

# EIA Hurricane Florence Electricity Status Report

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

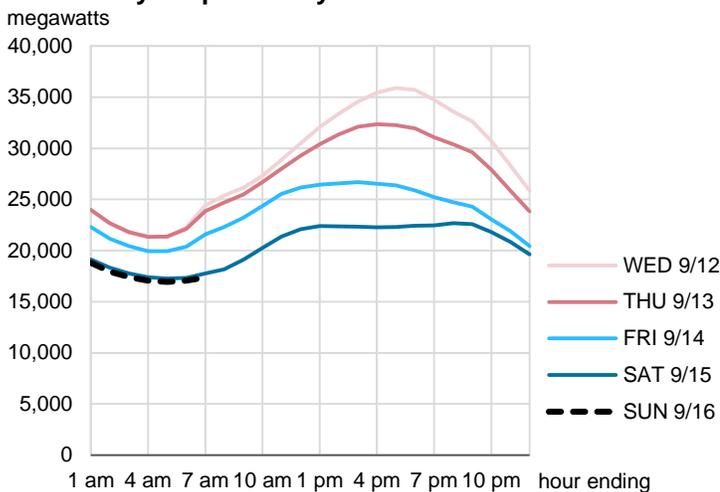


## Sunday September 16, 2018 – AM Edition *Note: this will be the only report for today*

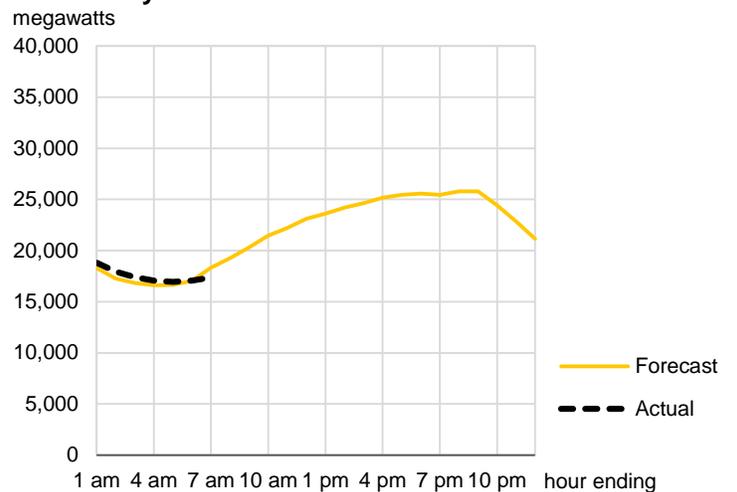
- Weather:** Florence was downgraded to a tropical depression, expected to begin moving northwest today. Heavy rainfall and flooding continue across portions of the region.
  - Electricity:** Load forecasts in the east (CPLE, SCEG, SC) show load beginning to recover today as the storm moves west and restoration efforts continue. CPLW and DUK in the west expect lower or similar loads today compared to yesterday.
  - Generators:** Solar generation has declined over the past few days, particularly in CPLE and SCEG. Coal and natural gas generation has varied by balancing authority.
- One of the McGuire nuclear plant's two units shut down beginning Friday night for planned maintenance unrelated to Florence. The Brunswick nuclear plant remains offline as of Saturday night.
- Customers:** As of 10:52 a.m., about 703,000 customers in North Carolina and about 52,000 customers in South Carolina have reported electricity outages, roughly 14% and 2% of the customers in the states, respectively. Outage numbers are falling in some counties and rising in others as the storm moves inland and restoration is underway.

## REGIONAL OVERVIEW

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



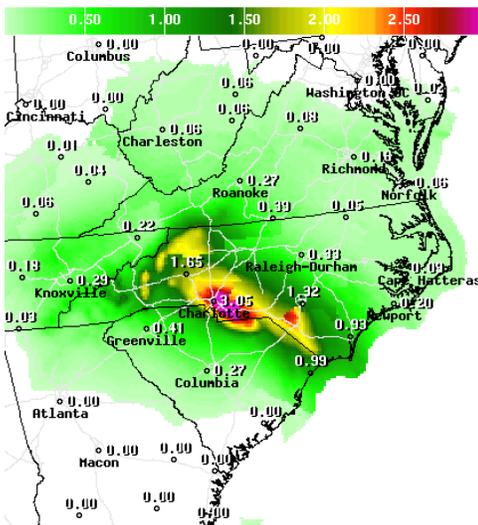
### North & South Carolina region electricity load current day actual vs. forecast



## WEATHER PROJECTIONS

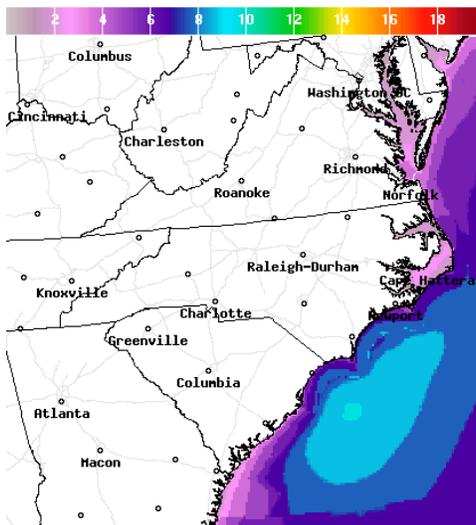
### Precipitation

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



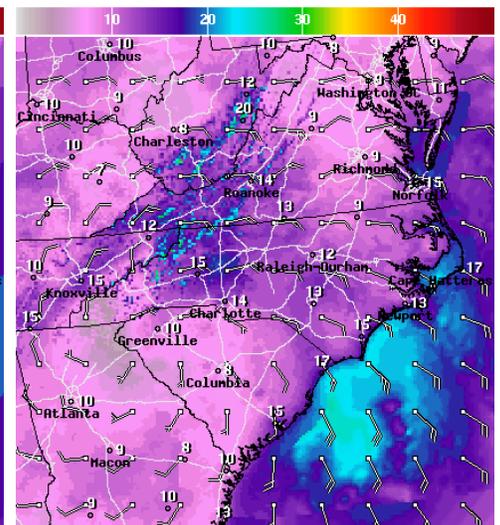
### Wave Height

feet  
for Sun Sep 16 at 2 pm EDT



### Wind Speed & Direction

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



National Digital Forecast Database  
11z issuance Graphic created-Sep 16 7:30AM EDT

