## OFFICE OF ELECTRICITY DELIVERY AND ENERGY RELIABILITY (OE) U.S. DEPARTMENT OF ENERGY

# **Gulf Coast Hurricanes**<sup>1</sup> **Situation Report #24** October 26, 2005 (4:00 PM EDT)

### **HIGHLIGHTS**

- There are 2,659,024 customers without power in Florida as of 4:00 PM EDT 10/26 due to Hurricane Wilma. This represents about 29 percent of customers in the state.
- Port Everglades is closed to commercial traffic. The port suffered damage and it is unknown when the port will reopen.
- DOE staff are stationed at the Regional Response Coordination Center (RRCC) in Atlanta, Georgia, pursuant to Hurricane Wilma. 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 10/26, there are 2,659,024 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
Brevard	3,500	76,000	79,500	96%
Broward	838,100	24,700	862,800	3%
Collier	85,600	84,000	169,600	50%
Glades	1,600	1,800	3,400	53%
Hendry	3,800	4,700	8,500	55%
Indian River	24,700	16,900	41,600	41%
Lee	91,300	103,600	194,900	53%
Martin	51,600	33,000	84,600	39%
Miami-Dade	800,400	156,100	956,500	16%
Okeechobee	11,000	4,900	15,900	31%
Palm Beach	593,200	70,300	663,500	11%
St. Lucie	46,400	56,500	102,900	55%

<sup>\*</sup>Data is from 4:00 PM 10/26 FL EOC report and 1:00 PM 10/26 FPL website update.

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County	Customers w/o Power	<b>Total Customers</b>	% Customers w/o Power	
Florida Power & Light	2,552,000	4,343,095	59%	

Municipals	62,921	1,268,280	5%
Cooperatives	44,103	949,925	5%
Total includes companies with			
low number of outages not			
included in Table	2,659,024	9,138,533	29%

<sup>\*</sup>Data is from 4:00 PM 10/26 FL EOC report

- FPL said that the most severe damage has been to poles, wires, and substations and priority is being given to fixing damage to large, high voltage transmission lines and substations. FPL's preliminary assessments indicate that the worst damage occurred in Broward and southeastern Palm Beach counties. The company has a restoration team of 6,000 workers in the field and additional personnel will continue to arrive from outside of Florida through next week.
- As of 10/25/05 the National Rural Electric Cooperative Association reported that of the three Florida electric cooperatives affected by Hurricane Wilma, Lee County Electric Cooperative and Florida Keys Electric Cooperative expect to have the majority of customers restored by the weekend. Glades Electric Cooperative has over 100 transmission poles to replace and is reporting substantial damage to the distribution system, most of which is located in very rural areas.
- Port Everglades is closed to commercial traffic. The port suffered damage and it is unknown when the port will reopen.

#### ESTIMATED RESTORATION DATES - HURRICANE WILMA

County	Florida Power	Municipal	Cooperative
	& Light	Utilities	Utilities
Broward			Nov. 13 –
			Midnight
Charlotte			Oct. 30 –
			Midnight
Collier	Nov. 15 –		Nov. 15 –
	Midnight		Midnight
Dade	N. of Kendall	Oct. 31 -	
	<b>Dr.</b> – <b>Nov.</b> 22 –	Midnight	
	Midnight		
	S. of Kendall		
	<b>Dr Nov. 8</b> –		
	Midnight		
Glades	Nov. 8 –	Oct. 31 –	Nov. 20 –
	Midnight	Midnight	Midnight
Hendry	Nov. 15 –	Oct. 31 –	Nov. 20 –
	Midnight	Midnight	Midnight
Highlands			Oct. 30 –
			Midnight
Indian River	Nov. 8 –	Oct. 29 -	
	Midnight	Midnight	
Lee	Nov. 15 –		Nov. 15 –
	Midnight		Midnight
Monroe		Oct. 31 –	Oct. 29 –
		Midnight	Midnight

Okeechobee	Nov. 8 – Midnight		Nov. 8 – Midnight
Palm Beach	E. of turnpike & N. of PGA – Nov. 15 – Midnight Remainder of Palm Beach – Nov. 22 – Midnight	Nov. 9 – Midnight	Tricking it
St. Lucie	Nov. 15 - Midnight	Oct. 31 – Midnight	

