### OFFICE OF ELECTRICITY DELIVERY AND ENERGY RELIABILITY (OE) U.S. DEPARTMENT OF ENERGY Gulf Coast Hurricanes<sup>1</sup> Situation Report #1 September 24, 2005 (3:00 PM EDT)

# **HIGHLIGHTS**

- Currently, 1,139,425 customers are without electric power in Texas, Louisiana and Mississippi. This includes new customer outages due to Hurricane Rita as well as outages remaining from Hurricane Katrina. This number is expected to <u>increase</u> as more outages are reported in areas of Texas and Louisiana hit by Rita.
- ESF-12 in Texas is supporting efforts to aid refineries in the Port Arthur area. ESF-12 has assisted companies in obtaining clearances for repair and maintenance work. ESF-12 is also working with the electric utilities to expedite power restoration to the refinery industry.
- DOE participated with other agencies in supporting development of a strategy for prepositioning fuel to support Hurricane Rita first responders. The plan was developed in response to requests for fuel in various locations. After a joint meeting with GSA, TSA, DOD, and ESF-12 and 13, a decision was reached to solve problem of fuel supplies for first responders. Six locations were identified to serve as fuel depots strategically located throughout the impact area. There will be 5,000 gallons of gasoline and 5,000 gallons of diesel in each of the six locations, designed to be a gravity feed, retail distribution-type point. The sites will be established by DOD to refuel responders working response missions in the impact area. The sites should be in operation by 12 noon on Sunday, 9/25, and remain in operation for a 10-day period. ESF-13 will provide 24-hour security in conjunction with these sites. DOD will coordinate with the TX DOT main point of contact regarding fuel issues.
- On 9/21, EPA issued a reformulated gasoline (RFG) waiver for the Houston/Galveston, TX area. EPA expanded the waiver to include the Dallas/Forth Worth area. The second waiver will expire September 30. The waiver allows both areas to use conventional gasoline for distribution and for sale in those areas from September 21 through September 26, 2005. Due to gasoline supply concerns, EPA also extended the RFG waiver for Richmond, VA until September 30.
- The Strategic Petroleum Reserve sites of Big Hill, Bryan Mound, and West Hackberry sites are shut down and staff have evacuated in preparation for Hurricane Rita. The Bayou Chactow site is on Alert Level II and operating. A fly-over of the facilities will take place soon.
- DOE staff have been at the National Response Coordination Center (NRCC) at FEMA HQ, the Interagency Incident Management Team at HQ and the State Emergency Operation Center (EOC) in Louisiana for several weeks. Three staff are in Austin, TX, in preparation for Hurricane Rita. Another is at NORTHCOM, per its request.

- On 9/23/05, Entergy <u>New Orleans</u> filed for bankruptcy protection (not Entergy Corporation). Entergy Corporation, Entergy New Orleans, the Louisiana Congressional delegation, the New Orleans City Council and the mayor of New Orleans are working in concert to try to get direct assistance from the federal government so that customers don't have to pay for the existing, now damaged, facilities and any new replacement facilities.
- Hurricane Rita has been downgraded to a Category 1 hurricane. Maximum sustained winds are near 75 mph. Further weakening is expected over the next several hours. The storm has moved inland and since Rita is expected to slow down significantly, rainfall totals of 10 to 15 inches are expected over eastern Texas and western Louisiana. Maximum rainfall of over 25 inches may occur in localized areas. Isolated tornadoes are possible today and tonight over far eastern Texas, Louisiana, southern Arkansas, and Mississippi.

#### **OIL AND GAS INFORMATION**

MMS reports today that as a result of damage from Hurricane Katrina and precautionary actions in advance of Hurricane Rita, shut-in oil production in the Gulf is currently at 1,500,898 barrels of oil per day. The shut-in oil production is equivalent to 100 percent of the normal daily oil production in the Gulf, which is currently approximately 1.5 million barrels of oil per day. Shut-in gas production is at 7.488 billion cubic feet per day. This shut-in gas production is equivalent to 74.88 percent of the normal daily gas production in the Gulf, which is currently approximately 10 billion cubic feet per day. These evacuations are equivalent to 79.73 percent of 819 manned platforms and 68.66 percent of 134 rigs currently operating in the Gulf.

