



A Clean Energy Agenda Runs Through The Federal Energy Regulatory Commission

The Federal Energy Regulatory Commission's (FERC) sweeping authority over the power sector's interstate operations and planning drives investment and shapes the industry. In this paper, I review how FERC is already influencing the clean energy transition and explain how FERC will be an indispensable player in the Biden Administration's clean energy agenda. I consider two 2021–2025 scenarios: 1) Congress passes a clean energy standard; and 2) Congress does not enact major changes to energy regulatory authority.

Under either scenario, FERC will issue numerous decisions that will affect the pace and cost of clean energy deployment. I examine two of FERC's principal regulatory functions and show their relevance to clean energy. Transmission oversight includes setting rates and regulating operations and planning. FERC's oversight will be important in assuring that new wind and solar will be able to connect to the interstate network. FERC should incentivize transmission investors to develop new lines, and prohibit transmission operators from imposing conditions on network access that might hinder deployment. FERC's market regulation aims to harness competition to set "just and reasonable" rates. FERC will determine whether interstate wholesale markets value clean energy or include other mechanisms to accelerate clean energy deployment.

I highlight major reforms that FERC should undertake, using both its transmission oversight and market regulation authorities, under both policy scenarios.

If Congress passes a clean energy standard (CES), FERC should:

- Ensure that transmission providers are developing new infrastructure that supports the clean energy ambitions laid out in the CES. Failure to do so will hinder deployment of wind and solar generation needed to comply with Congress's policy.
- Create markets that facilitate CES compliance or modify existing market structures to match the goals of the new clean energy mandate. Existing market designs are inconsistent with a rapid transition.

If Congress does not create any new energy regulatory authority, FERC should:

- Steer transmission planning processes to favor projects that will enable clean energy deployment and ensure that interconnection rules are not impeding development of new resources. FERC should be particularly attentive to the unique transmission needs of offshore wind.
- Reverse its recent decisions that support unnecessary polluting generators and make state clean energy programs more expensive. At the very least, FERC should ensure that interstate markets do not make it harder to achieve state clean energy goals. Ideally, FERC should adopt market designs that are fully compatible with the clean energy ambitions expressed in state policies and utility pledges, and by consumers.
- Reinvigorate the forty-year old Public Utility Regulatory Policies Act as a mandate that utilities competitively procure renewable energy.

In Part I, I explain how FERC's regulation can have substantial consequences for the competitiveness of different fuels and technologies and thus directly affect greenhouse gas emissions from the power sector. Although Congress has not specifically directed FERC to regulate these emissions, encourage



deployment of low-carbon resources, or otherwise address the power sector's contribution to climate change, FERC's flexible legal authority provides it with opportunities to facilitate the clean energy transition. After connecting FERC's authority to clean energy, in Part II I highlight FERC decisions since the 2017 presidential inauguration that directly affect clean energy deployment. Part III elaborates on the above suggestions about how FERC can wield its authority to support President-elect Biden's clean energy agenda.

I. The Federal Power Act and FERC's Market and Transmission Oversight¹

Historically, FERC had a limited role. The Federal Power Act (FPA) is a New-Deal era law that empowers FERC to regulate interstate transmission and wholesale sales of electric energy in interstate commerce. When it was enacted, the FPA tasked FERC (then called the Federal Power Commission) with overseeing transactions between utilities and left to states most other regulatory functions, including setting electricity rates paid by consumers, overseeing local distribution, and permitting construction of all non-hydro infrastructure. At the time, the industry was dominated by vertically integrated utilities that generated their own power and delivered it to consumers through interstate transmission and local distribution lines that they owned. Under this model, nearly all infrastructure was developed and financed through state-regulated processes and rates. Federal regulators had little influence over the industry's investments and operations.

