

U.S. DEPARTMENT OF ENERGY Office of Electricity Delivery and Energy Reliability

Infrastructure Security and Energy Restoration

ENERGY ASSURANCE DAILY

Friday Evening, December 21, 2012

The next issue of Energy Assurance Daily will be published on December 26

Major Developments

Update: More Than 169,000 Customers Remain Without Power after Snow and Rain **Barrels through the Midwest and Eastern United States December 21**

A series of snow and rain storms since Wednesday have knocked out power to hundreds of thousands of utility customers throughout much of the U.S. Midwest and Eastern United States. As of 2:00 p.m. EST Friday, 169,316 customers remained without power. Since the storm began, at least 534,999 customers have experienced power outages at one time or another. The hardest hit states Friday morning were Michigan, New Jersey, New York, Illinois, Indiana, and Wisconsin, but outages also remained in Arkansas, Louisiana, Texas, Nebraska, and Iowa from storms on Wednesday and Thursday. Most utilities expected to fully restore power to affected customers by Saturday.

U.S. Midwest and Eastern U.S. Customer Power Outages December 19–21, 2012				
Electric Utility	State	Peak	Latest Reported	
AEP – SWEPCO	AR, LA, TX	64,200	9,508	
Entergy – Arkansas	AR	46,000	8,156	
Connecticut Light & Power	CT	3,600	1,837	
Georgia Power	GA	2,100	2,100	
MidAmerican	IA, IL	43,300	6,522	
Ameren	IL	10,000	5,134	
Commonwealth Edison	IL	30,000	3,549	
Duke – Indiana	IN	8,700	6,587	
IndianaMichigan Power (AEP)	IN, MI	17,000	15,855	
Entergy – Louisiana	LA	22,000	1,388	
Consumers Energy	MI	62,700	27,150	
Ameren – Missouri	MO	13,340	1,563	
Duke – Carolinas	NC, SC	4,742	4,742	
Omaha Public Power District	NE	41,000	5,270	
Atlantic City Electric	NJ	7,400	1,529	
Jersey Central Power & Light (FirstEnergy)	NJ	26,500	5,943	
Public Service Electric & Gas	NJ	22,800	7,850	
Long Island Power Authority	NY	7,200	4,494	
National Grid	NY	13,300	13,160	
NYSEG	NY	7,600	5,616	
PPL Utilities	PA	1,682	1,682	
Oncor	ТХ	39,700	7,756	
Dominion Virginia	VA, NC	4,935	4,935	
Alliant – Wisconsin	WI	10,000	6,498	
We Energies	WI	16,000	7,588	
AEP – Appalachian	WV, VA	5,600	1,290	
MonPower (FirstEnergy)	WV, VA	3,600	1,614	
TOTAL*		534,999	169,316	

*Total outages represent only electric utilities listed in this table. Sources:

Reuters, 11:36 December 21, 2012

http://viewoutage.entergy.com/ar.aspx https://www.swepco.com/outages/ http://viewoutage.entergy.com/ar.aspx http://www.arkansasbusiness.com/article/89780/more-than-40000-entergy-arkansas-customers-in-dark http://www.cl-p.com/outage/OutageMap.aspx https://twitter.com/GeorgiaPower http://www.midamericanenergy.com/storm/OutageWatch/MECOutageWatch.aspx http://apps.ameren.com/outage/OutageMap.aspx?state=IL https://www.comed.com/ layouts/comedsp/OutageMap.aspx http://www.si-r.com/breaking/x1084476220/Thousands-in-Illinois-without-power-after-storm http://www.nbcchicago.com/news/local/ComEd-Preps-for-Storm-Outages-184282351.html http://www.duke-energy.com/indiana/outages/current.asp https://indianamichiganpower.com/outages/ https://indianamichiganpower.com/outages/details.aspx?stormName http://viewoutage.entergy.com/la.aspx http://www.consumersenergy.com/News.aspx?id=5948&year=2012 http://apps.ameren.com/outage/OutageMap.aspx?state=MO http://www.duke-energy.com/north-carolina/outages/current.asp http://ww3.oppd.com/pom/default.aspx http://www.omaha.com/article/20121220/NEWS/121229993 http://www.atlanticcitvelectric.com/home/emergency/maps/stormcenter/ http://outages.firstenergvcorp.com/ni.html http://www.pseg.com/home/customer service/outage info/outagemap.jsp http://www.lipower.org/stormcenter/outagemap.html https://www1.nationalgridus.com/PowerOutageMap-NY-RES http://www.nyseg.com/Outages/outageinformation.html https://www.pplelectric.com/my-account/outage-center/outage-map.aspx http://stormcenter.oncor.com/default.html https://www.dom.com/storm-center/dominion-electric-outage-summary.jsp http://www.alliantenergy.com/CustomerService/StormandOutageCenter/OutageSummary/index.htm http://www.alliantenergy.com/AboutAlliantEnergy/Newsroom/NewsReleases/032407 http://www.we-energies.com/outagemapext/default.html http://sussex.patch.com/articles/more-than-1-000-without-power-in-sussex-area https://www.appalachianpower.com/outages/Default.aspx http://outages.firstenergycorp.com/mdwv.html http://www.sj-r.com/breaking/x1084476220/Thousands-in-Illinois-without-power-after-storm https://www.comed.com/customer-service/outage-information/Pages/storm-center.aspx http://www.nbcchicago.com/news/local/ComEd-Preps-for-Storm-Outages-184282351.html http://www.omaha.com/article/20121220/NEWS/121229993 http://www.alliantenergy.com/AboutAlliantEnergy/Newsroom/NewsReleases/032406 http://www.alliantenergy.com/AboutAlliantEnergy/Newsroom/NewsReleases/032407 http://www.ksla.com/story/20399182/arklatex-residents-clean-up-wait-for-power-to-return http://www.arkansasonline.com/news/2012/dec/21/thousands-still-without-power-after-storms-winds/ http://www.entergy.com/news room/newsrelease.aspx?NR ID=2632 http://sussex.patch.com/articles/more-than-1-000-without-power-in-sussex-area http://www.we-energies.com/outagemapext/default.html http://www.consumersenergy.com/News.aspx?id=5948&year=2012

Electricity

BGE Restores Power to 70,000 Customers in Maryland after Two Transmission Blow Out December 20

Baltimore Gas and Electric Co. (BGE) has restored power to nearly 70,000 of its customers in Annapolis and other parts of Anne Arundel County that lost power last night when two main transmission lines in the Annapolis area failed just before 9:00 p.m. EST, according to a spokesman. Local reports indicated the incident caused dramatic flashes of light after the lines blew, and BGE acknowledged the failure likely had caused the flashes. Annapolis officials said BGE reported two substations had shut down. The utility had isolated the problem areas and was working through them.

http://www.baltimoresun.com/news/breaking/bs-md-ar-annapolis-power-outages-20121220,0,6928544.story http://www.myfoxdc.com/story/20398914/power-outage-in-annapolis#axzz2FijhRYFH

Entergy's 813 MW FitzPatrick Nuclear Unit in New York Reduced to 52 Percent by December 21

On the morning of December 20 the unit was operating at full power. http://www.nrc.gov/reading-rm/doc-collections/event-status/reactor-status/2012/

Update: Constellation's 565 MW Nine Mile Point Nuclear Unit 1 in New York at Full Power by December 21

Constellation Energy Nuclear Group's Nine Mile Point Unit 1 is returning from an outage that began December 13, when operators initiated a manual reactor scram from full power due to a primary containment leakage. The unit restarted by December 20.

http://www.nrc.gov/reading-rm/doc-collections/event-status/reactor-status/2012/

Update: Entergy's 966 MW River Bend Nuclear Unit 1 in Louisiana at Full Power by December 21

On the morning of December 20 the unit was operating at 50 percent. http://www.nrc.gov/reading-rm/doc-collections/event-status/reactor-status/2012/

Update: SWEPCO Starts Commercial Operation of Its 600 MW Turk Coal-Fired Power Plant in Arkansas

Southwestern Electric Power Co. (SWEPCO), an operating unit of American Electric Power, on Thursday reported it has begun commercial operation of the new 600 MW John W. Turk, Jr. coal-fired power plant near Fulton, Arkansas. The plant will serve SWEPCO customers in Louisiana and Texas, as well as the East Texas Electric Cooperative customers. In Arkansas the plant will serve SWEPCO and Arkansas Electric Cooperative Corp. customers.

https://www.swepco.com/info/news/viewRelease.aspx?releaseID=1342

DOI Approves Environmental Impact Statement for a McCoy Solar's Proposed 750 MW McCoy Solar Energy Project in California

