UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

Sierra Club; Natural Resources Defense Council, Inc.; and Sustainable FERC Project	)	Docket No. EL24-_____
v.	)	
Southwest Power Pool, Inc.	)	

COMPLAINT OF SIERRA CLUB; NATURAL RESOURCES DEFENSE COUNCIL, INC.; AND SUSTAINABLE FERC PROJECT

Aaron Stemplewicz
Senior Attorney, Clean Energy Program
Earthjustice
1617 J.F.K. Blvd., Suite 1130
Philadelphia, PA 19103
Tel: (215) 717-4524
astemplewicz@earthjustice.org

Alexander Tom
Associate Attorney, Clean Energy Program
Earthjustice
50 California St., Suite 500
San Francisco, CA 94111
Tel: (415) 217-2111
atom@earthjustice.org

Gregory E. Wannier
Senior Attorney
Sierra Club Environmental Law Program
2101 Webster St., Suite 1300
Oakland, CA 94612
Tel: (415) 977-5646
greg.wannier@sierraclub.org

Natalie McIntire
Natural Resources Defense Council
20 N. Wacker Dr., Suite 1600
Chicago, IL 60606
Tel: (312) 847-6824
nmcintire@nrdc.org

John Moore
Director
Sustainable FERC Project
20 N. Wacker Dr., Suite 1600
Chicago, IL 60606
Tel: (312) 651-7927
Moore.fercproject@gmail.com

Dated: March 29, 2024

TABLE OF CONTENTS

UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

Sierra Club; Natural Resources Defense Council, Inc.; and Sustainable FERC Project	)	Docket No. EL24-_____
v.	)	
Southwest Power Pool, Inc.	)	

Pursuant to Sections 206 and 306 of the Federal Power Act (hereafter "FPA" or "the Act"), 16 U.S.C. §§ 824e, 825e, and Rules 206 and 212 of the Federal Energy Regulatory Commission's (hereafter "FERC" or "Commission") Rules of Practice and Procedure, 18 C.F.R. §§ 385.206 and 385.212, the Sierra Club, Natural Resources Defense Council, Inc., and the Sustainable FERC Project ("Complainants"), hereby file this Complaint against Southwest Power Pool, Inc. ("SPP" or "Respondent").

This Complaint requests that the Commission find that SPP's existing Tariff provisions[1] and planning criteria protocols[2] governing its accreditation rules for both thermal and renewable resources are unjust, unreasonable, and unduly discriminatory and preferential pursuant to the FPA.

---

[1] SPP, Open Access Transmission Tariff, Sixth Revised Volume No. 1 ("SPP OATT"), Attachment AA § 7.8.

[2] SPP, SPP Planning Criteria Revision 4.2 § 7.1 (June 7, 2023) ("SPP Planning Criteria") (attached in Exhibit B). SPP recently revised its planning criteria as part of proposed tariff revisions to its accreditation methodologies, *see* SPP, SPP Planning Criteria Revision 4.3 § 7.1 (Nov. 6, 2023), which are currently pending before the Commission in Docket No. ER24-1317. Because Revision 4.2 reflects SPP's existing accreditation methodologies (which are currently in place and will remain so should the Commission reject SPP's filing), Complainants cite to Revision 4.2 throughout this Complaint.

This Complaint is supported by the affidavit of Dr. Michael Milligan, Ph.D.[3] Also attached are copies of the various studies and reports that support the Complaint.[4]

I. COMMUNICATIONS

Communications regarding this matter should be addressed to the following persons, who also should be designated for service on the Commission's official list:

Aaron Stemplewicz
Senior Attorney, Clean Energy Program
Earthjustice
1617 J.F.K. Blvd., Suite 1130
Philadelphia, PA 19103
Tel: (415) 977-5646
astemplewicz@earthjustice.org

Alexander Tom
Associate Attorney, Clean Energy Program
Earthjustice
50 California St., Suite 500
San Francisco, CA 94111
Tel: (415) 217-2111
atom@earthjustice.org

Gregory E. Wannier
Senior Attorney
Sierra Club Environmental Law Program
2101 Webster St., Suite 1300
Oakland, CA 94612
Tel: (415) 977-5646
greg.wannier@sierraclub.org

Natalie McIntire
Senior Advocate
Natural Resources Defense Council
20 N. Wacker Dr., Suite 1600

[3] The Affidavit of Dr. Michael Milligan, Ph.D. (hereafter "Milligan Affidavit") is attached as Exhibit A.
[4] *See* Exhibit B.

Chicago, IL 60606
Tel: (312) 847-6824
nmcintire@nrdc.org

John Moore
Director
Sustainable FERC Project
20 N. Wacker Dr., Suite 1600
Chicago, IL 60606
Tel: (312) 651-7927
Moore.fercproject@gmail.com

II. THE PARTIES

A. Complainants

The Sierra Club, founded in 1892, is a national organization with more than sixty chapters and over three million members and supporters. The Sierra Club's purpose is to explore, enjoy, and protect the wild places of the earth; to practice and promote the responsible use of the earth's ecosystems and resources; and to educate and enlist humanity to protect and restore the quality of the natural and human environments. Part of the Sierra Club's current work focuses on environmental and public health problems associated with energy generation, and measures to improve the affordability of electric service. Sierra Club frequently advocates for wholesale market designs and rules that both facilitate fair participation by renewable energy resources, demand-side management, and storage; and enable system planners to more cost-effectively ensure grid reliability. Sierra Club's membership includes numerous ratepayers in the SPP footprint, whose terms and rates of service will be adversely impacted by rules that give undue preference to fossil fuel generation in a manner that increases costs to consumers without commensurate benefits.

Natural Resources Defense Council, Inc. ("NRDC") is a national non-profit corporation with members residing in each of the fifty United States, including numerous ratepayers in the SPP footprint. NRDC is dedicated to safeguarding the Earth: its people, its plants and animals, and the natural systems on which all life depends. Additionally, NRDC works to achieve energy solutions that will lower consumer energy bills, meet federal and state carbon reduction goals, accelerate the use of renewable energy, and ensure that clean energy is affordable and accessible to all.

The Sustainable FERC Project ("SFP") is a partnership of state, regional, and national environmental and other public interest organizations. SFP advocates for fair market designs and rules that ensure renewable energy resources can compete on a level playing field. SFP also works to expand the deployment of clean energy resources into the United States' electricity transmission grid, and to reduce and eventually eliminate carbon pollution from the U.S. power sector.

B. Respondent

SPP is a Commission-approved Regional Transmission Organization ("RTO"). It is an Arkansas non-profit corporation with its principal place of business in Little Rock, Arkansas. SPP currently has 107 members, including 16 investor-owned utilities, 14 municipal systems, 20 generation and transmission cooperatives, 8 state agencies, 17 independent power producers, 13 power marketers, 13 independent transmission companies, 1 federal agency, 4 large retail customers, and 1 alternative power/public interest. As an RTO, SPP: (1) administers, across the

facilities of SPP's Transmission Owners, open access transmission service over approximately 70,000 miles of transmission lines covering portions of Arkansas, Iowa, Kansas, Louisiana, Minnesota, Missouri, Montana, Nebraska, New Mexico, North Dakota, Oklahoma, South Dakota, Texas, and Wyoming; and (2) administers the Integrated Marketplace, a centralized day-ahead and real-time Energy and Operating Reserve market with locational marginal pricing and market-based congestion management.

III. INTRODUCTION

SPP's existing accreditation methodology for accrediting thermal generation resources ("Thermal Methodology") is woefully outdated and plainly unlawful. As more fully described below, SPP's Thermal Methodology gives thermal resources a free pass: thermal units effectively receive the maximum possible capacity value, representing an assumption that they will always be available to the system. This methodology is not remotely reflective of the realities of operating a thermal generating unit, most notably failing to account for variations in unit performance and forced outages. It is also not reflective of the realities of operating a regional grid, failing to evaluate unit performance during the highest-risk periods or to consider systemic risks such as extreme weather events and correlated outages in any meaningful way.

SPP's methodological failures have multiple impacts: they potentially create reliability risks to the grid because of inaccurate resource capacity signaling; they impose on ratepayers the obligation to pay for capacity contributions that they are

not actually receiving; and they artificially constrain the ability of resource planners to develop a robust mix of resources at lowest cost. As a result, there is no reasonable justification for allowing SPP's Thermal Methodology to remain in place.

SPP compounds this problem by using a methodology for accrediting renewable resources ("Renewable Methodology") that *does* account for variability in unit performance and *does* evaluate those resources' contribution during higher risk periods. This inconsistent treatment of generation resources is unduly discriminatory on its face. SPP's Renewable Methodology also has its own suite of inaccuracies that render it unjust and unreasonable in its own right; and SPP's accreditation methodologies are not contained in its tariff, thereby violating the Commission's Rule of Reason.

SPP proposed a revision to its Renewable Methodology in November 2021.[5] When that revision was rejected by the Commission on March 2, 2023, Commissioner Clements suggested that "[a]s SPP goes back to the drawing board, the simplest way to avoid undue discrimination would be to adopt a consistent framework."[6] And in response, SPP initiated a stakeholder process to develop a new set of proposed revisions to its existing methodologies, which expanded to include proposed amendments both to SPP's Renewable Methodology and to its Thermal

[5] Submission of Tariff Revisions to Implement Effective Load Carrying Capability Methodology, Docket No. ER22-379 (Nov. 10, 2021), Accession No. 20211110-5076 (SPP's proposal did not change the accreditation methodology for thermal resources).
[6] *Sw. Power Pool, Inc.*, 182 FERC ¶ 61,100 (2023) (Clements, Comm'r, concurring at P 9).

Methodology (collectively, the "Proposed Methodologies"). SPP filed these proposed revisions with the Commission on February 23, 2024, in Docket No. ER24-1317. In that filing, SPP acknowledges significant and irreconcilable flaws with the Existing Methodologies because they fail to appropriately accredit thermal resources based on their contribution to system resource adequacy.[7]

Unfortunately, the Proposed Methodologies do not sufficiently improve upon the Existing Methodologies. While the Proposed Methodologies eliminate some of the glaring failures of the Existing Methodologies (such as giving coal and gas plants a free pass for all malfunctions), they still fail to fairly account for each generating unit's contribution to system resource adequacy. Most problematically, the proposed Thermal Methodology uses the Demand Equivalent Forced Outage Rate ("EFORd") calculation,[8] which reduces the accreditation of units that are not available when called upon to be available during all hours of a season. However, it does not account for the actual needs of SPP's overall system by evaluating unit performance during SPP's highest-risk periods, or by otherwise accounting for systemic risks such as extreme weather events and correlated outages. And this flawed approach to thermal accreditation perpetuates undue discrimination against renewable resources. Complainants have discussed the flaws in SPP's Proposed

[7] Submission of Tariff Revisions to Implement Effective Load Carrying Capability Methodology and Performance Based Accreditation, Docket No. ER24-1317 (Feb. 23, 2024), Accession No. 20240223-5157 ("SPP Tariff Revisions").
[8] EFORd considers a unit's historical forced outage rate during periods the unit was in demand. EFORd assumes that a generating unit's performance is independent of other similar resources (i.e., that outages are not correlated).

Methodologies at more length in the concurrently filed protest of SPP's proposed tariff amendments.[9]

The purpose of this Complaint is not to disrupt or delay much-needed revisions to SPP's accreditation methodologies; rather, it is to hasten the development and deployment of equitable replacement accreditation methodologies for all resources.[10] If FERC merely rejects SPP's newly proposed tariff revisions without clear guidance on an acceptable replacement rate, it will force SPP to go back to the "drawing board" yet again, wasting precious time in another attempt to develop a lawful proposal. Instead, we seek here to have the Commission instruct SPP on the parameters of a just and reasonable rate that complies with the FPA and provides comparable treatment of thermal and renewable resources.