Industry "restructuring" elevated FERC's influence. In the 1990s, industry restructuring, forced by regulatory changes, shifted regulatory authority over power plant revenues. FERC ordered utilities to open their transmission systems to non-utility generators and encouraged them to cede control over interstate delivery to new Regional Transmission Organizations (RTOs). These reforms created opportunities for non-utility-owned plants to sell energy through RTO-run auctions or other FERC-regulated wholesale markets. These non-utility plants (called "merchant" generators) were a new class of entities that were uniquely dependent on FERC-regulated revenue and RTO rules. Their proliferation, starting about thirty years ago, marked a fundamental shift in FERC's role and influence over the industry's development.²

FERC regulates interstate auction markets. With a significant share of the industry's revenue now flowing through RTO markets, FERC's regulation of those markets has become one of its most prominent functions. The energy markets governed by the RTOs aim to meet consumer demand at the lowest cost by facilitating competition among generators. Because demand for electricity varies throughout the day and year, not all power plants are needed to meet demand at any given moment. RTO auctions select which generators produce energy and how much they produce at any given moment. Based on generators' offers into the auction, the RTO computes the price where supply intersects with demand. The RTO then orders all sellers offering below that price to produce energy and pays them prices that vary by location in relation to the transmission network's topology. The

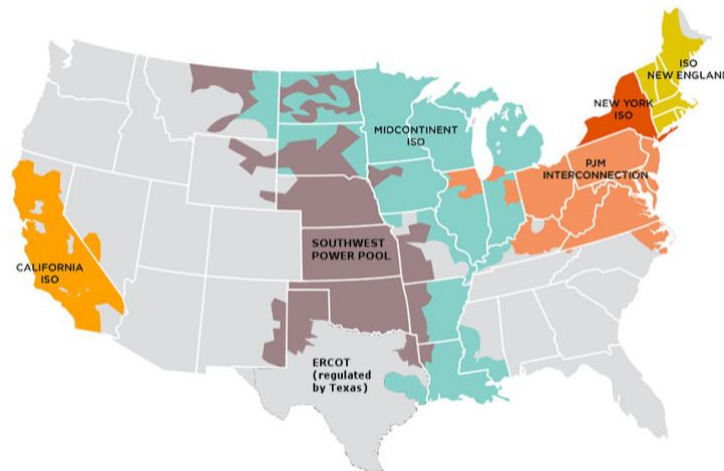
¹ In a 2017 paper entitled [Climate Implications of FERC Proceedings](#), Kate Konschnik and I connected the Federal Power Act's broad legal standards to FERC's market oversight and provided examples of how market rules that are ostensibly resource neutral can affect the resource mix and therefore greenhouse emissions. In this section, I summarize that paper's key conclusions.

² In approximately 35 states, utilities remain vertically integrated. Utility-owned plants can make FERC-regulated wholesale sales and may seek to supplement those revenues with direct support for power plant operations through state-approved consumer rates. In many of these states, power is generated by a mix of utility-owned and merchant plants.



resulting locational prices reflect system conditions. High prices indicate that expensive generators are keeping a local system in balance and signal to investors that a more efficient plant could be profitable at that location.

Three eastern RTOs — the New York Independent System Operator (NYISO), New England ISO (ISO-NE), and PJM — also oversee capacity markets that operate under similar economic principles. Generators and resources that reduce consumer demand bid commitments into these auctions to be available to produce energy or reduce demand during a specified future month or year. The RTO selects bids from lowest to highest cost until it meets projected future system peak demand and pays selected resources the market-clearing price for that region. All RTOs also operate markets for grid services that are essential to maintaining reliability.



FERC-regulated RTOs (map adapted from SustainableFERC.org)

FERC has broad discretion to set “just and reasonable” market-based rates. RTOs must receive FERC’s permission to change market rules. Section 205 of the FPA requires FERC to review all proposed rule changes and ensure that they result in “just and reasonable” rates and are not “unduly discriminatory.”³ There are no formulas or protocols that dictate how FERC should apply these subjective standards to market rules. FERC’s discretion is bounded by decades of federal court precedent, although most of those decisions pre-date FERC’s 25-year old market-based regulatory regime. FERC’s general approach has been to meet the FPA’s ratemaking standards by approving market rules that enhance competition and improve economic efficiency. FERC has found that numerous market design objectives can serve these two general goals. As examples, market rules should create prices that compensate resources for the services they provide to the system, allow sellers to recover their operational costs, and guide investors’ decisions about resource investment. An RTO proposing market rule changes justifies its proposal by arguing that it meets these or other objectives endorsed by FERC.

