

EIA Hurricane Florence Electricity Status Report

Tracking the electricity impact of Hurricane Florence on the Southeastern region of the United States

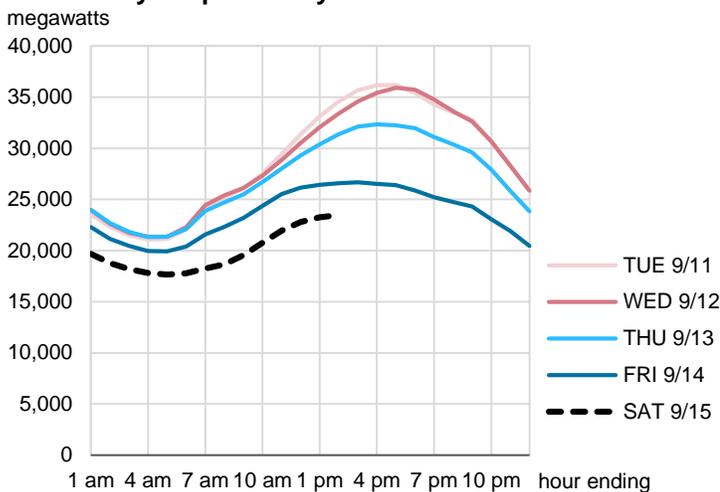


Saturday September 15, 2018 – PM Edition

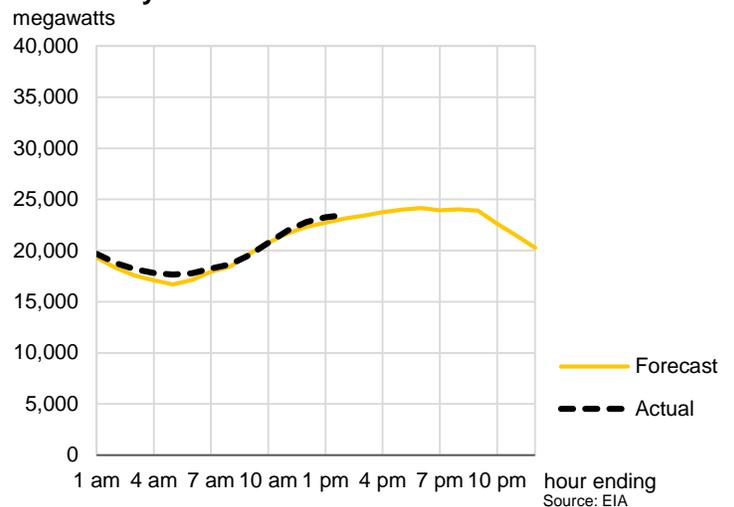
- Weather:** Tropical Storm Florence is centered 40 miles south of Florence, South Carolina, and continuing west at a slow 3 mph. Winds reaching 45 mph extend up to 150 miles from the center, mainly near the coast. Florence is expected to weaken to a tropical depression by tonight. Heavy rainfall and flooding continue across portions of the region.
- Electricity:** Loads continue to be substantially lower than preceding days, a combination of hurricane impacts (cooler temperatures, evacuations, and outages) and the normal pattern of lower weekend loads compared to weekdays.
- Generators:** Hydro generation in SCEG, DUK, and SC has grown in the past few days, particularly during the early morning hours, compared to the pre-hurricane period.
- Customers:** As of 3:30 p.m., about 736,500 customers in North Carolina and about 80,000 customers in South Carolina have reported electricity outages, roughly 14% and 3% of the customers in the states, respectively. Outage numbers are falling in both states as restoration is underway.

REGIONAL OVERVIEW

North & South Carolina region electricity load current day vs. past 4 days



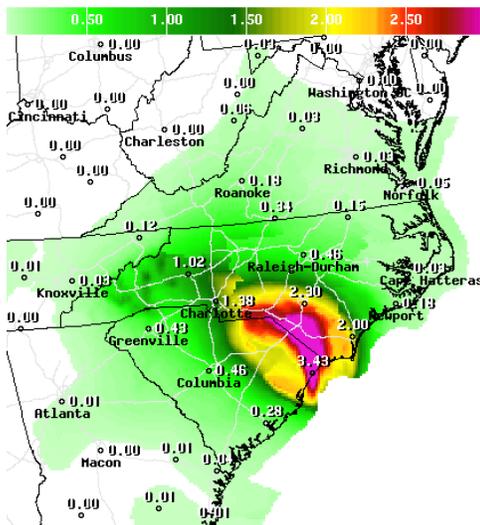
North & South Carolina region electricity load current day actual vs. forecast



WEATHER PROJECTIONS

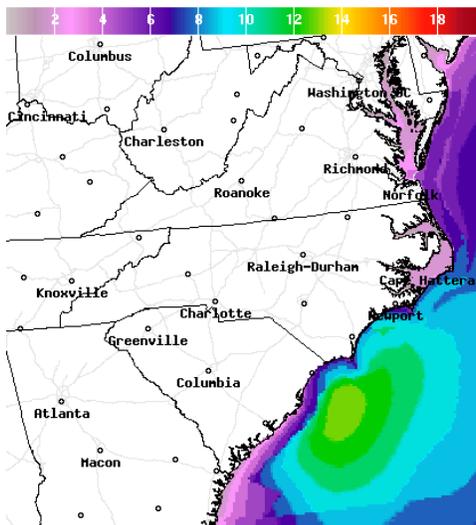
Precipitation

inches
6 hr period ending Sun Sep 16 at 2 am EDT



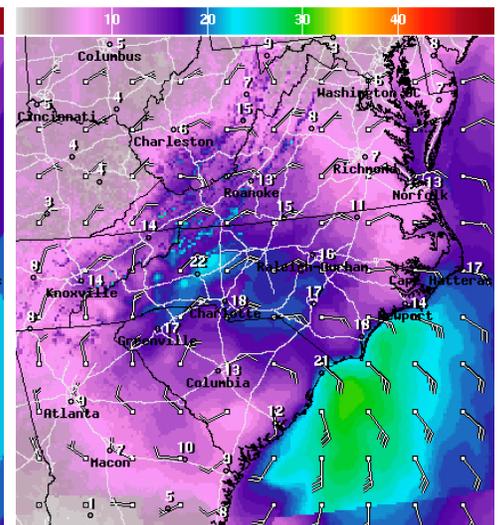
Wave Height

feet
for Sun Sep 16 at 2 am EDT



Wind Speed & Direction

knots (1 knot = 1.15 mph)
for Sun Sep 16 at 2 am EDT



National Digital Forecast Database
18z issuance Graphic created-Sep 15 2:39PM EDT

National Digital Forecast Database
18z issuance Graphic created-Sep 15 2:47PM EDT

National Digital Forecast Database
18z issuance Graphic created-Sep 15 2:36PM EDT

Source: NOAA

Send questions or comments about this report to infoelectric@eia.gov.

