

**OFFICE OF ELECTRICITY DELIVERY AND ENERGY RELIABILITY (OE)**  
**U.S. DEPARTMENT OF ENERGY**  
**Gulf Coast Hurricanes<sup>1</sup> Situation Report #13 Revised**  
**October 11, 2005 (3:00 PM EDT)**

**HIGHLIGHTS**

- Currently, 181,290 customers are without electric power in Texas and Louisiana.
- On 10/10, DOE held a meeting in Washington, DC, to discuss the incorporation of new technologies into the electricity system rebuilding effort in the Southeast, particularly New Orleans. Representatives from OE, utilities, national laboratories, and academia were in attendance.
- Entergy reports that all of the 16 key energy facilities impacted by Hurricanes Katrina and Rita now have at least a single source feed for clean-up power and twelve have full capacity available for their current needs. Two more facilities had loop service restored on 10/10.
- On 10/6 EPA extended the reformulated gasoline (RFG) waiver for the St. Louis, MO, area until Oct 27. The Internal Revenue Service also extended the penalty relief period during which dyed diesel fuel can be sold for use or used on the highway. The penalty relief will apply throughout the United States and is effective until October 25.
- 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, and in Austin, TX.

**OIL AND GAS INFORMATION**

- According to MMS, 1,062,530 barrels of oil per day were shut-in which equates to 70.84 percent of the normal daily oil production in the Gulf. Shut-in gas production was 6.042 billion cubic feet per day. This shut-in gas production is equivalent to 60.42 percent of the normal daily gas production in the Gulf. Evacuations are equivalent to 32.48 percent of 819 manned platforms and 2.99 percent of 134 rigs currently operating in the Gulf. For further information see MMS web site at [www.mms.gov](http://www.mms.gov). MMS reports 65 destroyed platforms and 32 damaged platforms in the Gulf of Mexico (GOM).

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

	Rita	Katrina	Ivan
<b>Platforms Destroyed</b>	65	46	7
<b>Platforms Extensive Damage</b>	32	20	20
<b>Rigs Adrift</b>	13	6	5
<b>Rigs Extensive Damage</b>	10	9	4
<b>Rigs Destroyed</b>	4	4	1
<b>Rigs Unaccounted For</b>	0	0	0
<b>Number of Pipelines Damaged</b>	23	21	102
<b>Shut-in Production High</b>	26-Sep	30-Aug	16-Sep
<b>Gas (BCF)</b>	8.623	9.418	6.515
<b>Oil (bbls)</b>	1,564,679	1,557,981	1,410,002
<b>Cumulative (To Date)</b>	<i>Combined with Rita</i>	<b>8/26/05 - 10/11/05</b>	9/13/04 - 02/14/05
<b>Gas (BCF)</b>	<i>Combined with Rita</i>	<b>271.661</b>	172.259
<b>Oil (bbls)</b>	<i>Combined with Rita</i>	<b>54,557,243</b>	43,841,245
<b>Evacuation Highs</b>			
<b>Platforms</b>	754	660	575
<b>Rigs</b>	107	89	
<b>Platforms in the Path</b>	1600	1300	150

Source: US MMS October 7, 2005

- The following tables highlight the current shut downs by major energy facilities in the path of Hurricane Rita as of October 11:

## OIL OPERATIONS IN THE PATH OF HURRICANE RITA

### Refineries

Company	Location	Capacity (B/D)	Status
<b>PORT ARTHUR/ LAKE CHARLES</b>			
Citgo	Lake Charles, LA	324,300	Power restored – restarting
ConocoPhillips	West Lake, LA	239,400	Power restored - restarting
Calcasieu	Lake Charles, LA	30,000	Operating at full rate
ExxonMobil	Beaumont, TX	348,500	Shut down - power restored
Shell (Motiva)	Port Arthur, TX	285,000	Shut down - <b>power restored</b>
Total	Port Arthur, TX	233,500	Shut down - <b>power restored</b>
Valero (Premcor)	Port Arthur, TX	255,000	<b>Restarting</b>
Total		1,715,700	<b>Shutdown – 867,000</b>
<b>HOUSTON/TEXAS CITY</b>			
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	Reduced rates; fluid Cat Cracker down
ExxonMobil	Baytown, TX	557,000	Operating at full rate
BP	Texas City, TX	437,000	Shut down
Valero	Texas City, TX	209,950	Operating at full rate
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 – 437,000
<b>TOTAL OF ALL AREAS including Corpus Christi</b>		<b>4,713,676</b>	<b>Total Shutdown – 1,304,000</b>
Three refineries (all in LA) from Hurricane Katrina remain shut down – 554,000 barrels per day		<b>554,000</b>	<b>Total including Katrina – 1,858,000</b>  Chevron Pascagoula, MS – restarted October 6; estimate normal production by late October. Exxon Mobil Chalmette – partial power ConocoPhillips Belle Chasse – <b>full power</b> Murphy Oil Meraux – partial power

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

- Valero reports its Krotz Springs, LA, and Ardmore, OK, refineries are now back to normal and are operating at full rates due to availability of crude oil.
- Chevron Corporation announced last Wednesday that it has successfully and safely initiated the startup procedures for its Pascagoula, MS, refinery which was shut down prior to Hurricane Katrina. The refinery could return to normal operations by the end of the month. Hurricane Katrina damaged the refinery’s marine terminal, cooling towers

and other equipment. It did not suffer significant flooding because of a perimeter dike installed after Hurricane Georges in 1998.