Date	Percent of GOM Oil Shut-in	Percent of GOM Gas Shut-in
August 30	95.20	87.99
August 31	91.45	83.46
September 1	90.43	78.66
September 2	88.53	72.48
September 3	78.98	57.80
September 4	No data reported	No data reported
September 5	69.57	54.13
September 6	58.02	41.06
September 7	57.37	40.36
September 8	60.12	40.20
September 9	59.88	38.29
September 10	59.84	38.21
September 11	No data reported	No data reported
September 12	57.38	37.84
September 13	56.45	37.20
September 14	56.25	35.18
September 15	56.14	34.11

Gulf of Mexico (GOM) Shut-in Oil and Gas

Date	Percent of GOM Oil Shut-in	Percent of GOM Gas Shut-in
September 16	56.06	33.84
September 19	55.84	33.75
September 20	58.49	34.82
September 21	73.16	47.13
September 22	91.93	65.95
September 23	99.13	72.04
September 24	100	74.88

- The Lake Charles Trunkline Liquefied Natural Gas (LNG) facilities are reported shut down.
- The following tables highlight the current shut downs by major energy facilities in the path of Hurricane Rita:

## OIL OPERATIONS IN THE PATH OF HURRICANE RITA 9/23/05, 1200 HOURS

Refineries

Company	Location	Capacity (B/D)	Status
PORT ARTHUR/ LA	AKE CHARLES		
Citgo	Lake Charles, LA	324,300	Shut down
ConocoPhillips	West Lake, LA	239,400	Shut down
Calcasieu	Lake Charles, LA	30,000	Shut down
ExxonMobil	Beaumont, TX	348,500	Shut down
Shell (Motiva)	Port Arthur, TX	285,000	Shut down
Total	Port Arthur, TX	233,500	Shut down
Valero	Port Arthur, TX	255,000	Shut down
Total		1,715,700	
HOUSTON/TEXAS	CITY		
Shell Deer Park	Deer Park, TX	333,700	Shut down
Lydonell Citgo	Houston, TX	270,200	Shut down
Astra Oil	Pasadena, TX	100,000	Shut down
Valero	Houston, TX	83,000	Shut down
ExxonMobil	Baytown, TX	557,000	Shut down
BP	Texas City, TX	437,000	Shut down
Valero	Texas City, TX	209,950	Shut down
Marathon	Texas City, TX	72,000	Shut down
ConocoPhillips	Sweeny, TX	229,000	Shut down
Total		2,291,850	
CORPUS CHRISTI			
Flint Hills Resources	Corpus Christi, TX	288,126	Reduced runs, returning to normal
Citgo	Corpus Christi, TX	156,000	OK
Valero	Corpus Christi, TX	142,000	Reduced runs, returning to normal

Company	Location	Capacity (B/D)	Status
Trigeant (asphalt)	Corpus Christi, TX	30,000	Reduced runs, returning to normal
Valero	Three Rivers, TX	90,000	Reduced runs, returning to normal
Total		706,126	
TOTAL OF ALL AREAS		4,713,676	Total Shutdown – 4,007,500
Four refineries (3 in LA and 1 in MS) from			
Hurricane Katrina remain shut down –			
879,000 barrels per day			

Sources: Confirmed by company or on company web site. Various trade press sources.

There are reports of refineries near New Orleans that may not have electricity. Valero's Krotz Springs (78,000 b/d) refinery reports reduced runs. DOE continues to confirm.

