

**OFFICE OF ELECTRICITY DELIVERY AND ENERGY RELIABILITY (OE)
 U.S. DEPARTMENT OF ENERGY
 Gulf Coast Hurricanes¹ Situation Report #18
 October 19, 2005 (3:00 PM EDT)**

HIGHLIGHTS

- A total of 137,680 electricity customers in Louisiana and Texas remain without power from Hurricanes Katrina and Rita. Less than 16,000 are due to Hurricane Rita, including 7,037 in Louisiana and 8,331 in Texas. In Louisiana 122,312 customers remain without electricity due to Hurricane Katrina. These customers are principally in the areas near New Orleans and are unable to receive power at this time.
- On 10/13, three members of the US Department of Energy’s ESF-12 team of engineers in New Orleans performed an on-site assessment of the Plaquemines Parish. Plaquemines Parish is south of Orleans Parish and is one of the three parishes under the jurisdiction of the Area Field Office in New Orleans. These assessments were in support of Hurricane Katrina and Rita restoration and recovery efforts.
- Hurricane Wilma is currently a category 5 storm with maximum sustained winds near 165 mph and is located about 300 miles southeast of Cozumel, Mexico. Wilma is moving toward the west-northwest near 7 mph and is expected to turn towards the northwest in the next 24 hours. The storm’s projected path will bring it into the Gulf of Mexico and over South Florida by early morning on 10/23. <http://www.nhc.noaa.gov/>
- DOE staffs have been activated to the Regional Response Coordination Center (RRCC) in Atlanta for Hurricane Wilma. DOE staff are also at the New Orleans Area Field Office and State EOC in Baton Rouge.

OIL AND GAS INFORMATION

- According to MMS, 973,084 barrels of oil per day are shut-in which equates to 64.87 percent of the normal daily oil production in the Gulf. Shut-in gas production is 5.242 billion cubic feet per day. This shut-in gas production is equivalent to 52.42 percent of the normal daily gas production in the Gulf. Evacuations are equivalent to 25.76 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. 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	70	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 - 10/19/05	9/13/04 - 02/14/05
Gas (BCF)	Combined with Rita	316.006	172.259
Oil (bbls)	Combined with Rita	62,595,113	43,841,245
Evacuation Highs			
Platforms	754	660	575
Rigs	107	89	
Platforms in the Path	1600	1300	150

Source: US MMS October 19, 2005. Note MMS has provided more recent data on damaged pipelines.

- According to Louisiana's Department of Natural Resources, onshore crude oil production in southern Louisiana has reached 55,756 barrels per day, or 27.5 percent of the region's capacity, and natural gas production has reached 765 million cubic feet, or 34.2 percent of daily capacity. Of the 55 intrastate pipelines operating in southern Louisiana, two have reopened, 40 remain shut in, 11 are partly shut in, and the status of two is unknown.
- Sixteen processing plants in Louisiana and Texas, with capacities equal to or greater than 100 million cubic feet per day, are not active. The inactive plants have an aggregate capacity of 9.71 billion cubic feet per day (Bcf/d), and they had a total pre-hurricane flow volume of 5.45 Bcf/d.
- The following tables highlight the current shut downs by major energy facilities in the path of Hurricane Rita as of 10/19:

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	Restarting
ConocoPhillips	West Lake, LA	239,400	Restarting
Calcasieu	Lake Charles, LA	30,000	Operating at full rate

Company	Location	Capacity (B/D)	Status
ExxonMobil	Beaumont, TX	348,500	Restarting
Motiva	Port Arthur, TX	285,000	Shut down – initiating start-up sequence
Total	Port Arthur, TX	233,500	Restarting
Valero (Premcor)	Port Arthur, TX	255,000	Reduced rates
Total		1,715,700	Shutdown – 285,500
HOUSTON/TEXAS CITY			
Shell Deer Park	Deer Park, TX	333,700	Operating at full rate
Lydonell Citgo	Houston, TX	270,200	Reduced rates - FCC remains down
Astra Oil (Crown Central)	Pasadena, TX	100,000	Operating at full rate
Valero	Houston, TX	83,000	Reduced rates
ExxonMobil	Baytown, TX	557,000	Operating at full rate
BP	Texas City, TX	437,000	Shut down – expected restart late October/early November
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
TOTAL OF ALL AREAS including Corpus Christi			
		4,713,676	Total Shutdown – 722,500
Three refineries (all in LA) from Hurricane Katrina remain shut down – 554,000 barrels per day		554,000	Total including Katrina –1,276,500 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.

- Lyondell reports that all of its major Gulf Coast chemical plants have returned to full rates with the exception of a propylene oxide facility that was previously scheduled for maintenance turnaround activity. The company's joint venture, Lyondell-Citgo Refining (LCR), continues to operate at reduced rates following hurricane-related equipment issues and problems encountered in its fluid catalytic cracking unit during start-up. The refinery is expected to operate at 30 percent to 50 percent of its 270,200 barrel-per-day capacity until mid- to late-November.
- Shell reports its repair work continues to progress at the Motiva Port Arthur Refinery, with most utility systems up and running. Shell is completing the final site assessments and repair work required to initiate the start-up sequence this week. The restart period will extend into next week as equipment, systems and processes become fully operable and production increases toward normal operating rates

- Valero reports its Port Arthur refinery is expected to ramp up to full production rates by the end of the week. It is currently at about 75 percent.
- ExxonMobil reports restarting several units at its shutdown Beaumont refinery in Texas. The company said the rest of the units at the 350,000 bpd refinery would be brought back online within about two weeks.
- Total says its Port Arthur Refinery is returning on schedule and should be completed by the end of this week.
- The Port of New Orleans reports that the port's yardmasters, trainmasters, customer service and administration functions have all returned to its yard office. Only three sections of the railroad remain out of service. These should be repaired and back in service in the next four to six weeks.
- Shown below is a list of natural gas pipelines impacted by Hurricane Rita, as of 10/19.

