Office of Electricity Delivery and Energy Reliability

Infrastructure Security and Energy Restoration

ENERGY ASSURANCE DAILY

Wednesday Evening, April 06, 2011

Major Developments

Update: After Early-Week Storms, Fewer than 170,000 Customers Remain without Power across Multiple Southern States April 6

An estimated 164,829 customers remained without power across multiple southern states on April 6, multiple news and company sources reported, after storms cut power to more than 1.2 million customers on April 4-5. Utilities in numerous states reported power disruptions, but the following table lists only those states where 10,000 or more customers lost electricity.

U.S. South Storm Customer Power Outages					
April 4 – April 5, 2011					
Electric Utility	State	Peak	Latest Reported		
Duke Energy	NC/SC	220,000+	58,755		
Progress Energy	NC	118,064	27		
EnergyUnited	NC	16,000	200		
Union Power Cooperative	NC	8,500	10*		
Progress Energy	SC	17,736	7		
Georgia Power	GA	215,000	26,500		
Georgia EMC	GA	119,837	23,802		
Alabama Power	AL	85,000	6,700		
Wiregrass Electric Cooperative	AL	7,000	125		
Decatur Utilities	AL	1,367	500**		
Nashville Electric Service	TN	73,000	2,468		
MLGW	TN	63,500	12,000		
Dickson Electric	TN	13,000	1,600		
Entergy	LA	57,426	498		
CLECO	LA	10,000	223		
Washington-St. Tammany Electric Coop	LA	7,000	353		
Entergy	MS	22,327	121		
Entergy	AR	12,317	283		
AEP SWEPCO	AR/LA/TX	5,000	0		
Appalachian Power	WV/VA	50,000	10,715		
Dominion Virginia Power	VA	15,000	8,555		
Progress Energy	FL	11,989	297		
Florida Power & Light	FL	11,000+	8,000+***		
Talquin Electric Cooperative	FL	9,600	597		
Clay Electric	FL	9,000	0		
Gulf Power	FL	8,600	0		
City of Tallahassee	FL	8,500	836		
West Florida Electric Cooperative	FL	5,000	1,500		
Tampa Electric	FL	4,275	157		
TOTAL***		1,205,038	164,829		

^{*} Estimated.

Sources:

^{**} According to news reports, "most" outages were restored.

^{***} No new information on company outages in approximately 24 hours.

^{****}Total outages only represent electric utilities listed in this table

http://www.nytimes.com/2011/04/06/us/06storms.html

Duke Energy: http://www.duke-energy.com/south-carolina/outages/current.asp,

http://twitter.com/#!/DukeEnergyStorm/status/55321405746724864

Progress Energy: http://www.progress-energy.com/shared/outages/car/index.html

EnergyUnited: http://www.energyunited.com/press_releases/Aprilstormoutage3-2-2011.pdf,

http://www.salisburypost.com/News/040511-WEB-EnergyUnited-qcd Union Power Cooperative: http://www.union-power.com/default/11-04-05/Union Power Succeeds in Restoring Power After Storm.aspx,

http://www.charlotteobserver.com/2011/04/05/2198982/storms-batter-area-down-trees.html

Georgia Power: http://www.ajc.com/news/power-may-be-on-900624.html,

http://www2.wsav.com/news/2011/apr/05/storms-knock-out-power-around-georgia-ar-1674680/,

http://www.ajc.com/news/atlanta/tens-of-thousands-still-899284.html, http://www.gpb.org/news/2011/04/04/storms-

kill-6-cut-power-to-thousands

Georgia EMC: http://www.georgiaemc.com/stormcentral/outagesbyregion.aspx, http://www.gpb.org/news/2011/04/04/storms-kill-6-cut-power-to-thousands

Alabama Power: http://twitter.com/alabamapower/

Wiregrass Electric Cooperative: http://www.wiregrass.coop/wecnewsroom/newsdetail/11-04-

05/Wiregrass_Electric_expects_full_restoration_by_this_evening_following_late_night_storm.aspx,

http://www.wiregrass.coop/wecNewsroom/newsDetail/11-04-

05/Wiregrass Electric working to restore power following storm.aspx

Decatur Utilities: http://decaturdaily.com/stories/Storm-strikes-Decatur,77679 Nashville Electric Service: http://www.nespower.com/OutageMap/default.aspx.

