# **Tropical Cyclone Barry | Report #4 - FINAL**

REPORT TIME & DATE: 11:30 AM EDT | Monday, July 15, 2019

**INCIDENT START DATE:** Friday, July 12, 2019

**PRIMARY LOCATION(S):** Gulf Coast **REPORT DISTRIBUTION:** Public

This will be the final scheduled Situation Report from the U.S. Department of Energy (DOE) covering impacts from Tropical Cyclone Barry. DOE will continue to monitor the situation and will provide an update if there are any significant issues.

### **EXECUTIVE SUMMARY**

As of 11:00 AM EDT, Tropical Depression Barry was 70 miles west-northwest of Little Rock, Arkansas, moving north at 12 MPH, with maximum sustained winds of 25 MPH. Barry is expected to continue north, before beginning a northeasterly motion on Tuesday and easterly on Wednesday. Barry will continue to produce periods of heavy rainfall across portions of the Mississippi Valley. The U.S. Department of Energy (DOE) Energy Response Organization continues to monitoring impacts from Barry and is in regular contact with industry partners.

## **Electricity Sector Summary**

- As of 11:00 AM EDT, there were approximately 55,000 customer outages across the effected states, including approximately 45,000 customers in Louisiana.
- Restoration efforts are underway as conditions permit.
- Utilities in the impacted area pre-staged crews, equipment, and materials. Mutual assistance networks have been activated to support restoration efforts as needed.
- Utilities in less impacted areas have released crews to support utilities in other areas.

#### Oil & Natural Gas Sector Summary

- There have been no reports of widespread retail fuel station disruptions in the affected areas.
- The port of Morgan City and the Louisiana Offshore Oil Platform remain closed. All other ports in the region have are open.
- The one refinery in Louisiana that shut down as a precaution pre-storm is preparing to restart. All other refineries in Louisiana remained operational throughout the storm.
- Offshore oil and natural gas production platforms that shut-in as a precaution prior to the storm will begin restart operation over the next few days, following safety checks.
- For the week ending on July 5, the Gulf Coast (PADD 3) had 81.7 million barrels of total gasoline stocks, according to the Energy Information Administration (EIA). This is 6% higher than the 5-year average for this time of year. The Gulf Coast also has 37.1 million barrels of total distillate stocks, which is below than the 5-year average for this time of year; however, stocks have increased since the prior week.

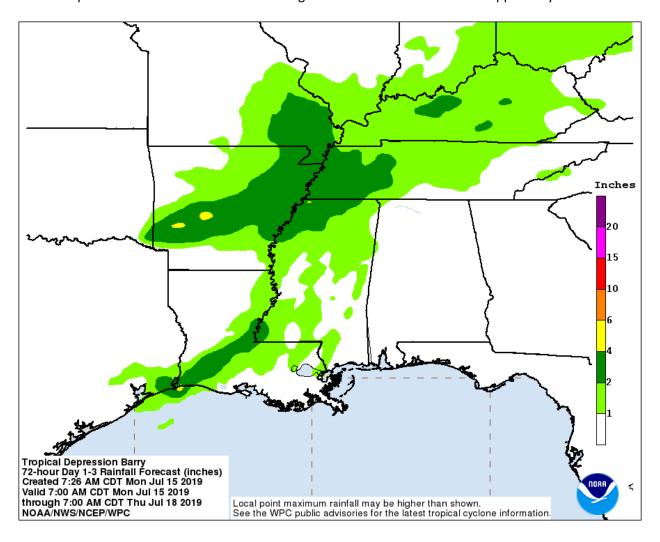


## **Tropical Storm Barry**

As of 11:00 AM EDT, Tropical Depression Barry was 70 miles west-northwest of Little Rock, Arkansas, moving north at 12 MPH, with maximum sustained winds of 25 MPH. Barry is expected to continue north, before beginning a northeasterly motion on Tuesday and easterly on Wednesday.

Barry is expected to produce additional rain accumulations of 2 to 4 inches over across Arkansas, western Tennessee and Kentucky, southeast Missouri, and northwest Mississippi, with isolated maximum amounts of 8 inches.

All hurricane and tropical storm warnings and watches have been terminated. Flash Flood Watches and Warnings are in effect for portions of far southeast Texas through the Lower and Middle Mississippi Valley.





## **ELECTRICITY SECTOR**

#### **POWER OUTAGES**

## Outage Map (as of 11:00 AM EDT, July 15)



ELECTRICITY OUTAGES AS OF 11:00 AM EDT 7/15/2018								
Impacted State	Current	Percent of Total Customers	24-Hour Peak					
	<b>Customers Outages</b>	in State without Power	<b>Customer Outages</b>					
Alabama	1,601	0.08%	6,753					
Arkansas	2,298	0.19%	2,977					
Louisiana	44,834	2.16%	180,617					
Mississippi	3,376	0.30%	8,332					
Texas	7,255	0.07%	8,901					
Total	55,364	-	*					

<sup>\*</sup>There is no sum of the Peak Customer Outage column because peaks for individual utilities occur at different times.



