Hurricanes Maria, Irma, and Harvey
September 21 Afternoon Event Summary (Report #41)

REPORT TIME & DATE: 4:00 PM EDT | Thursday, September 21, 2017
INCIDENT START DATE: Friday, August 25, 2017
PRIMARY LOCATION(S): TX, LA, FL, GA, NC, SC, Puerto Rico, & USVI
REPORT DISTRIBUTION: Public

Note: DOE will continue to phase out information related to Hurricanes Irma & Harvey as appropriate and may begin to provide a separate report in needed.

EXECUTIVE SUMMARY
Hurricane Maria made landfall on the southern coast of Puerto Rico around 6:15 AM EDT on Wednesday, September 20, after passing approximately 15 miles south-southwest of St. Croix around 2:00 AM EDT. As of Thursday, Maria continues to move northwest, past the Dominican Republic, as a category 3 storm.

DOE is supporting response efforts for Hurricane Maria and continues to support restoration efforts from both Hurricane Harvey and Hurricane Irma. ESF #12 responders are deployed to St. Thomas and St. Croix in support of FEMA Incident Management Assistance Teams and responders are prepared to deploy to Puerto Rico as soon as conditions permit. ESF #12 responders are also deployed to the National Response Coordination Center and the Florida State Emergency Operations Center.

Electricity Sector Summary (as of 2:30 AM EDT Thursday)
- Florida: 29,315 customer outages (<1% of total state customers)
  - Most utilities estimated that over 95% of customers will be restored by September 22
- Puerto Rico: Nearly all 1.57 million electricity customers in Puerto Rico continue to be without power following the storm
- USVI: As of Wednesday afternoon, the majority of the 25,000 customers on St. Croix were reported to be without power. St. Thomas and St. John previously experienced extensive power outages from Hurricane Irma, with restoration only occurring to critical facilities
- Damage assessment for Puerto Rico and the USVI are beginning as conditions permit. DOE is working closely with the local governments, FEMA, and industry to facilitate mutual aid

Oil and Natural Gas Sector Summary (as of 2:30 AM EDT Thursday)
- Florida is working closely with gasoline truckers & shippers to ensure timely delivery of product to retail stations and reports from state officials as well as data from GasBuddy.com indicate that the situation continues to improving
- No issues have been reported with any key pipelines transporting petroleum products throughout the affected region
HURRICANE MARIA OVERVIEW
As of 2:00 PM EDT, Hurricane Maria was 85 miles east-northeast of Puerto Plata, Dominican Republic, moving northwest at 9 MPH with maximum sustained winds of 120 MPH (category 3). Hurricane-force winds extend outward from the center up to 60 miles and tropical storm-force winds extend outward up to 150 miles.

Maria is continuing to produce rainfall across Puerto Rico and the U.S. Virgin Islands. As of the 2:00 PM EDT forecast, Puerto Rico can expect an additional 4 to 8 inches of rain and the Virgin Islands can expect an additional 2 to 4 inches. Many rivers in Puerto Rico are at or near flood stage and flash flood and flood warning have been issued throughout the region.

Maria is expected to continue northwest through tonight, followed by a turn toward the north-northwest on Friday. On the forecast track, Maria’s eye will continue to pass offshore of the northern coast of the Dominican Republic today, and then move near or just east of the Turks and Caicos Islands and southeastern Bahamas tonight and on Friday.
DOE ACTIONS

ESF#12 Responder Deployments:

- FEMA National Response Coordination Center – Washington, DC
  - Activities and responsibilities of the Region II Response Coordination Center have been absorbed by the National Response Coordination Center
- Hurricane Maria:
  - FEMA Region II IMAT – St. Croix
  - FEMA Region II IMAT – St. Thomas
  - FEMA Region II IMAT – Puerto Rico – Staging to Deploy
- Hurricane Harvey:
  - Texas Joint Field Office – Austin, TX
- Hurricane Irma:
  - Florida State Emergency Operations Center – Tallahassee, FL
- DOE has been in contact with the ESF #12 responder deployed to St. Croix to confirm safety following Hurricane Maria. DOE understands that FEMA IMAT on St. Thomas is safe; however, DOE has not spoken with responder deployed to that location. FEMA has reported that all responders on Puerto Rico were accounted for following the passage of the storm.
- DOE is prepared to deploy responders to Puerto Rico once conditions permit. Responders will pre-position in Atlanta, GA for a FEMA flight to the island.
Hurricane Maria
ELECTRICITY SECTOR