http://nashvillecitypaper.com/content/city-news/nashville-electric-service-reports-60000-customers-without-power

MLGW: http://www.mlgw.com/SubView.php?key=about_newsreleases&chunkid=365,

http://www.mlgw.com/SubView.php?key=about newsreleases&chunkid=366,

http://www.mlgw.com/SubView.php?key=about_newsreleases&chunkid=369

Dickson Electric: http://www.tennessean.com/article/20110405/DICKSON01/110405008/Update-1-600-DES-

customers-still-without-power-, http://www.newschannel5.com/story/14377665/damage-widespread-after-strongstorms-hit-mid-state

Entergy: http://www.entergy-louisiana.com/outages/la.aspx, http://entergy-mississippi.com/outages/ms.aspx,

http://entergy-arkansas.com/outages/ar.aspx

Washington-St. Tammany Electric Coop:

http://www.thesttammanynews.com/articles/2011/04/06/news/doc4d9b8df143005651951017.txt.

http://www.nola.com/weather/index.ssf/2011/04/bad weather leaves thousands w.html

CLECO: http://www.cleco.com/omsmap/,

http://www.nola.com/weather/index.ssf/2011/04/bad weather leaves thousands w.html

AEP SWEPCO: https://www.swepco.com/outages/, http://www.ksla.com/Global/story.asp?S=14378446

Appalachian Power: https://www.appalachianpower.com/outages/details.aspx?stormName=April 4 Spring

Wind/Rain Storm

Dominion Virginia Power: http://www.dom.com/storm-center/dominion-electric-outage-summary.jsp,

http://www.wric.com/Global/story.asp?S=14383839, http://www.dom.com/storm-center/dominion-electric-outagemap.jsp

Progress Energy (Florida): http://www.progress-energy.com/shared/outages/fla/index.html

Florida Power & Light: http://www.floridatoday.com/article/20110330/BREAKINGNEWS/110330006/11-000-lost-

power-after-severe-thunderstorms-Brevard

Clay Electric: http://outagemap.clayelectric.com/,

http://www.palatkadailynews.com/articles/2011/04/06/news/news01.txt

Talquin Electric Cooperative: http://www.talquinelectric.com/news/newsdetail.aspx?itemID=58,

http://www.outageentry.com/dvosm/dvOSM2.php?Client=talq,

http://www.wctv.tv/home/headlines/119235289.html

Gulf Power: http://www.pnj.com/article/20110406/NEWS01/104060318/1006/news01/Monday-night-thunderstormcuts-power-starts-fires, http://www.pnj.com/article/20110405/NEWS01/110405003/1006/Storms-damage-Santa-Rosa-County

City of Tallahassee: http://www.talgov.com/communications/newsdetail.cfm?id=2862,

http://www.talgov.com/communications/newsdetail.cfm?id=2866

West Florida Electric Cooperative: http://www.wctv.tv/home/headlines/119235289.html,

http://www2.jcfloridan.com/news/2011/apr/05/scattered-power-outages-after-storm-ar-1676717/

Tampa Electric: http://www.tampaelectric.com/outagemap/

Entergy's 1,075 MW Waterford Nuclear Unit 3 in Louisiana Shut by April 6

Entergy had been running the unit at reduced capacity (about 85 percent) since late-February due to "high vibration on a feedwater pump," Bloomberg News said, citing the Nuclear Regulatory Commission (NRC). It was not clear if the shutdown was related to that issue. The NRC reported that on the morning of April 5 the unit was operating at 85 percent.

http://www.bloomberg.com/news/2011-04-06/u-s-nuclear-output-declines-to-lowest-level-in-almost-17-months.html Information also derived from the NRC Power Reactor Status Reports:

http://www.nrc.gov/reading-rm/doc-collections/event-status/reactor-status/2011/

Update: Duke Energy's 1,100 MW McGuire Nuclear Unit 2 in North Carolina Ramped Up to 55 Percent by April 6

The Nuclear Regulatory Commission reported that on the morning of April 5 the unit was operating at 10 percent. Information derived from the NRC Power Reactor Status Reports:

http://www.nrc.gov/reading-rm/doc-collections/event-status/reactor-status/2011/

Update: Despite Partner's Objections, Xcel Energy Seeks to Cancel Plans for 150 MW Merricourt Wind Power Project in North Dakota

Citing a potential threat to two endangered birds, Xcel Energy said yesterday that it had abandoned its jointly-held plans to construct the 150 MW facility, but the company's partner – enXco – said it planned to fight the cancellation.

http://www.bizjournals.com/twincities/news/2011/04/05/xcel-in-fight-to-cancel-400m-wind-farm.html?ana=yfcpc

Xcel Energy Plans 345 kV, 200-Mile, Texas-to-Oklahoma Electric Transmission Line

Xcel Energy expects the line to deliver at least 500 MW of electricity from its TUCO Substation north of Lubbock, Texas to a new interchange in Beckham County, Oklahoma.

