

OFFICE OF ELECTRICITY DELIVERY AND ENERGY RELIABILITY (OE)
U.S. DEPARTMENT OF ENERGY
Hurricane Katrina Situation Report #38
September 19, 2005 (3:00 PM EDT)

HIGHLIGHTS

- Currently, 275,431 customers remain without electric power in Louisiana and Mississippi due to Hurricane Katrina. This is down by over 2.4 million from a peak of 2.7 million customers that were without power after Hurricane Katrina struck the region.
- At 2 PM, 9/19 the center of Tropical Storm Rita was located just southeast of Long Island in the Bahamas, about 165 miles southeast of Nassau and about 380 miles east-southeast of Key West, FL. The storm's maximum sustained winds are near 60 mph with tropical storm force winds extending outward up to 115 miles. Additional strengthening is expected and Rita could become a hurricane during the next 24 hours. Rita is expected to move into the Gulf of Mexico during the coming week. <http://www.nhc.noaa.gov/>. The Government of the Bahamas has discontinued all warnings for the Turks and Caicos.
- Entergy continues to make significant progress securing the natural gas system and restoring service. Of the 145,000 Entergy gas customers to date, 86,500 (60%) have been secured and 52,500 (36%) have been restored. The restored customers are primarily in the Algiers, Uptown, Gentilly, Central City, Lakeshore and Lakeview areas, along with 10% of the French Quarter and 50% of the Central Business District.
- Working gas in storage increased to 2,758 Bcf as of Friday, September 9, which is 3.7 percent above the 5-year average inventory level for the report week, according to EIA's *Weekly Natural Gas Storage Report*. The implied net injection of 89 Bcf is 3 percent above the 5-year average of 86 Bcf and about 7 percent less than last year's injection of 96 Bcf. It is also the largest net injection since the beginning of July and marks the first time since late June that the implied net injection has exceeded the 5-year average. Despite continued natural gas production shut-ins in the Gulf of Mexico, which reduces supplies from what they otherwise would have been, the relatively large net injection occurred as futures prices hold a significant premium to the Henry Hub spot price offering a strong economic incentive to store natural gas for the winter heating season.
- DOE staff have been at the National Response Coordination Center (NRCC) at FEMA HQ, the Interagency Incident Management Team at HQ, FEMA Region IV, and the State Emergency Operation Centers (EOC) in Louisiana for several weeks. **Today, in response to further activation orders from FEMA, OE deployed two staff to FEMA Region IV in Atlanta and one to the State EOC in Tallahassee, FL, for Hurricane Rita response.**

PETROLEUM AND GAS INFORMATION

- According to MMS reports on 9/19, 10.26 percent of 819 manned platforms and 1.49 percent of 134 rigs remain evacuated in the Gulf of Mexico (GOM). Today's shut-in oil production is 837,648 barrels of oil per day. The shut-in oil production is equivalent to 55.84 percent of the normal daily oil production in the GOM, which is currently approximately 1.5 million barrels of oil per day. Shut-in gas production is 3.375 billion cubic feet per day. This shut-in gas production is equivalent to 33.75 percent of the normal daily gas production in the GOM, which is currently approximately 10 billion cubic feet per day.

- **Improvement in GOM Shut-in Oil and Gas 8/30/05 – 9/16/05**

Date	Percent of GOM Oil Shut-in	Percent of GOM Gas Shut-in
August 30	95.20	87.99
August 31	91.45	83.46
September 1	90.43	78.66
September 2	88.53	72.48
September 3	78.98	57.80
September 4	No data reported	No data reported
September 5	69.57	54.13
September 6	58.02	41.06
September 7	57.37	40.36
September 8	60.12	40.20
September 9	59.88	38.29
September 10	59.84	38.21
September 11	No data reported	No data reported
September 12	57.38	37.84
September 13	56.45	37.20
September 14	56.25	35.18
September 15	56.14	34.11
September 16	56.06	33.84
September 17	55.84	33.75

