



MISSOURI PUBLIC SERVICE COMMISSION

STAFF RECOMMENDATION

APPENDIX 2

Staff Schedules 1 - 5

**EVERGY METRO, INC.,
d/b/a Evergy Missouri Metro
and
EVERGY MISSOURI WEST, INC.,
d/b/a Evergy Missouri West**

CASE NO. EO-2025-0154

*Jefferson City, Missouri
July 25, 2025*

**** Denotes Confidential Information ****

Applicability:

Any customer taking service at 34 kV or greater except those served under the Large Power, Special Rate for Incremental Load Service, or Special High-Load Factor Market Rate rate schedules prior to January 1, 2026, or any customer with an expected 15-minute customer Non-Coincident Peak (NCP) of 25 kW or greater at a contiguous site (whether served through one or multiple meters) shall be subject to this Schedule LLPS. *[Note, for the EMM tariff, only the Large Power rate schedule reference is applicable.]*

In the event that a customer with a demand that did not exceed 25 MW prior to January 1, 2026, (1) increases its demand to 29 MW or greater, unless such customer is served on the Special Rate for Incremental Load Service or Special High-Load Factor Market Rate rate schedules, or (2) requires installation of facilities operating at transmission voltage to accommodate increases in its demand, EMM/EMW shall expeditiously work with such customer to execute a service agreement and fully comply with the provisions of this Schedule LLPS within 6 months of (1) the customer's notice that such customer's demand is expected to equal or exceed 29 MW or (2) EMM/EMW's determination that transmission facilities are required.

Customers eligible for service on the LLPS rate schedule are required to take service on this rate schedule.

LLPS customers are required to participate in the following riders:

- Fuel Adjustment Clause
- Tax and License Rider
- Renewable Energy Standard Rate Adjustment Mechanism Rider. *[EMW only]*
- Securitized Utility Tariff Rider *[EMW only]*

LLPS customers are not eligible to participate in the following riders:

- Underutilized Infrastructure Rider
- Economic Development Rider
- Large Power Off-Peak Rider
- Limited Large Customer Economic Development Discount Rider
- Standby Service Rider
- Voluntary Load Reduction Rider
- Curtailable Demand Rider
- Demand Side Investment Mechanism Rider
- Market Based Demand Response

[This list prepared based on EMW tariff names]

Service Agreement:

The form of the application for LLPS service shall be the Company's standard written application form *[which shall be approved by the Commission in this or another proceeding prior to utilization]*. This form shall include

- A. The customer's full corporate name and registration information, and that of any and all parent companies.
- B. The anticipated load, by month and year, for a minimum of 15 years. This shall include:
 - a. A description of weather sensitive load, in monthly kW and monthly kWh,
 - b. A description of non-weather sensitive load, in monthly kW and monthly kWh,
 - c. An explanation of the variables driving changes in non-weather sensitive load, in monthly kW and monthly kWh,
 - d. A commitment to provide updated load-forecasts for the upcoming year by January 1 of that year, in monthly kW and monthly kWh,
 - e. A commitment to notify EMM/EMW of any anticipated deviations of +/-10% or more of previously-anticipated load as soon as such potential deviations become anticipated;
 - f. A commitment to cooperate in daily load forecasting.
 - i. Information for load management purposes, including,
 1. Contact information for the person or persons responsible for the LLPS customer's load forecasting,
 2. Contact information for the person or persons responsible for executing curtailment of the LLPS load,
 3. A commitment to maintain updated contact information.

- C. A pledge of collateral or other security as ordered by the Commission in this proceeding, which shall equal or exceed the indicated termination fees.
- D. A commitment to pay or cause to be paid any applicable termination charges, as defined in the LLPS tariff. In the event that any additional termination provisions may be necessary or appropriate to address additional risk with a particular LLPS customer, those provisions shall be defined in the service agreement.
- E. The minimum term of service for a customer qualifying for service under LLPS shall be 10 years, following a ramp-up period of up to 5 years.
- F. Details pertinent to calculation and verification of rates for the Capacity Cost Sufficiency Rider, if applicable.

