



FEDERAL ENERGY REGULATORY COMMISSION

September 7, 2022

The Honorable Cathy McMorris Rodgers
Ranking Member
House Energy & Commerce Committee
U.S. House of Representatives
Washington, D.C. 20510

Dear Ranking Member McMorris Rodgers,

Thank you for your June 6, 2022 letter expressing concern regarding the North American Electric Reliability Corporation's (NERC) "alarming assessment" showing "that more than half the nation will be at elevated risk of power outages this summer."¹ I also found NERC's assessment alarming and have written several statements regarding the growing reliability risks caused by federal and state policies which, by mandate or subsidy, spur the development of weather-dependent generation resources at the expense of the dispatchable resources needed for system stability and resource adequacy.²

In your letter, you request that my colleagues and I answer a series of questions. Below are my responses. In addition, given your past interest in the Commission's permitting delays, I have attached an updated chart on the status of natural gas proceedings.

¹ U.S. Representatives McMorris Rodgers, Upton, Burgess, Scalise, Latta, Guthrie, McKinley, Kinzinger, Griffith, Bilirakis, Johnson, Long, Bucshon, Mullin, Hudson, Walberg, Carter, Duncan, Palmer, Dunn, Curtis, Lesko, Pence, Crenshaw, Joyce, and Armstrong, June 6, 2022 Letter, at 1 (Accession No. 20220705-4002).

² See, e.g., *Transmission Sys. Planning Performance Requirements for Extreme Weather*, 179 FERC ¶ 61,195 (2022) (Daly, Comm'r, concurring).



1. Describe what specific actions you are taking or are prepared to take to address energy or electricity emergencies this summer in the bulk power system.

To understand the specific actions that the Commission is entitled to take in order to address emergencies, a general overview of the Commission’s statutory authority may be helpful. The Commission does not have emergency authority under the Federal Power Act (FPA). Emergency authority provided under FPA section 202(c)³ is vested in the Secretary of Energy (DOE) under the DOE Organization Act.⁴

The Commission does have authority under FPA sections 205 and 206 to amend a public utility’s rate schedules and the terms and conditions of service set forth in its tariff.⁵ Under FPA section 205,⁶ the Commission plays a reactive role—a public utility proposes rates, terms, and conditions in its tariff, which the Commission must approve if they are just and reasonable. Under FPA section 206,⁷ the Commission can affirmatively alter a utility’s tariff. Through either a complaint from a third party, or on its own motion, the Commission can examine a utility’s tariff and, if it finds the existing tariff unjust and unreasonable, it can modify the rates, terms, or conditions of a tariff by imposing a just and reasonable replacement rate.

In response to your letter, Chairman Glick identified several Commission orders approving FPA section 205 filings submitted by California Independent System Operator Corporation (CAISO), Southwest Power Pool, Inc. (SPP), Midcontinent Independent System Operator, Inc. (MISO), and PJM Interconnection, L.L.C. (PJM).⁸ In my view, the tariff revisions authorized by these orders are insufficient to avert the increasing

³ 16 U.S.C. § 824a(c).

⁴ Pub. Law 95-91.

⁵ The Commission also has authority to require NERC to develop reliability standards. 16 U.S.C. § 824o(d).

⁶ 16 U.S.C. § 824d.

⁷ 16 U.S.C. § 824e.

⁸ Chairman Glick July 1, 2022 Letter to Representatives McMorris Rodgers, et al., at 2-3 (Accession No. 20220705-4003) (Chairman Glick July 1, 2022 Letter).



likelihood of the reliability catastrophe that NERC has warned about. As I have previously stated,⁹ the CAISO orders are modest incremental reforms which will not—cannot—address the failure of CAISO’s markets to ensure resource adequacy.

Since August 2020, CAISO has sought and obtained approval of Reliability Must-Run Service Agreements (RMR agreements)¹⁰ and stopgap relief on an emergency basis in numerous proceedings.¹¹ These are examples of short-term fixes that are almost certain to exacerbate the long-term problem by further distorting CAISO’s markets.

RMR agreements are a product of market failure, and they themselves further distort markets. The Commission has stated RMR agreements should be used as a “last resort”¹² because:

RMR contracts suppress market-clearing prices, increase uplift payments, and make it difficult for new generators to profitably enter the market. That is because under current market rules, generators operating under a cost-of-service RMR contract must offer power under a Stipulated Bid Cost that includes stipulated marginal, start-up and no-load costs. The units are then entitled to a monthly fixed cost payment to the extent that revenues earned from the energy market, including any payments for start-up and no-load costs, do not recover allowable capacity costs and fixed [Operation and Maintenance (O&M)] costs. As a result, expensive generators under RMR contracts receive greater revenues than new entrants, who would receive lower revenues from

⁹ See *Cal. Indep. Sys. Operator Corp.*, 177 FERC ¶ 61,153 (2021) (Danly, Comm’r, concurring at P 3).

¹⁰ See, e.g., *KES Kingsburg, L.P.*, 175 FERC ¶ 61,255 (2021) (Danly, Comm’r, concurring); *Midway Sunset Cogeneration Co.*, 175 FERC ¶ 61,003 (2021) (Danly, Comm’r, concurring); *EF Oxnard LLC*, 172 FERC ¶ 61,133 (2020) (Danly, Comm’r, concurring); *Greenleaf Energy Unit 2, LLC*, 172 FERC ¶ 61,111 (2020) (Danly, Comm’r, concurring).

¹¹ See my response to question 4.

¹² See, e.g., *Devon Power LLC*, 103 FERC ¶ 61,082, at P 31 (2003).



the suppressed spot market price. In short, extensive use of RMR contracts undermines effective market performance. In addition, suppressed market clearing prices further erode the ability of other generators to earn competitive revenues in the market and increase the likelihood that additional units will also require RMR agreements to remain profitable.¹³

Over a year and a half ago, I brought a proposal before the Commission to initiate an FPA section 206 action to investigate the failures of CAISO's markets. I believed then and continue to believe now that such a step is necessary in the wake of the rolling blackouts of August 2020, but my colleagues declined to support that action.¹⁴ I continue to believe an FPA section 206 complaint investigation is warranted. CAISO's market structure appears unable to provide sufficient compensation to dispatchable generation resources to ensure their solvency. The result is that the owners of dispatchable generation resources either defer expensive maintenance or upgrades (leading to an ever-increasing number of reliability-threatening unplanned outages) or retire such resources altogether. The intermittent resources that are replacing dispatchable generation simply cannot provide the full reliability benefits for which they are given credit under CAISO's construct.¹⁵ Regrettably, the Commission has no plans of which I am aware to initiate any such investigation.

While the coordination among SPP, MISO, and PJM can help reduce costs, reduce congestion, and improve reliability, there is too much assumed reliance upon neighbors—there is limited transfer capacity between markets to deliver limited amounts of generation. For instance, weather conditions—like the current Western heatwave—can affect the ability of CAISO to count on imports from outside its territories. Neighboring regions can experience similar weather that can create larger demands on their own

¹³ *Id.* P 29.

