

**OFFICE OF ELECTRICITY DELIVERY AND ENERGY RELIABILITY (OE)
U.S. DEPARTMENT OF ENERGY
Hurricane Katrina Situation Report #35
September 14, 2005 (2:00 PM EDT)**

HIGHLIGHTS

- Currently, 391,896 customers remain without electric power in Louisiana and Mississippi due to Hurricane Katrina. This is down by about 2.3 million from a peak of 2.7 million customers that were without power after Hurricane Katrina struck the region.
- DOE is coordinating efforts with the US Department of Transportation and the State of LA to support the re-opening and repair of Highway 23 in Plaquemines Parish. The Highway is currently open for 47 miles southeast of New Orleans to Port Sulphur. The LA Department of Transportation estimates that the southern half of the roadway from Port Sulphur to Venice will open in 30 days.
- Entergy reports that the Waterford 3 nuclear plant was returned to service.
- Last night EPA extended the diesel waiver for States located in PADD 1 (DC, ME, NH, VT, MA, RI, CT, NY, NJ, PA, MD, DE, WV, VA, NC, SC, GA, and FL) and PADD 3 (NM, TX, LA, MS, AL, and AR), including Tennessee to allow the use of high sulfur diesel for on-road use until October 5, 2005.
- Entergy reports that transmission line work to the LOOP's Fourchon facility is complete. Presuming that there are no difficulties encountered, this will restore additional offshore crude oil will be available to refineries.
- 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.

PETROLEUM AND GAS INFORMATION

- According to MMS reports on 9/14, 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 843,745 BOPD. The shut-in oil production is equivalent to 56.3 percent of the normal daily oil production in the GOM, which is currently approximately 1.5 million BOPD. Shut-in gas production is 3.518 BCFPD. This shut-in gas production is equivalent to 35.2 percent of the normal daily gas production in the GOM, which is currently approximately 10 BCFPD. According to MMS, approximately 35 percent of shut-in oil is as a result of problems with onshore infrastructure.

▪ **Improvement in GOM Shut-in Oil and Gas 8/30/05 – 9/14/05**

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

- The repair or replacement of flooded substations will delay restoration of transmission service to several refineries downstream of New Orleans. Inspection of customer facilities is required before service can be restored.
- The State University of New York Maritime College reported that its training ship, the 565-foot Empire State VI, will be utilized to berth up to 700 ConocoPhillips employees and contract workers as they begin repairs on strategic infrastructure and facilities at ConocoPhillips' oil refinery in Belle Chasse, Louisiana. The ship should arrive in New Orleans on September 16th.
- **The Coast Guard and its industry partners have established a Joint Information Center to support the response to seven major oil spills in the southern Louisiana area following Hurricane Katrina.**
- **The Port of New Orleans opened today to commercial traffic. The Captain of the Port of New Orleans has reviewed the preliminary surveys completed on the Mississippi River Gulf Outlet (MRGO) and has reopened the entire waterway to vessels with drafts of 22 feet or less. The Inner Harbor Navigational Canal (Industrial Canal) is still shut down.**
- **See the attached tables of natural gas pipelines and processing plants located on the Gulf Coast.**

Natural Gas Transmission Pipeline Status (9/13/05 PM)

Pipeline	Primary Markets	Capacity (MMcfd)	Impacts
ANR Pipeline	Midwest	6,414	None reported
Florida Gas Transmission	Florida	2,150	10% overage limit (9/13/2005)
Gulf South	Gulf States	2,750	Allocations in categories other than Primary Firm service
Southern Natural Gas	Southeast	3,296	550 mmcfd production shut in
Tennessee Gas	Northeast	6,937	700 mmcfd production shut in
Texas Eastern Transmission	Northeast	5,939	Deliveries allowed only for confirmed receipts
Trunkline Gas	Midwest, East Coast	1,500	Deliveries allowed only for confirmed receipts
Transco	Northeast	8,100	None Reported
Gulfstream	Florida	1,100	Deliveries allowed only for confirmed receipts

Natural Gas Processing Plant Status (9/13/05)

Natural Gas Processing Plant	State	Capacity as of Jan 1, 2005 (MMcfd)*	2004 Average Throughput (MMcfd)**	Current Status
Dynegy - Yscloskey	LA	1,850	1,343	Seawater damage. Could take 3-6 months to repair.
Dynegy – Venice	LA	1,300	997	Seawater damage. Could take 3-6 months to repair.
Enterprise Products – Toca	LA	1,100	468	Assessment ongoing.
BP - Pascagoula	MS	1,000	768	Power restored. Waiting for pipelines to deliver gas.
ExxonMobil – Garden City	LA	630	NA	Waiting on power
Duke Energy – Mobile Bay	AL	600	172	Available for service but waiting on pipeline outlet for liquids.
Marathon – Burns Point	LA	200	60	Waiting on power
ExxonMobil – Grand Isle	LA	115	72	Waiting on power

- The tables below show no change in the five shutdown refineries and company confirmation of status of two refineries with reduced runs.