National Digital Forecast Database  
11z issuance Graphic created-Sep 16 7:29AM EDT

National Digital Forecast Database  
11z issuance Graphic created-Sep 16 7:47AM EDT

Source: NOAA

Send questions or comments about this report to [infoelectric@eia.gov](mailto:infoelectric@eia.gov).

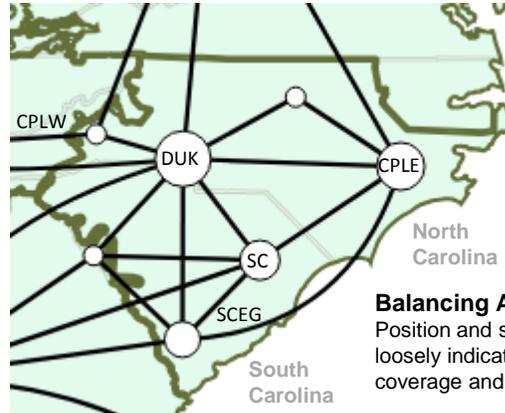
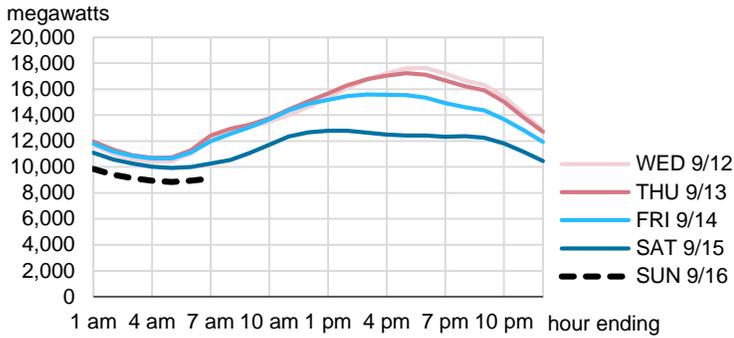
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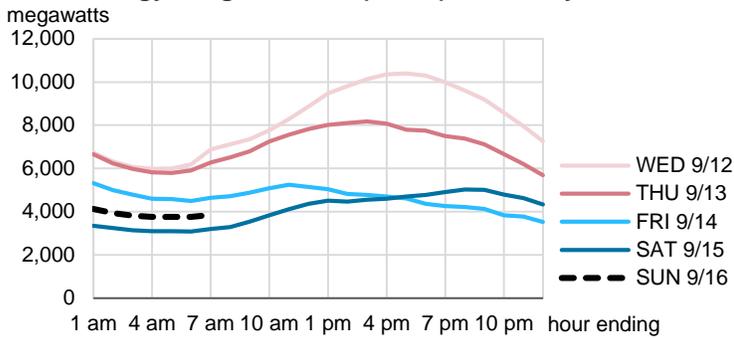
## BALANCING AUTHORITY OVERVIEW

### Duke Energy Carolinas (DUK) electricity load

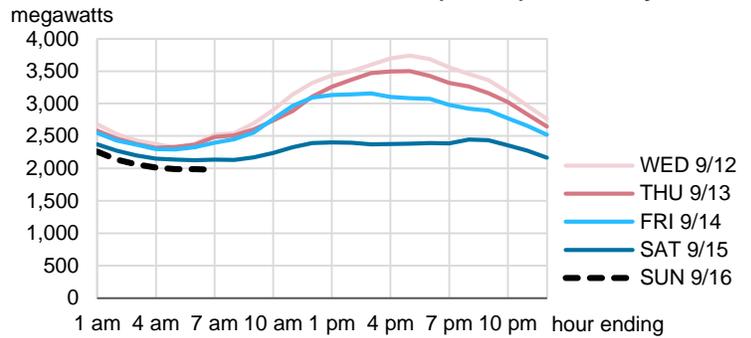


**Balancing Authorities**  
Position and size of circles are loosely indicative of geographic coverage and system size

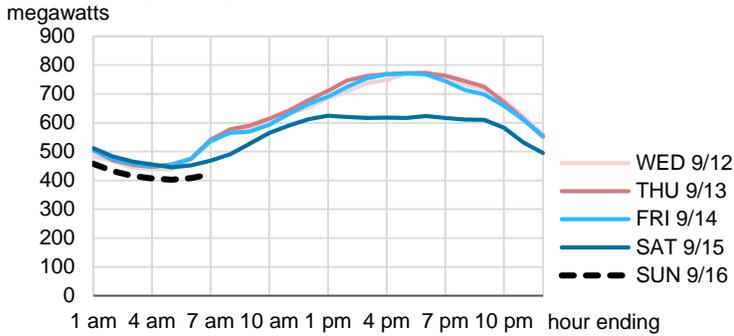
### Duke Energy Progress East (CPLE) electricity load



