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

Capacity Accreditation ) Docket No. AD23-10-000

## <u>COMMENTS OF THE INSTITUTE FOR POLICY INTEGRITY</u> <u>AT NEW YORK UNIVERSITY SCHOOL OF LAW</u>

Pursuant to the Federal Energy Regulatory Commission's (FERC or the Commission) September 17, 2023 notice,<sup>1</sup> the Institute for Policy Integrity at New York University School of Law (Policy Integrity)<sup>2</sup> respectfully submits these comments in support of the American Clean Power Association's petition for a technical conference on capacity accreditation (Petition).<sup>3</sup> Policy Integrity is a non-partisan think tank with expertise in capacity accreditation<sup>4</sup> and dedicated to improving the quality of government decisionmaking through advocacy and scholarship in the fields of administrative law, economics, and public policy. FERC should grant the Petition because a technical conference would help the Commission ensure just and reasonable rates and prevent unduly prejudicial practices.<sup>5</sup>

If accreditation undervalues the reliability contributions of some resources and overvalues the contributions of others, it distorts relative investment/retirement incentives and

<sup>&</sup>lt;sup>1</sup> Capacity Accreditation; Notice of Request for Technical Conference, 88 Fed. Reg. 62072 (Sept. 8, 2023).

<sup>&</sup>lt;sup>2</sup> This letter does not purport to represent the views, if any, of New York University School of Law.

<sup>&</sup>lt;sup>3</sup> Petition of the American Clean Power Association for Technical Conference on Capacity Accreditation, *Petition of the American Clean Power Association for a Technical Conference on Capacity Accreditation under AD23-10*, Docket No. AD23-10-000 (Aug. 22, 2023).

<sup>&</sup>lt;sup>4</sup> See, e.g., SYLWIA BIALEK ET AL., INST. FOR POL'Y INTEGRITY, RESOURCE ADEQUACY IN A DECARBONIZED FUTURE WHOLESALE MARKET DESIGN OPTIONS AND CONSIDERATIONS (2021); BURÇIN ÜNEL & AVI ZEVIN, INST. FOR POL'Y INTEGRITY, DEFINING, MEASURING, AND MONETIZING RESILIENCE IN THE ELECTRICITY SYSTEM (2018); Inst. for Pol'y Integrity, Comments to PJM on the Resource Adequacy Critical Issue Fast Path (Aug. 18, 2023), https://policyintegrity.org/documents/20230823-stakeholder-written-comments---policy-integrity-cifp-resourceadequacy\_%281%29.pdf; Inst. for Pol'y Integrity, Comments to Public Utility Commission of Texas on Wholesale Electricity Market Design (Dec. 15, 2022), https://policyintegrity.org/documents/puct\_comments\_of\_ipi.PDF; Inst. for Pol'y Integrity, Comments on Resource Adequacy to New Jersey Board of Public Utilities (Oct. 25, 2022), https://policyintegrity.org/documents/Policy\_Integrity\_Comments\_on\_2022\_RA\_Report.pdf; Inst. for Pol'y Integrity, Comments to New York Public Service Commission on Brattle Group Resource Adequacy Analyses (Aug. 21, 2022), https://policyintegrity.org/documents/Policy\_Integrity\_Comments\_on\_Brattle\_Analyses.pdf. <sup>5</sup> See 16 U.S.C. § 824d(a)–(b); *id.* § 824e(a).

may lead to overpaying for reliability or to a resource adequacy shortfall.<sup>6</sup> Accurate accreditation is becoming increasingly difficult as grids accommodate rapidly changing resource mixes with varying energy and reliability attributes, public policy constraints, and increasing/unprecedented extreme weather events.<sup>7</sup> Moreover, accreditation has simultaneously become more consequential, as capacity market revenues have grown to a significant share of total market payments.<sup>8</sup> Indeed, for some generation resources, capacity payments can comprise more than half of their revenue.<sup>9</sup>

Given the heightened complexity and significance of capacity accreditation, the moment is ripe for a forum in which grid operators and other experts can discuss best practices and receive guidance from FERC, the North American Electric Reliability Corporation, and other

<sup>&</sup>lt;sup>6</sup> Cynthia Bothwell & Benjamin. F. Hobbs, Crediting Wind and Solar Renewables in Electricity Capacity Markets: The Effects of Alternative Definitions upon Market Efficiency, 38 ENERGY J. 1 (2019) 173, 175, 187 ("[T]oo much capacity credit for a particular resource is an implicit subsidy that may lead to overinvestment. Conversely, too little credit could divert investment away from a resource. Inaccurate credits can impact investment choices between renewable and thermal generation and can also affect relative profitability of different renewable types or locations.... [T]he most efficient generation mix results from basing capacity payments upon the relative marginal ability of each resource to decrease expected unserved energy."); ENERGY SYSTEMS INTEGRATION GROUP, ENSURING EFFICIENT RELIABILITY: NEW DESIGN PRINCIPLES FOR CAPACITY ACCREDITATION (2023) ("Power system planners then have typically met the planning reserve margin by 'stacking up' individual resources according to their capacity accreditation."); MOLLY ROBERTSON ET AL., RES. FOR THE FUTURE, REFORMING RESOURCE ADEQUACY PRACTICES AND ENSURING RELIABILITY IN THE CLEAN ENERGY TRANSITION (2023) ("[O]verestimating electricity capacity needs can drive up costs for consumers, and underestimating needs can threaten reliability."). <sup>7</sup> Bothwell & Hobbs, *supra* note 6, at 174 ("[M]any nontraditional resources have limitations that are not directly translatable into equivalent forced outage rates in adequacy calculations. ... [A]s system load net of renewables becomes more variable, even assessing the contribution of traditional fossil and nuclear sources becomes more complex, as other operational characteristics such as ramp rates may constrain the ability of the system to meet load. Quantifying capacity credits has therefore become more difficult."); BIALEK ET AL., supra note 4, at 23 ("[E]xtreme weather and climate change are increasingly relevant factors that should inform any approach to resource adequacy ... [and] suggest that attention should be paid to estimating particular resources' capacity contributions and identifying when times of scarcity can be expected to occur ....").

