



U.S. Department of Energy
Emergency Support Function 12

Hurricane Ike Situation Report # 19

September 26, 2008 (12:00 PM EDT)

http://www.oe.netl.doe.gov/emergency\_sit\_rpt.aspx

Summary

Table with 3 columns: Impacted State, Electric Customer Outages, % of State Out. Includes rows for Texas (410,157 outages, 4% out), TOTAL (410,157), and Petroleum & Natural Gas production shut-ins (Crude Oil: 770,408 b/d, 59.3% out; Natural Gas: 4,175 mmcf/d, 56.4% out; Refinery Capacity: 656,500 b/d, NA out).

Notes:

Total state customers are based on 2006 EIA Customer Data.

Note: due to a large number of service providers, including investor owned utilities and cooperatives, the number of customer outages reported may not be comprehensive.

Source:

Crude Oil and Natural Gas Production Data from Minerals Management Service.

Refinery Status confirmed by company or on company web site and through various trade press sources.

\* % capacity out represents percent of production capacity in the Gulf of Mexico.

Highlights:

- As of 10:00 AM EDT September 26, there are 410,157 customers without power in Texas. Power has been restored to nearly 75,500 customers since Ike Situation Report No. 18 yesterday. Outages in heavily impacted Texas counties as reported by the Texas PUC as of 10:00 AM EDT September 26 include: Harris - 350,619; Galveston - 15,224; Brazoria - 18,960. As of 8:00 AM EDT September 26, Texas City is open at all times to vessels with drafts of less than 16 feet and open to project depth for daylight only transits. Sabine Pass Channel going into waterways leading to Port Arthur and Beaumont is now open to vessels with drafts of 36 feet or less during daylight hours and 30 feet or less at all times. Part of the Gulf Intracoastal Waterway in TX has re-opened, but it is still closed from mile marker 350 to 319 and has some closures in LA as well. The Calcasieu River is again restricted to vessels with drafts of 39 feet or less, which is just below its project depth of 40 feet. Nighttime transit above mile marker 190 on the Lower Mississippi River is still restricted to vessels with drafts of 30 feet or less. The Pascagoula, Channel in MS is still limiting vessels with drafts over 36 feet to occasional daylight transits.



# U.S. Department of Energy Emergency Support Function 12

## ESF 12 Actions:

- ESF-12 is staffing the FEMA National Response Coordination Center (NRCC) in Washington, DC. The FEMA Region VI Joint Field Office (JFO) in Austin, TX and the FEMA National Incident Management Assistance Teams in Houston and San Antonio have been demobilized.

## Situation Report Detail

### Petroleum & Gas Information

Oil & Gas Offshore Production Shut In Status for Affected Area			
Location	Amount Shut In	Pre-event Production	% Shut In
Crude Oil (B/D)	770,408	1,300,000	59.3%
Natural Gas (MMCF/D)	4,175	7,400	56.4%

Source: Minerals Management Service

- As of September 25, the Minerals Management Service (MMS) reports 4,175 million cubic feet per day (MMcf/d) of the Gulf’s natural gas production remains shut-in, equivalent to 56.4 percent of the Gulf production. MMS reports 770,408 barrels/day of the Gulf’s crude production remains shut-in, equivalent to 59.3 percent of the Gulf’s crude production. A total of 179 production platforms, or 25.8 percent of the Gulf’s 694 manned platforms, remain evacuated. Personnel from 3 rigs, representing 2.6 percent of the 116 operating in the region, remain evacuated. Percents in prior situation reports were calculated based on 717 manned platforms and 121 operating rigs but were changed based on the confirmed number of platforms and rigs destroyed by Hurricane Ike
- On September 25, the Louisiana’s Department of Natural Resources reports that 53,364 b/d or 34 percent of the normal Louisiana oil production has been restored. Operators in 17 parishes and in-State offshore areas normally produce 155,767 barrels/day (the numbers are in addition to MMS reports of Federal offshore production). Shut-in oil production is 68,998 b/d and the status of remaining 33,405 b/d is unknown. The estimated amount of restored gas production is 586 MMcf/d or 36 percent of the daily gas production capacity, which is 1,642 MMcf/d. The estimated amount of shut-in gas production is 743 MMcf/d; the status of the remaining 312 MMcf/d has not been confirmed.
- On September 25, DOE stated that it is delivering 500,000 barrels of emergency exchange oil to Citgo’s refinery at Lake Charles, LA and 150,000 barrels to Alon’s Krotz Springs, LA refinery. From September 8 through September 25, DOE has released 3.949 million barrels of oil from the Strategic Petroleum Reserve (SPR) to five different oil companies due to disruptions from hurricanes Gustav and Ike. The companies receiving SPR oil are Alon, Citgo, ConocoPhillips, Marathon, and Placid.
- Presently waivers of clean gasoline specifications exist in parts of: KY (through September 30), TX (through October 1), VA, MD, and DC (through October 7), and GA (through October 12).



