

October 24, 2025

The Honorable Debbie-Anne A. Reese Secretary Federal Energy Regulatory Commission 888 First Street, N.E. Washington, D.C. 20426

Re: Southwest Power Pool, Inc., Docket No. ER26-247-000

Submission of Tariff Revisions to Add the High Impact Large Load Processes and High Impact Large Load Generation Assessment

Dear Secretary Reese:

Pursuant to Section 205 of the Federal Power Act ("FPA"), 16 U.S.C. § 824d, and Section 35.13 of the Federal Energy Regulatory Commission's ("Commission") Regulations, 18 C.F.R. § 35.13, Southwest Power Pool, Inc. ("SPP"), as authorized by its independent Board of Directors, submits revisions to SPP's Open Access Transmission Tariff ("Tariff")¹ to add new Attachments BA and BB, which contain a proposed High Impact Large Load ("HILL") process and a High Impact Large Load Generation Assessment ("HILLGA") process, respectively. There are numerous revisions to the broader Tariff to effectuate these changes.

SPP respectfully requests that the Commission accept the proposed revisions, find the revisions just and reasonable, and set an effective date of January 15, 2026. SPP requests that the Commission issue an order by January 8, 2026, which is 75 days after submission of this filing.

I. EXECUTIVE SUMMARY

The United States, including SPP's Regional Transmission Organization ("RTO") footprint, is experiencing an unprecedented surge in requests for large-scale load interconnections, including data centers, cryptocurrency mining operations, electrification of industrial processes, and other high-demand facilities. This surge is fueled in part by the considerable economic opportunities presented by such high

Southwest Power Pool, Inc., Open Access Transmission Tariff, Sixth Revised Volume No. 1. References in this filing to "Tariff" refer to the version of SPP's Tariff currently in effect. "Proposed Tariff" refers to a version reflecting the revisions proposed in this filing. All capitalized terms not otherwise defined in this filing shall have the definitions assigned by the Tariff.

energy demand enterprises and the national security implications of failing to seize on the opportunity to lead the world in critical information technology applications and manufacturing.

The integration of large loads into the electric system of the United States is an issue of national interest. This year, the federal government stressed the urgency and importance of advancing artificial intelligence ("AI"), promoting leadership in digital assets and financial technology (i.e., cryptocurrencies), and restoring domestic manufacturing. The Trump Administration announced that "[i]t is the policy of the United States to sustain and enhance America's global AI dominance in order to promote human flourishing, economic competitiveness, and national security." The Trump Administration also promoted reshoring manufacturing, such as in the production of pharmaceuticals, and proclaimed that it is "the policy of my Administration to support the responsible growth and use of digital assets, blockchain technology, and related technologies across all sectors of the economy, because "[t]he digital asset industry plays a crucial role in innovation and economic development in the United States, as well as our Nation's international leadership." The Administration has sought to foster these goals by issuing "America's AI Action Plan," related Executive Orders, and White House publications.

Executive Order 14179; see Winning the Race America's AI Action Plan (hereafter, "America's AI Action Plan"), The White House, 1 (July 2025), https://www.whitehouse.gov/wp-content/uploads/2025/07/Americas-AI-Action-Plan.pdf (stating that AI presents the potential for "[a]n industrial revolution, an information revolution, and a renaissance—all at once").

Regulatory Relief to Promote Domestic Production of Critical Medicines, Executive Order 14293, 90 FR 19615 (May 5, 2025), https://www.whitehouse.gov/presidential-actions/2025/05/regulatory-relief-to-promote-domestic-production-of-critical-medicines/. See generally Regulating Imports with a Reciprocal Tariff to Rectify Trade Practices That Contribute to Large and Persistent Annual United States Goods Trade Deficits, Executive Order 14257, 90 FR 15041 (Apr. 2, 2025) (held invalid by V.O.S. Selections Inc. v. United States, 772 F. Supp. 3d 1350, 1359 (Ct. Int'l Trade 2025)).

Strengthening American Leadership in Digital Financial Technology, Executive Order 14178, 90 FR 8647 (Jan. 23, 2025), https://www.whitehouse.gov/presidential-actions/2025/01/strengthening-american-leadership-in-digital-financial-technology/.

Accelerating Federal Permitting of Data Center Infrastructure, Executive Order 14318, 90 FR 35385 (July 23, 2025), https://www.whitehouse.gov/presidential-actions/2025/07/accelerating-federal-permitting-of-data-center-infrastructure/ ("We will pursue bold, large-scale industrial plans to vault the United States

In addition to the federal push to develop the necessary systems and processes for integrating these large load customers, load serving entities and states in the SPP region specifically have stressed the need to expedite the process of interconnecting and serving these large loads and have acknowledged the increase in requests for large load interconnections.⁶ For example, SPP's Expedited Resource Adequacy Study Needs Assessment Report,⁷ which was endorsed by SPP's Regional State Committee,

further into the lead on critical manufacturing processes and technologies that are essential to national security, economic prosperity, and scientific leadership."); Promoting the Export of the American AI Technology Stack, (July Executive Order 14320. 90 FR 35393 23. 2025). https://www.whitehouse.gov/presidential-actions/2025/07/promoting-theexport-of-the-american-ai-technology-stack/ ("Artificial intelligence (AI) is a foundational technology that will define the future of economic growth, national security, and global competitiveness for decades to come. . . . It is the policy of the United States to preserve and extend American leadership in AI and decrease international dependence on AI technologies "); Removing Barriers to American Leadership in Artificial Intelligence, Executive Order 14179, 90 FR 8741 (Jan. 23, 2025), https://www.whitehouse.gov/presidentialactions/2025/01/removing-barriers-to-american-leadership-in-artificialintelligence/; President's Council of Advisors on Science and Technology (Jan. 2025), https://www.whitehouse.gov/presidential-23, actions/2025/01/presidents-council-of-advisors-on-science-and-technology/ ("Today, a new frontier of scientific discovery lies before us, defined by transformative technologies such as artificial intelligence, quantum computing, and advanced biotechnology. As our global competitors race to exploit these technologies, it is a national security imperative for the United States to achieve and maintain unquestioned and unchallenged global technological dominance."). See also Maintaining American Leadership in Artificial Intelligence, Executive Order 13859, 84 FR 3967 (Feb. 11, 2019), https://trumpwhitehouse.archives.gov/presidential-actions/executive-ordermaintaining-american-leadership-artificial-intelligence/ ("Continued American leadership in AI is of paramount importance to maintaining the economic and national security of the United States and to shaping the global evolution of AI in a manner consistent with our Nation's values, policies, and priorities.").

See, e.g., Economic Development,
https://kansasreflector.com/2025/04/15/kansas-legislature-slips-under-the-wire-a-sales-tax-break-to-incentivize-hyperscale-data-centers/.

Regional State Committee, *Agenda*, Southwest Power Pool, Inc., 275-98 (SPP Expedited Resource Adequacy Study (SPP ERAS) Needs Assessment Report (Apr. 28, 2025)) (May 5, 2025) ("ERAS Needs Assessment Report"),

noted a considerable increase in large load addition requests during the last five years, which is occurring alongside other load growth in the SPP region.

While these large loads provide significant economic and national security opportunities, they also pose unique challenges to the continued reliable and economic operation of the bulk electric transmission system. Large loads such as these are highly energy intensive, concentrated, and present unique operational challenges to grid operators to maintain reliability. As they continue to proliferate in response to the federal government's push and the needs and demands of states, load serving entities, and technology companies, their impact on the regional transmission grid will continue to grow, and the associated challenges will continue to grow absent additional processes to address their unique reliability and operational impacts. In this filing, SPP proposes mechanisms to seize the opportunity to incorporate large loads into SPP in a reliable manner by creating additional study and operational requirements applicable specifically to such large loads and proposing an optional process for studying the limited interconnection of generating resources identified specifically to serve large loads.

First, SPP proposes to define large loads meeting certain characteristics as "High Impact Large Loads" or "HILLs," and proposes a new Attachment BA to its Tariff that includes additional study and operational requirements that will be required of HILLs. These new requirements will apply alongside SPP's existing load addition and modification study processes and other existing requirements imposed on certain loads to ensure that SPP has the necessary insight into the grid reliability impacts of these large loads and the necessary operational tools to manage them. Specifically, SPP will continue to process all load additions and modifications, including HILLs, using its existing Attachment AQ, Attachment AX, and/or Attachment Z1 study processes. However, for HILLs, SPP and the applicable Transmission Owner(s) will simultaneously conduct additional studies under Attachment BA to ensure that the unique operational characteristics of HILLs are considered when evaluating the addition of a HILL to the regional transmission system, and that SPP has mechanisms in place to maintain reliable operation of the transmission system.

Attachment BA also imposes ongoing operational requirements, including the addition of certain equipment, to ensure that SPP can continue to manage the transmission system while accommodating the unique operational demands and characteristics of HILLs. The proposed requirements are just and reasonable because they address the unique impacts of HILLs, thereby facilitating their reliable

 $[\]frac{https://spp.org/documents/73730/rsc\%20meeting\%20materials\%20update\%20}{20250505\%20v4.pdf}.$

⁸ *Id.* at 9-11.

interconnection to the transmission system while protecting other load from the operational impacts of HILLs.

Second, SPP proposes the HILLGA process to facilitate the prompt interconnection of generating resources that are specifically identified for and limited to serving a HILL, at the request of the interconnection customer. As set forth in proposed Attachment BB submitted in this filing, SPP will study HILLGA Requests outside of its existing generator interconnection process on a serial basis, but solely for the impact of the Generating Facility of to serve the identified HILL. The HILLGA process will not result in granting the Generating Facility traditional generator interconnection service, such as Network Resource Interconnection Service ("NRIS") or Energy Resource Interconnection Service ("ERIS"); instead, Generating Facilities studied under the HILLGA process will receive much more limited "Load Limited Resource Interconnection Service," or "LLRIS," which only studies the impact of the Generating Facility serving the identified HILL, which must be located in the same local area. If an interconnection customer with a Generating Facility supporting a HILL desires NRIS or ERIS, it would still be required to go through SPP's existing generator interconnection queue.

Attachment BB also contains other provisions that insulate interconnection customers in SPP's existing generator interconnection queue from being harmed by the new HILLGA process. For example, LLRIS is only granted for a limited, five-year term, requiring Generating Facilities studied under the HILLGA process to submit a separate Interconnection Request to SPP's standard generator interconnection process if they wish to remain interconnected to the SPP transmission system beyond the five-year limit of LLRIS.

Importantly, neither the HILL study process outlined in Attachment BA nor the HILLGA process set forth in Attachment BB will result in a grant of transmission service for the HILL. A customer must still request transmission service using one of SPP's existing mechanisms to receive transmission service. However, SPP's HILL process set forth in Attachment BA, in concert with the existing study processes in Attachments AQ and AX, will provide a delivery point for the HILL, and the HILLGA process will provide LLRIS to the Generating Facility supporting a HILL, which will

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Proposed Tariff, Attachment BB, Section 1, Definition of Generating Facility ("will mean a HILLGA Customer's device(s) for the production and/or storage for later injection of electricity identified in the HILLGA Request, but will not include HILLGA Customer's Interconnection Facilities and will not include a Storage as Transmission Only Asset as defined in Section 1 of the Tariff. A Generating Facility consists of one or more generating unit(s) and/or storage device(s) which usually can operate independently and be brought online or taken offline individually.").

facilitate an expedited path to transmission service to deliver the output of a Generating Facility for a HILL.

SPP is also working with stakeholders to develop other mechanisms to support the timely and reliable interconnection and operation of HILLs and will file any additional modifications that result from these efforts. However, the HILL and HILLGA provisions proposed in this filing, standing alone, are just and reasonable and the Commission should accept them.