Source: Florida EOC ESF-12 10/26/05 2 PM EDT

### Louisiana

 Entergy on 10/25 updated its Table showing its restoration progress by neighborhood in New Orleans. See: <a href="http://www.entergy-neworleans.com/content/corp/emergencyctr/NOLA\_electric\_detail\_content.asp">http://www.entergy-neworleans.com/content/corp/emergencyctr/NOLA\_electric\_detail\_content.asp</a>

### **OIL AND GAS INFORMATION**

According to MMS, 1,022,515 barrels of oil per day are shut-in, which equates to 68.17 percent of the normal daily oil production in the Gulf. Shut-in gas production is 5.563 billion cubic feet per day. This shut-in gas production is equivalent to 55.63 percent of the normal daily gas production in the Gulf. Evacuations are equivalent to 27.84 percent of 819 manned platforms and 12.69 percent of 134 rigs currently operating in the Gulf. For further information see MMS web site at <a href="https://www.mms.gov">www.mms.gov</a>. 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
	2 (Missing / Allegedly		
	Sunk - Added in With		
Rigs Unaccounted For	Destroyed)	0	0
Number of Pipelines	28	70	102

Damaged			
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
	Combined Ri		0/12/04 02/14/05
Cumulative (To Date)	8/26/05 - 1	0/25/05	9/13/04 - 02/14/05
	Combined Ri		
Gas (BCF)	348.0	172.259	
	Combined Riv		
Oil (bbls)	68,550,886		43,841,245
<b>Evacuation Highs</b>			
Platforms	754	660	575
Rigs	107	89	69
Platforms in the Path	1600	1300	150

Source: US MMS October 25 2005.

- According to the Louisiana Department of Natural Resources (on Oct 26), onshore crude oil production in southern Louisiana has reached 69,596 barrels per day, or 34.3 percent of the region's capacity; natural gas production of 890 million cubic feet, or 39.8 percent of daily capacity in 38 southern Louisiana parishes, has been restored. Of the 55 intrastate pipelines operating in southern Louisiana, five have reopened, 38 were shut in, 11 were partly shut in, and the status of one was unknown.
- 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/TEXA	S 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
Central)			
Valero	Houston, TX	83,000	Operating at full rate

Company	Location	Capacity (B/D)	Status
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		4,713,676	Total Shutdown – 437,000
Corpus Christi			
Chevron Pascagoula	, MS – reduced runs;	554,000	Total including Katrina –991,000
estimate normal pro-	duction 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		

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 10/25.

On-Shore and Off-Shore Pipelines with	Status
Reported Supply Issues	
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. Effective Oct 26, ANR will increase its
	capacity through its Grand Chenier facilities to 550-
	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,	CIPCO has minor damage and Black Lake remains
Seabreeze and Black Lake	shut-in due to lack of supplies.
Duke Energy Gas Transmission	As of Oct 26, five zones partially restricted or sealed to
	capacity on Texas Eastern.
Enbridge Inc.'s Offshore System, which	MS Canyon, Manta Ray, and UTOS pipelines are still
includes Garden Banks, Manta Ray, Nautilus,	out of service. MS Canyon has Nov 7 as target date to
Stingray, and MS Canyon	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

On-Shore and Off-Shore Pipelines with	Status
Reported Supply Issues	
	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 23 and 33
	and Force Majeure on Segment 26 on Natural Gas
	Pipeline Company of America lines on Oct 26; 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)	As of October 26, 16 locations are cleared for
Trunkline and Sea Robin	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.
	Florida Gas transmission is performing some
	unscheduled maintenance in October.
Tennessee Gas	For the October 24th Gas Day: Tennessee will accept
	nomination increases at all points except for meters
	listed on the latest operational advisory posting. Some
Williams	pipeline points were restricted on Oct 23.  Most Williams' facilities have returned to service. The
w infams	only report of significant damage is Cameron Meadows
	natural gas processing plant in LA.
(Sources: Company web sites, DOT, and Trade association	

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