

**UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION**

Building the Future Through Electric) Docket No. RM21-17-000
Regional Transmission Planning and Cost)
Allocation and Generator Interconnection)

**REPLY COMMENTS OF THE INSTITUTE FOR POLICY
INTEGRITY AT NEW YORK UNIVERSITY SCHOOL OF LAW**

Pursuant to the Federal Energy Regulatory Commission’s (FERC or the Commission) July 15, 2021 Advanced Notice of Proposed Rulemaking (ANOPR),¹ *Building for the Future Through Electric Regional Transmission Planning and Cost Allocation and Generator Interconnection*, the Institute for Policy Integrity at New York University School of Law (Policy Integrity) respectfully submits these reply comments.² Policy Integrity is a non-partisan think tank dedicated to improving the quality of government decisionmaking through advocacy and scholarship in the fields of administrative law, economics, and public policy. Policy Integrity’s staff has deep expertise in cost-benefit analysis and regulatory economics, and has participated in numerous proceedings before the Commission, regional transmission organizations and independent system operators (RTOs/ISOs), and state public utility commissions regarding the socially efficient pricing of energy resources—including transmission resources.

¹ *Building for the Future Through Electric Regional Transmission Planning and Cost Allocation and Generator Interconnection*, 176 FERC ¶ 61,024 (2021) [hereinafter ANOPR]; see also *Notice of Extension of Time*, Docket No. RM21-17 (Sept. 3, 2021) (extending deadline for reply comments).

² These comments do not necessarily reflect the views of NYU School of Law, if any.

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I. Introduction

Policy Integrity’s reply comments respond to initial comments that seek to dissuade the Commission from using its authority under the Federal Power Act (FPA) to define some of the benefits of transmission capacity and to guide the allocation of transmission project costs among beneficiaries. When it comes to transmission, FERC’s authority is at its apex: the Commission has more authority over this aspect of the power sector than it does over wholesale sales.³

After briefly characterizing the Commission’s authority over core features of the transmission development process in Part II, these comments address two overarching points. In Part III, we rebut suggestions from other commenters that the Commission’s authority to designate particular effects as relevant to transmission planning and project selection is limited to effects that bear upon the justness and reasonableness of rates. So long as the Commission can substantiate a nexus between a beneficial effect and rates, it can prescribe conforming treatment

³ S.C. Pub. Serv. Auth. v. Fed. Energy Regul. Comm’n, 762 F.3d 41, 63 (D.C. Cir. 2014).

of that effect by entities subject to its rules and decisions. It follows that FERC may require planning entities to consider a uniform but not necessarily comprehensive set of minimum inputs and cognizable effects for the purposes of transmission planning and project selection, including emissions reductions and enhanced resilience.

In Part IV, these comments respond to contentions that the federal courts would reject FERC's expert determination that some project costs should be allocated to all grid users. Courts have made clear that the Commission has the legal authority and duty to spread at least some of the costs of transmission capacity expansions to all grid users in a region where all users can be shown to benefit. Transmission expansion can provide real benefits in the form of emissions reductions and enhanced resilience. These benefits are not speculative; they can and should be accounted for in cost allocation methodologies. Further, as other commenters have noted, where project benefits are diffuse, the cost-causation and beneficiary pays principles should prevent FERC from allocating the full burden of paying for those benefits to a single party—diffuse benefits means diffuse beneficiaries. And yet, as the Commission's ANOPR notes, the existing cost allocation process has consistently allowed parties to reap benefits from transmission without paying their fair share.⁴ This pattern, in addition to violating a clear legal and economic principle, can stymie project development by allowing costs to fall disproportionately and unpredictably on some beneficiaries but not on others. For these reasons, the failure to allocate the costs of projects where the benefits are clear but diffuse makes current allocation methodologies unjust and unreasonable.

⁴ ANOPR, *supra* note 1, at P 86.

II. The Commission Has Broad Discretion to Prescribe a Baseline of Benefits that Planning Entities Should Consider in Planning, Project Selection, and Cost Allocation

The FPA provides the Commission with ample discretion to consider all of the benefits that transmission expansion can provide and to direct the allocation of the associated costs as widely as is justified by sound reasoning and substantial evidence. Yet some commenters attempt to read the FPA, the Natural Gas Act (NGA), and federal case law, as imposing categorical limits on the Commission’s authority over transmission planning, project selection, and cost allocation. Contrary to those commenters’ cramped readings of the case law, courts have not prohibited FERC from considering benefits it determines are relevant to transmission planning and project selection, so long as the considered benefits affect the justness and reasonableness of FERC-jurisdictional rates.⁵ As for the limits on the Commission’s authority over cost allocation, courts have only required that the Commission adequately explain its reasoning and substantiate its decision with evidence.⁶ In sum, the courts have not crafted categories of benefits or approaches to cost allocation that somehow lie beyond what the Commission may authorize or even prescribe.

Planning and project selection. The Commission has broad discretion over which benefits planning entities should consider in planning and project selection. Echoing dictum in the Supreme Court’s *New York v. FERC* decision,⁷ the U.S. Court of Appeals for the D.C. Circuit

⁵ *El Paso Natural Gas Co. v. Fed. Energy Regul. Comm’n*, 966 F.3d 842, 858 (D.C. Cir. 2020) (noting that the question of cost allocation involves “both technical understanding and policy judgment” and so the court’s role is limited to “ensur[ing] that [FERC] engaged in reasoned decisionmaking” (alteration in original)).

⁶ *See, e.g., Ill. Comm. Comm’n v. Fed. Energy Regul. Comm’n*, 576 F.3d 477 (7th Cir. 2009); *Ill. Comm. Comm’n v. Fed. Energy Regul. Comm’n*, 766 F.3d 556, 561–62 (7th Cir. 2014); *Algonquin Gas Transmission Co. v. Fed. Energy Regul. Comm’n*, 948 F.2d 1305, 1312–13 (D.C. Cir. 1991). These cases are discussed in detail below.

⁷ *New York v. Fed. Energy Regul. Comm’n*, 535 U.S. 1, 17 (2002) (“There is no language in the statute limiting FERC’s *transmission* jurisdiction to the wholesale market, although the statute does limit FERC’s *sale* jurisdiction to that at wholesale.”).

said in *South Carolina Public Service Authority v. FERC* that “the Commission possesses greater authority over electricity transmission than it does over sales.”⁸ And, in *National Ass’n for the Advancement of Colored People (NAACP) v. Federal Power Commission*, the Supreme Court made clear that the touchstone of the Commission’s authority under the FPA or NGA to consider or address something is the relationship of that thing to FERC-jurisdictional rates.⁹ But some commenters fixate on language in the *NAACP* holding that, taken out of context, gives the impression that the Supreme Court determined that employment discrimination was simply beyond the bounds of what Congress had empowered the Commission to address.¹⁰ It is true that the Court said the Commission does not have a “broad license to promote the general public welfare.”¹¹ But the Court, in that same case, *also* said that “the Commission has statutory authority to consider the consequences of employment discrimination in performing its mandated regulatory functions,”¹² and to act on any issues that “are directly related to the Commission’s establishment of just and reasonable rates in the public interest.”¹³ So, *NAACP* does not stand for the proposition that the Commission must ignore certain areas of policy. Instead, it gives the Commission license to act wherever it can demonstrate that rates would otherwise be unjust and unreasonable.

Cost allocation. The Commission likewise has broad discretion in determining which benefits can be considered in cost allocation. When courts have rejected FERC’s decisions about

⁸ *S.C. Pub. Serv. Auth.*, 762 F.3d at 63.

⁹ *NAACP v. Fed. Power Comm’n*, 425 U.S. 662, 671 (1976).

¹⁰ See Comments of S. Co. Servs., Inc. at 35, *Building for the Future Through Electric Regional Transmission Planning and Cost Allocation and Generator Interconnection*, Docket No. RM21-17 (Oct. 12, 2021) [hereinafter Southern Co. Comments]; Comments of the Large Pub. Power Council at 19, *Building for the Future Through Electric Regional Transmission Planning and Cost Allocation and Generator Interconnection*, Docket No. RM21-17 (Oct. 12, 2021) [hereinafter LPPC Comments].

¹¹ *NAACP*, 425 U.S. at 669.

¹² *Id.* at 665 n.2.