- Shown below is a list of natural gas pipelines impacted by Hurricane Rita as of October 11.

On-Shore and Off-Shore Pipelines with Reported Supply Issues	Status
ANR	Many of ANR's facilities have been inspected and approved for flow. <b>On the Eastern SEGA System, effective immediately, ANR has returned to service the following offshore pipelines and interconnects that have been inspected and approved:</b> 1. 24" Ship Shoal 207 Line to Eugene Island 188; 2. 30" Eugene Island 281/296/306 Line to Eugene Island 188; 3. 20" South Marsh Island 58 Line to Patterson Compressor Station; 4. 30" Eugene Island 188 Lines to Patterson Compressor Station; 5. 24" Loop Line from EI 250 to EI 188.
Chevron	Western LA facilities shut-in
Columbia Gulf Transmission	Force Majeure, effective immediately for meters upstream of and including the Egan Measurement Stations. Repair to Pecan Island facility is a prerequisite to flow of any gas in the offshore system.
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, Manta Ray, Stingray, and UTOS pipelines are still out of service. <b>Stingray recovery may take between two and four months.</b> Garden Banks is operational and is able to supply ANR and Transco. Nautilus has lifted Force Majeure and is accepting nominations for gas as of Oct 6.
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	<b>Limited transportation capacity on segment 25 and Force Majeure on Segment 26 on Natural Gas Pipeline Company of America lines on Oct 11; also some limited storage in Gulf Coast zones.</b>
Sabine	Due to the temporary unavailability of compression at

<b>On-Shore and Off-Shore Pipelines with Reported Supply Issues</b>	<b>Status</b>
	Henry Hub, Sabine is accepting nominations for receipts and deliveries only to the extent that volumes can be received and delivered without the need for compression. <b>Twelve interconnects now open.</b>
Southern Union's (Panhandle Energy) Trunkline and Sea Robin	Trunkline's Terrebonne System started accepting nominations for gas on Sept 27. <b>Four offshore points are not available until tested; three offshore receipts and delivery points total are unavailable due to damage;</b> and 10 additional offshore receipts points are unavailable due to producer related operational issues. Due to damage to offshore systems, Trunkline will prohibit nominations for flow on the entire Vermilion system.  Florida Gas Transmission is limiting receipts at three interconnections due to quality of gas issues.  Sea Robin has damage at its delivery point; it is not accepting nominations.
Tennessee Gas          Williams	Tennessee reported on many of its damage assessments on Oct 5 and there are a significant number of facilities damaged and leaking. <b>Effective Timely Cycle, 9:00 AM CCT, for the gas day of October 11th, due to nominations in excess of the available capacity, Tennessee has partially restricted the Niagara Spur.</b>  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, DOT, and Trade associations)

## ELECTRICITY INFORMATION

### **STATE OUTAGE DATA**

<b>Utility</b>	<b>Customers w/o Power</b>	<b>% Customers w/o Power</b>
Louisiana	143,424	6.9%
Texas	37,866	0.4%

- Louisiana data is reported by the Louisiana Public Service Commission as of 10/10 2:00 PM and their percentage outage numbers are used in calculating the percentage of total outage. Texas data is from the TX JFO/EOC 10/10 3:00 PM.

- Entergy continues to make progress in bringing its power plants back into service and now 12 of the 14 fossil units Entergy operating in the area affected by Hurricane Rita are operational (both units at Lewis Creek, both units at Toledo Bend, five units at Nelson and three units at Sabine). Two unavailable units at Sabine are awaiting storm damage repairs.

- Entergy has returned 292 lines and 425 substations to service since Rita’s landfall, leaving 52 lines and 11 substations still out. In Louisiana the company also reports progress with only 14 lines and 11 substations out in the greater New Orleans area due to severe flooding damage and/or lack of load from flood destruction.

**STATE REPORTS**

**Texas**

- The Texas Public Utility Commission reports that as of 10/10 3:00 PM 37,866 electricity customers remained without power, which is equal to less than ½ of 1% of all customers.
- Currently, Entergy has 29,125 customers without power; Sam Houston and Jasper Newton Coop have 2,928 and 5,789 customers without power respectively. Three counties account for almost 25% of the total customers without power: Tyler (67%), Orange (31%) and Jasper (24%).

**Louisiana**

- In Louisiana, 143,424 customers remain without power, as reported by the Louisiana Public Service Commission (LAPSC) (2:00 PM, 10/10). Of the total outage number 126,190 are due to Hurricane Katrina and 17,234 are due to Hurricane Rita. A total of 7% of customers in the state remain without electricity.
- Entergy has reduced its estimate of the number of customers who are unable to receive power from 156,300 to approximately 123,000 customers. They report that repairs to partially flooded properties appear to be progressing faster than expected.

**Customers Unable to Receive Power in Louisiana by Parish (10/10)**

<b>PARISH</b>	<b>CUSTOMERS</b>
<b>Jefferson</b>	528
<b>Plaquemines</b>	6,493
<b>St. Bernard</b>	28,534
<b>Orleans</b>	87,161
<b>Total</b>	<b>122, 716</b>

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