II. BACKGROUND: THE NEED FOR THE PROPOSED REVISIONS

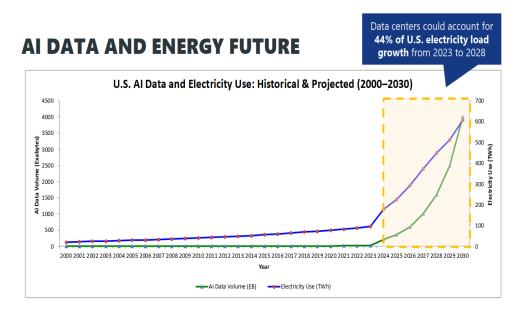
As an RTO, a Market Operator, a Reliability Coordinator, a Balancing Authority, and a Transmission Provider, SPP has significant responsibilities for the reliable and economical operation of the facilities under its control. Like other RTOs, Independent System Operators ("ISO"),¹⁰ and utilities, SPP is facing significant operational, planning, and market challenges in response to unprecedented growth in large, often non-traditional, load interconnection requests. Consistent with its responsibilities, SPP is rising to the challenge of integrating these large loads into the RTO footprint in a manner that safeguards the continued safe and reliable operation of the Transmission System. SPP intends to address the challenge of large loads in a multistep approach beginning with the present filing. In this filing, SPP will explain how large loads will be categorized, what a large load must do to interconnect to the Transmission System, and the requirements to maintain that connection, and how the generation supporting a large load may interconnect to the Transmission System.

A. The Growth and Importance of Large Loads in the United States

As noted above, SPP and other utilities nationwide are experiencing a surge in requests to interconnect large loads. This trend of unprecedented electrical usage is projected to increase exponentially in the next five years, significantly driven by AI data centers:

See, e.g., 2025 PJM Long-Term Load Forecast Report at 5 (Jan. 24, 2025), https://www.pjm.com/-/media/DotCom/library/reports-notices/load-forecast/2025-load-report.pdf.

Figure 1: Large load predictions across the United States¹¹



Each year, the North American Electric Reliability Corporation ("NERC") performs a Long-Term Reliability Assessment, which assesses the adequacy of the electric system and projects supply and demand.¹² The Long-Term Reliability Assessment provides information about twenty assessment areas within the six NERC Regional Entities.¹³ Aggregating the assessment areas, the 2024 Long-Term Reliability Assessment estimated that the "summer peak demand forecast is expected to rise by over 132 GW, and aggregated winter peak demand forecasts are increasing by 149

See https://www.iea.org/news/ai-is-set-to-drive-growth/charts/ais-power-binge;; https://www.goldmansachs.com/insights/articles/ai-to-drive-165-increase-indata-center-power-demand-by-2030.

NERC, Event Analysis, Reliability Assessment, and Performance Analysis (Sept. 29, 2025), https://www.nerc.com/pa/RAPA/ra/Pages/default.aspx;; NERC, Rules of Procedure (Nov. 28, 2023), https://www.nerc.com/AboutNERC/RulesOfProcedure/NERC%20ROP%20effective%2020220825 no%20appendicies.pdf.

NERC, 2024 Long-Term Reliability Assessment, at 40 (July 15, 2025), https://www.nerc.com/pa/RAPA/ra/Reliability%20Assessments%20DL/NERC C Long%20Term%20Reliability%20Assessment 2024.pdf.

GW."¹⁴ This marks a reversal of a two-decade trend of flat or falling growth rates.¹⁵ In response to this, NERC established a large load reliability task force. SPP is represented on this task force and considers discussions from this task force to inform its treatment of large loads.

SPP is also experiencing this trend in growing requests to interconnect large loads, as shown in Figures 2 and 3. As was recently demonstrated in the ERAS Needs Assessment Report, SPP has experienced a significant upswing in requests for large load interconnections over the past five years, and while they peaked in 2022, that could be due in part to SPP's inability under current processes to study and interconnect large loads quickly enough to satisfy commercial needs.



Figure 2: New Large Load Submissions in SPP 2021-2024¹⁶

¹⁴ *Id.* at 31.

¹⁵ Id.

¹⁶ ERAS Needs Assessment Report at 10.

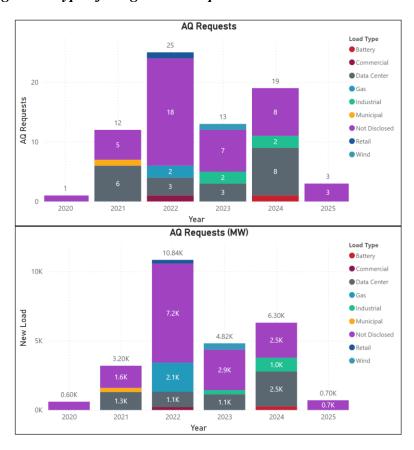


Figure 3: Type of Large Load Requests in SPP 2020-2025¹⁷

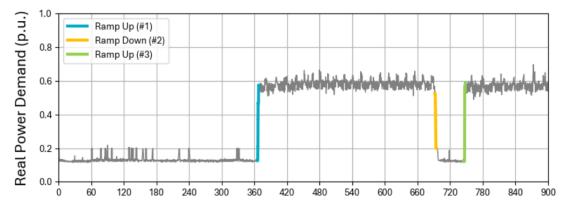
B. The Challenges Presented by Large Loads

Large loads interconnected to the Transmission System can stress both real-time operational reliability and resource adequacy planning, particularly in areas with constrained transmission capacity. The scale, speed, and operational inflexibility of these loads also strain existing transmission planning processes, real-time operational tools, and market mechanisms originally designed for gradual and geographically distributed load growth. Figure 4 below provides a sample depiction of the power demand for a 50 MW AI data center:

¹⁷

Figure 4: AI Training Data Center (50 MW) Demand Curve

Al Training Data Center (50 MW) Demand Curve



The current regulatory frameworks, transmission planning processes, and market constructs were designed primarily for incremental and predictable load growth. The emergence of large load developments, which frequently request transmission service within months rather than years of their intended commercial operation, strain these legacy processes. Preserving open access principles while ensuring grid reliability and resource adequacy through the current legacy processes creates challenges.

SPP specifically faces challenges in the following areas:

- Unique operational characteristics: Large loads may exhibit non-conforming load profiles, the ability to ramp rapidly (see Figure 4 above) and flutter, and sensitivity to power quality issues. The impact of these operational characteristics is magnified because large loads are also concentrated at a single site. For perspective, some of these facilities may be larger than the largest single-site load currently interconnected to the SPP Transmission System. This concentration results in a more significant impact in a localized area than multiple, smaller loads dispersed throughout an area.
- Reliability: Interconnecting large loads to the Transmission System may stress both real-time operational reliability and resource adequacy

SPP's largest active load facility is approximately 200 MW and another facility is registered for 236 MW. Meta is considering a 5 GW facility. https://techcrunch.com/2025/07/14/mark-zuckerberg-says-meta-is-building-a-5gw-ai-data-center/.

planning, particularly in areas where transmission capacity is already constrained.

- Generator interconnection: Large load customers are requesting faster deployment timelines for the generation supporting large loads than typical interconnection study timelines.
- Generation Resource availability: To obtain transmission service under the current Tariff requirements, applicants must provide sufficient generation for a new load. 19 This requirement could limit the ability of some applicants to obtain firm transmission service for new large loads, which may lead to large load customers locating in other regions in the U.S. or other countries altogether.

SPP needs mechanisms to study and address these unique challenges to ensure that large loads can interconnect on a timely basis and operate reliably within the broader SPP Transmission System.

III. DESCRIPTION OF AND JUSTIFICATION FOR PROPOSED TARIFF REVISIONS

As described above, SPP is experiencing unprecedented growth in large, often non-traditional, load interconnections, and this growth is expected to accelerate. These loads present economic opportunities but also operational challenges. To meet these challenges, SPP is pursuing a multi-step, systematic approach starting with this filing in which SPP proposes two new mechanisms: (1) the HILL study process set forth in Attachment BA; and (2) the HILLGA process set forth in Attachment BB.

Specifically, in this filing, SPP proposes to define the large loads creating these challenges, provide the requirements for large loads satisfying this definition to interconnect to the transmission system and retain that connection, and provide a process to allow large loads to expeditiously connect supporting generation. To assess and reliably manage the challenges associated with these loads, SPP proposes to: (1) establish a new category of load, termed a "HILL"; (2) establish enhanced study requirements for HILLs to enable SPP to assess the load's reliability impacts on the Transmission System; and (3) establish additional, on-going operational requirements for HILLs to ensure continued reliability of the Transmission System. In recognition of the unique opportunities presented by these loads, to SPP and nationally, SPP is also proposing to implement a new generator interconnection service and related interconnection process to allow the limited connection of supporting generation for HILLs on an expedited basis.

See, e.g., Tariff at Sections 29.2 and 31.4, Attachment G, Section 4.1, and Attachment AQ, Addendum 1.

The Tariff revisions proposed herein are just and reasonable because they will provide SPP with additional study and operational tools necessary to integrate large loads into the SPP Transmission System and provide a limited pathway for the expedited interconnection of Generating Facilities specifically limited and targeted to serve individual large loads without impacting other generators in the interconnection queue. The Tariff revisions are necessary for SPP to ensure reliable interconnection of these large loads and just and reasonable and not unduly discriminatory or preferential, and therefore, should be accepted by the Commission.

A. High Impact Large Load Study Process – Attachment BA

1. Definition of HILLs

SPP proposes to establish a new category of load, termed High Impact Large Load or "HILL." A HILL is defined as:

A new commercial or industrial load, or increase in commercial or industrial load, at a single site connected through one or more shared Points of Interconnection (POIs) or delivery points, where such load is either (1) 10 MW or more if connected to the Transmission System at a voltage level less than or equal to 69 kV; or (2) 50 MW or more if connected to the Transmission System at a voltage level greater than 69 kV. An Electric Storage Resource is not considered a HILL. A load may be categorized as a HILL after the initial effective date of Attachment BA of the Tariff. High Impact Large Loads must register as such in accordance with Attachment AE of the Tariff and follow the processes specified in Attachment BA of the Tariff.²¹

As discussed in more detail below, because of the unique operational and reliability challenges posed by a HILL, a HILL will be subject to additional study and operational requirements to ensure continued reliability of the Transmission System.

Based on SPP's experience, large loads can differ from traditional load in several ways, as discussed above. Primarily, large loads are just that: they are a facility requiring a large amount of energy at a single site. This factor alone can present operational challenges and reliability risks to the Transmission System. Additionally, large loads can have high ramp rates and the potential to exhibit sudden and rapid changes at unpredictable times. While these operational characteristics may not in and

Proposed Tariff, Part I, Section 1 (Definitions H) (Definition of High Impact Large Load).

²¹ *Id*.

of themselves present reliability risks, when they occur in relation to a 50 MW or greater load at a single site, they can.²²

In developing the definition for HILL, SPP considered the characteristics that distinguish large loads from traditional loads: it must be commercial or industrial, concentrated at a single site, and, most importantly, large. SPP consulted the information gathered by the NERC Large Load Task Force in surveys to determine what qualifies as a "large" quantity of load.²³ Most of the survey participants qualified "large" as greater than 50 MW. That survey also showed that "large" may be relative to other factors, such as voltage interconnection.

To reflect the fact that the size of the load may impact the system differently at different voltage levels, SPP proposes to include as a HILL, in addition to 50 MW loads, 10 MW loads that connect at or below 69 kV. While the NERC definition of the Bulk Electric System includes only transmission elements of 100 kV or higher, ²⁴ the additional 10 MW threshold is necessary due to the prevalence of 69 kV lines in the eastern interconnection portion of SPP's RTO footprint. In addition, a HILL connecting to transmission facilities at or below 69 kV will have similar impacts to the Transmission System as a HILL that is 50 MW, or larger, connecting to transmission facilities that are greater than 69 kV.

Because they are already interconnected and operating within the SPP Transmission System, existing loads will not be considered a HILL unless they seek to increase load and otherwise meet the definitional requirements.