¹⁴ See *Staff Presentation on California Independent System Operator (EL21-19-000)*, FERC (Dec. 17, 2020), <https://www.ferc.gov/news-events/news/staff-presentation-california-independent-system-operator-el21-19-000>; *Transcript of the 1073rd Meeting*, FERC, at 47 (Dec. 17, 2020), <https://www.ferc.gov/news-events/events/december-17-2020-virtual-open-meeting-12172020>.

¹⁵ See *Californians for Renewable Energy v. Cal. Indep. Sys. Operator Corp.*, 174 FERC ¶ 61,204 (2021) (Danly, Comm'r, concurring at P 4).



systems while simultaneously reducing intermittent generation.¹⁶ Simply put: at a certain point, if everybody is leaning on everybody else, we all fall down at the same time, especially when the RTOs have become increasingly fragile.

NERC stated that “[MISO] faces a capacity shortfall in its North and Central areas, resulting in high risk of energy emergencies during peak summer conditions”¹⁷ and that “[e]xpected resources do not meet operating reserve requirements under normal peak-demand and outage scenarios.”¹⁸ Likewise, the Midwest Reliability Organization, a NERC Regional Entity,¹⁹ found that the North and Central areas of MISO’s footprint to be at high risk for capacity shortfalls.²⁰ The results from MISO’s April 2022 planning resource auction showing a 1.3-GW shortfall confirm that this is the case.²¹

Moreover, MISO anticipates its capacity deficits and reliability risks will grow over the next five years. Results from the Organization of MISO States (OMS) and

¹⁶ *2021 Long-Term Reliability Assessment*, NERC, at 8 (Dec. 2021), https://www.nerc.com/pa/RAPA/ra/Reliability%20Assessments%20DL/NERC_LTRA_2021.pdf (“Areas that rely on [Variable Energy Resources] or imports to meet peak or other high-risk periods face greater risk in wide-area, long-duration weather events and when weather-dependent generation is impacted by abnormal atmospheric conditions, such as smoke or wind drought.”).

¹⁷ *2022 Summer Reliability Assessment*, NERC, at 4 (May 2022), https://www.nerc.com/pa/RAPA/ra/Reliability%20Assessments%20DL/NERC_SRA_2022.pdf (NERC Summer Assessment).

¹⁸ *Id.* at 15.

¹⁹ NERC Regional Entities ensure compliance with mandatory reliability standards. *See* 16 U.S.C. § 824o(a)(7) (“‘regional entity’ means an entity having enforcement authority”).

²⁰ *2022 MRO Regional Summer Assessment*, Midwest Reliability Organization, at 5 (June 8, 2022), <https://www.mro.net/wp-content/uploads/document-library/MRO-2022-Regional-Summer-Assessment.pdf> (MRO Summer Assessment).

²¹ *2022/2023 Planning Resource Auction (PRA) Results*, MISO, at 6 (Apr. 14, 2022), <https://cdn.misoenergy.org/2022%20PRA%20Results624053.pdf>.



MISO's joint 2022 survey²² project that MISO will "have a capacity deficit of 2.6 GW below the 2023 [Planning Reserve Margin Requirement]"²³ which could grow to 10.9 GW in 2027.²⁴ MISO has been reported to have said that "its preliminary 2022 regional resource assessment shows additions of largely renewable resources, coupled with retirement of controllable resources that will further chip away at its stores of accredited capacity" and that "the planned additions are simply not making up for planned retirements."²⁵ In order to ensure reliable resources, MISO states it will "be increasingly reliant on emergency or non-firm resources, such as imports."²⁶

NERC also reported that SPP may experience energy shortfalls. NERC stated that in SPP "[o]utages and reduced output from thermal and hydro generation could lead to energy shortfalls at peak demand" and that "[p]eriods of above normal wind generator output may give some relief, however, this energy is not assured."²⁷ The Midwest Reliability Organization found similarly.²⁸

While NERC reported that "PJM expects no resource problems over the entire 2022 summer peak season,"²⁹ recent Commission issuances and state policies have significantly impaired the orderly entry and exit of resources in the market and,

²² 2022 OMS-MISO Survey Results, MISO, <https://cdn.misoenergy.org/20220610%20OMS-MISO%20Survey%20Results%20Workshop%20Presentation625148.pdf> (OMS-MISO Survey).

²³ *Id.* at 2.

²⁴ *Id.* at 5.

²⁵ Amanda Durish Cook, *MISO Describes Bleak RA Future, Stakeholders Push Back*, RTO INSIDER, June 20, 2022.

²⁶ OMS-MISO Survey at 2.

²⁷ NERC Summer Assessment at 4.

²⁸ MRO Summer Assessment at 6.

²⁹ NERC Summer Assessment at 23.



consequently, impaired the long-term reliability of the electric system.³⁰ In June, PJM announced that its 2023/2024 RPM Base Residual Auction resulted in a price of \$34.13 per megawatt-day for most of the PJM footprint,³¹ the third lowest RTO-wide price ever.³² PJM attributed the auction price in part to its elimination of the minimum price offer rule,³³ the tariff filing for which the Commission allowed to go into effect by operation of law. Many have expressed concern that these prices are too low for the market to retain existing (or attract new) dispatchable generation that is necessary to ensure reliability.³⁴

On top of the retirements driven by failed market design, further retirements can be anticipated due to recently enacted state laws. On August 3, 2022, PJM issued a study modeling the consequences of the Climate and Equitable Jobs Act, recently passed in

³⁰ See, e.g., September 29, 2021 Notice of Filing Taking Effect by Operation of Law, Docket No. ER21-2582-000; see also Statement of Commissioner James P. Danly, Docket No. ER21-2582-000 (Oct. 27, 2021) (opposing the evisceration of the Minimum Offer Price Rule); *PJM Interconnection, L.L.C.*, 178 FERC ¶ 61,020 (2022) (Danly, Comm'r, dissenting) (opposing elimination of 10 percent adder in modeling energy market offers); Statement of Commissioner James P. Danly, Docket Nos. EL19-58-006, et al. (Jan. 20, 2022) (dissenting to order *PJM Interconnection, L.L.C.*, 177 FERC ¶ 61,209, reversing recently approved reserve market reforms); *Indep. Mkt. Monitor for PJM v. PJM Interconnection, L.L.C.*, 176 FERC ¶ 61,137 (2021) (Danly, Comm'r, dissenting), *reh'g denied*, 178 FERC ¶ 61,121 (2022) (Danly, Comm'r, dissenting) (opposing unit-specific mitigation review of all seller capacity offers).

³¹ *2023/2024 RPM Base Residual Auction Results*, PJM, at 1 (June 21, 2022), <https://pjm.com/-/media/markets-ops/rpm/rpm-auction-info/2023-2024/2023-2024-base-residual-auction-report.ashx>.

³² *Id.* at fig. 2.

³³ *PJM Capacity Auction Secures Electricity Supplies at Competitive Prices*, PJM, at 2 (June 21, 2022), <https://www.pjm.com/-/media/about-pjm/newsroom/2022-releases/20220621-pjm-capacity-auction-secures-electricity-supplies-at-competitive-prices.ashx>.