Capacity Cost Sufficiency Rider:

In the event that EMM/EMW does not have sufficient capacity to reliably serve a requesting LLPS customer and its other load in a given season of a given year of the anticipated Service term, EMM/EMW may obtain contractual capacity to reliably serve the requesting customer. EMM/EMW shall file an ET case and tariff with no less than 45 days effective date, and shall file testimony explaining the potential LLPS customer, that customer's energy and capacity needs, and the capacity arrangements applicable to reliably serving that customer. EMM/EMW may seek a protective order for portions of the testimony as appropriate, but any Capacity Cost Sufficiency Rider Rate to be charged to any LLPS customer must be contained in a published tariff. The Capacity Cost Sufficiency Rider tariff shall contain terms related to treatment of revenues generated by the rider to prevent other customer classes' rates from reflecting any unjust or unreasonable costs arising from service to such customers.

Rates for Service

Brief Description	EMM	EMW	Determinant for Charge
Customer Charge	\$ 10,417	\$ 10,417	\$/Customer
Facilities Charge	\$ 0.01075	\$ 0.00484	\$/ of Assets
Demand Charge 1 - Charge for Generation Capacity Cost of Service	\$ 15.61	\$ 4.89	\$/kW during demand window
Demand Charge 2 - Charge for Transmission Capacity Cost of Service	\$ 3.00	\$ 5.32	\$/kW during demand window
Energy Charges			
Summer Off Peak	\$ 0.01122	\$ 0.01265	\$/kWh
Summer Intermediate	\$ 0.03055	\$ 0.03038	\$/kWh
Summer On Peak	\$ 0.05539	\$ 0.05316	\$/kWh
Fall Off Peak	\$ 0.01194	\$ 0.01266	\$/kWh
Fall Intermediate	\$ 0.02712	\$ 0.02743	\$/kWh
Fall On Peak	\$ 0.04662	\$ 0.04642	\$/kWh
Winter Off Peak	\$ 0.02003	\$ 0.02017	\$/kWh
Winter Intermediate	\$ 0.02749	\$ 0.02661	\$/kWh
Winter On Peak	\$ 0.03494	\$ 0.03304	\$/kWh
Spring Off Peak	\$ 0.00978	\$ 0.01000	\$/kWh
Spring Intermediate	\$ 0.02296	\$ 0.02342	\$/kWh
Spring On Peak	\$ 0.03990	\$ 0.04068	\$/kWh
Load-servicing charge (Summer)	0.002	0.002	\$/kWh
Load-servicing charge (Non-Summer)	0.001	0.001	\$/kWh
RES compliance charge	\$ 0.00033	\$ 0.00040	\$/kWh
Variable Fixed Revenue Contribution	24.77%	24.77%	Percent of other charges
Stable Fixed Revenue Contribution	24.77%	24.77%	Percent of other charges
Demand Deviation Charge	\$ 107.02	\$ 107.02	\$/kW annual deviation
Imbalance Charge	\$ 8.92	\$ 8.92	\$/kW monthly deviation
Economic Development Discount Responsibility Charge	\$ -	\$ -	\$/kWh
Capacity Shortfall Rate, if applicable	\$ -	\$ -	\$/kW
Reactive Demand Charge	\$ 0.99294	\$ 0.46	\$/kVar
Capacity Cost Sufficiency Rider, if applicable	\$ -	\$ -	\$/Month

Treatment of LLPS Customer Revenues

- A. Until a rate case recognizing the customer at the full level of projected demand, the difference between the revenue for each charge considered for that customer in the last general rate case, and the current level of revenue for that charge will be recorded to a regulatory liability account. This treatment is applicable to revenue from all charges except the Customer Charge, Facilities Charge, Demand Deviation Charge, Imbalance Charge, Capacity Shortfall Rate, the Capacity Cost Sufficiency Rider, and the RES Compliance Charge. The resulting regulatory liability will be treated as an offset to production ratebase with a 50 year amortization. The annualized and normalized revenue from these charges shall be reflected in each rate case.
- B. All revenue billed under charge the RES Compliance charge will be recorded to a regulatory liability, and that regulatory liability will be treated as an offset to production ratebase with a 50 year amortization. Revenue for the RES Compliance charge will only be addressed through this accumulated regulatory liability, and shall not be considered as rate revenue in rate cases.
- C. All revenue billed under the Demand Deviation Charge, Imbalance Charge, Capacity Shortfall Rate, and the Capacity Cost Sufficiency Rider will be used to offset expense associated with the increased cost of service caused by the LLCs customer in any applicable rate case or through the FAC, if applicable.
- D. Unless the FAC is modified to address positive regulatory lag associated with LLPS customer growth, the difference caused by positive customer growth between normalized and actual LLPS Day Ahead Energy Charge revenues shall be recorded to a regulatory liability. The resulting regulatory liability will be treated as an offset to production ratebase with a 50 year amortization. The annualized and normalized revenue from these charges shall be reflected in each rate case.

