To: Jackson, Ryan[jackson.ryan@epa.gov]
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Energy and Climate Report

Afternoon Briefing - Your Preview of Today's News

The following news provides a snapshot of what Bloomberg BNA is working on today. Read the full version of all the stories in the final issue, published each night.

House Energy Spending Chair Cuts Research Program He Likes

Posted June 28, 2017, 01:17 P.M. ET

By Rebecca Kern

Rep. Mike Simpson (R-Idaho) said that while he likes the Energy Department's ARPA-E program, which provides early stage investment in innovative energy technologies, his Energy and Water Subcommittee's fiscal 2018 appropriations bill would cut it "because of limited resources."

The House Appropriations Committee's Energy and Water Subcommittee approved by voice vote June 28 the $37.56 billion appropriations bill funding the Energy Department, Army Corps of Engineers, and other related agencies. The funding would be $209 million below the fiscal 2017 enacted level and $3.65 billion above the President Donald Trump's budget request. No amendments were offered during the markup.

The Advanced Research Projects Agency-Energy was proposed to be eliminated in Trump fiscal 2018 budget, which requested just $20 million to wind down remaining projects, compared to $291 million in the fiscal 2017 annualized continuing resolution.

While the House version would cut ARPA-E funding, the program has strong backing in the Senate. Sen. Lamar Alexander (R-Tenn.), chairman of the Senate Appropriations Committee's Energy and Water Subcommittee, told Energy Secretary Rick Perry during the Energy Department budget hearing June 21 that he wanted his assurance that Perry would continue to fund the program.

Simpson acknowledged the funding bill will be altered. "We'll go into conference and it will change. This is the first step in a process, but it will change along the way," he told reporters after the markup.

ARPA-E was created during President George W. Bush's administration. Since 2009, ARPA-E has funded over 400 potentially transformational energy technology projects.

House Compromise Struck on Interim Nuclear Storage Measure

Posted June 28, 2017, 11:56 A.M. ET

By Brian Dabbs

A bipartisan measure to authorize private interim storage of nuclear waste will move to the House floor following the Energy and Commerce Committee's approval June 28.

Lawmakers struck a compromise on an amendment to provide "adequate" funding for related transportation services, while ensuring a "base authorization for at least $150 million for the first private interim storage agreement," Rep. John Shimkus (R-Ill.) said at the markup.

"This gives those private storage initiatives financial surety," he said, noting that interim storage must have local support.

The legislation also reboots Energy Department research on a permanent repository at Nevada's Yucca Mountain site, which had been under study as the permanent U.S. burial site before the Obama administration mothballed it. Most Nevada lawmakers staunchly oppose using Yucca Mountain as a waste repository.

Another amendment aims to placate concerns over Nevada's water rights.

The underlying legislation (H.R. 3053) authorizes the Energy Department to strike contracts with private facilities on interim storage of spent fuel from commercial nuclear power plants, which is currently stored on-site at those plants.

But Rep. Ben Ray Lujan (D-N.M.) opposed the bill over concerns the interim storage facilities will become de facto permanent repositories. The Nuclear Regulatory Commission has received two applications from private companies to accept the spent fuel.

Pipeline Pinch Adds to Oil-Sands Woes as Keystone Wait Drags

Posted June 28, 2017, 03:33 P.M. ET

By Kevin Orland and Frederic Tomesco

Call it the pipeline pinch, or maybe the Keystone quagmire.

While plans by Canadian companies from Suncor Energy Inc. to Canadian Natural Resources Ltd. to boost oil output are racing to fruition, the construction of three pipelines needed to move that product to market, including the infamous Keystone XL, is lagging years behind.

The result: Producers have little choice but to move those extra barrels by train, with costs two to three times higher than pipeline shipping. It's an unwelcome added expense after oil plunged about 20 percent from this year's peak. Futures prices have settled in below $45 a barrel, after many predicted it would rise to $60.

"We're not going to see significant new pipeline capacity until late 2019 or 2020," said Nick Schultz, vice president for pipelines and regulatory matters at the Canadian Association of Petroleum Producers. In the meantime, the extra expense for shipping "impacts royalties and other things that impact the public."

During Barack Obama's administration, oil-sands producers feared a future when they would have to rely heavily on costly railway shipments if he didn't approve Keystone XL. That may start this year.

