

Issue 1, 2020

Energy Infrastructure Attacks are 'Probable': Oil Traders Fear Supply Disruptions in the Middle East

"A dramatic escalation of geopolitical tensions will most likely result in an unplanned oil supply shortage in the Middle East, elevating the likelihood of another spike in oil prices."

Why this is important: This article highlights the importance of energy infrastructure and the need for redundancy throughout the numerous energy systems. There are bottlenecks in the system that are particularly vulnerable, such as the Strait of Hormuz for the oil sector. There are also bottlenecks in the U.S. electrical grid that make certain towers and transmission lines especially susceptible to attack. By building redundancy into these various systems, the respective nations can alleviate the impact of attacks on these current energy bottlenecks. --- Nicholas S. Preservati

Russia, Ukraine Reach New Agreement on Natural Gas Transmission

"In the short term, a new five-year gas transit agreement between Russia and Ukraine, agreed just 12 days before the current agreement is to expire, is good news for Europe, Russia and Ukraine — a rare example of pragmatism and compromise in today's winner-takes-all approach to diplomacy."

Why this is important: The anticipated completion of the Nord Stream 2 and TurkStream pipelines by Russia places a greater urgency on increased exports of cheap U.S. shale gas to Europe. While the transportation of Russian gas through the Ukrainian pipeline system decreases under a five-year gas transit agreement with Russia, U.S. operators need to increase LNG exports to maintain a significant share of the European market, which is hungry for natural gas. --- William M. Herlihy

China Must Cancel New Coal Plants to Meet Climate Goals

"Chinese government researchers, among others, said Beijing is capable of phasing out coal to meet 2050 targets."

Why this is important: A new study by the University of Maryland and China suggests to meet its climate change goals, China needs to immediately stop construction of coal-fired electrical generation plants. China has built 42.9 GW of new coal-fired electrical generation plants since 2018, and it has 121 GW of ongoing construction. To meet its growing electrical needs, it needs another 1,250 to 1,400 GW of new coal-fired plants. The world's largest country has 1,000 GW of coal-fired generation plants, which is 60 percent of its electrical generation capacity. This new study suggests closing older and less efficient plants now to reduce CO2 emissions. But with economic growth in China at its slowest pace in 30 years, China continues to approve new coal-fired electrical generation plants. To meet 2030 and 2050 CO2 emissions targets, this study suggests it must start closing plants now. With its current economy, that is unlikely. --- Mark E. Heath

California has Big Clean Energy Ambitions, and is Looking for Better Energy Storage to Realize Them

"The California Energy Commission is putting up to \$11 million on the table for developers of energy storage technologies other than lithium-ion batteries, according to a solicitation launched last month."

Why this is important: To generate 100 percent of its electricity from renewables, which requires a large amount of intermittent solar and wind, California will need a quantum leap in battery storage capacity. Lithium batteries alone, despite their dropping cost and incremental improvements, will not be sufficient to fill the need. By providing seed money to promising storage projects, California is furthering the development of intermittent energy supplies, which can be adopted there and outside its borders. --- David L. Yaussy

U.S. Greenhouse Gas Emissions Dip, Trump Policies Put Future Cuts in Doubt

"U.S. emissions linked to climate change fell last year on a record drop in coal-fired power generation, but further declines are unlikely without rapid policy changes."

Why this is important: Tremendous efforts have been made in reducing emissions in the electric generation sector. However, that sector only accounts for 25 percent of the U.S.'s total emissions. If the U.S. wants to significantly cut its emissions, it needs to exert the same amount of effort in reducing emissions in the transportation and agriculture sectors, which are the two largest components of the remaining 75 percent of U.S. emissions. --- Nicholas S. Preservati

Yunnan Will Speed Up the Integration and Reorganization of the Coal Industry to Build a 50 Million Ton Coal Group

"The 'opinion draft' shows that Yunnan will proceed from the reality of various regions, adjust measures to local conditions, properly handle the relationship between the integration of resources, merger and reorganization, and the elimination of backward production capacity, and concentrate its industrial layout to key areas."