¹³ *Id.* at 671.

how to allocate costs in light of the distribution of benefits, they have faulted the Commission for failing to fully explain and substantiate its decisions, but not for overstepping the scope of its substantive authority under the FPA or NGA.¹⁴ For instance, in *Algonquin*, there was no question about whether the NGA allowed the Commission to incorporate facility costs into a “rolled in” rate structure.¹⁵ The court’s rejection of the Commission’s decision in that case focused on what the court determined to be impermissibly conclusory reasoning.¹⁶ The court expressly recognized that where benefits accrue system-wide, the Commission can, in principle, justify a broad socializing of costs.¹⁷ Indeed, the court affirmed the Commission’s standard for determining how widely to allocate costs—that roll in can be warranted when “the quality of the system’s services is enhanced by the presence of the facilities in question”¹⁸—and rejected the petitioners’ suggested narrowing of that standard.¹⁹ Thus, while Southern Company is correct that *Algonquin* does not permit an allocation of costs based on “speculation,”²⁰ *Algonquin* does not prevent the

¹⁴ See Ill. Comm. Comm’n v. Fed. Energy Regul. Comm’n, 576 F.3d 470, 474–75 (7th Cir. 2009) (agreeing with previous case law recognizing that feasibility is a concern in rate making, but that a “cursory response simply will not do”); *id.* at 477 (recognizing that there will be some benefit but taking issue with FERC’s analysis in determining cost allocation); Ill. Comm. Comm’n v. Fed. Energy Regul. Comm’n, 766 F.3d 556, 561–62 (7th Cir. 2014) (comparing record evidence and analysis in case at hand to that affirmed in *Illinois Commerce Commission v. Federal Energy Regulatory Commission*, 721 F.3d 764 (7th Cir. 2013), noting that for MISO’s allocation the record included evidence of and a determination regarding the even spread of benefits, while for PJM’s allocation, FERC “made no such determination . . . ; as a practical matter, all it did was express a hope that things might turn out that way”).

¹⁵ *Algonquin Gas Transmission Co. v. Fed. Energy Regul. Comm’n*, 948 F.2d 1305, 1313 (D.C. Cir. 1991) (“[T]he question of how to allocate costs among a pipeline’s customers is . . . one on which the Commission enjoys broad discretion.”).

¹⁶ *Id.* (“[I]t became apparent that the Commission’s position is that system-wide benefits exist primarily because the Commission says they do. An agency’s unsupported assertion does not amount to substantial evidence.”).

¹⁷ *Id.* at 1312 (“Where new facilities increase a pipeline’s transmission capacity or the reliability of its service, they may benefit all customers to the extent necessary to justify a cost roll in.”).

¹⁸ *Id.* at 1313. Further, the Commission’s and the courts’ test for whether a rolled in rate structure is warranted requires a showing of system-wide benefits. See *Battle Creek Co. v. Fed. Power Comm’n*, 281 F.2d 42 (D.C. Cir. 1960); see also *Complex Consol. Edison Co. of N.Y. v. Fed. Energy Regul. Comm’n*, 165 F.3d 992, 995 n.3 (D.C. Cir. 1999). That is, system-wide benefits necessarily could justify a broader socializing of costs among pipeline customers.

¹⁹ *Algonquin*, 948 F.2d at 1313.

²⁰ Southern Co. Comments, *supra* note 10, at 20 (citing *Algonquin*, 948 F.2d at 1312–14).

Commission from allocating the costs of transmission projects widely where reasoning and evidence supports the decision.

In sum, courts have affirmed FERC’s broad authority to remedy unjust and unreasonable rates, rules, and practices with respect to transmission planning, project selection, and cost allocation. Further, where the Commission identifies a need for remedial action to make rates just and reasonable, Section 206 of the FPA *requires* the Commission to undertake such action.²¹ Thus, should the Commission determine that present approaches to transmission planning, project selection, and cost allocation result in unjust and unreasonable rates, it would be obliged to act, and to explain and substantiate the measures it decides to undertake.²²

III. The Commission Should Require Transmission Planners to Consider a Baseline Set of Benefits

The transmission development process presently relies on models and analytical approaches whose inputs, methodologies, and outputs are diverse across transmission planning categories (reliability, economics, and public policy) and across geographically defined administrative regions. Even if all approaches taken were equally technically sound, this diversity would still create problems in selecting the best projects and allocating project costs

²¹ 16 U.S.C. § 824e.

²² Additionally, as the Solar Energy Industry Association notes, Comments of the Solar Energy Indus. Ass’n at 9–10, *Building for the Future Through Electric Regional Transmission Planning and Cost Allocation and Generator Interconnection*, Docket No. RM21-17 (Oct. 12, 2021) [hereinafter SEIA Comments], Section 309 has been interpreted to grant FERC broad authority to “use means of regulation not spelled out in detail, provided the agency’s action conforms with the purposes and policies of Congress and does not contravene any terms of the Act.” *Niagara Mohawk Power Corp. v. Fed. Power Comm’n*, 379 F.2d 153, 158 (D.C. Cir. 1967); *see also* *Verso Corp. v. Fed. Energy Regul. Comm’n*, 898 F.3d 1, 10 (D.C. Cir. 2018) (“Section 309 accordingly permits FERC to advance remedies not expressly provided by the FPA, as long as they are consistent with the Act.”); *TNA Merchant Projects v. Fed. Energy Regul. Comm’n*, 857 F.3d 354, 359 (D.C. Cir. 2017) (“Beyond strictures of this sort [that is, its statutory purposes under 201 etc.], that plainly limit FERC’s authority, section 309 affords the agency broad authority to ‘remedy its errors’ and correct unjust situations.”). FERC’s discretion is “if anything, at zenith when the actions assailed relate primarily . . . to the fashioning of policies, remedies and sanctions . . . in order to arrive at maximum effectuation of Congressional objectives.” *Niagara Mohawk Power*, 898 F.3d at 159. FERC can use this authority to craft remedies necessitated by its findings under Section 206.

because the methodological differences make it challenging to compare projects that percolate up through different administrative processes and in different regions. Further, this lack of uniformity provides fodder for potential disputes over the allocation of costs of regional and interregional projects that span administrative processes and boundaries, potentially chilling efforts to develop such projects and encumbering their evaluation. This is particularly problematic because, while generally more expensive, in many instances these projects could perform more efficiently and cost-effectively than local ones.²³ The Commission should thus recognize that the present multiplicity of analytical approaches for planning and project selection is an impediment to rates that are just, reasonable, and not unduly discriminatory or preferential and, as a remedy, impose greater uniformity on transmission planning and project selection.

Such a remedy would not involve eliminating *all* regional flexibility, which is, to an extent, valuable to retain.²⁴ Establishing national parameters for modeling and planning, and designating a given set of effects as cognizable need not entail the complete specification of all aspects of planning or the characterization of all effects for the purpose of comparing and selecting among projects or project portfolios. Thus, remedying the problem of analytical diversity with a common baseline can be compatible with calls for allowing regions to reflect their “specific and unique needs” in project planning.²⁵ The Joint Federal-State Task Force on

²³ JOHANNES PFEIFENBERGER ET AL., BRATTLE GRP., TRANSMISSION PLANNING FOR THE 21ST CENTURY: PROVEN PRACTICES THAT INCREASE VALUE AND REDUCE COSTS 68 (2021).

²⁴ See Order on Rehearing and Clarification, *Transmission Planning and Cost Allocation by Transmission Owning and Operating Public Utilities*, Order No. 1000-A, 139 FERC ¶ 61,132, at P 266 (2012) (“[P]ublic utility transmission providers, in consultation with stakeholders, have the flexibility to ensure that their respective regional transmission planning process is designed to accommodate the unique needs of that particular region.”).

²⁵ Comments of Duke Energy Corp. at 3, 7, *Building for the Future Through Electric Regional Transmission Planning and Cost Allocation and Generator Interconnection*, Docket No. RM21-17 (Oct. 12, 2021); see also Comments of the Cal. Indep. Sys. Operator Corp. on Advanced Notice of Proposed Rulemaking at 41, 67–68, *Building for the Future Through Electric Regional Transmission Planning and Cost Allocation and Generator Interconnection*, Docket No. RM21-17 (Oct. 12, 2021); Initial Comments of the N.Y. State Pub. Serv. Comm’n & N.Y. State Energy Rsch. & Dev. Auth. at 5–9, *Building for the Future Through Electric Regional Transmission Planning and Cost Allocation and Generator Interconnection*, Docket No. RM21-17 (Oct. 12, 2021).