Pipelines in Western Canada, which holds the world's third-largest oil reserves, can carry about 3.3 million barrels of crude a day, according to CAPP. Meanwhile, the area is expected to produce 3.92 million barrels a day this year and 4.2 million next year as a number of large oil-sands projects come online.

The looming bottleneck adds a new urgency to the industry's calls for more capacity and may lend credence to its argument that the lack of lines hurts the nation's economy.

More Expensive

Canadian oil producers have long lamented the dearth of pipelines carrying their supplies to the nation's east and west coasts, saying that the situation leaves them able to export only to the U.S. and forces them to accept whatever price American refiners will pay. Environmentalists in Canada and the U.S. have opposed new or expanded pipelines, arguing that burning the crude locked up in the oil sands would contribute to catastrophic global warming.

The industry saw glimmers of hope last year, when government regulators approved expansions of Kinder Morgan Inc.'s Trans Mountain pipeline linking Alberta's oil sands with export facilities on British Columbia's Pacific Coast as well as Enbridge Inc.'s Line 3 running from Hardisty, Alberta, to the U.S. border in Manitoba.

The pipeline situation got another boost when U.S. President Donald Trump approved TransCanada Corp.'s Keystone XL, which spans from the oil sands to the U.S. Gulf Coast. Kinder Morgan this month entered into credit agreements totaling C$5.5 billion ($4.2 billion) to help fund the development of Trans Mountain.

More Hurdles

Yet Keystone still needs to win approvals from regulators in Nebraska, and the Line 3 project has faced delays that pushed its in-service date back to 2019. The fate of Trans Mountain also has been called into question after opponents of the project won power in British Columbia last month.

Meanwhile, there are a handful of massive new oil projects that will start production this year and next. Suncor's Fort Hills oil-sands project is expected to begin production in the fourth quarter and ramp up to about 90 percent of its capacity of 194,000 barrels a day within 12 months. Canadian Natural plans to complete another phase of expansion at its Horizon mine this year that will add 80,000 barrels a day.

While Suncor has pipeline space reserved for output from Fort Hills, the company believes market access is important to Canada's oil producers and its economy, said Sneh Seetal, a spokeswoman. Canadian Natural isn't concerned with transportation of Horizon's production because the operation produces light oil, which has fewer shipping constraints, said spokeswoman Julie Woo.

"Though transportation of crude oil by pipeline is our current and primary method of shipment, we evaluate and monitor on an ongoing basis where crude by rail has been, and will continue to be, an option," Woo said.

Offshore Project

More oil will be produced outside of Western Canada as well. The Hebron project off the coast of Newfoundland and Labrador also is expected to come online this year. Operated by Exxon Mobil

Corp. with investments by Chevron Corp., Suncor, Statoil ASA and Nalcor Energy Corp., Hebron is expected to have crude oil production capacity of 150,000 barrels a day at its peak.

All that extra Canadian crude promises to be a boon for railroad companies who were stung by declines in that business when crude prices crashed in 2014. In fact, some already are seeing a pickup in their oil business. Canadian Pacific Railway Ltd. Chief Executive Officer Keith Creel said on a conference call last month that the company had moved 17,000 carloads of oil so far this year, nearly meeting its forecast for 20,000 carloads for all of 2017.

Two-Year Window

Canadian National Railway Co. foresees a two-year window of opportunity before Trans Mountain starts up and crude-by-rail shipments are affected, Chief Commercial Officer Jean-Jacques Ruest told an investor presentation June 14.

If crude-by-rail demand "comes in, you want to ride it very hard, and if at some point the opportunity disappears, then you ride something else," Ruest said.

Crude and condensate accounted for about C$370 million of revenue at Canadian National Railway last year. That's less than half the C$750 million that the company generated from the same line of business in 2014. The company's overall revenue was C$12 billion last year.

Railways may benefit from a pickup in their oil businesses for the next year or two, said David Tyerman, an analyst at Cormark Securities.

"They view it as a short-term boost," he said. "They're happy to haul the stuff, but they're not going to spend a lot of money on infrastructure because they don't know if this is going to be around long."

But the oil industry's trade group sees a need for more pipelines beyond those that already are expected to enter service. Canada will need an additional 1.3 million barrels a day of pipeline capacity by 2030 to meet the nation's growing production, CAPP said in a report earlier this month.

