

OFFICE OF ELECTRICITY DELIVERY AND ENERGY RELIABILITY (OE)
U.S. DEPARTMENT OF ENERGY
Gulf Coast Hurricanes¹ Situation Report #10
October 5, 2005 (3:00 PM EDT)

HIGHLIGHTS

- Currently, 394,910 customers are without electric power in Texas and Louisiana.
- Entergy has re-established clean-up power for most refineries that were impacted by Hurricanes Katrina and Rita. The company expects significant progress during the next several days in Texas as more power plants and transmission assets are brought back onto the system.
- Entergy is making progress in restoring gas distribution in New Orleans with 100% of customers having service in the French Quarter and, overall, 39% of customers have gas service available (a total of 56,810 customers have had gas restored).
- Last night the US Environmental Protection Agency (EPA) extended the waiver allowing high sulfur (dyed) diesel fuel to be used on highways until October 25, 2005, in the following States: Alabama, Arkansas, Georgia, Florida, Kentucky, Louisiana, Mississippi, New Mexico, North Carolina, South Carolina, Tennessee, Texas, and Virginia. The previous waivers issued on September 13 and September 30 expired today.
- Energy Secretary Bodman kicked off a National "Easy Ways to Save Energy" Campaign to highlight how American families, businesses and the federal government can save energy in response to rising winter energy costs. "As a result of tight oil and gas markets, and the damage done by Hurricanes Katrina and Rita, it's likely that consumers will see an increase in their heating bills this winter," Secretary Bodman said. The effort will provide consumers, industry and federal agencies with a variety of energy saving ideas. For easy energy saving tips, consumers can visit www.energysavers.gov
- On 09/30, 26 natural gas processing plants, with capacities equal to or greater than 100 million cubic feet per day in Texas, Louisiana, and Mississippi, were not active; **now there are 20. Nine** of these 21 plants with a total capacity of 5.4 billion cubic feet per day are not active owing to external factors, including lack of electric power or gas supplies. Eleven of the 21 plants are inactive because of damage to the facilities themselves. These plants have capacity of 7.7 billion cubic feet per day.
- DOE staff have been at the National Response Coordination Center (NRCC) at FEMA HQ, the Interagency Incident Management Team at HQ, and both the State Emergency Operation Center (EOC) and the FEMA Joint Federal Office (JFO) in Baton Rouge, LA for several weeks. Three staff are in Austin, TX, and additional staff are on the way to Louisiana for the New Orleans and Lake Charles JFOs. As requested, beginning 10/4 DOE ESF-12 will have representatives at the Texas EOC from 8:00 a.m. to 5:00 p.m., rather than 7:00 a.m. to 8:00 p.m.

OIL AND GAS INFORMATION

- According to MMS, 1,299,928 barrels of oil per day were shut-in which equates to 86.66 percent of the normal daily oil production in the Gulf. Shut-in gas production was 6.895 billion cubic feet per day. This shut-in gas production is equivalent to 68.95 percent of the normal daily gas production in the Gulf. Evacuations are equivalent to 37.12 percent of 819 manned platforms and 5.22 percent of 134 rigs currently operating in the Gulf. For further information see MMS web site at www.mms.gov. MMS reports 61 destroyed platforms and 33 damaged platforms in the Gulf of Mexico (GOM).

Damage to GOM Oil & Gas Infrastructure Ivan vs. Katrina vs. Rita

	Rita	Katrina	Ivan
Platforms Destroyed	65	46	7
Platforms Extensive Damage	32	20	20
Rigs Adrift	13	6	5
Rigs Extensive Damage	10	9	4
Rigs Destroyed	1	4	1
Rigs Unaccounted For	3	0	0
Number of Pipelines Damaged	23	21	102
Shut-in Production High	26-Sep	30-Aug	16-Sep
Gas (BCF)	8.623	9.418	6.515
Oil (bbls)	1,564,679	1,557,981	1,410,002
Cumulative (To Date)	<i>Combined with Rita</i>	8/26/05 - 10/05/05	9/13/04 - 02/14/05
Gas (BCF)	<i>Combined with Rita</i>	233.446	172.259
Oil (bbls)	<i>Combined with Rita</i>	47,756,987	43,841,245
Evacuation Highs			
Platforms	754	660	575
Rigs	107	89	
Platforms in the Path	1600	1300	150