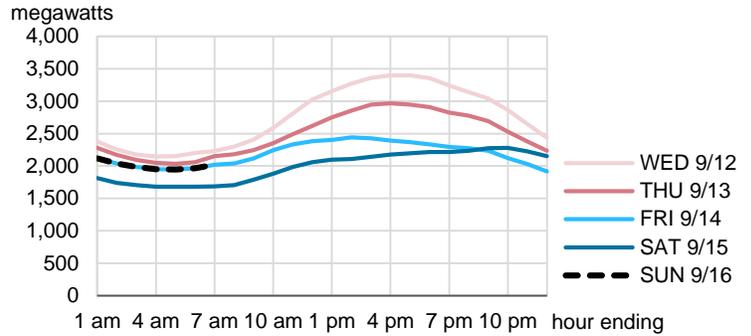
### South Carolina Electric & Gas Co (SCEG) electricity load



### Duke Energy Progress West (CPLW) electricity load

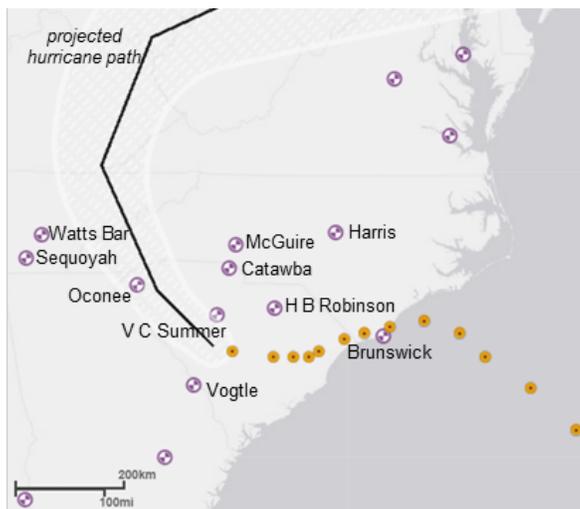


### Santee Cooper/SC Public Service Auth. (SC) electricity load



Source: EIA

## NUCLEAR PLANTS & AVAILABILITY

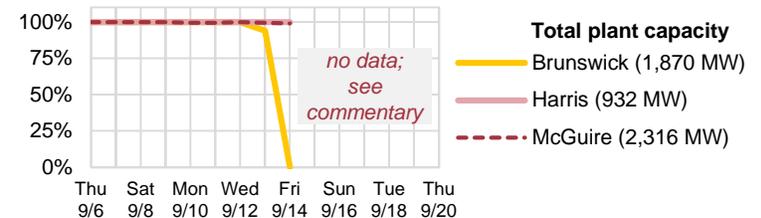


Data through 6 am

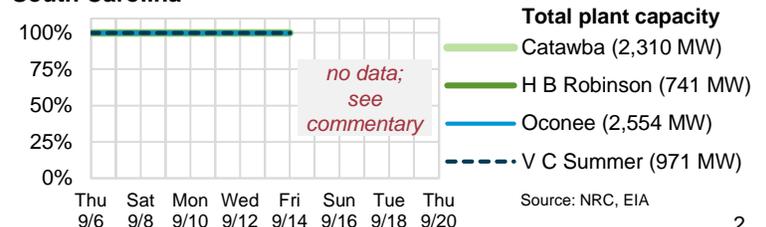
Source: EIA

### Daily snapshot of nuclear plant availability *Updates are not available on non-business days*

#### North Carolina



#### South Carolina



Source: NRC, EIA

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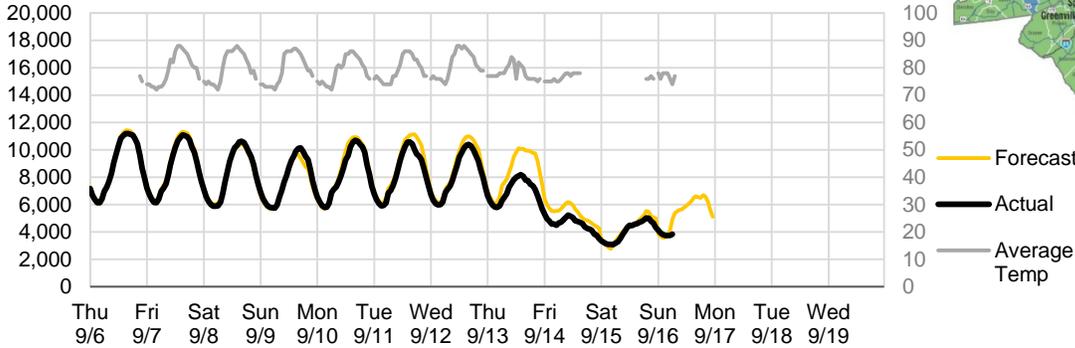


## DUKE ENERGY PROGRESS EAST (CPLE)

Current electricity load data through hour ending 7 am

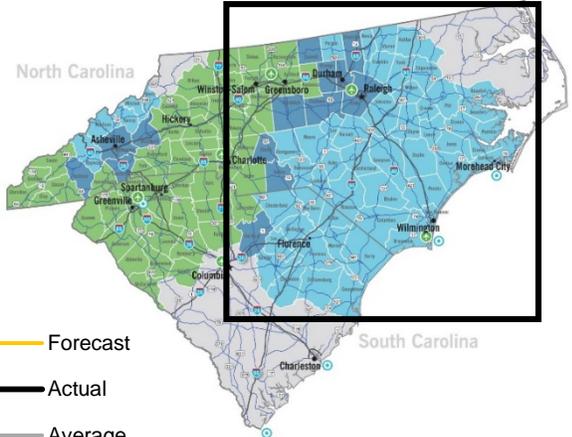
### Duke Energy Progress East (CPLE) Electricity load, actual vs. forecast