"The urgent need for new pipelines to increase our competitiveness continues to be one of the biggest challenges facing our industry," CAPP CEO Tim McMillan said.

Discoveries Boost Hopes for Alaska Oil Output

Posted June 28, 2017, 9:15 A.M. ET

By Alan Kovski

Oil discoveries on the North Slope of Alaska during the past few years have increased hopes for the economy of the region and the state.

The developments also could quiet worries about keeping viable the North Slope's oil lifeline—the Trans-Alaska Pipeline. If its volumes sink too low, it becomes uneconomical to operate.

Oil production on the North Slope increased during the past 12 months as new wells more than made up for declines at older wells, said Ed King, a special assistant to the commissioner of the

Alaska Department of Natural Resources.

The increases came from ConocoPhillips Co. operations primarily, and an Exxon Mobil Corp. project to a lesser extent. At the same time, BP Plc has slowed the decline at the super-giant Prudhoe Bay Oil Field.

"I don't anticipate that it'll be another increase in 2018," King said, referring to Alaska's fiscal 2018, which will start July 1. There are no notable new supplies set to come online during the next 12 months that would allow another increase, he told Bloomberg BNA.

After 2018, the picture becomes more complicated because of the difficulties in forecasting the output of new discoveries.

Sharply Differing Outlooks

The spring 2017 forecast from the Alaska Department of Revenue projected a decade of decline in North Slope output, without benefit of enough information to include significant volumes from recent discoveries.

Interior Secretary Ryan Zinke visited Alaska in late May. He signed an order to accelerate development of the National Petroleum Reserve-Alaska and to make a new estimate of potential oil reserves in part of the Arctic National Wildlife Refuge.

The Wilderness Society issued a report June 19 arguing that expected developments in North Slope oil fields should keep the Trans-Alaska Pipeline viable for many years to come.

"The pipeline will continue operating for decades, with no need to drill in controversial, ecologically important and federally protected Arctic regions, i.e., the Arctic National Wildlife Refuge, off-limits portions of the National Petroleum Reserve-Alaska, and the Arctic Ocean," the report said.

Pipeline Volumes Rise

The Trans-Alaska Pipeline carried more than 2.1 million barrels a day at its peak in 1988, but now is operating at a quarter of that amount.

Alyeska Pipeline Service Co., operator of the line for a consortium of oil companies, has not determined the lower limit at which the line would become uneconomical, said Michelle Egan, an Alyeska spokeswoman.

Flow through the pipeline rose in 2016 to 517,000 barrels a day, the first annual increase since 2002, according to Alyeska. Year-to-date flows in 2017 have averaged 557,000 barrels a day, Egan said June 26.

The increases in North Slope production that fed the pipeline occurred primarily because of more production from the Alpine and Kuparuk fields, both operated by ConocoPhillips, and the startup of Exxon Mobil's Point Thomson field.

Good management at the Prudhoe Bay field managed to temporarily arrest the long decline of output there, according to DNR's King.

"It'll be interesting to see if they can extend that," he said of the Prudhoe Bay work. "They did a

really great job last year."

Two Especially Big Fields

But big hopes for future production come from new fields.

Foremost is Nanushuk, which Armstrong Energy LLC is developing in partnership with Spanish oil giant Repsol S.A. The companies estimate that 1.2 billion barrels of light oil can be recovered, their calculation boosted this year by additional exploration wells.

Nanushuk's location is not too far from existing infrastructure and enough wells have been drilled to boost confidence in estimates.

Less certain is the discovery of Caelus Energy LLC's Smith Bay Project, because only two wells have been drilled. In October 2016, the company said it estimated that there could be several billion barrels of oil in the field in state waters off the northern coast of Alaska. How much of the oil is recoverable remains to be determined.

California Weighs Making Electric Cars Cheaper Right Off the Lot

Posted June 28, 2017, 12:07 P.M. ET

By Dana Hull and Ryan Beene

The federal tax credit for electric car purchases has an end in sight, but California doesn't want demand for the zero-emissions vehicles to meet the same fate.

The state, long a champion of electric cars, is considering a bill to provide rebates to electric vehicle buyers at the time of purchase, reducing the sale price right as customers drive off the lot. The bill, which does not specify the size of rebates but proposes giving more cash to low-income buyers, looks to set aside as much as $3 billion for the incentives.

