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Granholm gives support for Mountain Valley Pipeline at FERC

Tom Tiernan

Energy Secretary Jennifer Granholm expressed support for the Mountain Valley Pipeline project at the Federal Energy Regulatory Commission in an April 21 letter, even though the fate of the 304-mile, 2 Bcf/d pipeline is largely in the hands of other agencies and an appeals court.

Granholm recognized that FERC had completed its regulatory authorizations for the MVP project, which is designed to transport Appalachian gas supplies to Southeast markets. "I request that if there is any further commission-related action on this project, it

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DOE tightens LNG export extension policy, denies Lake Charles LNG request

Maya Weber

The US Department of Energy has denied Lake Charles LNG's request for a second extension of its deadline to start exports from its planned Louisiana export terminal, as the agency rolled out a new policy raising the bar for extending deadlines for commencement of US LNG exports to non-free trade agreement nations.

Finding the seven years that it generally allows projects for the start of exports to be "reasonable" and "achievable," the DOE said in its new policy that it will no longer consider applications for extensions -- unless an applicant can show it has physically begun construction and that it faced "extenuating circumstances" beyond its control to meeting the deadline.

While the new policy did not directly apply to the Lake Charles decision, the DOE said April 21 its ruling on that extension request was consistent with the new approach.

DOE determined that Energy Transfer's Lake Charles LNG has not shown good cause for "an unprecedented second extension" of the commencement deadline for gas exports to non-FTA nations. The extension would have pushed a December 2025 deadline out to December 2028. The DOE first issued an export authorization for the project in 2016 and granted an extension in 2020.

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DOE $3 billion loan guarantee may boost Sunnova market reach

John Siciliano

After losing its bid to become a micro-utility in California and with capital drying up after the Silicon Valley Bank crash, large rooftop solar company Sunnova received a boost from the federal government last week in the form of a $3 billion conditional loan guarantee.

The US Energy Department loan mechanism, once approved, would help the company gain greater access to capital to expand its customer base to less affluent communities, a goal that dovetails with President Joe Biden's new environmental justice executive order signed April 21.

The DOE Loan Programs Office announced April 20 that it is providing up to $3 billion in a partial loan guarantee to Sunnova, equating to a 90 percent guarantee of up to $3.3 billion of financing to back loans originating through a new Sunnova "solar loan channel" called Project Hestia.

"Project Hestia would provide disadvantaged individuals and communities with increased access to Sunnova services by indirectly and partially guaranteeing the cash flows associated with those consumers' loans," the company said in a release. These customers would have to use Sunnova's patented technology that allows them to track energy usage while having them participate in a program to reduce usage when directed under the company's demand response program.

Sunnova said the loan guarantee would bring it one step closer to deploying a future virtual power plant (VPP) that would provide power, or reduce it, based on the grid's needs.

The company had sought ratemaking authority in California to operate similarly to an investor-owned utility but in a more limited way, called a "micro-utility." The California Public Utilities Commission rejected Sunnova's application earlier in April, agreeing with the Public Advocates Office that the changes the company sought to how a public utility operates require a more thorough review that cannot be addressed in an application.

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FERC approves utility line ratings change, advocates seek more

Kate Winston

The Federal Energy Regulatory Commission has approved a half dozen filings to implement ambient adjusted line ratings, a change that has the potential to better optimize the transmission system and reduce power prices by easing congestion.

While supporting the adoption of ambient adjusted ratings, some stakeholders say FERC action on other grid-enhancing technologies would have an even bigger impact.

"Ambient adjusted ratings will tend to reduce power prices during certain periods," Rob Gramlich, president of Grid Strategies, said in an April 24 email. "Dynamic line ratings would do more to wring out efficiencies in the network, but FERC hasn't gotten to that yet," he said.

Line ratings measure the maximum transfer capability of a particular transmission line and can vary based on weather conditions. In 2021, FERC issued Order 881, which requires power line operators to move away from seasonal and static line ratings, which tend to be conservative, and instead use ambient adjusted ratings, which use near-term forecasted ambient air temperatures.

"These are important decisions and it's the beginning of a bigger opportunity to squeeze more juice out of our existing system at a relatively minimal cost to customers," Commissioner Allison Clements said during FERC's monthly meeting April 20.

FERC approved compliance filings for New York Independent System Operator, California Independent System Operator, Tampa Electric, Black Hills Power, Arizona Public Service Co. and Louisville Gas and Electric. Other grid operators also submitted compliance filings last year, but FERC has not yet acted on them.