**U.S. Department of Energy  
Emergency Support Function 12**

In addition, TX still has a waiver of the Texas Low-Emission Diesel requirements (through September 30).

- Three refineries remain shut down as of 10 AM EDT September 26 in the Port Arthur and Texas City areas, with a total operable capacity of 0.7 million b/d. Valero reported on September 25 that its Port Arthur refinery has restarted. At 10:00 AM EDT September 26, Shell issued a statement it would defer turnaround maintenance activities planned for third quarter 2008 at some Shell and Motiva refineries in the Gulf Coast. See table below for status of refineries.

Refineries in the Path of Gustav / Ike as of 9/25/08 10:00 AM EDT							
Refinery Impacted	Location	Storm	Capacity (B/D)				
			Operating	Shut Down	Restarting	Reduced Runs	Back to Normal
<b>Pascagoula/Mobile Region</b>							
Chevron	Pascagoula, MS	G	330,000				330,000
Shell	Saraland, AL	-	86,000				
<b>Pascagoula/Mobile Total</b>			<b>416,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>330,000</b>
<b>Lower Mississippi River Region</b>							
Alon (Formerly Valero)	Krotz Springs, LA	G	80,000			80,000	
Chalmette Refining	Chalmette, LA	G	192,760				192,760
ConocoPhillips	Belle Chasse, LA	G	247,000				247,000
ExxonMobil	Baton Rouge, LA	G	503,000				503,000
Marathon	Garyville, LA	G	256,000				256,000
Motiva	Norco, LA	G	236,400				236,400
Motiva	Convent, LA	G	235,000				235,000
Murphy Oil	Meraux, LA	G	120,000				120,000
Placid Refining	Port Allen, LA	G	56,000				56,000
Shell	Saint Rose, LA	G	55,000				55,000
Valero	Norco, LA	G	185,003				185,003
<b>Lower Mississippi River Total</b>			<b>2,166,163</b>	<b>0</b>	<b>0</b>	<b>80,000</b>	<b>2,086,163</b>
<b>Lake Charles Region</b>							
Calcasieu	Lake Charles, LA	G+I	78,000			78,000	
Citgo	Lake Charles, LA	G+I	429,500			429,500	
ConocoPhillips	Westlake, LA	G+I	239,400			239,400	
<b>Lake Charles Total</b>			<b>746,900</b>	<b>0</b>	<b>0</b>	<b>746,900</b>	<b>0</b>
<b>Port Arthur Region</b>							
ExxonMobil	Beaumont, TX	G+I	348,500	348,500			
Motiva	Port Arthur, TX	G+I	285,000			285,000	
Total Petrochemicals	Port Arthur, TX	G+I	232,000	232,000			
Valero (formerly Premcor)	Port Arthur, TX	G+I	289,000		289,000		
<b>Port Arthur Total</b>			<b>1,154,500</b>	<b>580,500</b>	<b>289,000</b>	<b>285,000</b>	
<b>Houston/Galveston Region</b>							
BP	Texas City, TX	I	467,720		467,720		
ConocoPhillips	Sweeny, TX	I	247,000			247,000	
Deer Park	Deer Park, TX	I	329,800			329,800	
ExxonMobil	Baytown, TX	I	567,000			567,000	
Houston Refining	Houston, TX	I	270,600		270,600		
Marathon	Texas City, TX	I	76,000	76,000			
Pasadena Refining	Pasadena, TX	G+I	100,000		100,000		
Valero	Houston, TX	I	83,000		83,000		
Valero	Texas City, TX	I	199,500			199,500	
<b>Houston/Galveston Total</b>			<b>2,340,620</b>	<b>76,000</b>	<b>921,320</b>	<b>1,343,300</b>	
<b>Corpus Christi Region</b>							
Citgo	Corpus Christi, TX	I	156,000				156,000
Flint Hills Resources	Corpus Christi, TX	I	288,126				288,126
Valero	Corpus Christi, TX	I	142,000				142,000
Valero	Three Rivers, TX	I	93,000			93,000	
<b>Corpus Christi Total</b>			<b>679,126</b>	<b>0</b>	<b>0</b>	<b>93,000</b>	<b>586,126</b>
<b>TOTAL</b>			<b>7,503,309</b>	<b>656,500</b>	<b>1,210,320</b>	<b>2,548,200</b>	<b>3,002,289</b>