The U.S. Department of the Interior (DOI) on Thursday announced the release of the Final Environmental Impact Statement (EIS) for the McCoy Solar Energy Project, a proposed 750 MW photovoltaic solar power plant under development by McCoy Solar, LLC, in Riverside County, California. The project would also include a 14.5-mile generation tie-in line and 2-acre switch yard connecting with Southern California Edison's Colorado River Substation. Publication of the Final EIS and proposed plan amendment for the proposed McCoy Solar project initiates a 30-day protest period on the proposed plan amendment, a necessary step before the project can be approved. The protest period will end on January 22, 2013.

http://www.doi.gov/news/pressreleases/secretary-salazar-announces-milestone-on-mccoy-solar-energy-project-capsstrong-year-for-renewable-energy-development-on-public-lands.cfm

EDF EN Canada Inc. and Enbridge Partner to Build 150 MW Massif du Sud Wind Project in Quebec

Enbridge Inc. and EDF EN Canada Inc. announced today that they have entered into an agreement under which Enbridge will invest approximately \$170 million to acquire a 50 percent interest in the 150 MW Massif du Sud Wind Project in Quebec. Construction began in November 2011, and is expected to be completed in December 2012. EDF EN Canada Inc.'s operation and maintenance affiliate, EDF Renewable Services Canada Inc. will provide long-term operations and maintenance services. Hydro-Quebec will buy the power under a 20-year power purchase agreement.

http://www.enbridge.com/MediaCentre/News.aspx?yearTab=en2012&id=1708026

Petroleum

Motiva Restarts Units at Its 600,000 b/d Port Arthur, Texas Refinery December 21 after Power Outage December 20

Motiva Enterprises on Friday said it has begun restarting units at its Port Arthur refinery that were hit by a power outage on Thursday. The refinery experienced a power outage and a loss of steam, and most refinery units shut down. The company did not identify the units that were restarting. Reuters, 09:35 December 21, 2012

Update: Western Refining Restarts FCCU after Repairs at Its 122,000 b/d El Paso, Texas **Refinerv by December 21**

Western Refining Inc on Thursday said it had completed work on the fluid catalytic cracking unit (FCCU) at its El Paso refinery and the unit was back up and running. The company had last Friday reported an unplanned outage on the FCCU on the south side of the facility.

Reuters, 17:15 December 20, 2012

ExxonMobil Reports Ongoing Sulfur Dioxide Emissions at Its 238,600 b/d Joliet, Illinois **Refinery December 20**

ExxonMobil Corp. reported ongoing sulfur dioxide emissions at its Joliet refinery Thursday morning, according to a filing with the Illinois Emergency Management Agency. Operators said the cause of the release would be investigated and corrected.

Reuters, 04:00 December 21, 2012

CVR Reports Compressor Failure at Its 70,000 b/d Wynnewood, Oklahoma Refinery **December 20**

CVR Energy Inc. reported a compressor failure caused emissions at its Wynnewood refinery on Thursday, according to a filing with the U.S. National Response Center.

http://www.nrc.uscg.mil/reports/rwservlet?standard_web+inc_seq=1033856

Phillips 66 Reports Compressor Malfunction at Its 238,000 b/d Linden, New Jersev **Refinery December 21**

Phillips 66 on Friday said repairs were in progress to fix a mechanical malfunction on a compressor at its Bayway refinery in Linden, according to a filing with the state pollution regulators. Reuters, 11:27 December 21, 2012

BP Reports Possible Sulfur Dioxide Emissions from Calciner at Its 225,000 b/d Cherry Point, Washington Refinery December 13–15

BP Plc. reported possible sulfur dioxide emissions from a calciner at its Cherry Point refinery December 13–15, according to a filing with the Northwest Clean Air Agency. Reuters, 17:07 December 20, 2012

Shell Reports Sulfur Dioxide Emissions at Its 145,000 b/d Anacortes, Washington Refinery December 19

Shell Oil reported excess sulfur dioxide emissions at its Anacortes refinery on Wednesday, according to a filing with the Northwest Clean Air Agency. Reuters, 16:21 December 20, 2012

Oil Tanker Carrying Bakken Crude to Imperial Oil's Saint John Refinery in Canada Runs Aground on Hudson River in New York December 20