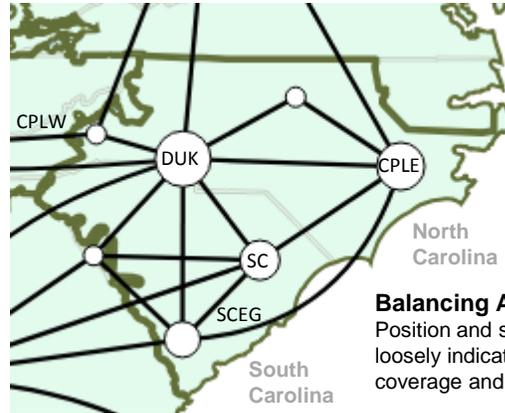
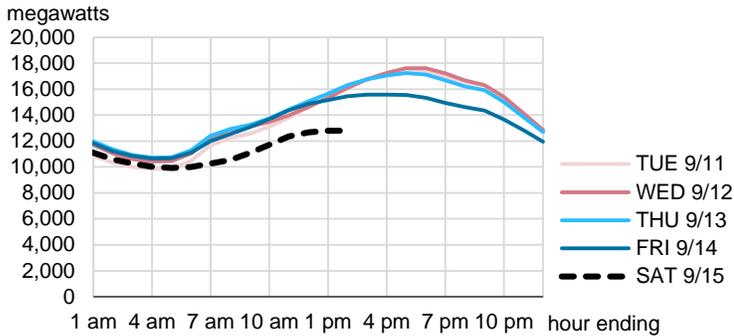
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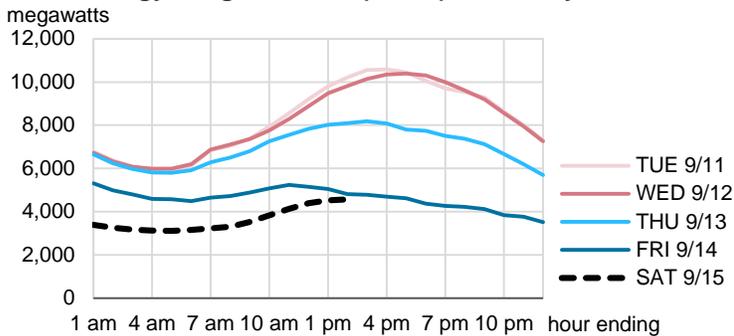


BALANCING AUTHORITY OVERVIEW

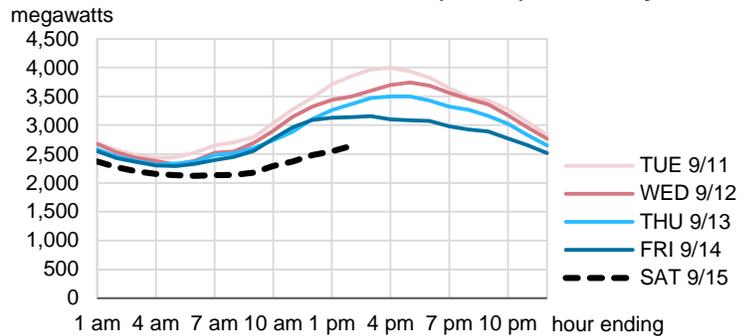
Duke Energy Carolinas (DUK) electricity load



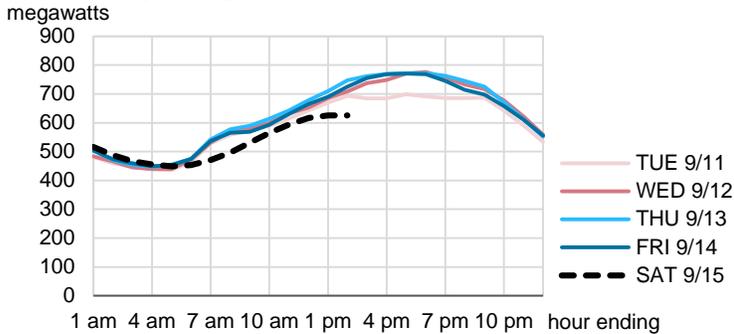
Duke Energy Progress East (CPLE) electricity load



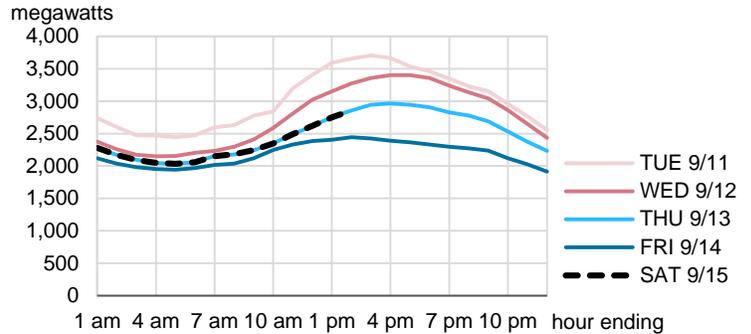
South Carolina Electric & Gas Co (SCEG) electricity load