Early Termination:

In the event that an LLPS customer's monthly load (in kWh) is 50% or less of its expected load under its updated contract load for 3 consecutive months, the customer will be required to pay, or cause to be paid, all amounts expected for the remainder of the contract under the following charges: Facilities Charge, Demand Charge for Generation Capacity, Demand Charge for Transmission Capacity, Variable Fixed Revenue Contribution, and Stable Fixed Revenue Contribution.

- A. If a customer anticipates a temporary closure or load reduction related to retooling, construction, or other temporary causation, this anticipated reduction shall not trigger the termination charges described above until the anticipated load reduction has exceeded the anticipated duration by three months;
- B. The amount due under the Variable Fixed Revenue Contribution Charge in the event of early termination shall be due at the level associated with normal usage in the most recent applicable rate proceeding. If a rate proceeding has not occurred establishing normal usage, or if the customer was not recognized at the anticipated contract maximum load in the prior rate proceeding, the amount due under the Variable Fixed Revenue Contribution Charge shall be at the level associated with the contract projected usage;
- C. In the event an LLPS customer either declares bankruptcy, the facility is closed, or is more than 5 business days late in payment of a properly-rendered bill for service, termination charges are immediately due;
- D. Except in the case of bankruptcy, closure, or lack of timely payment, termination charges are due on the due date of the bill for the third month of 50% or lower usage;
- E. The portion of termination charge revenue associated with the Facilities Charge shall be recorded as a regulatory liability, and treated as an offset to transmission plant. The amortization period for this regulatory liability shall be set to coincide as closely as is practicable with the depreciable life of the transmission-related infrastructure associated with the LLPS customer;
- F. The remaining termination charge revenue shall be recorded as a regulatory liability and treated as an offset to production ratebase in perpetuity, without amortization;
- G. Provisions contained herein supersede the Termination of Service provisions of the Rules and Regulations of the generally-applicable tariff.

Other Terms:

- A. LLPS customers shall be billed on a calendar month basis.
- B. LLPS bills shall be rendered by the fifth business day of the following calendar month.
- C. LLPS bills shall be paid by the fifteenth business day of the month issued.
- D. Demand is measured as four times the sum of the energy consumed in three consecutive five minute intervals in which the most energy is consumed.
- E. Service on this schedule is limited to 33% of EMM/EMW's annual Missouri jurisdictional load.
- F. Prior to execution of a Service Agreement with a prospective LLPS customer, EMM/EMW shall ensure that it has adequate capacity available for resource adequacy calculations to serve all existing customers and the prospective LLPS customer. In the event EMM/EMW executes a Service Agreement without adequate capacity, EMM/EMW's existing customers shall be held harmless from any SPP or other RTO capacity charges, and held harmless from any penalties assessed by any entity related to those capacity shortfalls.

Appendix 2 – Schedule 2 – Alternative to Separate Pricing Node

If the Commission does not require Evergy to request separate SPP commercial pricing nodes for each LLPS customer, Staff recommends that the Commission order Evergy to provide the following information as soon as practicable and on a going forward basis:

1. Provide the disaggregated load forecast of each LLPS customer as utilized in Evergy's forecast provided to SPP annually for purposes of Resource Adequacy requirements.
2. Provide the Evergy Metro forecast provided to SPP annually for purposes of Resource Adequacy requirements.
3. Provide the Evergy West forecast provided to SPP annually for purposes of Resource Adequacy requirements.
4. Provide the disaggregated hourly load forecast of each LLPS customer as utilized in Evergy's Day-Ahead load forecast for Evergy's SPP Day-Ahead load bid.
5. Provide the total hourly load forecast of as utilized in Evergy Metro's Day-Ahead load forecast for Evergy Metro's SPP Day-Ahead load bid.
6. Provide the total hourly load forecast of as utilized in Evergy West's Day-Ahead load forecast for Evergy West's SPP Day-Ahead load bid.
7. The cleared hourly Day-Ahead Locational Marginal Price, separated by Marginal Energy Component, Marginal Loss Component, and Marginal Congestion Component for the transmission pricing node in the nearest proximity of each LLPS customer.
8. Actual load of each LLPS customer in the same format and interval as SPP's Real-time Balancing Market
9. The cleared Real-Time Balancing Market Locational Marginal Price, separated by Marginal Energy Component, Marginal Loss Component, and Marginal Congestion Component for the transmission pricing node in the nearest proximity of each LLPS customer.
10. Identification of all transmission related expenses that result from serving the load of LLPS customers including, but not limited to:
 - a. Identification of specific expense types and SPP OATT Schedules
 - b. Applicable rates for each expense
 - c. Evergy Metro and Evergy Missouri West specific determinants for each expense by applicable period
 - i. Coinciding determinants of each LLPS customer by applicable period
 - d. Forecasted applicable rates for each expense
 - e. Forecasted Transmission Revenue Requirements
 - f. Current and prospective Load Ratio Share for Transmission Revenue Requirements
11. Identification of any changes to Evergy's policies, practices, or implementation strategy related to Transmission Congestion Rights (TCR) and Auction Revenue Rights (ARR)

12. Identification of the differences of costs and revenues attributable to TCRs and ARRs before and after changes to Evergy's policies, practices, or implementation strategy.
13. Contracted capacity purchases including all contract terms and agreements.
 - a. All Requests for Proposals associated with capacity purchases.
14. Identification of any Deficiency Payment associated with SPP Resource Adequacy requirements, separately for Evergy Metro and Evergy Missouri West. If any such payment is assessed on a combined basis, identification of any Deficiency Payment allocation or obligation between Evergy Metro and Evergy Missouri West.
15. Communication strategy by LLPS customer utilized to inform Evergy's SPP Day-Ahead Load Bid.
 - a. Communication between Evergy and each LLPS customer of deviations from initial forecasted load.
 - b. Communications between Evergy and each LLPS customer of planned customer outages, including maintenance outage.
 - c. Communications between Evergy and each LLPS customer regarding any changes or additions of equipment or operations that would result in material changes (greater than 1%) of each LLPS customer's monthly peak demand
16. SPP designation of each LLPS customer (i.e. conforming load, non-conforming load, other) as well as the specific SPP reporting requirements associated with each customer.
17. Administrative costs associated with interaction with each LLPS customer and interfacing with Evergy's existing SPP processes.



LARGE LOAD STAKEHOLDER ENGAGEMENT FORUM

JULY 1, 2025

1:00 PM – 4:00 PM

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OPENING REMARKS & FORUM KICKOFF

LANNY NICKELL
PRESIDENT AND CHIEF EXECUTIVE OFFICER

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ADMINISTRATIVE ITEMS AND OBJECTIVES

DEREK WINGFIELD

MANAGER, COMMUNICATIONS

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SPP ANTI-TRUST NOTICE

SPP strictly prohibits use of participation in SPP activities as a forum for engaging in practices or communications that violate the antitrust laws.

Please avoid discussion of topics or behavior that would result in anti-competitive behavior, including but not limited to, agreements between or among competitors regarding prices, bid and offer practices, availability of service, product design, terms of sale, division of markets, allocation of customers or any other activity that might unreasonably restrain competition.