2. Study Requirements for HILLs

When a Network Customer or Transmission Customer (collectively, "Transmission Customer"²⁵) applies for transmission service under the Tariff to serve

NERC, Characteristics and Risks of Emerging Large Loads, at 11 (July 2025), https://www.nerc.com/comm/RSTCReviewItems/3 Doc White%20Paper%2
OCharacteristics%20and%20Risks%20of%20Emerging%20Large%20Loads.p
df.

²³ *Id*.

NERC, Glossary of Terms, Bulk Electric System (Oct. 1, 2025), https://www.nerc.com/pa/stand/glossary%20of%20terms/glossary_of_terms.p df.

A Transmission Customer is defined as "[c]ustomers receiving transmission service under Part II and Part III of this Tariff." Tariff, Part I, Section 1 (Definitions T). Part III of SPP's Tariff also refers to these customers as Network Customers, which is defined as "An entity receiving transmission

a load, the load must undergo certain studies as provided in Attachment AQ or Attachment AX.²⁶ In addition to the studies provided for in those attachments, SPP proposes to require additional studies for a Transmission Customer seeking to add or modify a delivery point associated with a HILL.²⁷

As set forth in proposed Section 2.1.1 of Attachment BA, to receive service under Attachment AQ, the Transmission Customer must have sufficient Designated Resources to serve its existing load and the additional HILL.²⁸ If SPP determines that the Transmission Customer does not have sufficient Designated Resources to serve its existing load and the new HILL, the Transmission Customer may follow the requirements of Attachment AQ for the amount of the load that has sufficient Designated Resources²⁹ or Attachment AX if the Transmission Customer has planned generation for the requested megawatt amount in excess of its Designated Resources.³⁰

The Transmission Customer's request for creation or modification of a delivery point to accommodate a HILL must be provided to both SPP and the Host Transmission

service pursuant to the terms of the Transmission Provider's Network Integration Transmission Service under Part III of the Tariff." Tariff, Part I, Section 1 (Definitions N).

Through Attachment AQ, any existing customers may obtain firm transmission service for the modification of an existing delivery point or for the creation of a new delivery point. Under Attachment AX of the Tariff, existing customers may receive provisional transmission service for a new or modified delivery point using planned generation, instead of existing Designated Resources. Lastly, new customers may receive transmission service for their load and Resources through Attachment Z1 of the Tariff.

²⁷ Proposed Tariff, Attachment BA, Section 2.

Proposed Tariff, Attachment BA, Section 2.1.1.

Proposed Tariff, Attachment BA, Section 2.1.2(a).

Proposed Tariff, Attachment BA, Section 2.1.2(b). If a Transmission Customer has neither existing Designated Resources nor planned resources, its load addition cannot be studied under either process. A Transmission Customer can, however, use a combination of existing Designated Resources and planned resources to interconnect new load by applying both Attachment AQ and Attachment AX.

Owner pursuant to Attachment AQ and Attachment AX.³¹ For all such requests, SPP will require a HILL Delivery Point Study ("HDPS"), which is a broader, more rigorous set of analyses than would typically apply under Attachment AQ or Attachment AX due to the potential for more significant impacts to the Transmission System. SPP must evaluate the Transmission System's ability to withstand and control disturbances created by the HILL at the Point of Interconnection ("POI"). To do so, SPP will use transient stability assessments and system strength screening. If these additional studies identify weaknesses on the Transmission System caused by the interconnection of the HILL, SPP will also perform a supplemental Electromagnetic Transient ("EMT") study.³²

SPP will provide a HILL Delivery Point Study Agreement ("HDPS Agreement") and a request for any additional data or information required for the study to the Transmission Customer. ³³ The HDPS Agreement will commit the Transmission Customer to pay the study costs outlined in Section 2.1.3.5 of Attachment BA. The HDPS Agreement must be returned within 30 Calendar Days or the request to study the HILL will be deemed to be withdrawn, unless otherwise agreed. ³⁴ Upon receipt of the executed HDPS Agreement, the study data, and the required deposit, SPP will perform the HDPS. Within 90 Calendar Days, ³⁵ SPP will complete the HDPS, which will assess the impacts of the HILL delivery point on the Transmission System using power flow and short circuit analyses, and any other analyses that may be appropriate

Proposed Tariff, Attachment BA, Section 2.1.3 ("Host Transmission Owner is defined as the owner of that portion of the Transmission System to which such connection or modification is to be made.").

An EMT study may include EMT dynamic performance, sub-synchronous oscillation (SSO) screening, converter-driven stability assessments, power capability and control studies, emergency power control, fault ride-through, power quality evaluations, and model verification.

Proposed Tariff, Attachment BA, Section 2.1.3.4.

Proposed Tariff, Attachment BA, Section 2.1.3.4.

If SPP is unable to provide the report within 90 Calendar days, SPP will notify the Transmission Customer and the Host Transmission Owner and provide an estimate of the time needed to reach a final determination along with an explanation of the reason(s) that additional time is required to complete the study. Proposed Tariff, Attachment BA, Section 2.1.3.4.

in accordance with SPP Business Practice 7850.³⁶ If SPP identifies the need to perform a detailed EMT study,³⁷ an additional deposit may be required.³⁸

SPP proposes a \$10,000 non-refundable application fee, which will be adjusted every three years for inflation.³⁹ Additionally, SPP proposes a deposit of \$100,000 to perform the HDPS and an additional \$200,000 if EMT analysis is necessary.⁴⁰ These deposit amounts reflect the estimated costs of performing the studies. SPP must refund any excess deposit funds to the Transmission Customer and, likewise, the Transmission Customer must pay any costs in excess of the deposit.⁴¹

The Host Transmission Owner may also require additional analysis through a HILL Supplemental Load Connection Study ("HSLCS"),⁴² which will be coordinated through an agreement⁴³ between the Transmission Customer and Host Transmission Owner.⁴⁴ To conduct the HSLCS, the Host Transmission Owner may also require additional information from the Transmission Customer and an advance deposit of

Southwest Power Pool, Inc., Open Access Transmission Tariff Business Practices ("Business Practices"), at Business Practice 7850.

EMT studies are crucial for analyzing the impact of large loads. Unlike traditional steady-state studies, EMT simulations model the power system in the time domain, capturing rapid and short-duration events known as electromagnetic transients. New Section 5.6 to the SPP Planning Criteria outlines the Electromagnetic Transient (EMT) Screening and Studies for HILLs.

Proposed Tariff, Attachment BA, Section 2.1.3.5.

Proposed Tariff, Attachment BA, Section 2.1.3.3.

The HILL Supplemental Load Connection Study Agreement ("HSLCS Agreement").

Proposed Tariff, Attachment BA, Section 2.1.3.3. Attachment AQ and Attachment AX similarly allow the Host Transmission Owner to conduct any needed studies to evaluate the delivery point change through the load connection study. *See* Tariff, Attachment AQ, Section 3.1, and Attachment AX, Section 2.1.

\$25,000 to conduct the study.⁴⁵ The Host Transmission Owner must refund any remaining deposit funds to the Transmission Customer and, likewise, the Transmission Customer must pay for any additional costs incurred.⁴⁶ The Host Transmission Owner may determine that the HSLCS is not necessary due to the Load Connection Study that is already required under Attachment AQ or Attachment AX, as applicable.⁴⁷

While the HDPS and HSLCS study procedures for HILL delivery points are consistent with the current study processes outlined in Attachments AQ and AX, these studies are more complex and detailed to allow SPP and the Host Transmission Owner to study the impacts of the HILL to the Transmission System. The additional studies are necessary to capture the unique dynamic behaviors and risks posed by large electronic loads⁴⁸ and ensure reliable system performance. These studies require significantly more time and resources due to their scope, complexity, and computational demands, which, in turn, drives higher study costs compared to traditional load interconnection studies.

3. Ongoing Reliability Requirements for HILLs

The unique characteristics of HILLs, as explained above, necessitate that HILLs comply with the following ongoing reliability requirements.

a. <u>Integrated Marketplace Requirements</u>

Under Section 2.2.2 of Attachment BA, SPP proposes to require Transmission Customers seeking to add or modify a HILL delivery point to provide data and comply with other requirements pursuant to Section 2.2 of Attachment AE⁴⁹ and SPP's

Proposed Tariff, Attachment BA, Section 2.1.3.3.

Proposed Tariff, Attachment BA, Section 2.1.3.3. SPP Business Practice 7850 outlines the additional data that is required through the HDPS.

Tariff, Attachment AQ, Section 3.1, and Attachment AX, Section 2.1.

Large electronic loads use extensive power electronic interfaces to draw electrical energy from the grid. To do so, they typically use converters, inverters, or rectifiers. These loads differ significantly from traditional industrial or mechanical loads because their interaction with the grid is nonlinear, fast-acting, and often lacks inherent inertia.

Proposed Tariff, Attachment AE, Section 2.2(20) ("A Market Participant registering a HILL must meet the applicable requirements described in Section 2.22 of this Attachment AE.").

Integrated Marketplace Market Protocols.⁵⁰ Specifically, a HILL must: (1) Follow all Non-Conforming Load requirements;⁵¹ (2) provide load data via telemetry in Real Time; (3) have remote capability to disconnect the load from the Transmission System; (4) have an effective up and down ramp rate not exceeding 20 MW/minute unless otherwise directed; (5) include additional information with registration, and 6) not have withdrawals from the Transmission System without appropriate transmission service.⁵²

By requiring HILLs to follow all Non-Conforming Load requirements, a Market Participant will be subject to additional load forecast requirements, which, as discussed above, is necessary given the heightened reliability impacts of a HILL.⁵³ Under Attachment AE, Section 2.12, Market Participants must provide initial hourly forecasts for their Non-Conforming Load, update those forecasts, and provide Non-Conforming Load data to the extent that telemetering is available. As described in the Market Protocols, all Non-Conforming Load must submit a forecast on a 5-minute rolling 15-minute ahead basis.⁵⁴ SPP is also including in its Market Protocols an additional intermediate forecast update requirement for HILLs, requiring an update "for two (2) hours following the current interval for each 15-minute interval that the forecast deviates from the hourly profile by 10% or 25 MW, whichever is greater."55 Currently, in its Market Protocols, SPP encourages updates to Non-Conforming Load forecasts prior to the mandatory update required closer to Real-Time, but the update is not required. For a HILL, the update will be mandatory given the sizeable impact a HILL may have on a very localized area of the Transmission System and the need to ensure the most up-to-date information on the expected demand at that concentrated location.

In addition, SPP proposes revisions to the definition of Non-Conforming Load to more accurately describe the load patterns that necessitate the additional forecasting

Southwest Power Pool, Inc., SPP Integrated Marketplace Market Protocols ("Market Protocols"), available at: https://www.spp.org/spp-documents-filings/?id=20867.

Non-Conforming Load is defined as "[1]oad that cannot be generally forecasted through a mathematically derived pattern using only weather, time, season, or other normal forecasting methods." Proposed Tariff, Attachment AE, Section 1.1 N.

Proposed Tariff, Attachment AE, Section 2.22.

Tarriff, Attachment AE, Section 2.12.

Market Protocols, Section 4.1.2.1.2.

Market Protocols, Section 4.1.2.1.2.

required for Non-Conforming Load.⁵⁶ The new definition describes Non-Conforming Load by distinguishing it from load that follows the types of patterns typically used in SPP's forecasts. This will better put Market Participants on notice of the types of loads that are Non-Conforming Load.

b. <u>Phasor Measurement Unit Requirements</u>

SPP proposes to require, prior to Service Commencement Date of the HILL, the installation of Phasor Measurement Unit ("PMU") equipment, or other similar equipment.⁵⁷ HILLs may have very fast changes in load and, because of their size and concentrated impacts, changes in the patterns of their power consumption may occur on a scale large enough to have impacts on the transmission system so fast that they are not adequately captured by conventional supervisory control and data acquisition ("SCADA") systems, which scan every four seconds.