- MMS has provided the following estimates of Hurricane Katrina damage to Outer Continental Shelf Infrastructure in the Gulf of Mexico: 46 producing structures destroyed; 20 producing structures extensively damaged; 4 drilling rigs destroyed; 9 drilling rigs extensively damaged; and 6 rigs adrift (all adrift rigs have been located, remanned, and are having power brought up on them).
- MMS reports that most of the destroyed platforms were 30- year-old shelf platforms with minimal production in the West Delta, Grand Isle, and South Pass areas.
- Air Products (major supplier of hydrogen) announced today that portions of its New Orleans, La. industrial gas complex, which sustained extensive damage from Hurricane Katrina, should begin operations within the coming months, with substantial operations anticipated by the end of the calendar year. The company also announced that it has secured alternate feed gas sources and has re-established partial operations at its Sarnia, Ontario, Canada production facility, originally shut down due to a planned suspension of a supplier's

feed gas. The two plants, at New Orleans, and Sarnia represent approximately 90 percent of the company's liquid hydrogen production in North America.

- The Captain of the Port of New Orleans re-opened the Inner Harbor Navigation Canal (IHNC) on the Gulf Intra Coastal Waterway (GICW) north of the Turning Basin. The IHNC remains closed south of the Turning Basin due to salvage operations at the Florida Avenue Bridge. Vessels can continue to access the GICW east of the IHNC via the Baptiste Collette alternate route. The opening of this waterway will now allow access from Lake Pontchartrain to the Gulf of Mexico through the IHNC, GICW and/or the Mississippi River Gulf Outlet (MRGO).

The Gulf Intracoastal Waterway (GICW) is now open from mile 55, West of Harvey Lock (Houma) westward through the Harvey Lock, which is operational. The Algiers Lock, while operational, may be closed to navigation until further notice due to lock operator safety concerns. Currently, the GICW remains closed from the Inner Harbor Navigational Canal eastward to mile 60, East of Harvey Lock.

- The U.S. Coast Guard reports that of the estimated 6.8 million gallons of oil released into the environment due to Hurricane Katrina, 98% of it has been recovered, contained, evaporated, or has dispersed naturally.
- Entergy Gas Operations has repaired a total of 215 gas leaks and has reduced gas leakage in the system by 75 percent since the hurricane hit. They continue gas leak detection and repair throughout the New Orleans area, with 82% assessed. Some of the areas in the lower parts of the New Orleans "bowl" have significant mud (1-3 feet deep), which makes it difficult to access.
- The tables below show no change for the four refineries shutdown as a result of damage from Hurricane Katrina.

Table 1. Shutdown Refineries

Refinery	Location	State	Capacity (bbl/day)	Current Status
ConocoPhillips*	Belle Chasse	LA	247,000	No power - major damage
ExxonMobil	Chalmette	LA	187,200	No power - water damage
Murphy	Meraux	LA	120,000	No power – water is starting to recede, currently making assessment of damage, leaking crude oil tank repaired
ChevronTexaco*	Pascagoula	MS	325,000	Damage unknown – assessment being made

ELECTRICITY INFORMATION

STATE OUTAGE DATA

Utility	Customers w/o Power	% Customers w/o Power from Katrina
Louisiana*	243,884	22%

Mississippi	31,547	2%
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*Louisiana data is reported by the Louisiana Public Service Commission and their percentage outage numbers are used in calculating the percentage of total outage.

STATE REPORTS

Mississippi and Louisiana

- In Louisiana 243,884 customers remain without power, as reported by the Louisiana Public Service Commission (LAPSC) (10:00 PM, 9/18/05 latest report).

Louisiana Outage Data by Utilities with Significant Outages (10:00 PM 9/18/05)

UTILITY	OUTAGES	% customers w/o power
Entergy Louisiana	48,086	10%
Entergy New Orleans	167,268	81%
Wash-St. Tammany	15,756	35%
CLECO	12,412	15%
Total for state shown includes companies with low percentage outages not shown in the Table	243,884	22%

*Louisiana data and percentages are reported by the Louisiana Public Service Commission.

- As of reporting 9/17/05 Mississippi had 31,547 customers without power, which represents 2 percent of customers in the state, including 18,776 Mississippi Power customers and 12,771 customers of the Electric Power Associations of Mississippi (EPAOFMS).
- Entergy has almost 6,000 line and vegetation workers supporting restoration activities.
- Entergy Transmission reports 29 lines and 23 substations out of service as of 5:00 PM 9/18/05. This is down from 181 lines and 263 substations out of service following Katrina's hit.