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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.

Feds Must Support Nuclear Power for National Security, Perry Says

Posted October 12, 2017, 02:43 P.M. ET

By [Rebecca Kern](#)

The commercial nuclear power industry needs a federal boost for national security reasons to prevent the U.S. from falling behind global competitors such as Russia and China, Energy Secretary Rick Perry told lawmakers today.

“If we’re going to continue to be a leader in nuclear energy in the world, we’re going to have to support this industry in this country,” Perry said during testimony at an Oct. 12 House Energy and Commerce Committee hearing.

“The question is do we have a national security interest in the nuclear industry, and I think the answer is yes,” he said.

“If we lose our supply chain, if we lose our intellectual chain of supply of bright scientists,” Perry testified, “then we’re going to lose our role as a leader when it comes to nuclear energy in the world, and that in turn is going to affect our ability to address the weapons side of it.”

Perry was on the defensive during the hearing, which focused heavily on the Energy Department’s recent proposal directing the Federal Energy Regulatory Commission to take action to prop up certain coal and nuclear plants that are having difficulty competing in wholesale energy markets.

An unusual set of energy industry bedfellows, including renewable, gas and oil industry groups, as well as large industrial manufacturers and free-market think tanks, oppose the plan. FERC has set an expedited three-week public comment deadline of Oct. 23.

Members from both sides of the aisle questioned Perry about the intention behind the proposal, which he called “a way to kick-start a national discussion about resiliency and about reliability of the grid.”

The proposal would allow generators with a 90-day supply of fuel on-site—which would include coal and nuclear facilities—to recover their operating costs at “a fair rate of return.” Coal and nuclear plants now get paid a wholesale energy market rate set by historically low prices of natural gas. This is making it difficult for nuclear and coal plants to cover their operating costs and leading some

utilities to close plants due to difficulty competing economically.

FERC, as an independent agency, has the authority to choose how to address the market challenges identified in the proposal. It can do so by a rule or other action, regulators and legal experts told Bloomberg BNA.

House Republicans Push Bills to Promote Oil and Gas

Posted October 12, 2017, 04:12 P.M. ET

By [Alan Kovski](#)

Republicans in the House are lining up more oil and gas legislation, including a bill on offshore drilling, and a rewrite of the law on national monuments, all with solid opposition from Democrats.

The survival of some of the measures may hinge on whether they can be added to must-pass legislation such as an omnibus appropriations bill or tagged onto budget measures needing only simple majority votes in the Senate for passage.

Two draft bills under discussion in the House Natural Resources Committee would encourage a broadening and acceleration of offshore oil and gas drilling and a shift of more authority to states for the permitting of onshore drilling on federal lands. Spokesmen for Senate Energy and Natural Resources Committee Democrats suggested there would be no support among Democrats for either one.

Another bill would establish restrictions and public input requirements for presidential use of the Antiquities Act to create national monuments.

Rep. Rob Bishop (R-Utah), chairman of the House Natural Resources Committee, is lining the bills up for action by the full House. The first step is to go beyond the discussion-draft stage by introducing formal versions, which Bishop hopes to do within a month, committee spokeswoman Molly Block said.

Looking for Offshore Energy

Bishop's committee Oct. 11 debated a discussion draft, the [Accessing Strategic Resources Offshore Act](#), that would establish a sharing of government revenues with Southeastern coastal states and Alaska from offshore oil and gas development. It also would allow the Interior secretary to add lease sales in areas excluded from the existing five-year leasing plan.

"Lease sales would be entirely at the discretion of the secretary, who would be free to ignore the five year plan altogether," Rep. Alan Lowenthal (D-Calif.), said. "This would never be acceptable to the people of California and many other states."

The bill also would limit a president's ability to put areas off limits to leasing and block use of the Obama administration's Arctic Rule, which added extra layers of regulatory protections for the difficult operating environment amid the icebergs and short drilling season off the Arctic coasts of Alaska.