The FPA empowers FERC to order changes to market rules when it finds they fail to meet the FPA’s standards. Under this so-called section 206 authority, FERC must also entertain complaints about market rules filed by market participants, stakeholders, state regulators, or other entities. FERC conducts both section 205 and 206 proceedings pursuant to notice-and-comment procedures that

³ Section 205 prohibits a utility from “granting any undue preference” in its rates while section 206 prohibits “unduly discriminatory” rates. For simplicity, I use the term “unduly discriminatory” throughout as shorthand and treat the standards in 205 and 206 as identical, which is consistent with federal court decisions.



provide interested parties with opportunities to comment on proposed rule changes and require FERC to respond to those comments in its decision.

FERC also approves and sets rates, terms, and conditions for transmission service pursuant to the same section 205 and 206 standards and procedures. All transmission providers, including RTOs and privately owned utilities that are not RTO members, must administer a transmission tariff that meets FERC's minimum specifications. Tariffs must include procedures for open and transparent planning of transmission expansion, including processes for regional planning among neighboring utilities. Transmission investments planned through these processes are financed through cost-of-service rates that provide the developer with a FERC-set rate of return.

FERC policy affects the resource mix. FERC maintains a tradition of not favoring any particular fuel in its regulation of market and transmission rules, but its regulation does not result in neutral outcomes for clean energy resources. Market rules may value certain resource attributes, and transmission service may account for the differing performance of various types of resources. In energy markets, FERC's decisions about which attributes to value and how to price those attributes affect resource types unevenly.

For example, FERC has ordered RTOs to ensure that market prices update every five minutes in order to accurately reflect short-term system needs. Price spikes – even lasting as short as five minutes – incentivize generators to provide energy. Batteries and other fast-acting resources are able to respond first to these price spikes and capture the associated profits. Their quick responses may relieve pressure on the system and drive prices down. This economically efficient outcome is the result of non-discriminatory pricing that rewards resource performance. While the five-minute pricing rule does not explicitly favor any particular fuel or technology, it influences the mix of resources that sell through the RTO markets.

Like market rules, provisions in transmission tariffs also affect the resource mix. For example, in 2012 FERC ordered transmission providers to offer flexible scheduling to generators and other customers. FERC found that then-existing protocols were premised on traditional generation resources with planned production schedules, and the rules penalized resources whose output deviated from the scheduled quantity. These out-of-date rules disadvantaged wind and solar generators who could not precisely forecast their production sufficiently in advance to meet the scheduling rules. FERC determined that flexible scheduling terms were necessary to remedy transmission tariffs that unduly discriminated against wind and solar resources.

Market rules can also impede participation of certain resource types. Legacy protocols and practices enshrined in tariffs may fail to reflect twenty-first century technologies. In 2008, FERC prohibited RTOs from administering market rules that disadvantage demand response (DR) resources that can reliably reduce energy consumption in order to keep supply and demand in balance. It required RTOs to ensure their rules allow DR resources to provide all services they are technically able to deliver. Two years later, FERC concluded that because energy saved by demand response may at times be the cheapest option for maintaining system balance, RTOs must pay for DR service under the same terms as it pays generators for energy sales.

FERC chooses market outcomes using neutral criteria. FERC's order on demand response compensation was hotly contested before the Commission and in subsequent litigation in federal court. The controversy illustrates the breadth of FERC's discretion to choose among various plausible market design objectives and potential mechanisms for achieving those objectives. Even where



FERC is aiming squarely at improving competition, economic efficiency, and reliability, as it clearly was in its DR orders, the law's broad standards could have reasonably led FERC to a few different conclusions. Indeed, numerous economists and other experts urged FERC to provide DR lower rates than generators. FERC's policy choice boosted demand response providers and harmed traditional generators who faced potential market share loss to demand-side resources. FERC rationalized its decision on neutral market design criteria, such as enhancing competition and improving efficiency, rather than as a choice between market participants.

