

EIA Emergency Response



For

Committee on National Statistics

October 19, 2018 | Washington, D.C.

By

Linda Capuano, Administrator



Independent Statistics & Analysis

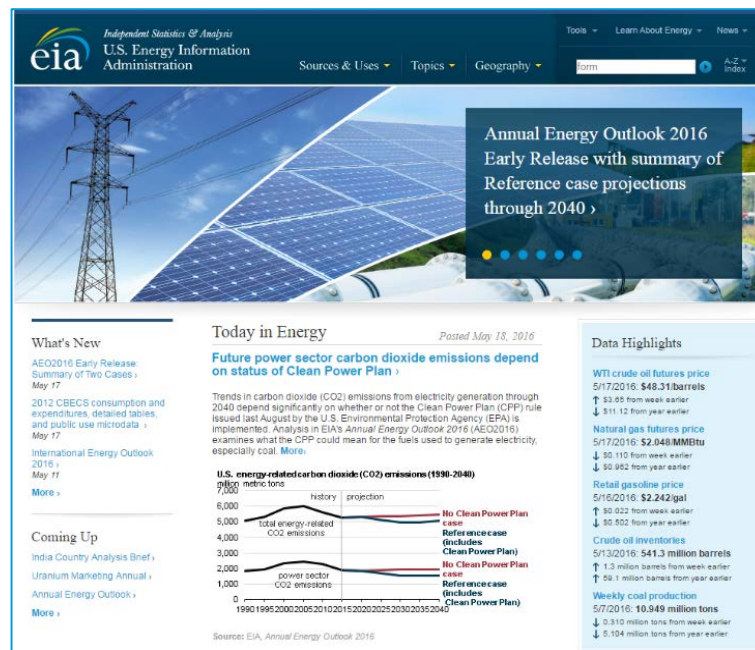
U.S. Energy Information
Administration

The Nation's source of energy information

EIA collects, analyzes, and disseminates independent and impartial energy information to promote sound policymaking, efficient markets, and public understanding of energy and its interaction with the economy and the environment.

EIA's products are independent

By law, EIA's data, analyses, and forecasts are independent of approval by any other officer or employee of the United States Government.



Solid legal foundation and trust

Legal right to collect

- Federal Energy Administration Act of 1974 (Public Law 93-275)
- Department of Energy (DOE) Organization Act of 1977 (Public Law 95-91)
- Other legal mandates

Legal obligation to protect

- Confidential Information Protection and Statistical Efficiency Act (CIPSEA), Title V of the E-Government Act of 2002 (Public Law 107-347)
- Freedom of Information Act, 5 USC. 552, exemptions 3, 4, and 6
- Paperwork Reduction Act, 44 U.S.C. 3501
- Information Quality Act, P.L. No. 106-554; H.R. 5658, Section 515(a)

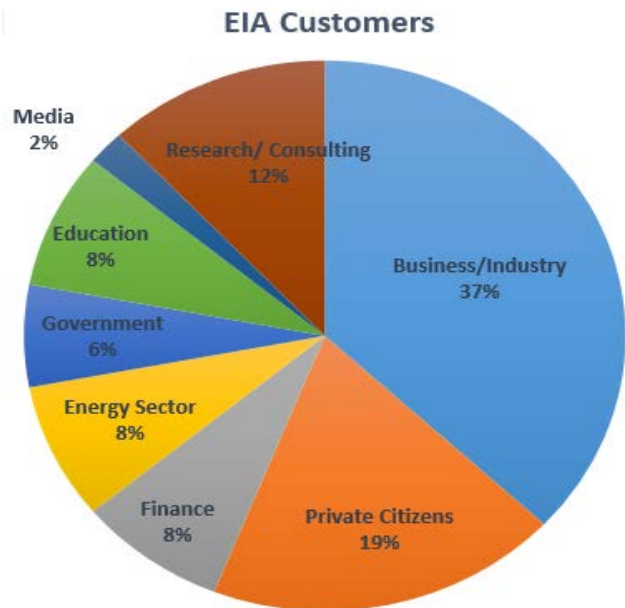
EIA is a Principal Federal Statistical Agency

- Three Branches of Government: Executive; Legislative; and Judiciary.
- Executive Branch – 15 Departments
- 190 Agencies within 15 Departments
- 90 out of 190 Agencies perform various statistical collections
- 13 out of 90 are Principal Federal Statistical Agencies

EIA's data collection and analytical products integrate all energy sectors



EIA stakeholders



Source: 2017 EIA Web Customer Survey

Business/Industry

- Manufacturers – market research

Energy Sector

- Consumers – monitor price forecasts
- Producers – track inventory statistics

Finance/Consulting

- Commodities Analysts – market response to supply data

Private Citizens

- Public – research gasoline prices

Government

- Executive Agencies – WH, DOE, & EPA use EIA data to track energy markets and program performance and to analyze policy proposals
- Congress – policy development and agency funding
- State Governments – planning and program development