Democrats have been defending the Arctic Rule since it was published in July 2016. The rigors of the Arctic environment, where an oil leak beneath sea ice might be unreachable for months, require

extra protections, the Democrats have said.

Rep. Paul Gosar (R-Ariz.) suggested the revenue sharing could boost support for Atlantic offshore drilling, where many people worry about the risks to the environment and tourism. A South Carolina Republican state senator from a coastal district, Stephen Goldfinch, testified that new revenues especially would be appreciated in South Carolina towns like Conway and Andrews, where the poverty rate is 50 percent.

But Goldfinch avoided endorsing or opposing the bill and said his constituents seemed evenly divided on the idea of offshore drilling.

Eric Milito, the director of Upstream and Industry Operations for the American Petroleum Institute, expressed support for the bill during the hearing, but his industry association did not offer any opinion on whether it could get through Congress. The National Ocean Industries Association did not respond to a request for comment.

Bigger State Roles in Onshore

The House Natural Resources Committee will debate a discussion draft focused on onshore oil and gas Oct. 13. That draft bill, [Opportunities for the Nation and States to Harness Onshore Resources Act](#), would allow states to take over permitting and permit enforcement for oil and gas on federal lands.

The legislation also would eliminate the need for a Bureau of Land Management permit or National Environmental Policy Act (NEPA) reviews on non-federal land where the federal government has an ownership stake in the subsurface mineral rights. It also would bar federal regulation of hydraulic fracturing where states regulate fracking, and it would bar federal regulation of fracking on tribal lands without a tribe's consent.

Shifting permitting to states might void the application of NEPA and the Endangered Species Act, which impose requirements on federal rather than state agencies. Such a maneuver would have trouble finding support among House or Senate Democrats.

If either bill were to go to the Senate as stand-alone legislation it would have an uncertain future. A cloture vote to end debate would require 60 votes. Republicans have 52 senators, and not all of them are sure to support the bills.

Both bills can contribute to federal revenues, however, making it possible for them to be included in budget reconciliation legislation requiring only a simple majority. The House passed a fiscal year 2018 budget resolution Oct. 5 that reserved for the House Natural Resources Committee a provision for finding \$5 billion in savings. Oil and gas leasing revenues are possible candidates for such savings.

Antiquities Act Rewrite

The Natural Resources Committee also has been an arena for argument over the Antiquities Act, used by presidents to declare national monuments, as President Barack Obama did in December with the Bears Ears National Monument in Utah.

The [National Monument Creation and Protection Act](#) (H.R. 3990), written to heavily amend the antiquities law, was approved by the committee Oct. 11 on a 23-17 vote. No Democrat supported the bill.

Proposed by Bishop, the measure would add stricter language in the act by specifying its purpose is to protect an “object or objects of antiquity.” The existing act uses somewhat looser language, which the last three presidents before Donald Trump have used to protect millions of acres of onshore or offshore terrain.

The bill also would require more public engagement, including county and state approvals for monuments of 10,000 acres or more. Environmental activists have opposed such ideas as state legislative approval, saying it would prevent new monuments from being created.

Philip Morris Joins Growing Group of Carbon-Pricing Corporations

Posted October 12, 2017, 10:53 A.M. ET

By [Christopher Martin](#) and [Emily Chasan](#)

Philip Morris International Inc., the maker of Marlboro cigarettes, now uses an internal cost of carbon emissions in its business decisions, joining a group of almost 1,400 companies that agreed to consider how greenhouse gas emissions will affect their industries, according to a statement Oct. 12 from environment group CDP.

That’s up from 150 companies in 2014.

Carbon markets from California to China and Europe are placing a price on the greenhouse gas as governments confront the growing threat of climate change. Businesses are responding by setting their own price and using it to determine the best course of action should their industry have to pay a carbon tax of some kind.

“Companies have accepted that there will be a carbon price one way or the other—carbon is no longer going to be a free ride,” said Paula DiPerna, an adviser to CDP. “It’s certainly become more of an investor focus. It’s part of investors’ lexicon of questions when they interrogate companies about environmental, social and governance issues.”