A Democratic-led FERC will be able to choose outcomes that favor clean energy interests, although its decisions must be similarly rooted in established understandings of the FPA's ratemaking standards.

II. Recent FERC Decisions that Directly Affect Clean Energy Deployment

FERC is composed of up to five commissioners, with no more than three members from a single political party including a chairperson designated by the president. Since August 2017, Republicans have held a majority of FERC seats and the chairpersonship. The Republican-led FERC has acted on thousands of utility and RTO tariff filings and issued several major rules. The vast majority of these orders are unanimous decisions on highly technical topics, many in company-specific proceedings and often affecting only a handful of market participants.

In this section, I focus on a few orders that most directly impact clean energy deployment across a broad section of the industry. In the past three years, FERC has taken actions that help clean energy and other actions that erect barriers to deployment. I discuss

- Two rules that enable participation of clean energy resources in interstate markets, and
- Orders that direct RTOs to hinder implementation of states' generation development policies, including clean energy programs, and a rollback of decades-old rules that encourage renewable energy development.

FERC facilitates deployment of storage and distributed resources. FERC's two major rules will improve the prospects for storage and distributed resources. Both rules were proposed in November 2016 by a Democratic-led FERC and finalized on a bipartisan basis in 2018 and 2020, respectively. The proposal recognized that RTO market rules were developed for traditional resources and did not recognize the unique technical properties of storage resources or contemplate the ability of small-scale distributed resources to participate in the interstate market. Like FERC's demand response rule, FERC's orders require RTOs to ensure that their market rules allow these new technologies to sell energy and all other products that they are capable of providing.

The devil is in the detail. The efficacy of these two directives to RTOs depends on implementation. FERC reviews each RTO's compliance filing to ensure that it meets FERC's requirements. Once the RTO receives FERC's approval and implements its rules, it must seek FERC's permission to change them and market participants may file complaints at FERC about implementation. While compliance with FERC's two orders may evolve over time, FERC's review of RTOs' initial proposals establishes precedent for FERC's future enforcement and is therefore particularly important. By January 2021, FERC will have approved all but one of the RTOs' filings to comply with the storage rule while RTOs will still be developing their proposals to address the distributed resources rule.



Eastern capacity auctions now hinder state policies. Should Democrats regain the FERC majority in 2021, they are likely to consider revamping the three Eastern capacity markets. In the past two years, FERC has restricted capacity market participation. Prior to FERC's new rules, a new clean energy resource that benefited from a state procurement mandate, renewable portfolio standard (RPS), or other state law could get paid by the RTO for its resource adequacy value. For instance, a wind generator selling renewable energy credits to a utility for its RPS compliance could also earn revenue from the RTO for its contribution to meeting the region's demand peak. However, under FERC's recent orders, the Eastern RTOs will ignore many new resources that earn state-sponsored revenue when it procures capacity. Consumers are likely to pay more, both through higher RTO capacity rates and increased costs of state programs that may have to make up the revenue that clean energy resources will no longer earn from capacity sales to RTOs.

FERC's orders oppose clean energy trends. Perhaps more significant than the consumer impacts, FERC's decisions mark a clean break between its market oversight and state clean energy policies. Numerous prior orders on capacity markets respect state clean energy policies and allow resources benefitting from state programs to participate in the RTO capacity markets. With state clean energy ambitions accelerating in the past few years, FERC's decisions force RTOs in the opposite direction and will cause them to buy more coal and gas powered resources than necessary to keep the lights on. As states push more clean capacity onto the system, RTO capacity auctions will sustain polluting generators and ignore operational plants supported by states. This divergence is unnecessary and benefits just a handful of market participants that primarily invest in natural gas powered plants.