#### **ELECTRICITY IMPACTS & RESTORATION EFFORTS**

As of July 15, Entergy Louisiana crews restored power to all of Grand Isle and most of Port Fourchon.
 Although Entergy continues to work to restore power throughout the state, crews have faced challenges in the Bayou Region (Assumption, Lafourche, St. Mary, and Terrebonne parishes) due to flooded roadways. Restoration work in the Greater Baton Rouge region will also take additional time, as much of the damage is in residential lots that are difficult to access with heavy equipment.

- As of July 14, Entergy Louisiana had assembled 3,400 personnel to assess damage and perform
  restorations. Crews prioritized activities that would restore power to the greatest number of customers.
  Entergy also took steps to protect flood-prone substations located in low-lying regions.
- As of July 14, Entergy Mississippi anticipated that power would be restored to Copiah, Washington, Warren, Lincoln, Hinds, and Carroll Counties later the same day. Some customers in Walthall will likely be without power until at least July 15. Prior to the storm, Entergy Mississippi had assembled a team of 130 restoration workers in preparation for potential future disruptions.
- As of July 14, Alabama Power reports no impacts to their system from Tropical Cyclone Barry.
- As of 10:00 AM EDT on July 14, Southwest Electric Cooperative anticipates outages to continue to occur
  over the next 48 hours and restoration may last until Wednesday. Line crews are assessing damage and
  restoring power. Additional crews from sister cooperatives and contract companies are available to
  assist with the restoration.
- As of July 12, the Lafayette Utilities System (LUS) reports the city of Tallahassee, Florida and the Gainesville Regional Utilities are providing an additional 80 tree-trimmers, mechanics, and line workers to support restoration.
- As of July 11, Central Louisiana Electric Company (CLECO) has increased number of external resources to 1000 line mechanics and 400 vegetation specialists.

#### **BACKGROUND AND PREPARATIONS**

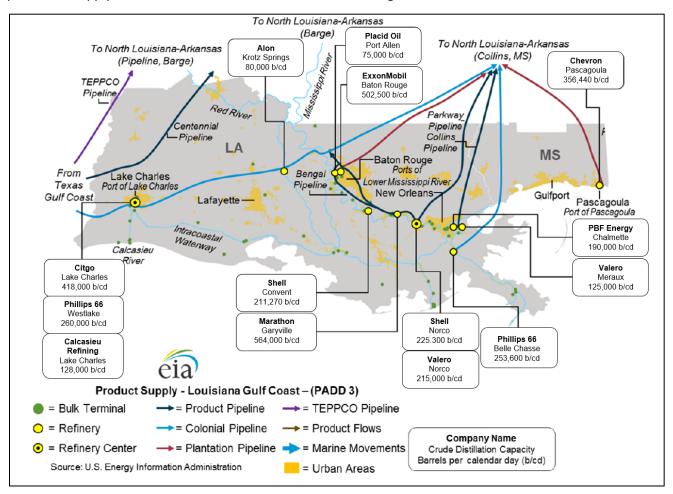
- The affected area is served by several utilities, including investor owned utilities, municipal utilities, and cooperative utilities. The three associations that represent these unities and manage the mutual assistance networks, the Edition Electric Institute (EEI), American Public Power Association (APPA), and the National Rural Electric Cooperative Association (NRECA), have been in regular contact with DOE, the potentially affected entities, and their mutual assistance networks.
- Potentially affected utilities have prepositioned crews, materials, and equipment to begin restorations as conditions permit.
- Mutual assistance networks have been activated and are ready to support restoration efforts if requested.
- Sustained winds over 34 mph prevent bucket truck operation. Flooded equipment will need to be dried and tested before being reenergized.
- Fluctuation in the outage numbers is expected and normal during large-scale restoration efforts.



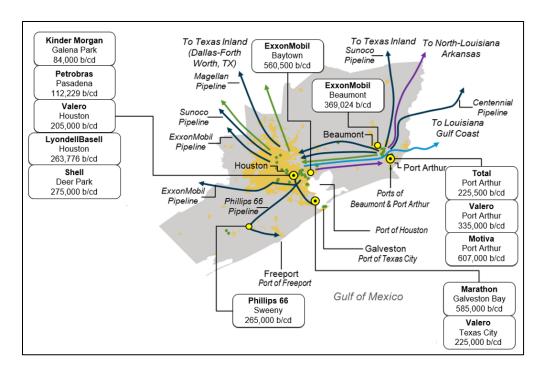
## **OIL & NATURAL GAS SECTOR**

#### **OVERVIEW**

Just over half of total U.S. refining capacity is located in the Gulf Coast (PADD 3) region. Gulf Coast refinery production is critical for supplying fuels to markets in the high-demand East Coast (PADD 1) region. Products move out of the Gulf Coast region on the Colonial and Plantation pipeline systems to Southeast and Central Atlantic markets, and via tanker and barge to Florida. The Gulf Coast refineries export approximately 20% of production to foreign countries. This provides a significant "export buffer," allowing refiners to shift fuel production away from exports to make up for shortages in domestic markets. The maps below highlight the petroleum supply chain in the Louisiana and Texas Gulf Coast regions.