The four-year effort by CDP to get global corporate leaders to measure the impact of carbon prices has been led by U.S. companies, which grew to 238 this year from 210 last year, including agriculture giant Cargill Inc. and cereal maker Kellogg Co. The biggest growth came from companies in Mexico, up 69 percent this year to 44, and China, which rose 40 percent to 102 now using an internal carbon price.

Philip Morris, which began using an internal carbon price in its decisions last year, adopted emission reduction goals of the Paris Climate Agreement and is using a mix of renewable energy and efficiency upgrades to meet it targets, Corey Henry, a spokesman, said in an emailed response to questions. The company set a price of \$17 a ton.

It’s used “to help us prioritize our GHG emission-reduction projects according to those most effective at reducing CO2,” Henry said.

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Dakota Access Boosts Drillers but Won’t Be a Bakken Game-Changer

Posted October 12, 2017, 9:17 A.M. ET

By Meenal Vamburkar

Once hailed as the spur for a North American “energy renaissance,” the \$3.8 billion Dakota Access pipeline has limited driller costs in its first four months in operation.

Just don’t expect it to live up to its pre-approval hype.

That’s the conclusion of analysts who say North Dakota’s Bakken shale play will continue to lag the drilling surge in Texas and Oklahoma, pipeline or no pipeline. The conduit’s use has dropped the break-even cost of drilling in the Bakken to around \$52 a barrel from \$55, as drillers abandon costlier rail shipments, said Erika Coombs, an analyst at BTU Analytics LLC. But that compares with about \$46 on average in Texas’s Permian play and \$41 in Colorado’s DJ basin, she said.

Is the Dakota Access “a game-changer?” Coombs said in a telephone interview. “The short answer: For the basin as a whole, not really.” It helps, she said, “but it’s not enough to attract capital away from the Permian or Scoop/Stack.”

First proposed in 2014, the 1,172-mile (1,886-kilometer) pipeline is designed to ship as much as 570,000 barrels of crude. However, its construction has faced major opposition from Native American tribes and environmental activists over the last year, including a legal suit that’s ongoing in federal court.

A judge ruled Oct. 11 that use of the conduit, in operation since June 1, could continue while its environmental impact is reviewed as a result of that suit.

Lawyers for Energy Transfer Partners LP, which operates the line, had argued it would be expensive to purge or plug the conduit while the U.S. Army Corps of Engineers conducted a supplemental review into aspects of the project, including its impact on the hunting and fishing rights of Native American tribes.

There’s a “serious possibility” that the corps will be able to back its prior conclusions for approving the pipeline’s route, U.S. District Judge James E. Boasberg ruled Oct. 11. But he urged the Corps not to treat his decision “as an exercise in filing out the proper paperwork” but to give serious considerations to errors that were made and identified. A follow-up court conference has been set by Boasberg for Oct. 18.

U.S. Justice Department spokesman Mark Abueg declined to comment on the court’s decision. Vicki Granada, a spokeswoman for Energy Transfer, didn’t immediately respond to request for comment.

The ruling is a win “for all major interstate infrastructure projects currently under construction or consideration,” said Craig Stevens, a spokesman for the GAIN Coalition, a group that promotes more infrastructure development.

When newly inaugurated President Donald Trump advocated green-lighting the Dakota Access in January, it was hailed as “a new beginning” for North America’s “energy renaissance,” in a statement by Ron Ness, president of the North Dakota Petroleum Council. “As Bakken crude is finally compensated for its true value, state tax coffers, mineral owners and workers will reap the rewards,” he said at the time.

And it has helped. In July, just a month after the conduit began operating, rail transported just 10 percent of Williston Basin output, down from 32 percent a year ago, according to the North Dakota Pipeline Authority. The pipeline runs from North Dakota to Illinois, where flows can be diverted to the Midwest and, eventually, make their way to the heart of the U.S. energy market, the U.S. Gulf Coast.