State backlash has been swift. Officials in numerous states with ambitious clean energy policies have denounced FERC's decisions and are seeking alternatives to the RTO capacity auctions. PJM allows utilities to procure capacity outside of its auction, and a few states are exploring whether to abandon the PJM auction and require utilities in their states to procure capacity under yet-to-be-created state programs. New York utility regulators are similarly considering whether to develop a new capacity procurement mechanism. In New England, regulators have intensified their criticisms of the ISO-NE capacity market, but their strong history of multi-state coordination may complicate any single state's ability to develop its own capacity procurement alternative. Moreover, across all three markets participants and stakeholders are recognizing that conflicts with state policies are untenable in the long run. There is no consensus on what new state procurement program or RTO market design should replace or supplement FERC's capacity market rules.

Other FERC decisions harm clean energy. Clean energy advocates and state officials have protested other recent FERC orders that support polluting resources. For example, FERC has approved the New England RTO's bail-out of Boston-area plant powered by liquefied natural gas (LNG) and its various programs aimed at "fuel security" that critics argue unjustly enrich traditional resources. FERC also issued new rules under the Public Utility Regulatory Policies Act of 1978 (PURPA), which requires utilities to buy energy from certain renewable generators. FERC was not required to update its long-standing PURPA rules but chose to do so in a way that is likely to discourage renewable development under the law.

FERC's "neutral" regulations have consequences. The Republican FERC Commissioners and their defenders argue that recent decisions that have adverse consequences for clean energy are not "picking winners and losers" in the market. Rather, through these orders the Republican FERC is endorsing another regulatory cliché — it is "leveling the playing field." FERC's supporters argue that the orders I describe in this section improve the efficiency and competitiveness of the wholesale



markets by removing long-standing advantages unfairly granted to certain resources. Numerous market participants and industry analysts subscribe to this view that FERC's decisions adhere to its established market design objectives.

Recent FERC policies benefit natural gas. A Democratic-led FERC would be able to scrutinize the results of these decisions. After a few years of experience with the storage rule, for example, FERC might be in a position to modify certain aspects should it find remaining obstacles to market access. In the capacity markets, FERC's recent rules double-down on a market that has overwhelmingly attracted investment in new natural gas powered facilities. The market design — billed by the current FERC as resource-neutral — is actually rigged to facilitate financing of natural gas plants. Investors in these plants are increasingly focused on the short-term, looking to sell their assets within a few years of acquisition. FERC might conclude that the basic structure of the capacity market fails to match the industry's long-term needs. Moreover, because neither the energy nor capacity markets value greenhouse gas emissions, investors in new natural gas capacity have a major advantage over clean energy resources.⁴

III. A Clean Energy Agenda for a Democratic-Led FERC, 2021–2025

In this section, I explain how FERC can use its expansive authorities over the power sector's interstate operations and planning to support a clean energy agenda. I focus on three key policy areas: transmission expansion, RTO market regulation,⁵ and PURPA.

Using its authority in these areas, I first describe how FERC could help to accomplish the goals of a CES. In my hypothetical, the CES does not direct FERC to take any action, but Congress's policy choice should lead FERC to ensure that its regulation is compatible with the national mandate.⁶ Second, I suggest how FERC might use its authority in these areas to facilitate clean energy deployment if Congress does not pass a CES. In that situation, state policies, investor and consumer demand, and technological progress will continue to drive clean energy deployment.

1. Transmission Expansion

Clean energy requires transmission. Connecting new wind and solar to the interstate network will require massive investments in transmission infrastructure. Because nearly all transmission expansion is planned and financed through FERC-regulated processes, implementing a national CES will necessarily go through FERC.

FERC has tried to foster competitive transmission development. Ten years ago, FERC addressed key obstacles to interstate transmission development. Its rules aim to break the traditional utility-by-utility approach to transmission planning by forcing utilities to consider regional projects that could

⁴ It's worth noting that the Republican Commissioners have enthusiastically approved natural gas pipelines and LNG terminals pursuant to their authority under the Natural Gas Act. For several years, Commissioners have been split along party lines about how to address greenhouse gas emissions associated with new natural gas infrastructure. A Democratic majority would be able to chart a new course on this issue.