Electric Transmission is one potential resource to draw on for the purpose of identifying a baseline of parameters and a set of benefits that should inform planning and project selection nationwide. Other potential resources include the intermediate and final outputs of New York State’s transmission development efforts, which entail close collaboration between the New York Independent System Operator, transmission-owning utilities, the state’s Public Service Commission, and the New York State Energy Research and Development Authority.²⁶ Drawing on these sources and others highlighted in the initial round of comments in this proceeding—and on the example of the European Network of Transmission System Operators for Electricity, which furnishes its 42 member utilities with a unitary cost-benefit analysis even though they are located across 35 countries²⁷—the Commission can readily identify parameters and benefits that are, arguably, universal in their applicability to transmission planning across the United States.

A. Benefits Prescribed by the Commission for Transmission Planners’ Consideration Can Include Societal Benefits

The scope of benefits considered by transmission planners has material implications for rates. That is, there is a causal nexus between the justness and reasonableness of rates and the consideration of—or unwarranted failure to consider—particular benefits in project planning and selection. From this it follows that if the Commission can identify a causal nexus between rates and the consideration of one or more specific types of benefit in the transmission planning context, then it has authority under the FPA, as interpreted by the Supreme Court, to prescribe analytically appropriate consideration of those benefits.²⁸

²⁶ *E.g.*, Order on Local Transmission and Distribution Planning Process and Phase 2 Project Proposals, N.Y. Pub. Serv. Comm’n Case 20-E-0197 (issued and effective Sept. 9, 2021); Order on Phase 1 Local Transmission and Distribution Project Proposals (issued and effective Feb. 11, 2021); JOHANNES PFEIFENBERGER ET AL., INITIAL REPORT ON THE NEW YORK POWER GRID STUDY (2021) (prepared for New York State Public Service Commission).

²⁷ ENTSO-E, 2ND ENTSO-E GUIDELINE FOR COST BENEFIT ANALYSIS OF GRID DEVELOPMENT PROJECTS (2018).

²⁸ NAACP v. Fed. Power Comm’n, 425 U.S. 662, 671 (1976).

This rule applies equally to the benefits of transmission projects that might accrue narrowly to a small set of beneficiaries, such as avoided congestion costs in a well-defined load pocket, and to benefits that accrue widely and in a way makes it difficult to specify exactly how much value flows to one beneficiary or another. The resilience attribute of interregional transmission capacity is perhaps the clearest example of this latter sort of benefits, because the costs avoided during severe disruption by importing power across regional boundaries clearly accrue region-wide but in ways that are difficult to measure and impossible to predict with specificity.²⁹

A more contentious example of a societal benefit that the Commission can direct transmission planners to consider is the greenhouse gas emissions avoided by clean generation resources. But the Commission does not need to engage in environmental regulation to recognize this as a benefit of transmission for planning and project selection purposes.³⁰ As Policy Integrity has explained in relation to wholesale market carbon pricing, strong arguments support the Commission addressing the market failure of climate change by treating greenhouse gas emissions avoidance as an economic benefit.³¹ But, even if the Commission opts not to take that

²⁹ See generally MICHAEL GOGGIN, GRID STRATEGIES, TRANSMISSION MAKES THE POWER SYSTEM RESILIENT TO EXTREME WEATHER (2021) (estimating foregone resilience value of transmission in the context of multiple disruptive events).

³⁰ See Southern Co. Comments, *supra* note 10, at 20 (noting FERC is “an economic (not environmental) regulator” and thus cannot consider emissions reductions benefits); Joint Comments of Consumer Organizations at 11, *Building for the Future Through Electric Regional Transmission Planning and Cost Allocation and Generator Interconnection*, Docket No. RM21-17 (Oct. 12, 2021) (“The Commission is not a profit-facilitator for corporations, nor is it an environmental regulator or legislator.”); Comments of the La. Pub. Serv. Comm’n at 6, *Building for the Future Through Electric Regional Transmission Planning and Cost Allocation and Generator Interconnection*, Docket No. RM21-17 (Oct. 12, 2021) [hereinafter Louisiana PSC Comments] (discussing Commission precedent that it is not an environmental regulator). Cf. *Constellation Mystic Power*, 164 FERC ¶ 61,022, at P 37 (2018) (stating that “[w]hether individual components of a cost-of-service rate, including fuel-related costs, are recoverable turns on whether they are just and reasonable, not whether the Commission has regulatory authority over all aspects of those rate components,” and citing *Grand Council of the Crees v. Fed. Energy Regul. Comm’n*, 198 F.3d 950 (D.C. Cir. 2000)).

³¹ See, e.g., MATT BUTNER ET AL., INST. FOR POL’Y INTEGRITY, CARBON PRICING IN WHOLESALE ELECTRICITY MARKETS: AN ECONOMIC AND LEGAL GUIDE (2020); Cf. Comments of the U.S. Dep’t of Energy to Advanced Notice of Proposed Rulemaking at 16–17, *Building for the Future Through Electric Regional Transmission*

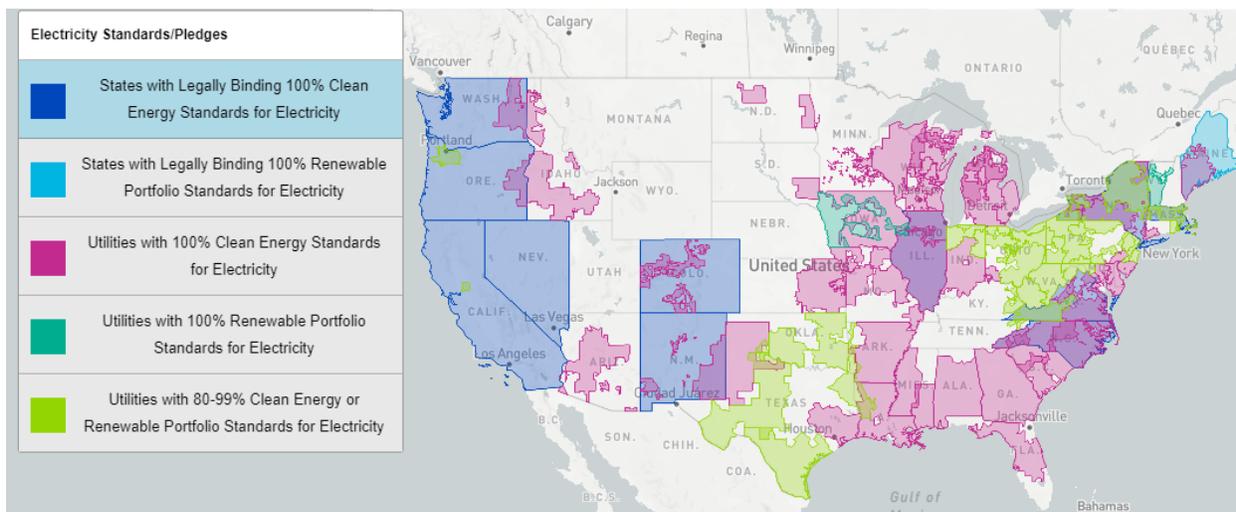
approach to emissions, it still has ample grounds to treat emissions avoidance as a cognizable consideration for the purposes of transmission planning and project selection. Directives to avoid greenhouse gas emissions are a commonplace feature of the economic and policy environment in which transmission planning is being undertaken. Those directives are rooted in state law and local laws and policies, utility commitments, and corporate procurements and pledges.³² These private and public policies have been accumulating and that accumulation is accelerating.³³ Figure 1 maps state and utility clean energy commitments, but omits the footprint created by municipal policies and corporate clean energy procurements. It illustrates how multiple, diverse, and often overlapping commitments make for a patchwork policy quilt that covers the clear majority of loads served by the electric grid.

Planning and Cost Allocation and Generator Interconnection, Docket No. RM21-17 (Oct. 12, 2021) [hereinafter DOE Comments] (“[W]here climate and energy goals reflect a response to market inefficiencies (such as the failure to address externalities that impede welfare maximizing transactions and the insufficient provision of public goods such as reliability and resilience), FERC should enable transmission planning and cost allocation to address the market inefficiency . . .”).