But even with cheaper transport, and smoother access to major markets, the Bakken remains disadvantaged, both in terms of location and overall cost.

Named for Henry Bakken, a North Dakota farmer whose land hosted the first well in the region in the early 1950s, the Bakken is expected to produce an average of 1.1 million barrels a day of oil this year and next, a figure lower than the 1.2 million barrels produced in 2015, according to the Energy Information Administration. At the same time, Permian production is expected to reach 2.9 million barrels a day by the end of next year, the EIA said in July.

The Bakken's lack of growth "really is from the competition with the Permian basin and the Oklahoma Anadarko basin," said Lynn Helms, director of the North Dakota's Department of Mineral Resources, in a September webcast. One big problem, according to Helms, is that skilled, experienced workers left for other plays when the oil rout hit.

"It's been difficult if not impossible to get them to move back to North Dakota," he said.

The pipeline has opened new markets for Bakken drillers, which offers new promise for their product, said Ryan Saxton, manager of oil transportation in North America at Genscape Inc., an energy data provider. But, he added, "that's not going to get you back to the hey-day of the Bakken."

—With assistance from Andrew Harris.

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China's Top Coal Region to Cut Pollution by 40 Percent

Posted October 12, 2017, 9:07 A.M. ET

By [*Feifei Shen*](#)

China's second-largest coal producing region is planning to cut pollution by two fifths over the autumn and winter seasons, Xinhua News Agency reported.

The reduction in China's northern province of Shanxi seeks to reduce the concentration of [PM2.5 particles](#) and sulfur dioxide from October to March 2018, Xinhua reported Oct. 11, citing the provincial environmental protection bureau.

In order to meet the target, authorities will take measures involving the closure of small highly-polluting firms, production cuts in heavy industry, and a ban on burning low-quality coal. One million households will also be pushed to shift toward electric or gas heating systems from traditional coal. Coal burning has also been prohibited completely in parts of six major cities, Xinhua said.

Shanxi is joining other regions in northern China to make greater efforts to curb smog during the winter, when pollution usually accumulates from home heating and weather conditions. Recurrent air pollution has been a persistent problem despite several years of government campaign to control

it to avoid social unrest.

Harsher measures to reduce pollution could challenge the province as it seeks to maintain economic growth at the same time. Shanxi's economy grew by 4.5 percent last year from the previous year, lagging behind the nation's 6.7 percent as a whole.

China also plans to plans to cut average PM2.5 concentrations in Beijing and surrounding areas by more than 15 percent, the environmental ministry said in August. Authorities will require emission licenses in the region for power, steel, cement, copper, zinc, lead and aluminum producers by the end of the year.

The Shandong provincial government has offered 600 million yuan (\$91 million) in subsidies for people switching to electric and gas heating systems in six cities that affect the Beijing-Tianjin-Hebei region, Xinhua said.

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China Mulls Storage Salve for \$4 Billion Renewables Headache

Posted October 12, 2017, 9:33 A.M. ET

By [Feifei Shen](#)

China is considering a prescription for nearly \$4 billion worth of wasted electricity production looming over its push into clean energy.

The world's biggest investor in renewables plans an aggressive expansion into energy storage with an eye to making the technology widespread by 2025, according to a [statement](#) posted on the website of the National Development and Reform Commission Oct. 11.

In recent years, China's booming renewables sector has helped drive down the cost of solar panels and wind turbines globally. A push by the nation into storage may accelerate an expected drop in battery costs caused by increased global investment in their use for electric vehicles and grid use.

China will kick start the storage business with several pilot projects including lithium-ion battery storage systems of about 100 megawatts in size, along with other technologies such as supercritical compressed air and flywheel energy storage systems, according to the NDRC.

Storage is seen as critical to overcoming curtailment, a situation that arises when grid access is constrained, particularly for wind- and solar-generated electricity. China's renewable plants suffer from the world's most severe curtailment, according to a Bloomberg New Energy Finance report published in September.