Why this is important: China's Yunnan Province Energy Bureau is developing a three-year action plan to increase and integrate coal production. The province is setting up a 50-million ton group to increase coal production and focus on larger mines. It projects the Province will mine 58 million tons in 2020 and 80 million tons in 2021. Despite goals to reduce CO2 emissions, China continues to build coal-fired electrical generation plants and mine and import more coal. --- Mark E. Heath

Questions Raised Over WV Business and Inventory Tax Phase Out

"Joint Resolution 1 would eliminate the ad valorem tax on manufacturing inventory, machinery, and equipment, also known as the business and inventory tax."

Why this is important: West Virginia is one of the few states that taxes business inventory, machinery and equipment, which multiple state administrations have concluded acts as a barrier to manufacturing jobs growth. The West Virginia Legislature says it will remove that tax for manufacturers during the 2020 legislative session, which started Wednesday. The key question is how revenue from the tax, which is directed to the counties, will be replaced by the Legislature, and over

The Key Distinction Between U.S. Energy Independence and Energy Security

"While there is no doubt that the United States does enjoy a much higher degree of energy 'security' thanks largely to the rapid increase in its own domestic oil production over the last decade, it continues to import crude oil from the Middle East."

Why this is important: The terms "energy independence" and "energy security" are often used interchangeably. This article highlights a nuanced but important distinction between the two terms. Energy independence relates to the U.S.'s ability to produce the resources necessary to satisfy its energy needs. However, energy independence does not equate to energy security because the price of coal, natural gas, and especially petroleum are largely dictated by global markets. Fluctuations in the global market may create geopolitical issues that threaten the U.S.'s energy security without necessarily affecting its energy independence. Therefore, the U.S. needs to develop an energy policy that provides both energy independence and energy security. --- Nicholas S. Preservati

Electric Vehicles Could Boost Load 1.5 GW by 2035

"The forecast predicts plug-in vehicle loads will rise from 200 MW in 2020 to an estimated 1,500 MW by 2035, which is less than 0.1% to average annual growth rate."

Why this is important: Electric vehicles generally charge from the electrical grid, increasing emissions from power plants and decreasing emissions from tailpipes. PJM, which operates the electrical grid in much of the eastern part of the U.S., is anticipating a growing fleet of electric vehicles will be a significant additional load it must prepare for. As one industry expert says, an EV can double the electric consumption of a household, resulting in ever-greater demand for generation. --- David L. Yaussy

China's Pipeline Plan May Raise Energy Risk

"The outlines of the plan suggest that PipeChina will be a massive state holding with a sprawling network of pipelines and as many as nine import terminals for liquefied natural gas."

Why this is important: The consolidation of three existing Chinese national oil companies into China Oil & Gas Piping Network Corp. promises a bright future for the export of LNG from the U.S. to China. The combination of the pipeline infrastructure of those companies and the expansion plans of PipeChina should be a lucrative export market for cheap U.S. shale gas so long as the federal government promptly permits more LNG export terminals. --- William M. Herlihy

EIA Energy Statistics

Here is a round-up of the latest statistics concerning the energy industry.

PETROLEUM

This Week in Petroleum

Weekly Petroleum Status Report

NATURAL GAS

Natural Gas Weekly Update

Natural Gas Futures Prices

COAL

Short-Term Energy Outlook - Coal

Coal Markets

Weekly Coal Production

RENEWABLES

Short-Term Energy Outlook

Monthly Biodiesel Production Report

Monthly Densified Biomass Fuel Report

What are your areas of interest? If there are particular industries or issues that you would like to hear about, <a href="mailto:email

If you would like to subscribe to this weekly e-blast or know someone who would, please <a href="mailto:emailt

If you have any energy questions, please feel free to contact us.

This is an attorney advertisement. Your receipt and/ or use of this material does not constitute or create an attorney-client relationship between you and Spilman Thomas & Battle, PLLC or any attorney associated with the firm. This e-mail publication is distributed with the understanding that the author, publisher and distributor are not rendering legal or other professional advice on specific facts or matters and, accordingly, assume no liability whatsoever in connection with its use.

Responsible Attorney: Michael J. Basile, 800-967-8251