



# ENERGY ASSURANCE DAILY

Friday Evening, August 16, 2013

## *Electricity*

---

### **U.S. Nuclear Power Plants Vulnerable to Terrorist Attack – Report**

U.S. commercial and research nuclear facilities remain inadequately protected against two credible terrorist threats – the theft of bomb-grade material to make a nuclear weapon and sabotage attacks intended to cause a reactor meltdown – according to a new report, released on Thursday, prepared under a contract for the Pentagon by the Nuclear Proliferation Prevention Project (NPPP) at the University of Texas at Austin’s LBJ School of Public Affairs. None of the country’s 104 commercial nuclear reactors or three research reactors is protected against an attack involving multiple players such as the ones carried out on September 11, 2001, according to the NPPP report. The report notes operators of existing nuclear facilities are still not required to defend against the number of terrorist teams or attackers associated with 9/11, nor against airplane attacks, nor even against readily available weapons such as high-power sniper rifles. Of particular concern, the NPPP report finds some U.S. nuclear power plants are vulnerable to terrorist attack from the sea, but they are not required to protect against such ship-borne attacks. Another serious terrorism danger is posed by three civilian research reactors that are fueled with bomb-grade uranium, which is vulnerable to theft to make nuclear weapons. The NPPP recommends that Washington require a level of protection at all potentially high-consequence U.S. nuclear targets – including both nuclear power reactors and civilian research facilities with bomb-grade material – sufficient to defend against a maximum credible terrorist attack. To meet this standard at commercial facilities, the U.S. Nuclear Regulatory Commission should upgrade its “design basis threat,” and the U.S. government should provide the requisite additional security that is not supplied by private-sector licensees.

<http://blogs.utexas.edu/nppp/files/2013/08/Hastings-PR-2013-Aug-14-rev5.pdf>

### **PG&E Reports Loss of Start-up Power at Its 2,240 MW Diablo Canyon Nuclear Power Plant in California August 15**

Pacific Gas & Electric Co. (PG&E) reported unit 1 experienced a loss of start-up power due to a failure of the start-up transformer 1-1 load tap changer. This loss caused a valid auto-start signal to all three emergency diesel generators (EDGs) and they all started successfully. All EDGs were shut and returned to standby. The plant is in a 72-hour shutdown limiting condition for operation (LCO) for the loss of one of three qualified circuits. The two other qualified circuits (vital power via auxiliary transformers and the EDGs) remain operable.

<http://www.nrc.gov/reading-rm/doc-collections/event-status/event/2013/20130816en.html>

### **Diesel Generator Inoperable at Exelon’s 1,022 MW Clinton Nuclear Unit in Illinois August 15**

Exelon Corp. reported the damper that provides the flow path from the outside area into the ventilation room would not open when the fan was started. This rendered the division 3 diesel generator inoperable as well as the high pressure core spray, although it remained available. The cause of the damper failing to open had not yet been determined. Troubleshooting is in progress to determine the cause and actions required to restore operability. The division 1 and division 2 diesel generators are operable.

<http://www.nrc.gov/reading-rm/doc-collections/event-status/event/2013/20130816en.html>

### **Update: Dominion’s 1,130 MW Millstone Nuclear Unit 3 in Connecticut Ramped Up to 94 Percent by August 16**

On the morning of August 15 the unit was operating at 67 percent, according to the Nuclear Regulatory Commission. The unit had shut on August 9 after experiencing the loss of a non-vital 480v bus resulting in a feedwater transient that caused the steam generator water level to lower below the automatic reactor trip setpoint.

<http://www.nrc.gov/reading-rm/doc-collections/event-status/reactor-status/2013/>

## **Constellation's 825 MW Calvert Cliffs Nuclear Unit 1 in Maryland Reduced to 86 Percent by August 16**

On the morning of August 15 the unit was operating at full power, according to the Nuclear Regulatory Commission.

<http://www.nrc.gov/reading-rm/doc-collections/event-status/reactor-status/2013/>

## **Southern Reports Hot Short in RHR Shutdown Cooling Control Cable at Its 856 MW Hatch Nuclear Unit 1 in Georgia August 15**

Southern Co. reported a condition was identified that resulted from an inter-cable circuit analysis as part of the safe shutdown analysis that identified a vulnerability associated with two unit 2 valves with controls in fire area 2203. An inter-cable hot short could occur on the control cables for the residual heat removal (RHR) shutdown cooling suction valve 2E11-F008 valve and cause the valve to open in the event of a postulated fire in fire area 2203F which is in the vicinity of the unit 2 remote shutdown panel. In addition, a spurious opening of RHR shutdown cooling suction valve 2E11-F009 valve could occur due to a hot short on the control cables. The fire is postulated while in mode 1 which could cause both valves to open during power operation. This postulated event would expose the low pressure RHR-shutdown cooling suction line to normal operating pressures which would result in an inter-system loss of cooling accident (LOCA). Immediate actions were taken to de-energize the valves in the closed position which removed the vulnerability.