Curtailment Cost

The phenomenon carries a heavy cost. Renewable energy generators in China experienced losses of 25.5 billion yuan (\$3.87 billion) in 2016 because of the curtailment of wind and solar energy, representing 49.7 terawatt-hours of wasted wind and 3.28 terawatt-hours of squandered solar, BNEF estimated.

"The curtailment issue is tough and won't see significant improvement by 2020," said Tian Miao, a

Beijing-based senior analyst at Sun Hung Kai Financial Ltd. "Storage will help make a better use of renewables but it needs long-term progress."

Along with the pilot projects, China is also encouraging companies to create innovative financing models and to participate in overseas projects to improve domestic manufacturing technology, the nation's top economic planning agency said. Overseas storage projects would involve vanadium redox battery storage plants and lead carbon capacitors.

China's total installed renewable power capacity surpassed 600 gigawatts as of the end of June, according to data from the National Energy Administration. The rate of curtailment, or idle rate, stood at 13.6 percent for wind turbines in the first half and 6.7 percent for photovoltaics, NEA data showed.

Along with supporting storage technology aimed at helping to absorb more renewable energy, China will also study the setting of prices for electricity coming from storage systems, the NDRC said.

Storage Needs

China's move is "the first step in the right direction," said I-Chun Hsiao, a BNEF analyst based in Tokyo, who added that the nation is keen to develop all kinds of technology.

Excluding capacity from pumped hydro power, China had 243 megawatts of storage at the end of 2016, up 72 percent from a year earlier, the China Energy Storage Alliance said in May. Lithium-ion batteries hold the biggest share, followed by lead-acid batteries and redox-flow batteries, the alliance said.

Global electricity storage capacity should triple by 2030 if countries were to double their share of clean energy such as solar and wind, according to the International Renewable Energy Agency.

With growing demand for storage from stationary and mobile applications, the total stock of storage in energy terms will need to grow to as much as 15.72 terawatt-hours by 2030 from an estimated 4.67 terawatt-hours this year, the Abu Dhabi-based agency said in a report last week.

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Brazil Experiments With Floating Solar Panels Above Dams

Posted October 12, 2017, 6:57 A.M. ET

By [Michael Kepp](#)

Floating solar panels on the reservoirs above two state-owned dams will showcase technology that could eventually help Brazil diversify its energy sector as the country grapples with severe droughts.

Brazil's nationwide drought is now in its fifth year and has hampered hydropower generation, which accounts for 70 percent of the country's electricity.

Subsidiaries of Eletrobras, the federal electricity holding company, recently contracted for floating solar systems on the reservoirs above two dams in drought-stricken areas. The grid of modular solar panels mounted on a floating array will allow dam operators to generate electricity even while reducing the flow of water through dam turbines when reservoir levels are low.

“Although France, England, and Japan were the first countries to install such systems, Brazil is the first country to build them on dam reservoirs,” Orestes Goncalves Jr., managing partner of floating solar company Ciel & Terre’s Brazilian office, told Bloomberg BNA. “And when Chesf and Eletronorte [the Eletrobras subsidiaries] confirm the viability of these floating systems here, they will encourage private Brazilian companies to install them.”

Chesf expects its 1 megawatt, 12.5-million-real (\$4-million) floating solar system to start operation by the end of the year at the 1,050-megawatt Sobradinho dam in northeast Bahia state.

Eletronorte is building a 57-million-real (\$18-million), 5-megawatt floating solar project on the reservoir of the 250-megawatt Balbina dam in the western Amazon state of Amazonas, with operations expected to begin by next July. A smaller-scale pilot solar project had already been tested at the Balbina dam.

Because of drought, the Sobradinho dam is generating electricity at 16 percent of its installed capacity, Jose Bione, the manager in charge of the floating solar system at Chesf, told Bloomberg BNA.

The Balbino dam is functioning at 80 percent of its capacity, but that was at 40 percent from the end of 2015 until this May, Davidson Pereira Campos, manager of Eletronorte’s innovation, technology and energy department, told Bloomberg BNA.