Source: US MMS October 5, 2005

- Shell reports it currently has 55,000 barrels per day of crude coming in from its western Gulf pipeline systems. In the eastern Gulf, Shell is testing its Delta 20" line and anticipates placing it back into service this week. Shell expects the Delta 20" to start flowing at 100,000 barrels per day and ramping up towards 300,000 barrels per day near the end of the month, pending the outcome of additional tests.
- There are two liquefied natural gas import facilities in the LA region not delivering gas into the system. As of October 3, the Calcasieu Ship Channel and Industrial Canal have been cleared for LNG vessel transit to the Trunkline facility.

- The following tables highlight the current shut downs by major energy facilities in the path of Hurricane Rita as of October 5:

OIL OPERATIONS IN THE PATH OF HURRICANE RITA

Refineries

Company	Location	Capacity (B/D)	Status
PORT ARTHUR/ LAKE CHARLES			
Citgo	Lake Charles, LA	324,300	Shut down; minor damaged reported- partial power restored.
ConocoPhillips	West Lake, LA	239,400	Shut down – wind damage; power restored. Estimated restart in mid-October
Calcasieu	Lake Charles, LA	30,000	Shut down; may have partial power soon.
ExxonMobil	Beaumont, TX	348,500	Shut down – assessment being made, partial power restored.
Shell (Motiva)	Port Arthur, TX	285,000	Shut down; wind damage, flooding, no power;
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; no power.
Total		1,715,700	Shutdown – 1,715,700
HOUSTON/TEXAS CITY			
Shell Deer Park	Deer Park, TX	333,700	Operating at reduced rates
Lydonell Citgo	Houston, TX	270,200	Operating at reduced rates.
Astra Oil (Crown Central)	Pasadena, TX	100,000	Operating at full rate
Valero	Houston, TX	83,000	Down due to unplanned maintenance
ExxonMobil	Baytown, TX	557,000	Operating at normal rates
BP	Texas City, TX	437,000	Shut down
Valero	Texas City, TX	209,950	Operating at reduced rates
Marathon	Texas City, TX	72,000	Operating at full rate
ConocoPhillips	Sweeny, TX	229,000	Operating at full rate
Total		2,291,850	Shut down – 520,000
TOTAL OF ALL AREAS including Corpus Christi		4,713,676	Total Shutdown – 2,235,700
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 – 3,114,700

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

- Valero reports its Krotz Springs, LA, and Ardmore, OK, refineries are currently at reduced rates due to crude availability and pipeline issues.

- Several pipelines shut down their systems as a result of Hurricane Rita. Shown below is a status of the pipelines as of October 5.

Pipelines/Ports

Company	Locations	Status
CRUDE PIPELINES		
Capline	St. James, LA, to Patoka, IL	Operating at 80% of capacity
Sun Pipeline	Nederland, TX, terminal	Nederland terminal resumed limited operations, opening its 20" (ExxonMobil) line on October 1. All lines are expected to re-open soon. Three docks are ready to receive vessels. Repairs to the other four docks are expected to be completed by Saturday, October 8.
PRODUCT PIPELINES		
Explorer	LA to OH	Operating at full capacity out of Houston/Pasadena which is 2/3 of the company's normal volumes. Not operating out of origin facilities in Lake Charles and Port Arthur.
Colonial	Houston, TX	Operating at 50% of capacity
Longhorn	Houston west to NM/AZ Galena Park terminal (Houston)	Operational
Centennial System	Beaumont, TX, to Creal Springs, IL.	Operational
Magellan Pipeline	TX/OK	Operational but supply constrained.
TEPPCO	Beaumont, TX to NY	Operating at 65% capacity on 20" line; 14 and 16" line at 75%. No commercial power at Beaumont.
PORTS		
Port Arthur	Port Arthur, TX	Maximum 32 ft draft – daylight only. 24 hours for light tugs and shallow draft.

