

OFFICE OF ELECTRICITY DELIVERY AND ENERGY RELIABILITY (OE)
U.S. DEPARTMENT OF ENERGY
Gulf Coast Hurricanes Situation Report #28
October 28, 2005 (4:00 PM EDT)

HIGHLIGHTS

- There are 1,767,872 customers without power in Florida as of 4:00 PM EDT 10/28 due to Hurricane Wilma. This represents about 19 percent of customers in the state.
- Florida Power and Light (FPL) reports that it has restored electricity to more than 1.4 million customers, or nearly 47 percent, of the approximately 3.2 million customers without power in the wake of Hurricane Wilma.
- FPL reports that it expects to have restored service to a majority of their customers by 11/8 and to 95% of customers by 11/15 (see restoration table).
- A workforce of some 9,400 from FPL and from electricity companies and contractors from 33 states and Canada are working 24 hours a day on the restoration effort with an additional 2,200 workers to arrive throughout the weekend.
- Only eight of the 241 FPL substations that sustained damaged from Hurricane Wilma remain out and almost all critical facilities have been re-energized as of 6 AM 10/28. Efforts are being made to restore electricity to critical infrastructure such as gas stations and grocery stores.
- ExxonMobil reports that it has 112 branded gasoline stations open and with fuel in the Tampa and South Florida areas. Due to high demand in these areas, some stores may be out of fuel for short periods.
- Shell and Motiva report that approximately 100 Shell-branded gasoline stations in South Florida are open for business and this number continues to increase. Electric power is being restored to sites and backup generators are also being utilized to expedite restoration efforts. Police have been escorting tanker trucks to ensure deliveries are made in a safe and orderly manner.
- DOE staff are stationed at the Regional Response Coordination Center (RRCC) in Atlanta, Georgia, pursuant to Hurricane Wilma. DOE will begin staffing the Orlando Long Term Recovery Office as of 0700 on Saturday 10/29. DOE staff remain at the New Orleans Area Field Office and Joint Field Office in Baton Rouge.

ELECTRICITY INFORMATION

STATE REPORTS

Florida

- As of 4:00 PM EDT 10/28, there are 1,767,872 customers without power in Florida due to Hurricane Wilma.

Florida Power & Light Outage Data: Hard Hit Counties*

County	Customers w/o Power	Total Customers Restored	Total Customers Affected	% Customers Restored
Broward	631,500	231,300	862,800	27%
Collier	35,600	134,000	169,600	79%
Dade	474,400	482,100	956,500	50%
Glades	300	3,100	3,400	91%
Hendry	2,700	5,800	8,500	68%
Indian River	7,600	34,000	41,600	82%
Lee	45,000	149,900	194,900	77%
Martin	25,500	59,100	84,600	70%
Okeechobee	6,500	9,400	15,900	59%
Palm Beach	470,900	192,600	663,500	29%
St. Lucie	24,300	78,600	102,900	76%

* Data is from 4:00 PM 10/28 FL EOC report.

Florida Utility Outage Data: Hard Hit Utilities*

County	Customers w/o Power	Total Customers	% Customers w/o Power
Florida Power & Light	1,724,400	4,343,095	40%
Municipals	35,985	1,268,280	3%
Cooperatives	7,487	949,925	1%
“Total Customers” includes companies with low number of outages not included in Table	1,767,872	9,138,533	19%

*Data is from 4:00 PM 10/28 FL EOC report. Total shown for Total Customers column represents all customers in the state.

ESTIMATED RESTORATION DATES – HURRICANE WILMA

County	Florida Power & Light	Municipal Utilities	Cooperative Utilities
Broward	W. and S. of I-75 and N. of I-595, and W. of University Dr. – Nov. 15 All other areas – Nov. 22		Nov. 13 – Midnight
Charlotte			Oct. 30 – Midnight
Collier	All other areas – Nov. 8 E. and N. of I-75 – Nov. 15		Nov. 15 – Midnight
Dade	S. of SW 88 th St. – Nov. 8 Miami Beach S. of 79 th St. – Nov. 15 Between SW 8 th St. and SW 88 th St. – Nov. 15 N. of SW 8 th St. or Tamiami Trail – Nov. 22	Oct. 31 - Midnight	
Glades	Nov. 8	Oct. 31 – Midnight	Nov. 20 – Midnight

Hendry	Nov. 10	Oct. 31 – Midnight	Nov. 20 – Midnight
Highlands	Nov. 8		Oct. 30 – Midnight
Indian River	N. of State Road 60 – Nov. 4 S. of State Road 60 – Nov. 8	Oct. 29 - Midnight	
Lee	All other areas – Nov. 8 E. of I-75 – Nov. 15		Nov. 15 – Midnight
Martin	E. of Turnpike – Nov. 12 W. of Turnpike – Nov. 15		
Monroe		Oct. 31 – Midnight	Oct. 29 – Midnight
Okeechobee	Nov. 8		Nov. 8 – Midnight
Palm Beach	N. of PGA Blvd. – Nov. 12 E. of I-95 between PGA Blvd. and Lake Worth Rd. – Nov. 15 Remainder of Palm Beach – Nov. 22 – Midnight	Nov. 9 – Midnight	
St. Lucie	N. of State Road 70 – Nov. 8 S. of State Road 70 and E. of Turnpike – Nov. 12 Remainder of St. Lucie – Nov. 15	Oct. 31 – Midnight	

Source: Florida EOC ESF-12 10/26 2:00 PM EDT report and 10/28 FPL website update.

