1% of all system outages. Terrain challenges include swamps, rocky and rough mountainous territory and long, cross-country sections of land, each of which makes for difficult and time consuming line construction, maintenance and restoration.



The Cooperative has a number of staff, line and substation personnel on standby 24 hours a day, year round. Once an outage is reported, the Operations Center will dispatch the appropriate personnel in

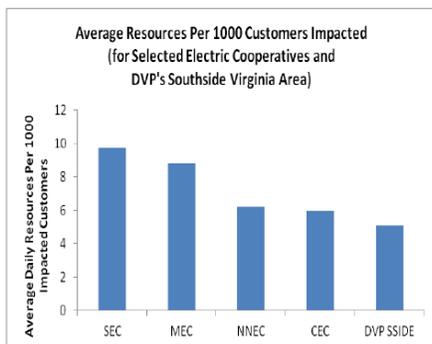


September 11<sup>th</sup> Memorial, New York City, NY

order to get the power restored as quickly as possible. If an outage is large enough, contract crews are utilized. These crews are available through the Cooperative's Emergency Response Plan (ERP), which was developed several years ago in response to the 9-11 tragedy. We currently have immediate access to five contract crews from T&D Solutions, nine contract crews from Townsend Tree and W.A. Kendall and the additional support of

Cooperative personnel from the Tarheel Electric Membership Association (TEMA) in North Carolina and the Virginia, Maryland, Delaware Association of Electric Cooperatives (VMDAEC), as well as crews from neighboring states to assist, if needed. These crews are staged in various locations throughout the system when sufficient notice has been given of the threat of severe weather, like wind, ice and snow storms, thunderstorms and hurricanes. The additional crews are led by Cooperative personnel, such as staking technicians, utility service representatives and/or supervisors. It is Southside's responsibility to obtain lodging and food for these crews while they assist in the power restoration efforts.

For example, we began monitoring the path of Hurricane Irene on August 23, 2011 and we also activated our ERP. Cooperative employees began checking stock materials, fuel, equipment and trucks to be sure everything was in order and ready for use. Our contract crews were put on standby and SEC personnel began preparing for the storm. On Thursday, prior to Irene's arrival, crews were packing their clothes in case they were needed in another part of our territory, while the Cooperative's Human Resources Department was making arrangements for lodging and food, not only for SEC personnel but also for any contract crews that may be utilized. These activities must take place well in advance of any threat of severe weather, as other utilities and contractors are looking for places to stay and eat.



Irene was forecast to be a glancing blow to Virginia; however, its path deviated slightly to the west and the Cooperative was left with approximately 19,372 members off as of 8PM on August 27<sup>th</sup>. Plans enacted earlier in the week were already in motion and by 6PM on Sunday, August 28<sup>th</sup>, the Cooperative had collected an additional 153 men from North Carolina and South Carolina to work alongside our Cooperative personnel. Restoration efforts continued around the clock and all members were restored by August 31<sup>st</sup> at 8PM. In terms of damage, the

hurricane inflicted \$1.46 million in damage to the Cooperative’s system and was one of the more costly weather events in the Cooperative’s history. The storm left nearly 6 million customers along the East Coast without power for up to two weeks in some areas.

During an event like Irene, our goal is to get the greatest number of members on as quickly and safely as possible. Transmission lines and substations are considered first priority. Three-phase circuits or main feeders are next and then the smaller, single-phase lines. Local service damage at individual member locations is the last to be restored. Of course, we also must attend to any life threatening situations

| Electric Utility | Total Customers Affected | Percent of Customers Affected | Total Duration of Outage |
|------------------|--------------------------|-------------------------------|--------------------------|
| DVP              | 1,218,698                | 52%                           | 11 days                  |
| REC              | 29,500                   | 19.7                          | 6                        |
| NNEC             | 16,800                   | 90.3                          | 8                        |
| MEC              | 11,105                   | 35.7                          | 5 2/3                    |
| CEC              | 7,000                    | 64.6                          | 7                        |
| SEC              | 25,864                   | 48.6                          | 4                        |

**Comparison of Utility restoration rates during Hurricane Irene as detailed in the Virginia State Corporation Commission’s report on April 3, 2012. SEC suffered outages to 48.6% of its system and recovered in 4 days**

reported to us by local Emergency Service departments in the counties and towns that we serve. Blocked roadways and other damage that interferes with Emergency Response crews are given priority along with emergency shelters, water supply facilities, communications facilities and other essential services. When possible, if another circuit is connected to an area experiencing an

outage, that area will be isolated and the other circuit will be used to temporarily serve as many member locations as possible until the system is repaired and functioning properly.

Sometimes you may see Cooperative or contract crews sitting idle during an outage. Please know that they are waiting on instructions from the Operations Center, reviewing the outage area before switching or energizing lines to ensure personnel safety or making sure they are not overlapping other crews in the field. SEC’s linemen work very hard to get the power back on in a timely manner, and it takes teamwork for the power restoration efforts to be a success. From the employees in the office to our men in the field, you can be sure that everyone is working safely and diligently to get the power back on as quickly as possible. So if you see our crews out in the field, give them a wave or a “thumbs up” and let them know you appreciate the hard work that they are doing for you, the membership.

