OFFICE OF ELECTRICITY DELIVERY AND ENERGY RELIABILITY (OE) U.S. DEPARTMENT OF ENERGY Gulf Coast Hurricanes¹ Situation Report #14 October 12, 2005 (3:00 PM EDT)

HIGHLIGHTS

- Currently, 172,522 customers are without electric power in Texas and Louisiana. Of these some 122,716 are Entergy Louisiana customers who cannot receive electricity at this time.
- 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.
- 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.
- 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, 1,046,462 barrels of oil per day were shut-in which equates to 69.76 percent of the normal daily oil production in the Gulf. Shut-in gas production was 5.919 billion cubic feet per day. This shut-in gas production is equivalent to 59.19 percent of the normal daily gas production in the Gulf. Evacuations are equivalent to 31.26 percent of 819 manned platforms and 2.24 percent of 134 rigs currently operating in the Gulf. For further information see MMS web site at <u>www.mms.gov</u>. 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
Platforms Destroyed	66	46	7
Platforms Extensive Damage	32	20	20
Rigs Adrift	13	6	5
Rigs Extensive Damage	10	9	4
Rigs Destroyed	4	4	1
	0 (3 missing rigs are counted in		
Rigs Unaccounted For	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 - 10/12/05	9/13/04 - 02/14/05
Gas (BCF)	Combined with Rita	277.527	172.259
Oil (bbls)	Combined with Rita	55,602,122	43,841,245
Evacuation Highs			
Platforms	754	660	575
Rigs	107	89	
Platforms in the Path	1600	1300	150

Source: US MMS October 12, 2005

• The following tables highlight the current shut downs by major energy facilities in the path of Hurricane Rita as of October 12:

OIL OPERATIONS IN THE PATH OF HURRICANE RITA	A
----------------------------------------------	---

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
Shell (Motiva)	Port Arthur, TX	285,000	Shut down - power restored
Total	Port Arthur, TX	233,500	Restarting

Company	Location	Capacity (B/D)	Status
Valero (Premcor)	Port Arthur, TX	255,000	Restarting
Total		1,715,700	Shutdown – 633,500
HOUSTON/TEXA	S 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	Pasadena, TX	100,000	Operating at full rate
Central)			
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
TOTAL OF ALL A	REAS including	4,713,676	Total Shutdown – 1,070,500
Corpus Christi	_		
Three refineries (all	in LA) from	554,000	Total including Katrina – 1,624,500
Hurricane Katrina re	emain shut down –		
554,000 barrels per day			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.

- 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.
- Explorer Pipeline expects its Lake Charles, Louisiana, origination point to be operational on October 11, with product moving on the Louisiana-Texas line by October 13 and its Port Arthur, Texas, operations fully operational by the end of the week.
- 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.
- Shown below is a list of natural gas pipelines impacted by Hurricane Rita as of October 12.

On-Shore and Off-Shore Pipelines with Reported Supply Issues	Status
Reported Supply Issues ANR	Many of ANR's facilities have been inspected and approved for flow. On the Eastern SEGA System, effective October 10, ANR has returned to service the following offshore pipelines and interconnects that have been inspected and approved: 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. ANR has also established a hydrocarbon Dew Point Limit effective October 11.
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 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	Limited transportation capacity on segments 16, 18, 25, and 33 and Force Majeure on Segment 26 on Natural Gas Pipeline Company of America lines on Oct 12; 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. Twelve interconnects now open.

On-Shore and Off-Shore Pipelines with	Status	
Reported Supply Issues		
Southern Union's (Panhandle Energy) Trunkline and Sea Robin	 Trunkline's Terrebonne System started accepting nominations for gas on Sept 27. Four offshore points are not available until tested; three offshore receipts and delivery points total are unavailable due to damage; and 10 additional offshore receipts points are unavailable due to producer related operational issues. As of October 11, Trunkline has removed prohibition on nominations for flow on the Vermilion system, except for three points with damage. 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	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 11th, due to nominations in excess of the available capacity, Tennessee has partially restricted the Niagara Spur.	
Williams (Sources: Company web sites, DOT, and Trade association	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

Utility	Customers w/o Power	% Customers w/o Power
Louisiana	136,650	6.6%
Texas	35,872	0.4%

- Louisiana data is reported by the Louisiana Public Service Commission as of 10/11 4:00 PM and their percentage outage numbers are used in calculating the percentage of total outage. Texas data is from the TX JFO/EOC 10/11 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's has made considerable progress in restoring its electrical transmission system with 45 transmission lines and 4 substations out of service that affect customers.

Hurricane Rita at its peak took out of service 82 percent of Entergy's Texas transmission lines and 38 percent of the transmission lines in southwest Louisiana, including all of the lines west of Lafayette. The company reports that at its peak, Hurricane Rita took 343 transmission lines and 436 substations out of service. The total mileage of lines out at peak was approximately 3,803

STATE REPORTS

<u>Texas</u>

- As of 3PM CDT 10/11/05 the Texas Public Utility Commission reported that 35,872 electricity customers remained without power (0.4%) including 29,124 Entergy customers. (The Entergy website reports that as of 9:30 PM CDT their Texas outage number had been reduced to 16,191).
- Sam Houston Electric Cooperative has less than 1,000 customers without power, while Jasper-Newton Electric Cooperative reported 5,789 customers remaining without power.

<u>Louisiana</u>

- The Louisiana Public Service Commission reports that as of 4PM 10/11 136,650 electricity customers remained without power from Hurricanes Katrina and Rita with only 11,288 without power from Hurricane Rita. A total of 6.6 % customers in Louisiana 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.

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

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

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