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
Shell Chemical	St Rose	LA	55,000	Awaiting restart
ChevronTexaco*	Pascagoula	MS	325,000	Damage unknown – assessment being made

Table 2. Refineries with Reduced Runs

Refinery	Location	State	Capacity (bbl/day)	Current Status
Motiva (Shell)	Norco	LA	226,500	Restarted – operating at 95%

ELECTRICITY INFORMATION

STATE OUTAGE DATA

Utility	Customers w/o Power	% Customers w/o Power from Katrina
Louisiana*	311,366	28%
Mississippi	80,530	6%

*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 311,366 customers remain without power, as reported by the Louisiana Public Service Commission (LAPSC) (7:00 AM 9/14/05 latest report).

Significant Louisiana Outage Data by Parish (7:00PM 9/13/05)

UTILITY	OUTAGES	% customers w/o power
Jefferson	47,037	23%
Lafourche	1,121	2%
Orleans	170,120	83%
Plaquemines	7,587	81%
St. Bernard	28,308	99%
St. Tammany	41,336	38%
Washington	14,784	56%

*Louisiana data and percentages are reported by the Louisiana Public Service Commission. Only Parishes with outages of more than 1,000 customers are shown

Louisiana Outage Data by Utility with Significant Outages (7:00AM 9/14/05)

UTILITY	OUTAGES	% customers w/o power
Entergy Louisiana	87,801	19%
Entergy New Orleans	170,120	83%
Wash-St. Tammany	26,019	57%
CLECO	27,058	33%
Total for state shown includes companies with low percentage outages not shown in the Table	311,366	28%

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

- Mississippi had 80,530 customers without power, which represents 6 percent of customers in the state, including 25,451 Mississippi Power customers and 55,079 customers of the Electric Power Associations of Mississippi (EPAOFMS). In Mississippi, Mississippi Power, Entergy and TVA have completed restoration activities to all customers able to receive power. Given the manner in which utilities count “customers”, there have been some seeming data anomalies during the restoration process. A building with one power meter is generally counted as one customer by utilities. If an apartment building is destroyed, for example, and several mobile units are established to house the former inhabitants, each with a separate meter, the result is an actual increased number in the total number of customers reported by the utility servicing them.
- Entergy reports that they have reenergized six of their substations within the city and restored distribution on a very limited basis, but there is a lot of work remaining outside the city that it will complete first. The company is continuing to move from outlying, minimally affected areas into more heavily damaged areas. They plan to focus on locations that have been evacuated after these others.
- Entergy has seventeen generating units in the New Orleans area that are fueled by natural gas and/or oil. Nine of those units have been returned to service, with one more expected to return late this week. To put this number in perspective, one must understand that several of the units that are currently offline operate only a few days out of the year during peak periods.
- Entergy Transmission reports 32 lines out of service and 25 substations as of 11:00AM 9/13/05. Transmission lines and substations continued to be restored on the eastbank and westbank of Jefferson Parish.
- Entergy reports that the repair or replacement of flooded substations will delay restoration of transmission service to several key loads, including refineries downstream of New Orleans, but customers have extensive damage as well. In flooded areas the safety of customer’s facilities must be validated by the applicable local authorities before service can be restored. The repair and inspection of customer facilities may constrain restoration in some areas.

- The following table documents the electricity restoration for Louisiana utilities from August 30 – September 13:

Date		<i>Outages by Utility</i>							<i>Total: All Utilities</i>
		<i>CLECO</i>	<i>DEMCO</i>	<i>EGSI</i>	<i>ELI</i>	<i>ENOI</i>	<i>SLECA</i>	<i>WST</i>	
Tues	8/30	80,810	40,115	97,376	420,711	201,369	13,912	45,000	899,293
Wed	8/31	79,672	29,411	76,681	421,390	215,163	13,912	45,000	881,229
Thur	9/1	79,672	20,652	51,277	391,118	200,751	13,912	45,000	802,382
Fri	9/2	80,800	18,740	36,004	349,816	200,771	362	45,000	731,493
Sat	9/3	77,600	10,039	6,440	294,526	200,751	362	45,000	634,718
Sun	9/4	74,800	10,039	1,362	258,861	200,751	362	45,000	591,175
Mon	9/5	72,200	8,264	420	261,812	200,749	362	44,799	588,606
Tues	9/6	65,800	1,533	35	211,101	197,749	362	43,909	520,489
Wed	9/7	60,066	1,533	0	186,653	184,383	362	43,909	476,906
Thur	9/8	54,027	1,533	0	169,112	182,152	362	40,650	447,836
Fri	9/9	49,650	1,533	0	157,354	181,645	362	40,650	431,194
Sat	9/10	41,894	1,533	858	136,670	179,522	362	36,050	396,889
Sun	9/11	31,897	1,533	502	110,291	176,644	362	31,650	352,879
Mon	9/12	27,058	0	273	93,757	176,124	362	28,669	326,243
Tues	9/13	27,058	0	93	93,379	173,605	362	26,019	320,516
% Back in Service		66%	100%	99.9%	78%	14%	97%	42%	64%