The data from PMUs is essential to SPP's obligation to ensure reliability of the Bulk Power System. PMUs supply high-resolution, time-synchronized measurements that enable SPP to validate models, monitor dynamic performance, and detect disturbances that may otherwise lead to instability or widespread reliability impacts. In particular, PMU data enhances SPP's ability to identify and respond to forced oscillations, monitor phase angles, assess voltage stability, and conduct post-event analysis.

As a result, continuous access to PMU data is required to ensure compliance with reliability standards, support accurate planning and operational models, and preserve the reliable operation of the transmission system. The information received through PMUs is critical for SPP to reliably plan and operate the Transmission System with the interconnection of HILLs.

The PMU equipment will be installed by the Transmission Owner at the Transmission Customer's expense.

c. Ride-Through Requirements

Pursuant to Section 2.2.5 of Proposed Attachment BA, HILLs will be required to follow SPP's ride-through requirement guidelines set forth in the High Impact Large

Proposed Tariff, Attachment AE, Section 1.1 N (Definition of Non-Conforming Load).

Proposed Tariff, Attachment BA, Section 2.2.4.

Load Ride-Through Requirements.⁵⁸ NERC found that HILLs present risks to the electric system if ride-through behavior is not managed:

> The voltage and frequency ride-through behavior of large loads during disturbances plays a significant role in how they can contribute to instability. Ride-through behavior is primarily defined in terms of how long the load remains connected during a given voltage and/or frequency disturbance. However, changes in the load's real or reactive power consumption during or after the disturbance are important as well (e.g., how much time passes before a disconnected load reconnects, and how quickly does it return to its original consumption). Currently, much attention is directed toward the tendency of many large loads to disconnect during disturbances. Some large loads have internal protection and control systems that will disconnect from the grid during disturbances. For example, some data centers may switch to backup power systems after three transient voltage disturbances within one minute as observed at certain data centers in the [Eastern Interconnection] load transfer event. The intent behind such systems is usually to ensure the reliability of the large load's processes (e.g., serving internet traffic) or to protect equipment from damage by switching to a local backup power source.

> [Bulk Power System] equipment is designed and operated to meet certain ride-through requirements (e.g., Reliability Standard PRC024) so that it remains on-line during disturbances and supports the system. These requirements are necessary because disconnecting BPS equipment during a disturbance can worsen the disturbance's effects and, if enough equipment disconnects, lead to cascading power outages. At a sufficient scale, the disconnection of load introduces similar concerns. The tendency of some loads to disconnect during disturbances is not new. However, the scale of recent load loss events was unexpected and had measurable effects on the [Bulk Power

⁵⁸ The High Impact Large Load Ride-Through Requirements were approved through the SPP stakeholder process by the necessary working groups. See Operating Reliability Working Group Meeting Materials, dated October 8, 2025, at Agenda Item 7, posted at: https://www.spp.org/spp-documentsfilings/?id=19845.

System]. This called into question existing modeling practices and expectations for loads.⁵⁹

Consistent with NERC's findings and resultant guidance, SPP proposes to require ride-through requirements for HILLs. Without these proposed voltage and frequency ride-through requirements, HILLs have the potential to cause disturbances to the Transmission System and the entire Bulk Power System. Ride-though requirements are still being developed throughout the electrical industry, and SPP will continue to modify its requirements as more defined requirements from NERC or the Commission become available.⁶⁰

4. The Proposed HILL Definition and Study and Ongoing Operational Requirements Are Just and Reasonable and the Commission Should Accept Them

SPP's proposed HILL design is just and reasonable and the Commission should approve it to enable utilities and customers throughout the SPP region to enjoy the economic opportunities and preserve the national security interests that large load interconnections can entail, but to do so in a manner that enables SPP to maintain reliable operation of the Transmission System.

The HILL definition is just and reasonable because it allows for the classification of certain new large loads that will require unique treatment to address the reliability impact of their operational characteristics. The HILL definition is based on current industry thinking, as reflected in NERC's Large Load Task Force, tailored to address the topology characteristics of the SPP Transmission System, and will be

NERC, Characteristics and Risks of Emerging Large Loads, Large Loads Tasks Force White Paper (July 2025), at 22, https://www.nerc.com/comm/RSTCReviewItems/3_Doc_White%20Paper%2 OCharacteristics%20and%20Risks%20of%20Emerging%20Large%20Loads.pdf.

60 **NERC** Large Load Task Force, FAOs. https://www.nerc.com/comm/RSTC/LLTF/Large%20Loads%20FAQs.pdf. In the recent NERC Alert Level 2 Industry Recommendation, NERC requested responses on various issues outlined in the notification. One of those requests is: "Describe the performance requirements for frequency ride-through, frequency recovery characteristics, or other frequency response data deemed necessary by TPs and PCs. Include in this response how this is acquired from the Large Load entities." Industry Recommendation Large Load Interconnection, Study, Commissioning, and Operations (Sept. 9, 2025), https://www.nerc.com/pa/rrm/bpsa/Alerts%20DL/NERC%20Alert%20Level %202%20%20Large%20Loads.pdf.

used to categorize the specific types of loads that will be subject to the additional studies and requirements discussed above. In the same way, loads that will not be categorized as HILLs will be properly excluded from these additional studies and requirements, as will preexisting loads that may meet the definition but are currently operating within the SPP Transmission System. Thus, the proposed definition reasonably balances the need to adequately study large loads with the administrative and transparency benefits of precision and ultimately, is narrowly tailored and targeted to identify those loads that may present a significant operational or reliability risk to the Transmission System.

SPP's proposed HILL study procedures, timelines, and deposits are likewise just and reasonable, as they are consistent with current Tariff study processes but modified as necessary to address the unique operating characteristics of HILLs and provide SPP with additional reliability insights that are critical for SPP to understand the impacts that interconnecting HILLs will have on the Transmission System. The study deposits are keyed to the anticipated costs of the additional studies, subject to true-up, and SPP's additional requirements ensure that highly speculative HILLs are discouraged from applying to be studied.

The proposed ongoing operational requirements are just and reasonable because they will afford SPP the opportunity to maintain continued reliable operation of the Transmission System in light of the addition of HILLs to the system. The requirements will ensure SPP has sufficient visibility into some of the most impactful loads on the system, ensure the utilities in the RTO footprint can serve load in real time, and ensure the ability to shed HILL load is available if needed.

Regarding the requirement to install PMUs specifically, SPP previously proposed similar installation requirements for new generator interconnections, and the Commission approved. The Commission agreed with the value provided by PMU data and found that it was appropriate to assign the costs of the PMU to the interconnection customer "because the PMU provides data specific to an individual generator's interaction with the grid that supports the generator's reliable operation." Similarly, here, PMUs are necessary for the planning and operation of the Transmission System and it is appropriate here to assign these costs to the Transmission Customer because the PMU is providing data specific to the interconnection of the Customer's load to the Transmission System. For these reasons, SPP proposes that the requirement to install PMU equipment for new HILL delivery points is just and reasonable.

For all of these reasons, the Commission should accept the proposed HILL provisions submitted in this filing as just and reasonable.

⁶¹ Sw. Power Pool, Inc., 170 FERC ¶ 61,100 (2020) ("GI PMU Order").

⁶² *Id.* at P 21.

B. High Impact Large Load Generator Assessment Process – Attachment BB

In addition to the HILL requirements discussed above, SPP proposes an optional HILLGA process to facilitate the prompt interconnection of generating Resources that are specifically identified for and limited to serving a HILL. The HILLGA is an expedited process designed to review and approve the interconnection of a new Generating Facility (or a change to an existing Generating Facility) to the Transmission System when the Generating Facility is supporting a HILL. ⁶³

As set forth in proposed Attachment BB, SPP will study HILLGA Requests outside of its existing generator interconnection process on a serial basis and solely for determining the impact of the Generating Facility to serve the identified HILL. The HILLGA process will not result in granting the HILLGA Customer traditional generator interconnection service, such as NRIS or ERIS; instead, HILLGAs will receive "Load Limited Resource Interconnection Service," or "LLRIS." LLRIS is limited interconnection service that allows the HILLGA Customer to integrate its Generating Facility with the Transmission System with injection rights limited to the HILL, which it is supporting. Generating Facilities seeking NRIS or ERIS will be required to submit a separate Interconnection Request under SPP's standard generator interconnection procedures set forth in Attachment V of the Tariff.⁶⁴

Importantly, neither the HILL study process outlined in Attachment BA nor the HILLGA process set forth in Attachment BB will result in a grant of transmission service from the Generating Facility to the HILL. A Transmission Customer must still request transmission service using one of SPP's existing transmission service processes. However, SPP's HILL process set forth in Attachment BA, in concert with the existing study processes in Attachment AQ and AX, will provide a delivery point for the HILL, and the HILLGA process will provide LLRIS to the Generating Facility supporting a HILL.

[&]quot;Generating Facility will mean a HILLGA Customer's device(s) for the production and/or storage for later injection of electricity identified in the HILLGA Request but will not include the HILLGA Customer's Interconnection Facilities and will not include a Storage as Transmission Only Asset as defined in Section 1 of the Tariff. A Generating Facility consists of one or more generating unit(s) and/or storage device(s) which usually can operate independently and be brought online or taken offline individually." Proposed Tariff, Attachment BB, Section 1.

SPP's Generator Interconnection Procedures (GIP) are currently contained in Attachment V of the Tariff.

The proposed HILLGA process is discussed in detail below, including discussion of what makes the proposed process just, reasonable, and not unduly discriminatory or preferential.

1. HILLGA Eligibility and Requirements

SPP will accept HILLGA Requests at any time.⁶⁵ This feature of the HILLGA process is different from the Definitive Interconnection System Impact Study ("DISIS") process contain in Attachment V of the Tariff and benefits the HILLGA Customer by allowing the HILLGA Customer the opportunity to submit a HILLGA Request at any time rather than waiting for a submission window to open. This encourages more efficient capacity addition, a recognized goal of the Commission.⁶⁶

The submission and eligibility requirements for a HILLGA Request are similar to the requirements in the DISIS process. The HILLGA Customer must submit the following: (1) an executed HILLGA Study Agreement; (2) a nonrefundable application fee of \$20,000; (3) a study deposit of \$250,000 for HILLGA Requests up to 500 MW or a study deposit of \$500,000 for HILLGA Requests over 500 MW; (4) demonstration of Site Control; (5) definitive POI; (6) Nameplate Capacity, Maximum Injection Capability, and Network Resource Deliverability (MW) pursuant to Appendix 1, Attachment A of Attachment BB; (7) Security deposit equal to \$8,000/MW of the requested Maximum Injection Capability ("Financial Security One"); (8) reasonable evidence of satisfaction of one of the listed development milestones; and (9) if applicable, the charging parameters of the Generating Facility that includes at least one electric storage resource, and a description of any control technologies that will limit the operation of the Generating Facility to the operating assumptions submitted by the HILLGA Customer.⁶⁷

While similar, a few of these requirements are more stringent than the requirements applicable to the DISIS in order to encourage the entry of more commercially viable, "shovel ready" projects. First, the application fee for HILLGA

Proposed Tariff, Attachment BB, Section 4.2.1.

Improvements to Generator Interconnection Procedures and Agreements, Order No. 2023, 184 FERC ¶ 61,054, at P 3 ("Order No. 2023"), limited order on reh'g, 185 FERC ¶ 61,063 (2023), order on reh'g and clarification, Order No. 2023-A, 186 FERC ¶ 61,199 (2024) ("Order No. 2023-A"), appeals pending, Petition for Review, Advanced Energy United v. FERC, Nos. 23-1282, et al. (D.C. Cir. Oct. 6, 2023).

Proposed Tariff, Attachment BB, Section 8.2.