 $\frac{http://www.xcelenergy.com/North\%20Dakota/Company/Newsroom/Pages/2011-03-31-BuildanewelectricpowertransmissionlinetoOklahoma.aspx}{}$

Smart Grid Managed Services Market to Reach \$4.3 Billion by 2015 as Utilities Face New Operational Challenges: Pike Research

The rollout of smart grid technologies is bringing a significantly increased level of complexity to utility operations, and many utilities will require substantial outside assistance to operate and maintain these new systems and infrastructure, according to a recent report from Pike Research. The smart grid managed services market will, as a consequence, surge from \$470 million in annual revenue in 2010 to nearly \$4.3 billion by 2015, according to the report.

 $\frac{http://www.pikeresearch.com/newsroom/smart-grid-managed-services-market-to-reach-4-3-billion-by-2015-as-utilities-face-new-operational-challenges$

Petroleum

Update: Despite Libyan Conflict, Global Oil Market Remains Oversupplied by nearly 500,000 b/d: Oil Market Intelligence

Oil supply is outpacing demand globally by nearly 500,000 b/d, according to preliminary estimates from Oil Market Intelligence.

http://www.energyintel.com/#latest

Update: Tanker Loads Rebel-Sold Crude, Leaves Libva's Tobruk Port April 6

A tanker left the port hauling crude purchased from the rebel administration, according to a satellite news channel. It was unclear who bought the oil.

Reuters, 11:08 April 6, 2011

Update: After March 31 Shutdown, Crude Unit Remains Offline at Shell's 329,800 b/d Deer Park, Texas Refinery April 5

A leak led Shell to shut the DU2 Unit Crude Column V-5102 distillation unit on March 31, according to a regulatory filing. Traders had expected the unit to resume service within a couple of days, but an unspecified problem was preventing the company from restarting it, as of April 5.

http://english.capital.gr/News.asp?id=1166322

http://www.foxbusiness.com/industries/2011/04/01/shell-reports-shutdown-deer-park-crude-distillation-unit/

Fire Leads Motiva to Shut DCU at 285,000 b/d Port Arthur, Texas Refinery March 31

A fire led Motiva to shut a delayed coker on March 31, according to two people familiar with the facility's operations.

http://www.bloomberg.com/news/2011-04-06/top-oil-market-news-crude-declines-jet-fuel-trailing-gasoil.html

Crew Controls Fire in Warehouse at ConocoPhillips' 185,000 b/d Trainer, Pennsylvania Refinery March 5

On-site responders quickly controlled a fire inside a warehouse, according to a local news source. It was not clear if the incident had any impact on production, or if the fire occurred near any production units. No one was reported injured.

http://abclocal.go.com/wpvi/story?section=news/local&id=8054538

http://www.bloomberg.com/news/2011-04-06/top-oil-market-news-crude-declines-jet-fuel-trailing-gasoil.html

Update: Sunoco Aims to Restart FCC at 175,000 b/d Marcus Hook, Pennsylvania Refinery April 7 – Power Outage Damaged Unit's Turbine at End of March

Sunoco hoped to restart the gasoline-producing fluid catalytic cracking (FCC) unit on April 7, a source familiar with the facility's operations said on April 5, after a March 28 power outage caused damage to the unit's turbine. The company relit the unit's flare by April 6.

http://af.reuters.com/article/energyOilNews/idAFN0511383520110405

Reuters, 09:41 April 6, 2011

Tesoro Restarts Unidentified Unit at 96,860 b/d Wilmington, California Refinery by April 5

It was not clear why the unit shut or whether the incident had any impact on production. Reuters, 09:26 April 6, 2011