Louisiana

- See Entergy's web site for restoration progress by neighborhood in New Orleans:
http://www.entropy-neworleans.com/content/corp/emergencyctr/NOLA_electric_detail_content.asp

OIL AND GAS INFORMATION

- According to MMS, 1,017,551 barrels of oil per day are shut-in, which equates to 67.84 percent of the normal daily oil production in the Gulf. Shut-in gas production is 5.504 billion cubic feet per day. This shut-in gas production is equivalent to 55.04 percent of the normal daily gas production in the Gulf. Evacuations are equivalent to 27.35 percent of 819 manned platforms and 4.48 percent of 134 rigs currently operating in the Gulf. For further information see MMS web site at www.mms.gov.

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	2 (Missing / Allegedly	0	0

	Sunk - Added in With Destroyed)		
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)	<i>Combined Rita / Katrina</i> 8/26/05 - 10/28/05		9/13/04 - 02/14/05
Gas (BCF)	<i>Combined Rita / Katrina</i> 364.720		172.259
Oil (bbls)	<i>Combined Rita / Katrina</i> 71,613,334		43,841,245
Evacuation Highs			
Platforms	754	660	575
Rigs	107	89	69
Platforms in the Path	1600	1300	150

Source: US MMS October 28 2005.

- According to the Louisiana Department of Natural Resources on Oct. 28, onshore crude oil production in southern Louisiana has reached 73,084 barrels per day, or 36 percent of the region's capacity; natural gas production of 912 million cubic feet, or 40.8 percent of daily capacity in 38 southern Louisiana parishes, has been restored. Of the 55 intrastate pipelines operating in southern Louisiana, seven have reopened, 32 are shut in, 16 are partly shut in.
- The following tables highlight the current shut downs by major energy facilities in the path of Hurricane Rita as of 10/25:

REFINERY IMPACTS FROM HURRICANE RITA

Company	Location	Capacity (B/D)	Status
PORT ARTHUR/ LAKE CHARLES			
Citgo	Lake Charles, LA	324,300	Reduced rate
ConocoPhillips	West Lake, LA	239,400	Restarting
Calcasieu	Lake Charles, LA	30,000	Operating at full rate
ExxonMobil	Beaumont, TX	348,500	Reduced rates
Motiva	Port Arthur, TX	285,000	Restarting
Total	Port Arthur, TX	233,500	Restarting
Valero (Premcor)	Port Arthur, TX	255,000	Operating at full rate
Total		1,715,700	
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	Pasadena, TX	100,000	Operating at full rate

Company	Location	Capacity (B/D)	Status
Central)			
Valero	Houston, TX	83,000	Operating at full rate
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 – 437,000
Chevron Pascagoula, MS – reduced runs; estimate normal production by late Oct. Three refineries in LA from Hurricane Katrina remain shut down – 554,000 b/d Exxon Mobil Chalmette – full power ConocoPhillips Belle Chasse – full power Murphy Oil Meraux – partial power		554,000	Total including Katrina –991,000

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

- Shown below is a list of natural gas pipelines impacted by Hurricane Rita, as of 10/28.

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 Compressor Station (CS). As of Oct 28, ANR will begin accepting gas associated with liquid re-injectors at locations upstream of the Grand Chenier CS. ANR's capacity through its Grand Chenier facilities is now 650-MMcf/d.
Columbia Gulf Transmission	Force Majeure, effective Sept 26 for meters upstream of and including the Egan Measurement Stations. As of Oct 21, physical volumes in storage for Columbia Gas Transmission are generally on par with historical values and stand at 228.3 bcf.
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	On Texas Eastern as of Oct 28, zones STX and ETX are restricted to capacity and zones M1-24" and M2-24" through the Batesville CS and receipts sources at Monroe station are also restricted to capacity. To address natural gas supply constraints caused by the Venice Gas Processing Plant outage, Texas Eastern plans to construct an interconnection with facilities

On-Shore and Off-Shore Pipelines with Reported Supply Issues	Status
	owned by Discovery Gas Transmission. Some gas quality standards will be waived. Texas Eastern has restored all 10 storm affected compressor stations to full operational capability. As of October 27, 2005 Texas Eastern has approximately 17 meters not available for flow on its Cameron system Texas Eastern has 9 meters not available for flow on its South Pass system.
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.
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	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 17, 18 and 33 and Force Majeure on Segment 26 on Natural Gas Pipeline Company of America lines on Oct 28; 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	As of October 28, 17 locations are cleared for nominations and flow on the Sea Robin system. Texas Gas Transmission has agreed to waive certain gas quality specifications to allow gas supplies currently shut-in to flow through Sea Robin.
Tennessee Gas Williams	For the October 24th Gas Day: Tennessee will accept nomination increases at all points except for meters listed on the latest operational advisory posting. 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 and Trade associations)