Eyes on Private Dams

“The private sector, which has 16 dams in the northeast ... will probably wait to see if floating systems at Sobradinho and Balbina are viable before waging capital on similar investments,” Bione said.

Brazil’s Votorantim Group, one of Latin America’s largest industrial conglomerates, is studying using floating solar projects on the reservoirs of some of its 33 dams nationwide, which mainly supply electricity to steel mills, aluminum smelters, and pulp and paper plants, the company told Bloomberg BNA.

Braskem, Latin America’s largest petrochemical producer, is also evaluating installing floating solar systems on small, natural lagoons on its Brazilian properties, mainly to provide electricity for its administrative offices, Robson Casali, who is in charge of Braskem’s energy-related business, told Bloomberg BNA.

In addition to the dam-based projects, in August, a consortium led by France’s Ciel & Terre installed a 304-kilowatt floating solar system on a rainwater accumulation pond in the north-central state of Goias.

The consortium includes Canadian Solar, the biggest solar panel maker in Brazil, and WEG Energy S.A., which manufactures devices to transform the direct current from the floating solar panels to alternating current.

Future Energy Auctions

While floating systems are more expensive than land-based solar power, the water cools the panels, which can make them more efficient.

If the government confirms the viability and efficiency of these floating solar systems, it could allow developers to sell their future power at energy auctions, analysts and industry advocates said.

At these auctions, energy developers offer future power to electricity distributors at the lowest prices below a government-set ceiling, and they sign 20- to 30-year contracts with the first distributors that agree to buy the electricity.

“If the government finds that floating solar systems are structurally operative and maintainable during the 20- to 30-year duration of a supply contract, it will allow developers to sell future solar power from such systems at energy auctions,” Helena Chung, a Bloomberg New Energy Finance analyst in Brazil, told Bloomberg BNA.

U.K. Eyes Cap on ‘Rip-Off’ Power, Gas Prices

Posted October 12, 2017, 11:47 A.M. ET

By [Alex Morales](#)

The U.K. government published its plans to cap domestic power and gas prices to protect millions of households from what it calls “rip-off” charges at the hands of the biggest utilities.

The new law will empower the energy regulator, Ofgem, to introduce the cap for those on Standard Variable Tariffs, the default rate consumers revert to once fixed-term contracts expire. The Department for Business, Energy and Industrial Strategy estimates there are 18 million such accounts.

“Our broken energy market has to change—it has to offer fairer prices for millions of loyal customers who have been paying hundreds of pounds too much,” Prime Minister Theresa May said in a statement. The draft legislation “is a vital step towards fixing that.”

May is delivering on a Conservative Party election pledge that was shared by the Labour opposition, meaning the legislation is unlikely to be obstructed in Parliament. Legislators from both parties want to fast-track the bill and the business department is seeking to build cross-party consensus on how the cap operates.

The draft bill requires Ofgem to consult on and impose the cap “as soon as practicable” after the legislation is passed, BEIS said Oct. 12, without being specific about the timing. The cap will be a temporary measure effective until end-2020, after which Ofgem will decide whether it should be extended on an annual basis until its expiry in 2023.

“It’s likely to take at least a year before a full consultation process on a market-wide cap can be concluded and implemented,” Ryan Thomson, a partner at energy consultants Baringa Partners, said by email. “Any potential benefits to consumers may not be felt until 2019.”

Fast-track implementation is opposed by the utilities, which say they need to make a fair margin on the prices they charge in order to invest for the future. They also point to the mounting cost of meeting government targets for renewables, energy efficiency, installing smart meters and subsidizing poorer households.

“It is disappointing that the government has chosen to proceed with this crude and counter-

productive legislation,” said Sam Hall, a senior research fellow at the think tank Bright Blue. “A price cap risks harming investment in new power generation and reducing competition in the market.”