FERC-jurisdictional RTOs and Independent System Operators (collectively, "RTO/ISOs") across the country are modifying, or have already modified, their resource accreditation methodologies to account for correlated generator outages.[11]

---

[9] Protest of Pub. Interest Orgs., Docket No. ER24-1317 (Mar. 29, 2024) ("PIOs Protest").

[10] *See, e.g.*, *Renew Ne., Inc. & the Am. Clean Power Ass'n*, 182 FERC ¶ 61,085 at note 146 (2023) (We seek here to avoid a situation as described by Commissioner Clements, "[w]here the failure of existing rules to adapt to changing market conditions has created an urgent problem, the cost of rejecting a proposal is great, and there is a temptation to compare what has been proposed to the status quo. Indeed, stakeholders commonly identify deficiencies with a filing but nonetheless urge us to accept it") (citing Potomac Economics, Motion to Intervene Out of Time and Comments, Docket No. ER22-495-000 (Jan. 17, 2022)).

[11] *See* Gabriel Aguilera, et al., Resource Adequacy for State Utility Regulators: Current Practices and Emerging Reforms, Nat'l Ass'n Regul. Util. Comm'rs, at 28–29 (Nov. 2023), https://pubs.naruc.org/pub/0CC6285D-A813-1819-5337-BC750CD704E3 (The report summarizes how MISO, CAISO, PJM, and NYISO all use accreditation methodologies that at least partially account for outages; the only

Many of these RTO/ISOs have found that methodologies that do not account for any outages, or that only account for average forced outages across all demand hours, such as EFORd methodologies,[12] are insufficient to ensure just and reasonable rates.[13] SPP currently relies on a badly outdated methodology based on Installed Capacity ("ICAP") that does not account for any type of outages.[14] In other words, SPP is currently *at least* two steps behind the methodologies adopted or proposed by other RTO/ISOs across the country. SPP itself has stated that its current Thermal Methodology is outdated and unreliable. Specifically, SPP has conceded that ICAP is "less ideally suited"[15] to addressing ongoing challenges, and "*can no longer be relied upon amid the evolving resource mix . . . .*"[16]

Complainants ask the Commission to find that SPP's current Thermal Methodology is unjust, unreasonable, unduly discriminatory, or otherwise unlawful. Additionally, Complainants propose several core principles that the Commission

---

other Commission jurisdictional RTO/ISO that does not account for outages in its accreditation—other than SPP—is ISO-NE) (attached in Exhibit B).

[12] EFORd considers a unit's historical forced outage rate during periods the unit was in demand. EFORd assumes that a generating unit's performance is independent of other similar resources (i.e., that outages are not correlated).

[13] *See, e.g.*, Initial Comments and Limited Protest of the FirstEnergy Companies, Docket No. ER24-99 (Nov. 13, 2023), Accession No. 20231113-5301.

[14] The only other FERC jurisdictional RTO/ISO to rely on ICAP, ISO-NE, has stated that "'[t]he current capacity accreditation methodology overvalues gas resources' reliability contributions, which likely means that the region is over-relying on natural gas-fired generators to meet peak winter demand,'" and that ISO-NE is in the process of revising its capacity accreditation to account for outages. Robert Walton, *ISO New England proposes 1-year delay to 2025 forward capacity auction*, Utility Dive (Nov. 7, 2023), https://www.utilitydive.com/news/iso-new-england-delay-FCA19-capacity-auction-accreditation/698973/.

[15] SPP Tariff Revisions at 43.

[16] *Id.* at 8 (emphasis added).

should adopt when crafting the replacement rate that would help ensure equal treatment of resources while accurately reflecting the reliability contributions of those resources. Complainants further suggest one mechanism that might accomplish this goal that arises naturally from SPP's historic approach to capacity accreditation. Complainants are not, at this time, asking for FERC to initiate a formal evidentiary hearing to further develop the record to establish the necessary elements of a lawful accreditation methodology, but reserve the right to do so in the course of this proceeding.[17]

IV. BACKGROUND

A. SPP's Existing Capacity Accreditation Methodologies

SPP's current capacity accreditation methodologies are substantively contained in the RTO's Planning Criteria,[18] and they differ based on the type of resource being accredited. As described below, SPP uses an ICAP methodology to accredit thermal units; and it calculates accreditation for wind and solar resources based on those units' performance during designated peak load hours.

1. Thermal Units

For "conventional generation (thermal units, conventional and pumped storage hydro units)," SPP's Planning Criteria define a resource's Accredited

[17] *Blumenthal v. FERC*, 613 F.3d 1142, 1144 (D.C. Cir. 2010) ("FERC's choice whether to hold an evidentiary hearing 'is generally discretionary'") (quoting *Cerro Wire & Cable v. FERC*, 677 F.2d 124, 128 (D.C. Cir. 1982)).

[18] SPP's tariff requires only that a resource "be capable of supplying its accredited capacity, as determined in accordance with SPP Planning Criteria, for a minimum of four (4) continuous hours"; and it exempts run-of river hydroelectric, wind, and solar resources from that requirement. SPP OATT, Attachment AA, § 7.8.

Capacity "as the maximum Net Generating Capability a unit shall sustain over a four-hour period modified for environmental, seasonal, operational and fuel limitations."[19] Net Generating Capability, in turn, means "[t]he gross maximum output a unit can sustain over a one-hour period reduced by any power used for unit auxiliaries."[20] SPP requires thermal units to perform a Capability Test—which establishes a unit's Net Generating Capability—every five years during the Summer Season.[21] For thermal units, the test must occur when the ambient temperature is within a certain range.[22]

In addition to these restrictions on Capability Tests, SPP provides that, in accrediting thermal units, "[a]mbient condition load corrections are not required but may be applied at the member's discretion."[23] SPP's Planning Criteria acknowledge that a thermal unit's availability "depends, in part, on the availability of an adequate and reliable fuel supply," and state that Net Generating Capability determinations shall "tak[e] into consideration the fuel management program and any restrictions imposed by regulatory agencies."[24] But SPP does not currently

---

[19] SPP Planning Criteria § 7.1.1(7).
[20] *Id.* § 7.1.1(6).
[21] *Id.* § 7.1.2.1(1).
[22] *Id.* § 7.1.1.1(2). If the ambient temperature is more than 10° Fahrenheit below the station's American Society of Hearing, Refrigerating, and Air Conditioning Engineers' ("ASHRAE") Rated Ambient Temperature, then the unit's output is penalized by 5%, plus an additional 0.5% per degree in excess of 10° (maximum of 20° below ASHRAE standard). Conversely, the test cannot be performed at more than 20 degrees above the station's ASHRAE Rated Ambient Temperature. *Id.*
[23] *Id.* § 7.1.5.1. The "[c]orrection methodology must be documented and maintained available for review by the Transmission Provider's staff." *Id.*
[24] *Id.* § 7.1.5.1; *see also id.* § 7.1.9 ("Assurance of having desired generating capacity depends, in part, on the availability of an adequate and reliable fuel supply").

prescribe any process or guidelines for adjusting a thermal unit's Accredited Capacity based on risks to fuel availability. Nor does SPP otherwise adjust a thermal unit's accreditation for forced outages or the unit's availability.[25]

If a unit cannot perform a Capability Test when required "due to a forced outage, a maintenance outage, or a forced de-rate," then the unit can use its last set of Capability Test results and retest in the next Summer Season.[26] SPP does not require a separate Winter Season Capability Test unless the unit has a higher claimed capability for the Winter Season.[27]

SPP also requires that a unit conduct an annual Operational Test.[28] The test must "be conducted at a minimum of 90% of [the unit's] Summer Season Net Generating Capability."[29] There are no ambient temperature requirements for an Operational Test and any hour where the unit operates above the 90% minimum can qualify as the Operational Test.[30]

If a thermal unit is capable of supplying its accredited capacity for a minimum of four continuous hours in an Operational Test, then it is accredited at the capacity level attained through the Capability Test.[31]

---

[25] *Cf. id.* §§ 7.1.2.1, 7.1.5.
[26] *Id.* § 7.1.2.4.
[27] *Id.* § 7.1.2.1(1).
[28] *Id.* § 7.1.3.
[29] *Id.* § 7.1.3.1.
[30] *Id.*
[31] SPP Tariff Revisions at 13; SPP OATT, Attachment AA, § 7.8.

2. Wind and Solar Units

SPP takes a different approach to accrediting wind and solar resources. SPP's recommended methodology for wind and solar units determines those resources' capability on a monthly basis, based on historical performance.[32] Under that methodology, SPP looks at the top 3% of load hours for the Load Responsible Entity ("LRE") during each month of the evaluation period, then takes the unit's 60th percentile output during those peak load hours, i.e., the output the unit achieved in 60% of the peak load hours identified.[33] Historically, the highest load hours have been the riskiest hours in terms of maintaining sufficient capacity to meet load.

Facilities that have been in commercial operation for three or fewer years may calculate output using weather data to approximate wind or solar conditions in the area "if measured [megawatts ('MW')] values are not yet available."[34] Alternatively, the LRE may use a default value of 5% of nameplate capacity for wind units and 10% of nameplate capacity for solar units.[35] Facilities that have been in commercial operation for four or more years must include all available data up to the most recent ten years and must rely on metered MWh data.[36]

---

[32] SPP Planning Criteria § 7.1.6; *see also id.* § 7.1.1(7).
[33] *Id.* § 7.1.6(1)(a)–(b). While section 7.1.6(1)(a) references peak load hours during *each* month of the evaluation period, section 7.1.6(1)(c) states that accredited capacity "may be determined by selecting the appropriate monthly MW values corresponding to the [LRE]'s *peak* load month of the season of interest." (emphasis added).
[34] *Id.* § 7.1.6(1)(d)(ii).
[35] *Id.* § 7.1.6(1)(d)(iii).
[36] *Id.* § 7.1.6(1)(e).