On-Shore and Off-Shore Pipelines with Reported Supply Issues	Status
ANR	ANR has declared a Force Majeure and continues not to accept any nominations upstream of its Lake Arthur and Grand Chenier Compressor Stations. There is extensive damage to its liquid handling facilities located at Grand Chenier. Alternative arrangements have been worked out to get around this bottleneck. Effective Oct 19, ANR will increase its capacity through its Grand Chenier facilities to 350-MMcf/d for the SE 3 A-CFTP
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.
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 has restricted some receipt points due to maintenance. The pipeline inspection of the offshore Cameron system has determined production from thirty-seven meters on the Cameron system can begin flow effective 9AM, Wednesday, October 19, 2005.
Enbridge Inc.'s Offshore System, which includes Garden Banks, Manta Ray, Nautilus, Stingray, and MS Canyon	MS Canyon, Manta Ray, and UTOS pipelines are still out of service. MS Canyon has Nov 7 as target date to allow gas deliveries to the Sonat and Tennessee Gas Pipeline delivery points.
Enterprise Product Partners	As of Oct 6, all GOM area pipelines are normal except Phoenix, Viosca Knoll, Typhoon, and High Island. All platforms are in service except Garden Banks 72 and East Cameron 373. Six of its ten LA natural gas processing plants are operational.

On-Shore and Off-Shore Pipelines with Reported Supply Issues	Status
Gulf South – Lake Charles	May be required to schedule only primary firm capacity and implement scheduling reductions for Oct 19.
Gulf South – High Island Offshore System	The Force Majeure event related to Hurricane Rita that was posted September 21, 2005 is now lifted. Due to the ongoing storm recovery issues on the connecting pipelines downstream of HIOS, the ANR delivery point is the only one available for HIOS shippers until further notice
Kinder Morgan	Limited transportation capacity on segments 16, 23, and 33 and Force Majeure on Segment 26 on Natural Gas Pipeline Company of America lines on Oct 19; also some limited storage in Gulf Coast zones.
Sabine	Effective October 14, compression through Sabine's South Booster Station is now available. Force Majeure now lifted on 25 interconnects.
Southern Union's (Panhandle Energy) Trunkline and Sea Robin	Trunkline's Terrebonne System started accepting nominations for gas on Sept 27. Fourteen receipt and delivery points are still not available. Starting Oct 15, 15 locations are cleared for nominations and flow on the Sea Robin system. Florida Gas transmission is performing some unscheduled maintenance in October.
Tennessee Gas Williams	Effective Time Cycle, 9:00 AM CCT, for the gas day of October 19th, due to nominations in excess of the available capacity, Tennessee has partially restricted flow at two pipeline points and at two meters. Most Williams' facilities have returned to service. The only report of significant damage is Cameron Meadows natural gas processing plant in LA.

(Sources: Company web sites, DOT, and Trade associations)

ELECTRICITY INFORMATION

STATE REPORTS

Texas

- Jasper-Newton Electric Cooperative (JNEC) reports that as of 10/16 some 730 electrical workers have restored power to approximately 60% of JNEC's meters. All of the company's substations, 100% of their transmission lines and 95% of their main feeder lines are now energized. Angelina County is nearly completed with 99.8% of meters on.
- JNEC has been supported by 20 electric cooperatives and 30 contractors working to rebuild the 3,000 miles of power lines and over 5,000 utility poles destroyed by Hurricane Rita. Of their 20,905 customers 12,574 have been restored and 8,331 remain without power.

- JNEC serves mostly the rural areas of Newton County. Deweyville in southern Newton County and surrounding communities in northern Orange County have a higher density of members than the rural areas and were hardest hit by Hurricane Rita. The company reports on its website that restoration in these areas will be "tedious and time consuming."

Louisiana

- The Louisiana Public Service Commission reported on 10/17 12:00 PM CDT there were 7,037 customers in Louisiana without power due to Hurricane Rita and 122,312 without power from Hurricane Katrina. The total number of customers without electricity is approximately 6.3% of all customers.
- Entergy reports that all major energy facilities affected by Hurricanes Katrina and Rita in the Beaumont/Port Arthur, Lake Charles, and New Orleans areas have at least a single source feed for clean-up power and all but one have full capacity available for their current needs. Eight facilities have loop service restored.
- Entergy has completed restoration of electricity services to New Orleans area customers who can receive service with some 120,000 remaining without electricity. They report that repairs to partially flooded properties appear to be progressing faster than expected.
- Entergy's gas operation in New Orleans now has service available to about 41% of total customers and total gas usage is running approximately 37% of normal.
- Entergy will next report progress in Louisiana on 10/21 with the last report being on 10/14.

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