³⁴ See *PJM's capacity-auction results signal continuation of troubling trends*, PJM Power Providers Group (June 22, 2022), <https://www.p3powergroup.com/siteFiles/News/C90C8C039CF428BB732F77623B2E98FE.pdf>.



Illinois, which requires phasing out natural gas and coal fired generation.³⁵ PJM estimates that this law will cause 12,000 MW of dispatchable generation to retire by 2030 and an additional 23,000 MW by 2045.³⁶ These retirements are unlikely to be replaced with dispatchable generation: “PJM’s generation interconnection queue consists of approximately 200,000 MW, of which approximately 95% is solar, wind or hybrid; [PJM] expect[s] this trend to continue.”³⁷

NERC has also identified reliability risks in New England. NERC stated that while “[e]nergy and capacity is sufficient for a broad range of normal and above-normal scenarios in the [Northeast Power Coordinating Council]-New England area for the summer,” it anticipates a negative reserve margin in scenarios of “extreme high demand and extremely-low resources” which could “result in an energy emergency.”³⁸ NERC is being understated. As I explain below, the region today faces the real threat a winter reliability catastrophe.

2. Describe your interactions with other federal agencies, the states, NERC, and independent system operators related to assuring reliability in the bulk power system and the affordable, reliable delivery of electricity.

As Chairman Glick supervises Commission staff, I defer to his response.

3. Describe your interactions with the Environmental Protection Agency concerning potential and proposed rulemakings and enforcement activity that may affect the reliable delivery of electricity, such as the recent enforcement actions involving the disposal of coal combustion residuals from electric utilities rule.

a. List all potential and proposed rulemakings upon which you have provided the technical comment.

³⁵ *Illinois Generation Retirement Study*, PJM (Aug. 3, 2022), <https://www.pjm.com/-/media/committees-groups/committees/pc/2022/20220809/item-08b---information-only---2022-pjm-illinois-generation-retirement-study.ashx> (PJM Illinois Retirement Study).

³⁶ *Id.* at tbl. 2.

³⁷ *Id.* at 3.

³⁸ NERC Summer Assessment at 12 n.6.



b. List all enforcement actions upon which you have provided comment.

As a Commissioner, I have not been afforded the opportunity to vote on any comments that the Commission may have provided on proposed rulemakings or enforcement actions by the Environmental Protection Agency (EPA). It is not unusual for Commission staff to communicate with the EPA. As Commission staff is under the supervision of the Chairman,³⁹ I defer to him regarding whether those communications occurred and what subjects were discussed.

The EPA, however, frequently files in the Commission’s dockets on natural gas infrastructure and hydropower projects. As directed by section 309 of the Clean Air Act,⁴⁰ the EPA reviews and comments on the Commission’s environmental National Environmental Policy Act (NEPA) documents. Specifically, section 309 of the Clean Air Act requires EPA to review and comment on “any matter relating to duties and responsibilities granted pursuant to this chapter or other provisions of the authority of the [EPA].”⁴¹ In addition, EPA has filed comments on the Commission’s notices of inquiry.⁴² EPA has participated in technical conferences,⁴³ and EPA has filed comments on draft policies⁴⁴ relating to siting natural gas infrastructure and licensing hydropower facilities.

³⁹ 42 U.S.C. § 7171(c). The Chairman is responsible for the conduct of all Commission executive and administrative functions. *See also* 18 C.F.R. §§ 376.103, 105.

⁴⁰ 42 U.S.C. § 7609.

⁴¹ *Id.* § 7609(a).

⁴² EPA filed comments in the Notice of Inquiry for the Certification of New Interstate Natural Gas Facilities in Docket No. PL18-1-000 on June 21, 2018, July 26, 2018, and May 26, 2021.

⁴³ *See* FERC Staff, Technical Conference on Greenhouse Gas Mitigation: Natural Gas Act Sections 3 and 7 Authorizations, Supplemental Notice of Technical Conference, Docket No. PL21-3-000, at 2 (Nov. 18, 2021).

⁴⁴ *See* EPA April 25, 2022 Comments on Draft Updated Policy Statement, Docket No. PL18-1-000. Some of the EPA’s comments appear unrelated to its duties and responsibilities. *See id.* at 4 (“Finally, EPA strongly supports not only the Commission’s



Starting in August 2021, EPA’s comments on the Commission’s NEPA documents have “strongly recommend[ed]”⁴⁵ that the Commission consider “carbon lock-in and potential stranded [natural gas pipeline] assets” when evaluating proposed pipelines.⁴⁶ EPA has also recommended that the Commission assess the climate impacts of greenhouse gas emissions from project operations as well as the upstream production and downstream consumption of natural gas by employing the Social Cost of Carbon in its decision making.⁴⁷ This, despite the Commission’s longstanding and repeatedly articulated determination that the Social Cost of Carbon cannot aid it in conducting project-level environmental review.⁴⁸

approach of not relying on precedent agreements but also to prevent self-dealing and ensure accurate needs assessment by thoroughly examining the relationship between the parties entering into a precedent agreement. It is important for the Commission to carefully scrutinize this element of purported need where the pipeline developer is affiliated with a local distribution company or other entity reserving capacity on the line.”).

⁴⁵ See, e.g., EPA August 16, 2021 Comments on Draft Environmental Impact Statement for East Lateral Xpress Project, Docket No. CP20-527-000, at 1.

⁴⁶ See, e.g., *id.*

⁴⁷ See, e.g., *id.* at 2-3.

⁴⁸ See, e.g., *Mountain Valley Pipeline, LLC*, 161 FERC ¶ 61,043, at P 296 (2017), *order on reh’g*, 163 FERC ¶ 61,197, at PP 275-97 (2018), *aff’d sub nom. Appalachian Voices v. FERC*, No. 17-1271, 2019 WL 847199, at *2 (D.C. Cir. 2019) (“[The Commission] gave several reasons why it believed petitioners’ preferred metric, the Social Cost of Carbon tool, is not an appropriate measure of project-level climate change impacts and their significance under NEPA or the Natural Gas Act. That is all that is required for NEPA purposes.”).



4. List all waivers or other emergency actions you are considering or have taken over the past two years in connection with electric reliability.

As Chairman Glick explains in his response,⁴⁹ the DOE has emergency authority under the FPA. I am aware of DOE having issued four emergency orders within the last two years—three to preserve the reliability of the bulk power system in CAISO and the Electric Reliability Council of Texas (ERCOT), and one to restore power to electric customers in Texas following a hurricane.⁵⁰

⁴⁹ See Chairman Glick July 1, 2022 Letter at 4.