3. Energy Storage Units

SPP requires that energy storage resources undergo a Capability Test for "the time (e.g. four-hour) duration at which they are accredited."[37] The Capability Test must occur every three years during the Summer Season.[38]

Storage resources with a time duration of at least four hours are accredited based on the Capability Test, with no adjustments.[39] However, a storage resource with a shorter duration will have its accreditation adjusted to a four-hour equivalent; for example, a two-hour duration storage resource will be accredited at 50%.[40]

V. LEGAL STANDARD

A. The Commission's Just and Reasonable Standard Under the FPA and SPP's Burden of Proof

Section 206 of the Act empowers FERC to make a determination on existing rates and to modify them if they are found to be "unjust, unreasonable, unduly discriminatory or preferential."[41]

Specifically, under Section 206 of the Act, the Commission may investigate—either on its own initiative or in response to a third-party complaint—whether a rate contained in an RTO's existing tariff remains just and reasonable.[42] The

---

[37] *Id.* § 7.1.2.3(1).
[38] *Id.* § 7.1.2.3(2). Units that claim a higher Winter Season accredited capacity must perform the test every three years during the Winter Season. *Id.* § 7.1.2.3(3).
[39] *Id.* § 7.1.7.
[40] *Id.*
[41] 16 U.S.C. § 824e(a).
[42] *Id.* § 824e(a); *see also Pub. Serv. Elec. & Gas Co. v. FERC*, 989 F.3d 10, 13 (D.C. Cir. 2021).

proponent of the rate change bears the burden of showing that the existing rate is unjust or unreasonable.[43] If the proponent does so, then the existing rate is unlawful, and the Commission "must establish a just and reasonable replacement rate."[44] A complainant in a Section 206 proceeding may, but need not, offer a full replacement proposal that is just and reasonable.[45] Section 206 therefore "mandates a two-step procedure" whereby the Commission must "make an explicit finding that the existing rate is unlawful before setting a new rate."[46] The Commission has found that "evolving market mechanisms" can render existing tariff provisions "unjust and unreasonable."[47]

B. The Commission's Undue Discrimination Standard Under the FPA

As the Commission has observed, the FPA "bristles with concern about undue discrimination."[48] This standard prohibits a grid operator from, without adequate justification, granting one type of market participant preference over another type that can provide a similar service.[49]

---

[43] 16 U.S.C. § 824e(b).
[44] *Pub. Serv. Elec. & Gas Co.*, 989 F.3d at 13 (citing 16 U.S.C. § 824e(a)).
[45] *FirstEnergy Serv. Co. v. FERC*, 758 F.3d 346, 353 (D.C. Cir. 2014).
[46] *Emera Me. v. FERC*, 854 F.3d 9, 24 (D.C. Cir. 2017).
[47] *PJM Interconnection, L.L.C.*, 149 FERC ¶ 61,091 at P 30 (2014).
[48] *Am. Elec. Power Serv. Corp.*, 67 FERC ¶ 61,168 at 61,490 (1994) (citing *Associated Gas Distribs. v. FERC*, 824 F.2d 981, 998 (D.C. Cir. 1987)).
[49] "*Complex" Consol. Edison Co. of N.Y., Inc. v. FERC*, 165 F.3d 992, 1012 (D.C. Cir. 1999); *see also Town of Norwood, Mass. v. FERC*, 202 F.3d 392, 402 (1st Cir. 2000) ("Specifically, the Federal Power Act outlaws unjustifiably disparate treatment of similarly situated entities under the rubric of 'undue preference.'") (citing 16 U.S.C. § 824d(b)); Mkt.-Based Rates for Wholesale Sales of Elec. Energy, Capacity & Ancillary Servs. by Pub. Utils., 119 FERC ¶ 61,295 at P 963 (2007) ("The standard for judging undue discrimination or preference remains what it has always been:

The Commission has explained that different treatment is unduly discriminatory "when there is a difference in rates or services among similarly situated entities."[50] Determining that entities are similarly situated "does not mean that there are no differences between them; rather, it means that there are no differences that are material to the inquiry at hand."[51] Entities are similarly situated "if they are in the same position with respect to the ends that the law seeks to promote or the abuses that it seeks to prevent, even if they are different in many other respects."[52] Irrelevant differences will not make parties dissimilarly situated.[53] Consistent with those precedents, the Commission has, for example, determined that new and existing generators were similarly situated for "reactive

---

disparate rates or service for similarly situated customers."); 16 U.S.C. § 824e(a) (requiring the Commission to fix a rate found "unjust, unreasonable, unduly discriminatory or preferential").

[50] *Calpine Oneta Power, L.P.*, 116 FERC ¶ 61,282 at P 36 (2006); *El Paso Nat. Gas Co.*, 104 FERC ¶ 61,045 at P 115 (2003); *Towns of Alexandria, Minn. v. Fed. Power Comm'n*, 555 F.2d 1020, 1028 (D.C. Cir. 1977).

[51] *N.Y. Indep. Sys. Operator, Inc.*, 162 FERC ¶ 61,124 at P 10–11 (2018) (Order granting, in part, and denying, in part, rehearing and clarification, and requiring further compliance).

[52] *Id.* at P 10. The Commission further explained "Consistent with those precedents, the Commission has, for example, determined that new and existing generators were similarly situated for 'reactive power compensation purposes' because they were equally capable of providing that service, notwithstanding other significant differences." *Id.* (citing *Calpine Oneta Power, L.P.*, 116 FERC ¶ 61,282 at P 36, *reh'g denied* 119 FERC ¶ 61,177 (2007)); *see also PJM Interconnection, L.L.C.*, 168 FERC ¶ 61,121 (2019) ("'[N]on-federal renewable resources are similarly situated to federal hydroelectric and thermal resources for purposes of transmission curtailments because they all take firm transmission service'") (citing *Iberdrola Renewables, Inc. v. Bonneville Power Admin.*, 137 FERC ¶ 61,185 at P 62 (2011), *reh'g denied*, 141 FERC ¶ 61,233 (2012)).

[53] *See, e.g.*, *N.Y. Indep. Sys. Operator, Inc.*, 162 FERC ¶ 61,124 at P 10.

power compensation purposes" because they were equally capable of providing that service, notwithstanding other significant differences.[54]

Tariffs and market rules must be designed to compensate all resources capable of providing services needed by the grid without specifying eligibility requirements or operating procedures that exclude innovative or new technologies capable of providing the same service.

VI. ARGUMENT

SPP's methodology for thermal resource accreditation fails to consider many critical factors when determining thermal units' value, thereby resulting in unjust and unreasonable rates. Additionally, SPP's methodologies for other resource classes use radically different metrics that do account for many of those factors. As a result, SPP is unequivocally over-accrediting thermal resources in comparison to renewable resources, which is unduly discriminatory. Furthermore, SPP's methodology for renewable resource accreditation relies on a crude measure of performance during high-load periods, which does not appropriately value renewable resources based on their contribution to improved grid reliability. Lastly, the substantive provisions of SPP's accreditation methodologies are not contained in the tariff, and instead are contained in the planning criteria, violating the Commission's Rule of Reason. SPP's existing Thermal and Renewable

[54] *Calpine Oneta Power, L.P.*, 116 FERC ¶ 61,282 at P 36; *see also Iberdrola Renewables, Inc. v. Bonneville Power Admin.*, 137 FERC ¶ 61,185 at P 62 (2011) (explaining that that "non-[f]ederal renewable resources are similarly-situated to [f]ederal hydroelectric and thermal resources for purposes of transmission curtailments because they all take firm transmission service").

Methodologies therefore violate the FPA for four independent, but equally significant, reasons.

A. SPP's Existing Thermal Methodology for Thermal Resources Is Unjust and Unreasonable Because It Fails to Accurately Reflect the Capacity Value of Those Resources

SPP's existing ICAP-based Thermal Methodology fails to consider either forced outage rates or correlated outages. Instead, the methodology merely "aligns with the nameplate of the [thermal] resource."[55] There is no reasonable justification for SPP to continue using the ICAP accreditation methodology for its thermal resources.

1. SPP's Existing Thermal Methodology for Thermal Resources Is Unjust and Unreasonable Because It Fails to Account for Forced Outages

Under the ICAP accounting convention, SPP does not consider generators' forced outage rates. In fact, the Thermal Methodology does not consider any type of outages at all. This failure leads to a significant overstatement of thermal resources' reliability value. Forced outages of generation resources are well documented and were one of the primary drivers for RTO/ISOs to seek a more accurate way to account for resource performance and availability. As SPP has acknowledged, basing accreditation on the reliability of a given resource is a foundational need for

[55] Nat. Res. Def. Council, RR554 – Resource Adequacy Performance Based Accreditation for Conventional Resources Comment Form, SPP, at 1 (May 23, 2023), https://sustainableferc.org/wp-content/uploads/2023/05/RR-554-Comments-052323-Clean-Energy-Organizations.pdf (emphasis omitted) (attached in Exhibit B).

any capacity accreditation regime.[56] However, SPP's Thermal Methodology (i.e., ICAP) fails to meaningfully incorporate a consideration of forced outages into accreditation convention.[57]

ICAP is known to overstate a resource's ability to provide capacity during resource adequacy events, by overlooking the likelihood that resources may be unavailable due to forced outages during demand periods. SPP is well-aware that forced outages occur,[58] not least because they are extensively discussed at the North American Electric Reliability Corporation ("NERC"),[59] and multiple experts have developed widely accepted methods to plan and account for such forced outages.[60] It

---

[56] SPP Tariff Revisions at 2 ("It is not enough to have sufficient nameplate generation installed; the region needs assurance that such capacity will deliver at an expected output when the output is needed most.").
[57] Ex. A, Milligan Aff. at 6.
[58] Garrett Crowson, January 2024 Winter Storm Gerri, SPP, at 26–28 (2024) ("Crowson Slides") (slides showing generating capacity outages during Winter Storms Gerri, Elliot, and Uri) (attached in Exhibit B); *see also* SPP Tariff Revisions at 9–10 (discussing forced outages during Winter Storm Uri).
[59] *See, e.g.*, NERC, 2023 State of Reliability Overview: Assessment Overview of 2022 Bulk Power System Performance, at 7 (June 2023), https://www.nerc.com/pa/RAPA/PA/Performance%20Analysis%20DL/NERC_SOR_2023_Overview.pdf ("In 2022, conventional generation experienced its highest level of unavailability (8.5%) overall since NERC began gathering [Generating Availability Data System ("GADS")] data in 2013 as measured by the weighted equivalent forced outage rate (WEFOR).") (attached in Exhibit B).
[60] Ex. A, Milligan Aff. at 2–5, 18–21; *see also* Derek Stenclik, Ensuring Efficient Reliability: New Design Principles for Capacity Accreditation, at 10, Energy Sys. Integration Grp. ("ESIG") (Feb. 2023) ("ESIG Report"), https://www.esig.energy/wp-content/uploads/2023/02/ESIG-Design-principles-capacity-accreditation-report-2023.pdf (explaining that, historically, thermal resource "capacity accreditation was commonly calculated as its [Unforced Capacity ('UCAP')]—installed capacity minus its forced outage rate") (attached in Exhibit B); *KeySpan-Ravenswood, LLC v. FERC*, 348 F.3d 1053, 1054 (D.C. Cir. 2003) ("[T]he UCAP methodology accounts for the probability that a generating unit will be called upon to produce energy but will

is unreasonable for SPP to continue to rely on ICAP's outdated assumption that thermal resources will always be available when SPP knows that they will not.[61] Indeed, SPP recently released analysis examining the availability and accredited value of different resource classes over Winter Storms Uri, Elliot, and Gerri. SPP found that thermal resources significantly and repeatedly underperformed relative to their accredited value in all three storms.[62] These high-risk system events are precisely the times when system operators need their accreditation methodologies to be accurate; however, as shown by the figures below, SPP's ICAP methodology for thermal resources regularly over-accredited those resources by about 18% to 57%, while under-accrediting wind resources by up to 250%.[63] Such repeated and drastic accreditation inaccuracies during high-risk periods are unsustainable and demand immediate revision. As can be seen from the figures below, thermal resource availability was consistently and significantly below their ICAP accredited value.

be unable to do so because of 'forced outages,' i.e., unforeseen circumstances resulting in a generating unit's production of less than maximum net capacity.").
[61] Ex. A, Milligan Aff. at 7–11.
[62] Crowson Slides, *supra* note 58 at 18–23.
[63] *Id*.