The U.S. Coast Guard on Thursday reported a 600-foot motor tanker carrying about 11.7 million gallons of Bakken crude oil down the Hudson River briefly ran aground Thursday morning south of Albany, but showed no evidence of a spill. The ship had been on course to deliver the oil to Irving Oil Corp.'s Saint John refinery in Eastern Canada. Crews operating the Stena Primorsk said a mechanical failure knocked out the ship's steering, causing the vessel to hit land near Stuvyesant, New York. The vessel was at anchor Friday undergoing inspections. http://news.yahoo.com/oil-tanker-runs-aground-hudson-river-york-state-202746707.html http://www.bloomberg.com/news/2012-12-20/tanker-carrying-bakken-crude-to-canadian-refinery-runsaground.html

Valero Approved to Ship Crude Oil from the U.S. Gulf Coast to Its 235,000 b/d Quebec City, Quebec Refinery; Plans to Ship Mostly Eagle Ford Shale Crude

http://www.businessweek.com/2012-12-20/valero-receives-approval-to-ship-u-dot-s-dot-oil-to-quebec-refinery http://www.mysanantonio.com/business/article/Valero-to-ship-Eagle-Ford-crude-to-Quebec-plant-4135925.php

Update: DOI Announces Plan for Additional Development of National Petroleum Reserve-Alaska

The U.S. Department of the Interior (DOI) on Wednesday announced the availability of the Integrated Activity Plan and Final Environmental Impact Statement (Final IAP/EIS) for the National Petroleum Reserve in Alaska (NPR-A). The preferred alternative identified in the EIS would allow for the development of 72 percent of the estimated economically recoverable oil in the reserve. The DOI also issued a memo to the Bureau of Land Management confirming that the preferred alternative will allow for the potential construction of pipelines carrying oil or gas from operations in the Chukchi and Beaufort Seas through the NPR-A. The plan will guide the transition from leasing and exploration to production and transport of the reserve's oil and gas resources, which are estimated to hold 549 million barrels of economically recoverable oil and 8.7 trillion cubic feet of economically recoverable natural gas. Release of the Final IAP/EIS paves the way for the Secretary to issue a Record of Decision that adopts the final management plan in the first quarter of 2013.

http://www.doi.gov/news/pressreleases/secretary-salazar-announces-plan-for-additional-development-wildlife-protection-in-23-million-acre-national-petroleum-reserve-alaska.cfm

Natural Gas

Update: PUCO Fines Dominion East Ohio for Safety Violations Following January 2011 Fires in Fairport Harbor, Ohio

The Public Utilities Commission of Ohio (PUCO) on December 12 approved an order that requires Dominion East Ohio to pay a fine of \$500,000 and to take steps to ensure compliance with federal natural gas pipeline safety standards following an investigation into a January 2011 series of fires in Fairport Harbor, Ohio. PUCO's investigation found that two low-pressure regulating devices at the High Street regulator station in Fairport Harbor had failed on January 24, 2011 due to the presence of pipeline fluids in the devices, which caused the pressure in the system to increase and ignited a series of fires. PUCO concluded that Dominion East Ohio had violated several sections of the Code of Federal Regulations, as well as provisions of the company's standard operating procedures (SOP) and guidelines. In addition to paying a fine, Dominion East Ohio must continue to conduct a physical inventory of all regulator stations in its Ohio pipeline distribution systems and modify its SOP to require an inspector to perform an internal inspection that exceeds federal law of a regulator when pipeline fluids are suspected. The company must also develop a written fluid mitigation program to detect and remove fluids in its pipeline system.

http://www.puco.ohio.gov/puco/index.cfm/media-room/media-releases/puco-fines-dominion-east-ohio-500000-following-investigation-of-fairport-harbor-incident/

Update: Ruptured 20-Inch Columbia Gas Transmission Pipeline in West Virginia Had Thinned to 30 Percent of Its Required Thickness – NTSB

Columbia Gas Transmission said that the 20-inch natural gas pipeline that exploded in Sissonville, West Virginia on December 12 could not be checked for corrosion using a pigging device—a tool that travels through a pipeline to check for irregularities—according to local safety officials. The pipeline showed signs of external corrosion, and it had thinned in places to about a third of its required thickness, according to the U.S. National Transportation Safety Board (NTSB), which is investigating the incident. Columbia plans to upgrade the exploded pipeline so it can accommodate a smart pig when it reopens. Officials said it would likely be "a long time" before the pipeline returns to service. Columbia operates two other natural gas pipelines in the area, the 26-inch Line SM-86 and the 30-inch SM-86 Loop, which are both within 200 feet of the exploded pipeline. The company believes the explosion did not damage either of the two lines. Operators restarted SM-86 the night of the explosion. Columbia planned to return the SM-86 loop to service on December 19.