Pipelines/Ports			
Company	Locations	Status	
<b>CRUDE PIPELINES</b>			
Seaway Crude Pipeline	Baytown terminal	Shut down	
	4 lines from Texas City,		
	Houston, Red Bluff, Baytown		
Capline	LOOP west to Houston; north	Operating at 75 percent of capacity	
	to Illinois		
PRODUCT			
PIPELINES			
Dixie (propane)	Mt. Belvieu, TX	Shut down	
Explorer	LA to OH	Shut down 24" and 28" lines; 12" line	
		operates from tankage	
Colonial	Houston, TX	Power outages at Beaumont, Port Arthur,	
		and Lake Charles. Power at Houston and	
		Baton Rouge. Throughput reduced to less	
		than 50 percent.	
Longhorn	Houston west to NM/AZ	Shut down by lack of product	
	Galena Park terminal (Houston)	Shut down	
Centennial System	Beaumont, TX	shut down	
Magellan Pipeline	TX/OK	Operational, portions closed	
Plantation	Baton Rouge, LA	Operational – no impact from Rita	
TEPPCO	Beaumont, TX	Two main lines shut down –16" El	
		Dorado, KS line north is operating on	
		reduced throughput	
PORTS			
Louisiana Offshore Oil		Suspended offshore operations	
Port (LOOP)			
Port of Houston	Houston, TX	Closed – assessments being conducted	

Company	Locations	Status	
Port of Freeport	Freeport, TX	Closed – assessments being conducted	
Port Arthur	Port Arthur, TX	Closed	
Port of Corpus Christi	Corpus Christi, TX	Shut down – may open late today	

Sources: Confirmed by company, company web site or Association of Oil Pipelines. Various trade press sources

- A large number of petrochemical plants owned by Dupont, Dow, Union Carbide, ExxonMobil, Lynondell/Equistar, Total Petrochemical, and Chevron have been shut down in preparation for Hurricane Rita. Note: due to the large number of plants, the list will not be displayed in the situation report.
- The U.S. Coast Guard announced yesterday that the Gulf Intracoastal Waterway is closed to westbound traffic West of Wax Lake in the Morgan City AOR until further notice due to Hurricane Rita.
- The U.S. Coast Guard issued a Marine Safety Bulletin yesterday that closed the Lower Mississippi River from mile marker 304 to the Southwest Pass sea buoy.
- The U.S. Coast Guard announced that as of noon today, the Port of Shreveport-Bossier City will suspend all cargo operations and that the Red River River is closed to all commercial traffic from mile 195 to mile 235. Vessel movement after the setting of Port Condition Zulu must be coordinated through MSU Baton Rouge
- There are over 60 natural gas plants and processing facilities (not counting pipelines and compressor stations) from New Mexico to Alabama that were in the potential path of Hurricane Rita and most of these shut down as a precaution prior to landfall of Rita. Duke Energy, for example, shut down about 20 facilities in NM, TX, LA, and AL. Other major gas processing companies in the area include Dynegy, El Paso, Enterprises Product Partners, and ExxonMobil.
- Since most Gulf Coast gas production and natural gas processing is shutdown in preparation
  of Hurricane Rita, most natural gas pipelines in the affected areas are running with losses of
  supply going into their systems.

On-Shore and Off-Shore Pipelines with	Status	
Reported Supply Issues		
Columbia Gulf Transmission	Loss of supply	
Duke Energy Gas Transmission	Loss of supply	
Enbridge Inc.'s Offshore System	No nominations until further notice	
Kinder Morgan	Loss of supply	
Mississippi Canyon	Shut-in	
Southern Union's Trunkline Gas	Limited Flow in TX due to loss of supply	
Transcontinental Gas	Loss of supply in LA	
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(Source: Platt's September 23)

 On 9/21 Entergy reported progress of gas restoration by area in New Orleans: Algiers (100%), French Quarter (10%), CBD (98%), Central City (50%), Uptown (50%), Downtown (15%), Broadmoor (20%), Carrollton (3%), Mid City (15%), Gentilly (45%), Lakeshore (100%), Lake Vista (40%), Lakeview (50%), New Orleans East (0%), and 9<sup>th</sup> Ward (0%). A total of 53,646 gas customers (37%) have been restored.