Duke Energy Progress West (CPLW) electricity load

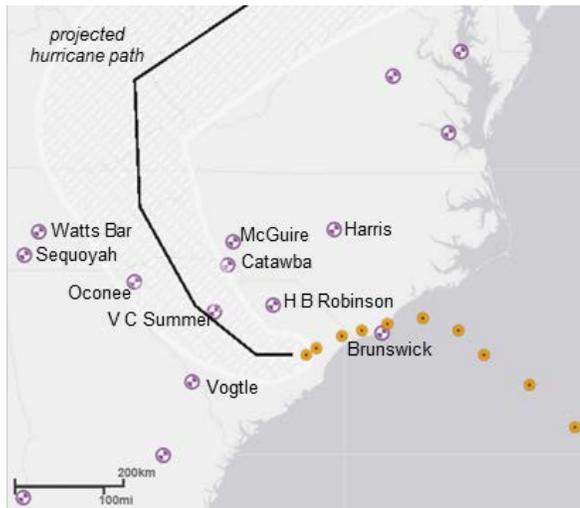


Santee Cooper/SC Public Service Auth. (SC) electricity load



Source: EIA

NUCLEAR PLANTS & AVAILABILITY



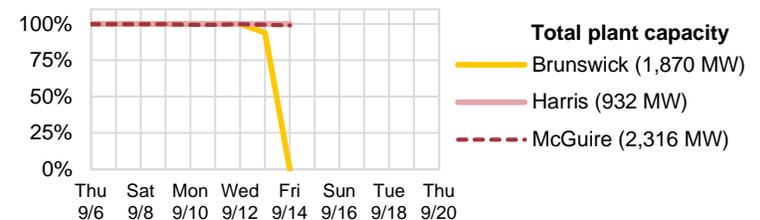
Data through 12 pm

Source: EIA

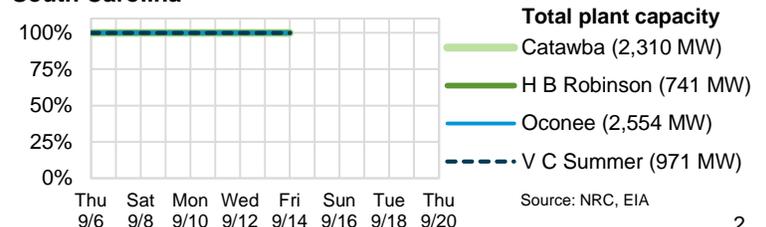
Daily snapshot of nuclear plant availability

Updates are not available on non-business days

North Carolina



South Carolina



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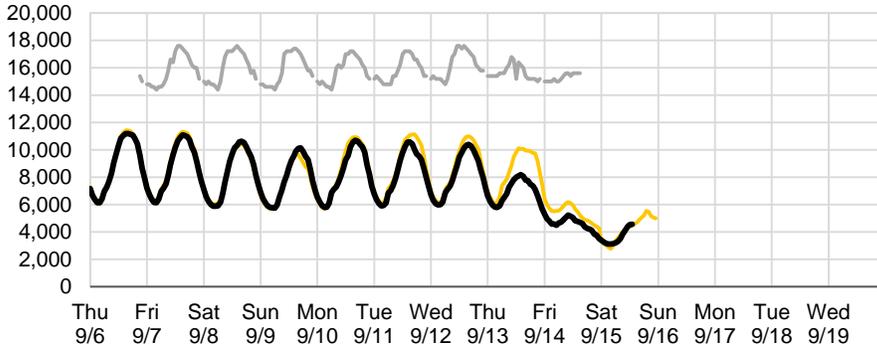


DUKE ENERGY PROGRESS EAST (CPLE)

Current electricity load data through hour ending 2 pm

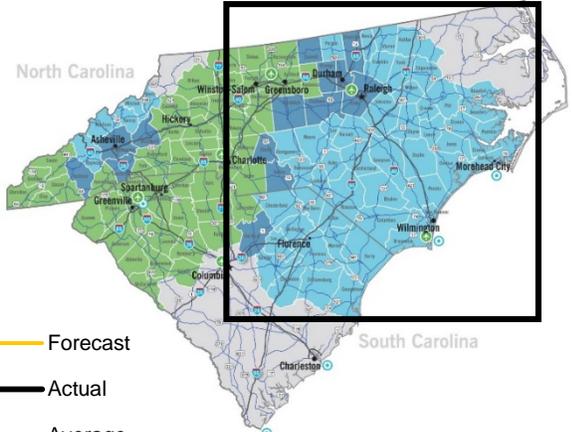
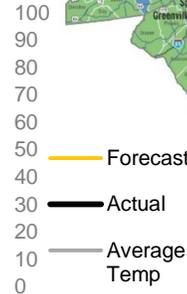
Duke Energy Progress East (CPLE) Electricity load, actual vs. forecast

megawatts



Wilmington, North Carolina

Hourly average temperature degrees Fahrenheit



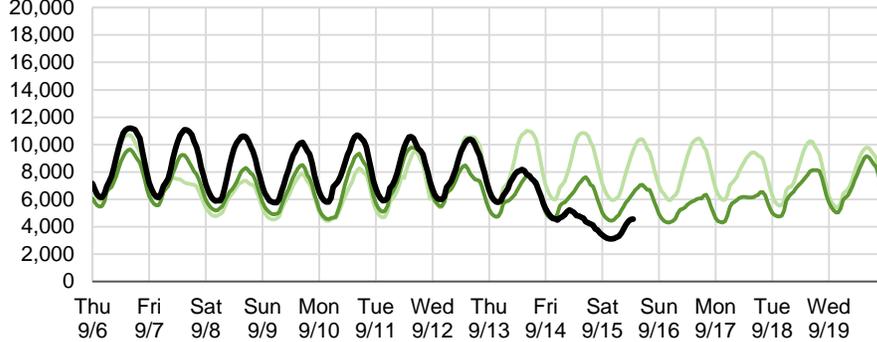
Service Territory Counties Served*

- Duke Energy Progress
- Duke Energy Carolinas
- Overlapping Territory
- Shipping Port
- Major Airport
- Interstate Highways
- State Highways

*Portions may be served by other utilities.
Source: Duke Energy

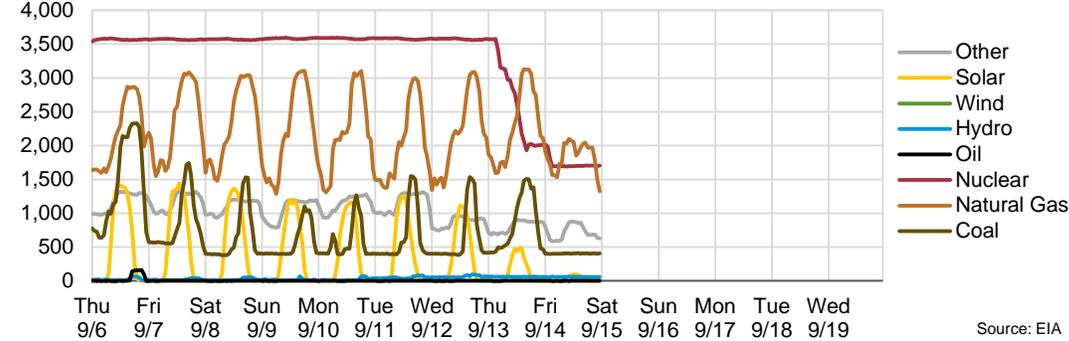
Duke Energy Progress East (CPLE) electricity load, 2018 vs. past two years

megawatts (previous years aligned by week number & day of week to 2018 data)