Alon Restarting FCC at 83,000 b/d Krotz Springs, Louisiana Refinery April 6

Alon shut the fluid catalytic cracking (FCC) unit for unidentified reasons by early on April 6, according to a regulatory filing. The company expected to return the unit to planned rates by the end of April 6, a spokesman said. DJN, 10:48 April 6, 2011

http://www.bloomberg.com/news/2011-04-06/alon-s-krotz-springs-plant-shut-cat-cracker-filing-shows-1-.html

Alberta Government Plans to Establish Conservation Zone across Approximately 20 Percent of Province's Oil Sands Region

The Government of Alberta announced a plan yesterday to conserve nearly two-million hectares of land in the province's Lower Peace Region. Multiple oil companies, including Nexen, Suncor, Canadian Natural Resources, and Imperial, own leases in the affected area, according to the Globe and Mail.

http://alberta.ca/home/NewsFrame.cfm?ReleaseID=/acn/201104/30180270F6D1C-EEF6-91B3-39A09CEC9E3E0DD8.html

http://www.theglobeandmail.com/report-on-business/alberta-conservation-plan-stuns-oil-patch/article1971930/

NuStar, TexStar Plan 120,000 b/d, 12-Inch, 65-Mile Crude Oil/Condensate Pipeline in Texas

The line would deliver crude oil and condensate from Frio County to a proposed storage facility – to be built by NuStar – in Three Rivers, Texas, NuStar Logistics and TexStar Midstream Services said by April 5. From the storage facility in Three Rivers, NuStar would use an existing 16-inch pipeline to deliver up to 200,000 b/d of crude to its Corpus Christi North Beach Terminal. TexStar also expects to construct at least two truck unloading facilities along the proposed 12-inch line; those facilities would gather crude oil from producers in multiple in-state counties. The companies aim to open the projects in the second quarter of 2012.

 $\frac{\text{http://www.pennenergy.com/index/petroleum/display/7516753660/articles/pennenergy/petroleum/pipelines/2011/04}{\text{nustar -texstar to.html}}$

http://www.businessweek.com/ap/financialnews/D9MDL4L02.htm

Galp Plans to Produce 40,000 b/d of Oil in Angola by 2017 – Total Would be More than Double Company's Current Angolan Output

Reuters, 08:59 April 6, 2011

Natural Gas

U.S. Shale Gas Production Rises to 4.87 Tcf in 2010, Accounting for 23 Percent of Total U.S. Natural Gas Output: EIA

The United States produced 4.87 Tcf of shale gas in 2010, compared to just 0.39 Tcf in 2000, according to the Energy Information Administration (EIA).

http://www.eia.gov/pressroom/releases/press357.cfm

Shale Gas Reserves Total 5,760 Tcf in 32 Foreign Countries, Compared to 862 Tcf in United States: EIA

Thirty-two foreign countries contain 5,760 Tcf of technically recoverable shale gas resources, compared with 862 Tcf in the United States, according to initial assessments from a newly-released study sponsored by the Energy Information Administration (EIA). Among the studied countries were: France, Poland, Turkey, Ukraine, South Africa, Morocco, Chile, Canada, Mexico, China Australia, Libya, Algeria, Argentina, and Brazil. The study did not include Russia and the Middle East, offshore resources, or some shale basins in the countries studied. http://www.eia.gov/pressroom/releases/press357.cfm

Other News

Update: Aventine Renewable Energy Aims to Launch Production in August 2011 at Proposed 113 MMGal/Yr. Aurora West Ethanol Plant in Nebraska

Aventine Renewable Energy had aimed to begin production by late spring 2011, but poor weather and other factors postponed that plan. The company postponed construction in November 2008, citing economic conditions, a news source said previously.

http://www.auroranewsregister.com/index.php?option=com_content&view=article&id=2824:aventine-targets-august-start&catid=13:featured-articles

http://www.theindependent.com/articles/2009/09/02/news/local/10550289.txt

Kawartha Ethanol Plans 13.2 MMGal/Yr. Expansion at Existing 21.1 MMGal/Yr. Ethanol Plant in Ontario, Canada

http://www.mykawartha.com/news/article/976121--ethanol-plant-expandinghttp://www.kawarthaethanol.ca/about.html

Tokyo Electric Power Stops Radioactive Water Leak at Fukushima Daiichi Nuclear Power Plant in Japan April 6

Tokyo Electric Power used sodium silicate to seal a radioactive water leak at its earthquake-and-tsunami-damaged Fukushima Daiichi nuclear power plant in Japan, the company said on April 6. The water had been flowing into the ocean since the weekend. The company was pumping nitrogen into reactor No. 1's containment vessel, as of latest reports, in an effort to prevent hydrogen gas from accumulating.