Requests is double the application fee for DISIS requests.⁶⁸ Second, the DISIS process utilizes a tiered approach for the study deposit, capping the deposit at \$250,000 regardless of the size of the request.⁶⁹ Third, the Financial Security applicable to HILLGA Requests is double the financial security in the DISIS process.⁷⁰ Finally and importantly, the DISIS process does not require evidence of satisfaction of a development milestone until the end of the DISIS.⁷¹ Under the proposed HILLGA process, a HILLGA Customer must demonstrate reasonable evidence of satisfaction of a development milestone at the execution of the HILLGA Study Agreement. The listed development milestones may include: executed contracts for supply or transportation of fuel to the Generating Facility, executed contracts for equipment for the construction of the Generating Facility, attestations that the Generating Facility is part of a state resource plan, application for a land use permit, an effective Interim Generator Interconnection Agreement associated with the same HILLA Request, and others.⁷²

These heightened requirements are designed to deter and limit speculative requests. In this regard, the HILLGA process is similar to other recently approved initiatives in other RTOs, including ERAS recently submitted by SPP.⁷³ Further, as recognized in Order No. 2023, increased financial commitments "disincentivize interconnection customers from submitting interconnection requests for speculative generating facilities and ensure that ready, more viable proposed generating facilities can proceed through the study process."⁷⁴ The financial requirements for the HILLGA

Proposed Tariff, Attachment BB, Section 8.2(f) and Tariff, Attachment V, Section 8.2(g).

⁶⁹ Tariff, Attachment V, Section 8.2(b).

Proposed Tariff, Attachment BB, Section 8.2(e) and Tariff, Attachment V, Section 8.2(f).

Tariff, Attachment V, Section 8.5.2. Reasonable evidence of having satisfied at least one development milestone is required prior to the end of Decision Point 2.

Proposed Tariff, Attachment BB, Section 8.2(h).

Sw. Power Pool, Inc., 192 FERC ¶ 61,062 (2025) (order directing SPP to remove extraneous language from the Tariff in Attachment AW, Section 8.7 and otherwise approving ERAS) ("SPP ERAS Order"); PJM Interconnection, L.L.C., 190 FERC ¶ 61,084, at P 155 (2025) ("PJM Order") (finding PJM's commercial readiness criteria to be just and reasonable by prioritizing projects that are more likely to meet resource adequacy needs).

⁷⁴ Order No. 2023 at P 177.

process are even higher than those recognized as being a disincentive to speculative projects in Order No. 2023.

Proposed Attachment BB Section 3.1.3 requires the HILLGA Customer to provide the Generating Facility's projected capacity accreditation MW value, as determined pursuant to Attachment AA of the Tariff. This value must not exceed the requested MW load amount of the associated HILL multiplied by the higher of: (a) 110% plus the highest approved Planning Reserve Margin percentage effective at the time of the HILLGA Study Agreement and outlined in the SPP Planning Criteria, or (b) 125%. This requirement ensures that only the generation capacity necessary to serve the HILL is processed through the HILLGA while recognizing the load responsible entities' requirement to secure sufficient Resources to cover the Planning Reserve Margin that the load responsible entity will be required to carry when the HILL receives long-term, firm transmission service.

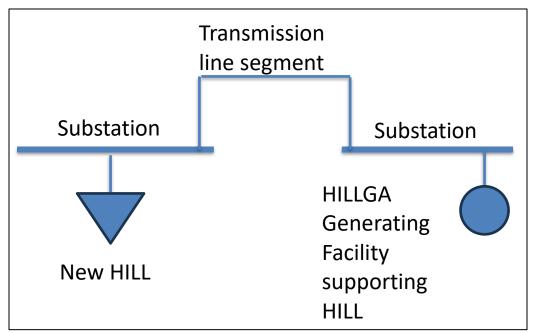
A HILLGA Customer must submit a separate HILLGA Request for each Generating Facility associated with a HILL. The HILLGA Request must also identify the POI where the Generating Facility will connect to the Transmission System. Due to the limited nature of the interconnection, the POI must necessarily be in the same local area as the HILL, which requires close electrical proximity. To be considered within the same electrically local area, the POI of the Generating must be no more than two substations away from the HILL. The figure below demonstrates the configuration of the POI of a HILLGA Generating Facility being two substations away from the HILL.

Proposed Tariff, Attachment BB, Section 3.1.3(2).

Proposed Tariff, Attachment BB, Section 3.1.3(3).

Proposed Tariff, Attachment BB, Section 3.1.3(5)(a) ("The Point of Interconnection is on the Transmission System no more than two substations away from the HILL(s) local delivery facilities.

Figure 5: HILLGA Generating Facility Two Substations Away from HILL



For a HILLGA Generating Facility connecting to a 765 kV transmission line, the HILLGA Generating Facility is further constrained to be within one substation away from the HILL that it is supporting. Transmission lines that are 765 kV are designed to transport power over longer distances due to lower impedance. Because there may be large distances between substations on a 765 kV transmission line, the single substation difference between a Generating Facility to a HILL is necessary to preserve the local, limited nature of the interconnection service. Even though there may be large distances between the HILL and the supporting Generating Facility, the impacts to the Transmission System caused by a HILL located one substation away from the supporting Generating Facility on a 765 kV transmission line will be electrically localized to those facilities, similar to Generating Facility supporting HILLs on lower voltage transmission facilities.

A Generating Facility may support multiple HILLs if no more than five substations are involved and no more than two existing transmission line segments are used between each substation.⁷⁹ This means there can only be two existing line segments utilized between the Generating Facility and each of the supported HILLs,

Proposed Tariff, Attachment BB, Section 3.1.3(5)(a).

⁷⁹ *Id*.

and only five substations involved in the configuration.⁸⁰ This is consistent with the limitation that a single HILL must be within two substations of the HILL Generating Facility that is supporting that HILL. These requirements are in place to ensure that the proposed Generating Facility can support the HILL in a localized area. The figure below demonstrates a HILLGA Generating Facility supporting two HILLS with the utilization of two existing line segments and only five substations involved in the configuration.

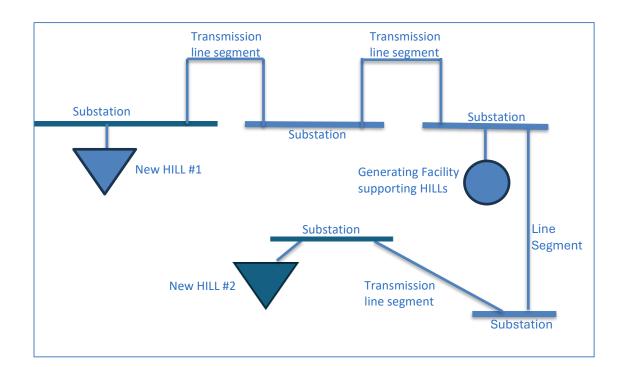


Figure 6: HILLGA Generating Facility Supporting Multiple HILLs

Finally, If the POI is on facilities not under SPP's functional control, the HILLGA Request must follow the procedures for non-jurisdictional generator interconnections found in the existing Section 6.3 of the SPP Business Practice 7250.⁸¹

⁸⁰ *Id.*

Proposed Tariff, Attachment BB, Section 3.1.3(4). SPP Business Practice 7250 outlines SPP's study process for generator interconnection requests that are not connecting to facilities under SPP's functional control or not connecting to another entity with an open access transmission tariff on file with the Commission. SPP revised the study processes in SPP Business Practice 7250 to account for the unique nature of HILLs for consistency with the proposed HILLGA process.

2. Load Limited Resource Interconnection Service and Transmission Service Available to Serve HILLs

Through the HILLGA process, HILLGA Customers will obtain a new interconnection service type called LLRIS.⁸² LLRIS grants limited interconnection rights solely to support the HILL, which limits both the impacts of the generation on SPP's Transmission System and potential Network Upgrade costs.⁸³ Because the LLRIS process considers the local area limitations when evaluating the impacts of a Generating Facility, the HILLGA Customer is only obligated to mitigate those impacts that occur under the system conditions under which the HILL will operate.

In order to obtain NRIS, which provides rights to serve Network Load, or ERIS, the HILLGA Customer must submit a separate Interconnection Request under SPP's current applicable generator interconnection procedures. However, HILLGA Requests will be studied for NRIS to allow SPP to understand the impact that the generator would have if delivering outside the local area during emergency conditions. ⁸⁴ This will also provide the HILLGA Customer preliminary cost information indicative of what it should expect if it later requests that SPP study the Generating Facility for NRIS.

As stated above, the HILLGA process does not provide any type of transmission service for the Generating Facility to serve the HILL. A Transmission Customer may obtain Short-Term Service or Non-Firm Point-To-Point Transmission Service on an asavailable basis pursuant to Part II of the Tariff if a delivery point was established through Attachment AX. Because Short-Term Service and Non-Firm Point-To-Point Transmission Service are granted based on whether available transfer capability exists to accommodate the service, those are the fastest pathways for a Transmission Customer to obtain transmission service to deliver the output from a Generating Facility to the HILL, but those services lack the level of duration and firmness to serve the HILL on a long-term basis. For a Transmission Customer to obtain firm Long-Term Point-To-Point Transmission Service from the Generating Facility to a HILL, the Transmission Customer must go through the Aggregate Transmission Service Study pursuant to Attachment Z1 of the Tariff. To obtain Network Integration Transmission Service ("NITS"), the HILLGA Customer must first change its generation injection rights from LLRIS to either NRIS or ERIS through SPP's standard generator

Proposed Tariff, Attachment BB, Section 3.2.

Proposed Tariff, Attachment BB, Section 1 (Definition of LLRIS).

Proposed Tariff, Attachment BB, Section 3.2.

Tariff, Part II, Section 13.2.

interconnection procedures.⁸⁶ The HILLGA Customer may then request NITS through the appropriate transmission service process.

3. The HILLGA Study Process

Similar to the study of a HILL under proposed Attachment BA, study of the Generating Facility through the HILLGA process will include steady-state, short circuit, stability analysis, and other screenings to determine if further EMT analysis is necessary. This analysis will determine if there are Network Upgrades needed to accommodate the injection of the Generating Facility to the local area. The HILLGA evaluation will include informational NRIS only transfer analysis to Deliverability Area. Requests not already included in the HILL model at the same POI will be included as part of the Facilities Analysis to capture higher-queued Interconnection Requests at the same substation. Additionally, the respective HILLGA models will be utilized to determine the limited injection amounts for LLRIS allowed prior to the completion of Network Upgrades needed for full injection rights of the Generating Facility.

SPP will complete the HILLGA System Impact Study, which will evaluate the impact of the proposed interconnection on the reliability of the Transmission System, no later than 90 Calendar Days after the close of the HILLGA Review Period. This allows for more rapid study and decision-making to support HILLs that is not possible under SPP's current generator interconnection processes. If a HILLGA Request requires a restudy due to a higher queued project dropping out of the queue, or a modification of a higher queued project subject to Section 4.4 of Attachment BB, or a change in the HILLGA Request's POI, the restudy will be performed within 60 Calendar Days from notification of the required restudy. The HILLGA process is able to accommodate this shortened timeline because HILLGA Requests will be handled

SPP's Generator Interconnection Procedures are currently outlined in Attachment V of the Tariff.

Proposed Tariff, Attachment BB, Section 8.4.

Proposed Tariff, Attachment BB, Section 3.8.1.

Proposed Tariff, Attachment BB, Section 3.0.

Proposed Tariff, Attachment BB, Section 3.2.

Proposed Tariff, Attachment BB, Section 8.5.

Proposed Tariff, Attachment BB, Section 8.5.

Proposed Tariff, Attachment BB, Section 8.8.

through a simplified, serial process, and the generators will only be studied for the limited purpose of injecting within the local area to support the HILL.

