

**OFFICE OF ELECTRICITY DELIVERY AND ENERGY RELIABILITY (OE)
U.S. DEPARTMENT OF ENERGY
Gulf Coast Hurricanes¹ Situation Report #15
October 13, 2005 (3:00 PM EDT)**

HIGHLIGHTS

- Considerable progress has been made in recovery from Hurricanes Katrina and Rita in restoring electricity customers who can receive power. The total number of customer outages is 154,556. The majority of these outages are Entergy New Orleans and Entergy Louisiana customers who are, or may be, currently unable to receive power. The total number of customers who are without power in Texas and Louisiana who may be able to receive power is around 30,000. This includes 10,216 who remain without power in Louisiana from Hurricane Rita and less than 19,000 in Texas where outages continue to decline.
- Fifteen natural gas processing plants in Louisiana, with capacities equal to or greater than 100 million cubic feet per day, are not active. These plants have an aggregate capacity of 9.51 billion cubic feet per day (Bcf/d), and they had a total pre-hurricane flow volume of 5.33 Bcf/d.
- 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. The New Orleans Area Field Office was opened by FEMA today and one DOE staffer is a part of it. A second DOE staffer will arrive over the weekend.

OIL AND GAS INFORMATION

- According to MMS, 1,031,261 barrels of oil per day were shut-in which equates to 68.75 percent of the normal daily oil production in the Gulf. Shut-in gas production was 5.699 billion cubic feet per day. This shut-in gas production is equivalent to 56.99 percent of the normal daily gas production in the Gulf. Evacuations are equivalent to 28.81 percent of 819 manned platforms and 1.49 percent of 134 rigs currently operating in the Gulf. For further information see MMS web site at www.mms.gov. MMS reports 66 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
Platforms Destroyed	66	47	7
Platforms Extensive Damage	32	20	20

Rigs Adrift	13	6	5
Rigs Extensive Damage	10	9	4
Rigs Destroyed	4	4	1
Rigs Unaccounted For	0 (3 missing rigs are counted in destroyed)	0	0
Number of Pipelines Damaged	28	30	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)	Combined with Rita	8/26/05 - 10/13/05	9/13/04 - 02/14/05
Gas (BCF)	Combined with Rita	283.226	172.259
Oil (bbls)	Combined with Rita	56,633,383	43,841,245
Evacuation Highs			
Platforms	754	660	575
Rigs	107	89	
Platforms in the Path	1600	1300	150

Source: US MMS October 13, 2005

- Shown below is a list of natural gas pipelines impacted by Hurricane Rita, as of October 13.

On-Shore and Off-Shore Pipelines with Reported Supply Issues	Status
ANR	ANR has returned a large portion of the offshore Patterson System to service and is now in the process of implementing plans for permanent repairs to damaged facilities. By December ANR expects to be back to 100 per cent capacity. Due to damage to its West Cameron 167 to Grand Chenier pipeline segment and related facilities, ANR is declaring a Force Majeure and continues not to accept any nominations through its Grand Chenier facilities.
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. Stingray recovery may take between two and four months. Garden Banks is

On-Shore and Off-Shore Pipelines with Reported Supply Issues	Status
	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	<p>As of Oct 6, most affected facilities restarted operations. All of the partnership's offshore oil and natural gas pipelines in the Gulf of Mexico are operational except for the Phoenix gas pipeline, a portion of the Viosca Knoll natural gas pipeline, the Typhoon oil and gas pipeline laterals and the High Island offshore natural gas pipeline. Inspections of platforms have been completed with no major damage reported. All platforms are in service except Garden Banks 72 and East Cameron 373 which are waiting on repairs to downstream gas pipelines prior to returning to service.</p> <p>Onshore Assets:</p> <p>Currently, six of the ten significant Louisiana natural gas processing plants in which Enterprise owns various interests are operational and are either in the process of ramping up volumes or are waiting on production from upstream facilities. These plants are currently processing 1.1 billion cubic feet per day ("Bcfd") of natural gas compared to 5.2 Bcfd before the storm.</p>
Gulf South – Lake Charles	May be required to schedule only primary firm capacity and implement scheduling reductions for Oct 14.
Gulf South – High Island Offshore System	HIOS declared Force Majeure and will not accept nominations until further notice.
Kinder Morgan	Limited transportation capacity on segments 16 and 33 and Force Majeure on Segment 26 on Natural Gas Pipeline Company of America lines on Oct 13; also some limited storage in Gulf Coast zones.
Sabine	Due to the temporary unavailability of compression at 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. Force Majeure now lifted on 25 interconnects.
Southern Union's (Panhandle Energy) Trunkline and Sea Robin	<p>Trunkline's Terrebonne System started accepting nominations for gas on Sept 27. Three offshore points are not available until tested; three offshore receipts and delivery points total are unavailable due to damage; and Nine additional offshore receipts points are unavailable due to producer related operational issues.</p> <p>Florida Gas Transmission is limiting receipts at three interconnections due to quality of gas issues.</p>