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

- The Sabine-Neches waterway is tentatively scheduled to re-open to inbound vessels by October 5, 2005. The Calcasieu Ship Channel and Industrial Canal have been cleared for LNG vessel transit as of October 3, 2005.
- Shown below is a list of natural gas pipelines impacted by Hurricane Rita as of October 5.

On-Shore and Off-Shore Pipelines with Reported Supply Issues	Status
ANR	Many of ANR's facilities have been inspected and approved for flow. The 24" Line from Vermilion 397 to

On-Shore and Off-Shore Pipelines with Reported Supply Issues	Status
	EI 188, including connecting laterals remains unavailable for service due to sustained damage. As of October 4, ANR is accepting nominations at its Garden Banks interconnect.
Chevron	Western LA facilities shut-in
Columbia Gulf Transmission	Force Majeure, effective immediately for meters upstream of and including the Egan Measurement Stations.
Comstock Offshore	Shut-in since Sept 20
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.
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.
Enbridge Inc.'s Offshore System, which includes Garden Banks, Manta Ray, Nautilus, Stingray, and MS Canyon	MS Canyon, Nautilus, Manta Ray, Sting Ray, and UTOS pipelines are still out of service. Garden Banks is operational and is able to supply ANR and Transco.
Enterprise Product Partners GulfTerra Texas Pipeline	Shut-in September 23, 2005.
Gulf South – Lake Charles	May be required to schedule only primary firm capacity and implement scheduling reductions for Oct 4.
Gulf South – High Island Offshore System	HIOS declared Force Majeure and will not accept nominations until further notice.
Kinder Morgan	Force Majeure continues on portions of Natural Gas Pipeline Company of America lines. Force Majeure lifted on Border, Texas, North Texas, and Tejas lines.
Sabine	Force Majeure partially lifted (by pipeline) at Henry Hub delivery point as gas begins to flow between Columbia Gas Transmission and Gulf South pipelines.
Southern Union's (Panhandle Energy) Trunkline and Sea Robin	<p>Trunkline's Terrebonne System started accepting nominations for gas on Sept 27. Five receipt and two delivery points are still not available.</p> <p>Florida Gas Transmission is limiting receipts at three interconnections due to quality of gas issues.</p> <p>Sea Robin has damage at its delivery point; it is not accepting nominations.</p>
Tennessee Gas	Tennessee has lifted the system wide OFO Balancing Alert. There are also several points that remain shut in due to Force Majeure declarations on other pipelines.
Williams	Most Williams' facilities have returned to service. As of October 4, Transco is accepting nominations at its Garden Banks interconnect. The only report of significant damage so far is at the company's Cameron Meadows natural gas processing plant near Johnson Bayou, LA.

(Sources: Company web sites, DOTand Trade associations)
ELECTRICITY INFORMATION

STATE OUTAGE DATA

Utility	Customers w/o Power	% Customers w/o Power
Louisiana	224,531	10.8%
Texas	170,379	2.0%

- Louisiana data is reported by the Louisiana Public Service Commission as of 10/4 6:00 PM and their percentage outage numbers are used in calculating the percentage of total outage. Texas data is from the TX JFO/EOC 10/4 5:00 PM.

- Entergy reports that it has returned 205 lines and 308 substations to service since Rita's landfall, leaving 138 lines and 128 substations still out as of 5:30 AM 10/5.

STATE REPORTS

Texas

- In Texas there are currently 170,379 customers without power. Of these, 131,446 are in the Entergy service area. In addition, NRECA reports 38,933 electric cooperative customers without power with Sam Houston in Livingston; Jasper-Newton in Kirbyville; and Deep East Texas in St. Augustine.
- Three counties reported no electricity: Newton, Orange and Tyler. The Hardin, Jasper, Jefferson, and Sabine counties had over 71% of customers without service. Currently, 70% of outages are in three counties: Orange, Jefferson and Hardin.

Louisiana

- In Louisiana, 224,531 customers remain without power, as reported by the Louisiana Public Service Commission (LAPSC) (6:00 PM, 10/4). Of the total outage number 165,029 are due to Hurricane Katrina and 59,502 are due to Hurricane Rita.

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