Duke Energy Progress East (CPLE) net generation by energy source

megawatts



Source: EIA

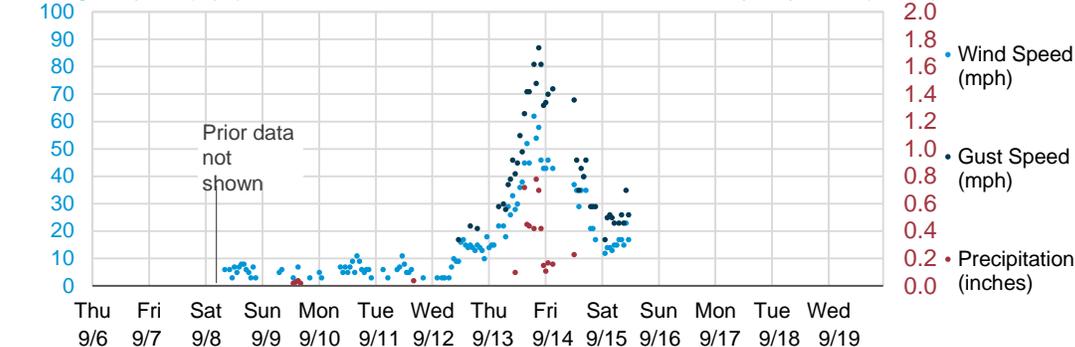
Duke Energy Progress East (CPLE) & Duke Energy Progress West (CPLE) Balancing Authorities' Combined Total Customers
 2,302,785 customers, 44% of all customers in North Carolina
 179,577 customers, 7% of all customers in South Carolina
 1,017 customers in Tennessee

Source: EIA

Morehead City, North Carolina weather

wind & gust speed (mph)

1 hr precipitation (inches)



Source: NOAA

EIA Hurricane Florence Electricity Status Report

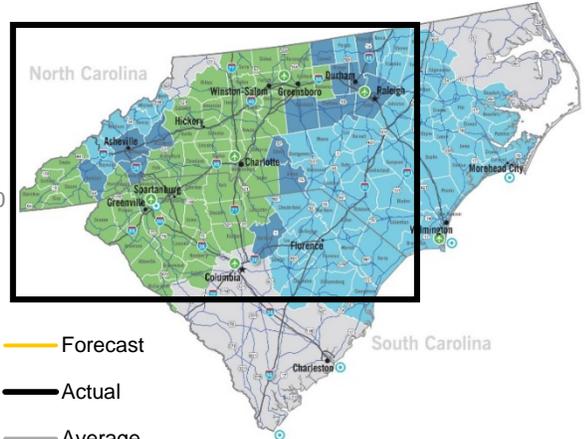
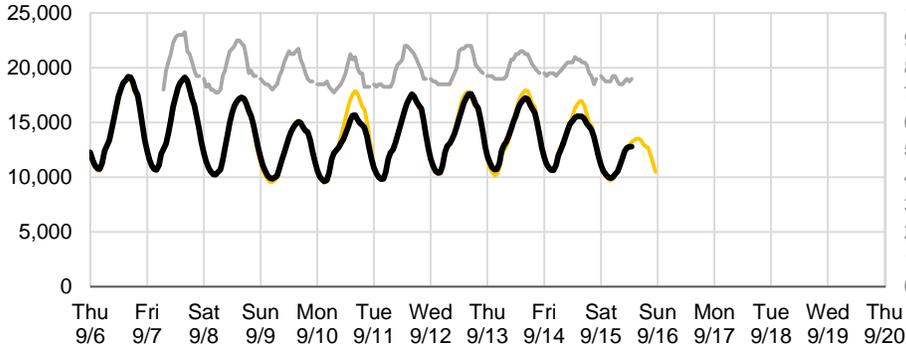
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DUKE ENERGY CAROLINAS (DUK)

Current electricity load data through hour ending 2 pm

Duke Energy Carolinas (DUK) Electricity load, actual vs. forecast



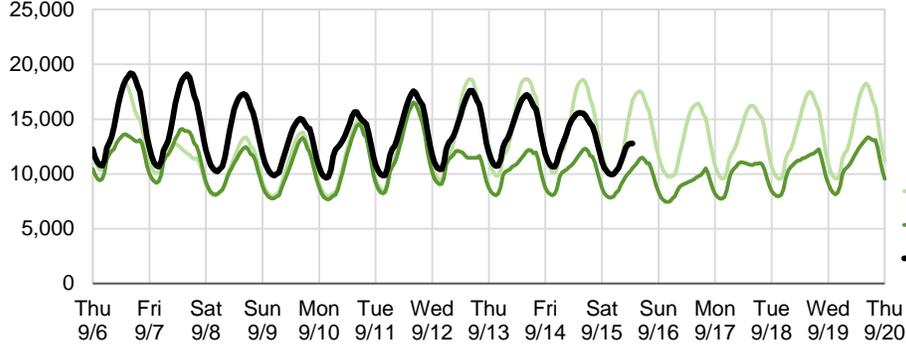
**Service Territory
Counties Served***

- Duke Energy Progress
- Duke Energy Carolinas
- Overlapping Territory
- Shipping Port
- Major Airport
- Interstate Highways
- State Highways

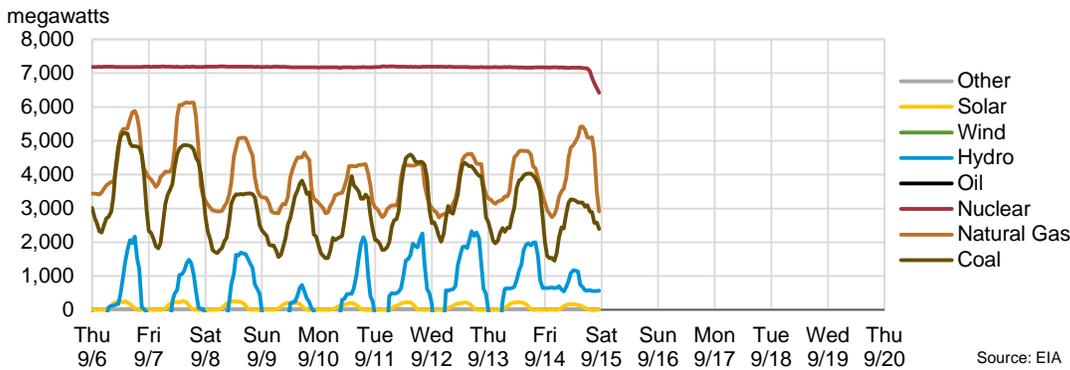
*Portions may be served by other utilities.