⁵⁰ See Department of Energy, DOE's Use of Federal Power Act Emergency Authority, <https://www.energy.gov/ceser/does-use-federal-power-act-emergency-authority#:~:text=On%20September%2010%2C%202021%2C%20the,levels%20in%20order%20to%20preserve.>



Chairman Glick also notes that the Commission waived provisions of CAISO's tariff to allow CAISO to interconnect two mobile, low-heat generating units to the electric system at the site of the decommissioned Greenleaf 1 cogeneration facility without the ordinary interconnection studies in order to address a potential capacity shortage and to maintain reliability.⁵¹ As I stated in my dissent, that waiver was not only illegal but unnecessary.⁵² Had dispatchable generation been adequately compensated, CAISO would not have needed to interconnect emergency resources in the first place. Further, the problem that CAISO faced was that it did not have emergency interconnection procedures that would have allowed resources to immediately interconnect. Instead of granting the waiver, the Commission should have found that, pursuant to FPA section 206, the CAISO interconnection process was unjust and unreasonable because it lacked emergency procedures. The Commission should have then ordered CAISO to file such procedures immediately. Emergency procedures set forth in the tariff would have provided criteria by which to allow expedited interconnection, allowing CAISO to manage its shortfalls by legal and predictable means.⁵³

5. List all regulatory actions you are considering or have taken over the past two years to alleviate reliability risks.

Chairman Glick's letter provides a list of Commission actions.⁵⁴ One of the actions is to talk about ISO-NE's well-known and longstanding reliability challenges stemming from insufficient natural gas pipeline infrastructure. This talking will happen

⁵¹ See Chairman Glick July 1, 2022 Letter at 5.

⁵² See generally *Cal. Indep. Sys. Operator Corp.*, 176 FERC ¶ 61,159 (2021) (Danly, Comm'r, dissenting).

⁵³ Just days ago, on August 31, 2022, the Commission approved CAISO's proposed tariff revisions to implement an emergency interconnection study process. See *Cal. Indep. Sys. Operator Corp.*, 180 FERC ¶ 61,143 (2022).

⁵⁴ See Chairman Glick July 1, 2022 Letter at 5-6.



on September 8, 2022, in Burlington, Vermont, and will be broadcast live on the Commission’s website.⁵⁵

The purpose of that talk, however, does not appear to be the identification of concrete actions to take in order to address the obvious and mounting reliability problems faced by New England. FERC staff’s notice states “[t]he objectives of the forum are to achieve greater consensus or agreement among stakeholders in defining the electric and natural gas system challenges in New England and identify what, if any, steps are needed to better understand those challenges *before* identifying solutions.”⁵⁶ Moreover, the schedule has allocated only 1.5 hours to a discussion of “develop[ing] effective solutions, time frames for action, and processes that may facilitate the development of solutions within such time frames.”⁵⁷ And this will occur all while “distill[ing] key points discussed during the day.”⁵⁸

ISO-New England, Northeast utilities, and regional policy makers have known of the need to address fuel supply constraints in New England and the impact that those constraints have on the region’s electricity supply during cold weather for two decades.⁵⁹ The “challenges” are well-known. Over half of New England’s generation is made up of natural gas.⁶⁰ NERC has stated that New England’s “reliance on natural-gas-fired generation coupled with the non-firm contracting by generators for fuel transport and

⁵⁵ See *id.* at 6; see also *New England Winter Gas-Electric Forum*, FERC <https://www.ferc.gov/news-events/events/new-england-winter-gas-electric-forum-09082022>.

⁵⁶ See FERC Staff August 22, 2022 Supplemental Notice of New England Winter Gas-Electric Forum, Docket No. AD22-9-000, at 1 (emphasis added).

⁵⁷ *Id.* at 7.

⁵⁸ *Id.*

⁵⁹ See *Harsh Weather Conditions Could Pose Challenges to New England’s Power System This Winter*, ISO New England, at 2 (Dec. 6, 2021), https://www.iso-ne.com/static-assets/documents/2021/12/20211206_pr_winteroutlook2122.pdf.

⁶⁰ See *Resource Mix*, ISO New England (Jan. 18, 2022), <https://www.iso-ne.com/about/key-stats/resource-mix/>.



uncertain LNG deliveries can pose reliability issues any time of the year.”⁶¹ NERC has also stated that New England is “fuel constrained in winter” which is “one of the most significant risks to the area.”⁶² Indeed, last December, ISO New England stated that if there is cold weather, high prices for oil and LNG affecting storage, and pipeline constraints, the ISO will have to “turn to several operating procedures to manage the grid, up to and including controlled power outages.”⁶³

I am concerned, however, that even sincere efforts by some participants to develop viable, effective action will be stymied by three narratives that have arisen in all of the Commission’s discussions of reliability: that extreme weather is the principal threat to the reliability of our electric system,⁶⁴ that “The Transition” of the generation fleet from

⁶¹NERC Long-Term Assessment at 73.

⁶² *Id.* at 36.

⁶³ *Harsh Weather Conditions Could Pose Challenges to New England’s Power System This Winter*, ISO New England, at 1 (Dec. 6, 2021), https://www.iso-ne.com/static-assets/documents/2021/12/20211206_pr_winteroutlook2122.pdf.

⁶⁴ *See., e.g.*, FERC staff, et al., *FERC, NERC Encourage NAESB to Convene Gas-Electric Forum to Address Reliability Challenges*, FERC (July 29, 2022), <https://www.ferc.gov/news-events/news/ferc-nerc-encourage-naesb-convene-gas-electric-forum-address-reliability> (“‘The record-setting heat we’ve experienced this summer, just like the brutal cold during Winter Storm Uri last year, is a stark reminder that extreme weather remains a threat to the reliability of our energy infrastructure,’ Glick said.”) (Staff Press Release of Letter to NAESB); *Transcript for the 1092nd Commission Meeting*, FERC, at 12 (July 28, 2022), <https://www.ferc.gov/media/commission-meeting-transcript-july-2022> (Chairman Glick stating, “we also do know that . . . extreme weather, high temperatures/low temperatures, other weather factors, drought, things like that, do have a big impact on electric grid reliability”) (FERC July 2022 Meeting Transcript); *id.* at 14 (Chairman Glick stating, “as we see climate change having a greater impact on grid reliability, we need to act”); Daniel Moore, *Feds Aim to Speed Clean Energy Studies, Extreme Weather Defenses*, BLOOMBERG, June 16, 2022 (quoting Chairman Glick as having stated “The fact is, we know that we are experiencing extreme weather and it’s getting worse and it’s certainly having an impact on grid reliability, whether it[’]s heat, severe cold, drought or wildfires or Category 5 hurricanes, torrential rains”); Rich Glick (@RichGlickFERC), TWITTER (May 19, 2022, 11:13 AM), <https://twitter.com/RichGlick>



dispatchable generation to weather-dependent resources is inevitable with the corollary that any investment in natural gas infrastructure will result in stranded assets;⁶⁵ or that the crux of the Northeast’s reliability problems can be solved by improving communication, contracts and scheduling between natural gas companies and electric utilities—*i.e.*, greater gas/electric coordination.⁶⁶

To take each narrative in turn: weather is not the primary problem we face in keeping the lights on; the main problem is the quantity of generation available to meet load. An insufficiency makes the grid fragile during severe weather. This insufficiency is occurring *because of* the retirement of dispatchable resources and their replacement with intermittents. In its 2021 Long-Term Reliability Assessment, NERC stated “[e]nergy risks emerge when variable energy resources [] like wind and solar are not supported by flexible resources that include sufficient dispatchable, fuel-assured, and weatherized generation.”⁶⁷ NERC provides several examples: “MISO could face the retirement and resultant loss of over 13 GW of resource capacity over the 2021-2024 period. At this level of retirements, resource additions must increase beyond current

FERC/status/1527306459263881223?s=20&t=94WOcbnJFMagk90iwuhwiA (“Extreme weather may be the single most important factor impacting #grid #reliability . . .”).