³² Comments of Advanced Energy Economy at 8–10, *Building for the Future Through Electric Regional Transmission Planning and Cost Allocation and Generator Interconnection*, Docket No. RM21-17 (Oct. 12, 2021).

³³ For details on local and state goals and mandates, see *100 Percent Renewable Targets*, ENERGY SAGE, <https://perma.cc/9X9W-TUBJ> (May 2, 2020) and Sophia Ptacek, *Race to 100% Clean*, NAT. RES. DEF. COUNCIL (Dec. 2, 2020), <https://perma.cc/255V-A7BV> (also mapping utility and corporate commitments). The Smart Electric Power Alliance finds that 81% of customer accounts in the United States are served by a utility with a carbon emissions-reduction target or by a utility whose parent company has adopted such a target; 69% of accounts are served by a utility with a 100% carbon emissions-reduction target or a utility whose parent company has adopted such a target. *Utilities’ Path to a Carbon-Free Energy System*, SMART ELEC. POWER ALLIANCE, <https://perma.cc/8AAP-Z53J> (last visited Nov. 14, 2021). Corporate clean energy continues to grow globally, with U.S. buyers leading the market. See, e.g., *Corporate Clean Energy Buying Grew 18%, Despite Mountain of Adversity*, BLOOMBERGNEF (Jan. 26, 2021), <https://perma.cc/CH9G-MA96> (“Companies announced 11.9GW of corporate PPAs in the U.S. in 2020.”). The Clean Energy Buyers Association includes nearly 300 companies, including 77 from the Fortune 500 list, all of whom have committed to achieving a 90% carbon-free U.S. electricity system by 2030. CLEAN ENERGY BUYERS ASS’N, <https://cebuyers.org/> (last visited Nov. 24, 2021).

Figure 1. Clean Electricity Standards and Other Commitments.³⁴



Consequently, the need to consider emissions impacts in transmission planning is not a policy judgment but a recognition of an empirical fact. Indeed, failing to consider this feature of the landscape would ensure that models misrepresent the reality they are meant to translate into an accurate rendering of transmission needs and efficient and cost-effective solutions. It is not only proper but necessary for the Commission to direct transmission planners to incorporate considerations of emissions reductions.

Finally, some commenters seek to mischaracterize the consideration of greenhouse gas emissions or resilience benefits as beyond the scope of what the Commission can direct transmission planners to consider, citing *NAACP*.³⁵ However, as explained above, these commenters wholly ignore that the Supreme Court concluded the Commission *does* have authority to address a broad range of issues so long as they “are directly related to the

³⁴ *U.S. Decarbonization Commitments*, CLEAN AIR TASK FORCE, <https://stephenjlee.github.io/catf-decarb-commitments/#/geomap> (last visited Nov. 11, 2021).

³⁵ See, e.g., Southern Co. Comments, *supra* note 10, at 35; LPPC Comments, *supra* note 10, at 19.

Commission’s establishment of just and reasonable rates in the public interest.”³⁶ Because resilience and emissions-focused clean energy policies both relate to rates, *NAACP* empowers FERC, rather than limiting it as these commenters mistakenly argue.

B. The Commission Should Also Prescribe Consideration of the Distributional Outcomes of Transmission Planning and Project Selection

In their initial comments, a number of commenters suggested that planning entities should be required to consider the impact of transmission policy and projects on disadvantaged communities, including environmental justice communities.³⁷ Some commenters contend specifically that “avoidance of impacts to disadvantaged communities should be factored into the choice of solutions”³⁸ and that cost-benefit analyses should consider how non-wire alternatives might, relative to traditional transmission solutions, reduced impacts on environmental justice communities.³⁹ These commenters essentially urge FERC to direct planning entities to account for the distributional consequences of projects or portfolios of projects selected.

³⁶ *NAACP v. Fed. Power Comm’n*, 425 U.S. 662, 671 (1976); *see also id.* at 665 n.2 (“the Commission has statutory authority to consider the consequences of employment discrimination in performing its mandated regulatory functions.”).

³⁷ *See* Comments of the City of N.Y. at 15, *Building for the Future Through Electric Regional Transmission Planning and Cost Allocation and Generator Interconnection*, Docket No. RM21-17 (Oct. 12, 2021) [hereinafter NYC Comments] (arguing that “benefits accruing to disadvantaged communities should be maximized”); *see also id.* at 4 (“[T]he planning process should integrate equity concerns.”); Initial Comments of Mass. Attorney General Maura Healy at 2, *Building for the Future Through Electric Regional Transmission Planning and Cost Allocation and Generator Interconnection*, Docket No. RM21-17 (Oct. 12, 2021) (arguing the commission should ensure “that all transmission planning reforms address existing environmental and energy inequities and deliver environmental justice”); Comments of the Off. of the People’s Counsel for D.C. on the Advanced Notice of Proposed Rulemaking at 3, *Building for the Future Through Electric Regional Transmission Planning and Cost Allocation and Generator Interconnection*, Docket No. RM21-17 (Oct. 12, 2021) (“Among those drivers is a need for the Commission’s policies to consider and account for the fact that marginalized communities have borne the brunt of pollution and environmental harm from energy production.”).

³⁸ NYC Comments, *supra* note 37, at 15.

³⁹ Comments of Am. Clean Power Ass’n & U.S. Energy Storage Ass’n on Advance Notice of Proposed Rulemaking at 67, *Building for the Future Through Electric Regional Transmission Planning and Cost Allocation and Generator Interconnection*, Docket No. RM21-17 (Oct. 12, 2021) (arguing the Commission should require planning entities to reevaluate benefits considered in cost/benefit analysis, noting that “environmental impact, physical footprint and environmental justice concerns are considerably smaller” for non-wires alternatives like storage projects compared to traditional wires solutions); *see also* Comments of Vistra Corp. at 9, *Building for the Future Through Electric*

A cost-benefit analysis should consider the benefits and costs that can be monetized as well as those that are not easily quantifiable, like improved environmental justice outcomes. Decisionmakers regularly consider other non-monetized or unquantified benefits and use their judgement and discretion to determine how those benefits should be weighed and factor into decisionmaking.⁴⁰ The Commission should encourage transmission planners to account for the distributional outcomes of proposed transmission projects (and project portfolios) and incorporate the results into the transmission planning and project selection processes.⁴¹ Policy Integrity's recent report, *Making Regulations Fair*, identifies the following two possible approaches for conducting a distributional analysis that build upon a disaggregated cost-benefit analysis to incorporate environmental justice considerations into transmission project selection:⁴²

1. *Qualitatively assessing the desirability of distributional outcomes from a disaggregated cost-benefit analysis.* Under this approach, FERC would direct planning entities to use a qualitative assessment in determining whether and how the desirability of possible distributional outcomes should affect its selection of projects. Coupled with disaggregated tallies of costs and benefits, a qualitative assessment would give the planning entities an opportunity to consider how costs and benefits are distributed and explain why it is acceptable to select a project considering this distribution of beneficial and adverse impacts. In other words, planning

Regional Transmission Planning and Cost Allocation and Generator Interconnection, Docket No. RM21-17 (Oct. 12, 2021) (noting environmental justice considerations also underscore the advantages of reusing existing sites).

⁴⁰ See JACK LIENKE ET AL., INST. FOR POL'Y INTEGRITY, *MAKING REGULATIONS FAIR: HOW COST-BENEFIT ANALYSIS CAN PROMOTE EQUITY AND ADVANCE ENVIRONMENTAL JUSTICE* 14 (2021) [hereinafter *MAKING REGULATIONS FAIR*] (providing examples).

⁴¹ See *id.* at 6–9; see also Richard L. Revesz & Samantha P. Yi, *Distributional Consequences and Regulatory Analysis*, 52 ENV'T L. (forthcoming 2022) (manuscript at 26–29), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3927277.