Source: Duke Energy

Duke Energy Carolinas (DUK) electricity load, 2018 vs. past two years



Duke Energy Carolinas (DUK) net generation by energy source

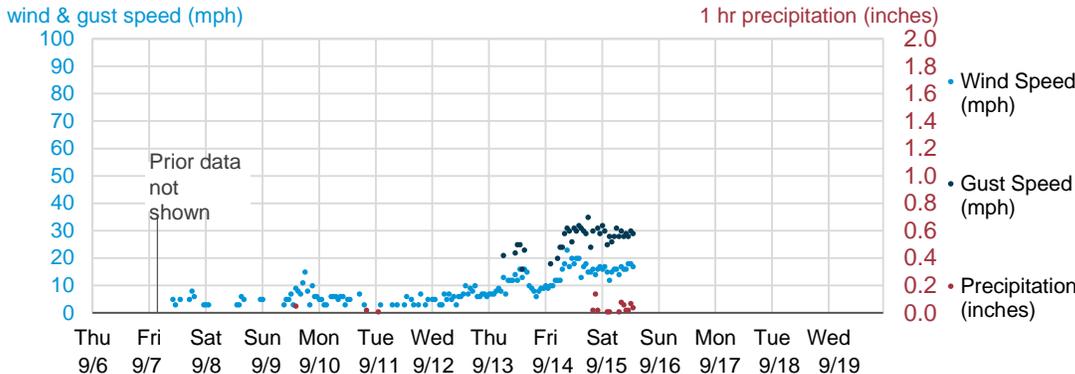


**Duke Energy Carolinas (DUK)
Balancing Authority
Total Customers**

- 2,639,107 customers, 51% of all customers in North Carolina
- 940,763 customers, 36% of all customers in South Carolina
- 394 customers in Georgia

Source: EIA

Charlotte, North Carolina weather



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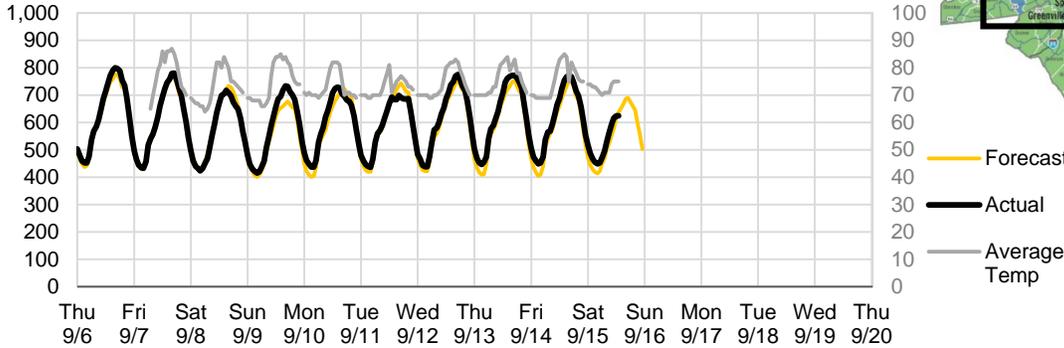


DUKE ENERGY PROGRESS WEST (CPLW)

Current electricity load data through hour ending 2 pm

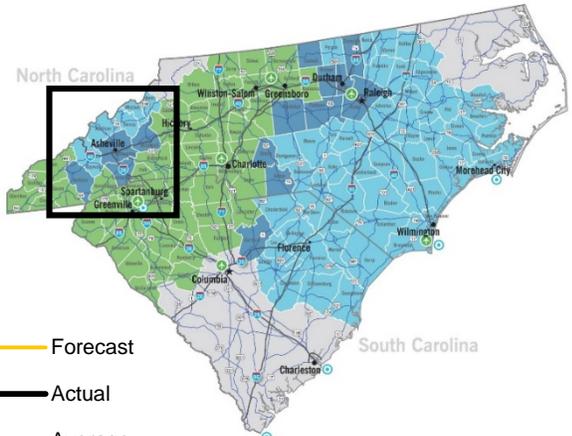
Duke Energy Progress West (CPLW) Electricity load, actual vs. forecast

megawatts



Asheville, North Carolina Hourly average temperature

degrees Fahrenheit



Service Territory Counties Served*

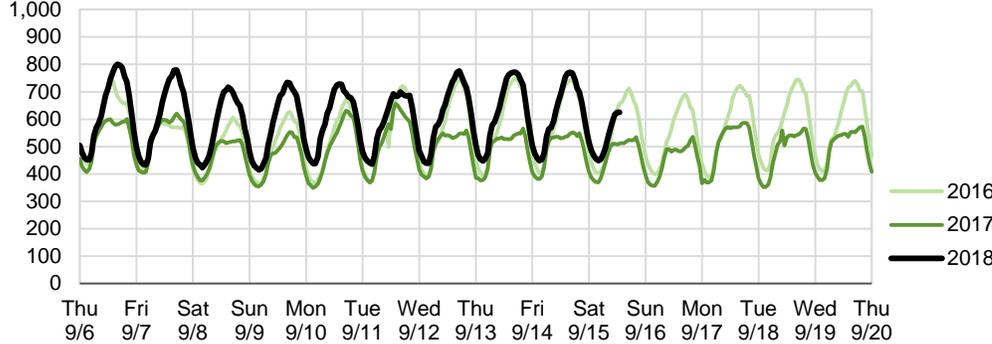
- Duke Energy Progress
- Duke Energy Carolinas
- Overlapping Territory
- Shipping Port
- Major Airport
- Interstate Highways
- State Highways

*Portions may be served by other utilities.