megawatts



### Wilmington, North Carolina

Hourly average temperature degrees Fahrenheit



### Service Territory Counties Served\*

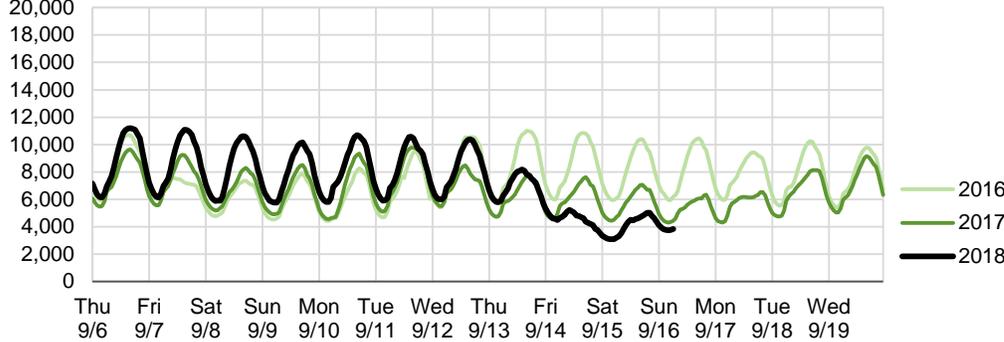
- Duke Energy Progress
- Duke Energy Carolinas
- Overlapping Territory
- Shipping Port
- Major Airport
- Interstate Highways
- State Highways

\*Portions may be served by other utilities.

Source: Duke Energy

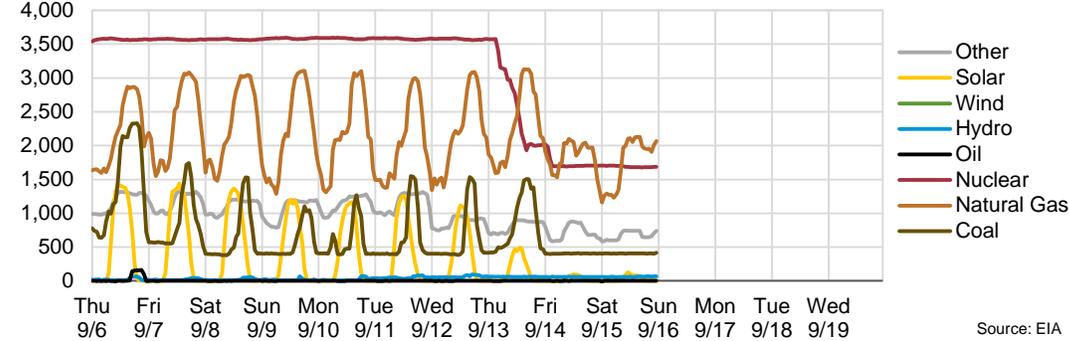
### Duke Energy Progress East (CPLE) electricity load, 2018 vs. past two years

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

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

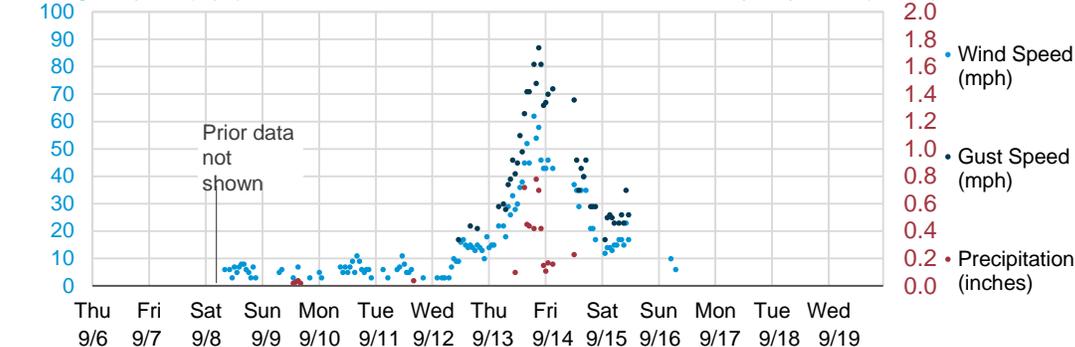
179,577 customers, 7% of all customers in South Carolina

1,017 customers in Tennessee

### Morehead City, North Carolina weather

wind & gust speed (mph)

1 hr precipitation (inches)



Source: NOAA

# EIA Hurricane Florence Electricity Status Report

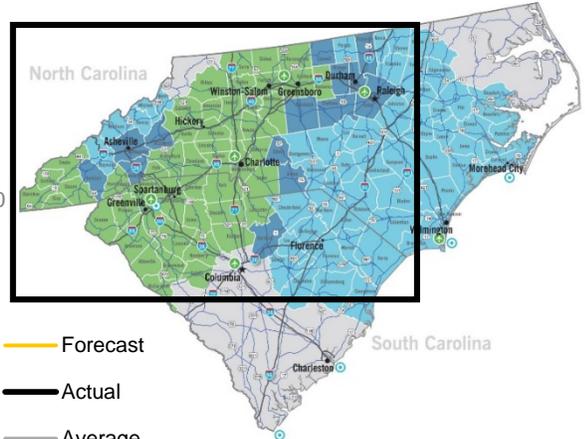
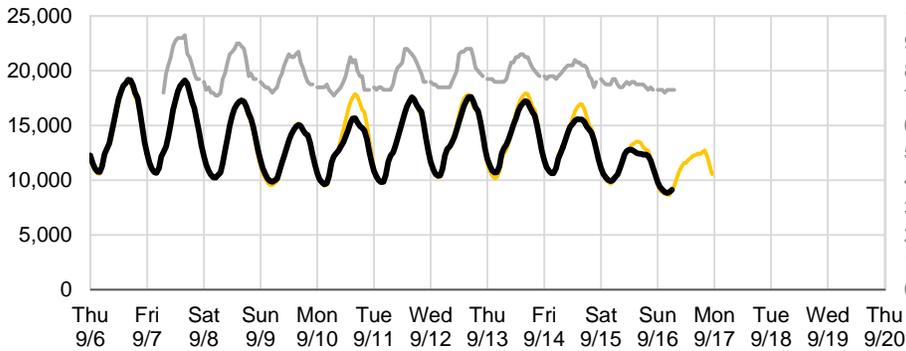
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## DUKE ENERGY CAROLINAS (DUK)