Figure 1: Coal Generator Availability During Recent Winter Storms[64]

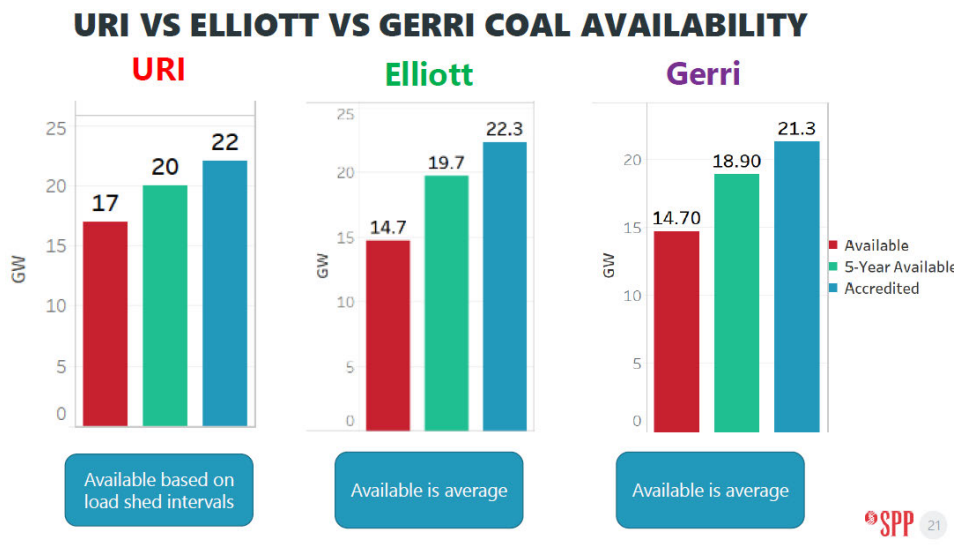
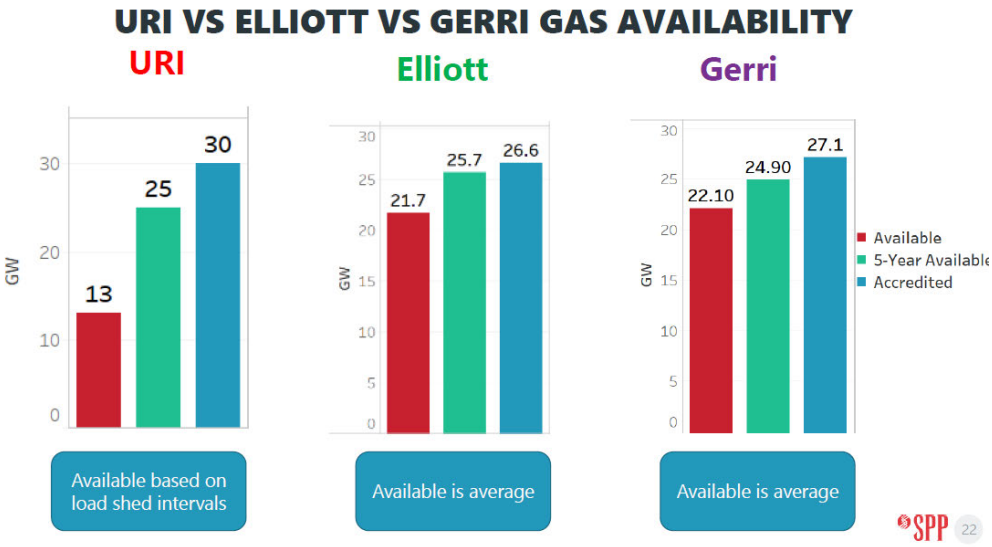


Figure 2: Gas Generator Availability During Recent Winter Storms[65]



In SPP's most recent accreditation submission to the Commission, SPP highlights a similar figure showing the way in which thermal resources "underperformed . . . as

[64] *Id.* at 21.
[65] *Id.* at 22.

compared to the accreditation those resources received under SPP's existing accreditation method" during Winter Storm Uri.[66] SPP then states that this result "*mandate[s]* that SPP adopt a methodology for accrediting capacity that better anticipates the availability of resources . . . ."[67] On this basis alone, the Commission must find the existing methodology for thermal resources to be unjust and unreasonable.

Moreover, ICAP also assumes that each thermal resource's ICAP megawatt is nearly the same, which is factually inaccurate because some thermal resources are subject to more forced outages than others.[68] Again, SPP acknowledges this reality in its most recent filing, where SPP states:

> Utilizing the net generating capability of the resource acknowledges the resource's maximum output, but does not consider the resource's performance or contribution to reliability in comparison to other resources in the SPP footprint, and therefore does not distinguish the performance of resources, *thus potentially providing too much capacity value to certain resources and undervaluing the reliability contribution of others*. As an example, two resources with equal net generating capability may have different failure rates depending on the age,

---

[66] SPP Tariff Revisions at 9–10.
[67] *Id*. at 10 (emphasis added).
[68] Ex. A, Milligan Aff. at 3, 5–7; *see also* Paul Arbaje & Mark Specht, Gas Malfunction: Calling into Question the Reliability of Gas Power Plants, Union of Concerned Scientists, at 3–5 (Jan. 2024) ("Arbaje & Specht Report"), https://www.ucsusa.org/sites/default/files/2024-01/Gas%20Malfunction_brief_1.8.pdf (detailing how "extreme winter weather causes gas plants to fail disproportionately") (attached in Exhibit B); Samuel A. Newell et al., Capacity Resource Accreditation for New England's Clean Energy Transition, Report 1: Foundations of Resource Accreditation, The Brattle Grp., at 24 (June 2, 2022) ("Newell Report"), https://www.mass.gov/doc/capacity-resource-accreditation-for-new-englands-clean-energy-transition-report/download (observing that "assigning the same value to all resources in a given class would be inaccurate, given each resource's unique technologies, configurations, innovations, and operations causing different abilities to reduce shortages") (attached in Exhibit B).

> mechanical components, or physical make-up of the facility. *The process of treating resources that provide different levels of reliability to the system the same for accreditation purposes results in a system planning reserve margin that might be higher than needed . . . .*[69]

Therefore, continuing to rely on ICAP introduces a known error into the estimate of thermal resource availability, which directly leads SPP to overstate supply availability and to underestimate system reliability risk. As noted by SPP, "[t]he process of treating resources that provide different levels of reliability to the system the same for accreditation purposes results in a system planning reserve margin that might be higher than needed, which *may be disproportionately carried by the owners or off-takers of higher performing resources with no recognition of that higher level of performance*."[70] For these reasons alone, SPP's existing methodology is unjust and unreasonable.

Relatedly, by failing to consider outage rates the ICAP methodology can lead to "adverse selection," which is a phenomenon whereby "lower performing but cheaper resources may displace other potential suppliers with better performing resources that would do more to ensure system reliability."[71] In other words, SPP's existing Thermal Methodology does not merely miscount the contribution of thermal resources: it eliminates any financial incentive for resources to become more reliable, undermining resource reliability in both the short and long term.

---

[69] SPP Tariff Revisions at 14 (emphasis added).
[70] *Id.* (emphasis added).
[71] Alberta Elec. Sys. Operator, Comparison of Installed Capacity (ICAP) & Unforced Capacity (UCAP) Capacity Value Calculation Methods, at 6 (July 4, 2017), https://www.aeso.ca/assets/Uploads/20170704-Eligibility-Session-3-UCAP-ICAP-Comparison-Presentation.pdf (emphasis omitted) (attached in Exhibit B).

In addition to causing uncertainty and inaccuracies regarding system reliability, relying on an ICAP-based methodology, rather than a convention that appropriately considers forced and correlated outages, ultimately rewards poorer performing units at the expense of better performing resources.[72]

The Commission recently found, with regard to resource adequacy requirements, that "[i]t is essential for the integrity of the system" to identify resources that "are truly expected to be available."[73] Specifically, the Commission rejected an SPP proposal where SPP's failure to ensure "availability" of resources resulted in an unacceptable "risk that capacity calculations could be inflated, giving a false impression of resource adequacy and grid resilience."[74] That same risk results today from SPP's Thermal Methodology: it "inflates" the expected availability of thermal resources such that it fundamentally distorts the value to the system these resources are actually providing.

2. SPP's Existing Thermal Methodology Is Also Unjust and Unreasonable Because It Fails to Account for Correlated Outages

SPP's existing Thermal Methodology is also unjust and unreasonable because it fails to consider correlated outages. Correlated outages can take several different

---

[72] Ex. A, Milligan Aff. at 7–8; *see also* Newell Report, *supra* note 68 at 26 (incorporating actual performance accounts for a resource's "physical attributes, maintenance management, fuel management, and any other measures the plant owner can take to enhance availability during shortages" and "provides incentives to manage availability better so as to earn higher capacity accreditation in future years," which is "especially important for traditional thermal resources, whose performance is strongly affected by these management factors").
[73] *Allison Clements, & Mark C. Christie. Sw. Power Pool, Inc.*, 185 FERC ¶ 61,159 at P 41 (2023).
[74] *Id*. at P 40.

forms, including weather-dependent outages, fuel availability outages, and common-mode outages—none of which are included in SPP's thermal accreditation convention.

Failing to include correlated outages in an accreditation methodology provides inaccurate information to utilities, state regulators, and SPP about the reliability contributions of thermal resources.[75] Recent analysis shows that ignoring these types of outages "can overstate the capacity value of [thermal] resources by 2.7% to over 20% in winter and 4.6% to over 10% in summer."[76] Here, the thermal units receiving capacity accreditation based on their ICAP rates that perform poorly during extreme events are accredited at a higher rate than their actual availability,[77] because the analysis does not consider that under extreme weather conditions, or other high-risk periods, the odds of correlated outages for many thermal resources dramatically increase.[78]

---

[75] Notably, nowhere in any of SPP's newly proposed capacity accreditation methodology filings does SPP even mention the term "correlated outages," let alone explain how its proposed changes will capture these well-understood events. *See generally*, SPP Tariff Revisions.

[76] Advanced Energy Econ. ("AEE"), Getting Capacity Right: How Current Methods Overvalue Conventional Power Sources, at 2 (Mar. 2022) ("AEE Report"), https://info.aee.net/hubfs/2022%20Folders/2022%20Reports%20With%20Stickers/STICKER%20Getting%20Capacity%20Right%20-%20How%20Current%20Methods%20Overvalue%20Conventional%20Power%20Sources.pdf (attached in Exhibit B).

[77] *See, e.g.*, Crowson Slides, *supra* notes 62–65.

[78] Ex. A, Milligan Aff. at 7.

Weather-dependent correlated outages are a well understood risk at this point. SPP has acknowledged the significance of this issue,[79] and modeling shows that thermal generation resources can "suffer correlated outages due to the acute impacts of extreme weather, such as frozen equipment or heat stress, causing them to perform below their EFORd-based rating in a statistically significant manner."[80] Moreover, "extreme weather events are becoming more frequent, disrupting fuel delivery systems, stressing generator performance, and causing correlated generator outages."[81] And "[r]ecent winter weather events during Winter Storm Uri (February 2021) and Winter Storm Elliott (December 2022) have shown unique vulnerabilities to thermal resources and the impacts of correlated outages on resource adequacy."[82] The Commission recently summarized that a common thread between winter storms from 2011, 2014, 2018, 2021, and 2022 involved correlated generator outages caused by freezing-related equipment failures.[83] These

---

[79] SPP, A Comprehensive Review of Southwest Power Pool's Response to the February 2021 Winter Storm: Analysis and Recommendations, Version 1.0, at 35–54 (July 19, 2021) https://www.spp.org/documents/65037/comprehensive%20review%20of%20spp's%20response%20to%20the%20feb.%202021%20winter%20storm%202021%2007%2019.pdf (attached in Exhibit B); *see also* Protest of Clean Energy Advocates to Southwest Power Pool's Response to the Commission's Second Request for Additional Information, at 4, Docket No. ER22-379-002 (June 29, 2022), Accession No. 20220629-5139.