Source: Duke Energy

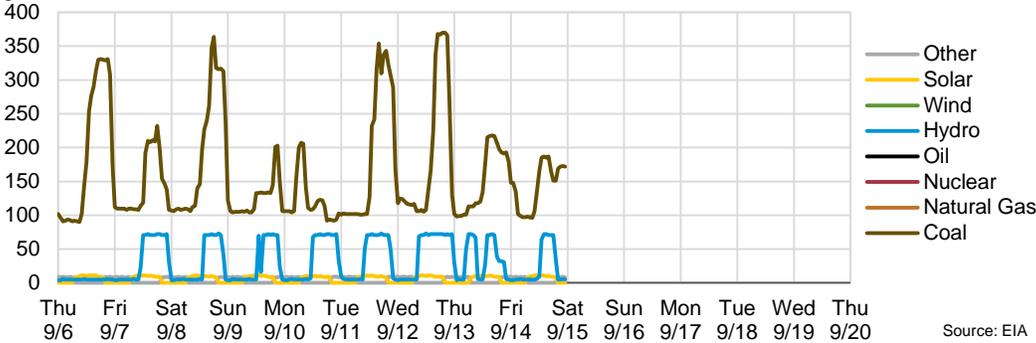
Duke Energy Progress West (CPLW) electricity load, 2018 vs. past two years

megawatts (previous years aligned by week number & day of week to 2018 data)



Duke Energy Progress West (CPLW) net generation by energy source

megawatts



Source: EIA

Duke Energy Progress East (CPLE) & Duke Energy Progress West (CPLE) Balancing Authorities' Combined Total Customers

2,302,785 customers, 44% of all customers in North Carolina

179,577 customers, 7% of all customers in South Carolina

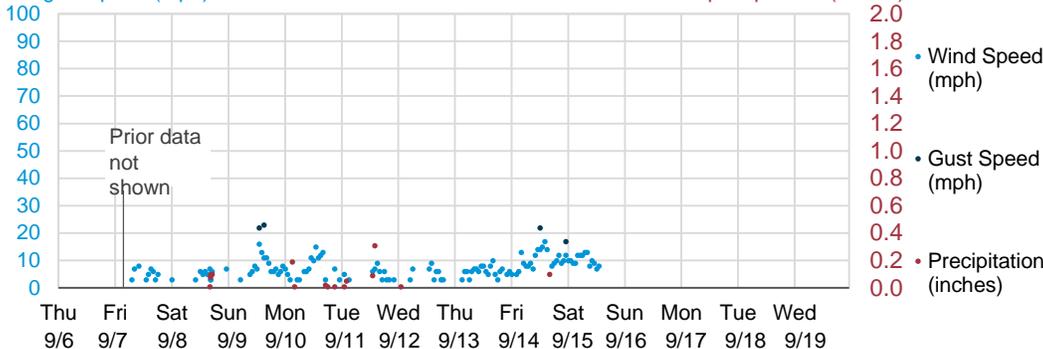
1,017 customers in Tennessee

Source: EIA

Asheville, North Carolina weather

wind & gust speed (mph)

1 hr precipitation (inches)



Source: NOAA

EIA Hurricane Florence Electricity Status Report

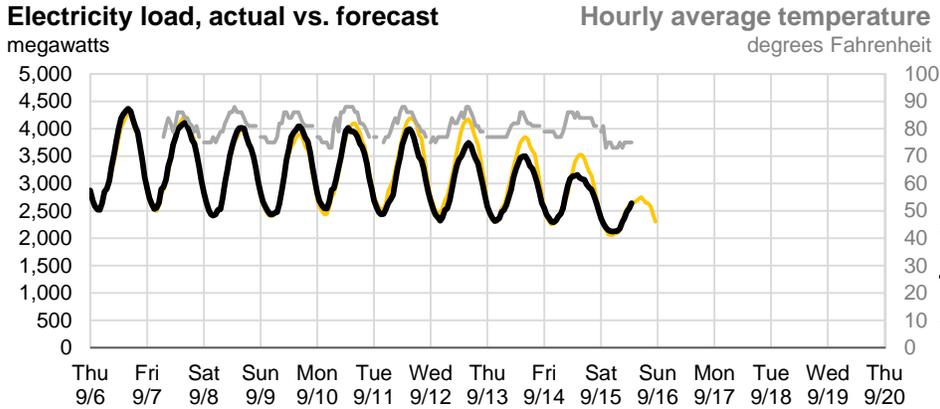
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SOUTH CAROLINA ELECTRIC & GAS (SCEG)

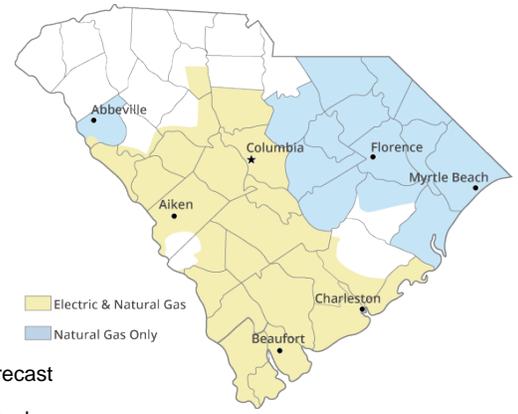
Current electricity load data through hour ending 2 pm

South Carolina Electric & Gas Co (SCEG) Electricity load, actual vs. forecast



Charleston, South Carolina Hourly average temperature

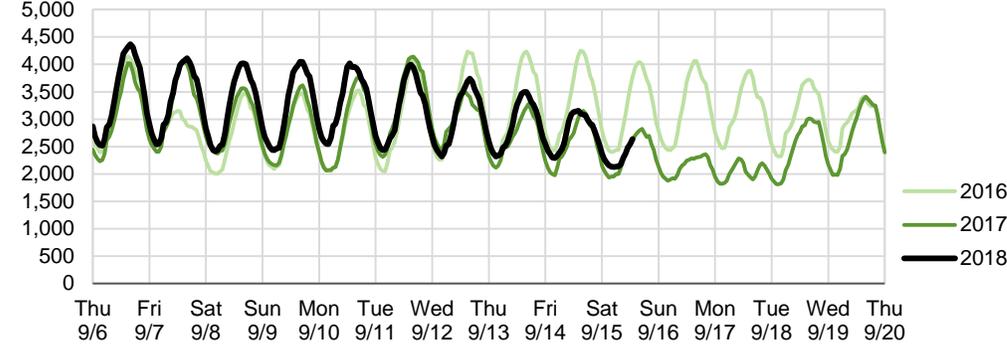
degrees Fahrenheit



Source: SCEG

South Carolina Electric & Gas Co (SCEG) electricity load, 2018 vs. past two years

megawatts (previous years aligned by week number & day of week to 2018 data)