Compared with AARs, DLRs reflect more variables, including air temperature, wind, solar heating intensity, transmission line tension, or transmission line sag. FERC in 2022 launched an inquiry(AD22-5) to explore the costs and benefits of the widespread adoption of DLRs.

"DLR starts reducing congestion immediately after deployment so that is an easy measure of the value," Julia Selker, executive director of the Working for Advanced Transmission Technologies Coalition, said in April 24 email.

DOE $3 billion loan guarantee may boost Sunnova market... (Cont'd from p. 1)

The Biden administration hopes that the loan guarantee will attract more private capital to clean-energy projects by guaranteeing payments that would unleash billions of dollars for the rooftop sector, according to reports.

Following the DOE announcement, the company's stock trading price rose significantly after it had tumbled over the last three months, according to Wall Street trading data. The company is slated to release its first-quarter earnings April 27.

William Berger, chairman, CEO and founder of Sunnova, called the loan guarantee "groundbreaking and a needle mover in a big way ... for not just Sunnova but for the entire industry," in comments made April 20.

Not only will it open the "funnel top" to help serve low-income customers on the mainland, but it will also strengthen the company's work over the last decade to assure electricity in the territory of Puerto Rico, Berger added.

Underscoring this point, the DOE recently announced that it is preparing to launch a $1 billion fund to help improve Puerto Rico's grid, with a specific focus on solar and new grid architectures. It is seeking input from industry on how it should proceed.

The loan guarantee should also help soothe the solar sector's last few weeks of uncertainty about access to capital following the Silicon Valley Bank crash.

Given the recent Silicon Valley Bank crisis that hurt solar developers with capital tied up in that institution, the DOE loan guarantee will help expand the availability of solar services "to a number of people that would not be able to have our service, especially in this type of environment," Berger said.

"That is very important in this market, as the credit has gotten tighter with the failure of Silicon Valley Bank and so forth on the community banking side of things. This fills that void," Berger said.

Although Sunnova was not as exposed to the effects of the Silicon Valley Bank crash compared with many of its competitors, the market where it did acquire much of its capital — the asset-backed securitization market that includes pension funds and insurers — has mostly dried up, the CEO noted.

So, the loan guarantee "was really the right thing at exactly the right time with regards to the capital markets," Berger said.

For Sunnova, the DOE action would help lower the cost of capital to install more rooftop solar in less affluent neighborhoods as well as help aggregate homes with rooftop solar and storage to provide "clean power that is in excess to the communities as well. So, it does quite a lot for the industry, Sunnova and the country," Berger said.

The loan guarantee is expected to close sometime in the second quarter. If the loan guarantee goes forward, it would support the origination of Sunnova loans associated with solar, storage or other Sunnova Adaptive Home technologies that utilize the company's patented demand response and VPP enabling software, the company said in a statement.

The future launch of a Sunnova VPP would help balance load and electricity supplies similarly to a conventional natural gas peaker power plant.

"Sunnova anticipates the DOE loan guarantee will support up to $4.0-$5.0 billion in Sunnova loan originations, reduce the company's weighted average cost of capital and generate interest savings," it said in a statement.

Furthermore, the loan guarantee is expected to support grid reliability, improve access to clean energy, and enhance ratings and advance rates on our senior bonds, said Robert Lane, executive vice president and CFO of Sunnova.

"This financing would allow Sunnova to realize issuance spreads commensurate with the expected credit uplift and introduce new, investment-grade investors to Sunnova's long-term strategy," Lane said.

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DOE sees progress in carbon capture despite projects' high costs

Jason Fargo

The Department of Energy issued an April 24 report highlighting the potential of "carbon management" technologies to help meet the nation's climate goals, but noting that more federal incentives for such projects may be needed.

The DOE report, "Pathways to Commercial Liftoff: Carbon Management," insists that carbon management is a mature technology already, pointing out that the US currently has more than 20 million tons per year of carbon storage capacity in service.

However, the agency warns that the nation will need to boost that to between 400 million to 1.8 billion tons by 2050 in order to meet federal decarbonization goals. Reaching those levels would involve around $100 billion in new investment by 2030 and a whopping $600 billion by 2050, DOE claims.

At least through the end of this decade, DOE suggests that the greatest development of carbon management will occur in industries yielding high-purity streams of carbon dioxide, such as ethanol production, natural gas processing, and the production of hydrogen from steam methane reforming. "These early projects have more favorable economics and can anchor the buildout of large-scale transport and storage infrastructure—laying the foundation for carbon management applications in other industries (e.g., steel, cement)," the report says.