[80] AEE Report, *supra* 76 at 4.

[81] *Midcontinent Indep. Sys. Operator, Inc.*, 180 FERC ¶ 61,141 (2022) (Clements, Comm'r, dissenting at P 3).

[82] ESIG Report, *supra* note 60 at x.

[83] *See, e.g.*, FERC et al., Inquiry into Bulk-Power System Operations During December 2022 Winter Storm Elliott: FERC, NERC and Regional Entity Staff Report, at 15, 18–19, 165 (Oct. 2023), https://www.ferc.gov/media/winter-storm-

equipment problems include but are not limited to: "freezing of particular components, including valves, water lines, inlet air systems, and sensing lines," and additional freezing related problems including "wiring failure[s], mechanical wear of valves, and embrittlement of flexible seal materials like rubber and silicone."[84] "Across all generator types, the top direct causes of plant outages in each of the major winter storm events related to equipment freezing . . . ."[85]

Relatedly, a second type of correlated outage specifically relates to fuel availability. "[C]old weather events can impact availability of fuel supply itself (such as natural gas) independent of particular acute impacts on generation resources themselves and result in correlated outages that may not be captured in the EFORd average availability calculation."[86] Similar to freezing issues, gas generation units are also particularly vulnerable to fuel availability disruptions, as "[l]arge, correlated fuel shortage failures at gas units occurred in the first calendar quarter of every year between 2013 and 2018."[87] Because gas units "depend on the real-time delivery of gas via pipeline, burning it upon delivery to produce electricity," they are "vulnerable to running out of fuel, since extreme cold weather can interrupt both the production and the transportation of gas."[88] Recent weather

---

elliott-report-inquiry-bulk-power-system-operations-during-december-2022 (attached in Exhibit B).

[84] Arbaje & Specht Report, *supra* note 68 at 4.

[85] *Id*.

[86] AEE Report, *supra* note 76 at 4.

[87] Gerad M. Freeman et al., *What causes natural gas fuel shortages at U.S. power plants?*, 147 Energy Policy 1, 1 (Dec. 2020) (attached in Exhibit B).

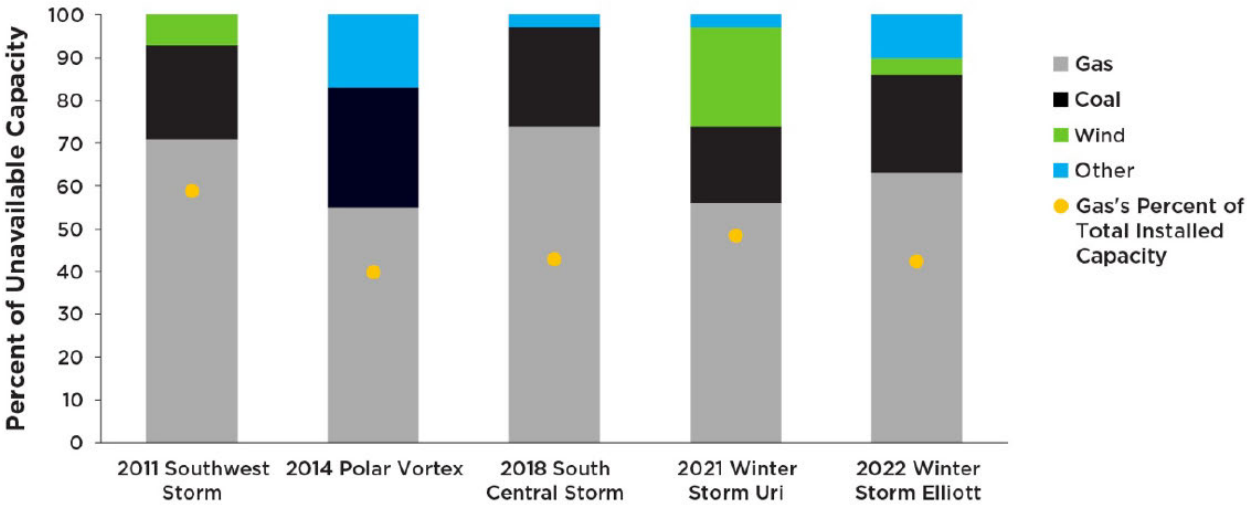
[88] Arbaje & Specht Report, *supra* note 68 at 4.

events in 2021 and 2022 led to corresponding gas production reductions of 70% because "liquids in the gas wells, wellheads, and ancillary equipment froze up and blocked the flow of gas."[89] These fuel supply issues "present[] a vulnerability with its potential to create a feedback loop of failures."[90]

Thermal gas units have been particularly impacted by weather driven correlated outages. When considering the last five major storms, a "key commonality among all five was that gas plants accounted, by far, for the largest source of generating capacity knocked offline."[91] Additionally, a "pattern" of outages has emerged "largely of gas plants . . . that [] generally took place when temperatures were *above* the plants' minimum ambient temperature ratings."[92] The figure below shows that, "[t]he cumulative gas plant capacity that failed during each event was more than twice that of the second-most-impacted category of capacity."[93]

[89] *Id*. These events are often called "freeze-offs."
[90] *Id*. at 5.
[91] *Id*. at 3.
[92] *Id*. at 4.
[93] *Id*. at 3.

Figure 3. Generation Failures by Fuel Type During Five Extreme Winter Storms[94]



SPP's failure to account for these well-documented correlated outages in the existing Thermal Methodology is unjust and unreasonable.

Additionally, it is not only cold-weather-related correlated outages that are unaccounted for by SPP's existing Thermal Methodology. Extreme heat can also result in correlated outages or derates for multiple thermal plants within a region.[95]

---

[94] *Id.* ("Gas plants accounted for most of the failed capacity in all five recent extreme winter weather events. *Gas plants failed disproportionately in comparison with gas's percentage of total installed capacity, indicating that they are more susceptible to extreme winter weather than are other resource types.* Notes: (1) 2011 data are specific to Texas's main grid operator, ERCOT; it had the most customers experiencing rolling blackouts. (2) 2014 data do not include wind generator outages because NERC had no mandatory reporting protocol for them. (3) 2018 data are specific to failures caused by freezing issues at generators. (4) In its 2011 report, FERC adjusted wind outages downward to account for expected output based on actual wind speed conditions. It did not do so for the 2021 and 2022 storms. This could have made the wind outages in 2021 and 2022 appear more substantial than they actually were, since grid operators rarely expect wind generators to operate at full output. (5) Gas's Percent of Total Installed Capacity is specific to the areas impacted by the storm") (emphasis omitted).

[95] *Id.* at 5; *see also* Ex. A, Milligan Aff. at 7; NERC, 2022 Summer Reliability Assessment, at 4–5 (May 2022) ("NERC 2022 Summer Reliability Assessment"),

For example, the NERC 2022 Summer Reliability Assessment found that in SPP's territory, specifically in the Missouri River Basin, common-mode outages can occur where drought conditions result in reduced "output from thermal generators that use the Missouri River for cooling . . . ."[96] Similar issues can arise during winter months when ice blocking can prevent river flow, which happened during Winter Storm Gerri and forced roughly 2,000 megawatts offline.[97]

This type of problem is not unique to the Missouri River Basin in SPP; it could occur anywhere where drought conditions or ice blocking persist, and can affect any generation resource reliant on hydronic cooling or flow.[98] NERC warns that "[o]utages and reduced output from thermal and hydro [systems] could lead to energy shortfalls at peak demand."[99] Common mode outages can also occur where resources share equipment like step-up transformers; and in extreme heat, it is well understood that thermal plants will need to derate their output even in the absence of active drought conditions, to keep the facilities cool enough to operate.[100] However, despite NERC specifically flagging this reliability risk in SPP nearly two

---

https://www.nerc.com/pa/RAPA/ra/Reliability%20Assessments%20DL/NERC_SRA_2022.pdf (attached in Exhibit B).

[96] NERC 2022 Summer Reliability Assessment, *supra* note 95 at 4.

[97] Crowson Slides, *supra* note 58 at 7.

[98] *See* Arbaje & Specht Report, *supra* note 68 at 5 (describing how prolonged drought in Texas forced a plant operator to take "three gas plant units, totaling 403 MW, offline for almost a year until rain replenished the reservoir from which they pulled cooling water").

[99] NERC 2022 Summer Reliability Assessment, *supra* note 95 at 4.

[100] Arbaje & Specht Report, *supra* note 68 at 5.

years ago, SPP's Thermal Methodology—as well as its Proposed Methodology in ER24-1317—accredits resources as if this risk is nonexistent.

While SPP continues to ignore correlated thermal outages, other RTOs have already determined, based on their experience, that *even* EFORd-based accreditation—SPP's proposed replacement for its flawed Existing Methodology—does not sufficiently measure resource availability in light of these risks. As discussed in greater detail in the concurrently filed protest, both the Midcontinent Independent System Operator ("MISO") and PJM Interconnection ("PJM") have received Commission approval to leave behind EFORd-based accreditation methodologies.[101] In those proceedings, MISO observed that the EFORd mechanism "no longer provides an accurate expectation of availability, as proven by recent emergency events, especially those driven by extreme weather."[102] Similarly, as PJM pointed out in its application, "the logic underlying use of EFORd as the main accreditation metric assumes that unplanned outages experienced by [thermal resources] are random and thus each resource's forced outage pattern is independent from other resources' forced outage patterns, and we now know this to not be the case . . . ."[103] In other words, these RTOs' experiences underscore how

---

[101] *See generally PJM Interconnection, L.L.C.*, 186 FERC ¶ 61,080 (2024); *Midcontinent Indep. Sys. Operator, Inc.*, 180 FERC ¶ 61,141 (2022), *reh'g denied*, 182 FERC ¶ 61,096 (2023); PIOs Protest at 21–24.

[102] Midcontinent Independent System Operator, Inc.'s Filing to Include Seasonal and Accreditation Requirements for the MISO Resource Adequacy Construct, at 5, Docket No. ER22-495 (Nov. 30, 2021), Accession No. 20211130-5166.

[103] PJM, Capacity Market Reforms to Accommodate the Energy Transition While Maintaining Resource Adequacy, Attachment E, Affidavit of Dr. Patricio Rocha-

badly SPP lags behind in adopting a reasonable approach to addressing correlated outages.

Lastly, an ICAP-based accreditation regime also fails to provide any meaningful incentive for individual generators to improve their availability during high-risk periods (such as through winterization, dual fuel contracts, or efforts to obtain additional firm fuel supply).[104] As explained by PJM, without an accreditation mechanism that forces generators to take these issues into consideration, the market "will provide insufficient incentives to retain and attract sufficient capacity resources necessary to maintain reliability."[105]

B. SPP's Existing Methodologies Are Unduly Discriminatory Because They Fail to Provide Comparable Treatment of Resources

SPP's existing Thermal Methodology is also unlawful because, combined with the existing Renewable Methodology, it results in differential treatment of similarly situated resources that is unduly discriminatory on its face. All resource types, including both renewable and thermal resources, experience outages that affect their ability to serve load. The Thermal Methodology is unlawful not only because it fails to account for outages for thermal resources, but also because it is inconsistent with the Renewable Methodology, which does account for outage potential among wind and solar resources. As explained by Commissioner Clements when discussing

---

Garrido on Behalf of PJM Interconnection, L.L.C., at 5, Docket No. ER24-99 (Oct. 13, 2023), Accession No. 20231013-5157.