If passed, the program could help bridge the "valley of death" looming on the horizon for electric vehicle demand as federal rebates begin to wind down, said Max Baumhefner, an attorney with the Natural Resources Defense Council's clean vehicles program.

"The conditions are right for a tipping point to occur but with uncertainty about the state's purchase rebates and the prospect of federal tax incentives expiring, it could tip in the wrong way."

The plan—dubbed the California Electric Vehicle Initiative—could be a key step in encouraging the purchase of battery-powered vehicles by bringing the price after credits more in line with similar gasoline-fueled models. Gov. Jerry Brown (D) set a goal of 1.5 million zero-emission cars on state roads by 2025, and the state already offers clean vehicle rebates for the purchase of models including the Chevy Bolt, Nissan Leaf and Tesla Model S and X, but customers have to apply for those credits after the purchase is complete, a possible deterrent.

Plan Details

The bill would eliminate the need for buyers to file tax rebates with the state, according to a draft statement on the bill seen by Bloomberg News. The income-based rebates would also help assuage concerns that tax dollars are helping wealthy buyers afford luxury cars such as the Tesla Model S,

which can sell for more than $100,000.

The legislation, which passed a vote on the assembly floor earlier this month, faces votes in two state Senate committees next week, the draft statement said.

The bill is modeled on the state's highly successful California Solar Initiative, which resulted in an uptick in rooftop solar installations on homes and commercial buildings across the state. Like that program, the electric vehicle proposal suggests the rebates decline over time as market penetration rises. Electric vehicles are forecast to become comparable price-wise with combustion-engine vehicles around 2026 in the U.S., according to Bloomberg New Energy Finance.

The bill comes as the federal tax rebate begins to run its course. Purchasers of only the first 200,000 electric cars sold by each manufacturer in the U.S. are eligible for the $7,500 federal tax credit before it starts to phase out, meaning the largest electric vehicle makers including General Motors Co., Nissan Motor Co. and Tesla Inc. will lose eligibility first, just as their more affordable, longer-range electrics are hitting the market.

Tesla is slated to begin in July production of its Model 3 sedan, which is expected to start at $35,000 before incentives or options. Tesla produced roughly 84,000 electric vehicles in 2016 and plans to make half a million in 2018, then 1 million in 2020.

As the nation's coal-fired power plants close, transportation is likely to eclipse electricity production as the nation's largest source of greenhouse gas emissions. That is already true in California, where transportation accounts for nearly 40 percent of the state's emissions.

Connecticut's Renewable Efforts Get Court Approval

Posted June 28, 2017, 12:13 P.M. ET

By Adrianne Appel

A Connecticut effort to contract for renewable energy does not violate federal law, a federal judge ruled Wednesday.

The state and proponents of renewable energy hailed the decision as a broad win for states that seek to grow their renewables market by requesting proposals for renewable energy projects.

Allco Renewable Energy Limited, a solar developer and investment firm based in New York City, filed a suit in August 2016, claiming Connecticut violated the federal Commerce Clause by giving preference to energy developers based in the Northeast (Allco Finance Ltd. v. Klee, 2d Cir., No. 16-2946, 6/28/17).

China Is About to Bury Elon Musk in Batteries

Posted June 28, 2017, 9:04 A.M. ET

By Joe Ryan

As Elon Musk races to finish building the world's biggest battery factory in the Nevada desert, China

is poised to leave him in the dust.

Chinese companies have plans for additional factories with the capacity to pump out more than 120 gigawatt-hours a year by 2021, according to a report published this week by Bloomberg Intelligence. That's enough to supply batteries for around 1.5 million Tesla Model S vehicles or 13.7 million Toyota Prius Plug-in Hybrids per year, according to Bloomberg New Energy Finance.

By comparison, when completed in 2018, Tesla Inc.'s Gigafactory will crank out up to 35 gigawatt-hours of battery cells annually.

Lithium-ion batteries have long been used in smartphones, laptops, and other personal electronics, but demand is forecast to explode in the next five years as electric vehicles proliferate and power companies install giant storage systems to smooth the ebb and flow of wind and solar.

Telsa produced nearly 84,000 vehicles in 2016 and has said it plans to make 500,000 in 2018.

While Tesla may be building the biggest and splashiest factory, the Chinese government has launched a sweeping effort to increase the country's dominant market share.