⁶⁵ See, e.g., FERC July 2022 Meeting Transcript at 14 (Chairman Glick stating, “the resource mix is changing”); *Transcript of the 1091st Commission Meeting*, FERC, at 61 (June 16, 2022), <https://www.ferc.gov/media/commission-meeting-transcript-june-2022> (Commissioner Clements stating, “[t]he predictions from the government, from every credible academic institution, from any you want to look at is telling us that the future market – that the supply of resources are going to be – that part is not FERC’s choice. So FERC, under the Federal Power Act, has a choice. It can decide to try and facilitate what is happening in the market.”).

⁶⁶ See generally Staff Press Release of Letter to NAESB.

⁶⁷ NERC 2021 Long-Term Assessment at 5. The Midwest Reliability Organization’s 2022 Regional Summer Assessment confirms NERC’s findings, stating “[c]onventional generation that traditionally provided essential reliability services continues to be retired and replaced with renewable generation that *either cannot provide these essential reliability services or has limited capability per design constraints.*” MRO Summer Assessment at 18 (emphasis added).



projections to avoid a capacity shortfall in 2024”⁶⁸; in CAISO, “energy risks are present today as electricity resources are insufficient to manage the risk of load loss when wide-area heat events occur”;⁶⁹ and “[t]he U.S. Northwest and Southwest parts of [the Western Electricity Coordinating Council] have increasingly variable resource profiles, raising the risk of energy shortfalls.”⁷⁰ The RTOs agree.⁷¹

Federal and state policies, by mandate or subsidy, have spurred the development of *weather dependent* generation resources which are driving dispatchable resources into insolvency. These policies warp price signals in the markets, destroying the economic conditions required for the orderly entry, exit, and retention of sufficient capacity with the needed characteristics to ensure system stability. The thinner and thinner reserve margins resulting from these incentives render the electric system ever more susceptible to instability in the face of *any* contingency—weather being but one possibility.

Many policy makers, however, do not seem moved by the warnings of NERC and the markets. In response to MISO’s concerns about its capacity shortfalls, Illinois lawmakers shrugged and argued that “MISO should re-evaluate and revamp its interconnection rules to accelerate new renewable capacity interconnections.”⁷² It does not seem that these same lawmakers have given any thought to the cost of ensuring a reliable system before enacting laws shutting down dispatchable generation. PJM

⁶⁸ NERC 2021 Long-Term Assessment at 5.

⁶⁹ *Id.*

⁷⁰ *Id.*

⁷¹ See, e.g., Amanda Durish Cook, *MISO Describes Bleak RA Future, Stakeholders Push Back*, RTO INSIDER, June 20, 2022 (reporting MISO having warned its Board of Directors of stating “the footprint is in desperate need of controllable resources ‘to balance weather-dependent resources’ based on a future assessment of its supply.”); ISO New England Inc. February 22, 2022 Post-Technical Conference Comments, Docket No. AD21-11-000, at 2-3 (“[E]nergy adequacy remains the most critical risk to the reliability of the bulk power system in New England, and, as extreme weather events increase, the system’s vulnerability to that risk will become increasingly more apparent.”) (citation omitted).

⁷² Amanda Durish Cook, *Illinois Leaders Blast MISO Inaction on Capacity Crisis*, RTO INSIDER, July 24, 2022.



estimates that the Illinois Climate and Equitable Jobs Act would require \$2 billion in transmission upgrades— “approximately \$700 million by 2030 and an additional \$1.3 billion by 2045,” costs that would fall on ratepayers *outside* Illinois’s borders.⁷³

If New England continues on its current course, energy prices will continue to rise. In its recently published *Future Grid Reliability Study*, ISO New England found that under the most aggressive clean energy scenarios, “[t]he reserve margin—i.e., how many extra resources are needed to keep the system reliable in times of stress—may need to increase by an order of magnitude by 2040 (*i.e., from 15% to 300%*),”⁷⁴ and meeting NERC reliability criteria under aggressive clean energy scenarios would require “89,900 MW in total wind, solar and storage versus the ~5,600 MW in use today.” With a bit of understatement, ISO New England observes that such additions “may present significant challenges [to] the transmission system and require an outsized amount of land or offshore areas to be sited and developed for the necessary wind and solar farms.”⁷⁵ Yet, have policy makers considered the costs?

To respond to the second narrative: no transition—particularly one on the scale of the total replacement of fossil fuels with some combination of wind, solar, and batteries—is inevitable. Though the transition of the generation fleet from dispatchable to weather-dependent generation may be driven by state and federal policies, the Commission remains obligated to protect the wholesale markets and the consumers who ultimately pay the rates they produce. States are perfectly free to adopt unwise public policies, but the Commission, as arbiter of interstate wholesale rates, must do its job to ensure that effects of these policies do not harm the citizens of other states. Up until recently,⁷⁶ the Commission has done this by mitigating the anticompetitive, price-suppressive effects of subsidies. Such mitigation protects the proper formation of price signals and prevents states from forcing their policies on their neighbors by making unsubsidized resources uncompetitive by default. The Commission has instead chosen,

⁷³ PJM Illinois Retirement Study at 3.

⁷⁴ *2021 Economic Study: Future Grid Reliability Phase 1*, ISO New England, Inc., at 2 (July 29, 2022), https://www.iso-ne.com/static-assets/documents/2022/07/2021_economic_study_future_grid_reliability_study_phase_1_report.pdf (emphasis added).

⁷⁵ *Id.* at 3.

⁷⁶ See, e.g., *ISO New England Inc.*, 179 FERC ¶ 61,139 (2022) (Danly, Comm’r, dissenting).



by action or inaction, to abandon its statutory duty to ensure that its jurisdictional rates are just and reasonable and is allowing out of market subsidies to drive dispatchable power out of the markets,⁷⁷ thereby introducing uncertainty and chilling stakeholder and investor confidence in market mechanisms.⁷⁸

⁷⁷ See, e.g., *N.Y. Indep. Sys. Operator, Inc.*, 179 FERC ¶ 61,102 (2022) (Danly, Comm'r, concurring in part dissenting in part) (suppressing prices by failing to mitigate buyer-side market power); *N.Y. Indep. Sys. Operator*, 178 FERC ¶ 61,101 (2022) (Danly, Comm'r, dissenting) (suppressed prices by weakening buyer-side mitigation); see also *PJM Interconnection L.L.C.*, Docket No. ER21-2582-000, September 29, 2021 Notice of Filing Taking Effect by Operation of Law; Statement of James P. Danly, Docket No. ER21-2582-000 (Oct. 27, 2021) (suppressed prices by eliminating minimum price offer rule); *PJM Interconnection L.L.C.*, 177 FERC ¶ 62,105 (Nov. 29, 2021 Notice of Denial of Rehearing by Operation of Law); Statement of James P. Danly, Docket No. ER21-2582-000 (Aug. 26, 2022).