[104] *PJM Interconnection, L.L.C.*, 186 FERC ¶ 61,080 at P 15; Ex A., Milligan Aff. at 8.

[105] *PJM Interconnection, L.L.C.*, 186 FERC ¶ 61,080 at P 15.

SPP's (now rejected) ELCC proposed revisions, "SPP's asymmetrical treatment of historical outages alone constitutes undue discrimination."[106] The same principle applies to SPP's *existing* disparity of treatment between renewable and thermal resources.

SPP has explained that its existing Renewable Methodology "takes into account both the variability/intermittency of wind and solar resources *as well as any outages, whether they are full plant outages or outages of individual wind or solar generating units that may be perceived as partial outage of the full wind or solar facility*."[107] In contrast, and as noted by the Commission, SPP's Thermal Methodology "*does not consider outages in the calculation*."[108] This discrepancy in treatment is plainly unlawful. With respect to correlated outages, SPP's treatment of renewable resources and thermal resources is, if anything, backwards. As described above, gas plants accounted for significant unavailable capacity in each of the five recent extreme winter events and failed disproportionately in comparison to the percentage of total installed capacity.[109] Yet, in SPP, it is only renewable resources that have correlated and forced outages considered in their accreditation methodology.

---

[106] *Sw. Power Pool, Inc.*, 182 FERC ¶ 61,100 (Clements, Comm'r, concurring at P 6).
[107] Motion for Leave to Answer and Answer of Southwest Power Pool, Inc., at 7, Docket No. ER22-379-001 (Apr. 21, 2022), Accession No. 20220421-5240 (emphasis added).
[108] Letter informing Southwest Power Pool, Inc. that the November 10, 2021 filing is deficient and requesting additional information within 30 days under ER22-379, at 4, Docket No. ER22-379 (May 10, 2022), Accession No. 20220510-3054 (emphasis added).
[109] *See* Arbaje & Specht Report, *supra* note 68 at 3.

When determining whether the Existing Methodologies' differential treatment of thermal and renewable resources amounts to undue discrimination, the Commission must "determine whether there is a reasoned and justifiable basis supported by substantial evidence for any differences in treatment."[110] Commissioner Christie has previously noted that the "fundamental failure" of a recent PJM capacity accreditation proposal was its failure to make adjustments for universal system reliability events to all resources, including thermal resources.[111]

Here, there is no unique attribute of solar and wind resources, as compared with thermal resources, that warrants only reducing their accreditation to account for unit-specific non-performance events.[112] The Commission initially, in response to SPP's initial capacity accreditation filing, stated that they agreed that the "use of ICAP for conventional resources and UCAP for intermittent resources is not unduly discriminatory because each methodology is predicated on the specific attributes and the dispatchable operating characteristics of their respective resource."[113] However, the Commission granted rehearing and set aside that initial order on other grounds, without re-affirming this initial conclusion or otherwise addressing arguments challenging it.[114] Moreover, since that initial order, the Commission has recognized that all types of resources fail to perform sometimes, and that it is

[110] *Sw. Power Pool, Inc.*, 182 FERC ¶ 61,100 (Clements, Comm'r, concurring at P 5).
[111] *PJM Interconnection, L.L.C.*, 176 FERC ¶ 61,056 (2021) (Christie, Comm'r, dissenting at P 10).
[112] Ex. A, Milligan Aff. at 12–13.
[113] *Sw. Power Pool, Inc.*, 180 FERC ¶ 61,074 at P 71 (2022).
[114] *Sw. Power Pool, Inc.*, 182 FERC ¶ 61,100 at PP 34–36 (2023).

appropriate to account for those failures equitably for all resource types.[115] The existing Thermal Methodology does not account for these events. While accreditation methodologies may justifiably differ among various RTO/ISOs and even amongst resource types, the methodologies must nevertheless analyze the expected available capacity provided by those resources based on factors that equally affect those resources. It is unlawful under the FPA to accredit some resources based on their performance, while completely ignoring the performance for other resources.

The Thermal Methodology does not do this; indeed, it effectively ignores all of the attributes of thermal resources other than performance in a set test. Meanwhile, the Renewable Methodology lowers the accreditation of wind and solar resources based upon their historic everyday performance, diminishing the value for outages and availability. There are good reasons to do so, but there is no justification for SPP evaluating the risks associated with renewable resources while completely ignoring the risks associated with thermal ones.[116]

---

[115] *See, e.g.*, *PJM Interconnection, L.L.C.*, 186 FERC ¶ 61,080 at P 42 (2024) (finding that PJM's proposal was just and reasonable because, among other things, it "incorporates the risk of correlated outages, especially in cold weather conditions, of all supply-side resources, including thermal resources," and "accredits all resources within an ELCC class with identical performance characteristics equivalently"); *cf. Ameren Servs. Co. v. Midwest Indep. Transmission Sys. Operator, Inc.*, 121 FERC ¶ 61,205, at P 33 (2007) ("The mere fact that a tariff provision implementing a particular rate [or practice] was at one time found to be just and reasonable does not preclude the Commission from later reviewing the tariff provision to determine whether it continues to be just and reasonable.").

[116] Ex. A, Milligan Aff. at 12–13.

SPP's Existing Methodologies give thermal resources a free pass for their potential nonperformance, even as they hold renewable resources accountable for their potential nonperformance through reduced accreditation. This disparate treatment cannot be justified, and therefore constitutes undue discrimination.

C. SPP's Existing Renewable Methodology Is Unlawful Because It Fails to Accurately Accredit Those Resources

SPP's Existing Renewable Methodology likewise warrants revision. As with thermal resources, renewable resources must be accredited based on a reasonable measure of the value they provide to the grid. However, accrediting solar and wind resources based on the performance of the unit at the 60th percentile of each fleet, exclusively during "the top three percent of monthly peak load hours," is an improperly crude metric. Among other shortcomings, this method focuses overly on peak load periods rather than high-risk periods (which may be associated with correlated thermal outages more than high load); it fails to account for the impact of increased penetration of renewable generation on the grid; and in focusing entirely on the 60th percentile performance, it ignores the possibility of larger or smaller variations in renewable fleet performance (or when any underperformance occurs).[117] For these reasons, the Existing Renewable Methodology should be revised.[118]

Notably, there is significant evidence that renewable generators may be providing more value to the system than SPP currently gives it credit for.

---

[117] *Id.* at 11–12.
[118] *See* SPP Tariff Revisions at 18–32.

Renewable generators—in particular wind resources—either matched their accredited expected availability or vastly exceeded it during the three most significant severe weather events in SPP in the last several years.[119] During Winter Storm Gerri, wind resources were accredited at 4.5 GW, but provided an average of 10.6 GW; during Winter Storm Elliot, wind resources were accredited at 3.7 GW, but provided an average of 13 GW; and during Winter Storm Uri, wind resources were accredited 4 GW and had exactly 4 GW available.[120] And there is reason to believe that pattern may continue: there is evidence that high winds are associated with rapid cold fronts.[121] If so, this would make wind resources relatively more valuable given that rapid cold fronts have presented the most significant risks to SPP's grid stability in recent years.

In its application to replace the Existing Renewable Methodology with an ELCC-based renewable accreditation, SPP suggests the opposite: that the Existing Renewable Methodology should be changed primarily because it *over*-accredits renewable resources. In support of this claim, SPP identifies an event on June 6, 2023, where "SPP experienced an unexpected output from its wind resource fleet, which was at times substantially below its accredited capacity as well as the

---

[119] Crowson Slides, *supra* note 58 at 23.
[120] *Id.*
[121] GridLab & Sharply Focused, Winds of Change: Understanding the Meteorological Phenomena that Fuel Renewable Energy Systems, Presentation to MISO Resource Adequacy Subcomm. Meeting, at 9–13 (Apr. 18, 2023), https://cdn.misoenergy.org/20230418-19%20RASC%20Item%2009%20Winds%20of%20Change%20Presentation628533.pdf (attached in Exhibit B).

nameplate capacity and historical wind max output."[122] But crucially, SPP fails to indicate whether this low wind event occurred during a period of time where SPP was facing challenges meeting load. Fundamentally, the purpose of capacity accreditation is not to accurately predict any resource class's output on a specific day or hour: it is to approximate the value that resource class is likely to provide to the grid in improving system reliability. Accreditation values should therefore be based on the likelihood a resource will be available during high-risk periods, and they should be judged based on the accuracy of that projected availability. Thus, the fact that production of the wind fleet drops beneath or exceeds its accredited capacity at random times, or during specific events, does not necessarily offer insight into how the accreditation should change.

Complainants believe that an ELCC approach based on accurate data and modeling assumptions has the potential to appropriately accredit resources based on their expected availability during the most challenging operational hours during the year or season. But any replacement methodology must do so fairly, and not exacerbate the existing problem of significant mis-accreditation of renewable resources by focusing more on over- than under-accreditation periods. Ultimately, SPP should use a methodology for accreditation of renewable resources that accounts for their performance when the system most needs their output. The Commission should select a replacement rate that accomplishes this goal.

[122] *Id.* at 8.

D. SPP's Existing Capacity Accreditation Methodologies Are Unlawful Because They Violate the Commission's Rule of Reason

SPP's Existing Methodologies are also unlawful because they are located largely outside of SPP's tariff, and therefore run afoul of the Commission's Rule of Reason. The key components of both the existing Thermal Methodology and Renewable Methodology are not contained in SPP's tariff; instead, they are contained in SPP's Planning Criteria.

The FPA requires rate filings to recite "the . . . practices . . . affecting such rates and charges."[123] Commission regulations go even further, requiring that rate schedules set forth "clearly and specifically,"[124] "all . . . practices . . . which in any manner affect or relate to . . . service, rates, and charges."[125] Elements that "'significantly affect rates, terms, and conditions' of service, are readily susceptible of specification, and are not generally understood in a contractual agreement *must be included in the tariff*" under the Commission's Rule of Reason.[126] "[T]he Commission has often invoked the rule of reason to require additional detail be included in jurisdictional tariffs" and "those directives typically require the addition of methodological or procedural detail . . . ."[127]

---

[123] 16 U.S.C. § 824d(c).
[124] 18 C.F.R. § 35.1(a) (1985).
[125] *Id.* at § 35.2(b).
[126] *Am. Elec. Power Serv. Corp. v. Sw. Power Pool, Inc.*, 183 FERC ¶ 61,068 at P 39 (2023) (citing *N.Y. Indep. Sys. Operator, Inc.*, 179 FERC ¶ 61,102 at P 106 (2022)) (emphasis added).
[127] *Id.* at P 46 (emphasis omitted); *see also Am. Elec. Power Serv. Corp. v. Sw. Power Pool, Inc.*, 184 FERC ¶ 61,207 at PP 31–33 (2023).