Reuters, 11:08 April 6, 2011

Energy Prices

U.S. Oil and Gas Prices April 6, 2011				
	Today	Week Ago	Year Ago	
CRUDE OIL West Texas Intermediate U.S. \$/Barrel	107.89	104.15	86.37	
NATURAL GAS Henry Hub \$/Million Btu	4.22	4.27	3.93	

Source: Reuters

Energy Notes

Constellation Energy Awards Contract to Replace Electric Generator in 2014 at 581 MW Ginna Nuclear Power Plant in Ontario, New York

 $\frac{http://ir.constellation.com/released etail.cfm?ReleaseID=562218}{http://www.constellation.com/AboutUs/WhoWeAre/Pages/REGinna.aspx}$

Secretary Chu Announces over \$110 Million in SunShot Projects to Advance Solar Photovoltaic Manufacturing in the United States April 5

http://www.energy.gov/news/10256.htm

Tesoro Failed to Appropriately Maintain Heat Exchanger Prior to Fatal April 2010 Explosion at 120,000 b/d Anacortes, Washington Refinery: U.S. Chemical Safety Board http://www.reuters.com/article/2011/04/04/us-refinery-blast-tesoro-probe-idUSTRE73375120110404?feedType=RSS&feedName=domesticNews

Equipment Malfunction Leads to Nitrogen Oxide Release at Valero's 315,000 b/d Corpus Christi, Texas Refinery by April 6

http://www.bloomberg.com/news/2011-04-06/top-oil-market-news-crude-declines-jet-fuel-trailing-gasoil.html

Update: First Megaload of Coker Drums Scheduled to Arrive at ConocoPhillips' Billings, Montana Refinery April 6 – Crews Trucked Equipment from Port in Lewiston, Idaho http://www.therepublic.com/view/story/e4d849c0d786421487fb276d7ef844c9/MT--Megaloads-Arrival/

Dust Storm Forces Offline Kuwaiti Oil Exports April 4 – Official Says Disruption Will Not Impact Client Commitments

 $\frac{http://www.google.com/hostednews/afp/article/ALeqM5iBOFkgFEx0N4QDwch5n9wxBKoTCg?docId=CNG.3d99}{b443b15130c2e8940c31d981a03e.791}$

Kuwait Aims to Boost Oil Production to 4 Million b/d by 2020, from 3 Million b/d in 2010 http://www.thepeninsulaqatar.com/business-news/148006-kuwait-sets-90bn-five-year-oil-investment-budget.html

Contractor Strikes Natural Gas Pipeline, Triggering Leak and Prompting Local Evacuation in Columbus, Ohio April 4 – Columbia Gas Contains Leak within Hours http://www.dispatch.com/live/content/local_news/stories/2011/04/05/leaking-gas-prompts-evacuations.html?sid=101

Columbia Gas of Pennsylvania to Replace up to 4,000 Potentially-Substandard Natural Gas Pipelines – Company Installed Thin-Walled Pipes in 2010

http://www.downstreamtoday.com/news/article.aspx?a_id=26265

Turbine Issues at DCP Gas Plant Lead to Flaring at XTO Energy's Russell's Compressor Station in Texas April 5-7

http://www11.tceq.state.tx.us/oce/eer/index.cfm?fuseaction=main.getDetails&target=152934

Links

This Week in Petroleum from the Energy Information Administration (EIA)

http://tonto.eia.doe.gov/oog/info/twip/twip.asp

Updated every Wednesday.

Weekly Petroleum Status Report from EIA

http://www.eia.doe.gov/oil_gas/petroleum/data_publications/weekly_petroleum_status_report/wpsr.html Updated after 10:30 AM & 1:00 PM EST every Wednesday.

Natural Gas Weekly Update from EIA

http://tonto.eia.doe.gov/oog/info/ngw/ngupdate.asp

Updated after 2:00 PM EST every Thursday.

ENERGY ASSURANCE DAILY

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http://www.oe.netl.doe.gov/ead.aspx

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