In parallel with those projects, DOE projects that other industries with less attractive economics for carbon capture will launch pilots and demonstrations through the mid-2030s, leading to substantial cost reductions and deployment of first-mover projects in various industrial sectors.

Even so, the agency suggests that the latter deployments will still need additional federal assistance, above and beyond the 45Q tax credits enshrined in last year's Inflation Reduction Act (IRA), to become economically viable.

For such high cost-of-capture industries such as cement, iron and steel, and bioenergy with carbon capture and storage, DOE estimates that current costs are "close to or above" the $85/ton 45Q tax credit for carbon capture, utilization and storage (CCUS) projects.

Meanwhile, for direct air capture projects, DOE says the IRA's $180/ton tax credit "is still insufficient without further cost declines or strong markets for carbon removal credits."

DOE tightens LNG export extension policy... (Continued from p. 1)

To support its request, Lake Charles had argued that global events including the coronavirus pandemic created an extremely difficult environment for constructing large-scale infrastructure projects. It also said that several recent off-take agreements involving the project were contingent on a deadline of 2028.

But the department agreed with environmental advocates that Lakes Charles LNG's "generalized statements" failed to show with specificity how the project was delayed by global events since its first extension application. And the DOE said the developer did not show evidence of actions taken to advance the project since the initial 2020 extension, aside from entering into several long-term offtake contracts in 2022.

"We agree with environmental advocates that these contracts alone do not demonstrate that Energy Transfer has made significant progress toward physical completion of the liquefaction project since 2020, including 'progress towards reaching FID,'" the order said.

The DOE also found that the project had not achieved the level of commercial progress that other authorization holders had reached in a similar time period. The department said that Venture Global had built and begun operating its Calcasieu Pass project within three years of getting its non-FTA authorization in 2019, and that since 2022 three other authorization holders have reached FID and started construction, within three or four years of receiving their long-term non-FTA authorization from the DOE.

The decision marks a setback for the 16.5 million mt/year Lake Charles project, which gained an extension from the Federal Energy Regulatory Commission for its authorization for the LNG terminal in May 2022. Energy Transfer has secured long-term contracts covering some 7.9 million mt/year of capacity and has said it is in talks for additional long-term offtake agreements that include preliminary deals with two Japanese customers.

DOE's current deadline, of Dec. 16, 2025, remains in effect for Lake Charles LNG, according to the agency.

Energy Transfer did not immediately reply April 24 to a request for comment.

In laying out its new policy on export extensions, DOE said it aimed to improve transparency for the LNG export market. The gap between authorized exports and those operating or under construction has grown to 25.64 Bcf/d, DOE said, adding that "this overhang obscures an accurate picture" of investment-backed commitments involving US LNG.

The uncertainty has become disruptive to DOE's analysis feeding into non-FTA export applications, increases challenges to market participants and could deter new entrants including those seeking to use newer technology or adopt better environmental practices, DOE said.

ClearView Energy Partners, in a research note, said the new policy applies on a prospective basis from April 21 and would limit the ability for license holders to defer construction indefinitely.

"As such, we consider this to be a positive policy move for projects that may be coming to market later but with stronger commercial prospects," ClearView said.

The action came the same day that DOE agreed to extend export time frame for the Port Arthur LNG project. The deadline for non-FTA exports to begin would be extended by 25 months to June 18, 2028, the agency said. Port Arthur's export authorization for up to 698 Bcf/year runs to Dec. 31, 2050.

In granting the Port Arthur extension, DOE pointed to the March 20, 2023, announcement of a final investment decision and start of construction on the Port Arthur Phase 1 project.

"The recent milestone supports PALNG's assertions that it 'has worked diligently' to complete the construction and place the export facilities into service," the DOE order said.

Weighing a protest by Public Citizen, DOE said the advocacy group had not shown how allowing more time to start exports would impact public interest factors the DOE had previously considered in authorizing the project.

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Delfin LNG expects FID by midyear with new commitment

Joe Fisher, Corey Paul

Delfin LNG now has sufficient commitments to its deepwater port project offshore Louisiana to make a final investment decision around mid-year for its first floating LNG vessel, following a sale and purchase agreement struck with Hartree Partners Power & Gas, parent Delfin Midstream said April 24.

Under the SPA, Delfin LNG will supply 600,000 mt/year on a free-on-board basis at the Delfin Deepwater Port, 40 nautical miles off the coast of Louisiana, to Hartree for a 20-year period, the company said in a statement. The SPA is indexed to the Henry Hub.

Delfin has now secured commitments for 3.1 million mt/year of LNG sales. The company said it expects to make FID in mid-2023 on the first FLNG vessel.