A determination of whether the tariff in question complies with the Rule of Reason "requires a case-by-case analysis, comparing what is in the . . . Tariff against what is in the Business Practice Manuals."[128] The Commission has stated that it is appropriate to use a Section 206 proceeding to revisit whether a previously approved tariff complies with the Rule of Reason.[129] Tariffs that omit major details may be revised or rejected, and courts have overturned Commission orders that failed to specify sufficient detail in the tariff.[130]

The D.C. Circuit has concluded that in the context of capacity accreditation methodologies, the Rule of Reason applied where the methodology for a UCAP capacity accreditation was not found in the tariff, resulting in remand.[131] There, the court found that "the rule that forced outage rates be measured over a one-year period for generators and a ten-year period for LSEs is, to say the least, easily reduced to writing," and therefore must be codified in the tariff.[132]

Similarly, here, the substantive provisions of the methodology for accrediting resources in SPP are not contained in SPP's tariff. Instead, they are found in SPP's

---

[128] *Cal. Indep. Sys. Operator Corp.*, 116 FERC ¶ 61,274 at P 1370 (2006).
[129] *See Sw. Power Pool, Inc.*, 136 FERC ¶ 61,050 at P 41 (2011) (An aggrieved party "may bring [a violation of the Rule of Reason] to our attention by filing a complaint under section 206 of the FPA"); *see also Cal. Indep. Sys. Operator Corp*, 133 FERC ¶ 61,224 at P 159 & n.138 (2010) ("While, presently, we find it acceptable to place the mentioned details used to determine policy-driven elements in the Business Practice Manual, if, once drafted, a party is concerned that these provisions could significantly affect rates and service, it can bring this issue to the Commission's attention under section 206 of the FPA").
[130] *See, e.g.*, *City & Cnty. of S.F. v. FERC*, 24 F.4th 652, 661 (D.C. Cir. 2022).
[131] *Keyspan-Ravenswood, L.L.C. v. FERC*, 474 F.3d 804, 811 (D.C. Cir. 2007).
[132] *Id.*

Planning Criteria.[133] For example, Section 7.1 of the Planning Criteria contains, among other things, the "procedures" for the "[c]apability [t]ests" for thermal units, conventional and pumped storage hydro units, and energy storage units.[134] The "[c]apability [t]ests" in turn determine the "Net Generating Capability of a unit."[135] The "Accredited Capacity" of a unit "is defined as the maximum Net Generating Capability a unit shall sustain over a four-hour period modified for environmental, seasonal, operational and fuel limitations."[136] The conditions for modification are also not contained in the tariff.[137] Therefore, the methodology for determining the "Accredited Capacity" for thermal units is contained in the Planning Criteria, and not the tariff filed with FERC.

The substantive provisions contained in the Planning Criteria significantly affect rates, terms, and conditions of service and are readily susceptible of specification. Because the totality of the substantive detail regarding SPP's methodology for accrediting resources is contained in the Planning Criteria and not the tariff, SPP is in violation of the Commission's Rule of Reason.

---

[133] *Compare* SPP, OATT, Attachment AA § 7.8 (providing in full: "A resource qualified in accordance with Section 7.1, 7.2, 7.4, or 7.7 of this Attachment AA shall be capable of supplying its accredited capacity, as determined in accordance with SPP Planning Criteria, for a minimum of four (4) continuous hours. The requirement set forth in Section 7.8 shall not apply to run-of-the-river hydroelectric, wind, or solar resources."), *with* SPP Planning Criteria § 7.1 (detailing accreditation methodologies).
[134] SPP Planning Criteria §§ 7.1–7.1.2.
[135] *Id.* at § 7.1.2.
[136] *Id.* at § 7.1.1.
[137] *Id.* at § 7.1.2.

VII. SPP'S PROPOSED METHODOLOGIES DO NOT RESOLVE THE UNJUST, UNREASONABLE, AND UNDULY DISCRIMINATORY NATURE OF THE RTO'S EXISTING METHODOLOGIES

As noted above, SPP has filed Proposed Methodologies that would completely replace the Existing Methodologies that are the target of this Complaint. Complainants are addressing the adequacy of the Proposed Methodologies in a concurrently filed protest in that docket.[138] As explained in the protest, although the Proposed Methodologies represent a marginal improvement over the Existing Methodologies in some respects, they maintain both SPP's failure to accurately accredit thermal resources, and its unduly discriminatory treatment of thermal units (who are not evaluated based on their contribution to grid reliability) and renewable units (who are evaluated based on their contribution to grid reliability). Thus, as explained further in the protest, the Commission should reject SPP's filing. And absent further action by the Commission under Section 206, the status quo will persist, leaving in place the pressing issues raised in this Complaint.

Accordingly, Complainants emphasize that the remedy requested below is necessary to ensure the swift adoption of legally sufficient accreditation methodologies in SPP. Complainants and SPP agree that SPP's Existing Methodologies are outdated and warrant reforms.[139] Complainants likewise agree with the Commission's prior emphasis on timely resolution of these issues.[140]

---

[138] *See* PIOs Protest.
[139] *See, e.g.*, SPP Tariff Revisions at 2–3, 10, 14.
[140] *Sw. Power Pool, Inc.*, 182 FERC ¶ 61,100 at P 36 (rejecting SPP's prior capacity accreditation filing and "encourag[ing] SPP to expeditiously submit any future filing").

However, as detailed in Complainants' protest, SPP's months-long stakeholder process has twice now resulted in a capacity accreditation proposal that fails to meet the FPA's standards.[141] Merely sending SPP back to the drawing board is likely to delay resolution even further. Accordingly, Complainants' filing is intended to ensure that the Commission has all available tools to direct SPP to adopt methodologies that accredit all resources based on their actual reliability contributions and do not unduly discriminate among different resource classes. Complainants urge the Commission to make full use of these tools to provide the necessary guidance to SPP.

VIII. REMEDY REQUESTED

The Commission should find that the SPP Tariff is unjust, unreasonable, and unduly discriminatory or preferential for the reasons discussed *supra*. Further, the Commission should impose on SPP a replacement resource accreditation methodology that fairly, equitably, and accurately accredits *all* resources based on the actual value they provide to the SPP system in reducing the likelihood of loss of load events. While a complainant bears the burden to establish that existing rates are not just and reasonable, or are unduly discriminatory, it does not face a burden to offer an alternate replacement rate that meets statutory requirements.[142] Nevertheless, Complainants offer a framework with guiding principles for the replacement rate, and have suggested below one accreditation pathway the

---

[141] *See* PIOs Protest.

[142] *See, e.g.*, *New England Power Generators Ass'n, Inc. v. ISO New England, Inc.*, 153 FERC ¶ 61,222 at P 35 (2015) (If complainant meets its burden, the Commission then determines the just and reasonable replacement rate).

Commission could consider imposing on SPP that is consistent with the overall tenor of the stakeholder discussions in which Complainants have engaged. Complainants request that the Commission direct SPP to submit a compliance filing implementing the Commission's instructions within sixty days from the date of a final Order.

A. Any Replacement Methodologies Should Be Consistent with the Recent ESIG Report Delineating Capacity Accreditation Best Practices

Complainants encourage the Commission to ensure that any chosen replacement accreditation methodology is consistent with the Pillars of Capacity Accreditation laid out by the Energy Systems Integration Group's ("ESIG's") February 2023 report discussing New Design Principles for Capacity Accreditation:

1) Accreditation Methods Should Be Non-Discriminatory;
2) Accreditation Methods Should Be Robust Against a Changing System;
3) Accreditation Methods Should Be Transparent for All Stakeholders;
4) Accreditation Methods Should Support Resource Adequacy; and
5) Accreditation Methods Should Yield Predictable Results over Time.[143]

SPP's accreditation methodology does not reflect at least three of these five design principles. The replacement rate that the Commission identifies for SPP should achieve all of these principles.

First, ESIG recommends that grid operators not discriminate between resource types in the processes they establish to accredit individual resources. In

[143] ESIG Report, *supra* note 60 at 31–36; *see also* Ex. A, Milligan Aff. at 19–20 (identifying ESIG principles as reflective of best practices).

the report, ESIG suggests that accreditation techniques "applied differently to different resources . . . can lead to discriminatory treatment of resources and can result in some resources being compensated more than their true reliability contribution would suggest, while others are compensated less."[144] ESIG identifies one key source of differential treatment that commonly shows up among grid operators, including in SPP: thermal units are often accredited based on their overall performance over the course of the year, which ignores the correlated outage problem created by extreme weather and/or fuel supply disruptions across the system. As a result, "load[] (ratepayers) are paying for the uncertainty and unreliability of thermal generators . . . [whereas] the uncertainty in variable renewables is assigned to the individual resource and not socialized across the load . . . ."[145] This does not mean that different techniques necessarily must lead to inequitable results—the report calls for equitable treatment, not equal treatment—but any differential treatment of different resource types must nonetheless treat those different resource types equitably.

SPP's methodology also falls far short of ESIG's second design principle, encouraging grid operators to utilize a technique that is robust against a changing system. SPP's methodology is not robust, because it fails to account for the uncertainty and shifting risk profile associated both with ongoing climate change and the clean energy transition. Accrediting any resource at its full ICAP is no

[144] ESIG Report, *supra* note 60 at 32.
[145] *Id.* at 38.

longer justifiable, nor is focusing renewable accreditation on a narrow band of hours in the day. Any replacement accreditation methodology should not merely improve on the status quo: it should ensure that resources receive capacity accreditation based on a best estimate of their actual contribution to the reliability of the system. This means looking beyond year-round unit performance statistics, or even performance during peak load periods, and instead focusing on the most challenging hours of the year: as ESIG has noted, "renewables shift periods of [system] risk to other hours or seasons," and resource accreditation should reflect that shift.[146]

Finally, ESIG's recommendation that any accreditation regime support resource adequacy merits extra attention. Ensuring that resource accreditation supports the overall system requires evaluating resources based on their performance when the system most needs them. As ESIG describes it:

> [A]ny accreditation technique should be designed to measure a resource's availability during times of risk, whenever the risk occurs. The evaluation of static time periods—like peak load windows—should be avoided, because they will not capture changing dynamics of the resource mix and load shape. The same is true for accreditation that is only based on limited time periods or particular seasons.[147]

Fundamentally, the power system does not have the same energy profile as it did even ten years ago; and its energy profile in ten years will look very different than today. We have already reached a level of solar penetration in some regions such that the peak load hours in the summer are no longer the hours in which the system is most at risk of facing loss of load events; and risk hours could shift further as

[146] *Id.* at 33.
[147] *Id.* at 35.

both wind and hybrid solar-battery facilities reach higher levels of integration. SPP's accreditation system should not pick winners and losers by choosing specific hours that receive additional focus. Instead, it should dynamically assign accreditation value to units based on both actual and modeled performance during the high-risk periods that show up each year.

B. If the Commission Chooses to Implement a Replacement Methodology Based on the Existing Record, It Should Require a Modified EFORd Methodology That Evaluates Unit Performance During High-Risk Periods

There are a number of accreditation methodologies that the Commission could use as a replacement for the RTO's current accreditation approaches in order to better align resource accreditation with resources' actual capacity value.[148] Such methodologies include but are not limited to: ELCC for all resources, MISO's Direct Loss of Load ("DLOL") methodology,[149] or a modified EFORd approach. SPP's proposed EFORd-based methodology does not qualify because, as explained above and in Complainants' Protest in more detail, the EFORd mechanism does not value resources based on their actual contribution to grid reliability.

Complainants and the SPP Market Monitoring Unit ("MMU") have suggested that ELCC, consistently applied for all resource classes, would result in comparable treatment between resource classes and send an appropriate signal for future resource planning and for existing generators to make investments that will

---

[148] *See, e.g.*, Ex. A., Milligan Aff. at 21.

[149] MISO recently filed its DLOL proposal with the Commission. *See* Midcontinent Independent System Operator, Inc.'s Filing to Reform MISO's Resource Accreditation Requirements, Docket No. ER24-1638 (Mar. 28, 2024), Accession No. 20240328-5329.

improve their availability during SPP's most challenging hours.[150] Similarly, while Complainants may take issue with some specific details of MISO's DLOL methodology and do not necessarily fully support the specific policy choices that MISO proposes, the DLOL methodology does treat all resource classes equivalently and calculates accreditation values for all resource classes by focusing on the same high-risk hours. However, although SPP and its stakeholders generally support using ELCC for wind, solar, and storage resources, the proposal to use ELCC for all resource classes was not adopted in SPP's stakeholder process. And SPP participants' lack of experience with the DLOL methodology might make it impractical to implement in a timely manner.

