

OFFICE OF ELECTRICITY DELIVERY AND ENERGY RELIABILITY (OE)
U.S. DEPARTMENT OF ENERGY
Gulf Coast Hurricanes¹ Situation Report #5
September 28, 2005 (3:00 PM EDT)

HIGHLIGHTS

- Currently, 945,506 customers are without electric power in Texas, Louisiana, Arkansas, and Mississippi. This includes new customer outages due to Hurricane Rita as well as outages remaining from Hurricane Katrina. NOTE: yesterday's total customer outage number should have been 1,071,563; the Louisiana number was overstated.
- In support of restoration activities in Texas, Secretary Bodman issued an order this morning to authorize and direct CenterPoint Energy to temporarily connect and restore power to Entergy Gulf States, Inc.
- DOE ESF-12 also continues to work with the Texas Tiger Team in other ways to facilitate electricity restoration. Steps taken by the Governor of Texas and the Texas Public Utility Commission have facilitated cooperation between utilities. The Governor issued an order allowing electric utilities to construct facilities over private land without the need to obtain an order of eminent domain from a court of competent jurisdiction. The Texas Public Utility Commission voted on 9/27 to allow electric utilities in the ERCOT grid to provide service and construct facilities into the Entergy service territory. The order waives the service area certificate requirements and CCN certification requirements of the PUC to accomplish emergency work in the Entergy service territory.
- Examples of cooperation between companies and progress in restoration of services include the following:
 - CenterPoint and Entergy have agreed to work in cooperation to provide power to the Dayton Storage Facility through the closed interconnection between CenterPoint Energy and Entergy which has energized the Lake Livingston Pumping Stations.
 - Power has been restored to the water pumping stations at Lake Livingston serving the City of Houston water supply. In addition, from one of the substations serving the water pumps, Entergy and the City of Liberty have restored power to the hospital and water supply in Liberty, TX.
 - Deep East Texas Electric Cooperative (DETEC) has continued to repair lines and clear right-of-way. SWEPCO-AEP has increased its deliver of energy to DETEC to offset losses suffered due to Entergy outages. Additionally, DETEC has entered into negotiations with TXU Electric Delivery to clear the right-of-way, restore and reenergize a transmission line to DETEC from TXU's ERCOT service territory.

- The Department of Energy has completed delivery of the first cargo of Strategic Petroleum Reserve crude oil sold as a result of the on-line competitive sale earlier this month. The 550,000 barrel cargo of sweet crude intended for Marathon Petroleum was delivered from the Bryan Mound, Texas, site. Transfer of all of the contracted crude oil will continue in batches throughout October. In addition to the competitive sale of crude oil, the Strategic Petroleum Reserve also approved loans of crude oil of up to 13.2 million barrels to refiners whose deliveries were interrupted. Over six million barrels of oil have been delivered to date.
- The two SPR sites of West Hackberry (LA) and Big Hill (TX) remain without power due to Hurricane Rita. The sites may be out of power for 5-10 days and, therefore, are unable to drawdown crude oil.
- On Late Monday, the Department of Homeland Security in coordination with Department of Transportation's (DOT) Maritime Administration, issued another Jones Act waiver. The waiver, which allows foreign ships to serve between U.S. ports in the movement of fuels, is effective until October 24. The DOT Federal Motor Carrier Safety Administration (FMCSA) also extended the driver-hours waiver for the nation until October 26.
- Last night the Environmental Protection Agency (EPA) extended waivers for the following areas: Houston/Galveston, Dallas/Forth Worth, TX, and Richmond, VA, to continue to use conventional gasoline in lieu of reformulated gasoline (RFG) until October 20. EPA also issued an RFG waiver for the St. Louis, MO, area until October 7. The Atlanta, GA, area received an extension on its low sulfur gasoline waiver until October 25. The Texas Commission on Environmental Quality was granted a waiver to delay the use of the Texas low-emission diesel until October 21.
- Entergy reports that all transmission lines to the major industrial loads (7 refineries) in the Lake Charles - Port Arthur area have extensive damage. Restoration of electricity to these refineries is a priority for the company.
- Valero reports that as of Monday, 202 of its 231 Houston area stores were open and 112 of those had fuel.
- As of September 27, ExxonMobil reports that all 89 Exxon branded retail stores in the Houston area were open and supplied with fuel. Eleven tanker trucks were brought in from CA, IL, FL, and NJ to resupply the affected areas. There are 11 Exxon retail stations open in Angelina County, 4 on Galveston Island, and 3 in Jefferson County.
- Shell reports that 280 of its 400 Shell branded gasoline stations in the Houston area now have gasoline, up from 240 stations yesterday. Shell also reports it has opened its Beaumont Terminal. With the partial opening of the Houston Ship Channel, Shell has a crude oil vessel at its dock.
- El Paso reports that all of its platforms in the Eastern Gulf of Mexico are now manned and have power restored. Production should resume 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, and additional staff are on the way to the Gulf.