⁵ A [recent paper published by the Institute for Policy Integrity](#) elaborates on some of these proposals.

⁶ The absence of a clear national policy has let FERC take positions that are seemingly at odds with each other. A new clean energy standard would remove that possibility. FERC is a reactive regulator with broad discretion to choose how to respond to industry trends. FERC issues most of its orders in response to utility or RTO proposals. When FERC does mandate changes to market or transmission rules, it typically justifies its action as necessary to adapt to shifting industry conditions.



meet consumer needs more cost-effectively than the sum total of each utility's separate plans for expansion within their retail service territories. A regional project is financed through cost-of-service rates paid by utilities that benefit from the project. By requiring utilities in a region to agree how they would share the costs of any regional projects, FERC hoped to avoid the cost allocation conflicts that had historically hindered regional development. FERC also ordered regional planners (RTOs and multi-utility bodies) to create non-discriminatory development processes that would allow non-utility developers to compete against utilities to build regional projects.

By most accounts, FERC's reforms have failed to unlock regional transmission development. In many parts of the country, utilities prefer developing projects through their own uncompetitive local planning processes rather than through a multi-utility regional process that no single utility can control. Moreover, inter-regional projects, including new lines that could unlock wind and solar resources in the middle of the country, have proven even more difficult to develop under current rules. There is no consensus on what FERC ought to do to motivate utilities and regional planners to develop more large-scale projects.

A CES creates demand for new transmission. Perhaps a national clean energy standard would compel transmission developers and planners to renew their regional planning efforts. Under the current regime, utilities participating in a regional planning process face different renewable energy obligations or none at all. Utilities that do not need or want renewable energy may be reluctant to plan and pay for transmission expansions designed to facilitate new wind and solar. A federal requirement, such as the 100 percent clean energy by 2035 mandate that Biden proposed during the campaign, might eliminate or at least reduce the impact of such disparities among utilities and make it more likely that regional planners could reach consensus among their utility members on projects designed to unlock clean energy resources.

FERC must address bottlenecks in the development process. It also seems plausible that no utility consensus emerges and a lack of transmission development could hinder compliance with the CES. In that case, FERC may need to step in with procedural or substantive reforms to transmission planning processes. FERC could encourage or require governance changes that would result in an entity independent of any utility controlling the regional planning process. Under current rules, regional planning entities may be either beholden to or directly controlled by transmission owning members that are undercutting FERC's pro-competitive policies. FERC might also tweak the project selection process by imposing technical metrics (such as particular cost-benefit analyses) or other requirements that bias regional planners in favor of selecting projects that unlock clean energy resources, including projects that stretch across multiple planning regions. FERC might also review interconnection rules that can require generation developers to pay for expensive transmission upgrades that benefit other entities.

Without a CES, FERC transmission reforms are more urgent. In the absence of a national CES, a Democratic-led FERC could take a similar approach, revisiting both planning processes and interconnection rules. Without a national clean energy mandate, FERC's substantive planning reforms may be even more important. While current rules require regional planners to consider state clean energy policies in the planning process, this mandate has resulted in little development.

Offshore wind needs FERC's attention. State policies envision 30 gigawatts of development over the next decade, which will require significant new transmission development off the East Coast. Transmission rules written for traditional projects are proving to be an obstacle to efficient offshore development. In October 2020, FERC hosted a technical conference to explore whether RTO



interconnection and planning rules can accommodate anticipated offshore wind growth. FERC conferences are often precursors to regulatory action. A Democratic-led FERC should take advantage of the opportunity and issue the first-ever rules aimed at facilitating offshore wind deployment.

FERC should incentivize transmission investment. The Republican-led FERC has not revisited the regional planning process, but it did open a proceeding about transmission rates that could encourage more development. In 2005, Congress instructed FERC to establish incentives for transmission investment, and it provided FERC with broad discretion to specify which categories of projects could benefit from those incentives. In March 2020, FERC proposed to change its 2006 incentive policy, specifying which types of project would be eligible for higher rates. FERC did not propose to include incentives for regional projects that unlock clean energy. Regardless of whether FERC finalizes this new policy prior to January 2021, a Democratic-led FERC could incentivize investments in projects aimed at clean energy or that are regional or interregional in scope.