⁴² A disaggregated analysis would allow planning entities to consider how the costs and benefits are distributed among discrete demographic groups and understand whether a project or portfolio of projects is net-beneficial or net-costly for a particular group. This can clarify the magnitude of distributional consequences and reveal information about whether one project or portfolio has more desirable environmental justice outcomes.

entities could use distributional outcomes to justify selection of a project or portfolio by explaining why “the better distributional consequence is sufficiently compelling to overcome the loss in quantified net benefits.”⁴³ Where one alternative has higher net benefits in only monetary terms but another alternative (which is also net-beneficial) has better distributional attributes because more benefits (or less harms) accrue to disadvantaged populations, a planning entity would be justified in selecting the latter.⁴⁴

2. Using quantitative tools that enable planners to assess the desirability of distributional outcomes. A quantitative assessment would involve using a set of standardized metrics for scoring policies’ distributional outcomes. This kind of approach includes use of inequality metrics and social welfare functions that could enable the planning entity to “score,” or assess the desirability of, different distributional outcomes. Planners might retain discretion as to how to use those scores when selecting among project options, but they should treat these scores similarly to how they might treat significant or important nonmonetized effects, that is to justify selecting a net-beneficial option with more desirable distributional outcomes. Planning entities may use their expert judgement to weigh quantified but nonmonetized effects, like risks, or unquantified benefits against costs and benefits, and they should consider the outputs of these metrics in the same way.⁴⁵

Each of these options could be used to help ensure that project selection accounts for the distributional consequences of new transmission projects. Thus, by directing transmission planners to consider the environmental justice benefits of new transmission capacity, such as reduced local air pollution and salutary associated impacts on burdened communities, the

⁴³ See Revesz & Yi, *supra* note 41, at 38.

⁴⁴ See *id.* at 38–39.

⁴⁵ See MAKING REGULATIONS FAIR, *supra* note 40, at 14; see also Revesz & Yi, *supra* note 41, at 38–39.

Commission would not be directing transmission planners to do the impossible. That is, the Commission can direct planners to make cost-benefit analysis with a distributional component part of their decisions. Doing so would allow planners to compare this critically important feature of project outcomes when selecting the best solution for identified transmission needs.

C. Mandating Cost-Benefit Analysis Using a Prescribed Baseline of Benefits Would Be a Principle-Driven Process Change, Not a Prescription of Outcomes

FERC's transmission planning and cost allocation orders identify openness, transparency, and information exchange as principles to follow.⁴⁶ In theory and practice, adherence to these principles supports the identification of more efficient and cost-effective transmission solutions and serves as a check on the development of suboptimal solutions that benefit the interests of only a particular transmission-owning utility. The Union of Concerned Scientists describes in detail how utilities have obscured key information to tilt transmission planning processes in favor of the projects that would benefit them.⁴⁷ That description illustrates that, to make rates just and reasonable, it is not enough to espouse transparency and comparability and invite stakeholders to embody those principles in their decisions. Rather, approaches that fail to embody those principles must be foreclosed. This is why Policy Integrity encouraged the Commission to direct transmission planners to embody a prescribed baseline of inputs and methodological features—including cost-benefit analysis—in their project selection processes.

⁴⁶ See, e.g., Preventing Undue Discrimination and Preference in Transmission Service, Order No. 890, 118 FERC ¶ 61,119, at P 435 (2007); Transmission Planning and Cost Allocation by Transmission Owning and Operating Public Utilities, Order No. 1000, 136 FERC ¶ 61,051, at P 80–81, 393–96 (2011).

⁴⁷ The comments of the Union of Concerned Scientists describe in detail how utilities have made strategic use of existing processes to obscure information about their proposed transmission investments. See generally Comments of the Union of Concerned Scientists at 24–28, *Building for the Future Through Electric Regional Transmission Planning and Cost Allocation and Generator Interconnection*, Docket No. RM21-17 (Oct. 12, 2021) [hereinafter UCS Comments].

Some commenters seek to characterize the recognition of particular transmission needs and benefits as somehow subsidizing resources in order to reach particular outcomes.⁴⁸ But, compelling transmission planners to take steps that ensure transparency and comparability across project proposals, and that recognize the realities of the current marketplace for bulk power system assets and services, does not amount to picking winners. Rather, a more uniform cost-benefit analysis, by requiring consistency and transparency, would hamper development of the sort of inefficient and cost-ineffective projects that cause rates to be unjust, unreasonable, and unduly discriminatory or preferential. Certainly, the process changes proposed here, by closing off ways to avoid the principles articulated in Orders 890 and 1000, would very likely have material effects on outcomes—that is, they would cause different transmission and non-wires projects to be selected for development. But this likely result is best understood as following from a process that prevents *anyone*, whether stakeholders or the Commission, from picking winners.

While this proposed change would pertain directly to the planning and project selection stages of transmission development, it would also have meaningful salutary effects on cost allocation as well. The main task of cost allocation is to trace the flow of benefits and to match them appropriately with costs. Providing more information to stakeholders and doing so in a way that encourages a more standardized analysis can only support consistency with the beneficiary pays principle.⁴⁹

⁴⁸ Louisiana PSC Comments, *supra* note 30, at 13–14; Comments of Dominion Energy Servs. at 13–14, *Building for the Future Through Electric Regional Transmission Planning and Cost Allocation and Generator Interconnection*, Docket No. RM21-17 (Oct. 12, 2021) [hereinafter Dominion Comments].

⁴⁹ These cases demand a “plausible and articulable reason” for why benefits are commensurate with the costs—more and better information can allow the Commission to articulate its reasoning and provide evidence in support. *See generally* Ill. Comm. Comm’n v. Fed. Energy Regul. Comm’n, 576 F.3d 477 (7th Cir. 2009).

IV. The “Beneficiary Pays” Principle Must Guide the Allocation of Transmission Project Costs

The beneficiary pays principle both ensures that parties cannot be forced to pay for benefits they do not receive, and requires beneficiaries to pay for benefits they do receive.⁵⁰ As several commenters noted, FERC’s failure to allocate costs associated with real benefits violates the beneficiary pays principle.⁵¹ This includes failing to allocate costs associated with benefits that are diffuse or difficult to quantify. The D.C. Circuit said as much in *Old Dominion Electric Coop. v. FERC*.⁵² That case dealt with FERC’s refusal to allow cost sharing even though it had previously determined that the high voltage lines at issue were a source of significant regional benefits. The court found fault with FERC’s refusal, explaining that denying cost sharing “produces a severe misallocation of the costs of such projects.”⁵³

⁵⁰ See *Old Dominion Elec. Coop. v. Fed. Energy Regul. Comm’n*, 898 F.3d 1254, 1263 (D.C. Cir. 2018) (“To the contrary, the cost-causation principle prevents regionally beneficial projects from being arbitrarily excluded from cost sharing—a necessary corollary to ensuring that the costs of such projects are allocated commensurate with their benefits.”).

⁵¹ Comments of Public Interest Organizations at 129–30, *Building for the Future Through Electric Regional Transmission Planning and Cost Allocation and Generator Interconnection*, Docket No. RM21-17 (Oct. 12, 2021) [hereinafter PIO Comments] (“Given these identified regional benefits, allocating 100% of the network upgrade costs using the ‘but for’ test does not ensure that all beneficiaries pay costs that are roughly commensurate to the benefits they receive, violating the ‘beneficiary pays’ principle and leading to an unjust and unreasonable outcome.”); Comments of NextEra Energy, Inc. at 35, *Building for the Future Through Electric Regional Transmission Planning and Cost Allocation and Generator Interconnection*, Docket No. RM21-17 (Oct. 12, 2021) (reminding FERC that the D.C. Circuit has been clear that the Commission may not single out a party for the full costs of a project or even most of it when the benefits of the project are diffuse, and citing *BNP Paribas Energy Trading GP v. Fed. Energy Regul. Comm’n*, 743 F.3d 264 (D.C. Cir. 2014)); see also Comments of EDF Renewables, Inc. at 8–10, *Building for the Future Through Electric Regional Transmission Planning and Cost Allocation and Generator Interconnection*, Docket No. RM21-17 (Oct. 12, 2021) (“A failure to allocate any costs to beneficiaries violates the cost causation principal, creates a classic free rider situation, and impedes the development of transmission even when system benefits are clear.”).

⁵² *Old Dominion Elec. Coop.*, 898 F.3d at 1261.

⁵³ *Id.* at 1263 (“[W]e fail to see how a categorical refusal to permit any regional cost sharing for an important category of projects conceded to produce significant regional benefits can be recognized with [the cost-causation] principle. To the contrary, the cost-causation principle prevents regionally beneficial projects from being arbitrarily excluded from cost sharing—a necessary corollary to ensuring that the costs of such projects are allocated commensurate with their benefits.”).