http://www.downstreamtoday.com/news/article.aspx?a_id=38029

Update: Pangea LNG Seeks Export Approval for South Texas LNG Project

Pangea LNG B.V. on Wednesday announced that its wholly owned subsidiary, Pangea LNG (North America) Holdings, LLC, has filed an application with the U.S. Department of Energy requesting multi-contract authorization to export liquefied natural gas (LNG) from its proposed facility in South Texas to any country with which the United States does not have a Free Trade Agreement in effect. The company's previously announced South Texas LNG Project would build a new LNG export terminal on the north shore of Corpus Christi Bay. Pangea is seeking authority to export up to 8 million metric tons per year of LNG, equal to approximately 400 billion cubic feet per year of natural gas. Pending all federal, state, and local regulatory approvals, the project is slated for operation by at least 2018. On November 29, Pangea filed an application with DOE seeking export authority to countries with which the United States has Free Trade Agreements.

http://pangealng.nl/2012/12/pangea-lng-submits-non-fta-export-application-to-doe-for-south-texas-lng-project/

Update: Williams Partners Seeks FERC Approval to Serve Growing Virginia, North Carolina Natural Gas Markets

Williams Partners L.P. on Wednesday announced that its Transco pipeline has filed an application with the U.S. Federal Energy Regulatory Commission (FERC) to provide 270 MMcf/d of incremental, year-round firm natural gas transportation capacity to serve growing markets in Virginia and North Carolina. The previously announced Virginia Southside Expansion is targeted to be placed into service by September 2015. The project would install approximately 100 miles of new 24-inch pipeline parallel to the existing Transco pipeline extending from the Transco mainline in Pittsylvania County, Virginia and terminating in Brunswick County, Virginia. The project would also include a new compressor facility in Pittsylvania County, Virginia.

http://www.williamslp.com/profiles/investor/ResLibraryView.asp?ResLibraryID=59429&BzID=1296&g=345&Nav =0&LangID=1&s=0

Other News

Nothing to report.

International News

Iraqi Kurdistan Oil Exports Fall to 5,000 b/d - Sources

Oil exports from Iraq's autonomous Kurdistan region have fallen to around 5,000 b/d from around 30,000 b/d at the start of the week, Iraqi oil officials said on Thursday. Two officials at the state-owned North Oil Company did not give a reason for the decline, but the fall comes at a time of increased tension between the Kurdish region and the central government in Baghdad over payments to oil companies operating in the north. Reuters, 06:53 December 20, 2012

Energy Prices

U.S. Oil and Gas Prices December 21, 2012				
	Today	Week Ago	Year Ago	
CRUDE OIL West Texas Intermediate U.S. \$/Barrel	87.96	86.09	98.48	
NATURAL GAS Henry Hub \$/Million Btu	3.35	3.27	3.07	

Source: Reuters

Links

This Week in Petroleum from the U.S. Energy Information Administration (EIA) <u>http://www.eia.gov/oog/info/twip/twip.asp</u> Updated every Wednesday.

Weekly Petroleum Status Report from EIA

http://www.eia.gov/oil gas/petroleum/data publications/weekly petroleum status report/wpsr.html Updated after 10:30 AM and 1:00 PM Eastern Time every Wednesday.

Natural Gas Weekly Update from EIA

http://www.eia.gov/oog/info/ngw/ngupdate.asp Updated after 2:00 PM Eastern Time every Thursday.

ENERGY ASSURANCE DAILY

Energy Assurance Daily provides a summary of public information concerning current energy issues. Published Monday through Friday to inform stakeholders of developments affecting energy systems, flows, and markets, it provides highlights of energy issues rather than a comprehensive coverage. *Energy Assurance Daily* is updated online Monday through Friday after 5:00 PM Eastern Time. For more information, visit the Infrastructure Security and Energy Restoration (ISER) website at: http://www.oe.netl.doe.gov/ead.aspx

Please direct comments and questions to: <u>ead@oe.netl.doe.gov</u>