Concurrently with the posting of the HILLGA System Impact Study report⁹⁴, SPP will tender a draft HILL Generator Interconnection Agreement ("HILLGIA") to the HILLGA Customer.⁹⁵ The HILLGA Customer, Transmission Owner, and SPP will have 45 Calendar Days to negotiate the HILLGIA, unless all parties agree to another time period.⁹⁶At the end of the 45 Calendar Day negotiation period, the HILLGA Customer must either finalize the terms of the HILLGIA, request that the HILLGIA be filed unexecuted, or enter into Dispute Resolution procedures. Otherwise, the request will be deemed withdrawn.⁹⁷ SPP will tender a final HILLGIA to the HILLGA Customer within 10 Business Days after the negotiation process is complete.⁹⁸ Within 10 Business Days of SPP tendering the final HILLGIA to the HILLGA Customer, the HILLGA Customer must either provide an executed HILLGIA to SPP or request in writing that SPP file the HILLGIA unexecuted with the Commission.⁹⁹

Section 3.6 of Proposed Attachment BB sets forth the HILLGA Affected System coordination requirements. SPP will be responsible for coordinating with Affected System Operators on any studies required to determine the impact of a HILLGA Request on an Affected System. Additionally, proposed Attachment BB Section 3.6.4 provides the process for determining whether a HILLGA Request has an impact on any Joint Targeted Interconnection Queue ("JTIQ") Upgrades. Proposed

Proposed Tariff, Attachment BB, Section 8.4.2 describes that the HILLGA System Impact Study report will state the assumptions upon which it is based; state the results of the analyses; and provide the requirements or potential impediments to providing the requested interconnection service, including a preliminary indication of the cost and length of time that would be necessary to correct any problems identified in those analyses and implement the interconnection.

Proposed Tariff, Attachment BB, Section 11.1.

Proposed Tariff, Attachment BB, Section 11.2.

Proposed Tariff, Attachment BB, Section 11.2.

Proposed Tariff, Attachment BB, Section 11.2.

Proposed Tariff, Attachment BB, Section 11.3.

Proposed Tariff, Attachment BB, Section 3.6.

Proposed Tariff, Attachment BB, Section 3.6.4(A).

Section 3.6.4 describes the study process of Midcontinent Independent System Operator, Inc.'s ("MISO") facilities as it relates to JTIQ and non-JTIQ upgrades. 102

As it relates to queue priority, HILLGA Requests will not be considered higherqueued than DISIS requests but will be treated like existing generators and incorporated into SPP's Integrated Transmission Planning ("ITP") models through the normal process described in the ITP manual. ITP models serve as the base case for interconnection request studies. Thus, the HILLGA Requests will not appear in DISIS studies until the DISIS models have been updated to new ITP models and therefore cannot drive upgrade costs or restudies for those DISIS clusters. Unlike the DISIS, which studies DISIS requests submitted in the same Queue Cluster Window together as a cluster, the HILLGA System Impact Study will study each HILLGA Request on an individual basis. 103 This difference highlights an important distinction between the HILLGA process and any other SPP interconnection process – the HILLGA process is intended to study localized impacts caused to the Transmission System by the Generating Facility's injection of energy to serve only the HILL it proposes to support. This means that any upgrade costs required by a Generating Facility will be specific to that facility's injection for the local support of the HILL and will have limited impacts on other requests. This focused approach avoids unnecessary complications and unnecessary restudies caused by project withdrawals often seen in cluster studies such as the DISIS.

4. The HILLGA Process is Just and Reasonable

The Commission should accept the HILLGA framework as just and reasonable and not unduly discriminatory or preferential. The HILLGA process is an expedited and separate serial interconnection process designed to facilitate the prompt interconnection of generating resources that are specifically identified as, and limited to, serving an identified HILL in the same local area as the HILLGA. The Commission applies the independent entity variation standard to evaluate proposals by RTOs and ISOs for deviations from the Commission's *pro forma* Large Generator Interconnection

Proposed Tariff, Attachment BB, Section 3.6.4

Proposed Tariff, Attachment BB, Section 4.

Procedures outlined in Order Nos. 2003, ¹⁰⁴ 2023, and 2023-A. ¹⁰⁵ To satisfy the independent entity variation standard, SPP must show that its proposed variations are just and reasonable and not unduly discriminatory or preferential and accomplish the purposes of Order Nos. 2003, 2023, and 2023-A. ¹⁰⁶ As described below, SPP's proposed Tariff revisions accomplish the purposes of the Commission's final rules on generator interconnection, including Order Nos. 2003, 2023, and 2023-A, by providing a path to ensure that HILLGA Customers are able to interconnect to the transmission system, albeit on a limited basis, in a reliable, efficient, transparent, and timely manner. ¹⁰⁷ In addition, while the HILLGA process is a new narrowly tailored process

¹⁰⁴ See Standardization of Generator Interconnection Agreements & Procedures, Order No. 2003, 104 FERC ¶ 61,103, at PP 822-27 (2003) ("With respect to an RTO or ISO . . . we will allow it to seek 'independent entity variations' from the Final Rule pricing and non-pricing provisions. This is a balanced approach that recognizes that an RTO or ISO has different operating characteristics depending on its size and location and is less likely to act in an unduly discriminatory manner ... The RTO or ISO shall therefore have greater flexibility to customize its interconnection procedures and agreements to fit regional needs."), order on reh'g, Order No. 2003-A, 106 FERC ¶ 61,220, at P 759 ("[T]here is a rational basis for giving RTOs and ISOs more flexibility The foremost reason for different treatment is the fact that an RTO or ISO is independent and is less likely to act in an unduly discriminatory manner. . . . The RTO and ISO also may have operating characteristics that require more flexibility than provided by the 'regional differences' justification."), order on reh'g, Order No. 2003-B, 109 FERC ¶ 61,287 (2004), order on reh'g, Order No. 2003-C, 111 FERC ¶ 61,401 (2005), aff'd sub nom. Nat'l Ass'n of Regul. Util. Comm'rs v. FERC, 475 F.3d 1277 (D.C. Cir. 2007), cert. denied, 552 U.S. 1230 (2008).

Order No. 2023 at P 10 ("We note that compliance obligations that result from this final rule will be evaluated in light of the independent entity variation standard for regional transmission organizations (RTO) and independent system operators (ISO)[.]).

See Sw. Power Pool, Inc., 186 FERC ¶ 61,068, at P 10 n.18 (2024) (citing Sw. Power Pool, Inc., 183 FERC ¶ 61,215, at P 30 (2023) ("Under the independent entity variation standard, SPP must demonstrate that its proposed variations are just and reasonable and not unduly discriminatory or preferential, and accomplish the purpose of the Commission's rulemaking establishing the proforma generator interconnection procedures and agreements")).

See, e.g., SPP ERAS Order at P 24 (citing Order No. 2003, 104 FERC ¶ 61,103 at PP 26, 827; Order No. 2023, 184 FERC ¶ 61,054 at P 1); id. at P 162 ("RTOs/ISOs, as independent entities, have greater flexibility to tailor their

needed to facilitate limited generation interconnection to support HILLs as expeditiously as possible, separate from the interconnection processes in Attachment V of the Tariff, the HILLGA process incorporates a majority of the changes SPP proposed, and the Commission accepted, on compliance with Order Nos. 2023 and 2023-A.¹⁰⁸ The timely interconnection of new generation to serve large load is of national and regional importance and the HILLGA framework is an important step to help achieve these interests.

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generator interconnection processes to meet regional needs, including resource adequacy needs, and we find that SPP has demonstrated that the ERAS proposal is just, reasonable and consistent with the purpose of Order No. 2023 to ensure that interconnection customers are able to interconnect to the transmission system in a reliable, efficient, transparent, and timely manner.."); PJM Order at P 14 (finding that PJM's Resource Reliability Initiative proposal met the independent entity variation standard because it would "improve the efficiency of PJM's transition process and will help ensure interconnection to the transmission system in a reliable, efficient, transparent, and timely manner"); Cal. Indep. Sys. Operator, Corp., 188 FERC ¶ 61,225, at P 39 ("CAISO Order"), reh'g denied, 189 FERC ¶ 62,099 (2024) (finding CAISO's tariff revisions met the independent entity variation standard "by helping to ensure that interconnection customers are able to interconnect to the transmission system in a reliable, efficient, transparent, and timely manner"); Midcontinent Independent System Operator, Inc., 192 FERC ¶ 61,064 (2025) ("MISO ERAS Order"). The Commission found that "MISO's proposal to evaluate [Expedited Resource Addition Study] interconnection requests in a separate, serial study process is just and reasonable and not unduly discriminatory or preferential and accomplishes the purposes of Order Nos. 2003 and 2023." *Id.* at 259.

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Sw. Power Pool, Inc., 191 FERC ¶ 61,230 (2025) ("Order No. 2023 Compliance Order"). On May 16, 2024, SPP submitted proposed revisions to Attachment V of its Tariff in compliance with the requirements of Order Nos. 2023 and 2023-A, and SPP requested independent entity variations regarding certain directives in Order Nos. 2023 and 2023-A. In its filing, SPP proposed Tariff revisions that complied with Order Nos. 2023 and 2023-A and, in some instances, proposed to retain its existing Tariff provisions that it argued met or exceeded the Commission's goals in Order Nos. 2023 and 2023-A. In Order No. 2023 Compliance Order, the Commission found that SPP partially complied with the requirements of Order Nos. 2023 and 2023-A. SPP made a subsequent compliance filling to address these concerns on August 25, 2025. Second Order No. 2023 Compliance Filing of Southwest Power Pool, Inc., Docket No. ER24-2026-001 (August 25, 2025) ("Second Order No. 2023 Compliance Filing").

This filing addresses a significant need to quickly study generation needed to interconnect large loads. Due to the number of requests in the DISIS queue, late-stage withdrawals from that queue, and other issues that have hindered DISIS Interconnection Customers' ability to bring resources online, SPP's Transmission Customers lack a path to quickly and reliably bring on the generation necessary to support HILL customers in a timely manner. As discussed above, the potential loss of these types of loads is detrimental to the economics of states in the SPP region and to the national security interest if these large loads are consequently located outside the United States.¹⁰⁹

a. <u>The HILLGA Process Does Not Disadvantage Existing</u> SPP Interconnection Customers

HILLGA represents a reasonable approach to address these large load generation needs without disadvantaging requests in the DISIS queue. The Commission has previously approved variations from its *pro forma* interconnection requirements to accommodate state requirements when the proposal does not "spill over or harm other Interconnection Customers in the queue." 110 Here, SPP is not proposing to modify its generator interconnection procedures under Attachment V of the Tariff but rather is establishing a separate process to support the need to interconnect generation to support HILLs in an expedited manner without undue preference. SPP's standard interconnection process (i.e., DISIS) will function unabated to achieve the goals outlined in Order Nos. 2003, 2023, and 2023-A. For example, and as explained above, the models used in studying any ongoing SPP generator interconnection processes (i.e., DISIS) will not include any HILLGA Request, and similarly, the models used in the HILLGA evaluation process will not include pending DISIS requests that have not received a Generator Interconnection Agreement. This means that the priority of pending DISIS requests will not be affected by the HILLGA process or the study of HILLGA Requests. In addition, the HILLGA study process will not affect the timing of completing any pending DISIS requests because the HILLGA process will be predominantly completed by outside consultants paid for by the HILLGA Customer through the required study deposits. In this way, the HILLGA process balances the need to support HILLS in an expedited manner with the interest of other SPP Interconnection Customers in a way that is just, reasonable, and consistent with open access principles.

b. <u>The HILLGA Process is Narrowly Tailored to Address a</u> Pressing Problem

As explained throughout this letter, SPP is facing an unprecedented spike in large load interconnections, and its current processes are not well equipped to integrate

See supra Section I.

See Xcel Energy Operating Cos., 109 FERC \P 61,072, at P 26 (2004).

these large loads in an efficient and reliable manner. The HILLGA process is thus necessary to address a looming problem.