Roughly 55 percent of global lithium-ion battery production is already based in China, compared with 10 percent in the U.S. By 2021, China's share is forecast to grow to 65 percent, according to Bloomberg New Energy Finance.

In all, global battery-making capacity is forecast to more than double by 2021 to 273 gigawatt-hours, up from about 103 gigawatt-hours today. That's a huge opportunity, and China doesn't want to miss it.

"The Gigafactory announced three years ago sparked a global battery arms race," said Simon Moores, a managing director at Benchmark Mineral Intelligence. "China is making a big push."

But don't count Tesla out. The company, based in Palo Alto, Calif., plans to announce locations for up to four new factories by the end of 2017. (It's exploring at least one site in Shanghai.) And there are few, if any, individual Chinese battery companies that can match the scale of Tesla's production toe to toe.

Yet while China lacks a dominant battery behemoth, it makes up for it with a constellation of smaller players, including Amperex Technology Ltd., Tianjin Lishen Battery Joint-Stock Co. and dozens of others.

Earlier this year, the Chinese government announced plans to consolidate battery manufacturers to help the industry mature. The initiative goes hand in hand with China's plans to flood highways with five million electric vehicles by 2020.

China's ambition to become the global leader in clean cars stems in part from pressure to clear pollution from smog-choked streets in Baoding, Xingtai, Shijiazhuang, and other cities. There's a second reason: creating a domestic market for Chinese battery manufacturers, said Logan Goldie-Scot, a Bloomberg New Energy Finance analyst.

"The Chinese government wants to encourage the creation of a domestic market to create a large enough base and gain a foothold," Goldie-Scot said. "From there, they can expand and sell globally."

—With assistance from Brian Eckhouse

China State Grid Chairman Says Clean Energy Will Create Jobs

Posted June 28, 2017, 8:37 A.M. ET

By Bloomberg News

Thousands of renewable energy plants will create jobs as the world switches to clean power from coal, according to the chairman of the State Grid Corp. of China.

New roles will emerge during construction and for operators and maintenance personnel, Shu Yinbiao said at press briefing June 27 at the World Economic Forum's Annual Meeting of the New Champions in Dalian, China.

"We will have more opportunities for jobs," Shu said. "The transformation of energy will not impact employment, it will create opportunities."

The remarks followed the International Renewable Energy Agency's forecast that green energy jobs will continue to grow in developing nations, especially Asia. The clean-energy business employed 9.8 million people last year, up 1.1 percent from 2015, led by an expansion in solar photovoltaics, according to the Irena's annual report.

Green jobs may reach 24 million worldwide in 2030 as more countries work to combat climate change, Irena said.

China, the world's biggest emitter, plans to invest 2.5 trillion yuan ($360 billion) in renewable energy through 2020 to reduce greenhouse gases that cause global warming. The investment will help create 13 million jobs, Li Yangzhe, former deputy head of National Energy Administration said in January.

Green Energy Investing Meets Crowd Funding in African Venture

Posted June 28, 2017, 9:32 A.M. ET

By Mathew Carr

Gullspang Invest led a group of investors providing 6 million euros ($6.8 million) to Trine Finance Ltd., a company that spurs off-grid solar power in emerging markets including Africa by tapping crowd funding in the U.K. and other advanced economies.

Trine offers crowd investors a return of about 5 percent, with money used to finance solar lamps and solar home systems from Zambia to Uganda, the Gothenburg, Sweden-based company said on its website. The electricity can be cheaper and safer than existing systems typically fueled by kerosene, which emit toxic fumes.

"When you can go in with everything from 25 euros and up, it's opening up finance to people who might not have had that opportunity before," said Lena Apler, founder of Collector AB and a member of Trine's advisory board, by email. "Sustainable solutions are not only turning out to be necessary, but also out competing traditional alternatives."

Trine Chief Executive Officer Sam Manaberi wants to channel 100 million euros of crowd-investment into solar energy projects over two years, up from more than 1 million euros distributed the past three years. Risks for the crowd investors, who spend a minimum 25 euros, range from fluctuating currencies to developing-country solar suppliers who might struggle to make payments.

Payments for the solar energy equipment can be made via mobile phones on a weekly or monthly basis, saving the need for large upfront costs and boosting its appeal. A Trine project listed for Kenya expects to save each participant 1,000 Kenyan shillings ($9.65) a month, about 10 percent of average income, the company said.