

KEYS TO RELIABILITY

Atlantic City Electric measures its reliability by the number of outages and the duration of each outage. But reliability is more than facts and figures. Electricity is an essential service and power outages amount to impact on real people and businesses.

So what goes on behind the scenes? What do the men and women of Atlantic City Electric do every day to help ensure the reliability and safety of the system? There are departments within the company that are virtually unknown to the general public, but are crucial to keeping the system strong and up and running. Three of those departments are Vegetation Management, Engineering and Operations.

Vegetation Management

The majority of power outages are caused directly or indirectly by vegetation. Tree limbs can make contact with electrical lines, vines grow into transformers and falling trees can easily bring down poles. The challenge for Atlantic City Electric is to find the right balance between protecting the natural landscape and preventing and minimizing damage to electrical infrastructure.

“Our job is to help the line crews do their job to keep the lines clear and the power on,” said Nick Bocchicchio, Atlantic City Electric Staff Forester. “Keeping trees away from power lines, making sure transformers are clear and helping crews get access to remote locations are all priorities.”

The team is comprised of a small group of certified arborists with over 60 years of combined experience. The primary responsibilities include the management and control of the trees, shrubs and other vegetation growing around power transmission and distribution facilities. The team is involved with many of the internal departments, especially as it pertains to planning work schedules. There are also times where the team works directly with property owners when scheduled or emergency work needs to be done.

“We used to be called the Forestry department, but we really do quite a bit more than just pruning and trimming. We plan our work in four-year cycles and are always prepared to handle emergency situations. We work with the engineers to help them plan projects, with operations on the front end and some days directly with the customers. We knock on doors, alert customers to upcoming work, and help them understand why our work is important,” said Bocchicchio.

The vegetation management team is responsible for maintaining 7,200 miles of vegetation within Atlantic City Electric’s service territory, with approximately 40% of the territory being the Pinelands, which is a state and federally protected area and requires special care. They are also responsible for the inspection and maintenance of about 250,000 wood electrical poles.

Operations

The Operations team is comprised of line crews and crew supervisors that are responsible for the maintenance and repair all of the infrastructure for its nearly 550,000 customers. System reliability depends on the equipment working properly and safely on a consistent basis.

“Much of my day revolves around making sure I have crews out in the field where they need to be when they need to be there,” said Bill Eppler, Distribution Supervisor, Glassboro Operations.

“We are managing a lot of things all at one time. In one area, we may be doing repair work; in another we might be working on replacing older equipment. We are also out there proactively inspecting our equipment so we can identify potential reliability and safety problem areas so we can fix it before it becomes an issue. It’s my job to get everything scheduled and get crews in the field to get the work done as quickly and as safely as possible.”

The Operations team also works closely with the Engineering department to develop work plans for reliability enhancement projects, research and analyze historical system data to prioritize maintenance areas, and to find ways to redesign circuits to accommodate increased demand for power.

“A lot of the work we do revolves around collaborating with other departments to find the best ways to reduce the amount of people who might be affected by an outage,” he added.

Engineering

Designing electrical systems requires a great deal of attention to detail as well as the ability to see the big picture. Both skills are crucial to delivering reliable power systems that meets the growing demand for power in New Jersey.

“Our main responsibility is to design systems that meet the needs of our customers,” said Bob Wolcott, Senior Supervising Engineer, Pleasantville District. “We are responding to a number of different company needs including requests for the design of new infrastructure, upgrading existing equipment and providing a system that is sustainable over time. We study our system backward as well as look forward to make sure we have all the information we need when we are in the planning and design phase. We also take into account contingency planning so all of our systems have a way to back each other up in the event of an outage.”

Substations are an important part of the system that Bob describes, the place where power arrives and easier stepped up or down in voltage for the remainder of its journey.

“When we are designing a plan for a new substation, we focus first on determining current and future need. Once that has been determined, we begin to collaborate with the designers and planners, as well as other key departments,” explains Alexis Louis, Atlantic City Electric Substation Engineer. “New substations must be designed so that they can work together in case load needs to be transferred from one to another. This is crucial especially during times of heavy use and during outages. We always try to look five or ten years ahead and anticipate what the need will be in the future. We need to be strategic during all phases of the project.”

Focused On Our Customers

All the work done by all of the departments within Atlantic City Electric is done collaboratively with the main objective being to deliver safe and reliable service 24 hours a day, 7 days a week as the company has been doing in South Jersey for more than 100 years.

1,000 words