The HILLGA process is not unlimited in scope; rather, it provides a limited interconnection service for the Generating Facility to support the HILL – the output of the Generating Facility will be limited to the load demand of the HILL and will be limited to serving the local area of the HILL. The HILLGA process provides interconnection rights solely for that Generating Facility to serve the HILL, not the SPP Balancing Authority as a whole. If a HILLGA Customer desires to obtain unencumbered interconnection rights (ERIS or NRIS), it will be required to submit a request pursuant to the procedures outlined in Attachment V of the Tariff. This feature of the HILLGA process respects SPP's existing interconnection process and ensures that a customer cannot use the HILLGA process to bypass the procedures outlined in Attachment V of the Tariff.

Further, the Generating Facility's LLRIS interconnection rights are also time limited. Under the proposed framework, executed HILLGIAs will terminate automatically five years after the Commercial Operation Date of the Generating Facility. In other words, for the Generating Facility to continue injecting power onto the Transmission System past the initial five year period, a new Interconnection Request must be submitted pursuant to SPP's standard generator interconnection process currently set forth in Attachment V of the Tariff. Moreover, if the HILL being supported by the Generating Facility fails to connect to the Transmission System within five years from execution of the HILLGIA, the HILLGIA will terminate. Again, this limitation of the HILLGA process recognizes the importance of SPP's standard generator interconnection process and balances use of that process with a need to interconnect HILLS in an expedited manner on a limited basis during a short time period.

c. <u>The HILLGA Process Encourages Faster, More Efficient Interconnection</u>

The HILLGA process meets one of the Commission's stated goals in Order No. 2023 – increase the speed of interconnection. First, as noted, HILLGA Customers do not have to wait for a submission window to open but can submit HILLGA Requests at any time. The HILLGA process also avoids study delays caused by the volume of other requests in a cluster because HILLGA Requests are studied serially. Under the proposed HILLGA framework, SPP expects to be able to complete the HILLGA System Impact Study within 90 Calendar Days and the entire HILLGA process

Proposed Tariff, Attachment BB, Appendices 2 and 3, Article 2.2 ("Term of Agreement").

Order No. 2023 at P 4.

(through HILLGIA) within 150 days. 113 This is significantly faster than the current DISIS process, which as designed will be completed within 12 months. 114

The eligibility and readiness requirements are essential to the efficient processing of HILLGA Requests. These requirements are similar to the requirements in Attachment V, but are more stringent to ensure that only projects that are "shovel ready" are submitted. As described in detail above, the HILLGA process includes increased financial commitments in line with the guidance of the Commission in Order No. 2023 to utilize increased financial commitments to encourage the speed of interconnection processing and to deter speculative requests. In addition to increased financial requirements, the HILLGA process requires (1) evidence of satisfaction of a development milestone at the time of HILLGA Study Agreement execution and (2) projects to enter commercial operation within five years of the execution of the HILLGA Study Agreement to address the urgency of serving HILLs. These requirements help ensure that the projects entering the HILLGA process will be in operation in time to serve the HILL they propose to support.

SPP will complete the HILLGA System Impact Study no later than 90 Calendar Days after the close of the HILLGA Review Period and must return the final HILLGIA within ten Business Days after the completion of the negotiation process. Proposed Tariff, Attachment BB, Sections 8.5, 11.2.

See generally Tariff, Attachment V, Section 8.

See, e.g., SPP ERAS Order at P 119 ("the proposed ERAS application fee, site control demonstration, financial security, and commercial operation date requirements are all stricter than those established for the DISIS queue, which provides more certainty that ERAS interconnection requests are "shovel ready," are unlikely to withdraw, and can be brought into service more quickly than a typical interconnection request in the DISIS queue"); PJM Order at P 155 (finding PJM's commercial readiness criteria to be just and reasonable by prioritizing projects that are more likely to meet resource adequacy needs).

See, e.g., SPP ERAS Order at P 118-119; PJM Order at P 155 (finding PJM's commercial operation date criteria to be just and reasonable by prioritizing projects that are more likely to meet resource adequacy needs); id., concurring op. (Commissioners Rosner and Phillips) at P 12; CAISO Order at P 114 (accepting CAISO's project viability scoring criterion because "prioritizing those interconnection requests that are more advanced in their technical planning and design can help CAISO eliminate speculative interconnection requests and identify potential interconnection customers that have completed more of their project development in advance of the cluster request window, and are therefore more likely to reach commercial operation").

In light of the foregoing, the Commission should find that the HILLGA framework is just and reasonable and meets the independent entity variation standard by accomplishing the goals of Order Nos. 2003, 2023, and 2023-A by facilitating the entry of new generation to the market to support the interconnection of large load customers. The HILLGA framework is narrowly tailored and targeted to enable additional generating Resources to quickly interconnect to the Transmission System to support the connection of HILLs. The HILLGA process is limited in time and scope and does not disadvantage other generator interconnection customers. For these reasons, the Commission should approve the proposed HILLGA Tariff revisions.

IV. OTHER TARIFF REVISIONS

SPP proposes the following revisions to the broader Tariff to effectuate the addition of the HILL and HILLGA processes.

A. Part I, Section 1 (Definitions)

SPP adds the following new definitions to the main body of the Tariff:

High Impact Large Load ("HILL"): A new commercial or industrial load, or increase in commercial or industrial load, at a single site connected through one or more shared Points of Interconnection (POIs) or delivery points, where such load is either (1) 10 MW or more if connected to the Transmission System at a voltage level less than or equal to 69 kV; or (2) 50 MW or more if connected to the Transmission System at a voltage level greater than 69 kV. An Electric Storage Resource is not considered a HILL. A load may be categorized as a HILL after the initial effective date of Attachment BA of the Tariff. High Impact Large Loads must register as such in accordance with Attachment AE of the Tariff and follow the processes specified in Attachment BA of the Tariff.

High Impact Large Load Generation Assessment ("HILLGA"): A planning assessment to evaluate the impact of new High Impact Large Load and supporting generation as described in Attachment BB of the Tariff.

High Impact Large Load Generation Assessment Customer ("HILLGA Customer"): As defined in Attachment BB of the Tariff.

¹¹⁷

High Impact Large Load Generation Assessment Generator Interconnection Agreement ("HILLGIA"): As defined in Attachment BB of the Tariff. 118

It is necessary to include the proposed definitions in Part I of the Tariff because SPP proposes to use the terms to revise existing Tariff language in multiple attachments. Specifically, in Attachment J, Section V, SPP references HILLGA Customer and HILLGIA as it relates to the generation interconnection Network Upgrades. The definition of HILL is used throughout the new Attachments BA and BB and existing Attachments O, AE, AQ, and AX. SPP provides justification for the definition of HILL above. 119

In addition, SPP proposes minor revisions to existing definitions Point(s) of Delivery and Point(s) of Receipt to add a reference to Part III of the Tariff and to add the word "or" to the definition of Points(s) of Receipt.

Point(s) of Delivery: Point(s) on the Transmission Provider's Transmission System where capacity and energy transmitted by the Transmission Provider will be made available to the Receiving Party under Part II and Part III of the Tariff. The Point(s) of Delivery shall be specified in the Service Agreement for Long-Term Firm Point-To-Point Transmission Service.

Point(s) of Receipt: Point(s) of interconnection on the Transmission Provider's Transmission System where capacity and/<u>or</u> energy will be made available to the Transmission Provider by the Delivering Party under Part II <u>and Part III</u> of the Tariff. The Point(s) of Receipt shall be specified in the Service Agreement for Long-Term Firm Point-To-Point Transmission Service. ¹²⁰

This added reference to "Part III" in these existing definitions is a clean-up to already approved Tariff language. Part III of the Tariff relates to Network Integration Transmission Service. Point(s) of Delivery and Point(s) of Receipt are applicable to the provision of transmission service through both Network Integration Transmission Service and Point-To-Point Transmission Service (outlined in Part II).

Proposed Tariff, Part I, Section 1 (Definitions H).

See supra Section III.A.

Proposed Tariff, Part I, Section 1 (Definitions P).

B. Attachment J, Section V (Other Network Upgrades)

SPP proposes revisions to Section V.C of Attachment J¹²¹ to specify that the cost of generation interconnection related to Network Upgrades will be allocated in accordance with both Attachment V and Attachment BB. For any Directly Assigned Upgrade Costs assigned to a HILLGA Customer for a Network Upgrade required in its HILLGA, the HILLGA Customer will be eligible for compensation through candidate Incremental Long-Term Congestion Rights ("ILTCR") in accordance with Attachment Z2 of the Tariff. If a HILLGA Customer receives candidate ILTCRs, the candidate ILTCR MW and source and sink paths related to the candidate ILTCRs will be included in the HILLGA Customer's HILLGIA in Appendix A.

This proposed revision makes the cost recovery and the eligibility of ILTCRs for Network Upgrades identified through the HILLGA process comparable to other Network Upgrades identified through other generation interconnection processes.

C. Attachment O (Transmission Planning Process)

1. Section I (Overview of Planning Process)

SPP proposes revisions to Section I of Attachment O to include High Impact Large Load Generator Requests to the list of processes in the Tariff that can result in new and proposed transmission facilities. ¹²² This addition is necessary to reference the Network Upgrades that will be assigned out of the HILLGA planning process outlined in Attachment BB of the Proposed Tariff.

2. Section V (The SPP Transmission Expansion Plan Report)

SPP proposes revisions to Section V of Attachment O to specify that the list of interconnection facilities and other transmission upgrades related to generator interconnection service are approved in accordance with the provisions of Attachment V and Attachment BB and will be included in the SPP Transmission Expansion Plan. ¹²³ This addition is necessary to reference the Network Upgrades that will be assigned out of the HILLGA process outlined in Attachment BB of the Proposed Tariff. These will be included in the SPP Transmission Expansion Plan similar to other upgrades identified through SPP's other generation interconnection processes.

Proposed Tariff, Attachment J, Section V.C.

Proposed Tariff, Attachment O, Section I.

Proposed Tariff, Attachment O, Section V(3)(j).

D. Attachment V, Section 8 (Definitive Planning Phase)

SPP revises Section 8.4.1 of Attachment V to include a reference to Attachment BB in item (iii):

(iii) have a pending higher queued Interconnection Request to interconnect to the Transmission System, except for Interconnection Requests submitted pursuant to Attachment AW or Attachment BB of the Tariff[.]¹²⁴

This revision is necessary to modify the scope of the DISIS. The HILLGA System Impact Study will consider the Base Case, and all generating facilities that, on the date the HILLGA System Impact Study is commenced have executed a Generator Interconnection Agreement or HILLGIA or requested that an unexecuted Generator Interconnection Agreement or HILLGIA be filed with FERC. Similarly, this revision to Attachment V makes clear that interconnection requests submitted through Attachment BB that have not executed a HILLGIA or requested an unexecuted HILLGIA be filed with FERC will not be included in the DISIS.

E. Attachment AE (Integrated Marketplace)

1. Section 2.2 (Application and Asset Registration)

SPP adds new subsection 2.2(20) to specify that a Market Participant registering as a HILL must meet applicable requirements described in Section 2.22 of Attachment AE.¹²⁶ In addition, SPP adds new subsection 2.2(21) to require that a Market Participant registering a Resource with a HILLGIA under Attachment BB of the Tariff must meet applicable requirements described in Section 2.22.2 of Attachment AE.¹²⁷ These revisions are necessary to ensure that new loads and Resources related to HILLs meet the applicable requirements.

Proposed Tariff, Attachment V, Section 8.4.1.

Proposed Tariff, Attachment BB, Section 8.4.1.

Proposed Tariff, Attachment AE, Section 2.2(20).

Proposed Tariff, Attachment AE, Section 2.2(21).

