



Tropical Storm Michael | Report #3

REPORT TIME & DATE: 9:00 AM EDT | Thursday, October 11, 2018
INCIDENT START DATE: Wednesday, October 10, 2018
PRIMARY LOCATION(S): Alabama, Florida, Georgia, North Carolina, South Carolina
REPORT DISTRIBUTION: Public

EXECUTIVE SUMMARY

As of 8:00 AM EDT, Tropical Storm Michael was 40 miles west-northwest of Columbia, South Carolina, moving northeast at 21 MPH, with maximum sustained winds of 50 MPH. Tropical storm-force winds extend outward from the center up to 160 miles. On the forecast track, the center of Michael will continue to move across central South Carolina this morning, then move across portions of central and eastern North Carolina and southeastern Virginia this afternoon and evening, before moving into the Atlantic Ocean by late tonight or early Friday.

Electricity Sector Summary

- Customer Outages as of 8:00 AM EDT:
 - Alabama: 60,905 customer outages (2.4%)
 - Florida: 309,691 customer outages (3.2%)
 - Georgia: 336,364 customer outages (7.1%)
 - North Carolina: 13,630 customer outages (0.3%)
 - South Carolina: 100,648 customer outages (4.3%)
 - *Note: Customer outages number will continue to increase and may fluctuate as the Hurricane Michael impacts the southeast.*
- Crews in the impacted area have begun to perform damage assessments and restorations as the weather and flooding permit.
- Fluctuation in the outage numbers is expected and normal during large-scale restoration efforts.
- Utilities across the impacted area pre-staged crews, equipment, and materials and mutual assistance networks have been activated, with over 30,000 personnel positioned to support restoration efforts.

Oil & Natural Gas Sector Summary

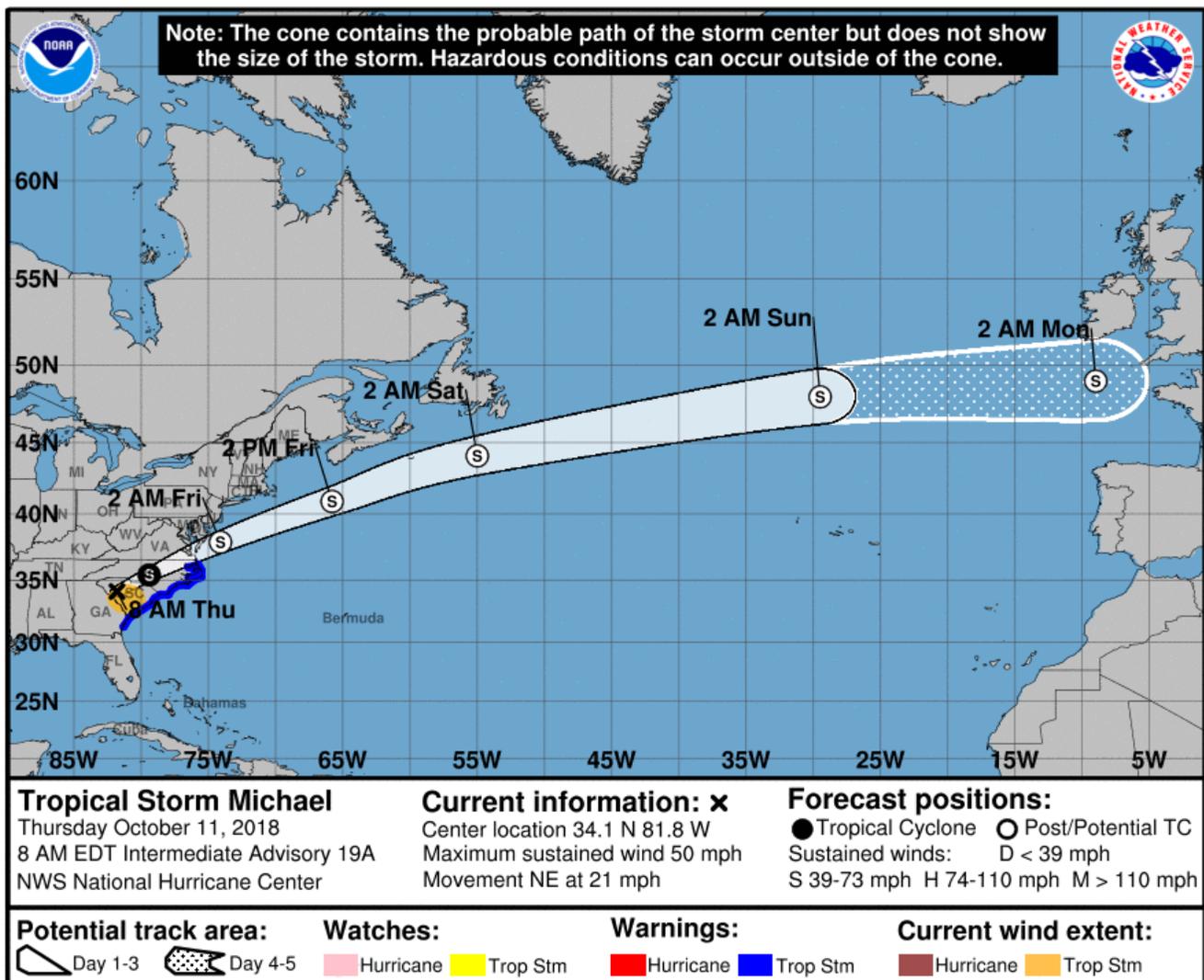
- For the week ending on September 28, the Lower Atlantic Region (WV, VA, NC, SC, GA, and FL) had 28.7 million barrels of total gasoline stocks, according to the Energy Information Administration. This is 15% higher than the 5-year average for this time of year.
- As of 6:00 AM October 11, 5.7% of Florida gas stations (including 36% of Florida Panhandle stations), 2.3% of Georgia gas stations, and 1.2% of Alabama gas stations were reported out-of-service due to lack of fuel and/or power.

