Major Developments

Storm, High Winds Knock Out Power to Over 670,000 Customers in U.S. Pacific Northwest, British Columbia November 17–18

A strong storm packing powerful winds knocked out power to 672,296 customers in Washington, Oregon, Idaho, Montana, and British Columbia Tuesday night. Wind gusts up to 49 mph were reported, toppling trees and power lines. As of 3:30 p.m. EST Wednesday, 272,787 customers remained without power. Avista, at the height of the storm, reported more than 180,000 customers without power, which is nearly half of its electric customers. The company said the priority for restoration will be to rebuild and repair transmission lines first and then crews will work to restore power to those entities that serve critical community infrastructure. Crews will then work to restore power to those areas with the densest populations and work out along distribution lines to less populated areas. Kootenai Electric, which reported 10,471 customer outages, said it may take days to assess the damage to the entire system and customers should be prepared for extended power outages. Puget Sound Energy, which reported about 210,000 outages, said at least 25 of its transmission lines need to be repaired and several of its smaller substations in more remote areas are offline. The company said it expected to make significant progress restoring power today. Snohomish County PUD, which reported about 150,000 customers without power, said power has been restored to all substations but 36 breakers remained open. Two transmission line segments also remained out.

Northwest, British Columbia Customer Power Outages
November 17–18, 2015

<table>
<thead>
<tr>
<th>Electric Utility</th>
<th>State</th>
<th>Peak</th>
<th>Latest Reported</th>
</tr>
</thead>
<tbody>
<tr>
<td>Avista</td>
<td>ID/WA</td>
<td>180,000</td>
<td>121,846</td>
</tr>
<tr>
<td>Kootenai Electric</td>
<td>ID</td>
<td>10,471</td>
<td>10,484</td>
</tr>
<tr>
<td>Flathead Electric Co-op</td>
<td>MT</td>
<td>11,000</td>
<td>4,699</td>
</tr>
<tr>
<td>Puget Sound Electric</td>
<td>WA</td>
<td>210,000</td>
<td>66,305</td>
</tr>
<tr>
<td>Snohomish PUD</td>
<td>WA</td>
<td>150,000</td>
<td>65,000</td>
</tr>
<tr>
<td>Seattle City Light</td>
<td>WA</td>
<td>5,325</td>
<td>6</td>
</tr>
<tr>
<td>Portland General Electric</td>
<td>OR</td>
<td>28,000</td>
<td>3,247</td>
</tr>
<tr>
<td>Pacific Power</td>
<td>OR</td>
<td>4,500</td>
<td>0</td>
</tr>
<tr>
<td>BC Hydro</td>
<td>B.C.</td>
<td>73,000</td>
<td>1,200</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td>672,296</td>
<td>272,787</td>
</tr>
</tbody>
</table>

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

Sources:
- [http://www.kec.com/content/power-outage-updates](http://www.kec.com/content/power-outage-updates)
- [https://twitter.com/KootenaiEC?ref_src=twsrc%5Etfw](https://twitter.com/KootenaiEC?ref_src=twsrc%5Etfw)
- [http://www.flatheadelectric.com/](http://www.flatheadelectric.com/)
- [https://pse.com/accountsandservices/ServiceAlert/Pages/Outage-Map.aspx](https://pse.com/accountsandservices/ServiceAlert/Pages/Outage-Map.aspx)
- [https://twitter.com/snopud](https://twitter.com/snopud)
- [https://twitter.com/SEACityLight](https://twitter.com/SEACityLight)
- [https://www.portlandgeneral.com/safety_outages/outages/outage_updates/outage_list.aspx](https://www.portlandgeneral.com/safety_outages/outages/outage_updates/outage_list.aspx)
- [https://twitter.com/portlandgeneral](https://twitter.com/portlandgeneral)
- [https://www.pacificpower.net/ed/po/ooi.html](https://www.pacificpower.net/ed/po/ooi.html)
- [https://www.bchydro.com/power-outages/app/outage-list.html#current](https://www.bchydro.com/power-outages/app/outage-list.html#current)
**Storm Watch**

**Damaging Winds from Tropical Storm In-Fa Could Impact Guam, Saipan by November 21**
As of 4:00 p.m. EDT (5:00 a.m. ChST, Wednesday), the National Weather Service forecasts damaging winds could impact Guam and Saipan over the weekend. The storm is currently 775 miles southeast of Guam and 800 miles southeast of Saipan. Tropical Storm In-Fa is forecast to intensify over the next few days.