## U.S. Department of Energy Emergency Support Function 12

**Note:** The table does not include all refineries in the PADD III, Gulf Coast Region. Storm column indicates hurricanes impacting refineries: G = Gustav; I = Ike, G+I = Both storms, and - = no impact.

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

- As of 10:30 AM EDT September 26, seven major natural gas pipelines in the Gulf Coast area continue to report complete shut-in of their systems. Four of the seven pipelines have notified their customers that the pipeline is ready to return to service; however, due to continued assessments of damage to interconnecting facilities and/or lack of upstream gas flow, these pipelines remain completely shut-in. The other 3 pipelines have reported that the repairs to the damaged facilities are ongoing and the integrity of the line is being verified. At this time there is no time frame of restoration of service for these pipelines. See table below.
- Many of the natural gas pipelines that have commenced gas flow from their offshore receipt points continue to see improvements. As additional offshore natural gas production becomes available some of the pipeline are either at or are fairly close to their pre-Hurricane levels of gas flow on their systems.
- There are 39 major natural gas processing plants in the path of Hurricane Ike with a total operating capacity of 17.7 billion cubic feet per day (Bcf/d). As of 10:30 AM EDT September 26, the Energy Information Administration (EIA) has confirmed that 7 plants remain shut down which includes those plants still impacted from Gustav, totaling an operating capacity of 4.68 Bcf/d (26 percent of the capacity in Hurricane Ike's path). In addition, EIA reports 26 plants have resumed operations at reduced or normal levels with a total operating capacity of 10.02 Bcf/d. Five plants continue to report that they are capable to restart (totaling 2.76 Bcf/d operating capacity) once power is restored and/or upstream gas flow are sufficient. See table below.