Delfin "is well advanced in securing project level equity and debt for the first FLNG vessel," it said.

"The Delfin project's ability to make FID one vessel at a time is attracting significant interest from buyers, and Delfin is already in advanced discussions for marketing LNG for its second FLNG vessel," said Dudley Poston, CEO of Houston-based Delfin Midstream.

Delfin Midstream COO Wouter Pastoor said the company is finalizing construction contracts for multiple identical liquefier vessels and expects to make FID on its second FLNG vessel by the end of 2023.

Last November, Delfin Midstream received a one-year permit extension from the Federal Energy Regulatory Commission for the offshore Louisiana project. The extension, approved Nov. 17 by the commission, gave Delfin until Sept. 28, 2023, to place into service the onshore component, which would include metering, compression and piping infrastructure (CP15-490). It was the fourth time FERC allowed more time for the project's onshore facilities.

The Delfin LNG project could support up to four FLNG vessels to produce up to 13.3 million mt/year of LNG, according to the company.

Granholm gives support for Mountain Valley Pipeline... (Continued from p. 1)

proceeds expeditiously," she wrote in a letter to the commission.

The long-delayed completion of the MVP project is tied up by the recent rejection of water permits in West Virginia by the US Court of Appeals for the Fourth Circuit, while a renewed authorization for a 3.5-mile stretch of the pipeline to cross the Jefferson National Forest in West Virginia and Virginia gained a supplemental environmental impact statement April 13. The positive development for MVP on the US Forest Service's plan to allow the pipeline to cross the national forest followed the April 3 rejection by the court of MVP's water quality certificate issued by the West Virginia Department of Environmental Protection.

"While the department takes no position regarding the outstanding agency actions required under federal or state law related to the construction of the MVP project, nor on any pending litigation, we submit the view that the MVP project will enhance the nation's critical infrastructure for energy and national security," Granholm said in the letter to FERC.

"We appreciate the commission's prompt actions to fulfill its regulatory responsibilities regarding natural gas infrastructure under the Natural Gas Act, and the interagency coordination it provides as the lead federal agency for the project," Granholm said.

Natural gas and infrastructure such as MVP to support its delivery and use "can play an important role as part of the clean energy transition, particularly with broad advances in and deployment of carbon capture technology facilitated by the Bipartisan Infrastructure Law and Inflation Reduction Act," she added. "We look forward to continuing to work with FERC to ensure consumers have access to reliable, cost-effective, and clean energy," Granholm concluded.

There is no indication in Granholm's letter of what prompted the expression of support for such a large and controversial pipeline project, which has been a key focus of Sen. Joe Manchin (D-W.Va.), chairman of the Senate Energy and Natural Resources Committee. Manchin has sought legislative efforts in Congress to aid the completion of the MVP project, which has had multiple agency approvals vacated by the Fourth Circuit.

The Sierra Club issued a statement April 24 expressing concern about Granholm showing Biden administration support for the pipeline, while consulting firm Arbo said the letter indicates the Biden administration will likely issue remaining federal permits needed by MVP.

Furthermore, because Graholm said the pipeline would enhance critical infrastructure and national security, courts generally do not like to intrude on national security matters, said Gary Kruse, managing director of research at Arbo. "This may make the Fourth Circuit more amenable to upholding the remaining federal permits that will undoubtedly be appealed," Kruse said when asked about the Granholm letter.

MVP spokesperson Natalie Cox of majority owner Equitrans Midstream said April 24 that the company remains committed to working with federal and state regulators to secure all needed permits and complete construction of the pipeline.

"We are gratified that the US Department of Energy and Secretary Granholm have gone on the record to confirm what we believe and have been saying – Mountain Valley Pipeline is a critical infrastructure project that is essential for our nation's energy security, consumer affordability, and ability to effectively transition to a lower-carbon future," Cox said in a statement.

The project, providing an additional outlet for Appalachian Basin gas, is partly built but has faced lengthy delays after multiple adverse court rulings. The developers have hoped to regain federal authorizations this spring in order to resume construction this summer, though the water permit rejection in early April makes that seem unlikely.

In addition, a coalition of environmental groups petitioned the Fourth Circuit to strike down the new Endangered Species Act biological opinion for the project, reissued late February by the US Fish and Wildlife Service after prior court setbacks. The new biological opinion found the project would not jeopardize the continued existence of a handful of vulnerable species, including bats, fish and a rare flowering plant.

The groups contend FWS neglected critical public input on key deficiencies in its analysis in a rush to deliver the opinion on the developer 's timeline.

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