Centrica’s Tumble

May’s announcement to Conservative supporters last week that she’d legislate for the cap sent shares of Centrica Plc, the owner of British Gas, tumbling to a 14-year low. The U.K.’s “Big Six” utilities also include Electricite de France SA, SSE Plc, Innogy SE’s Npower unit, Iberdrola SA’s ScottishPower business and EON SE.

The government move follows a probe by the Competition and Markets Association that found customers overpay on their energy bills by 1.4 billion pounds (\$1.8 billion) a year.

The energy market “does not operate in the interests of the majority of consumers,” the business department said. “While we are in favor of free markets, we will always take action to fix them when they’re broken.”

Ofgem said on Oct. 11 it is extending a safeguard tariff to 1 million more vulnerable households, with a further 2 million set to benefit by “winter next year.” The price cap already applies to 4 million customers.

—With assistance from Jessica Shankleman and Mathew Carr.

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Danish Company Dong Turns Trash into Energy

Posted October 12, 2017, 8:02 A.M. ET

By Jess Shankleman

The U.K. might soon be powering its lights with energy that comes from the trash. A Danish energy company is working on [new machines](#) that sort household trash from recycling, while rapidly breaking down organic materials like food to create power from biogas produced by the process.

Dong Energy A/S, which runs hundreds of wind turbines in the North Sea, says its plant 30 kilometers (19 miles) outside of Manchester is one of the first to use enzymes on an entire waste stream and then combine it with recycling sorting technology. That would be particularly helpful in cities where space is at a premium and small apartments often have room for only one trash bin.

The process “is a useful option for local authorities and waste companies that have not yet rolled out separate food waste collections,” said Charlotte Morton, chief executive of the Anaerobic Digestion & Bioresources Association.

Dong, which is changing its name to Oersted, says its “Renescence” plant in Northwich will be finished at the end of this year at a cost of 600 million krone (\$95 million). It will help deal with Britain’s mountains of waste, about a quarter of which goes to landfill dumps, where it releases the potent greenhouse gas methane as it rots.

“If everything goes well, this is going to be a big showcase that people will come to from all over the world to see,” Thomas Dalsgaard, executive vice president of thermal power and bioenergy at

Dong, said in an interview at the plant.

The Renescience process starts with a giant claw that crunches into a mountain of trash and it ends with seven different types of material—from plastics to metals and biogas, that can be used to create electricity, recycled or sold on to a scrap yard. Nothing goes to landfill.

Renescience enzymes, like those found in washing powder, clean trash for 12-hours in tanks 50 meters (164 feet) long, speeding up the decomposition process and taking organic materials to an anaerobic digestion plant where it's used to create electricity.

Anything that's left is sorted through a series of ballistic separators, conveyor belts, magnets and shredders to give the finished clean and reusable products. While some leftovers from the process are currently incinerated, Dalsgaard said that will stop by 2020.

"You can be lazy and have a good conscience with Renescience, and you can also solve an issue about space and we can solve whatever residuals would be from household sourcing," he said.

In fact, he reckons Renescience is better than home sorting because any waste food, like ketchup at the bottom of a plastic bottle is turned into electricity rather than washed away.

If the technology proves a success, Dong has plans to develop a series of plants across the U.K., Europe and the world, including Malaysia. Britain was the ideal place to start because filling landfills with mountains trash are getting more expensive.

Crucially, the biogas that drives the engines can create a steady flow of power to back up intermittent electricity generated by wind and solar. That could provide an alternative to plans for costly new nuclear power stations like the once being built at Hinkley Point.

"We would argue that offshore wind in a country like this is very close to being baseload, so combined with decentralized generation in multiple sites and storage, it could be a cost effective alternative to nuclear," he said.

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Australia to Fund Companies to Scale Back Energy Use This Summer

Posted October 12, 2017, 03:20 P.M. ET

By [Murray Griffin](#)

Australia will pay 10 large industrial energy users and small businesses to reduce energy use at times of extreme peak demand under a pilot program that has received A\$35.7 million (\$27.9 million) in government grants.