Tropical Storm MICHAEL

As of 8:00 AM EDT, Tropical Storm Michael was 40 miles west-northwest of Columbia, South Carolina, moving northeast at 21 MPH, with maximum sustained winds of 50 MPH. Tropical storm-force winds extend outward from the center up to 160 miles. On the forecast track, the center of Michael will continue to move across central South Carolina this morning, then move across portions of central and eastern North Carolina and southeastern Virginia this afternoon and evening, before moving into the Atlantic Ocean by late tonight or early Friday.

Michael is forecast to produce total rain accumulations of 4 to 7 inches from eastern Georgia to the southern Mid-Atlantic and 1 to 3 inches over the northern Mid-Atlantic and coastal southern New England.

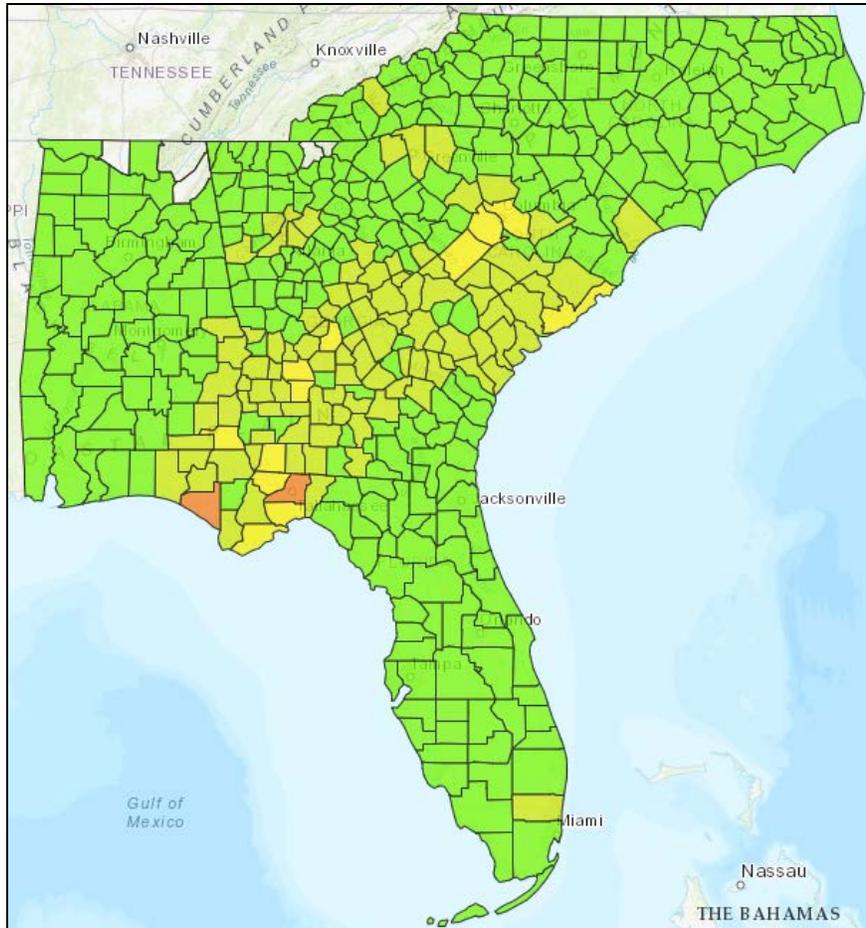
A tropical storm warning remains in effect from the Altamaha Sound, Georgia to Duck, North Carolina, as well as the Pamlico and Albemarle Sounds.



ELECTRICITY SECTOR

POWER OUTAGES

Outage Map (as of 8:00 AM EDT)



ELECTRICITY OUTAGES AS OF 8:00 AM EDT 10/11/2018

| Impacted State | Current Confirmed Customer Outages | Percent of Total Customers in State without Power | 24-Hour Peak Customer Outages |
|----------------|------------------------------------|---|-------------------------------|
| Alabama | 60,905 | 2.4% | 65,365 |
| Florida | 309,691 | 3.2% | 314,563 |
| Georgia | 336,364 | 7.1% | 336,364 |
| North Carolina | 13,630 | 0.3% | 13,630 |
| South Carolina | 100,648 | 4.3% | 100,648 |
| Total | 821,238 | - | * |

**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.*

ELECTRICITY IMPACTS & RESTORATION EFFORTS

- Crews in the impacted area, where the storm has passed, have begun to perform damage assessments and restorations as the weather conditions permit. Estimate restoration timelines will begin to be developed once damage assessments are complete.
- Impacted and potentially impacted utilities have mobilized over 30,000 personnel, including utility crews, contractors, and mutual assistance workers from at least 24 states to restore power.
- Restoration efforts and damage assessments will be limited until the storm has passed and weather conditions permit. Crews are unable to operate in heavily flooded areas and when wind speeds are greater than 30 MPH.
- Potentially affected utilities have prepositioned crews, materials, and equipment to begin restorations as conditions permit.
- Mutual aid networks have been activated and crews from utilities across the country are preparing to support restoration efforts.

Alabama

| | | |
|--------------------------------|---|----------------------------------|
| 60,905 Customer Outages | ↑ >100% since Oct 10, 3:00 PM EDT | 65,365 24-hr Peak Outages |
|--------------------------------|---|----------------------------------|

- **Significantly Impacted Utilities**
 - Alabama Power Co.: 45,986 Customer Outages
 - Wiregrass Electric Coop Inc.: 14,857 Customer Outages
- As of 4:30 AM EDT, Alabama Power reports Hurricane Michael disrupts service to 45,000 customers as it leaves the state. Approximately 10,000 customers in Houston, 7,400 in Henry, 6,000 in Lee, 5800 each in Geneva and Dale, 5200 in Barbour, 3000 in Russell counties. Teams will be further assessing damage beginning at first light.