IMPACTS TO PUERTO RICO AND U.S. VIRGIN ISLANDS

<table>
<thead>
<tr>
<th>ELECTRICITY OUTAGES AS OF 2:30 PM EDT 09/21/2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Impacted State</td>
</tr>
<tr>
<td>----------------</td>
</tr>
<tr>
<td>Puerto Rico</td>
</tr>
<tr>
<td>Total</td>
</tr>
</tbody>
</table>

- President Trump approved a major disaster declaration for Puerto Rico and the U.S. Virgin Islands (USVI) due to impacts from Hurricane Maria.

Puerto Rico
- The Puerto Rico Electric Power Authority (PREPA) is reporting near 100% of total customers in Puerto Rico are without power, with the exception of facilities running on generators.
- DOE is coordinating with PREPA, FEMA, and industry on potential mutual aid, if needed.
- Significant flooding and debris have severely limited the ability to safely conduct damage assessments in the immediate aftermath of the storm.
- Puerto Rico Gov. Ricardo Rosselló established a nightly curfew from 6 PM EDT to 6 AM EDT that took effect Wednesday evening and will end Saturday morning. A number of exceptions to this curfew were announced, including for state and Federal personnel supporting recovery efforts.

U.S. Virgin Islands
- As of the afternoon of Wednesday, September 20, the majority of the 25,000 customers on St. Croix were reported to be without power. St. Thomas and St. John previously experienced extensive power outages from Hurricane Irma, with restoration focusing on critical facilities.
- St. Croix expects to reenergize the power plant and some switchgear once equipment dries, possibly as soon as Friday, September 22.
- USVI Water and Power Authority (WAPA) crews ceased restoration activities at 5 PM EDT on Monday in anticipation of Hurricane Maria. USVI WAPA’s administrative and customer service offices were also closed Tuesday and Wednesday in anticipation of the storm.
- USVI WAPA is expected to begin damage assessments across today, Thursday, September 21, as conditions permit.
- DOE is working closely with industry and FEMA to facilitate mutual aid for the U.S. Virgin Islands, while ensuring minimal burden on the USVI from additional personnel during Hurricane Maria.
PORTS

- The U.S. Coast Guard has set the following conditions for ports and waterways in Sector San Juan as a result of Hurricane Maria. Listed in the table are select ports that import petroleum products.

<table>
<thead>
<tr>
<th>Port</th>
<th>Average Imports (b/d)*</th>
<th>Status</th>
<th>Date Stamp</th>
</tr>
</thead>
<tbody>
<tr>
<td>Puerto Rico</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>San Juan</td>
<td>57,000</td>
<td>Port Condition Zulu. Closed.</td>
<td>09/19/17</td>
</tr>
<tr>
<td>Ponce</td>
<td>30,000</td>
<td>Port Condition Zulu. Closed.</td>
<td>09/19/17</td>
</tr>
<tr>
<td>Guayanilla</td>
<td>4,000</td>
<td>Port Condition Zulu. Closed.</td>
<td>09/19/17</td>
</tr>
<tr>
<td>Yabucoa</td>
<td>Not. Avail.</td>
<td>Port Condition Zulu. Closed.</td>
<td>09/19/17</td>
</tr>
<tr>
<td>U.S. Virgin Islands</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Christiansted, St. Croix</td>
<td>18,000</td>
<td>Port Condition Zulu. Closed.</td>
<td>09/18/17</td>
</tr>
<tr>
<td>Limetree Bay, St. Croix</td>
<td>Not. Avail.</td>
<td>Port Condition Zulu. Closed.</td>
<td>09/18/17</td>
</tr>
<tr>
<td>Cruz Bay, St. John</td>
<td>--</td>
<td>Port Condition Zulu. Closed.</td>
<td>09/18/17</td>
</tr>
<tr>
<td>Charlotte Amalie Harbor, St. Thomas</td>
<td>--</td>
<td>Port Condition Zulu. Closed.</td>
<td>09/18/17</td>
</tr>
</tbody>
</table>