The Demand Response pilot project includes a diverse range of energy users that adds up to a commitment to cut energy demand by 200 megawatts by 2020 when requested. Federal funding for the program will total A\$28.6 million (\$22.4 million), with the remaining grant money provided by the New South Wales government as extra support for projects in that state, the two governments announced Oct. 11.

The new project aims to help the expansion of country's relatively small demand management

industry.

“Demand response will not only ease the strain on the electricity grid and prevent blackouts. These projects will also put money back into the pockets of Australian businesses and households, helping to reduce their energy costs and emissions,” said Ivor Frischknecht, chief executive officer of federal authority Australian Renewable Energy Agency.

Years of policy reversals on energy and climate policy have raised fears of blackouts on extremely hot days in the impending Australian summer, as the grid struggles to supply sufficient electricity to millions of air-conditioned homes and nonresidential buildings.

Consequently, the government wants at least 143 megawatts of the total demand reduction capacity to be on-call ahead of this summer.

Ready to Participate

With one exception, the 10 project grants will go to intermediaries such electricity companies that will in turn invite their customers to participate. Energy company AGL Energy Ltd., for example, will provide 20 megawatts of demand response in New South Wales under the program, with 17 megawatts coming from commercial and industrial customers and 3 megawatts from residential customers.

“We expect the residential component of this program will grow to over 10,000 customers during the three-year project, and we will be providing a number of innovative energy solutions to our residential NSW customers who sign up to this project,” an AGL spokesperson told Bloomberg BNA by email Oct. 12.

Meanwhile, EnergyAustralia said it will provide 50 megawatts of demand reduction capacity, with 40 megawatts to be secured in time for the summer, which starts Dec. 1.

Intercast & Forge, Australia’s largest foundry, will receive A\$323,654 (\$253,300) to participate directly.

Energy users that sign up to the program will be paid a participation fee, irrespective of whether they’re called on to reduce demand during an extreme peak period.

They will receive an additional payment if they are actually requested to scale back demand.

Aussie Green Energy Bank Warns Funds at Risk If Targets Scrapped

Posted October 12, 2017, 03:43 P.M. ET

By Perry Williams

Australia’s government-owned green bank said investments in renewable energy generation will drop if the nation doesn’t extend into the next decade clean energy targets and the financial incentives to meet them.

Clean Energy Finance Corp., which invested nearly A\$2.1 billion (\$1.6 billion) in the year to June in renewable and power storage projects, will be forced to cut funding if the country’s existing subsidies program that expires in 2020 isn’t replaced, according to Ian Learnmonth, the lender’s

chief executive officer. Outside investments from developers will fall as well if the government of Prime Minister Malcolm Turnbull fails to set clear targets, he said.

“You are going to need a greater price signal than just the wholesale power price,” Learnmonth said in an interview. “Developers would be cautious. You would see a downturn in investment if there is no guidance over the coming 12-18 months.”

Extending clean energy targets beyond 2020 has become a lightning rod within the divided coalition government as it tries to balance competing energy sources amid spiraling power prices. A decline in renewables costs has boosted speculation Turnbull may refrain from setting new clean energy targets as he seeks to avoid further political infighting that has plagued his government.

CEFC, which has access to a A\$10 billion fund, more than doubled investments in the year ending in June across 35 developments in solar, wind, energy storage and efficiency projects. It spent A\$837 million in 2015-16 and A\$484 million in the year before.

The government body has commissioned consultant Jacobs to calculate the impact of different policy outcomes on pricing forecasts for clean energy and a report is due in November. The results of that modeling will help the CEFC determine how much it might invest in a project, Learnmonth said.

While cost declines have put the price of solar and wind power in line with thermal generation, according to Learnmonth, prices fail to reflect the storage capacity needed to ensure the power grid can call on renewables when required. The cost of solar in Australia has dropped by more than half since the start of the decade and batteries will fall 60 percent by 2020, Energy Minister Josh Frydenberg said Oct. 9 at a conference in Sydney.

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