⁷⁸ See *TransAlta Energy Mktg. (U.S.) Inc.*, 179 FERC ¶ 61,192 (2022) (Danly, Comm'r, dissenting) (suppressed prices and introducing contract uncertainty by abrogating freely negotiated contracts); *El Paso Elec. Co.*, 179 FERC ¶ 61,191 (2022) (Danly, Comm'r, dissenting) (same); *Guzman Energy, LLC*, 179 FERC ¶ 61,190 (2022) (Danly, Comm'r, dissenting) (same); *Nev. Power Co.*, 179 FERC ¶ 61,174 (2022) (Danly, Comm'r, dissenting) (same); *Direct Energy Bus. Mktg., LLC*, 179 FERC ¶ 61,169 (Danly, Comm'r, dissenting) (same); *ConocoPhillips Co.*, 179 FERC ¶ 61,168 (Danly, Comm'r, dissenting) (same); *Macquarie Energy LLC*, 179 FERC ¶ 61,126 (2022) (Danly, Comm'r, dissenting) (same); *Brookfield Renewable Trading & Mktg. LP*, 179 FERC ¶ 61,119 (2022) (Danly, Comm'r, dissenting) (same); *Tri-State Generation & Transmission Ass'n Inc.*, 179 FERC ¶ 61,118 (2022) (Danly, Comm'r, dissenting) (same); *Uniper Global Commodities N. Am. LLC*, 179 FERC ¶ 61,117 (2022) (Danly, Comm'r, dissenting) (same); *Midcontinent Indep. Sys. Operator, Inc.*, 179 FERC ¶ 61,074 (2022) (Danly, Comm'r, dissenting) (rejected a proposal for transmission owners to unilaterally elect to fund certain upgrades thereby denying transmission owners' right to receive a return on and of the capital costs of those network upgrades, necessary upgrades and transmission owner system protection facilities); *Cal. Indep. Sys. Operator Corp.*, 179 FERC ¶ 61,035 (2022) (Danly, Comm'r, dissenting) (suppressed prices by eliminating ROE adder); *Shell Energy N. Am. (U.S.), L.P.*, 179 FERC ¶ 61,034 (2022) (Danly, Comm'r, dissenting) (same); *Mercuria Energy Am., LLC*, 179 FERC ¶ 61,033 (2022) (Danly, Comm'r, dissenting) (same); *Tucson Elec. Power Co.*, 179 FERC ¶ 61,032 (2022) (Danly, Comm'r, dissenting) (same); *bP Energy Co.*, 179 FERC



Regardless of the zeitgeist in certain policymaking circles, natural gas remains and will remain one of the electric system's primary inputs. Nevertheless, the Commission has cast a chill over investment in new pipeline projects with the issuance of its draft policy statements⁷⁹ and by issuing orders throwing the finality of fully litigated certificates into doubt.⁸⁰ In doing so, the Commission has increased risk premiums and made it extremely difficult to rationally allocate capital or secure financing on

¶ 61,031 (2022) (Danly, Comm'r, dissenting) (same); *Tenaska Power Servs. Co.*, 179 FERC ¶ 61,030 (2022) (Danly, Comm'r, dissenting) (same); *PacifiCorp*, 179 FERC ¶ 61,021 (2022) (Danly, Comm'r, dissenting) (same); *PJM Interconnection L.L.C.*, 178 FERC ¶ 61,104 (2022) (Danly, Comm'r, dissenting); *order addressing arguments raised on reh'g*, 179 FERC ¶ 61,161 (2022) (Danly, Comm'r, dissenting) (suppressed prices by eliminating scarcity pricing); *Indep. Mkt. Monitor for PJM v. PJM Interconnection, L.L.C.*, 176 FERC ¶ 61,137 (2022) (Danly, Comm'r, dissenting), *order addressing arguments raised on reh'g., addressing requests for clarif. & accepting compliance filing*, 178 FERC ¶ 61,121 (2022) (Danly, Comm'r, dissenting) (suppressed prices by imposing unit-specific review); *Elec. Transmission Incentives Policy Under Section 219 of the Fed. Power Act*, 175 FERC ¶ 61,035 (2021) (Danly, Comm'r, dissenting) (introduced uncertainty by eliminating the RTO adder and violating the FPA); *Hollow Road Solar LLC*, 174 FERC ¶ 61,200 (2021) (Danly, Comm'r, dissenting) (exempting solar facility from minimum price offer rule); *PJM Interconnection, L.L.C.*, 178 FERC ¶ 61,020 (2022) (Danly, Comm'r, dissenting) (suppressed prices by reducing demand curve).

⁷⁹ See *Consideration of Greenhouse Gas Emissions in Nat. Gas Infrastructure Project Revs.*, 178 FERC ¶ 61,108 (2022) (Danly and Christie, Comm'rs, dissenting); *Certification of New Interstate Nat. Gas Facilities*, 178 FERC ¶ 61,107 (2022) (Danly and Christie, Comm'rs, dissenting); ; see also *Certification of New Interstate Nat. Gas Facilities*, 178 FERC ¶ 61,197, at P 2 (2022) (converting the two policy statements to "draft policy statements"). It is worth noting that PJM and MISO filed comments on the draft policy statements. PJM and MISO May 25, 2022 Limited Reply Comments, Docket Nos. PL18-1-001, et al., at 4 ("[A]ny future Commission pipeline policy should consider the importance of ensuring that needed pipeline infrastructure can be timely sited, and ensure that the need for infrastructure to meet electric system reliability is affirmatively considered and not lost in the debate over the scope of environmental reviews to be undertaken by the Commission.").

⁸⁰ See, e.g., *Algonquin Gas Transmission, LLC*, 174 FERC ¶ 61,126 (2021) (Danly and Christie, Comm'rs, dissenting).



commercially viable terms. Absent the development of more natural gas infrastructure, natural gas supply constraints will not be relieved and regions like New England, which are highly dependent upon natural gas, will suffer reliability failures.

Further, if we in fact intend to address New England’s winter reliability risks focusing on “gas-electric coordination” it will, at the very most, yield marginal benefits. The Commission and stakeholders have spent years modifying natural gas-electric communication, contracts, and scheduling.⁸¹ Yet, fuel security and reliability risk continue in New England. As NERC’s John Moura has pointed out, “[e]very ounce of efficiency has [already] been squeezed out of that” and “coordination really doesn’t let more gas flow.”⁸² To achieve a real and lasting improvement to reliability in New England, we must address the region’s two fundamental problems: (1) the need for additional pipeline capacity in the face of federal and state policies impeding development, and (2) current market design that does not adequately compensate generators for the reliability benefits of firm natural gas supplies. As the Natural Gas Supply Association has argued, until these fundamental problems are addressed, “opportunities to do more in the name of gas-electric coordination will be limited to only incremental enhancements on the margin that will not significantly enhance levels of service to power generators or better accommodate their load profiles.”⁸³

* * *

⁸¹ See, e.g., *Coordination of the Scheduling Processes of Interstate Nat. Gas Pipelines & Pub. Utils.*, Order No. 809, 80 Fed. Reg. 23,198, 151 FERC ¶ 61,049 (2015), *order on clarification*, 152 FERC ¶ 61,095, *order on reh’g*, 152 FERC ¶ 61,212 (2015), *order on clarification*, 153 FERC ¶ 61,049 (2015).