Florida

| | | |
|---------------------------------|--|-----------------------------------|
| 309,691 Customer Outages | ↑ 17% since Oct 10, 4:00 PM EDT | 314,563 24-hr Peak Outages |
|---------------------------------|--|-----------------------------------|

- **Significantly Impacted Utilities**
 - Gulf Power (Southern Company): 112,835 Customer Outages
 - Tallahassee Electric: 111,230 Customer Outages
 - Talquin Electric Coop: 49,470 Customer Outages
 - Duke Energy Florida: 30,845 Customer Outages
 - Florida Power and Light: 22,439 Customer Outages

Georgia

| | | |
|---------------------------------|---|-----------------------------------|
| 336,364 Customer Outages | ↑ >100% since Oct 10, 3:00 PM EDT | 336,364 24-hr Peak Outages |
|---------------------------------|---|-----------------------------------|

- **Significantly Impacted Utilities**
 - Georgia Power: 188,376 Customer Outages
 - Mitchell EMC: 22,543 Customer Outages
 - Grady EMC: 19,189 Customer Outages
 - Flint Energies: 18,967 Customer Outages



North Carolina

| | | |
|--------------------------------|---|----------------------------------|
| 13,630 Customer Outages | ↑ 100% since Oct 10, 3:00 PM EDT | 13,630 24-hr Peak Outages |
|--------------------------------|---|----------------------------------|

- **Significantly Impacted Utilities**
 - Duke Energy: 11,774 Customer Outages

South Carolina

| | | |
|---------------------------------|---|-----------------------------------|
| 100,648 Customer Outages | ↑ >100% since Oct 10, 3:00 PM EDT | 100,648 24-hr Peak Outages |
|---------------------------------|---|-----------------------------------|

- **Significantly Impacted Utilities**
 - South Carolina Electric & Gas: 74,084 Customer Outages
 - South Carolina Cooperatives: 30,310 Customer Outages
 - Duke Energy: 11,911 Customer Outages

BACKGROUND AND PREPARATIONS

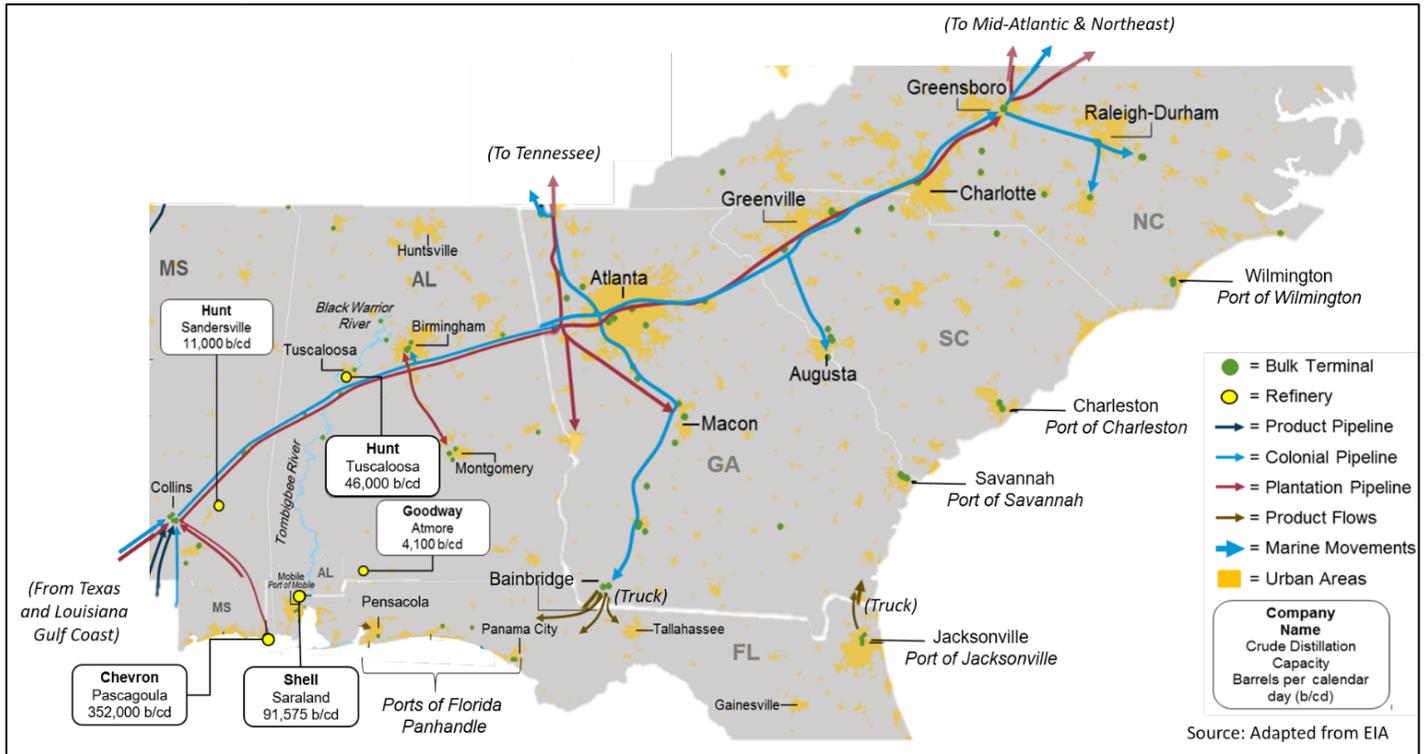
- The affected area is served by several utilities, including investor owned utilities, municipal utilities, and cooperative utilities. The three associations that represent these utilities and manage the mutual assistance networks, Edison Electric Institute (EEI), American Public Power Association (APPA), and the National Rural Electric Cooperative Association (NRECA), have been in regular contact with DOE, the potentially affected entities, and their mutual assistance networks.