2. RTO Market Reforms

Current markets do not align with clean energy goals. RTO markets have never priced greenhouse gas emissions or provided any mechanism for utilities to procure clean energy. As discussed in Part II, the Republican-led FERC has exacerbated the disconnect between the clean energy transition and the markets by ordering the three Eastern RTOs to implement capacity market rules that hinder the achievement of state clean energy goals. The gap between new resources coming online and generators procured by RTO capacity markets will widen as state clean energy ambitions escalate. Under existing state policies, utilities will support the deployment of gigawatts of new wind, solar, and storage. Meanwhile, operating under existing rules, the Eastern RTOs will ignore much of this new capacity and sustain the ongoing operation of gigawatts of greenhouse gas-emitting resources. A Democratic-led FERC would likely undo that damage and attempt to align the RTO markets with the clean energy transition. FERC's solutions could range from an energy market price on greenhouse gas emissions to new capacity procurement mechanisms.

FERC should reform markets to account for a CES. If Congress follows the well-established model adopted by thirty states, its CES will require utilities to purchase renewable energy credits or similar instruments that signify a quantity of electricity was generated by a clean energy resource. In several recent FERC proceedings, opponents of these policies have argued that energy credit sales provide renewable resources with an unfair advantage over traditional merchant generators that rely exclusively on wholesale energy and capacity sales to stay afloat. FERC's recent capacity market orders agree with merchant generators that out-of-market REC revenue "distorts" prices that the wholesale markets would otherwise generate if all participants only earned money from wholesale sales. FERC's response has been to obstruct capacity market participation of clean energy generators earning out-of-market revenue pursuant to state policies.

Carbon pricing is consistent with a CES. A Democratic-led FERC would likely take a different approach to out-of-market revenue, regardless of whether Congress enacts a CES. Pricing greenhouse gas emissions in RTO markets is one option. In October 2020, FERC issued a proposed policy statement that would encourage RTOs to implement carbon prices set by states. If Congress passes a CES, FERC may be more likely to go further and declare that existing energy market rules are unjust and unreasonable because they do not include a carbon price. While a carbon price would not be a CES compliance mechanism — utilities would presumably have to purchase energy credits for the CES — it would raise costs for polluting generators, harmonize RTO generator dispatch with



Congress's clean energy goal, and reward zero-emission generators with higher energy prices. Higher energy market revenues would likely reduce the price that generators are willing to sell CES compliance credits. Pricing emissions while simultaneously reducing out-of-market revenues achieves widely embraced market design goals.

FERC might also instruct RTOs facilitate compliance with the CES. FERC might ask RTOs for technical assistance in tracking energy credit generation and trading, or it could request they develop proposals for market-based compliance mechanisms. Centralized regional procurement would presumably be more cost-effective compared to each utility purchasing energy credits directly from clean energy generators.

Without a CES, FERC should prioritize Eastern capacity auctions. If Congress does not pass clean energy legislation, a Democratic-led FERC might focus on de-escalating tensions between state policies and RTO capacity markets. Pricing carbon emissions in the energy market could be part of the solution. Because capacity auction prices typically vary inversely with energy prices, higher energy prices due to a carbon price would likely lead to lower capacity prices. Clean energy generators would benefit from higher energy prices and the lower capacity prices would lessen the impact of the rules put in place by the current Republican-led FERC. FERC might impose a carbon price only on the Eastern RTOs that also operate capacity auctions, or it might impose a price in all energy markets to ensure that they accurately reflect the industry's changing resource mix.