**U.S. Department of Energy  
Emergency Support Function 12**

**Force Majeure / Critical Notice Posting by Natural Gas Pipelines as of 9/26/08 10:00 AM EDT**

Pipeline Name	Time Stamp	Notice (Status)
ANR Pipeline Co.	9/26/08	ANR's Southeast Area operation conditions are improving resulting in additional points and services being cleared to flow gas. The Cameron Meadows lateral segment remains shut-in. Inspections continue on both offshore and onshore facilities.
Chandeleur Pipeline Co.	9/23/08	Operationally Scheduled Volumes indicates pipeline is flowing at almost 80% of pre hurricane levels.
Columbia Gulf Transmission	9/23/08	Flow from offshore points has been reduced to approximately 60% of normal operating capacity.
Destin Pipeline Co.	9/18/08	Pascagoula processing plant Force Majeure declared Sept. 15 now lifted and flows will resume to normal.
Discovery Gas Transmission	9/22/08	Damage to offshore system that will prevent the receipt of all offshore gas for a minimum of one month. The damage has occurred on the 18 ST 200 lateral, which has been torn away from the 30" mainline at ST 231. Onshore delivery & receipt points will continue to accept flow.
Enbridge (UTOS)	9/25/08	All UTOS facilities remain under Force Majeure and are currently down and all points are shut-in. Crews are currently at the UTOS Station 44 clearing mud and debris and are assessing the damage. There is no time frame for restoration of service at this time.
Garden Banks Gas Pipeline	9/25/08	Garden Banks' pipeline facilities are essentially ready for return to service; however, the pipeline remains shut-in because there is no current availability of downstream outlets for condensate, which includes interconnects with ANR, Tennessee, Transco, and Sea Robin all of which are unavailable.
High Island Offshore System	9/24/08	Force Majeure from Sept 10 remains in effect - 42-inch diameter line on system has been severed and HIOS is determining the length that will need to be replaced. 3 points along a lateral not impacted can flow gas but all other offshore points remain shut-in. Currently only one of the four delivery point is available on the system which is the interconnection with ANR Pipeline.
KinderMorgan (Texas & Tejas)	9/20/08	All firm storage customers can resume injections at 100% of their firm injection rights. There is no interruptible space available at this time.
Manta Ray Offshore Gathering	9/24/08	Force Majeure is lifted as of Sept 24. Gas flow is available for delivery to Nautilus Pipeline but all other delivery points (ANR, Transco, & Trunkline) remain unavailable at this time. Only portion of receipts offshore can flow gas at this time.
Mississippi Canyon Pipeline	9/25/08	Force Majeure is lifted; however, no flow has commenced at this time.
Natural Gas Pipeline Co of America	9/24/08	Power has been restored to Compressor Station 343 and the leaks discovered on the LA line have been repaired and is now in service. Force Majeure still in effect for Station 342 and Station 302.
Nautilus Pipeline Co.	9/24/08	Force Majeure has been lifted as of Sept 24. Deliveries to Louisiana Intrastate Gas & Gulf South are available. As gas flow increases to processing plant the other delivery points will be available in order to meet gas quality requirements at these points.
Sabine Pipe Line (Henry Hub)	9/22/08	Force Majeure has been lifted for some additional points along the system. Henry Hub continues to operate on partial compression and the pipeline is closely monitoring its system.
Sea Robin Pipeline Co.	9/24/08	Sea Robin commenced flow on Sept 22 at reduced levels. The Hess Processing Plant has completed repairs to its equipment but continues to operate at a minimum volume of 250 MMcf/d.
Southern Natural Gas Co.	9/24/08	Southern has issued its final update. Six receipt points remain shut-in totaling 62 MMcf/d. The restart of these points is dependent on third parties repairing damage and it is unknown when these points will return.
Stingray Pipeline Co.	9/25/08	Force Majeure remains in effect and all receipt points remain shut-in. Crews are onsite and assessing damage and conducting integrity checks. No time frame for restoration of service at this time.
Tennessee Gas Pipeline	9/25/08	All points upstream of the Grand Chenier gas processing plant are cleared to commence gas flow. The East Leg of the Bluewater System can commence gas flow.
Texas Eastern Transmission	9/26/08	TE estimates that producers have shut-in 400-500 MMcf/d of supply on its system. Damage assessments continue on facilities impacted by Gustav and Ike. Receipt points along the Cameron System and South Pass line remain at zero flow. Several compressor stations continue to run on backup generators as commercial power is unavailable.
Texas Gas Transmission	9/17/08	All systems on the pipeline are operational, but they are closely monitoring receipt points.
Transcontinental Gas Pipe Line	9/23/08	Further inspections are needed for the Southeast LA lateral resulting in shut-in gas flow from multiple points along this segment. Pipeline estimates that 575 MMcf/d remains shut-in due to Ike.
Trunkline Gas Pipeline	9/24/08	The Kaplan Compressor Station has one unit now available to flow gas raising the capacity to the Henry Hub. 30 receipt points have been cleared for flow.
Venice Gathering System	9/18/08	Remains shut-in from the effects of Gustav. Processing plant will not be available until first week in October - gas flow will remain at zero until plant is fully operational.
Dauphin Island Gathering	9/16/08	Force Majeure lifted as Mobile Bay (Duke) processing plant completed maintenance. System will resume normal operations.
Black Marlin Pipeline	9/15/08	Force Majeure declared Friday, Sept 12. - No gas flow being accepted.
Gulf South Pipeline	9/18/08	Critical Period has been lifted as of gas day Sept 18.
Northern Natural	9/22/08	Matagorda Offshore Pipeline System accepting gas flow at normal levels.