Sources:
- http://www.prh.noaa.gov/images/guam/errorTrack1.jpg
- http://www.prh.noaa.gov/data/GUM/TCPPQ1

**Electricity**

**Storms Knock Out Power to Over 64,000 Customers in Oklahoma, Texas November 16–17**
Strong storms producing tornados knocked out power to 64,500 customers in Oklahoma and Texas Monday night into Tuesday. Oncor, the hardest hit utility with 44,000 customers without power, said its outages were mainly in the Dallas and Fort Worth areas. As of 3:30 p.m. EST Wednesday, 1,357 customers remained without power.

<table>
<thead>
<tr>
<th>Electric Utility</th>
<th>State</th>
<th>Peak</th>
<th>Latest Reported</th>
</tr>
</thead>
<tbody>
<tr>
<td>OG&amp;E</td>
<td>OK</td>
<td>7,000</td>
<td>60</td>
</tr>
<tr>
<td>Public Service Company of Oklahoma</td>
<td>OK</td>
<td>500</td>
<td>857</td>
</tr>
<tr>
<td>Oncor</td>
<td>TX</td>
<td>44,000</td>
<td>339</td>
</tr>
<tr>
<td>Xcel Energy</td>
<td>TX</td>
<td>13,000</td>
<td>101</td>
</tr>
<tr>
<td>TOTAL*</td>
<td></td>
<td>64,500</td>
<td>1,357</td>
</tr>
</tbody>
</table>

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

Sources:
- https://www.facebook.com/XcelEnergyTX
- https://oge.com/wps/portal/oge/outages/systemwatch/

**Storms Knock Out Power to 39,700 Customers in Arkansas, Tennessee November 17**
Strong storms knocked out power to 25,700 Entergy customers in Arkansas and 14,000 Memphis Light, Gas, and Water (MLGW) customers in Tennessee on Tuesday. Entergy said its transmission team set out helicopter spotters early Wednesday morning to inspect several lines in the northwest, southeast, and southwest regions. As of 3:30 p.m. EST Wednesday, 3,790 Entergy customers and 2,443 MLGW customers remained without power. Entergy estimated power restoration to be complete by midnight Thursday.

Sources:
- https://twitter.com/MLGW

**Duke Energy’s 846 MW Oconee Nuclear Unit 1 in South Carolina Reduced to 45 Percent by November 18**
On the morning of November 17 the unit was operating at full power.

Sources:
Update: Exelon’s 1,163 MW Byron Nuclear Unit 1 in Illinois Ramps Up to 95 Percent by November 18
On the morning of November 17 the unit was operating at 78 percent, reduced from full power on November 14. [http://www.nrc.gov/reading-rm/doc-collections/event-status/reactor-status/2015/]

Update: Exelon’s 1,131 MW Byron Nuclear Unit 2 in Illinois Ramps Up to 94 Percent by November 18
On the morning of November 17 the unit was operating at 71 percent, reduced from 82 percent on November 14. [http://www.nrc.gov/reading-rm/doc-collections/event-status/reactor-status/2015/]

Update: Entergy’s 1,207 MW Grand Gulf Nuclear Unit 1 in Mississippi Ramps Up to 96 Percent by November 18
On the morning of November 17 the unit was operating at 80 percent, reduced from full power on November 16. [http://www.nrc.gov/reading-rm/doc-collections/event-status/reactor-status/2015/]

Energia de Baja’s 322 MW Lr2 Gas-fired Unit in California Shut by November 17
The unit entered an unplanned outage. [http://content.caiso.com/unitstatus/data/unitstatus201511171515.html]

Rolette Power Development Proposes 100 MW Wind Farm in North Dakota
Rolette Power Development LLC is proposing a 59 turbine, 100 MW wind farm on nearly 15,000 acres of land between Rolette and Rugby, North Dakota. State regulators signaled likely approval for a $175 million wind farm in north-central North Dakota on Tuesday, but a federal wildlife official believes more study is needed on the potential dangers the project poses to bald eagles. After the company submitted its permit to the state and a public hearing was held this summer, the federal agency identified two bald eagle nests just a few miles outside of the project’s footprint. Reuters, 6:01 November 17, 2015