Current electricity load data through hour ending 7 am

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



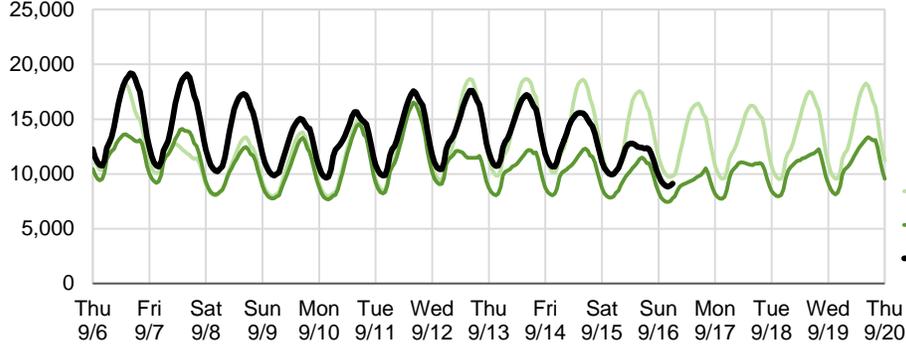
**Service Territory**  
Counties Served\*

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

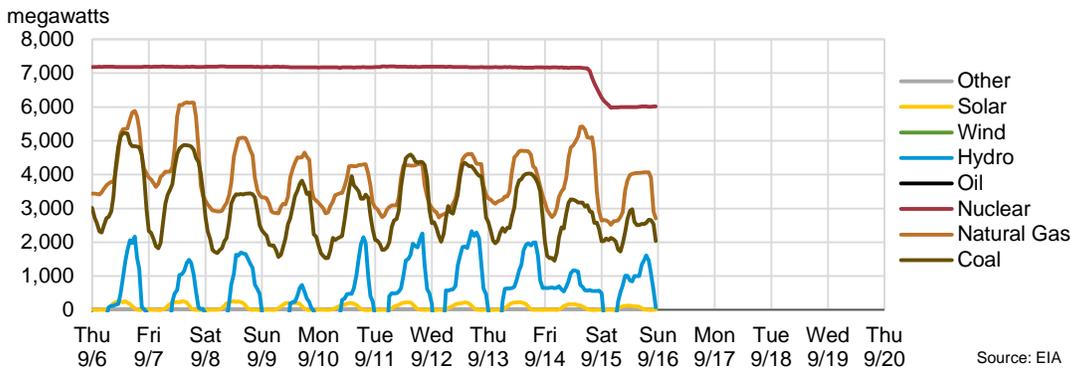
\*Portions may be served by other utilities.

Source: Duke Energy

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



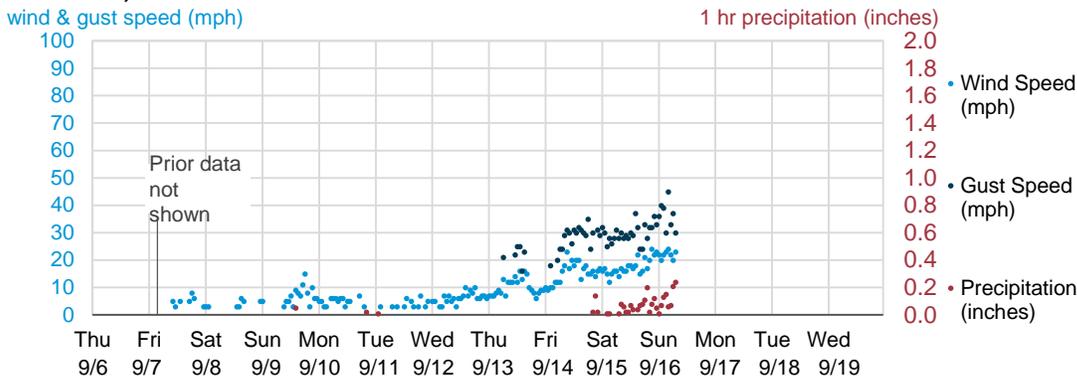
### Duke Energy Carolinas (DUK) net generation by energy source



**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)

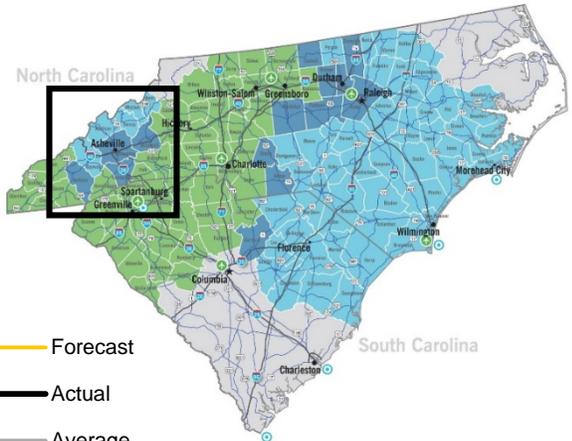
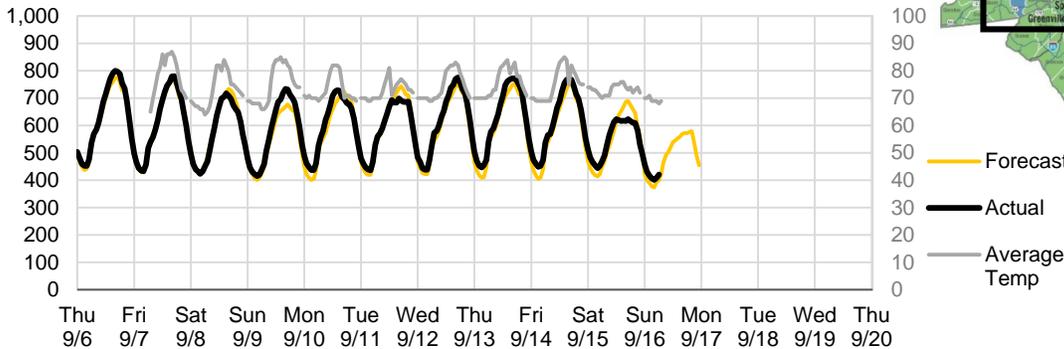
Current electricity load data through hour ending 7 am