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ACCESSIBILITY

- We strive to host inclusive, accessible meetings and experiences that enable all individuals to engage fully
- To request an accommodation or for inquiries about accessibility, please contact any SPP presenter, facilitator or meeting hosts. We will do our best to help



TODAY'S AGENDA

- **Welcome & Administrative Items**
- **Stakeholder Engagement**
- **Forum Overview**
- **SPP Large Load Integration Solution**
- **Timeline and Next Steps**
- **Moderated Questions and Discussion**
 - Pre-submitted Questions
 - Chat-submitted Questions
 - Open Forum Questions



PRINCIPLES FOR FORUM PARTICIPATION

WAIT TO RAISE YOUR HAND until after the end of the Q&A presentation, and after staff have answered questions submitted by stakeholders in advance.

ENGAGE: Send your questions through chat during presentations. Raise your hand to participate in Q&A at the end of the forum. A survey option will also be available to submit additional questions or responses after the forum.

RESPECT others' time. Everyone has the right to participate once before anyone speaks twice. Please keep your comments and questions concise to allow time for others.

DISCUSSION OBJECTIVES

- Large Load Growth
- SPP Opportunities and Challenges
- Objectives and Proposed Solution
- Next Steps



Review existing opportunities and challenges to connect large loads and offer solutions that position SPP as the High Impact Large Load RTO of choice



ACCELERATING HIGH IMPACT LARGE LOAD INTEGRATION

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LARGE LOAD GROWTH: OPPORTUNITIES & CHALLENGES

ANTOINE LUCAS
CHIEF OPERATING OFFICER

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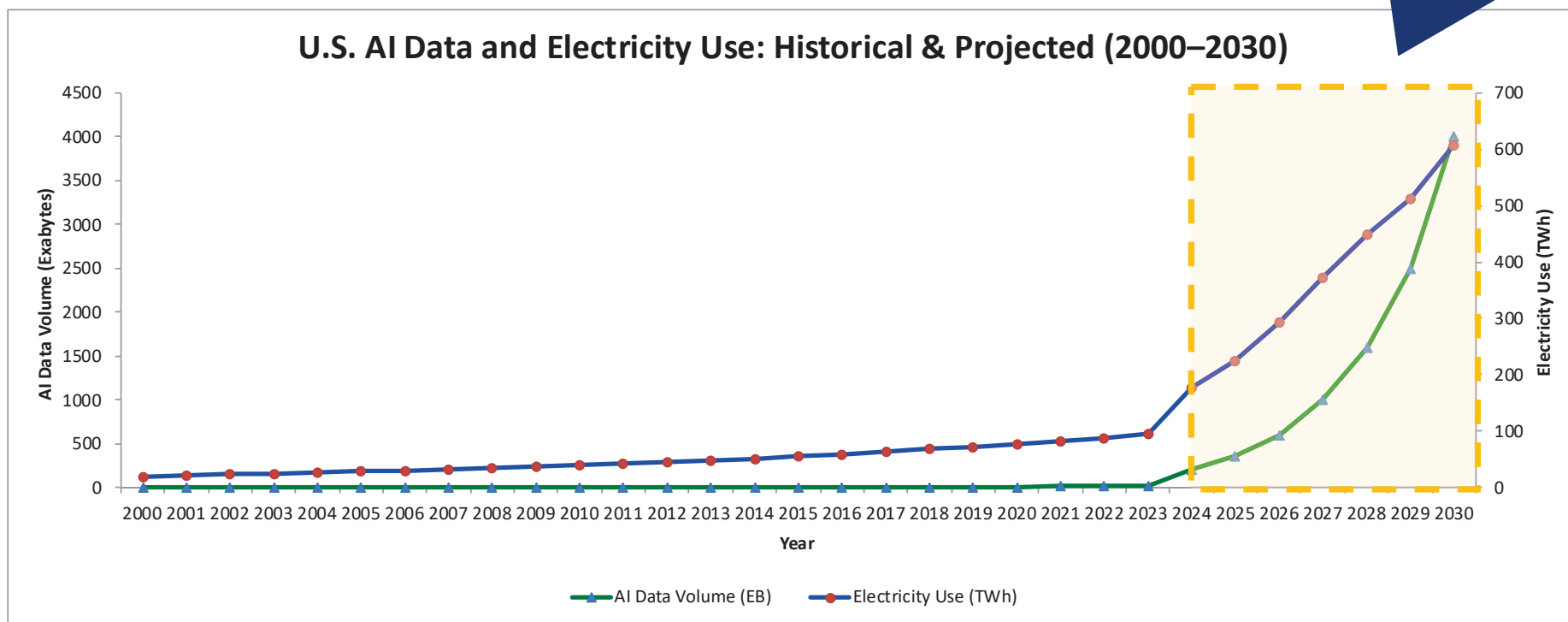
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AI DATA AND ENERGY FUTURE