Some planning entities have already recognized some diffuse benefits in planning and selection,⁵⁴ but in general neither the planning nor cost allocation process accounts for the full range of benefits.⁵⁵ Wherever benefits accrue from transmission expansion, the costs arising from that expansion must be assigned to beneficiaries. FERC has a duty to ensure a proper assessment of the many benefits that transmission can provide and an appropriate allocation of associated costs. It also has a duty to reject cost allocations that are not “at least roughly proportionate” with benefits as unjust and unreasonable.⁵⁶

The Commission thus not only has the legal authority to consider the full range of benefits, including those that are difficult to quantify or diffuse, but also a legal duty to allocate the associated costs to all beneficiaries. This does not mean that all project costs must be socialized across all grid users,⁵⁷ but it does require the Commission to take note of relevant, diffuse benefits and allocate the associated portion of any given project’s costs in a commensurately broad manner. A postage stamp allocation is one way that the Commission can (and has) assured that rates comply with this standard. This method of allocation ensures that transmission costs are “roughly proportionate to the anticipated benefits.”⁵⁸ It is a legally and

⁵⁴ See Johannes Pfeifenberger, Brattle Grp., Presentation to ESIG Fall Workshop: Closing Plenary Session, Transmission—the Great Enabler: Recognizing Multiple Benefits in Transmission Planning (Oct. 28, 2021) (slide 9 detailing the broad range of transmission benefits that RTOs have identified).

⁵⁵ UCS Comments, *supra* note 47, at 66.

⁵⁶ Ill. Comm. Comm’n v. Fed. Energy Regul. Comm’n (“*ICC v. FERC 2013*”), 721 F.3d 764, 770 (7th Cir. 2013).

⁵⁷ See Comments of Elec. Consumers Res. Council (ELCON) at 16, *Building for the Future Through Electric Regional Transmission Planning and Cost Allocation and Generator Interconnection*, Docket No. RM21-17 (Oct. 12, 2021) (“Widespread, hard-to-quantify benefits, including environmental or societal benefits as determined by stakeholders and transmission planners, could be allocated as a small percentage over a larger footprint to acknowledge the far-reaching effects of that benefit while higher percentages of the overall cost are allocated based on quantifiable metrics such as avoided congestion costs, reliability improvements, and regionally-specific upgrades).

⁵⁸ *ICC v. FERC 2013*, 721 F.3d at 770.

economically defensible way to align cost allocation with benefits that accrue widely and in a way makes it difficult to specify exactly how much value flows to one beneficiary or another.

A. Costs Associated with Diffuse Benefits like Emissions Reductions and Enhanced Resilience Can Be Allocated Broadly

Some commenters argue that the FPA does not authorize FERC to allocate costs associated with transmission projects on the grounds that those projects would yield benefits like reductions in carbon dioxide emissions, compliance with diverse clean energy mandates, or enhanced resilience.⁵⁹ But those commenters do not identify a sound basis for excluding these benefits from cost allocation determinations. Instead, they describe these benefits as “speculative”;⁶⁰ “not part of the traditional electricity service paradigm”;⁶¹ or not appropriately tied to the “the economical delivery of reliable energy.”⁶² The Commission, they say, lacks authority to tie a cost allocation to these benefits, due either to its limited discretion to consider these particular categories of benefits or because FERC would be unable to justify an allocation based on these benefits.⁶³ Either way, this characterization is incorrect.

⁵⁹ See, e.g., LPPC Comments, *supra* note 10, at 15 & n.26, 19 (“We discuss in section II.B.2 of the comments below whether the definition of benefits may be so broadly construed as to encompass social benefits outside the economics and reliability of the grid, and demand for transmission driven by public policy. Binding Supreme Court precedent makes it clear the answer is ‘no.’”); Southern Co. Comments, *supra* note 10, at 19–36 (arguing that cost allocation premised on societal benefits to justify widespread socialization would lack support); Comments of N. Va. Elec. Coop., Inc. at 9, *Building for the Future Through Electric Regional Transmission Planning and Cost Allocation and Generator Interconnection*, Docket No. RM21-17 (Oct. 12, 2021) [hereinafter NOVEC Comments] (“Particularly concerning are broad-based societal benefits, as distinct from more direct and traceable economic benefits.”).

⁶⁰ LPPC Comments, *supra* note 10, at 3; Southern Co. Comments, *supra* note 10, at 19–20. Commenters also label these benefits “indirect” or “incidental.” Southern Co. Comments, *supra* note 10, at 19 (citing *Algonquin*, which does not discuss “indirect” benefits); *id.* at 36 (describing these benefits as “incidental”); NOVEC Comments, *supra* note 59, at 9 (distinguishing societal benefits from those that are “more direct”). However, these commenters provide no citation for use of these terms as the limiting principle for the benefits that can be cost allocated. Regardless, we note that emissions reductions and enhanced resilience are in fact direct, deliberate, and crucial benefits of transmission expansion.

⁶¹ Southern Co. Comments, *supra* note 10, at 19 (providing no citation).

⁶² LPPC Comments, *supra* note 10, at 19 (providing no citation).

⁶³ E.g., Southern Co. Comments, *supra* note 10, at 36.

These benefits are not “speculative.” While Southern Company relies heavily on *Algonquin* to prohibit FERC from considering societal benefits and public goods like emissions reductions and resilience, these benefits are not speculative. As discussed above, that decision emphasized FERC’s failure to proffer evidence.⁶⁴ Yet, there is ample evidence that planning entities will have to expand transmission assets to reach cleaner, cheaper resources, and that doing so will result in reduced emissions and enhanced regional and interregional resilience. The extensive initial comments submitted in response to the ANOPR point to substantial evidence that this expansion will occur due to market demand and evolving policies.⁶⁵ As this evidence indicates, the location and type of resources that will be built and that will necessitate transmission is not speculative—wind, solar, geothermal, and other resources have been mapped thoroughly and in detail.⁶⁶ Neither is the voracious demand for zero-emissions attributes

⁶⁴ See *supra* notes 17–18 and accompanying text.

⁶⁵ See, e.g., Comments of the Harv. Elec. L. Initiative at 39–41, *Building for the Future Through Electric Regional Transmission Planning and Cost Allocation and Generator Interconnection*, Docket No. RM21-17 (Oct. 12, 2021) (explaining that planning studies suggest it is “exceedingly likely that wind and solar will dominate capacity additions” and that “wind and solar will be drive by policy and economics”); Comments of Shell Energy N. Am. (USA) & Shell Renewables & Energy Solutions, *Building for the Future Through Electric Regional Transmission Planning and Cost Allocation and Generator Interconnection*, Docket No. RM21-17 (Oct. 12, 2021) (describing need to provide transmission expansion for offshore wind to meet state policies); SEIA Comments, *supra* note 22, at 5 (explaining federal, state and local law and regulation will require “significant transmission expansion to accommodate demand for new solar and other remotely sited renewable generation”); Comments of RMI, *Building for the Future Through Electric Regional Transmission Planning and Cost Allocation and Generator Interconnection*, Docket No. RM21-17 (Oct. 12, 2021) (outlining market and policy transition that demands greater transmission); PIO Comments, *supra* note 51, at 55–57 (recounting research that required decarbonization in a cost-effective manner requires expansion of transmission); see also ANOPR, *supra* note 1, at PP 30–36. Additionally, there is over 900 GW currently seeking to interconnect to the grid. JOSEPH RAND, ET AL., LAWRENCE BERKELEY NAT’L LAB’Y, QUEUED UP: CHARACTERISTICS OF POWER PLANTS SEEKING TRANSMISSION INTERCONNECTION AS OF THE END OF 2020 (2021). That alone should demonstrate the market demand for expanded transmission.