Media/Education

- Journalists – cite energy statistics
- Teachers – use Energy Kids materials
- Researchers – energy forecasting and modeling

EIA Data Products and Tools

- Coal Data Browser
- Crude Import Tool
- Weekly Natural Gas Storage Report
- Weekly Petroleum Status Report
- Hourly Electric Load Tool
- Residential Energy Consumption

EIA Analytical Products

- Annual Energy Outlook
- International Energy Outlook
- Short-Term Energy Outlook
- This Week in Petroleum
- Natural Gas Weekly Update
- Today in Energy

EIA publishes many data series that can be helpful during energy disruptions

- Weekly gasoline and diesel retail prices
- Weekly crude oil and petroleum product inventories
- Weekly natural gas inventories
- Daily spot prices
- Hourly electricity load by balancing authority

Source: U.S. Energy Information Administration

EIA works closely with DOE and other agencies during energy disruptions

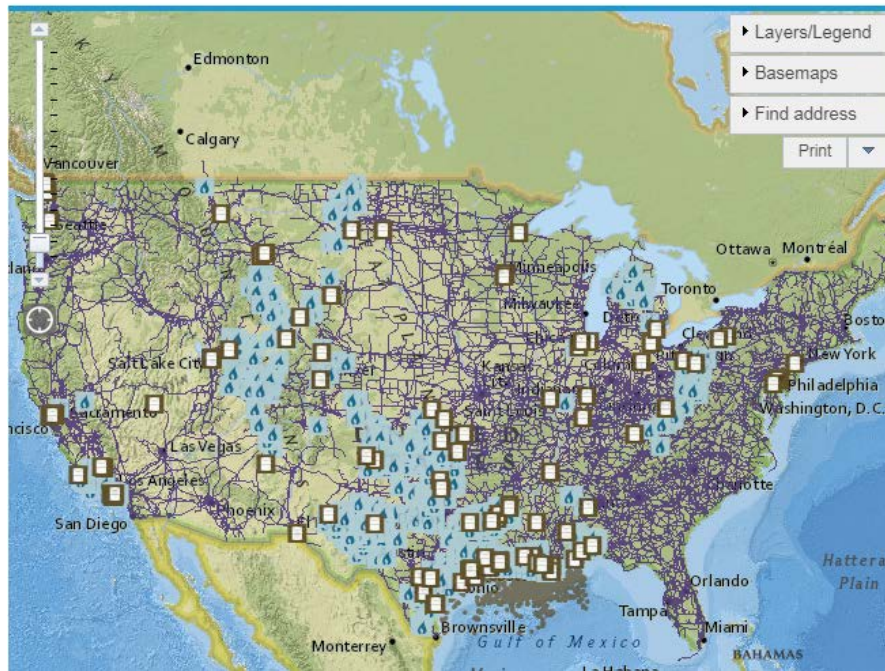
- **DOE's Office of Cybersecurity, Energy Security, and Emergency Response (CESER)**
 - CESER leads DOE's emergency preparedness and coordinated response to energy sector disruptions, including physical and cyber-attacks, natural disasters, and man-made events.
 - **Infrastructure Security and Energy Restoration Division (ISER)** leads efforts to secure U.S. energy infrastructure against hazards, reduce disruptive event impact, and respond to and facilitate recovery, in collaboration with industry and state and local governments.
 - **The Cybersecurity for Energy Delivery Systems Division** mitigates the risk of energy disruption from cyber incidents and other emerging threats within the energy environment.
- **EIA is independent but coordinates with CESER** and others during emergency events
 - EIA publishes independent Energy Disruption pages data and analysis and provides data and to CESER

EIA works closely DOE and other agencies during energy disruptions

- **Supports situational awareness by participating and coordinating with**
 - Department of Energy, Office of Cybersecurity, Energy Security, and Emergency Response (CESER)
 - Federal Emergency Management Agency (FEMA)
 - Department of Transportation, Pipeline and Hazardous Materials Safety Administration (PHMSA)
 - State Energy Offices
 - Canadian National Energy Board (NEB)
 - Others
- **Independently publishes information on its EIA.gov Disruption Pages**

EIA's energy disruptions page features interactive map layers displaying energy infrastructure and weather information

Energy Infrastructure with Active Storms and Other Hazards



[Eia.gov/special/disruptions](https://www.eia.gov/special/disruptions) interactive map layers include:

- Refineries, terminals, crude oil and petroleum product pipelines
- Oil and gas wells and offshore platforms
- Natural gas processing plants and pipelines
- Power plants
- Coal mines
- Weather indicators from NOAA