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 1,511,715 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 8.027 billion cubic feet per day. This shut-in gas production is equivalent to 80.27 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 72.40 percent of 819 manned platforms and 47.76 percent of 134 rigs currently operating in the Gulf. There are reports that as many as 18 GOM rigs and 40 platforms may be missing, damaged and/or detached from their moorings. We will attempt to gain further clarity in the next situation report.
- **Gulf of Mexico (GOM) Shut-in Oil and Gas**

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
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
September 25	100	80.47

Date	Percent of GOM Oil Shut-in	Percent of GOM Gas Shut-in
September 26	100	78.43
September 27	100	78.56
September 28	100	80.27

- 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

9/27/05

Refineries

Company	Location	Capacity (B/D)	Status
PORT ARTHUR/ LAKE CHARLES			
Citgo	Lake Charles, LA	324,300	Shut down; minor damaged reported- no restart due to power loss
ConocoPhillips	West Lake, LA	239,400	Shut down – wind damage and no power
Calcasieu	Lake Charles, LA	30,000	Shut down – assessment being made
ExxonMobil	Beaumont, TX	348,500	Shut down – assessment being made, no power
Shell (Motiva)	Port Arthur, TX	285,000	Shut down; minor damage to cooling tower and power lines
Total	Port Arthur, TX	233,500	Shut down
Valero (Premcor)	Port Arthur, TX	255,000	Shut down; "significant damage" to two cooling towers and a flare stack. 2 weeks – 1 month to repair & restart refinery.
Total		1,715,700	Shutdown – 1,715,700
HOUSTON/TEXAS CITY			
Shell Deer Park	Deer Park, TX	333,700	Attempting to restart
Lydonell Citgo	Houston, TX	270,200	Restarting
Astra Oil (Crown Central)	Pasadena, TX	100,000	Restarting
Valero	Houston, TX	83,000	Restarting
ExxonMobil	Baytown, TX	557,000	Restarting; delivering gasoline from terminals
BP	Texas City, TX	437,000	Shut down – evaluation of start up continues
Valero	Texas City, TX	209,950	Attempting to restart
Marathon	Texas City, TX	72,000	Restarting
ConocoPhillips	Sweeny, TX	229,000	Restarting – full rate by Thursday
Total		2,291,850	Shut down - 980,650
CORPUS CHRISTI			
Flint Hills Resources	Corpus Christi, TX	288,126	OK
Citgo	Corpus Christi, TX	156,000	OK

Company	Location	Capacity (B/D)	Status
Valero	Corpus Christi, TX	142,000	OK
Trigeant (asphalt)	Corpus Christi, TX	30,000	OK
Valero	Three Rivers, TX	90,000	OK
Total		706,126	
OTHER			
Valero	Lima, OH	158,400	Full rate
Valero	Memphis, TN	180,000	Full rate
Total		338,400	
TOTAL OF ALL AREAS (does not include Midwest refineries)		4,713,676	Total Shutdown – 2,696,350
Four refineries (3 in LA and 1 in MS) from Hurricane Katrina remain shut down – 879,000 barrels per day		879,000	Total including Katrina – 3,575,350

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

- Several pipelines shut down their systems as a result of Hurricane Rita. Shown below is a status of the pipelines as of September 27.

Pipelines/Ports

Company	Locations	Status
CRUDE PIPELINES		
Seaway Crude Pipeline	4 lines from Texas Gulf to Cushing, OK	Operating
Capline	St. James, LA, to Patoka, IL	Operating at 80 percent of capacity
Sun Pipeline	Nederland, TX, terminal	Partial operation – Nederland terminal not operating
PRODUCT PIPELINES		
Dixie (propane)	Mt. Belvieu, TX, to NC/GA	Operating
Cypress (ethane)	Mont Belvieu, TX, to Lake Charles, LA	104 mile pipeline was temporarily shut down and is ready to resume operations once supply is available and the customer is back online.
Explorer	LA to OH	Placed in limited service yesterday from the company's Pasadena and Houston, TX, facilities, which provide two-thirds of the company's normal volumes. The company's origin facilities at Lake Charles, La., and at Port Arthur, TX, are not yet ready to resume operations.
Colonial	Houston, TX	Operating at 72 percent of capacity.