<sup>&</sup>lt;sup>8</sup> ROB GRAMLICH & MICHAEL GOGGIN, GRID STRATEGIES LLC, TOO MUCH OF THE WRONG THING: THE NEED FOR CAPACITY MARKET REPLACEMENT OR REFORM 4–5 (2019); PJM INTERCONNECTION, UNDERSTANDING THE DIFFERENCES BETWEEN PJM'S MARKETS (2022); MONITORING ANALYTICS, LLC, STATE OF THE MARKET REPORT FOR PJM: JANUARY THROUGH JUNE 343 tbl. 5-21 (2023) (listing capacity market revenue by calendar year).
<sup>9</sup> MONITORING ANALYTICS, LLC, STATE OF THE MARKET REPORT FOR PJM: VOLUME 1: INTRODUCTION 54 ("In 2022, capacity market revenue accounted for 28 percent of total net revenues for a new [combustion turbine plant], 21 percent for a new [combined cycle plant], 44 percent for a new [coal plant], 7 percent for a new nuclear plant, 51 percent for a new [diesel plant], 3 percent for a new onshore wind installation, 4 percent for a new offshore wind installation and 5 percent for a new solar installation.").

relevant bodies. The topics that would benefit from robust discussion during a technical

conference include:

- What are the latest technical developments for modeling the reliability benefits of renewable and energy-limited resources?
- In light of the recent experiences with thermal outages during extreme weather,<sup>10</sup> how can accreditation appropriately reflect current thermal resource reliability and how can accreditation incentivize investment decisions that would improve the reliability of the thermal fleet?
- What is the role and optimal structure of non-performance penalties?
- How would seasonal accreditation affect the efficiency of capacity markets?
- What is the best way to capture the reliability contributions of individual capacity resources based on their location and design, as opposed to treating them as an undifferentiated resource class?
- How should grid operators model risk from extreme weather in light of climate change?
- What is the optimal frequency to update capacity accreditation factors to strike a balance between increased predictability of capacity revenues and to account for a changing generation mix which will affect these factors?
- To what extent should capacity accreditation be a "round-trip" process in which assigned values must be reassessed based on the portfolio of capacity resources selected at auction?
- Given increasing interconnection between grid regions hosting various generation mixes, should capacity accreditation methods be better harmonized?
- To what extent are imports and exports accounted for in capacity accreditation methods?
- How are out-of-market solutions such as reliability-must-run contracts treated in models to derive capacity accreditation values?
- How should demand side participation, e.g., peak load shaving or peak load shifting, be included in the models to compute capacity accreditation values?

<sup>&</sup>lt;sup>10</sup> E.g., FERC, NERC, AND REGIONAL ENTITY JOINT STAFF INQUIRY, DECEMBER 2022 WINTER STORM ELLIOTT GRID OPERATIONS: KEY FINDINGS AND RECOMMENDATIONS (2023), https://www.ferc.gov/news-events/news/presentation-ferc-nerc-regional-entity-joint-inquiry-winter-storm-elliott.

FERC should grant the Petition to address these questions (along with others that the Petition raises) in a technical conference that can form the basis for developing best practices and guidelines.

Respectfully submitted,

<u>/s/ Jennifer Danis</u>	<u>/s/ Christoph Graf</u>
Jennifer Danis	Christoph Graf, Ph.D.
Federal Energy Policy Director	Senior Economist
Institute for Policy Integrity at	Institute for Policy Integrity at
NYU School of Law	NYU School of Law
139 MacDougal Street, 3 <sup>rd</sup> Fl.	139 MacDougal Street, 3 <sup>rd</sup> Fl.
New York, NY 10012	New York, NY 10012
jennifer.danis@nyu.edu	<u>christoph.graf@nyu.edu</u>

<u>/s/ Christopher Holt</u> Christopher Holt, Ph.D. Economic Fellow Institute for Policy Integrity at NYU School of Law 139 MacDougal Street, 3<sup>rd</sup> Fl. New York, NY 10012 <u>chris.holt@nyu.edu</u> <u>/s/ Matthew Lifson</u> Matthew Lifson Attorney Institute for Policy Integrity at NYU School of Law 139 MacDougal Street, 3<sup>rd</sup> Fl.

New York, NY 10012 matthew.lifson@nyu.edu

Dated: October 2, 2023