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

megawatts

### Asheville, North Carolina

Hourly average temperature degrees Fahrenheit



**Service Territory**  
Counties Served\*

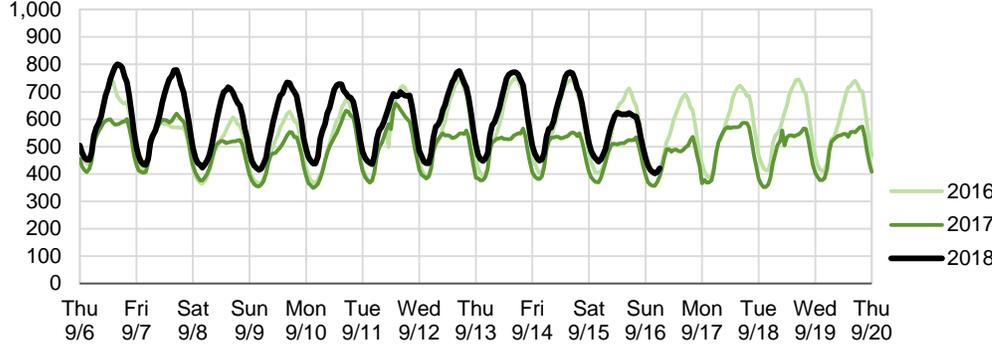
- Duke Energy Progress
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- Overlapping Territory
- Shipping Port
- Major Airport
- Interstate Highways
- State Highways

\*Portions may be served by other utilities.

Source: Duke Energy

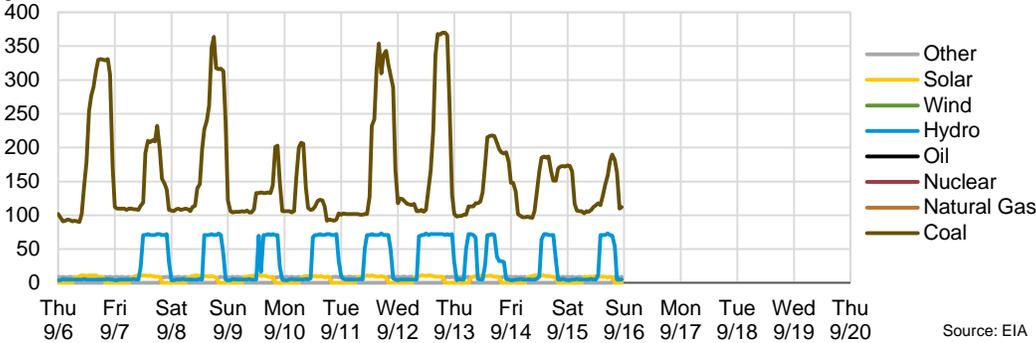
### Duke Energy Progress West (CPLW) electricity load, 2018 vs. past two years

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

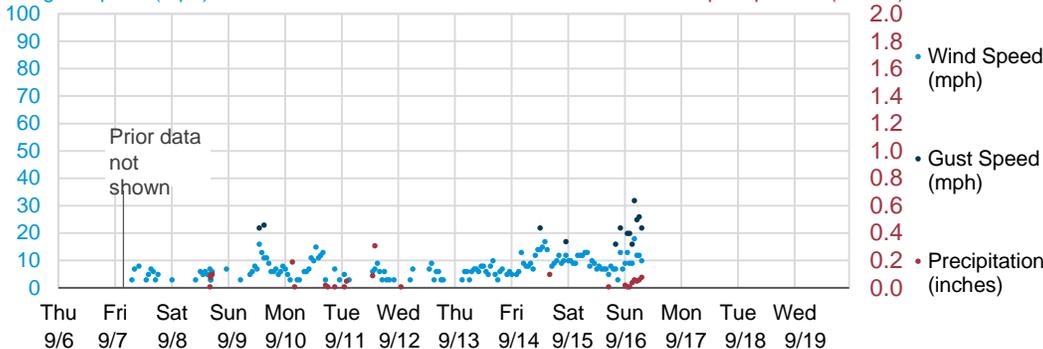
1,017 customers in Tennessee

Source: EIA

### Asheville, North Carolina weather

wind & gust speed (mph)

1 hr precipitation (inches)