**U.S. Department of Energy  
Emergency Support Function 12**

Natural Gas Processing Plants in the Path of Ike & Gustav as of 9/26/08 10:30 AM EDT							
Plant Name	Location	Impact	Capacity (million cubic feet per day) <sup>1</sup>				
			Design System Operation	Shut Down	Capable to Restart <sup>2</sup>	Operating at Reduced Level	Normal
<b>EAST LA / AL</b>							
Yscloskey	St. Bernard, LA	G	1,850	1,850			
Venice	Plaquemines, LA	G	1,300	1,300			
Pelican	St. Mary, LA	G	600			600	
Larose	Lafourche, LA	G + I	600			600	
Plaquemine	Iberville, LA	G	225				225
Burns Point	St. Mary, LA	G	160		160		
Mobile Bay (Duke)	Mobile, AL	M	300				300
<b>WEST LA / EAST TX</b>							
Eunice	Acadia, LA	G + I	1,200			1,200	
Sea Robin	Vermilion, LA	G + I (M)	950		950		
Bluewater	Acadia, LA	G + I	950		950		
Cameron Meadows	Cameron, LA	G + I	500	500			
Iowa	Jefferson Davis, LA	G + I	500				500
Grand Chenier II	Cameron, LA	G + I	400		400		
Sabine Pass	Cameron, LA	G + I	300	300			
Stingray	Cameron, LA	G	300	300			
Lowry	Cameron, LA	G + I	265			265	
Barracuda	Cameron, LA	G + I	225	225			
Gillis	Calcasieu, LA	G + I	180			180	
Dubach	Lincoln, LA	G	175				175
East Texas (MarkWest)	Panola, TX	I	780				780
East Texas (DCP)	Panola, TX	-	750				750
Godley (Forth Worth II)	Johnson, TX	I	300			300	
Port Arthur	Jefferson, TX	G + I	200			200	
Carthage	Panola, TX	I	175				175
Indian Springs	Polk, TX	I	150				150
<b>CENTRAL EAST TX</b>							
Houston Central	Colorado, TX	-	700				700
Markham	Matagorda, TX	G + I	300		300		
Matagorda <sup>3</sup>	Matagorda, TX	G + I	250	-	-	-	-
Armstrong	De Witt, TX	I	250				250
Point Comfort	Calhoun, TX	I (M)	200	200			
Old Ocean	Brazoria, TX	I	200				200
Wilcox	Lavaca, TX	I	220				220
La Grange	Fayette, TX	I	200				200
Waskom	Harrison, TX	-	270				270
<b>SOUTH EAST TX</b>							
King Ranch	Kleberg, TX	-	925				925
Shoup	Nueces, TX	-	290				290
La Gloria	Jim Wells, TX	-	265				265
Gregory	San Patricio, TX	I	150				150
Gulf Plains	Nueces, TX	-	150				150

**Note:** Storm column indicates hurricanes impacting processing plant: G = Gustav; I = Ike, G+I = Both storms, M = Maintenance, and - = no impact  
 “N/A” (Not Available or Confirmed) identifies those plants that are in the path of Ike that have not yet been confirmed of their status.

<sup>1</sup> The capacity represents the design capacity of the plants and does not represent the actual gas flow through these plants.

<sup>2</sup> Confirmed plants capable to restart after electricity is restored or when upstream gas flow commences service.

<sup>3</sup> The Matagorda processing plants has been idle (mothballed) prior to Hurricane Gustav/Ike.

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





# U.S. Department of Energy Emergency Support Function 12

## Electricity Updates:

### Texas:

As of: 9/26/2008 10:00 AM EDT



Electricity Outages: Utility Detail			
Texas			
Utility	Outages	Total Utility	% w/o Power
SWEPCO	293	84,696	0.3%
Entergy Texas	0	397,451	0.0%
CenterPoint	391,203	2,076,978	18.8%
ONCOR	415	179,442	0.2%
TX New Mexico Power Co	8,763	113,370	7.7%
All Cooperatives	9,483	462,645	2.0%
<b>TOTAL</b>	<b>410,157</b>	<b>3,314,582</b>	

Total utility customers are based on TXPUC outage reports.

Note: due to a large number of service providers, including investor owned utilities and cooperatives, the number of customer outages reported may not be comprehensive.