## **ELECTRICITY INFORMATION**

Utility	Customers w/o Power	% Customers w/o Power
Louisiana	258,920	23%
Texas	861,062	9%*
Mississippi	19,443	1%

#### STATE OUTAGE DATA

Louisiana data is reported by the Louisiana Public Service Commission and their percentage outage numbers are used in calculating the percentage of total outage.

\*Texas data represents CenterPoint Energy and Entergy only. Percent customers w/o power is based on EIA estimate of 10.1 million electricity customers in Texas.

## STATE REPORTS

#### <u>Texas</u>

- CenterPoint Energy (CNP) had reported a peak of 715,000 customers outages but that figure is down to 592,000 as of 9/23/05 9:00AM CDT. The company has begun restoration. Early estimates are that restoration will take up to one week. The company reports 316 circuits and six substations out of service.
- Entergy reports that very preliminary assessments of their electrical system show widespread damage to facilities in southeast Texas and southwest Louisiana. Entergy's transmission system currently has more than 70 substations out of service in Louisiana and Texas, primarily between Beaumont, Texas, and Lake Charles, La. Damage assessments will not begin until after the storm passes. As of 9/24/05 10:30CDT Entergy has 269,062 customers out of service.
- Utilities in the Gulf Region had been preparing for the arrival of Hurricane Rita. (See earlier Situation Reports on Entergy preparation). CenterPoint Energy reports that in addition to the company's 1,700 field personnel (including 250 contract linemen, 600 contract tree trimmers) the company has 1,400 linemen and 1,000 tree trimmers from around the country to assess damage and assist in the restoration. Several thousand additional utility workers are on stand-by from as far as Canada. The company reports that it has sufficient supplies in inventory to begin restoration efforts and that it has also made arrangements with its vendors and distributors for its post-storm needs.

### Louisiana

 In Louisiana, 258,920 customers remain without power, as reported by the Louisiana Public Service Commission (LAPSC) (6:00 PM, 9/23/05 latest report).

Louisiana Outage Data by Otinites with Significant Outages (0.001 M 9/25/05)			
UTILITY	OUTAGES	% customers w/o power	
Entergy Gulf	8,943	4%	
Entergy Louisiana	63,254	14%	
Entergy New Orleans	172,677	84%	
SLEMCO	11,735	16%	
Wash-St. Tammany	8,445	19%	
CLECO	5,239	6%	
Total for state shown includes companies with low percentage outages not shown in the Table	258,920	23%	

#### Louisiana Outage Data by Utilities with Significant Outages (6:00 PM 9/23/05)

\*Louisiana data and percentages are reported by the Louisiana Public Service Commission.

- As of 9/23/05, Entergy's transmission system currently has 27 lines and 22 substations out of service in the area affected by Hurricane Katrina. This is down from 181 lines and 263 substations out of service following Katrina's hit, but the number likely will change due to the affects of Hurricane Rita.
- Entergy has assembled a workforce of over 4,000 to support restoration following Hurricane Rita. Crews from outside the region have begun traveling toward the region.
- Customers in the parts of New Orleans that suffered extensive flooding following Hurricane Katrina - up to 170,000 - will require inspections and permits before being able to have their power restored.
- Entergy has posted a complete list of restoration dates by area in New Orleans at <u>http://www.entergy.com/corp/EmergencyCtr/restoration.asp</u>.

# <u>Florida</u>

The Florida Reliability Coordinating Council (FRCC) State Capacity Emergency Coordinator is continuing its Generating Capacity "Advisory" throughout the weekend from today, Saturday, September 24, 2005 through Sunday, September 25, 2005. The continuation of this Advisory throughout the weekend is due to the shutting down of the natural gas production facilities in the Gulf of Mexico as a result of Hurricane Rita. The FRCC is continuing its call for public appeals for conservation. The FRCC Region (Peninsular Florida) receives most of its natural gas from these production facilities

<sup>&</sup>lt;sup>1</sup> Situation Report series for Hurricanes Katrina and Rita have been combined into the Gulf Coast Hurricanes Situation Report series.