⁶⁶ The National Renewable Energy Laboratory has created geospatial data tools for a variety of generation sources, including wind, solar, and geothermal. See *Wind Geospatial Data Tools*, NAT’L RENEWABLE ENERGY LAB’Y, <https://www.nrel.gov/gis/wind-geospatial-data-tools.html> (last visited Nov. 24, 2021) (including the Wind Prospector tool, which “visualizes data and analyzes the potential for wind energy”); *Solar Geospatial Data Tools*, NAT’L RENEWABLE ENERGY LAB’Y, <https://www.nrel.gov/gis/solar-geospatial-data-tools.html> (last visited Nov. 24, 2021); *Geothermal Resource Data, Tools, and Maps*, NAT’L RENEWABLE ENERGY LAB’Y, <https://www.nrel.gov/gis/geothermal.html> (last visited Nov. 24, 2021). The Department of Energy likewise provides mapping on wind speeds and resource potential. See *Wind Energy Maps and Data*, U.S. DEP’T OF ENERGY, <https://windexchange.energy.gov/maps-data> (last visited Nov. 24, 2021).

speculative: it merely reflects burgeoning climate-oriented commitments by states, utilities, and the private sector,⁶⁷ all of which signal clearly where the power sector is headed. As for resilience, research and tragic lived experience have demonstrated the cost saving and outage-preventing benefits that enhanced interregional transfer capability can provide.⁶⁸ While there may be uncertainty as to the exact value of resilience benefits or when and how they would accrue, they are not speculative.

And, as discussed in Policy Integrity’s initial comments, taking a forward-looking approach to planning that seeks to optimize for anticipated future generation and to provide for flexibility will yield more efficient and cost-effective transmission infrastructure.⁶⁹ Thus, unlike in *Algonquin*, where the D.C. Circuit concluded that FERC had not adequately supported its contention that facilities would provide system-wide benefits and future flexibility,⁷⁰ here, the future cost savings that a flexible and proactive approach can provide is well documented.⁷¹ FERC can support and explain why it is just and reasonable to spread some transmission costs broadly.

⁶⁷ See *supra* notes 32–34 and accompanying text.

⁶⁸ See generally GOGGIN, *supra* note 29.

⁶⁹ Comments of the Inst. for Pol’y Integrity at N.Y.U. School of Law at 25–40, *Building for the Future Through Electric Regional Transmission Planning and Cost Allocation and Generator Interconnection*, Docket No. RM21-17 (Oct. 12, 2021) [hereinafter Policy Integrity Initial Comments] (detailing economic and engineering literature).

⁷⁰ As explained above, the *Algonquin* decision emphasized FERC’s failure to proffer evidence, leading the Court to conclude that its determination was speculative. See *supra* notes 17–18 and accompanying text. It did not suggest that benefits of a flexible or integrated system for future expansion would categorically be considered too speculative for cost allocation, just that FERC had not provided sufficient evidence of future, less costly expansion. *Algonquin Gas Transmission Co. v. Fed. Energy Regul. Comm’n*, 948 F.2d 1305, 1313–14 (D.C. Cir. 1991).

⁷¹ Policy Integrity’s initial comments explained that “[t]he engineering and economics literature is replete with evidence that co-optimizing transmission and generation investment decisionmaking leads to more efficient and lower-cost solutions” and cited research demonstrating consensus that an anticipatory approach that takes advantage of interdependencies and builds in flexibility is superior to the current reactive approach and will provide future cost savings. See Policy Integrity Initial Comments, *supra* note 69, at 25–40.

The law does not enshrine a “traditional electricity service paradigm.” In its comments, Southern Company purports to offer a limiting definition—the “traditional electricity service paradigm”—to delineate between benefits that, in its view, may and may not inform cost allocation,⁷² but that definition is not supported by legal authority or a clear articulation of economic principles. Southern Company does not say what that paradigm is, only that benefits must be consistent with it to be cognizable.⁷³ In addition to being too amorphous to be useful, this suggestion is sharply at odds with the Supreme Court’s recognition that the electric grid has changed and that “FERC’s role has evolved accordingly.”⁷⁴ As the ANOPR observes, today, many of the resources that can provide the most efficient and cost-effective power supply are location-constrained and far-flung.⁷⁵ Drawing on those resources clearly requires the Commission to adjust current approaches to transmission development. Thus, contrary to Southern Company’s view, the Commission’s duty is not to preserve a “traditional paradigm” but to enable competition, support efficiency, and ensure that rates are just and reasonable—even if doing so means intervening to disrupt and remediate that paradigm.⁷⁶

⁷² Southern Co. Comments, *supra* note 10, at 19 (providing no citation).

⁷³ *See id.* The Large Public Power Council makes a similar—and similarly unsupported—point about the “economical delivery of reliable energy.” *See* LPPC Comments, *supra* note 10, at 19. Avangrid states that socialization of costs is not appropriate where benefits are “not associated with the physical electric system or electric markets.” Initial Comments of Avangrid, Inc. October 12, 2021 at 25, *Building for the Future Through Electric Regional Transmission Planning and Cost Allocation and Generator Interconnection*, Docket No. RM21-17 (Oct. 12, 2021). While Avangrid does suggest that such benefits might better be included through a “tiered” approach, what should and should not be “associated” with the “physical electric system or electric markets” is unclear. Where transmission expansion provides benefits that the Commission can provide substantial evidence and explanation for, the costs should be allocated to beneficiaries.

⁷⁴ Fed. Energy Regul. Comm’n v. Elec. Power Supply Ass’n, 577 U.S. 260, 267 (2016); *New York v. Fed. Energy Regul. Comm’n*, 535 U.S. 1, 16 (2002) (“[T]he landscape of the electric industry has changed since the enactment of the FPA”); *see also* Michael Panfil, *From Attleboro to EPSA: The Pace of Change and Evolving Jurisdictional Frameworks in the Electricity Sector*, 38 U.C.L.A. J. ENV’T L. & POL’Y 1 (2020) (detailing foundational changes in the sector and the corresponding legal and regulatory responses).

⁷⁵ ANOPR, *supra* note 1, at PP 3, 100, 160.

⁷⁶ Policy Integrity supports PSEG’s position that a “changing resource mix will require creative cost allocation methodologies that acknowledge and incorporate, as nearly as practicable, the full spectrum of benefits and beneficiaries of transmission projects. The Commission has substantial flexibility to seek out, guide, or simply authorize such creative, inclusive approaches to cost allocation.” Comments of PSEG at 24, *Building for the Future*

B. Allocating Costs Consistent with Recognition that Project Benefits Accrue Widely Does Not Result in Double Payments

Several commenters argue that recognition that benefits like resilience and emissions reductions accrue to a broad set of beneficiaries would result in double payments.⁷⁷ However, this misunderstands what such recognition would mean. This would not result in double payments. Should the Commission direct transmission costs be allocated in this way, then ratepayers region-wide would help to pay for transmission projects that improve the resilience of their electricity service and make it possible to satisfy pertinent clean energy mandates. This would not amount to paying twice for the same thing, any more than paying a tariff that includes demand charge and a volumetric fee amounts to paying twice for electricity distribution service.

What these commenters actually oppose is the Commission putting state clean energy policies on the same footing as all the other state policies that have come to be reflected more or less directly in rates. But state clean energy policy deserves the same treatment as various other state-policy inputs that the Commission does not second-guess, ranging from tax credits to minimum wage to retail electricity reliability standards. The commenters' vague language is telling: they warn against customers being made to "pay twice" for "decarbonization," "an environmental benefit," or an "environmental attribute," but never define these terms,⁷⁸ which lack clear legal significance.

Through Electric Regional Transmission Planning and Cost Allocation and Generator Interconnection, Docket No. RM21-17 (Oct. 12, 2021).

⁷⁷ NOVEC Comments, *supra* note 59, at 10 ("[T]ransmission customers with environmental corporate goals or who are subject to environmental regulatory requirements should not be forced to pay twice for the environmental attributes of the same renewable resources: once through the purchase of environmental attributes and again through transmission rates.").

⁷⁸ *Id.*; Comments of the N.D. Pub. Serv. Comm'n in the Advanced Notice of Proposed Rulemaking at 4, *Building for the Future Through Electric Regional Transmission Planning and Cost Allocation and Generator Interconnection*, Docket No. RM21-17 (Oct. 12, 2021); LPPC Comments, *supra* note 10, at 4.

C. Allocating Costs Widely Does Not Effectuate a Market-Distorting Subsidy

Several commenters suggest that the wide allocation of costs associated with diffuse benefits would create a market-distorting subsidy that threatens wholesale market price formation and reliability.⁷⁹ Their flawed and ultimately incorrect argument goes like this: (1) renewable resources are “otherwise uneconomic” but continue to be developed and operated because of state policy supports; (2) but once interconnected to the grid, those resources can bid into wholesale markets at zero marginal cost and thereby “suppress” prices while underselling competing thermal generators; (3) this pattern of competition will drive thermal resources out of the marketplace, undermining resource adequacy and threatening reliability; and (4) at the same time, the suppression of capacity market prices will fail to prompt new market entrants that might restore resource adequacy.