*All petroleum products, excluding asphalt.
Source: Receipt data EIA Company Level Imports (Jan-May 2017)
Hurricane Irma
ELECTRICITY SECTOR

IMPACTS TO CONTINENTAL UNITED STATES

<table>
<thead>
<tr>
<th>Impacted State</th>
<th>Current Confirmed Customer Outages</th>
<th>Percent of Confirmed State Customers without Power</th>
<th>24-hr Peak Customer Outages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Florida</td>
<td>29,315</td>
<td>&lt;1%</td>
<td>62,513</td>
</tr>
<tr>
<td>Total</td>
<td>29,315</td>
<td>--</td>
<td>*</td>
</tr>
</tbody>
</table>

*There is no sum of the Peak Customer Outage column because peaks for individual utilities occur at different times; a total would not reflect peak outages.

Florida

- As of 7:30 AM EDT, September 21, Florida has 36,700 customer outages (<1% of total state customers).
  - Lee County Electric Cooperative has approximately 11,400 customer outages as of Thursday morning.
  - Florida Power and Light (FPL) has 10,790 customer outages.
  - Keys Energy Service has 4,351 customer outages.
  - Florida Keys Electric Cooperative has 1,420 customer outages.
- As of 11:00 AM EDT, September 20, FPL has restored power to approximately 99% of customers impacted by the storm.
  - As of 2:30 PM EDT, FPL is reporting 5,520 customer outages in Collier County. Restoration is estimated to be 95% completed by end of day Friday.
  - As of 2:30 PM EDT, FPL is reporting 4,950 customer outages in Lee County. Restoration is estimated to be 95% completed by end of day Thursday.
  - As of 2:30 PM EDT, FPL is reporting 10 customer outages in Miami-Dade County.
  - More than 99% of high-priority critical infrastructure facilities have been restored. More than 95% of schools and 99% of nursing homes, classified as priority, have been restored.
- The Florida Keys’ main transmission line, known as the tieline, is energized.
OIL & GAS SECTOR

PORTS

- The U.S. Coast Guard has set the following conditions for ports and waterways in the U.S. Southeast as a result of Hurricane Irma. Listed in the table are ports that receive petroleum products. Note, Caribbean ports are included in the previous section for Hurricane Maria.

<table>
<thead>
<tr>
<th>Port</th>
<th>Average Receipts (b/d)*</th>
<th>Status</th>
<th>Date Stamp</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sector Miami</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Port Everglades</td>
<td>298,000**</td>
<td>Open without restrictions.</td>
<td>09/12/17</td>
</tr>
<tr>
<td>Miami</td>
<td>1,500</td>
<td>Open without restrictions.</td>
<td>09/13/17</td>
</tr>
<tr>
<td>Port of Palm Beach</td>
<td>500</td>
<td>Open without restrictions.</td>
<td>09/13/17</td>
</tr>
<tr>
<td>Sector Key West</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All Ports</td>
<td>--</td>
<td>Open with restrictions. Temporary regulated navigation area and safety zone established. Speed restrictions in place, effective through 10/01.</td>
<td>09/16/17</td>
</tr>
<tr>
<td>Sector St. Petersburg</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tampa</td>
<td>273,700</td>
<td>Open without restrictions.</td>
<td>09/14/17</td>
</tr>
<tr>
<td>Port Manatee</td>
<td>700</td>
<td>Open without restrictions.</td>
<td>09/14/17</td>
</tr>
<tr>
<td>Sector Jacksonville</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Port of Jacksonville</td>
<td>69,800</td>
<td>Port Condition IV. Open without restrictions.</td>
<td>09/13/17</td>
</tr>
<tr>
<td>Port Canaveral</td>
<td>32,200</td>
<td>Port Condition IV. Open without restrictions.</td>
<td>09/14/17</td>
</tr>
<tr>
<td>Sector Mobile</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mobile (AL)</td>
<td>168,000 (outbound)</td>
<td>Open. Port Status Normal.</td>
<td>09/11/17</td>
</tr>
<tr>
<td>Pascagoula (MS)</td>
<td></td>
<td>Open. Port Status Normal.</td>
<td>09/11/17</td>
</tr>
<tr>
<td>Pensacola (FL)</td>
<td>11,400</td>
<td>Open. Port Status Normal.</td>
<td>09/11/17</td>
</tr>
<tr>
<td>Panama City (FL)</td>
<td>8,500</td>
<td>Open. Port Status Normal.</td>
<td>09/12/17</td>
</tr>
<tr>
<td>Gulf Intercostal Waterway</td>
<td></td>
<td>Open. Port Status Normal.</td>
<td>09/13/17</td>
</tr>
</tbody>
</table>