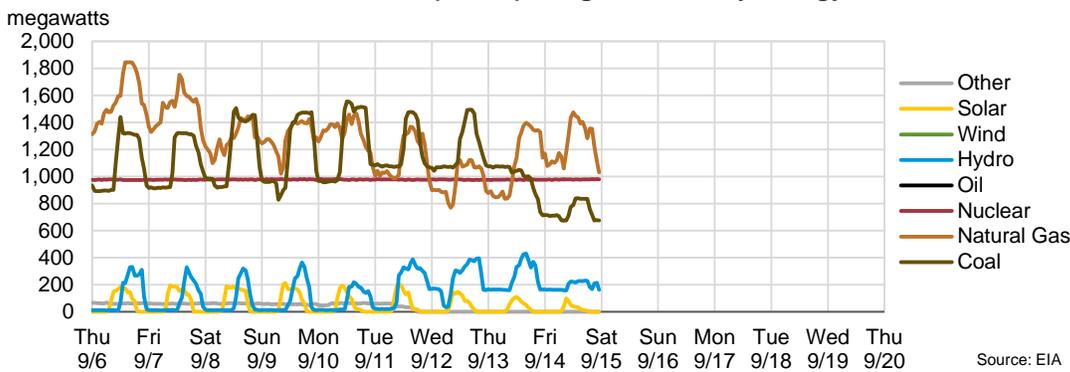


South Carolina Electric & Gas (SCEG) Balancing Authority Total Customers

746,512 customers, 28% of all customers in South Carolina

Source: EIA

South Carolina Electric & Gas Co (SCEG) net generation by energy source

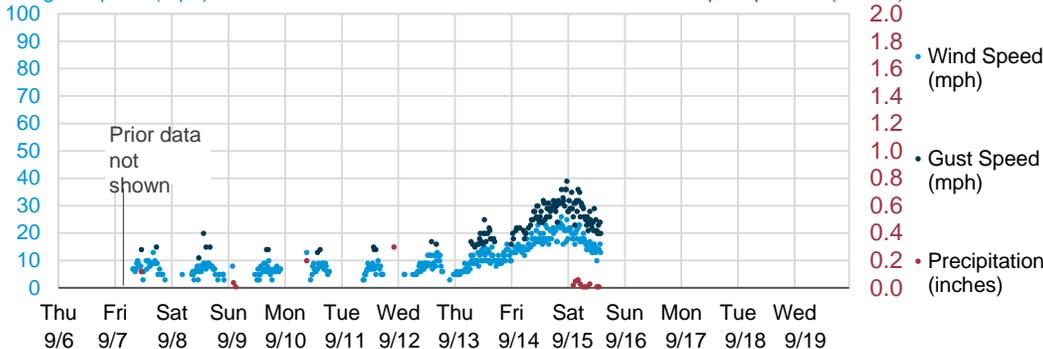


Source: EIA

Charleston, South Carolina weather

wind & gust speed (mph)

1 hr precipitation (inches)



Source: NOAA

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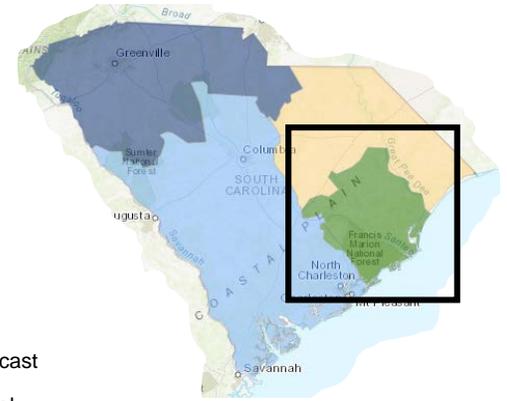
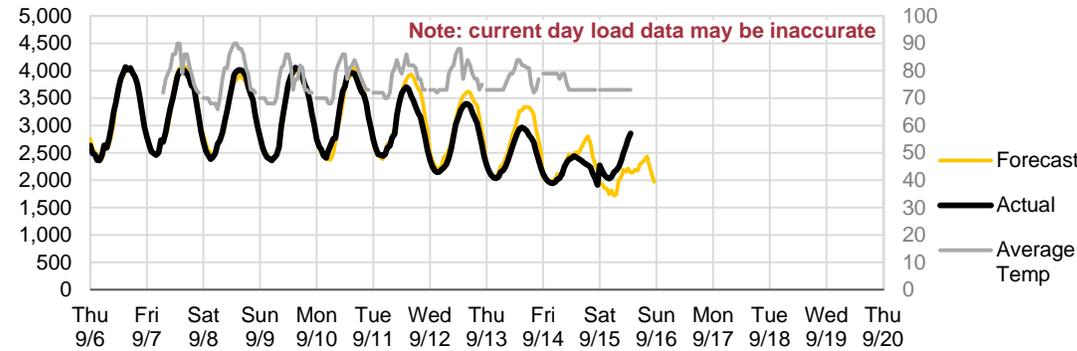
Santee Cooper/SC Public Service Authority (SC)

Current electricity load data through hour ending 2 pm

Santee Cooper (SC)