Source: U.S. Energy Information Administration

EIA releases daily electricity status reports during hurricanes

EIA Hurricane Michael Electricity Status Report

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

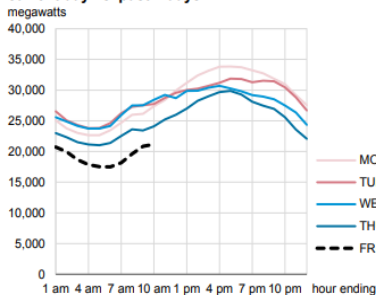


Friday, October 12, 2018 *Note: this will be the final report of the series.*

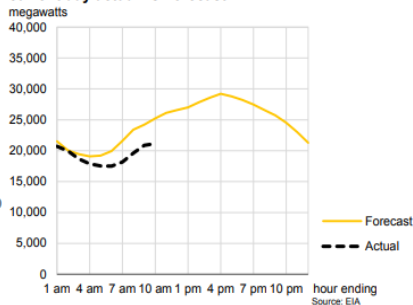
- Weather:** Tropical Storm Michael moved rapidly through Georgia, the Carolinas, and Virginia yesterday with heavy rainfall and up to 65 mile-per-hour winds extending 275 miles from the center before entering the Atlantic Ocean this morning.
- Electricity:** The hurricane's impact can be most clearly seen in the TAL (City of Tallahassee) balancing authority (BA), where load remains very low but is showing signs of recovery. Loads yesterday and today in other BAs, including DUK and CPLE in the Carolinas (see p. 7-8), were slightly lower than previous days; however, a steep drop in temperatures overnight partially obscures the impact of recovery efforts on load.
- Generators:** Both reactors at the 1,751-megawatt Farley nuclear plant in Alabama reported about 55% capacity availability this morning, up from 30% yesterday morning.
- Customer outages, as of 1:00 p.m.:** About 452,000 customers in Virginia (roughly 12% of the state); 410,000 customers in North Carolina (8%); 280,000 customers in Florida (3%); 146,000 customers in Georgia (3%); 23,000 customers in Alabama (1%); and 3,000 customers in South Carolina (<1%). Recovery is underway, but outages remain in the areas with the most severe (Florida and Georgia) and recent (North Carolina and Virginia) impacts.

REGIONAL OVERVIEW

Southeast region electricity load
current day vs. past 4 days



Southeast region electricity load
current day actual vs. forecast



Source: U.S. Energy Information Administration

Eia.gov/special/disruptions/archive/hurricane/Michael reports features:

- Hourly electricity load for balancing authorities in the affected areas
- Weather data including precipitation, wave height, and wind speed
- Maps featuring the projected storm path and the location of nuclear power plants
- Estimates of customers by state for each balancing authority

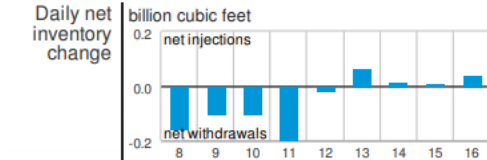
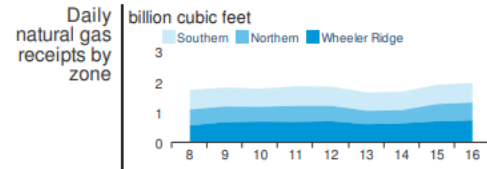
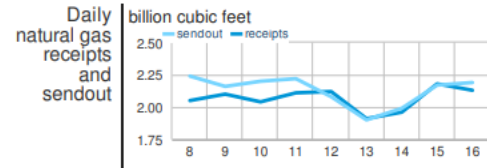
EIA posts custom dashboards to monitor select markets such as Southern California natural gas



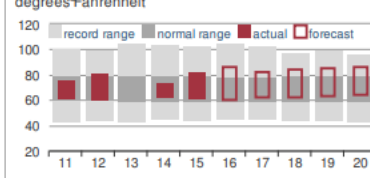
Southern California Daily Energy Report

Dashboard last updated: October 16, 2018 | Winter edition

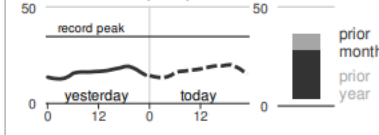
Southern California Gas (SoCalGas)



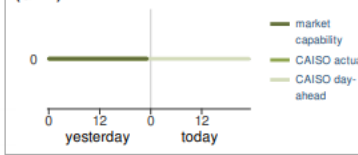
Los Angeles temperature



Total SoCal load (GWh)



Pacific DC Intertie electricity flows to CAISO (GWh)



[Eia.gov/special/disruptions/socal](https://www.eia.gov/special/disruptions/socal)

reports feature:

- Daily natural gas receipts and sendout
- Daily net inventory change
- Hourly electricity load
- Natural gas and electricity prices
- Map featuring natural gas infrastructure

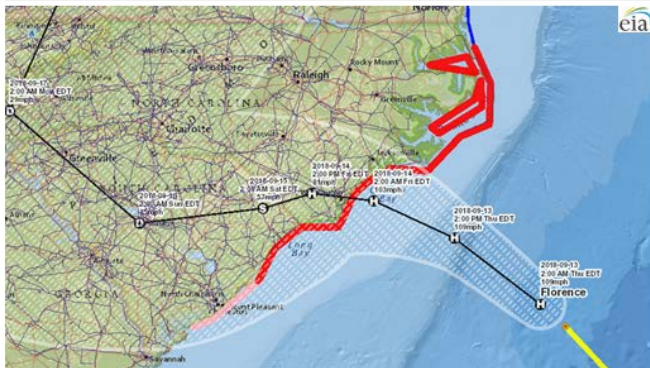
Source: U.S. Energy Information Administration

EIA posts analysis products covering emerging trends in energy markets

Today in Energy

Hurricane Florence likely to affect Southeast U.S. electric power, transportation fuels

Update: EIA has begun issuing a [Hurricane Florence Status Report](#). EIA will issue reports twice a day at about 10:00 a.m. and 5:00 p.m. or once a day at 5:00 p.m. as conditions warrant.



Source: U.S. Energy Information Administration, [Energy Disruptions Map](#)

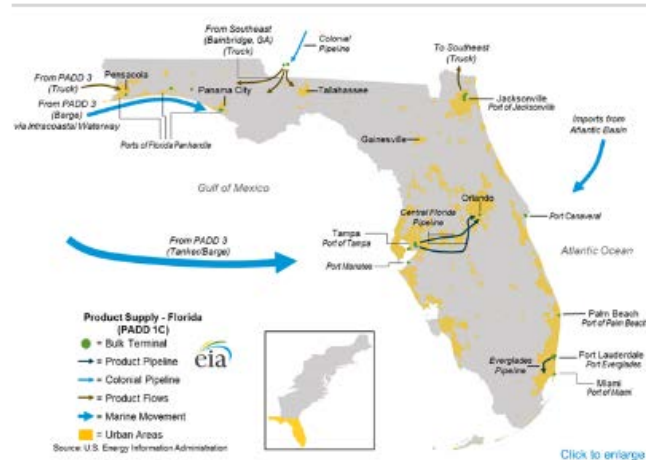
Hurricane Florence is [expected to make landfall](#) near the area of Wilmington, North Carolina, and Myrtle Beach, South Carolina as a Category 2 storm on Friday. The storm's high winds and heavy rainfall are likely to affect energy infrastructure throughout the region, particularly for electricity transmission and distribution, while widespread evacuations and disruptions to normal business operations could alter electricity demand and supply and demand patterns for transportation fuels.

Source: U.S. Energy Information Administration

This Week in Petroleum

Hurricane Irma prompts high gasoline demand as it disrupts Florida's supply chain

Hurricane Irma has created several issues with gasoline markets in Florida, both by prompting increased demand and disrupting the supply chain needed to deliver gasoline. Hurricane Irma made landfall in South Florida on September 10 and proceeded on a northwesterly path up the length of the state. Because of the evacuation of people in anticipation of Hurricane Irma, demand for transportation fuels and the logistical challenges in supplying Florida began before it made landfall. As Hurricane Irma approached, shipping traffic was diverted and ports closed, stopping the flow of petroleum products into Florida. People filling their gasoline tanks in anticipation of the storm resulted in a rapid increase in demand. In Hurricane Irma's aftermath, demand is slowly returning to normal levels, allowing time for resupply to arrive and supply chains to adjust.



Source: U.S. Energy Information Administration

EIA leverages social media to disseminate energy data

EIA tweets and posts links

- on-demand energy analysis
- near real-time electricity data
- daily status reports
- online tools that provide on-demand access to more frequent energy information updates

Access available to all

- Federal and state agencies, regional and local
- First responders to emergency operations centers
- Direct to mobile phones



Source: U.S. Energy Information Administration

For more information

Linda Capuano, Administrator
linda.capuano@eia.gov, 202-586-6351

Stephen Nalley, Deputy Administrator
stephen.nalley@eia.gov, 202-586-6351

Subject matter experts for this presentation:

Hannah Breul, Team Lead, Petroleum Markets Analysis
hannah.breul@eia.gov, 202-586-4522

Dale Sweetnam, Communications Manager, Content Operations Team
dale.sweetnam@eia.gov, 202-586-0851

Dennis Mesina, Public Affairs Specialist
dennis.mesina@eia.gov, 202-586-1377