OIL & NATURAL GAS SECTOR

OIL AND NATURAL GAS SECTOR OVERVIEW

The map below highlights the petroleum fuels supply chain in the area threatened by Hurricane Michael.



OFFSHORE PRODUCTION AND OIL & GAS PLATFORMS

- As of 12:30 PM EDT, October 10, 718,877 b/d (42.3%) of the oil production and 812 MMcf/d (31.7%) 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).

| U.S. Gulf of Mexico Oil & Gas Production Status | | | | |
|---|-----------------|-------------------|-------------------|-------------------|
| as of 12:30 PM EDT 10/10/2018 | | | | |
| Production | Pre-Event | Shut-In (10/08) | Shut-In (10/09) | Shut-In (10/10) |
| Crude Oil (b/d) | 1,700,000 | 324,190 | 670,831 | 718,877 |
| Natural Gas (MMcf/d) | 2,560 | 284 | 726 | 812 |
| Infrastructure | Pre-Event Count | Evacuated (10/08) | Evacuated (10/09) | Evacuated (10/10) |
| Manned Platforms | 687 | 10 | 75 | 89 |
| Rigs | 37 | 5 | 11 | 7 |

Source: BSEE

PORTS

- As of October 9, the Louisiana Offshore Oil Port (LOOP) has suspended operations at its Marine Terminal, which is the largest crude oil offloading facility in the United States. Currently, there are no interruptions in receipts or deliveries at LOOP's onshore Clovelly Hub storage facility. LOOP is executing its inclement weather plan and is closely monitoring the storm.
- The U.S. Coast Guard has set the following conditions for Gulf Coast and Southeast ports as a result of Hurricane Michael.

| Status of Southeast Ports as of 7:30 AM EDT 10/11/2018 | | | | | | | |
|--|------------------|--|------------|--------------------|---------|-----------|--------|
| Port Sector | Port | Status | Date Stamp | 2016 Volumes (b/d) | | | |
| | | | | Products* | | Crude Oil | |
| | | | | In | Out | In | Out |
| Mobile | Mobile, AL | Open. | 10/10 | 4,000 | 136,000 | 210,000 | 12,000 |
| | Pascagoula, MS | Open. | 10/10 | 13,000 | 114,000 | 156,000 | 2,000 |
| | Panama City, FL | Closed. Port Status Zulu. | 10/09 | 7,697 | - | - | - |
| | Pensacola, FL | Closed. Port Status Zulu. | 10/09 | 10,273 | - | - | - |
| Jacksonville | Jacksonville, FL | Open with restrictions. Port Status Whiskey. | 10/09 | 86,000 | 1,000 | - | - |
| Savannah | Savannah, GA | Open with restrictions. Port Status Yankee. | 10/10 | 15,000 | 1,000 | - | - |
| Charleston | Charleston, SC | Open with restrictions. Port Status Yankee. | 10/10 | 22,000 | - | - | - |
| North Carolina | Wilmington, NC | Closed. Port Status Zulu. | 10/10 | 6,000 | - | - | - |
| Hampton Roads | Norfolk, VA | Open with restrictions. Port Status X-ray. | 10/10 | 7,000 | - | - | - |
| | Newport News, VA | Open with restrictions. Port Status X-ray. | 10/10 | 3,000 | - | - | - |