*Average imports and domestic receipts of transportation fuels (gasoline, distillate, and jet fuel), unless otherwise noted.

**Includes bunker fuel and fuel oil and distillate for power generation.

Source: Receipt data from U.S. EIA, USACE data (2013), EIA Company Level Imports
Below is a map of key petroleum ports and petroleum product pipelines in Florida.

Source: EIA: https://www.eia.gov/analysis/transportationfuels/padd1n3/
Hurricane Harvey

OIL & GAS SECTOR

PETROLEUM REFINERIES

- As of 2:00 PM EDT, September 21, three refineries in the Gulf Coast region were shut down, according to public reports. These refineries have a combined refining capacity of 372,000 b/d, equal to 3.8% of total Gulf Coast (PADD 3) refining capacity and 2.0% of total U.S. refining capacity. No refineries began restarting operations since the last report.

- Two refineries are in the process of restarting after being shut down. This process may take several days or weeks to start producing product, depending whether any damage is found during restart. Production should be assumed to be minimal until restart is completed. These refineries have a combined capacity 658,770 b/d, equal to 6.8% of total Gulf Coast (PADD 3) refining capacity and 3.6% of total U.S. refining capacity. No restarting refineries changed their status since the last report.

- At least eight refineries in the Gulf Coast region were operating at reduced rates, according to public reports. These refineries have a combined total capacity of 2,675,429 b/d, equal to 27.6% of total Gulf Coast (PADD 3) refining capacity and 14.4% of total U.S. refining capacity. (NOTE: Actual crude throughput (production) reductions are lower than the total combined capacity). No refineries began operating at reduced rates since the last report.
PORTS

- The U.S. Coast Guard has set the following conditions for ports and waterways in the Gulf Coast

<table>
<thead>
<tr>
<th>Sector Corpus Christi</th>
<th>Port</th>
<th>Crude Imports Jan-May 2017 (b/d)</th>
<th>Status</th>
<th>Date Stamp</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brownsville</td>
<td>--</td>
<td>Open.</td>
<td></td>
<td>08/31/17</td>
</tr>
<tr>
<td>Corpus Christi</td>
<td>245,000</td>
<td>Port Condition Recovery. Open with restrictions. Allowing vessels up to 43’ draft to transit during daytime hours only.</td>
<td>09/11/17</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sector Houston and Galveston</th>
<th>Port</th>
<th>Crude Imports Jan-May 2017 (b/d)</th>
<th>Status</th>
<th>Date Stamp</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freeport</td>
<td>133,000</td>
<td>Port Condition Recovery. Open. 24/7. 38’ max draft.</td>
<td></td>
<td>09/05/17</td>
</tr>
<tr>
<td>Galveston</td>
<td>114,000</td>
<td>Port Condition Recovery. Galveston Bay Entrance Channel, Outer Bar Channel, Inner Bar Channel, Bolivar Roads Anchorages, Bolivar Roads Channel, and Galveston Harbor open 24/7.</td>
<td>09/05/17</td>
<td></td>
</tr>
</tbody>
</table>
| Houston                      | 646,000     | Port Condition Recovery. Open with restrictions. Intracoastal Waterway open 24/7. Houston Ship Channel open 24/7 below Sidney Sherman bridge with draft restrictions:  
  - Entrance Channel to Houston Cement West – 42-foot to 40-foot max draft.  
  - Houston Cement West to Sidney Sherman Bridge – 36-foot max draft | 09/13/17     |
| Texas City                   | 134,000     | Port Condition Recovery. Open. 24/7 with no restrictions. |                                                                         | 09/05/17     |