Source: NOAA

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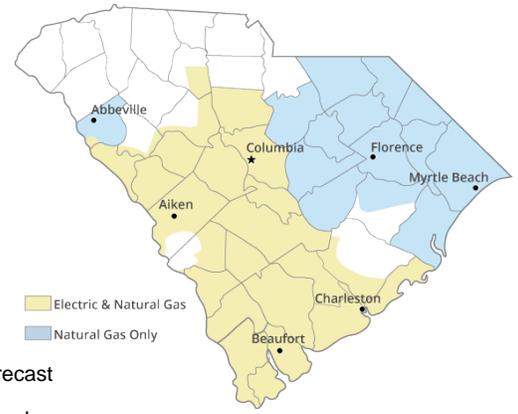
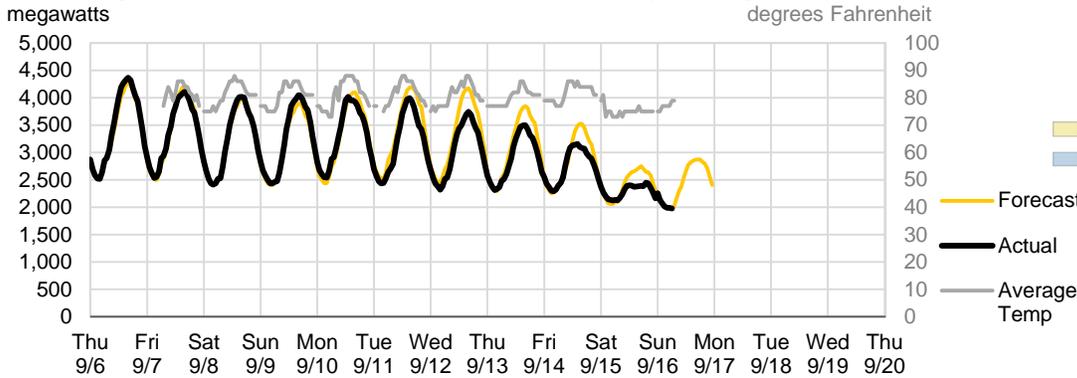
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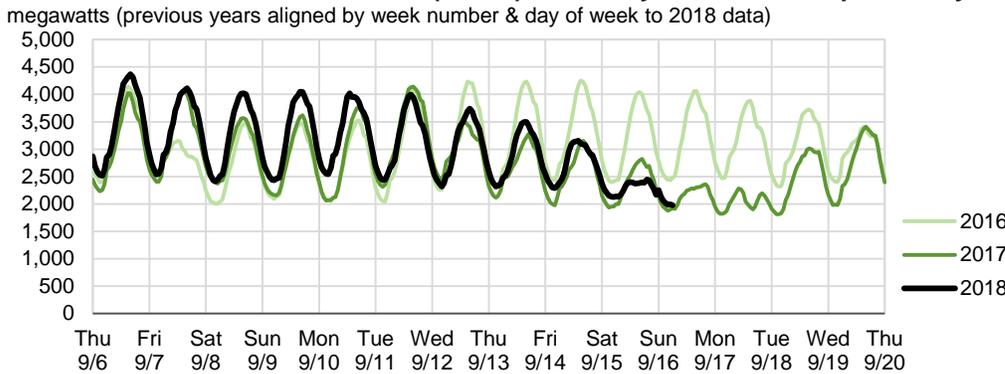
## SOUTH CAROLINA ELECTRIC & GAS (SCEG)

Current electricity load data through hour ending 7 am

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



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

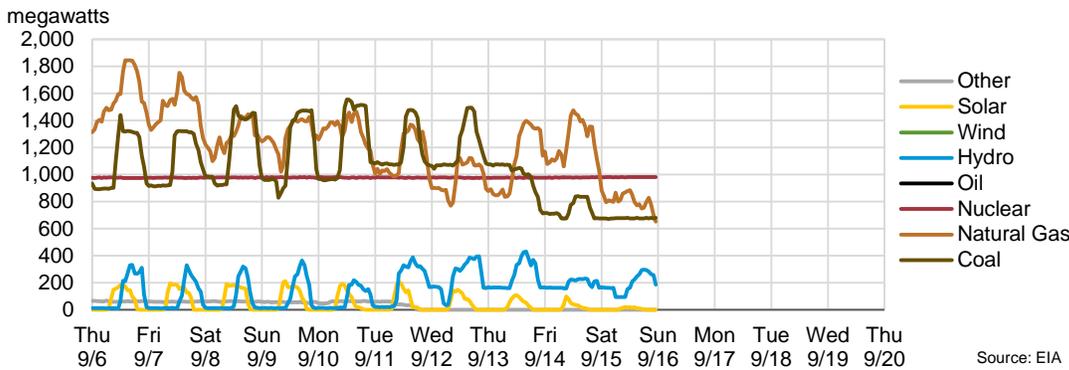


### South Carolina Electric & Gas (SCEG) Balancing Authority Total Customers

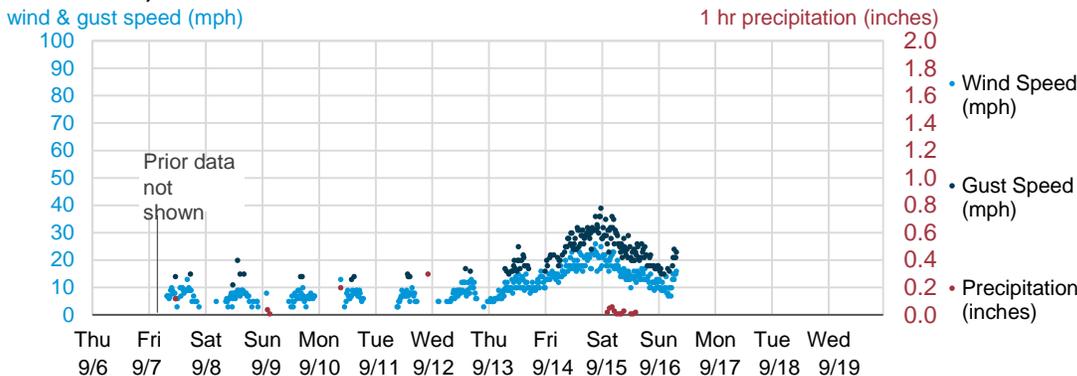
746,512 customers, 28% of all customers in South Carolina