As a result, Complainants believe the most immediately viable accreditation methodology available could be a *modified* EFORd mechanism for thermal generators that Complainants first proposed during SPP's stakeholder process.[151] Given broad support for ELCC for wind, solar, and storage, Complainants believe that approach should be used as the remedy for those resource classes. Although the proposed approach for thermals would not be identical to ELCC accreditation, it is comparable in treatment to ELCC resources and reasonably focused on SPP's

---

[150] John Luallen, RR 568 ELCC Methodology for Wind, Solar, and Storage, SPP MMU, at PDF p. 2 (Aug. 29, 2023) ("RR 568 ELCC Methodology for Wind, Solar, and Storage"), https://www.spp.org/Documents/69508/RR568.zip ("Overall, the MMU supports an ELCC methodology that applies to all resource types") (attached in Exhibit B).

[151] Clean Energy Orgs., Comments and Proposal RR #554 (Resource Adequacy Performance Based Accreditation for Conventional Resources), at 2–4 (Sept. 25, 2023) (attached in Exhibit B).

riskiest hours to warrant approval by FERC. Complainants also believe that this approach is consistent with the ESIG principles identified above.

In preparing this proposal, Complainants sought to identify an accreditation methodology that accomplished two distinct purposes simultaneously, both of which we understand to be fundamental goals of the SPP's Supply Adequacy Working Group and of SPP more broadly in developing new accreditation methodologies. First, an accreditation methodology should give system planners accurate and predictable information regarding the capacity accreditation of their existing generation resources, so that they can plan for the lowest-cost future generation mix that ensures reliability at a 1-in-10-year loss of load expectation ("LOLE") standard. And second, the methodology should provide a signal for future resource investments and to individual generators that encourages those resources to make investments or operational changes needed to maximize their availability during the highest-risk hours of the year.

To accomplish those parallel but interrelated goals, Complainants propose a two-step accreditation process in line with the two-step approach proposed for renewable resources in SPP's Proposed Methodologies: first, conventional resources would be evaluated class-wide based on their forced outage rates during the highest-risk hours of the year (a measurement we are calling "EFORr," as detailed below); and second, this class-wide accredited capacity would be allocated to individual generators within that class based on a weighted average of their EFORd and their EFORr. This two-step metric would ensure that overall accreditation of

conventional resources is based specifically on when the system is most at risk of supply shortfalls, addressing concerns about correlated outages due to fuel supply and weather conditions and considering risk periods that may occur outside of peak demand (e.g., as a result of high solar and wind penetration, or during periods of high maintenance).[152] It would also maintain a sufficiently large data set of hours to avoid undue volatility in accreditation values for individual generators.

The following discussion provides a detailed summary of Complainants' proposal.

Proposed Modified EFORd Approach for Thermal Resource Capacity Accreditation

Complainants suggest accrediting the overall classes of conventional resources (i.e., gas, coal, etc.)[153] using a modified UCAP and EFORd based methodology, called "EFORr."[154] EFORr is defined here as the average forced outage rate of a resource during "high-risk hours." In other words, it is a measure of the probability that a generating unit will not be available due to forced outages or forced deratings during hours of greatest risk and tightest supply margin. Unlike

[152] *See also* Ex. A, Milligan Aff. at 21 (identifying EFORr as a potentially suitable alternative).

[153] The Commission could consider further differentiating classes of conventional resources, specifically to address location and fuel security. For example, the accreditation of gas resources could be split into more than one class based on: (1) SPP Load Zone; and (2) whether or not dual fuel capability is available. This would ensure that gas resources in colder climates with dual fuel capability, for example, receive a class-wide accreditation different than gas resources in warmer climates without dual fuel capability.

[154] Equivalent Forced Outage Rate (risk hours).

EFORd, the proposed EFORr mechanism thereby has the capability to capture the risk of correlated outages.

Defining "high-risk hours" is important here: Complainants propose that this be defined as the top 1% of tightest hours in a given season (summer or winter), where the gap between net load and available generation is the smallest. This would equate to eighty-eight hours per year, or forty-four hours each summer and winter season. Alternatively, the top 3% of tightest intervals could be considered, in line with the MMU's suggestion.[155]

Under this metric, determining the class-wide accredited capacity could be done as follows:

- Class-Wide Accredited Capacity ("Class-Wide ACAP") =
  ∑ demonstrated net generating capability * (1 - EFORr).[156]

After calculating a class-wide total accredited value, that value would be allocated to individual resources in that class using a weighted average approach between EFORd and EFORr, which would hold individual resources accountable for their performance during high-risk hours, but reduce the volatility of that signal and provide better certainty to system planners by combining it with the EFORd measure of resources' overall performance. These calculations are as follows:

---

[155] RR 568 ELCC Methodology for Wind, Solar, and Storage, *supra* note 150 at PDF p. 3. (proposing to evaluate resources during "the top 3 percent of intervals with the lowest margin between available capacity and the region's peak load obligation").
[156] This is similar to the formula proposed by SPP in ER24-1317 for individual conventional resources [Accredited Capacity = demonstrated net generating capability * (1-EFORd)], *see* SPP Tariff Revisions at 32, except that this would be a class-wide sum based on availability of all resources in the class during the top percent of tightest hours.

- Individual Resource Available Capacity = demonstrated net generating capacity * [1 - (EFORd * Y% +EFORr * Z%)]

- Accredited Capacity = Class-wide Accredited Capacity * (Individual Resource Available Capacity/∑ Individual Resource Available Capacity for the full resource class)

- Note: Y + Z must always equal 100. The weighting could simply be 50%/50%, or a different split such as 60%/40% could be used.

IX. RULE 206 REQUIREMENTS

To the extent not already provided herein, Complainants provides the following additional information required by Rule 206 of the Commission's Rules of Practice and Procedure:

A. Good Faith Estimate of Financial Impact or Harm (Rule 206 (b)(4)):

Complainants have numerous members who are ratepayers within the SPP footprint. While it is difficult to quantify the precise costs that SPP's Existing Methodologies impose on ratepayers, it is likely that SPP's over-accreditation of thermal resources will result in higher planning reserve margins and improperly bias LRE planning decisions in favor of thermal resources. The inevitable result of this bias will be excess construction of thermal capacity that would not be built under a more rigorous accreditation regime, and insufficient construction of lower-cost alternatives, including renewable generation and electric storage resources, that could have provided the same reliability value.

That outcome would cost ratepayers millions of dollars in payments made for services that are not capable of being rendered.[157]

B. Operational or Nonfinancial Impacts (Rule 206 (b)(5)): The issues presented here have the effect of potentially creating unjust and unreasonable rates in SPP's wholesale market, and stifle innovation and competition from renewable resources in particular.

C. Other Pending Matters (Rule 206 (b)(6)): As noted in the Complaint, some of the issues here are currently pending in an existing Commission proceeding: Docket No. ER24-1317.

D. Specific Relief or Remedy Request (Rule 206 (b)(7)): The specific relief sought by Complainants is set forth in detail in the Complaint.

E. Documents Supporting the Complaint (Rule 206 (b)(8)): Complainants have attached to this Complaint the Affidavit of Dr. Michael Milligan, Ph.D. and additional reports and studies in support of this request for relief.

F. Alternative Dispute Resolution (Rule 206 (b)(9)): Complainants have not used the Commission's Enforcement Hotline or Dispute Resolution Services, and do not believe at this time that alternative dispute resolution would resolve the issues underlying this Complaint. Complainants have no reason to expect that alternative dispute resolution would result in the relief requested herein.

[157] *See* Ex. A, Milligan Aff. at 8.

G. Form of Notice (Rule 206 (b)(10)): A form of notice of Complaint suitable for publication in the Federal Register is attached hereto.

H. Fast Track Processing (Rule 206 (b)(11)): Complainants seek fast track processing. As described above, the Commission's March 2023 order recognized the need for expeditious resolution of SPP's capacity accreditation approach[158]—a need that has only grown more pressing in the year that has elapsed since then.

I. Service (Rule 206 (c)): Complainants have served a copy of this Complaint upon representatives for the Respondent (including those corporate officials designated by SPP on the FERC website for receipt of complaints) via electronic mail, simultaneous with the filing of this Complaint.

X. CONCLUSION

For the foregoing reasons, Complainants respectfully request the Commission grant the Complaint, and provide Complainants with the relief described above.

Dated: March 29, 2024.

Respectfully submitted,

/s/ Aaron Stemplewicz
Aaron Stemplewicz
Senior Attorney, Clean Energy Program
Earthjustice
1617 John F. Kennedy Blvd., Suite 1130
Philadelphia, PA 19103
Tel: (215) 717-4524
astmplewicz@earthjustice.org

[158] *Sw. Power Pool, Inc.*, 182 FERC ¶ 61,100 at P 36; *supra*, Part VII.

Alexander Tom
Associate Attorney, Clean Energy Program
Earthjustice
50 California St., Suite 500
San Francisco, CA 94111
Tel: (415) 217-2111
atom@earthjustice.org

Counsel for Sierra Club

/s/ Gregory E. Wannier
Gregory E. Wannier
Senior Attorney, Environmental Law Program
Sierra Club
2101 Webster St., Suite 1300
Oakland, CA 94612
Tel: (415) 977-5646
greg.wannier@sierraclub.org

/s/ Natalie McIntire
Natalie McIntire
Senior Advocate
Natural Resources Defense Council
20 N. Wacker Dr., Suite 1600
Chicago, IL 60606
Tel: (312) 847-6824
nmcintire@nrdc.org

/s/ John Moore
Director
Sustainable FERC Project
20 N. Wacker Dr., Suite 1600
Chicago, IL 60606
Tel: (312) 651-7927
Moore.fercproject@gmail.com

CERTIFICATE OF SERVICE

I hereby certify that I have on this date caused a copy of the foregoing document to be served upon Southwest Power Pool, L.L.C., at the following addresses obtained from the Commission's list of corporate officials designated to receive service pursuant to 18 C.F.R. § 385.2010(k):

Barbara Sugg
President and Chief Executive Officer
Southwest Power Pool, Inc.
201 Worthen Drive
Little Rock, AR 72223-4936
bsugg@spp.org

Mike Riley
Associate General Counsel
Southwest Power Pool, Inc.
201 Worthen Drive
Little Rock, AR 72223-4936
michael.b.riley@spp.org

Paul Suskie
Executive Vice President Regulatory Policy and General Counsel
Southwest Power Pool, Inc.
201 Worthen Drive
Little Rock, AR 72223-4936
psuskie@spp.org

Nicole Wagner
Manager, Regulatory Policy
Southwest Power Pool, Inc.
201 Worthen Drive
Little Rock, AR 72223-4936
jwagner@spp.org

Justin A. Hinton
Senior Attorney
Southwest Power Pool, Inc.
201 Worthen Drive
Little Rock, AR 72223-4936
jhinton@spp.org

Dated: March 29, 2024.

/s/ Aaron Stemplewicz
Aaron Stemplewicz
Senior Attorney
Clean Energy Program
Earthjustice
1617 John F. Kennedy Blvd., Suite 1130
Philadelphia, PA 19103
Tel: (215) 717-4524
astemplewicz@earthjustice.org