On-Shore and Off-Shore Pipelines with Reported Supply Issues	Status
	Starting Oct 15, 15 locations are cleared for nominations and flow on the Sea Robin system, although dehydration equipment is not working.
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. Effective Timely Cycle, 9:00 AM CCT, for the gas day of October 13th, due to nominations in excess of the available capacity, Tennessee has partially restricted eight different pipeline points. 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)

- The following tables highlight the current shut downs by major energy facilities in the path of Hurricane Rita as of October 13:

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	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
Motiva	Port Arthur, TX	285,000	Shut down – attempting to restart
Total	Port Arthur, TX	233,500	Restarting
Valero (Premcor)	Port Arthur, TX	255,000	Restarting
Total		1,715,700	Shutdown – 633,500
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	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

Company	Location	Capacity (B/D)	Status
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
TOTAL OF ALL AREAS including Corpus Christi		4,713,676	Total Shutdown – 1,070,500
Three refineries (all in LA) from Hurricane Katrina remain shut down – 554,000 barrels per day		554,000	Total including Katrina – 1,624,500 Chevron Pascagoula, MS – restarted October 6; estimate normal production by late October. Exxon Mobil Chalmette – partial power ConocoPhillips Belle Chasse – full power Murphy Oil Meraux – partial power

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

- Explorer Pipeline now expects its Lake Charles, LA, origination point to be operational within the next several days.
- Chevron reports that it has restored its oil and gas production in the U.S. Gulf of Mexico to 40% of the levels produced before hurricanes Katrina and Rita.
- The Louisiana Department of Natural Resources said on October 11 that 683.6 mmcf or 30.6 percent of southern Louisiana’s onshore natural gas production has been restored since hurricanes Katrina and Rita.

ELECTRICITY INFORMATION

STATE OUTAGE DATA

Utility	Customers w/o Power	% Customers w/o Power
Louisiana	135,566	6.5%
Texas	19,000	>0.2%

- Louisiana data is reported by the Louisiana Public Service Commission as of 10/12 4:00 PM and their percentage outage numbers are used in calculating the percentage of total outage. Texas data is an estimate based on last available TX JFO/EOC 10/11 and information reported by Entergy as of 11:30 AM CDT 10/12.

- Entergy’s has made considerable progress in restoring its electrical transmission system with 41 transmission lines and 9 substations still out from Hurricane Rita. They have reported that most major transmission priorities have been completed and that the grid is now able to support current requirements and return of additional load as restoration progresses.
- In the greater New Orleans area, Entergy reports that 14 lines and 11 substations are out of service due to the severe flood and/or lack of load from flood destruction.

STATE REPORTS

Texas

- Limited updates have been available from Texas, as the number of customers without power has declined to less than 19,000. Some reporting has not been recently updated including Sam Houston Electric Cooperative, which has less than 1,000 customers without power, and the Jasper-Newton Electric Cooperative, which reported 5,789 customers remaining without power.

Louisiana

- The Louisiana Public Service Commission reports continue to show slow but steady progress as reported above with some 10,216 customers remaining without power from Hurricane Rita. As with Texas, the frequency of outage reporting in Louisiana has slowed as the number of outages for customers who can receive power has declined.
- 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 (10/12)

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

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