#### **OFFSHORE OIL & GAS PRODUCTION**

As of 12:30 PM EDT, July 14 1.38 million barrels per day (b/d) (72.8%) of the oil production and 1.71 billion cubic feet per day (Bcf/d) (61.7%) of the natural gas production in the federally administered areas of the U.S. Gulf of Mexico are shut-in, according to estimates by the Bureau of Safety and Environmental Enforcement (BSEE). In addition, BSEE reports that 283 out of 669 manned platforms have been evacuated; 10 out of 21 non-dynamically positioned rigs have been evacuated; and none of the 20 dynamically positioned rigs are off location.



#### **PORTS**

 The U.S. Coast Guard has set the following conditions for Gulf Coast ports as a result of Tropical Storm Barry.

Status of Gulf Coast Petroleum Ports as of 10:30 AM EDT 07/15/2019									
Port Sector/ Port	Status	Date Stamp	2017 Crude Volumes (b/d)		2017 Product Volumes (b/d)				
			In	Out	In	Out			
Sector Mobile									
Mobile, AL	Open. Port status Normal.	7/12	73,099	5,171	1,560	48,485			
Pascagoula, MS	Open. Port status Normal.	7/15	51,020	41	3,980	40,890			
New Orleans									
New Orleans, LA	Open. Port status Normal.	7/14	73,374	20,206	20,989	226,100			
Baton Rouge, LA	Open. Port status Normal.	7/14	16,059	1,774	11,673	25,510			
South Louisiana	Open. Port status Normal.	7/14	46,182	0	754	0			
Houma									
Morgan City	Closed. Port status Zulu.	7/12	110,210	1,560	156	50			
LOOP	Closed. Port status Zulu.	7/12							
Port Arthur and Lake Charles									
Beaumont, TX	Open. Port status Recovery.	7/14	27,751	60,368	22,139	69,140			
Lake Charles, LA	Open. Port status Recovery.	7/14	115,913	1,140	15,170	66,132			

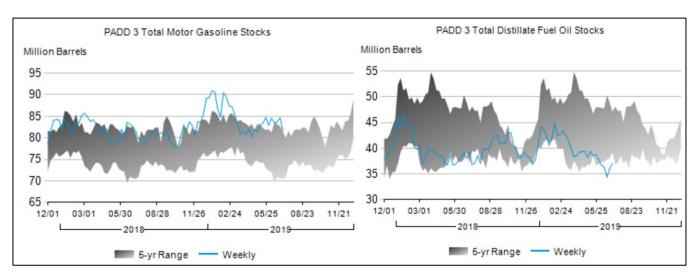
Source: Port status from U.S. Coast Guard <u>Homeport</u>; Crude and product volumes as of 2017 from U.S. Army Corp of Engineers Waterborne Commerce Statistics and EIA Company Level Imports

## **PETROLEUM REFINERIES**

• As of 10:30 AM July 15, the one refinery that shut down in advance of Barry was preparing to restart. All other refineries remained operational throughout storm.

#### **FUEL STOCKS**

• For the week ending on July 5, 2019, the Gulf Coast (PADD 3) had 81.7 million barrels of total gasoline stocks, according to the Energy Information Administration (EIA). This is 6% higher than the 5-year average for this time of year. For the week ending on July 5, the Gulf Coast had 37.1 million barrels of total distillate stocks, according to EIA. This is 14% lower than the 5-year average for this time of year.





## **EMERGENCY DECLARATIONS & WAIVERS**

#### **EMERGENCY DECLARATIONS**

To provide vital supplies and transportation services to a disaster area in the United States, emergency declarations may be issued by the President, Governors of States, or Federal Motor Carrier Safety Administration (FMCSA). These declarations trigger the temporary suspension of certain Federal safety regulations, including Hours of Service, for motor carriers and drivers engaged in specific aspects of the emergency relief effort. See 49 CFR 390.23 for the actual emergency regulation.

State(s)	Details	Effecti	Status		
State(s)	Details	Start	End	Status	
AL, AR, FL,					
GA, IL, IN, KS,		7/11/19	8/10/19	Active	
KY, LA, MS,	FMCSA Regional Declaration of Emergency				
MO, OK, TN,					
TX					
Louisiana	State of Emergency	7/10/19	8/8/19	Active	
Mississippi	State of Emergency	7/12/19		Active	

Sources: U.S. Department of Transportation; Governor Office Websites