Source: EIA

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



### Charleston, South Carolina weather



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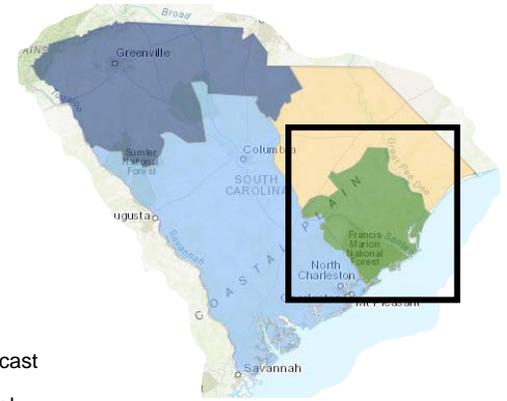
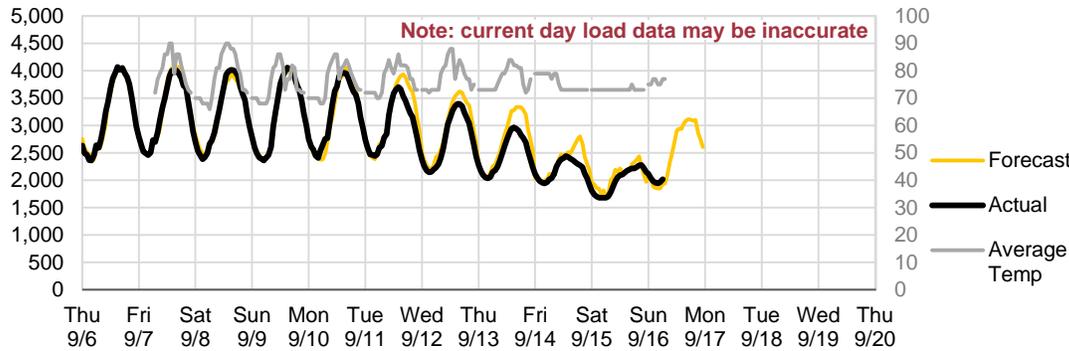
## SANTEE COOPER/SC PUBLIC SERVICE AUTHORITY (SC)

Current electricity load data through hour ending 7 am

### Santee Cooper (SC)

Electricity load, actual vs. forecast  
megawatts

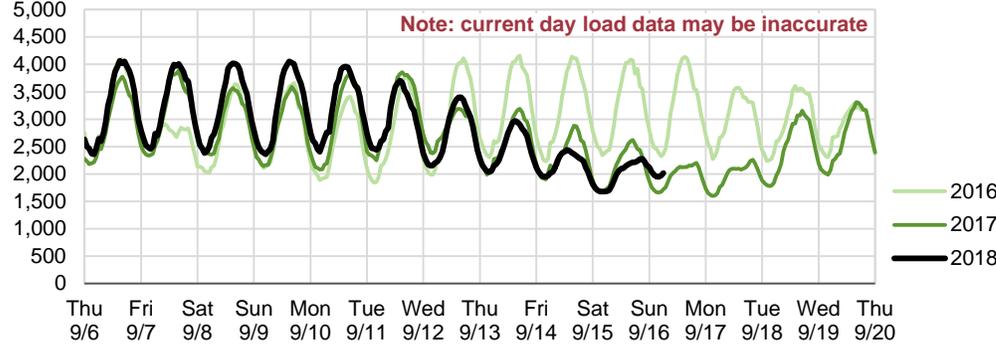
Myrtle Beach, South Carolina  
Hourly average temperature  
degrees Fahrenheit



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)



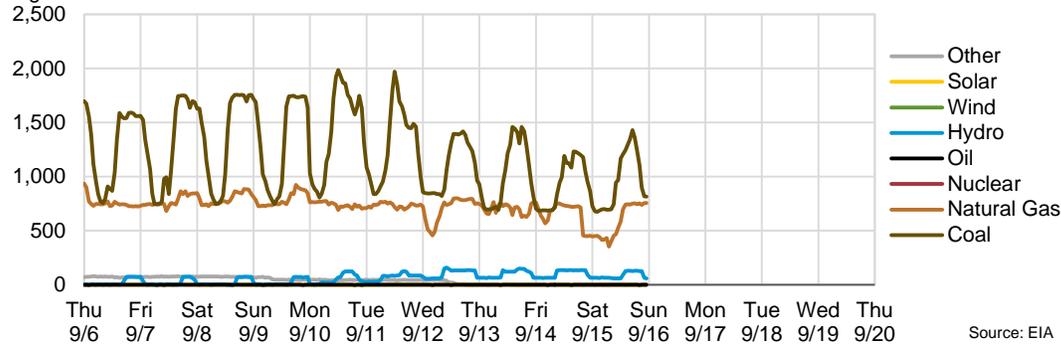
### Santee Cooper (SC) Balancing Authority Total Customers

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

Source: EIA

### Santee Cooper (SC) net generation by energy source

megawatts

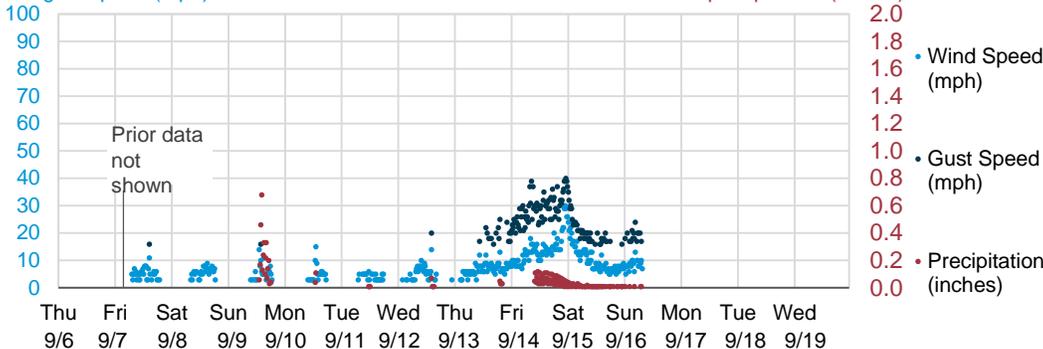


Source: EIA

### 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.