Data centers could account for **44% of U.S. electricity load** growth from 2023 to 2028



Exponential AI data and energy needs expected through the balance of the decade

Sources: McKinsey: "AI's Power Binge" [\[link\]](#), IEA, "AI is set to drive surging electricity demand from data centres" [\[link\]](#), Goldman Sachs "AI to drive 165% increase in data center power demand by 2030" [\[link\]](#)



AI DRIVEN LARGE LOAD GROWTH



Opportunity	Impact	Challenges	Impact
Accelerates economic GDP growth	AI could add \$15 trillion globally and \$4 trillion in the US by 2030	Job displacement risks	Up to 30% of US jobs could be automated by 2030
Drives global innovation	US produces ~30% of AI research papers worldwide	Ethical & privacy concerns	60% of consumers worry about AI privacy
Strengthens national security	US AI defense spending estimated at \$18 billion annually	Geopolitical competition	China invested \$70 billion in AI by 2025; global race risks
Attracts top global talent	US hosts 7 of the top 10 universities for A.I.	Environmental & energy strain	AI data centers projected to use 5-8% of US electricity by 2030 ; may drive 2-7% annual increases in electricity rates
Benefits multiple sectors (healthcare, manufacturing)	AI could boost healthcare productivity by 40%	Industry concentration risks	Top 5 US tech firms hold >75% of AI patent share

Opportunities exist for the U.S. to lead in the AI and Technology revolution

OTHER TYPES OF LARGE LOAD

Load Type	Description	Typical Size (MW)	Typical Voltage	Load Profile	Ramping Ability	Appetite for Demand Response
Data Centers	Facilities for computing infrastructure for data processing & storage	10 – 100+	13.8 kV – 230 kV	Flat, continuous, 24/7 operation	Low	Low
Cryptocurrency Mining	High-power computing for blockchain operations	5 – 100+	13.8 kV – 230 kV	Flat, responsive to price signals	High	High
Manufacturing (Heavy Industry)	Steel, cement and auto plants	20 – 500+	69 kV – 345 kV	Cyclical, shift-based	Low	Low
EV Charging Hubs	High-power fast-charging stations	1 – 50	13.8 kV – 115 kV	Peak, high during travel demand	Medium	Medium
Waste/water Treatment	Water intake, pumping and treatment	5 – 100	13.8 kV – 115 kV	Generally flat with time-of-day variation	Low	Low
Mining Operations	Extraction and primary processing of minerals	10 – 300+	69 kV – 230 kV	Shift-based, varies with production	Low to Medium	Medium
Oil & Gas Facilities	Refineries, LNG, compressor stations	10 – 500+	69 kV – 345 kV	Continuous with routine maintenance	Low	Low
Green Hydrogen Production	Electrolysis facilities for hydrogen generation	20 – 300+	69 kV – 230 kV	Controlled, linked to renewables or pricing	High	High
Agricultural Processing	Grain drying, food processing, cold storage	5 – 50	13.8 kV – 69 kV	Seasonal with steady processing demand	Medium	Medium
Battery Energy Storage (BESS)	Grid-scale battery systems	10 – 500+	13.8 kV – 230 kV	Dynamic, driven by grid needs	Very High	Very High

Not just A.I.: other large loads are contributing to rapid demand growth

THE UNIQUE OPPORTUNITY FOR SPP



Leverage SPP's wholesale market to offer a region of choice for large loads that value market transparency and price responsiveness



Central U.S. geography, grid connectivity and affordability offer an ideal location for large loads to connect



Catalyze economic development and desirable load growth by partnering with members and to align incentives with grid capacity



Lead the way for grid-friendly load integration, making SPP a model for balancing high-demand customers with grid reliability