Clean Line Energy to Refocus on Missouri for Its 780-Mile Grain Belt Express Transmission Line
Developers of a proposed $2 billion transmission line say they are returning their attention to Missouri after Illinois regulators approved the multistate project. Clean Line Energy will try again to persuade Missouri regulators to approve the 780-mile Grain Belt Express transmission line that would carry wind-generated electricity from Kansas through Missouri and Illinois to Indiana. Illinois officials gave their approval Thursday. Missouri’s Public Service Commission voted in July to deny Clean Line’s application for a certificate of need and public necessity, a step necessary to carry wind energy from the plains across Missouri. The commission said developers didn’t provide evidence the project would benefit Missouri. Grain Belt said officials haven’t decided whether to file a new case with the commission or pursue the project through federal energy regulations. Reuters, 4:31 November 17, 2015

Petroleum

Valero Plans FCCU Restart This Week at Its 335,000 b/d Port Arthur, Texas Refinery – Sources
Valero Energy Corp plans to restart the 75,000 b/d fluidic catalytic cracking unit (FCCU) at its Port Arthur, Texas, refinery this week, perhaps as early as Tuesday night, sources familiar with plant operations said on Tuesday. The FCCU was shut on Sunday by a fire on the unit. Reuters, 5:32 November 17, 2015

Update: Shell Says Oil Sheen Contained Near Its 316,600 b/d Deer Park, Texas Refinery November 16; No Impact from Small Fire November 18
Royal Dutch Shell Plc on Monday said a small oil sheen observed from one of the loading hoses near the Shell Deer Park Crude dock was contained. The company said the oil sheen was contained within the deployed boom and the source of the sheen was stopped. Shell said it does not anticipate any impact on the environment. The company on Wednesday also reported no impact to operations from a small fire at the site. Reuters, 10:16 November 16, 2015
Reuters, 10:42 November 18, 2015
Valero Reports Flaring at Its 100,000 b/d Houston, Texas Refinery November 18
Valero Energy Corp reported flaring at its Houston, Texas refinery, according to a community line.
Reuters, 10:41 November 18, 2015

U.S. Crude Oil Stocks Climb toward Record High – EIA
U.S. crude oil stockpiles climbed towards record highs last week but the rise was below analysts' expectations, data from the Energy Information Administration (EIA) showed on Wednesday. Crude oil inventories rose 252,000 barrels to 487.3 million barrels in the week to November 13, compared with analysts' expectations for an increase of 1.9 million barrels. Stocks at the Cushing, Oklahoma, crude oil futures delivery hub rose 1.5 million barrels to 56.9 million barrels, EIA said. Analysts point out that the crude oil build would have been larger if it were not for U.S. crude oil imports falling 409,000 b/d last week. Refinery utilization rates rose by 0.8 percentage point to 90.3 percent of capacity.
Reuters, 11:32 November 18, 2015

USD Partners Completes Acquisition of Casper Terminal in Wyoming November 17
USD Partners LP completed its previously announced acquisition of the Casper, Wyoming, crude oil terminal for total consideration of $225 million, subject to post-closing adjustments and adjustments for working capital. The Casper terminal assets include a unit train capable rail loading terminal, 900,000 barrels of tank capacity for storage and blending operations and a pipeline connection from Spectra Energy Partners LP’s Express crude oil pipeline, currently the primary source of crude oil delivered to the terminal. The Casper terminal is supported by take-or-pay contracts with primarily investment grade refiners and is expected to contribute approximately $26 million of Adjusted EBITDA in 2016 based on minimum contracted payments. The transaction is expected to be immediately accretive to distributable cash flow per unit.