2. Section 2.5 (Provision of Load and Generation Data)

SPP proposes minor revisions to the opening sentence of Section 2.5.¹²⁸ In addition, SPP proposes to add a new paragraph to state that with respect to a HILL, a Market Participant or its designated Meter Agent must submit hourly or five-minute interval revenue quality meter data of the load in accordance with timelines SPP specifies in its Market Protocols.¹²⁹ This revision is necessary because the large size of HILLs necessitates proper metering for accurate billing.

3. Section 2.22.2 (Resource Supporting a HILL)

SPP adds new Section 2.22.2¹³⁰ to specify that Resources with a HILLGIA under Attachment BB of the Tariff must follow all rules and restrictions included in their HILLGIA. In addition, Section 2.22.2 requires that when supporting Resources are participating under a HILLGIA for Load Limited Resource Interconnection Service, the Market Participant must ensure the total Maximum Economic Capacity Operating Limits of all supporting Resources does not exceed the submitted hourly load forecast value of the corresponding HILL except when directed by the SPP Reliability Coordinator to mitigate Emergency Conditions or as specified in the Resource's HILLGIA. These revisions are necessary to ensure that the Generating Facility supports only the HILL for which the HILLGIA was provided.

F. Attachment AQ (Delivery Point Assessment Process)

These proposed revisions to Attachment AQ are necessary to implement the new study requirements and ongoing reliability requirements in Attachment BA that will be required of Network Customers or Transmission Customers that request a new or modified delivery point associated with a HILL.

1. Section 1.0 (Introduction)

SPP proposes to add the following new sentence to Section 1.0:¹³¹ "If the delivery point is associated with a High Impact Large Load ("HILL"), the study of changes in delivery point facilities must additionally satisfy the requirements outlined in Attachment BA of this Tariff."

Proposed Tariff, Attachment AE, Section 2.5. SPP changes Market Participants to singular Market Participant and changes the word shall to will.

Proposed Tariff, Attachment AE, Section 2.5.

Proposed Tariff, Attachment AE, Section 2.22.2. SPP submits a Tariff sheet to mark Section 2.22.1 of Attachment AE as "Reserved for Future Use".

Proposed Tariff, Attachment AQ, Section 1.

2. Section 3.0 (Studies)

SPP proposes to revise Section 3.1¹³² (Load Connection Study) to specify that for a HILL, there are additional requirements pursuant to Section 2.1.3.3 of Attachment BA of the Tariff.

SPP proposes to revise Section 3.2¹³³ (Transmission System Study) to specify that all HILLs, regardless of the results from the preliminary assessment of the Transmission System Study, will be subject to the Delivery Point Network Study, as described in Section 3.2, and all supplemental study requirements outlined in Attachment BA of the Tariff. SPP also adds a sentence at the end of Section 3.2 to specify that for a HILL, there are additional requirements pursuant to Section 2.1.3.4 of Attachment BA of the Tariff. Finally, SPP specifies it will issue a report to the Transmission Customer and Host Transmission Owner within 90 Calendar Days in the case of a HILL.

3. Addendum 1 (Sample Request for Change in Local Delivery Facilities)

SPP proposes to add the following items to the list of Attachments required under Addendum 1 to Attachment AQ:

For a High Impact Large Load ("HILL"), the following additional data is required:

- 1) Dynamic model files (Composite Load Model ("CMLD")).
- 2) The completed "Additional HILL Characteristics Form", which is located in Southwest Power Pool, Inc.'s Open Access Transmission Tariff Business Practices, Business Practice 7850.
- 3) Type of HILL (data center, cryptocurrency mining, hydrogen electrolyzer, industrial, commercial, etc.)¹³⁴

G. Attachment AX (Provisional Load Process)

These proposed revisions to Attachment AX are necessary to implement the new study requirements and ongoing reliability requirements in Attachment BA that will be required of Network Customers or Transmission Customers that request a new or modified delivery point associated with a HILL.

Proposed Tariff, Attachment AQ, Section 3.1.

Proposed Tariff, Attachment AQ, Section 3.2.

Proposed Tariff, Attachment AQ, Addendum 1.

1. Section 1.0 (Study Requests for Changes in Local Delivery Facilities)

SPP proposes to add the following new sentence to Section 1.0:¹³⁵ "If the delivery point is associated with a High Impact Large Load ("HILL"), the study of changes in delivery point facilities must additionally satisfy the requirements outlined in Attachment BA of this Tariff."

2. Section 2.0 (Studies)

SPP proposes to revise Section 2.1¹³⁶ (Load Connection Study) to specify that for a HILL, there are additional requirements pursuant to Section 2.1.3.3 of Attachment BA of the Tariff.

SPP proposes to revise Section 2.2¹³⁷ (Transmission System Study) to specify that all HILLs, regardless of the results from the preliminary assessment of the Transmission System Study, will be subject to the Provisional Load Process Study, as described in Section 2.2, and all supplemental study requirements outlined in Attachment BA of the Tariff. SPP also adds a sentence at the end of Section 2.2 to specify that for a HILL, there are additional requirements pursuant to Section 2.1.3.4 of Attachment BA of the Tariff.

3. Addendum 1 (Sample Request for Provisional Load Process)

SPP proposes revisions to Addendum 1 to Attachment AX to include the following under item (1)(f) Details of planned Generation:

vi) Any expected environmental restrictions (e.g. run-time restrictions) or any other restrictions or limitations. ¹³⁸

SPP proposes to add the following items to the list of Attachments required under Addendum 1 to Attachment AX:

For a High Impact Large Load ("HILL"), the following additional data is required:

1) Dynamic model files (Composite Load Model ("CMLD")).

Proposed Tariff, Attachment AX, Section 1.

Proposed Tariff, Attachment AX, Section 2.1.

Proposed Tariff, Attachment AX, Section 2.2.

Proposed Tariff, Attachment AX, Addendum 1.

- 2) The completed "Additional HILL Characteristics Form", which is located in Southwest Power Pool, Inc.'s Open Access Transmission Tariff Business Practices, Business Practice 7850.
- 3) Type of HILL (data center, cryptocurrency mining, hydrogen electrolyzer, industrial, commercial, etc.)¹³⁹

V. STAKEHOLDER ENGAGEMENT AND APPROVAL

The proposed Tariff revisions were reviewed and approved through an expedited SPP stakeholder process. An initial introduction of large loads and design consideration was given to SPP's stakeholders in the following meetings: the Markets Working Group ("MWG") on May 27-28, 2025;¹⁴⁰ the Transmission Working Group ("TWG") on May 27, 2025;¹⁴¹ the Supply Adequacy Working Group ("SAWG") on May 29, 2025;¹⁴² and the Operating Reliability Working Group ("ORWG") on June 5, 2025.¹⁴³ The Markets and Operations Policy Committee ("MOPC") reviewed the initial

See MWG Minutes, dated May 27-28, 2025, at Agenda Item 9 posted at: https://www.spp.org/documents/73993/mwg%20minutes%2020250527-28.pdf. The MWG develops and oversees policies and procedures related to the Market Protocols that define SPP's wholesale markets, including energy and operating reserve, congestion management, congestion hedging, demand response and market power mitigation. The MWG proposes changes to the SPP Tariff and other governing documents to implement suggested market changes.

See TWG Meeting Minutes, dated May 27, 2025, at Agenda Item 13A posted at:
https://www.spp.org/documents/74956/twg%20meeting%20minutes%202025
https://www.spp.org/documents/74956/twg%20meeting%20minutes/202025
https://www.spp.org/documents/74956/twg%20meeting/202025
<a href="https://www.spp.org/documents/74956/twg%20meeting/20202025
<a href="https://www.spp.org/doc

- See SAWG Meeting Minutes, dated May 29, 2025, at page 3 posted at: https://www.spp.org/documents/74074/sawg%20meeting%20minutes%20202 50529-30.pdf. The SAWG develops and oversees policies and procedures related to reliable supply adequacy within the SPP footprint. This includes ensuring that these policies and procedures meet the compliance obligations of North American Electric Reliability Corporation reliability standards.
- See OWRG Meeting Minutes, dated June 5, 2025, at Agenda Item 11 posted at: https://www.spp.org/spp-documents-filings/?id=19845 (see ORWG Meeting

Proposed Tariff, Attachment AX, Addendum 1.

Tariff revisions on July 15-16, 2025.¹⁴⁴ This was followed by another round of meetings of stakeholder working groups, including the MWG on July 21, 2025;¹⁴⁵ SAWG on July 23, 2025;¹⁴⁶ OWRG (via a straw poll) on July 24, 2025; and a joint meeting of the Economic Studies Working Group ("ESWG") and TWG on July 31, 2025.¹⁴⁷

Materials 20250709-10 at file named 03a_ORWG_Minutes_20250605.pdf). The ORWG develops and oversees policies and procedures related to the reliable and secure operation of the Bulk Electric System within SPP's Reliability Coordinator, Balancing Authority and Reserve Sharing Group footprints. The ORWG ensures these operating policies are consistent with North American Electric Reliability Corporation and regional reliability standards.

- See MOPC Meeting Minutes, dated July 15-16, 2025, at Agenda Item 3 posted at:
 https://www.spp.org/documents/74366/mopc%20meeting%20minutes%20and%20ballots_combined%20file_20250715_v3.pdf. The MOPC consists of a representative officer or employee from each SPP Member and reports to the SPP Board of Directors. Its responsibilities include recommending modifications to the SPP Tariff. See Southwest Power Pool, Inc., Bylaws, First Revised Volume No. 4 at Section 6.1.
- See MWG Minutes, dated July 21-22, 2025, at Agenda Item 10 posted at: https://www.spp.org/documents/74416/mwg%20minutes%2020250721-22.pdf (non-binding straw poll to indicate position on the proposed large load integration framework as presented).
- See SAWG Minutes, dated July 23-24, 2025, at page 2 posted at: https://www.spp.org/documents/74480/sawg%20meeting%20minutes%20202
 50723-24.pdf (motion recommending clarification on items and concerns be resolved prior to Board of Directors approval of Revision Request 696).
- See ESWG & TWG Joint Meeting Minutes, dated July 31, 2025, at Agenda Item 4 posted at: https://www.spp.org/documents/74511/joint%20eswg-twg%20meeting%20minutes%2020250731.pdf (a straw poll was conducted to gauge support for the proposed policy direction).

The proposed revisions were approved by the MOPC on August 21, 2025, and the SPP Board of Directors on September 4, 2025. 149

VI. EFFECTIVE DATE

For all the reasons discussed in this transmittal letter, SPP requests that the Commission accept the proposed revisions to the Tariff to become effective January 15, 2026, which is not less than 60 days or more than 120 days prior to the submission of this filing as required by the Commission.¹⁵⁰

VII. ADDITIONAL INFORMATION

A. Documents submitted with this filing:

In addition to this Transmittal Letter, SPP provides with this filing Clean and Redlined Tariff revisions under the Sixth Revised Volume No. 1.

B. Service:

SPP has electronically served a copy of this filing on all its Members, Transmission Customers and Market Participants. A complete copy of this filing will be posted on the SPP web site, www.spp.org, and is also being served on all affected state commissions.

C. Requisite agreements:

There are none.

MOPC Special Meeting Minutes, dated August 21, 2025, at page 1 posted at: https://www.spp.org/documents/74652/special%20mopc%20minutes%20and%20ballots 20250821.pdf">20250821.pdf (motion passed with 96% approval).

Special Board of Directors & Members Committee Meeting Minutes, dated September 4, 2025, at Agenda Item 2 posted at: www.spp.org/documents/74765/2025-09-04%20special%20bod%20mc%20minutes%20v2.pdf.

¹⁸ C.F.R. § 35.3(a)(1).

D. Communications

Correspondence and communications with respect to this filing should be sent to, and SPP requests the Secretary to include on the official service list, the following:

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VIII. CONCLUSION

For all of the foregoing reasons, SPP respectfully requests that the Commission issue an order by January 8, 2026, accepting the Tariff revisions proposed herein as just and reasonable, to be effective on January 15, 2026.

Respectfully submitted,

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