<table>
<thead>
<tr>
<th>Sector Port Arthur and Lake Charles</th>
<th>Port</th>
<th>Crude Imports Jan-May 2017 (b/d)</th>
<th>Status</th>
<th>Date Stamp</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sabine Pass</td>
<td>--</td>
<td>Port Condition Recovery. Open with restrictions.</td>
<td></td>
<td>09/18/17</td>
</tr>
<tr>
<td>Port Arthur</td>
<td>687,000</td>
<td>Port Condition Recovery. Open with restrictions.</td>
<td></td>
<td>09/18/17</td>
</tr>
<tr>
<td>Beaumont/</td>
<td>33,000</td>
<td>Port Condition Recovery. Open with restrictions. Max draft of 31 feet on Neches River from ExxonMobil to Port of Beaumont due to shoaling.</td>
<td>09/19/17</td>
<td></td>
</tr>
<tr>
<td>Port Neches</td>
<td>--</td>
<td>Port Condition Recovery. Open with restrictions. Open to full 40 foot charted depth in Neches River Waterway from “SB” Buoy to ExxonMobil dock 4.</td>
<td>09/18/17</td>
<td></td>
</tr>
<tr>
<td>Nederland</td>
<td>--</td>
<td>Port Condition Recovery. Open with restrictions. Open to full 40 foot charted depth in Neches River Waterway from “SB” Buoy to ExxonMobil dock 4.</td>
<td>09/18/17</td>
<td></td>
</tr>
<tr>
<td>Lake Charles</td>
<td>218,000</td>
<td>Port Condition Recovery. Open with restrictions. 38 feet draft restrictions of the Calcasieu Ship Channel.</td>
<td>09/18/17</td>
<td></td>
</tr>
</tbody>
</table>

Source: U.S. Coast Guard
Emergency Declarations & Waivers

EMERGENCY DECLARATIONS

- Twelve states, including Puerto Rico and USVI, declared state emergencies due to Irma & Harvey. These declarations automatically waived select Federal Motor Carrier Safety Regulations (FMCSRs), including hours-of-service (HOS) regulations, for motor carriers hauling resources to aid in restoration. The declarations exempted FCMSR in every state along the motor carrier’s route as long as the final destination was with the declared disaster areas. Some HOS waivers applied specifically to the movement of petroleum products in or through the state. On September 18, USVI and Puerto Rico declared a state of emergency for Hurricane Maria and on September 20, President Trump approved a major disaster declaration.

- In addition, the Federal Motor Carrier Safety Administration (FMCSA) issued a Regional Emergency Declaration for Hurricane Harvey exempting FMCSRs in the States of Texas and Louisiana. On August 31, the FMCSA expanded the Regional Emergency Declaration to additional states and Washington, DC. On September 6, the Regional Emergency Declaration was extended for states affected by Hurricane Irma. On September 7, the Irma Regional Declaration was expanded again to include states in the Mid-Atlantic and Northeast. On September 11, an Amended Regional Declaration of Emergency was released that extended the exemption of FMCSRs in all 27 states and Washington D.C. through September 30, 2017, or the end of the emergency as defined.

- The table below summarizes emergency declarations and HOS waivers issued by states in response to the impacts of Hurricane Harvey and Hurricane Irma.