⁸² Robert Walton, *‘Batteries aren’t going to do it’: NERC’s Moura calls for gas investment to maintain reliability*, UTILITY DIVE, July 21, 2022, <https://www.utilitydive.com/news/nerc-2022-reliability-report-gas-solar/627784/>.

⁸³ Natural Gas Supply Association February 22, 2022 Comments, AD21-11-000, at 13.



Thank you for the opportunity to share my thoughts on the reliability challenges facing many parts of the country. If I can be of any further assistance with these issues or any other Commission matter, please do not hesitate to contact me.

Sincerely,

A handwritten signature in black ink that reads "James Danly". The signature is written in a cursive, flowing style.

James P. Danly
Commissioner

cc:

The Honorable Fred Upton
The Honorable Michael C. Burgess, M.D.
The Honorable Steve Scalise
The Honorable Robert E. Latta
The Honorable Brett Guthrie
The Honorable David B. McKinley
The Honorable Adam Kinzinger
The Honorable H. Morgan Griffith
The Honorable Gus M. Bilirakis
The Honorable Bill Johnson
The Honorable Billy Long
The Honorable Larry Bucshon, M.D.
The Honorable Markwayne Mullin

The Honorable Richard Hudson
The Honorable Tim Walberg
The Honorable Earl L. Carter
The Honorable Jeff Duncan
The Honorable Gary J. Palmer
The Honorable Neal P. Dunn, M.D.
The Honorable John Curtis
The Honorable Debbie Lesko
The Honorable Greg Pence
The Honorable Dan Crenshaw
The Honorable John Joyce, M.D.
The Honorable Kelly Armstrong

Pending NGA Sections 3(a) and 7(c) Applications

Applicant	Docket No.(s)	Project Name	Date Filed	Time Since Filing ⁱ	Date Noticed	Separate NEPA Scoping Document	Notice of Intent to Prepare NEPA Document	New Final NEPA Doc. Date	Order Date Estimate ⁱⁱ	Date Potential Stay Lifted ⁱⁱⁱ
Port Arthur LNG Phase II, LLC and PALNG Common Facilities Company, LLC	CP20-55	Port Arthur LNG Expansion Project	2/19/20	923 days	3/4/20	10/1/19	10/1/19 (EA) No notice for supp. enviro. review has been issued	1/15/21 (EA) No New Final NEPA doc has been issued	--	N/A
Rio Bravo Pipeline Company, LLC	CP20-481	Rio Bravo Pipeline Project Amendment	6/16/20	805 days	6/25/20	7/28/20	7/28/20 (EA) No notice for supp. enviro. review has been issued	12/21/20 (EA) No New Final NEPA doc has been issued	--	--

ⁱ I used August 30, 2022 as the end date for the calculation. The calculated number of days does not include the end date.

ⁱⁱ I am using 4 months as the time between the final NEPA document and order issuance because that was the average processing time from January 1, 2019 to May 24, 2021.

ⁱⁱⁱ In Order No. 871-B, the Commission established a policy to stay all certificate and permit proceedings for up to 150 days if there is a landowner protest. *See* Order No. 871-B, 175 FERC ¶ 61,098, at PP 43-51. To avoid the appearance of prejudging any pending cases, I assume the maximum stay for all NGA section 7 filings.

Applicant	Docket No.(s)	Project Name	Date Filed	Time Since Filing ⁱ	Date Noticed	Separate NEPA Scoping Document	Notice of Intent to Prepare NEPA Document	New Final NEPA Doc. Date	Order Date Estimate ⁱⁱ	Date Potential Stay Lifted ⁱⁱⁱ
Delaware River Partners LLC	CP20-522	Petition for Declaratory Order Regarding Gibbstown Logistics Center	9/11/20	718 days	9/15/20	N/A	N/A	N/A	--	N/A
Bradford County Real Estate Partners LLC	CP20-524	Petition for Declaratory Order	9/18/20	711 days	9/23/20	N/A	N/A	N/A	--	N/A
Golden Pass Pipeline, LLC	CP21-1 ^{iv} CP21-458	Compression Relocation and Modification MP 33 Compressor Station Modification Project	10/2/20 6/11/21	697 days 445 days	10/19/20 6/23/21	11/19/20	12/9/20 (EIS) 11/5/21 (EIS)	6/24/22	10/24/22	3/23/23
LA Storage, LLC	CP21-44	Hackberry Storage Project	1/29/21	578 days	2/10/21	None	8/27/21 (EIS)	4/8/22	8/8/22	1/5/23
Transcontinental Gas Pipe Line Company	CP21-94	Regional Energy Access Expansion Project	3/26/21	522 days	4/9/21	None	10/19/21 (EIS)	7/29/22	11/29/22	4/28/23

^{iv} The NEPA document for the Compressor Relocation and Modification project is delayed because the Commission combined its review with the MP 33 Compressor Station Modification Project to avoid improper segmentation. See Chairman Glick September 24, 2021 Letter to Senator Barrasso at 14.

Applicant	Docket No.(s)	Project Name	Date Filed	Time Since Filingⁱ	Date Noticed	Separate NEPA Scoping Document	Notice of Intent to Prepare NEPA Document	New Final NEPA Doc. Date	Order Date Estimateⁱⁱ	Date Potential Stay Liftedⁱⁱⁱ
Alliance Pipeline L.P.	CP21-113	Three Rivers Interconnection Project	4/1/21	516 days	4/12/21	9/20/21	2/10/22	9/16/22	1/16/23	6/15/23
Driftwood Pipeline LLC	CP21-465	Line 200 and Line 300 Project	6/17/21 10/13/21 amended 10/29/21 amended	305 days ^v	6/30/21 10/20/21 11/12/21	None	1/13/22 (EIS)	9/15/22	1/16/23	6/15/23
Texas Eastern Transmission, LP	CP21-463	Holbrook Compressor Units Replacement Project	6/17/21	439 days	7/2/21	10/1/21	1/28/22 (EA)	5/12/22	9/12/22	2/9/23
Texas Gas Transmission, LLC	CP21-467	Henderson County Expansion Project	6/25/21	431 days	7/9/21	7/29/21	10/7/21 (EIS)	8/25/22	12/27/22	5/26/23
Commonwealth LNG, LLC	CP19-502	Commonwealth LNG Project	7/8/21 ^{vi}	418 days	7/13/21	None	9/24/21 (EIS)	9/9/22	1/9/23	N/A
Rio Grande LNG, LLC Rio Bravo Pipeline Company, LLC	CP16-454 CP16-455	Remand Proceeding	D.C. Cir. Opinion Issued 8/3/21	392 days	--	--	--	--	--	N/A

^v This number is calculated from the date the application was amended.