Company	Locations	Status
		Colonial anticipates full operating capacity later this week.
Longhorn	Houston west to NM/AZ Galena Park terminal (Houston)	Partially shut down – update not available Shut down -- update not available
Centennial System	Beaumont, TX, to Creal Springs, IL.	Shut down – no commercial power, assessment continues
Magellan Pipeline	TX/OK	Operational, portions closed- update not available
Plantation	Baton Rouge, LA to Washington, DC	Operating
TEPPCO	Beaumont, TX to NY	Operating at 45 percent capacity
PORTS		
Louisiana Offshore Oil Port (LOOP)	LA	Operating at 100 percent
Port of Houston	Houston, TX	Open – daylight hours only – 40 ft draft
Port of Freeport	Freeport, TX	Open – no restrictions.
Port Arthur	Port Arthur, TX	Closed
Port of Corpus Christi	Corpus Christi, TX	Open
Mississippi River		Reopened – see note below

Sources: Confirmed by company, company web site, or trade associations. Various trade press source

- The Captain of the Port of New Orleans re-opened the Inner Harbor Navigation Canal (IHNC) on the Gulf Intra Coastal Waterway (GICW) on September 26th.
- **The U.S. Coast Guard reported that tug and barge traffic operating on the GICW between the Colorado Locks and the Calcasieu Locks is unrestricted. Also noted was that some portions of Sabine/Neches Waterway, the Neches river, and the Calcasieu River are restricted to shallow draft tows and light tugs only.**
- According to Duke Energy Field Services (DEFS), their Spindletop storage facility, Port Arthur, and Brookeland natural gas processing plants, and the CIPCO pipeline sustained minor damage and will be able to return to operating mode in the near future (date not provided). DEFS is unable to assess its Beaumont natural gas facility at this time. Natural gas facilities that remain shut-in for lack of supplies include Fullerton, Artesia, Pecos Diamond, Minden, George Gray and Mobile Bay, as well as the Black Lake pipeline.
- **Shown below is a list of natural gas pipelines impacted by Hurricane Rita. .**

Natural Gas Pipelines

On-Shore and Off-Shore Pipelines with Reported Supply Issues	Status
ANR	20 percent of capacity with reduced supply. Still on Force Majeure.
BP/Enbridge Destin pipeline	OK - Force Majeure ended Sept 27
Chevron	Western LA facilities shut-in
Columbia Gulf Transmission	Loss of supply
Comstock Offshore	Shut-in since Sept 20

On-Shore and Off-Shore Pipelines with Reported Supply Issues	Status
Duke Energy Field Services including CIPCO, Seabreeze and Black Lake	CIPCO has minor damage and Black Lake remains shut-in due to lack of supplies; note that most of company's natural gas assets are in Oklahoma and West TX and are not adversely affected.
Duke Energy Gas Transmission	The Texas Eastern pipeline is in balance and holding pressure. Most compressor stations and storage facilities affected by Rita are back on-line. The Gulfstream natural gas system is operational.
Enbridge Inc.'s Offshore System, which includes Garden Banks, Manta Ray, Nautilus, Stingray, and MS Canyon	No nominations until further notice; Stingray has flooding and wind damage to onshore facilities; Sea Robin delivery point damaged.
Gulf South – Lake Charles	Loss of supply
Kinder Morgan	Force Majeure continues on Border, Texas, North Texas, and Tejas pipelines; Natural Gas Pipeline Company of America declared Force Majeure on parts of Segment 16 (Arkoma), 23 (TGT Lowry), 24 (Col Erath, Equitable, GS Erath, and LRC) , and 26 (Sabine).
Southern Union's (Panhandle Energy) Trunkline and Sea Robin	Trunkline's Terrebonne System is accepting nominations for gas on starting today Sept 27. Some receipt and delivery points are not available. 28 receipt points are now cleared for flow, up from 17. Trunkline LNG, in Lake Charles, LA, remains shut down. Florida Gas Transmission fully operational. Sea Robin has damage at its delivery point.
Tennessee Gas Transcontinental Gas Williams – station # 44 Johnson Bayou Florida Gas Transmission	20 percent of capacity with reduced supply Loss of supply in LA Unable to get to facility Some compressor stations down- no impact on operations

(Sources: Company web sites, September 27)

ELECTRICITY INFORMATION

STATE OUTAGE DATA

Utility	Customers w/o Power	% Customers w/o Power
Arkansas	158	N/A
Louisiana	448,561	22%
Mississippi	380	N/A
Texas	496,407	4.9%

- Louisiana data is reported by the Louisiana Public Service Commission as of 9/28 6:00 AM and their percentage outage numbers are used in calculating the percentage of total outage.