Leverage SPP's diverse generation profile to attract forward focused large loads

SPP has a unique opportunity to offer reliable, scalable and cost-effective solutions for the next generation of data and manufacturing loads

REGIONAL CHALLENGES

Transmission Customer

- Transmission Customers (TC) and large loads are often unable to commit to projects due to uncertainty of cost, timing and operating requirements
- While both are well capitalized and motivated, large loads seek 24/7 operation with limited interest/ability to curtail loads

SPP

- Deliberate pace of current planning processes not consistent with market needs and will drive large loads to more responsive regions
- Must connect large loads in a manner that does not sacrifice reliability
- Minimize cost shifts from large loads to other customers

SPP must expeditiously develop modernized and timely planning processes to support large loads



SPP'S LARGE LOAD INTEGRATION SOLUTION

CASEY CATHEY,
VP ENGINEERING

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OUR VALUE PROPOSITION



- Timing / Lack of Cost Clarity
- Limited Existing Solutions

Our Challenge

Our Objectives

- 90-day Connection Study
- Path to Connect Supporting Gen
- Balance Reliability

- Economic Development
- Leader in Large Load Integration
- Load Growth Enablement

Our Results

Our Solution

- Fastest Connection Study in U.S.
- Flexible Options
- Interconnection Cost Clarity

Our solution directly addresses industry need through leading innovation

Our Vision

We must develop an **industry-leading** and **immediately available** solution that enables the **timely and reliable** integration of large loads, including those with **supporting generation**, through a streamlined, scalable process that provides **improved timing** and **cost clarity** to transmission customers.

Our Guiding Principles	
	Inspire mindsets and employ innovative, art-of-the possible thinking
	Prioritize reliability with focused and timely studies that address key risks
	Accelerate our ability to study large loads and supporting generation within 90 days
	Provide cost clarity by leveraging existing cost assignment structures
	Leverage an agile and engaged stakeholder process
	Where possible, find solutions that utilize existing tariff authority
	Ensure solution flexibility to manage volume and operating complexity

Target: A comprehensive, industry-leading, 90-day solution available immediately

OUR EXISTING SOLUTIONS FOR LOAD

Aggregate Transmission Service Studies (ATSS)

For those with sufficient generation, willing to wait for transmission upgrades, but needing to secure designated network capacity:

- Biannual study
- Robust study of load addition
- Firm transmission service
- Upgrades are base plan funded

Limitations of ATSS: Biannual studies limit times to request and result in additional wait time.

Attachment AQ Delivery Point Assessment

For those with sufficient generation and willing to wait for transmission upgrades, AQ provides a study process to add new delivery points to enable business decisions:

- Studied in 90 days
- Firm transmission service can be added with ATSS
- Upgrades are base plan funded

Limitations of AQ Study: This is not an option without available network resource capacity.

Attachment AX* Provisional Load Process

Study and *provisional* approval for customers with plans to *acquire* generation:

- Studied in 90 days
- Does not require current gen or GIA to study
- Upgrades are directly assigned until the customer acquires firm service for the new generation

Limitations of AX Study: Load may connect but would be subject to unreserved use charges if firm transmission is not acquired

SPP has an opportunity to close the gaps left by existing solutions

¹ Attachment AX is currently pending review at FERC. SPP requested on August 4, 2025, effective date.

Existing Solution Gaps

- Long wait times
- Limited answers for “high impact” large loads if the generation or GIA doesn’t already exist
- Lack of flexibility for limited connection or operation of load within system limits
- Transmission upgrade cost uncertainty

What is a “High-Impact Large Load” (HILL)?

A HILL is any commercial or industrial individual load facility or aggregation of load facilities at a single site connected through one or more shared points of interconnection or points of delivery that can pose reliability risks to the grid.

HILLs are deemed Non-Conforming Loads. A load may be considered a HILL if the point of interconnection kV level is:

- 69kV or below and the HILL peak demand is 10MWs or greater
- Greater than 69kV and the HILL peak demand is 50MWs or greater

What is Conditional High Impact Large Load Service (CHILLS)?

CHILLS is a new type of transmission service available to High Impact Large Load for the transfer of energy to designated point(s) of delivery to serve the Conditional High Impact Large Load (CHILL) of a transmission customer or a network customer.