<http://www.nrc.gov/reading-rm/doc-collections/event-status/event/2013/20130816en.html>

## **Update: TVA's 1,118 MW Browns Ferry Nuclear Unit 2 in Alabama at Full Power by August 16**

On the morning of August 15 the unit was operating at 45 percent, according to the Nuclear Regulatory Commission.

<http://www.nrc.gov/reading-rm/doc-collections/event-status/reactor-status/2013/>

## **Update: FPL's 512 MW Point Beach Nuclear Unit 2 in Wisconsin at Full Power by August 16**

On the morning of August 15 the unit was operating at 60 percent, according to the Nuclear Regulatory Commission.

<http://www.nrc.gov/reading-rm/doc-collections/event-status/reactor-status/2013/>

## **AES's 498 MW Alamosa Gas-fired Unit in California Reduced by August 15**

The unit entered a planned curtailment of 178 MW.

<http://content.caiso.com/unitstatus/data/unitstatus201308151515.html>

## ***Petroleum***

---

### **Tesoro Reports Small Fire at Its 166,000 b/d Martinez, California Refinery August 16**

A small fire was reported at Tesoro Corp.'s Martinez, California, refinery, according to a filing with the Contra Costa County health department. The fire was put out within 10 minutes and didn't cause any injuries or damage any equipment.

<http://www.hydrocarbonprocessing.com/Article/3244313/Latest-News/Tesoro-reports-small-fire-at-California-refinery.html>

## ***Natural Gas***

---

### **Enbridge Reports Leak, AGI Units Down at Its Tilden Gas Plant in Texas August 15**

Enbridge reported a leak developed, early Thursday morning, in a 3/8 inch tubing on the acid gas injector (AGI) no. 2 due to vibration. The damaged section of the pipe was repaired and wrapped with rubber to keep this type of event from occurring in the future. Later Thursday morning, the AGI no. 2 was shut down to repair a fifth stage scrubber tubing. While AGI no. 2 was down, AGI no. 1 unexpectedly shut down due to a compressor motor fault. The steel tubing was replaced on the fifth stage scrubber on AGI no. 2 and the unit was restarted and stabilized. The electrical breaker on AGI no. 1 was reset and AGI no.1 was restarted and stabilized.

<http://www11.tceq.state.tx.us/oc/eer/index.cfm?fuseaction=main.getDetails&target=186844>

<http://www11.tceq.state.tx.us/oc/eer/index.cfm?fuseaction=main.getDetails&target=186843>

## Other News

---

Nothing to report.

## International News

---

### Libya Threatens Military Action Against Oil Protesters August 15

Libya's government will use all means, including military force if necessary, to prevent striking security guards at the country's main ports from selling its oil independently of Libya's state national oil corporation (NOC), the Prime Minister said on Thursday. Libyan officials said their patience with protesters was running out as the country was losing billions with its oil exports cut more than half in the past weeks. Strikes at Libya's largest ports have pushed oil production and exports to their lowest levels since the civil war in 2011 to just 500,000-600,000 b/d compared to the country's production capacity of 1.6 million b/d. The strikes have hit major oil export sites such as Es Sider and Ras Lanuf with armed security guards asking for higher pay.

<http://www.reuters.com/article/2013/08/15/us-libya-oil-idUSBRE97E17N20130815>

### Egypt Oilfields Remain Open But Companies on Alert August 15

Egyptian oil and gas production by major companies has been unaffected by the crisis in Egypt, although Royal Dutch Shell has closed its office for the next few days and restricted business travel there. Egypt produces about 728,000 b/d of oil and 60.9 billion cubic meters per year of gas.

<http://www.reuters.com/article/2013/08/15/egypt-protests-shell-idUSL6N0GG2KJ20130815>

## Energy Prices

---

U.S. Oil and Gas Prices			
August 16, 2013			
	Today	Week Ago	Year Ago
<b>CRUDE OIL</b> <b>West Texas Intermediate U.S.</b> \$/Barrel	107.79	105.42	95.15
<b>NATURAL GAS</b> <b>Henry Hub</b> \$/Million Btu	3.37	3.32	2.82

Source: Reuters

## Links

---

***This Week in Petroleum*** from the U.S. Energy Information Administration (EIA)

<http://www.eia.gov/oog/info/twip/twip.asp>

Updated every Wednesday.

***Weekly Petroleum Status Report*** from EIA

[http://www.eia.gov/oil\\_gas/petroleum/data\\_publications/weekly\\_petroleum\\_status\\_report/wpsr.html](http://www.eia.gov/oil_gas/petroleum/data_publications/weekly_petroleum_status_report/wpsr.html)

Updated after 10:30 AM & 1:00 PM ET every Wednesday.

***Natural Gas Weekly Update*** from EIA

<http://www.eia.gov/oog/info/ngw/ngupdate.asp>

Updated after 2:00 PM ET 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 p.m. ET. 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: [ead@oe.netl.doe.gov](mailto:ead@oe.netl.doe.gov)*