Each of these four elements is simply wrong. The first point ignores the economic competitiveness of renewable resources regardless of state support.⁸⁰ It also overlooks a point made by the Department of Energy: the state support at issue seeks to *correct* a market failure and so is rightly understood as a valid feature of a marketplace that has yet to properly value key factors of electricity generation.⁸¹ The second point more or less imports the analysis underlying the now-rejected Expanded Minimum Offer Price Rule in PJM. That analysis rests, ultimately, on intuitive but inaccurate assumptions about how wholesale energy and capacity market prices

⁷⁹ Dominion Comments, *supra* note 48, at 13 (explaining that wholesale markets “could be in danger of not meeting their reliability obligations if otherwise uneconomic resources gain access to the wholesale markets through a socialized transmission buildout” and that “[s]uch access to the market could undermine price formation in the energy and capacity markets, forcing out dispatchable resources necessary for reliability.”); Comments of the Elec. Power Supply Ass’n at 13–14, *Building for the Future Through Electric Regional Transmission Planning and Cost Allocation and Generator Interconnection*, Docket No. RM21-17 (Oct. 12, 2021) [hereinafter EPSCA Comments] (“[T]here can be damaging market impacts from extensive transmission projects supported by socialized costs These projects may facilitate the development of so much installed capacity of zero marginal cost resources that, when dispatched at zero or negative prices, suppress prices for all other resources.”).

⁸⁰ See generally LAZARD, LEVELIZED COST OF ENERGY ANALYSIS: VERSION 15.0 (2021).

⁸¹ DOE Comments, *supra* note 31, at 16–17.

respond to renewables’ participation.⁸² Policy Integrity’s economic research has revealed key flaws in these assumptions, most importantly that they wholly ignore that state programs affect *energy* market prices and do not affect *capacity* markets in a consistent manner, suppressive or otherwise.⁸³ The third point is not wrong about the possibility that new, cleaner resources might drive out older, emitting ones, but it is wrong to suggest that this would undermine resource adequacy and reliability—an eventuality unsupported by research or empirics.⁸⁴ Finally, the fourth point ignores the existence of mechanisms designed specifically to translate indications of resource inadequacy into wholesale market price changes that would attract investment in new generating capacity, should thermal resources exit.⁸⁵ It also ignores the reliability benefits that expanded transmission will provide by bringing online a more diverse set of resources.⁸⁶ To sum

⁸² That analysis assumed that state payments to clean resources “simply or solely cause state-supported generators to reduce their capacity market offers, thereby lowering the clearing price or lowering the supply curve,” which ignores that state payments are made on a per-MWh basis and primarily affect energy market offers and clearing prices, while only indirectly affecting capacity market prices. *See generally* Comments of the Inst. for Pol’y Integrity at N.Y.U. School of Law at 15–18, *PJM Interconnection, L.L.C.*, Docket No. ER21-2582 (Aug. 20, 2021).

⁸³ Sylwia Bialek & Burcin Unel, *Efficiency in Wholesale Electricity Markets: On the Role of Externalities and Subsidies* 17–18, 21–22 (CESifo Working Paper Series 8673, 2020); SYLWIA BIALEK & BURCIN UNEL, INST. FOR POL’Y INTEGRITY, CAPACITY MARKETS AND EXTERNALITIES 6 (2018); *see also* Comments of the Inst. for Pol’y Integrity at N.Y.U. School of Law at 10–18, *Cricket Valley Energy Ctr. L.L.C. v. N.Y. Indep. Sys. Operator, Inc.*, Docket No. EL21-7 (Nov. 18, 2020). PJM also recognized this flaw in the logic in its recent 205 filing, in which it eliminated the Minimum Offer Price Rule and recognized that externality payments may be “economic and welfare-enhancing” and can be “successful in ensuring the differentiated value between carbon-emitting and carbon-free resources is recognized.” Revisions to Application of Minimum Offer Price Rule, Dr. Walter Graf Aff. ¶¶ 16–17, Docket No. ER21-2582 (filed July 30, 2021).

⁸⁴ *Cf.* Bialek & Unel, *supra* note 83, at 20 (“[E]ven if externality payments reduce capacity prices in the short term, capacity markets are designed to adjust to that change and keep prices at a level necessary to ensure resource adequacy.”); Comments of the Inst. for Pol’y Integrity at N.Y.U. School of Law at 9–11, *Modernizing Electricity Market Design: Resource Adequacy in the Evolving Electricity Sector*, Docket No. AD21-10 (Apr. 26, 2021) (explaining that externality payments to clean resources does not threaten resource adequacy). Chairman Glick and Commissioner Clements have recognized that the concern that increased renewables would harm resource adequacy needed for reliability is “speculative” and that protesters in the MOPR proceedings “presented no evidence to support it.” Statement of Chairman Glick and Commissioner Clements at P 62, *PJM Interconnection, L.L.C.*, Docket No. ER21-2582 (Oct. 19, 2021).

⁸⁵ For a description of this spurious argument and an explanation of why it is incorrect, see SYLWIA BIALEK, JUSTIN GUNDLACH & CHRISTINE PRIES, INST. FOR POL’Y INTEGRITY, RESOURCE ADEQUACY IN A DECARBONIZED FUTURE WHOLESALE MARKET DESIGN OPTIONS AND CONSIDERATIONS 24–25 (2021).

⁸⁶ *See, e.g.*, JOHANNES PFEIFENBERGER ET AL., THE VALUE OF DIVERSIFYING UNCERTAIN RENEWABLE GENERATION THROUGH THE TRANSMISSION SYSTEM (2020); GOGGIN, *supra* note 29, at 6 (“Many recent studies show that interregional transmission lines like those discussed in this paper become increasingly essential as wind and solar penetrations increase in different parts of the country. Just as these lines aggregate diverse sources of electricity

up, then, the reasoning undergirding the conclusion that a broad allocation of transmission expansion costs creates a subsidy for renewables and puts price formation and reliability at risk depends on a series of erroneous premises and unfounded assumptions. FERC is contemplating changes that would require planning for transmission in a forward-looking manner, recognize the emissions and resilience benefits of transmission expansion, and allocate costs in rough proportion to the accrual of benefits. As just explained, construing these steps as effectuating a subsidy for certain resources requires convoluted and unsound reasoning. By contrast, describing them as straightforwardly consistent with economic principle and legal precedent is far simpler and more accurate.

But, as Policy Integrity’s initial comments explained, the present lack of regional and interregional transmission development is due to “persistent barriers” to competition rooted in *administrative* arrangements, not to renewable generation resources being somehow uneconomic and thus unable to attract the necessary investment capital.⁸⁷ To ensure that rates are just, reasonable, and not unduly discriminatory or preferential, the Commission must remove these barriers so a wider array of resources can compete on a more level playing field. Taking these steps is likely to enable location-constrained but economically competitive renewable resources to come online, which will in turn mean stiffening the wholesale competition for some existing thermal resources. As far as economic theory and the FPA are concerned, this is not a problem—it is a benefit of transmission expansion and competitive wholesale markets.

Should reform give rise to resource adequacy concerns, existing market mechanisms will signal through prices that greater investment is needed. In short, the Commission and grid

supply and demand to balance out localized disruptions during extreme weather, they provide a similar value by canceling out local fluctuations in wind or solar output.”).

⁸⁷ See Policy Integrity Initial Comments, *supra* note 69, at 10–16.

stakeholders should trust that wholesale markets will continue to translate needs into prices, and prices into returns on investment.⁸⁸ Unsubstantiated speculation over whether expanded transmission and high degrees of renewable penetration will eventually require market reform should not steer FERC’s thinking, nor hinder the Commission from addressing the current unjust and unreasonable state of transmission planning, project selection, and cost allocation.

Respectfully submitted,

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⁸⁸ See generally JOSHUA D. RHODES ET AL., ASSESSMENT OF THE EMISSIONS PERFORMANCE OF WHOLESAL E ELECTRICITY MARKETS (2021) (finding that competitive markets are compatible with and can drive decarbonization and noting research finding that “while not perfect, markets are more likely than vertically integrated utilities to facilitate and adapt to new, unconventional generation technologies”).