<table>
<thead>
<tr>
<th>State</th>
<th>Details</th>
<th>Effective Dates</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regional</td>
<td>Regional Emergency Declarations and FMCSR waivers issued by FMCSA.</td>
<td>For Harvey: 08/25/17</td>
<td>Extension for All States: 09/30/17</td>
</tr>
<tr>
<td>(Multi-State)</td>
<td><strong>For Harvey</strong>: Applies to Alabama, Arkansas, Colorado, Connecticut, Delaware, Florida, Georgia, Illinois, Indiana, Kansas, Kentucky, Louisiana, Maryland, Mississippi, Missouri, New Jersey, New York, North Carolina, Ohio, Oklahoma, Pennsylvania, Tennessee, Texas, South Carolina, Virginia, Washington, D.C., and West Virginia.</td>
<td>Expanded for Harvey: 08/31/17</td>
<td>Active</td>
</tr>
<tr>
<td></td>
<td><strong>For Irma</strong>: Applies to Alabama, Florida, Georgia, Mississippi, North Carolina, South Carolina, Tennessee, Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont, Virginia, West Virginia, D.C., Puerto Rico, &amp; the U.S. Virgin Islands.</td>
<td>For Irma: 09/06/17</td>
<td>Expanded for Irma: 09/07/17</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Extended: 09/11/17</td>
<td>Extended: 09/11/17</td>
</tr>
<tr>
<td>State</td>
<td>Description</td>
<td>Start Date</td>
<td>End Date</td>
</tr>
<tr>
<td>-----------</td>
<td>--------------------------------------------------------------------------------------------------</td>
<td>------------</td>
<td>-----------</td>
</tr>
<tr>
<td>Alabama</td>
<td>State of Emergency/HOS waiver issued for petroleum products and petroleum-related supplies, goods, and services in the State. International Registration Plan and International Fuel Tax Agreement requirement suspended for vehicles engaged in or travelling through Alabama for disaster relief efforts in Florida.</td>
<td>08/30/17</td>
<td>09/08/17</td>
</tr>
<tr>
<td>Florida</td>
<td>State of Emergency/HOS waiver</td>
<td>09/04/17</td>
<td>11/03/17</td>
</tr>
<tr>
<td>Georgia</td>
<td>State of Emergency/HOS waiver expanded to all counties in Georgia on 9/10. For Harvey: 08/30/17 For Irma: 09/07/17 Expanded for Irma: 09/08/17 Expanded for Irma: 09/10/17</td>
<td>09/08/17</td>
<td>09/22/17</td>
</tr>
<tr>
<td>Kansas</td>
<td>Governor acknowledged state of emergency in Texas and declared that licensing rules, registration and fuel tax permits, and oversize vehicle permit fees are waived for motor carriers and persons operating motor vehicles directly participating in the relief and restoration effort.</td>
<td>08/30/17</td>
<td>09/30/17</td>
</tr>
<tr>
<td>Kentucky</td>
<td>State of Emergency/HOS waiver issued for transporters of food, water, medicine, fuel and other commodities within the affected areas to aid in emergency response of affected areas. State of Emergency Declaration/HOS waiver for petroleum products.</td>
<td>08/28/17</td>
<td>09/27/17</td>
</tr>
<tr>
<td>Louisiana</td>
<td>State of Emergency.</td>
<td>08/23/17</td>
<td>TBD</td>
</tr>
<tr>
<td>Michigan</td>
<td>State of Emergency/HOS waiver issued for petroleum products through the state.</td>
<td>08/31/17</td>
<td>09/15/17</td>
</tr>
</tbody>
</table>
Sources: [U.S. Department of Transportation](#); Governor Office Websites

### FUEL WAIVERS

- The table below lists fuel-related waivers issued by the U.S. Environmental Protection Agency (U.S. EPA) and other Federal and State agencies for Hurricanes Harvey and Irma.
- On August 30, U.S. EPA issued a multi-state (13 states) waiver for requirements of low-RVP conventional gasoline and reformulated gasoline (RFG) in response to Hurricane Harvey. The next day, the waiver was expanded to include 38 states and Washington, DC. On September 7, in preparation for Hurricane Irma, the EPA extended the temporary waiver for RFG until September 26. The low-RVP waiver for all states (except Texas) expired September 15 when the normal season RVP change occurs. In addition, EPA extended the Low Volatility SIP waiver in Texas and other federally-enforceable areas through September 16. This was extended on September 13 to October 1.