- Arkansas and Mississippi outages are for Entergy customers only as of 9/27 9:00 PM.

- Texas data is from the TX Utility Commission 9/27 9AM. Percent customers w/o power are based on EIA estimate of 10.1 million electricity customers in Texas.

STATE REPORTS

Texas

- In Texas there are currently 496,407 customers without power, according to the Texas PUC. This is down from a high of 1,122,892.

Texas Outage Data by Utilities with Significant Outages

UTILITY	OUTAGES
CenterPoint	94,963
Entergy Gulf States	249,658
TXU	28,000
Sam Houston Coop	54,100
Mid-South Synergy	25,165
Jasper-Newton Electric Coop	20,900
Deep East Texas Electric Coop, Inc	20,000
Rusk County Electric Coop	1,400
SWEPCO	1,011
TOTAL FOR STATE	496,407

Texas Outage Data by Counties with Significant Outages

COUNTY	OUTAGES
Angelina	17,200
Chambers	6,676
Fort Bend	3,594
Galveston	16,042
Grimes	6,801

Hardin	22,112
Harris	82,807
Jefferson	114,881
Liberty	29,699
Madison	2,011
Montgomery	41,101
Nacogdoches	12,000
Orange	38,892
Polk	19,745
Rusk	1,510
San Jacinto	8,171
Trinity	3,084
Tyler	13,033
Walker	13,358

- Entergy reports that the extensive damage to their transmission system includes approximately 290 transmission lines and 287 substations out of service. Both wooden and steel structures are damaged and some key transmission lines are out of service that will affect the company's ability to restore service. Entergy has made progress in restoring its 500 kV and 230 kV transmission lines.
- Entergy Texas continues service interruptions on a rotational basis to customers in the portion of its service territory north of Houston to avoid a blackout that could affect the area for an extended period. The rolling outages continue to affect homes and businesses in Montgomery, Walker, Grimes, and Liberty counties.
- Entergy reports that its workforce on 9/27 was approximately 12,500 plus 3,000 support personnel from other utilities and contractors and that additional recruitment in progress
- Entergy expects to be able to restore power to customers who can accept power in Arkansas, Mississippi, North Louisiana and the Baton Rouge area by Wednesday, Sept. 28.
- CenterPoint Energy reports that 500,000 of the 700,000 customers who had lost power due to Hurricane Rita were restored within 36 hours. The company expects to have all customers restored by Friday 9/28.
- SWEPCO anticipates having all power resorted by 10 pm Wednesday, 9/28. As of 8:20 pm 9/27, there were 122 line crews, 93 service techs, and 81 tree trimming crews working to restore power to SWEPCO customers.

Louisiana

- In Louisiana, 448,561 customers remain without power, as reported by the Louisiana Public Service Commission (LAPSC) (6:00 AM, 9/28/05 latest report). The Louisiana outage figure reported in Situation Report #4 for 9/27 was overstated. The correct number of customers without power in Louisiana for Situation Report #4 should have been 520,990.

Louisiana Outage Data by Utilities with Significant Outages (6:00 AM 9/28/05)

UTILITY	OUTAGES	% customers w/o power
Entergy Gulf States	94,598	26%
Entergy Louisiana	45,453	7%
Entergy New Orleans	154,409	75%
CLECO	47,227	18%
Beauregard	35,934	97%
SLEMCO	17,486	20%
Jefferson Davis	10,458	100%
Wash-St. Tammany	3,518	8%
SLECA	3,113	16%
SWEPCO	26,600	16%
Valley	9,380	23%
Total for state shown includes companies with low number of outages not include in Table	448,561	22%

Mississippi and Arkansas

- Entergy has completed restoration of almost all electrical service in Arkansas and Mississippi. Less than 400 customers remain without service in each state as of 9:30PM 9/27.

¹ Situation Report series for Hurricanes Katrina and Rita have been combined into the Gulf Coast Hurricanes Situation Report series.