^{vi} This is the date Commonwealth LNG, LLC amended its application. Commonwealth LNG, LLC filed its initial application on August 20, 2019.

Applicant	Docket No.(s)	Project Name	Date Filed	Time Since Filing ⁱ	Date Noticed	Separate NEPA Scoping Document	Notice of Intent to Prepare NEPA Document	New Final NEPA Doc. Date	Order Date Estimate ⁱⁱ	Date Potential Stay Lifted ⁱⁱⁱ
Texas LNG Brownsville	CP16-116	Remand Proceeding	D.C. Cir. Opinion Issued 8/3/21	392 days	--	--	--	--	--	N/A
NFEnergía LLC	CP21-496	San Juan Micro-Fuel Handling Facility	9/15/21	349 days	9/29/21	--	--	--	--	N/A
Columbia Gas Transmission, LLC	CP21-498	Virginia Electrification Project	9/21/21	343 days	10/5/21	None	2/3/22	12/16/22	4/17/23	9/14/23
Gas Transmission Northwest, LLC	CP22-2	GTN XPress Project	10/4/21	330 days	10/19/21	None	1/21/22	10/14/22	2/14/23	7/14/23
Texas Eastern Transmission, LP	CP22-15	Venice Lateral Project	11/10/21	293 days	11/24/21	None	3/16/22	2/17/23	6/19/23	11/16/23
Rio Grande LNG, LLC	CP22-17	Limited Amendment	11/17/21	286 days	11/29/21	--	--	--	--	N/A
Venture Global CP2 LNG, LLC Venture Global CP Express, LLC	CP22-21 CP22-22	CP2 LNG and CP Express Pipeline Project	12/2/21	271 days	12/16/21	--	2/9/22	7/28/23 ^{vii}	11/28/23	4/26/24

^{vii} This is the revised date as Commission staff, under the supervision of the Chairman, suspended environmental review on July 6, 2022. See FERC Staff July 6, 2022 Notice Suspending Environmental Review, Docket Nos. CP22-21-000, et al.; see also FERC Staff August 23, 2022 Notice of Revised Schedule, Docket Nos. CP22-21-000, et al.

Applicant	Docket No.(s)	Project Name	Date Filed	Time Since Filingⁱ	Date Noticed	Separate NEPA Scoping Document	Notice of Intent to Prepare NEPA Document	New Final NEPA Doc. Date	Order Date Estimateⁱⁱ	Date Potential Stay Liftedⁱⁱⁱ
Venture Global Calcasieu Pass, LLC	CP22-25	Calcasieu Pass LNG Terminal Amendment	12/3/21	270 days	12/15/21	3/24/22	4/27/22 (EA)	6/24/22 8/5/22 (revised)	12/5/22	N/A
Northern Natural Gas Company	CP22-26	Des Moines A-line Replacement Project	12/3/21	270 days	12/17/21	2/8/22	5/5/22 (EA)	11/4/22	3/6/23	8/3/23
Cameron LNG, LLC	CP22-41	Amended Expansion Project	1/18/22	224 days	1/28/22	3/31/22	4/27/22 (EA)	12/2/22	4/3/23	N/A
Equitrans, L.P.	CP22-44	Ohio Valley Connector Expansion Project	1/28/22	214 days	2/11/22	5/23/22	7/7/22 (EIS)	1/20/23	5/20/23	10/19/23
ANR Pipeline Company	CP22-63	Abandonment of Winfield Storage Project	3/2/22	181 days	3/16/22	4/12/22	5/12/22 (EA)	9/29/22	1/30/23	6/29/23
Venture Global Plaquemines LNG, LLC	CP22-92	Plaquemines Uprate Project	3/11/22	172 days	3/25/22	5/11/22	8/26/22 (EA)	1/6/23	5/8/23	N/A
Northern Natural Gas Company	CP22-138	Northern Lights 2023 Expansion	3/28/22	155 days	4/11/22	5/17/22	7/28/22 (EIS)	3/10/23	7/10/23	12/7/23
Great Basin Gas Transmission Company	CP22-141	2023 Mainline Replacement Project	3/30/22	156 days	4/13/22	5/16/22	7/7/22 (EA)	11/10/22	3/10/23	8/1/23

Applicant	Docket No.(s)	Project Name	Date Filed	Time Since Filingⁱ	Date Noticed	Separate NEPA Scoping Document	Notice of Intent to Prepare NEPA Document	New Final NEPA Doc. Date	Order Date Estimateⁱⁱ	Date Potential Stay Liftedⁱⁱⁱ
Gulf South Pipeline Company, LLC	CP22-161	Index 130 Mississippi River Replacement Project	4/8/22	144 days	4/25/22	5/18/22	6/21/22 (EA)	9/26/22	1/26/23	6/25/23
Columbia Gas Transmission, LLC	CP22-227	Coco B Wells Replacement Project	4/26/22	126 days	5/10/22	6/14/22	7/8/22 (EA)	10/20/22	2/22/23	7/22/23
Transcontinental Gas Pipe Line Company, LLC	CP22-461	Southside Reliability Enhancement Project	5/23/22	99 days	6/7/22	None	7/25/22 (EIS)	2/24/23	6/26/23	11/23/23
WBI Energy Transmission, Inc.	CP22-466	Wahpeton Expansion Project	5/27/22	95 days	6/10/22	--	--	--	--	--
Trailblazer Pipeline Company LLC Rockies Express Pipeline LLC	CP22-468	Trailblazer Conversion Project	5/27/22	95 days	6/9/22	7/11/22	--	--	--	--
Texas Eastern Transmission, LP	CP22-486	Appalachia to Market II and Armagh and Entriiken HP Replacement Projects	7/7/22	54 days	7/19/22	--	8/19/22	7/14/23	11/14/23	4/12/24

Applicant	Docket No.(s)	Project Name	Date Filed	Time Since Filingⁱ	Date Noticed	Separate NEPA Scoping Document	Notice of Intent to Prepare NEPA Document	New Final NEPA Doc. Date	Order Date Estimateⁱⁱ	Date Potential Stay Liftedⁱⁱⁱ
Tennessee Gas Pipeline Company, L.L.C.	CP22-493	Cumberland Project	7/22/22	39 days	7/29/22	--	--	--	--	--
Boardwalk Storage Company, LLC	CP22-494	BSC Compression Replacement Project	8/5/22	25 days	8/16/22	--	--	--	--	--
Transcontinental Gas Pipe Line Company, LLLC	CP22-495	Texas to Louisiana Energy Pathway Project	8/9/22	12 days	8/23/22	--	--	--	--	--
Transcontinental Gas Pipe Line Company, LLC	CP22-501	Southeast Energy Connector	8/24/22	6 days	8/30/22	--	--	--	--	--
Transcontinental Gas Pipe Line Company, LLC	CP22-502	Commonwealth Energy Connector	8/24/22	6 days	--	--	--	--	--	--
Columbia Gas Transmission, LLC	CP22-503	Virginia Reliability	8/24/22	6 days	--	--	--	--	--	--