<table>
<thead>
<tr>
<th>State</th>
<th>Description</th>
<th>Start Date</th>
<th>End Date</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>North Carolina</td>
<td>State of Emergency/HOS waiver issued for petroleum products.</td>
<td>08/31/17</td>
<td>09/30/17</td>
<td>Active</td>
</tr>
<tr>
<td></td>
<td>State of Emergency/HOS waiver issued for petroleum products, and emergency relief supplies and services through the state.</td>
<td>09/07/17</td>
<td>10/06/17</td>
<td>Active</td>
</tr>
<tr>
<td>Puerto Rico</td>
<td>State of Emergency</td>
<td>09/04/17</td>
<td>--</td>
<td>Active</td>
</tr>
<tr>
<td></td>
<td>Declared for Maria: 09/18/17</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>South Carolina</td>
<td>State of Emergency/HOS waiver issued for petroleum products through the state.</td>
<td>09/06/17</td>
<td>10/06/17</td>
<td>Active</td>
</tr>
<tr>
<td>Tennessee</td>
<td>Limited State of Emergency. EO-67 suspends certain vehicle restrictions for vehicles providing emergency supplies, equipment, or mobile housing units</td>
<td>09/11/17</td>
<td>11/08/17</td>
<td>Active</td>
</tr>
<tr>
<td>Texas</td>
<td>State of Disaster declared for 61 counties in Texas.</td>
<td>08/23/17</td>
<td>TBD</td>
<td>Active</td>
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<tr>
<td></td>
<td>Expanded: 08/30/17 Expanded: 09/01/17</td>
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<tr>
<td>Virginia</td>
<td>State of Emergency/HOS waiver issued for petroleum products through the state.</td>
<td>For Harvey: 09/01/17 For Irma: 09/07/17</td>
<td>For Harvey: 09/15/17 For Irma: 06/30/18, or rescinded.</td>
<td>Active</td>
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<tr>
<td>U.S. Virgin Islands</td>
<td>State of Emergency</td>
<td>09/04/17</td>
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<td>Active</td>
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<td>Declared for Maria: 09/18/17</td>
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<tr>
<td>State</td>
<td>Waiver</td>
<td>Issued By</td>
<td>Effective Dates</td>
<td>Status</td>
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| Multi-state waiver | RVP standard waived for gasoline sold in affected counties where low-RVP gasoline is required (9.0 RVP or lower). Allows sale of gasoline up to 11.5 psi RVP in all states located in PADD 1, PADD 2, and PADD 3. RFG standard is also waived in the designated regions. Also waived are provisions prohibiting the blending of RFG blendstock with conventional gasolines or blendstocks. | U.S. EPA | For Harvey: 08/30/17 Expanded for Harvey: 08/31/17 Extended for Irma: 09/07/17 For RVP: 09/15/17 For RFG: 09/26/17 | Expired
| TX | RFG requirement waived in Houston-Galveston-Brazoria areas. Waiver expanded to four-county Dallas-Fort Worth RFG area 8/26. Allows the sale or distribution of conventional gasoline. This was extended on 09/13 to October 1. | U.S. EPA | 08/25/17 Expanded: 08/26/17 Extended: 10/01 | Active |
| TX | 7.8 psi RVP standard waived for gasoline sold in 20 counties where low-RVP gasoline is required and are also under the Governor’s Disaster Declaration. Waiver expanded to 98 counties required to use low-RVP fuel 8/26. Allows sale of gasoline up to 9.0 psi RVP. This was extended on 09/13 to October 1. | U.S. EPA | 08/25/17 Extended: 10/01 | Expired |
| FL | Limited waiver of highway diesel fuel red dye requirements. Allows sale, distribution, and use of red dye NRLM diesel fuel for use in highway diesel vehicles, but diesel fuel must meet 15 ppm standard. Waiver of tax penalties when dyed diesel fuel is sold and used for highway use in Florida. | U.S. EPA U.S. IRS | 09/06/17 09/06/17 | Active |
| LA | RVP requirements of 7.8 psi and 9.0 psi waived in applicable areas. Permits the sale or distribution of winter gasoline with an 11.5 psi RVP. | State of Louisiana | 08/29/17 Expanded: 08/30/17 09/15/17 | Expired |
MI  RVP regulations waived. Permits the transportation and sale of motor fuels 9.0 psi RVP in Wayne, Oakland, Macomb, St. Clair, Livingston, Washtenaw, Monroe, and Lenawee counties, and up to 11.5 psi RVP elsewhere in Michigan.  State of Michigan 08/31/17 09/15/17 Expired