A Democratic-led FERC might also address the capacity market rules head on. It seems unlikely to me that FERC would simply reverse the recent orders and revert to the markets' pre-2018 rules. Instead, I suspect that FERC would seek to impose rules that allow market participants to opt-out of procurement requirements or provide mechanisms for procuring capacity that meets states' clean energy standards. In 2018, FERC had proposed to allow utilities to reduce their purchases from the RTO by the amount of capacity they have under contract. For example, a utility with 100 megawatts of clean energy capacity under contract pursuant to a state policy could reduce its procurement from the RTO by 100 megawatts. FERC abandoned this proposal, but a Democratic-led FERC might revive it. Alternatively, FERC might look to build on proposals that market participants have already developed as part of regional discussions about harmonizing RTO markets with state clean energy goals. Several proposals include mechanisms for utilities to procure renewable capacity, energy credits, or other products that meet state clean energy standards.

A clean energy agenda must be comprehensive. These big picture reforms aimed directly at clean energy deployment could be reinforced by dozens of FERC orders on technical market rules. These orders might be about a range of market minutia, such as RTO implementation of FERC's storage and distributed resources rules and pricing of grid services needed to maintain reliability on a system with more renewables. FERC might also review proposals from utilities in non-RTO regions for enhanced coordination. In the West, numerous utilities currently participate in the "Energy Imbalance Market," which enables short-term trading that can help the region keep the system in balance as renewable penetration increases. Utilities in the Southeast have indicated they are working on their own short-term trading mechanism. In general, FERC unanimously decides these types of technical issues in response to filed proposals. Nonetheless, a Democratic-led FERC might choose to prioritize issues that are salient for clean energy and be more responsive to comments filed by clean energy advocates.



3. PURPA

PURPA is a renewable mandate. In 1978, Congress created a special class of generators that includes combined heat and power facilities and renewable resources smaller than 80 megawatts and tasked FERC with issuing rules to encourage their development. In 1980, consistent with Congress' parameters in PURPA, FERC issued rules that established minimum standards for state-by-state implementation. The rules require utilities to buy energy from so-called Qualifying Facilities and pay them a rate equal to what the utility would otherwise pay to generate the energy itself or procure it from third parties. Since 1980, FERC's rules have required utilities to offer Qualifying Facilities long-term contracts with fixed energy prices. This rule has been critical for financing new generators.

FERC just weakened PURPA. In June 2020, FERC repealed the long-term contract requirement and made several technical changes to its rules that the solar energy trade association argues will "discourage the development of Qualifying Facilities in contravention of the statute's mandate." While state regulators will determine how FERC's new standards are implemented, it seems likely that FERC's rules will reduce the amount of renewable energy developed under PURPA. The statute has played a significant role in renewable energy deployment in non-RTO regions.

A national CES would diminish the relevance of PURPA. A CES would presumably be a more effective mechanism for driving clean energy investment and might obviate the need for a Democratic-led FERC to revisit the recently issued rules.

Without a CES, PURPA could be a powerful clean energy deployment mechanism. FERC might look to undo the new rules and harness PURPA's mandate to advance competitive renewable energy development. A proposal filed during FERC's rulemaking process links a utility's state-regulated generation planning process to its purchase obligations under PURPA. The proposal aims to induce vertically integrated utilities to meet their anticipated renewable energy demand through competitive solicitations rather than by simply building new renewable facilities themselves. Under the proposal, participating utilities would be excused from their obligations to purchase energy from all new Qualifying Facilities. Renewable energy developers would benefit from the competitive solicitations and avoid drawn-out state-level proceedings about PURPA rates that typically pit them against utilities. A Democratic-led FERC could revisit this market-based approach to renewable energy development under PURPA.

Conclusion

The clean energy transition inevitably runs through FERC. FERC's broad authority over interstate transmission and energy markets influences the mix of resources providing power and directly affects the sector's greenhouse gas emissions. Because it operates under flexible legal standards, FERC has broad discretion to shape the industry's evolution. Regardless of whether Congress passes clean energy legislation, the Democratic-led FERC should choose to wield its authority to support a clean energy agenda. FERC should ensure that transmission networks support clean energy deployment and market rules are aligned with a rapid clean energy transition.