Electricity load, actual vs. forecast
megawatts

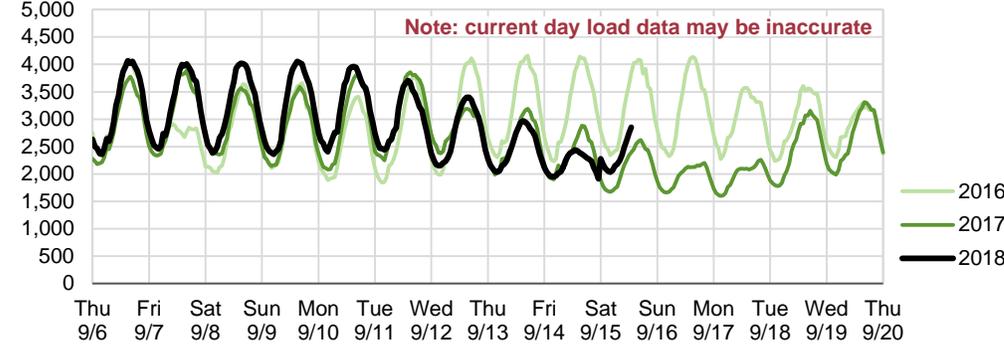
Myrtle Beach, South Carolina
Hourly average temperature
degrees Fahrenheit



Source: SCEMD

Santee Cooper (SC) electricity load, 2018 vs. past two years

megawatts (previous years aligned by week number & day of week to 2018 data)



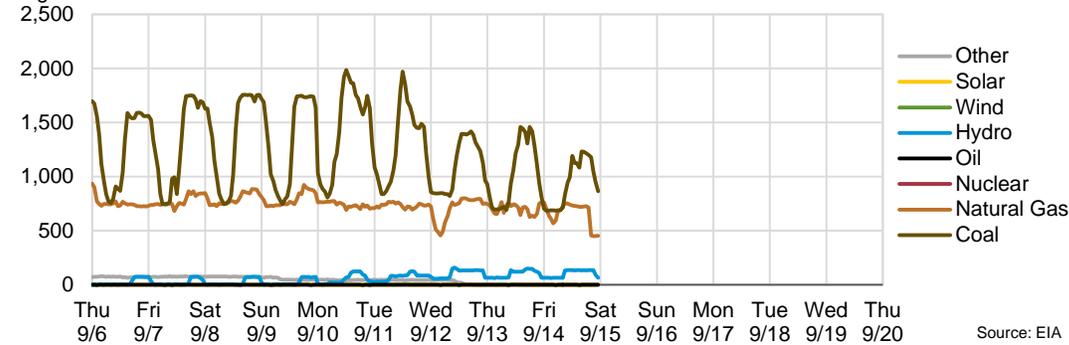
Santee Cooper (SC) Balancing Authority Total Customers

766,021 customers, 29% of all customers in South Carolina

Source: EIA

Santee Cooper (SC) net generation by energy source

megawatts

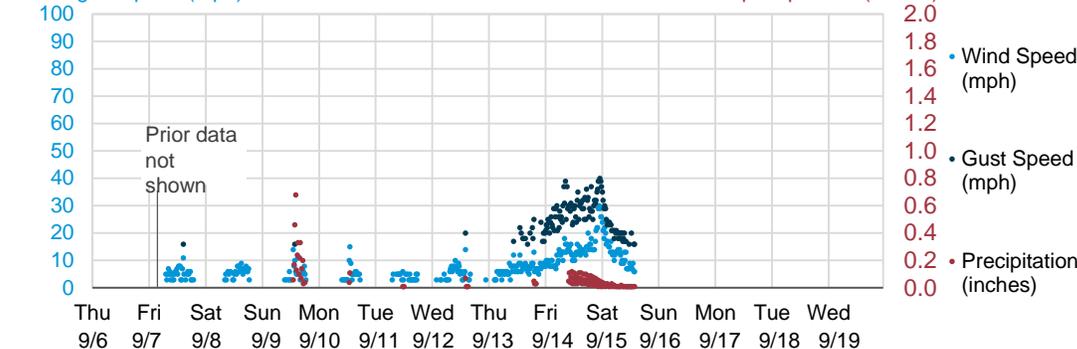


Source: EIA

Myrtle Beach, South Carolina weather

wind & gust speed (mph)

1 hr precipitation (inches)



Source: NOAA

DATA SOURCES & NOTES

- **Hourly electricity load, load forecast, and generation by energy source:** [EIA-930 data](#). Note that information submitted by reporting entities (balancing authorities) is preliminary data and made available "as-is" by EIA. Neither EIA nor reporting entities are responsible for reliance on the data for any specific use. See the [EIA-930 user guide](#) for more information about the EIA-930 data collection.

Balancing authorities are responsible for assuring in real-time that electricity supply and demand are balanced within a specified geographical footprint. An electric utility that functions as a balancing authority will likely have an area of responsibility that extends beyond its service territory, providing grid balancing services to other electric power companies. For example, the Duke Energy Progress East (CPL) balancing authority in North Carolina is responsible for balancing the grid in an area that extends beyond the Duke utility service territory.

Below are direct links to EIA-930 webpages (with select data series) or excel files (with all data series and a full history) for the balancing authorities highlighted in this report:

- Duke Energy Carolinas (DUK): [website](#), [Excel file](#) (includes generation by energy source)
- Duke Energy Progress East (CPL): [website](#), [Excel file](#) (includes generation by energy source)
- Duke Energy Progress West (CPLW): [website](#), [Excel file](#) (includes generation by energy source)
- Santee Cooper/South Carolina Public Service Authority (SC): [website](#), [Excel file](#) (includes generation by energy source)
- South Carolina Electric & Gas Company (SCEG): [website](#), [Excel file](#) (includes generation by energy source)
- **Weather data:** NOAA data for the cities and locations listed below:
 - Wilmington, NC: [Wilmington International Airport](#)
 - Morehead City, NC: [Cherry Point Marine Corps Air Station](#)
 - Charlotte, NC: [Gastonia Municipal Airport](#)
 - Asheville, NC: [Asheville Regional Airport](#)
 - Charleston, SC: [Charleston Executive Airport](#)
 - Myrtle Beach, SC: [Conway Horry County Airport](#)
- **Nuclear plant outages:** Nuclear Regulatory Commission daily status reports, displayed on EIA's [Status of U.S. Nuclear Outages](#). The NRC updates its reactor status information once each morning on business days. The NRC information is supplemented as necessary by press reports.
- **Number of customer outages:** [poweroutage.us](#), utility websites, and the [North Carolina Public Utility Commission](#). A "customer" typically represents one metered location. The number of customers is not equivalent to the number of persons without power. Customers include all types of power purchasers but are primarily residences. The outage estimates presented in the commentary section of this report are a snapshot in time. Outage numbers can change rapidly as weather conditions deteriorate or improve and repairs are effectuated.