MS  RVP standards of 9.0 psi waived. Permits the sale or distribution of winter gasoline with an 11.5 psi RVP.  State of Mississippi 08/30/17 09/15/17 Expired

SC  RVP standards of 9.0 psi waived. Permits the sale or distribution of winter gasoline with an 11.5 psi RVP. Allows the comingling of RFG with conventional gasoline. Waives butane blending and T V/L = 20 requirements.  State of South Carolina 09/07/17 10/31/17 Active

VA  Waived the RVP limit for gasoline ethanol blends prescribed by regulations. Extended waiver to apply through duration of Hurricane Irma impact on 9/8.  State of Virginia 09/01/17 Extended: 09/08/17 Until further notice. Active

Sources: U.S. Environmental Protection Agency; State Governments

OTHER WAIVERS

• Department of Homeland Security
  o On September 8, the Acting Secretary of Homeland Security waived Jones Act requirements for shipping refined petroleum products—including gasoline, diesel and jet fuel—to Florida for a 7-day period. The waiver of the Jones Act will allow foreign flag vessels to bring in fuel from New York, Pennsylvania, Texas, and Louisiana to South Carolina, Georgia, Florida and Puerto Rico to help with fuel shortages amid the threat from Hurricane Irma. On September 11, the Jones Act waiver was expanded to include shipments from all states in PADD 1B and PADD 3 to all states in PADD 1C. The waiver applies to covered merchandise laded on board a vessel through and including September 22, 2017.

• Federal Energy Regulatory Commission (FERC)
  o On September 5, the Federal Energy Regulatory Commission (FERC) approved an emergency waiver tariff, effective immediately, allowing the pipeline system to accept 11.5 RVP gasoline (A3) to fill nominations for 7.8 RVP gasoline (A1) and 9.0 RVP gasoline (A2); and to ship conventional gasoline in lieu of reformulated gasoline. Colonial’s tariffs and tariff practices would not normally permit it to accept product that does not conform to the specifications of the product that was nominated.

• Department of Transportation (DOT)
  o On September 8, DOT’s Pipeline and Hazardous Materials Safety Administration (PHMSA) issued an Emergency Waiver Order under 49 U.S.C. 5103 and Stafford Act declarations made for the U.S. Virgin Islands, Puerto Rico, Florida, and South Carolina, to persons conducting operations under the direction of the Environmental Protection Agency and the U.S. Coast Guard that support appropriate actions to prepare for, respond to, and recover from a threat to public health, welfare, or the environment
caused by actual or potential oil and hazardous materials incidents resulting from Hurricane Irma in Puerto Rico, U.S. Virgin Islands, Florida, and South Carolina. On September 10, 2017, based on a Stafford act emergency declaration, PHMSA amended this order to include Georgia.

- On September 1, PHMSA issued an Emergency Stay of Enforcement for operators affected by Hurricane Harvey. The declaration states that PHMSA does not intend to take any enforcement action relating to their noncompliance with certain operator qualification requirements, or pre-employment and random drug testing requirements, arising from the use of personnel for pipeline activities related to response and recovery. On September 7, PHMSA issued an enforcement stay for the waiver to include states affected by Hurricane Irma. The states included in this extension are Florida, Georgia, North Carolina, South Carolina, and Puerto Rico.

- On September 20, PHMSA issued an Emergency Stay of Enforcement for pipeline operators that may be affected by Maria. PHMSA will not take enforcement action relating to operator noncompliance with certain operator qualification requirements, or pre-employment and random drug testing requirements, arising from the use of personnel for pipeline activities related to response and recovery. The waiver took effect on September 20 and will expire on November 4, unless PHSMA determines it needs to be extended.

- **Environmental Protection Agency (EPA)**
  
  - On September 11, the EPA issued a blanket waiver for all power plant facilities in Florida, allowing them to operate without meeting all pollution controls in order to maintain the supply of electricity to customers and critical facilities across the state as a result of Hurricane Irma. The ‘no action assurance’ is temporary and will terminate on September 26, 2017; it was requested by the Florida Department of Environmental Protection and determined by EPA to be in the public’s interest. The facilities must continue to comply with all other federal, state and local environmental law and are still required to monitor and report levels of regulated contaminants released.