Saddlehorn, Grand Mesa to Combine Crude Oil Pipeline Projects in DJ Basin November 18
Saddlehorn Pipeline Company announced today it was combining projects with Grand Mesa Pipeline, LLC for the construction of a 20-inch undivided joint interest pipeline which begins approximately 20 miles north of Saddlehorn’s Platteville, Colorado origin at a junction near Grand Mesa’s Lucerne, Colorado origin. The joint interest pipeline will deliver various grades of crude oil from the DJ Basin to storage facilities in Cushing, Oklahoma. The initial capacity of the joint interest pipeline is expected to be 340,000 b/d, with Saddlehorn owning 190,000 b/d of capacity and Grand Mesa owning 150,000 b/d. Saddlehorn has the option to expand the maximum capacity of the pipeline to more than 450,000 b/d in the future. Saddlehorn will own origin points at Platteville, including one million barrels of storage, and Carr, Colorado as well as the pipeline segment from Carr to the Lucerne junction. Grand Mesa will own origin points both at Lucerne and Riverside, Colorado as well as the pipeline segment between Lucerne and Riverside. Pipeline installation began in early October for the Platteville-to-Cushing segment of the pipeline, which is expected to be operational during mid-2016. Right-of-way acquisition is currently in progress for the Carr-to-Platteville segment, which is expected to be operational in the fourth quarter of 2016.

LOOP to Add 2.2 Million Barrels of Aboveground Storage by 2017
The Louisiana Offshore Oil Port (LOOP) said on Wednesday said it will double an expansion plan and add six aboveground tanks, or 2.2 million barrels of capacity. LOOP, which receives both domestic and international crudes through ships and pipelines, had originally planned to construct three new aboveground storage tanks at its terminal. Construction of the original three tanks will be complete in the fall of 2016, and the second phase of the project is slated to come online in the spring of 2017. Once completed, there will be 11.2 million barrels of aboveground storage at LOOP and 71 million barrels of total capacity.
http://www.loopllc.com/Announcements/Announcements/LOOP-DOUBLES-ITS-CLOVELLY-HUB-EXPANSION-PROJECT

TransCanada Withdrawing Keystone XL Route Application in Nebraska
TransCanada Corp has told the Nebraska Public Service Commission it is withdrawing its route application for the Keystone XL pipeline in the state, the company said on Wednesday. The company said it is pausing to consider its next steps following President Obama’s denial of a permit for Keystone XL earlier this month.
Reuters, 11:23 November 19, 2015
Pilgrim Pipeline Holdings Submits Use and Occupancy Permit Application for Its 200,000 b/d Pilgrim Pipeline in New York November 18
Pilgrim Pipeline Holdings announced today that it has filed a use and occupancy permit application in New York to construct the Pilgrim Pipeline. The proposed 178-mile pipeline project consists of two separate, parallel underground lines running between supply and distribution terminals in Albany and Linden, New Jersey. The pipeline would carry refined products like gasoline, diesel, kerosene, and home heating oil to the north and crude oil southbound. The pipeline would handle an estimated 200,000 b/d in each direction (a total of 73 million barrels annually). Applications for permits will be filed in New Jersey later this year.

Natural Gas

Targa Reports AGC Shut at Its 150 MMcf/d Sand Hills Gas Plant in Texas November 17
Targa reported the acid gas compressor (AGC) was shut by the panel board for high fourth stage discharge pressure. This routed acid gas to the emergency acid gas flare. All the suction and discharge compressor valves on the fifth stage cylinder were replaced and the compressor was restarted. Once the AGC was restarted the flaring ceased.
http://www2.tceq.texas.gov/oce/eer/index.cfm?fuseaction=main.getDetails&target=223127

Regency Reports AGC Shut at Its 290 MMcf/d Waha Gas Plant in Texas November 16
Regency reported flared acid gas stream was coming from the amine treater due to the shutdown of the acid gas compressor (AGC). The AGC shut due to a tripped breaker in the boiler house. The breaker was reset and the AGC was put back in service.
http://www2.tceq.texas.gov/oce/eer/index.cfm?fuseaction=main.getDetails&target=223122

Other News

Nothing to report.

International News

Nothing to report.

Energy Prices

<table>
<thead>
<tr>
<th>U.S. Oil and Gas Prices</th>
<th>November 18, 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Today</td>
</tr>
<tr>
<td>CRUDE OIL</td>
<td></td>
</tr>
<tr>
<td>West Texas Intermediate U.S.</td>
<td></td>
</tr>
<tr>
<td>$/Barrel</td>
<td>40.65</td>
</tr>
<tr>
<td>NATURAL GAS</td>
<td></td>
</tr>
<tr>
<td>Henry Hub</td>
<td></td>
</tr>
<tr>
<td>$/Million Btu</td>
<td>2.05</td>
</tr>
</tbody>
</table>

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
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.

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

*Please direct comments and questions to: ead@oe.netl.doe.gov*