*Transportation fuels (gasoline, distillate, jet fuel) volumes only.

Source: U.S. Coast Guard [Homeport](#), U.S. Army Corp of Engineers, EIA Company Level Imports

FUEL STOCKS

- For the week ending on September 28, the Lower Atlantic Region (WV, VA, NC, SC, GA, and FL) had 28.7 million barrels of total gasoline stocks, according to the Energy Information Administration (EIA). This is 15% higher than the 5-year average for this time of year.
- For the week ending on September 28, the Lower Atlantic Region had 12.1 million barrels of total distillate stocks, according to EIA. This is equivalent to the 5-year average for this time of year.

RETAIL FUEL STATIONS

- As of 6:00 AM October 11, 5.7% of Florida gas stations (including 36% of Florida Panhandle stations), 2.3% of Georgia gas stations, and 1.2% of Alabama gas stations were reported out-of-service due to lack of fuel, lack of power, or both, according to GasBuddy.com.



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 Emergency Declarations and HOS Waivers as of 7:30 AM EDT 10/11/2018 | | | | |
|---|--|-----------------|-----------------|--------|
| State* | Details | Effective Dates | | Status |
| | | Start | End | |
| AL, FL, GA, LA, MS, NC, SC, TN | FMCSA Regional Emergency Declaration | 10/09 | 11/09 | Active |
| Florida* | State of Emergency Declaration | 10/07 | 12/06 | Active |
| Alabama | State of Emergency Declaration | 10/08 | 11/07 | Active |
| Georgia* | State of Emergency Declaration | 10/09 | 10/16 | Active |
| North Carolina* | State of Emergency Declaration | 10/10 | Until Rescinded | Active |
| Kentucky | State of Emergency Declaration | 10/10 | 11/10 | Active |

Sources: [U.S. Department of Transportation](#); Governor Office Websites

*Includes 35 counties in northern Florida, 92 counties in southern Georgia, and 66 counties in North Carolina. See Declarations for the full listing.

FUEL WAIVERS

The Environmental Protection Agency (EPA), working with the Department of Energy (DOE), responds quickly to address fuel supply disruptions caused by hurricanes or other natural disasters by issuing emergency waivers of certain fuel standards in affected areas. There are no fuel waivers at this time.

OTHER FEDERAL WAIVERS

- On October 10, **PHMSA** issued an Emergency **Stay of Enforcement for pipeline and LNG facility operators** affected by Hurricane Michael. Under the stay, PHMSA does not intend to take enforcement action relating to operators’ temporary noncompliance with operator qualification requirements found in 49 C.F.R. §§ 192.801–192.809 and 195.501–195.509, or pre-employment and random drug testing requirements found in 49 C.F.R. § 199.105(a), (c) arising from the use of personnel for pipeline activities related to response and recovery. The stay which went into effect on October 10 will remain in effect for 45 days until November 24, unless PHMSA determines an extension is required. In addition, on October 10, **PHMSA** issued an **Emergency Assistance Personnel** waiver for Alabama, Florida, Georgia, North Carolina, and South Carolina affected by Hurricane Michael. For 30 days following October 10, PHMSA waived the notice required under 49 U.S.C. § 60118(d), which necessitates a 60-day review period for States to notify PHMSA that it intends to waive a pipeline safety regulation adopted by the State pursuant to State certification under 49 U.S.C. § 60105 for the above listed requirements.