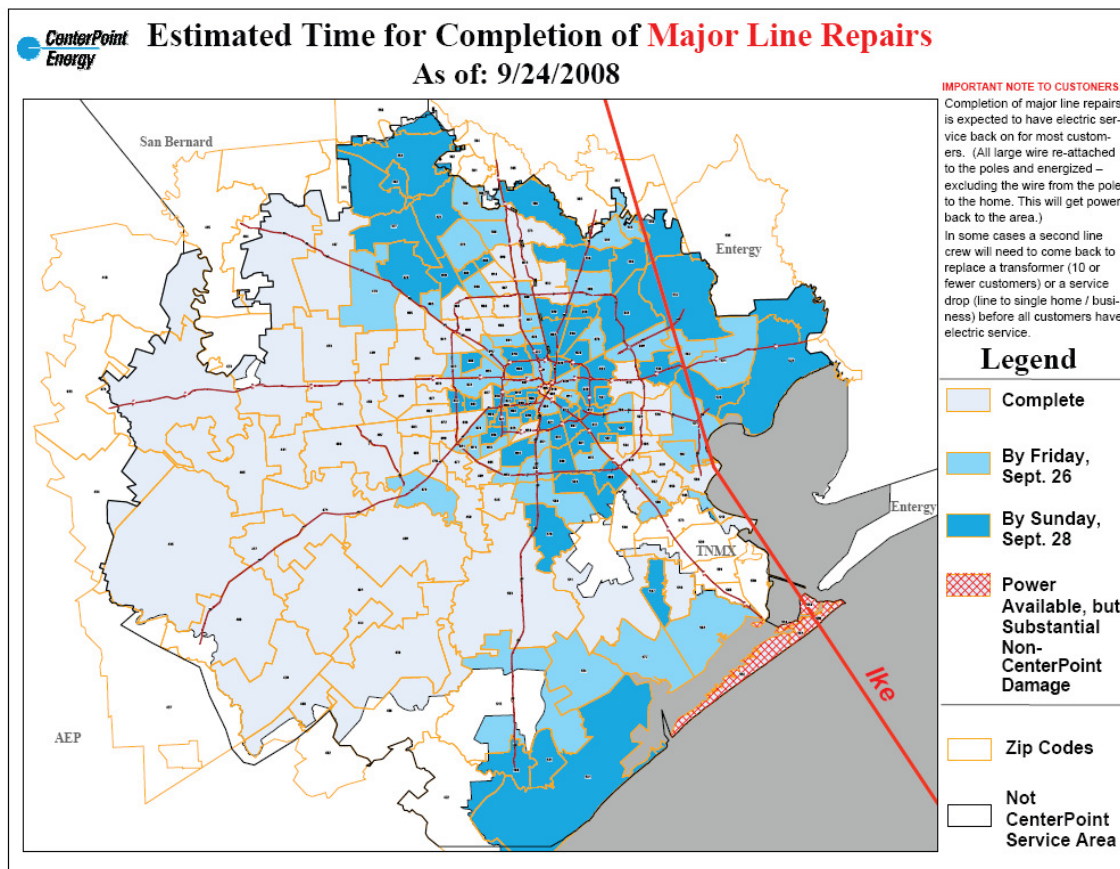
- As of 10:00 AM EDT September 26, there are 410,157 customers without power in Texas. Over 72,680 customers had power restored since Ike Situation Report No. 18. As of September 25, Entergy Texas reports that it has restored power to all customers that can safely take power. Entergy Texas reports that 7,300 customers are not capable of receiving power at this time. These customers have major structural damage or flooding that requires extensive reconstruction before being able to receive power.

### Restoration Updates:

- As of 9:00 AM EDT September 26, CenterPoint has restored power to over 1.7 million customers of the 2.1 million that lost power due to Ike. CenterPoint estimates that the majority of customers should have power restored by September 28. See updated restoration map below.
- CenterPoint reports that 11,000 mutual assistance crews plus 4,200 internal crews and contractors are involved in the restoration.
- Restoration updates from CenterPoint include:
  - 1,138 circuits have been restored out of the original 1,379 that were out.
  - 241 distribution circuits, out of a total of 1,492, are out.



# U.S. Department of Energy Emergency Support Function 12



- **In Ohio, customer outages have dropped from over 1 million to less than 1,000 as of 8:00 AM September 26.** The majority of outages are in the Dayton Power and Light (DP&L) service area where 1,700 crews from 10 states are restoring service. DP&L has the necessary materials such as transformers, poles, cross-arms and wire, to make the repairs and these materials are staged throughout the DP&L service area. Restoration to individual pockets of outages is expected by mid-week.