CHILLS will be available for yearly periods ranging from one to five years.

What is a Conditional High Impact Large Load (CHILL)?

A CHILL is the portion of a HILL that is receiving Conditional High Impact Large Load Service (CHILLS).

This is intended for any specifications of the HILL, including term of service, that cannot be reliably served on a firm basis by existing designated resources or the current transmission system.

CHILL can exist at the same delivery point as firm load.

OUR PROPOSED SOLUTIONS FOR HIGH-IMPACT LARGE LOADS



Conditional High Impact Large Load Service (CHILLS)

- Study in 90 days, provided all data is received and agreement signed
- Allows faster load connection with certain reliability-driven conditions
- Expected to transition to firm service within five years
- HILLGA optional, not required



Gen supported HILL GI Assessment (HILLGA)

- Gen *and* load studied in 90 days, pending data and agreements*
- Connect generation to serve the energy demand of the HILL or CHILL
- Generation may elect to be limited to serve a local area or pursue full interconnection service

Our proposed solutions provide more certainty for timing and cost

**Provided agreements are received for both the HILL or CHILL and the supporting generation.*

PROPOSED SOLUTIONS: WHAT CHILLS WILL DO



Results will be provided in 90 days*. This is for entities who do not want to wait for generation and transmission to get built before beginning operation. CHILLS will be billed at reserved capacity MWs unless curtailed, then curtailed MWs will be billed

Scenarios:

- Transmission Customer does have sufficient generation, GIA, or planned generation to serve load, but does not have transmission capacity to deliver energy to the load

or

- Transmission Customer does not yet have sufficient generation, but load will accept limited service until sufficient capacity is available, and any transmission system upgrades are completed

Our proposed solutions provide more certainty for timing and cost

**Provided all data is received and agreements are signed.*

PROPOSED SOLUTIONS: WHAT HILLGA WILL DO



Results will be provided in **90 days*** for new supporting generation and large load. New supporting generation will be studied with the load it will serve. This option is available for both CHILL and firm HILL loads.

Load with Supporting Generation Scenarios:

- Transmission Customer does not have sufficient generation, GIA, or planned generation to serve load
- or**
- Transmission Customer does have sufficient generation, GIA, or planned generation but the large load would rather pursue different generation to serve the load

Our proposed solutions provide more certainty for timing and cost

**Provided all data is received and agreements are signed. Deliverability area resources may require additional study.*

PROPOSED PATHS FOR LOAD AND SUPPORTING GENERATION



Common Bus

- Study delivered in 90 days*
- HILL or CHILL and supporting generation are behind the same point of interconnection
- Generation will not be injected to the grid



Local Area

- Study delivered in 90 days*
- HILL or CHILL and supporting generation are within two buses
- Energy flow on the grid will be limited by HILL's need and system capacity
- 5-year service term



Deliverability Area

- Studies delivered in 90 days*
- HILL or CHILL and supporting generation are in same deliverability area
- Energy limited by HILL's need plus reserve, and a multiplier
- Customer may pursue NRIS or interim service
- Transmission service requires an additional designation process

Our proposed solutions provide more clarity for timing and cost

**Provided all data is received and agreements are signed*

HILLGA PATH 1: COMMON BUS



- For HILL or CHILL and supporting generation behind the same delivery point
- Generation will be configured for zero injection onto the transmission system
- Generation greater than 10 MW must be market registered
- Separate metering required for each load and generator
- No net metering for billing purposes
- Studied in 90 days by SPP or an equivalent stability study done by the TO
- If study shows potential impacts to the transmission system, the generation must be studied under the longer DISIS process

HILLGA PATH 2: LOCAL AREA



- Gen can connect to more than one HILL or CHILL
- HILL and generation are in same “local area”
 - Using no more than 5 substations
 - Using no more than 2 transmission lines
 - Each load within 2 substations of generation
- Generation is required to limit output to the amount of HILL(s) considered in the agreement
- Supporting generation is capped at load max plus reserve margin x 1.25
- Service is interim for 5 years, which should be sufficient for the generation and load to be considered planned sites and subject to the planned CPP GRID-C fee

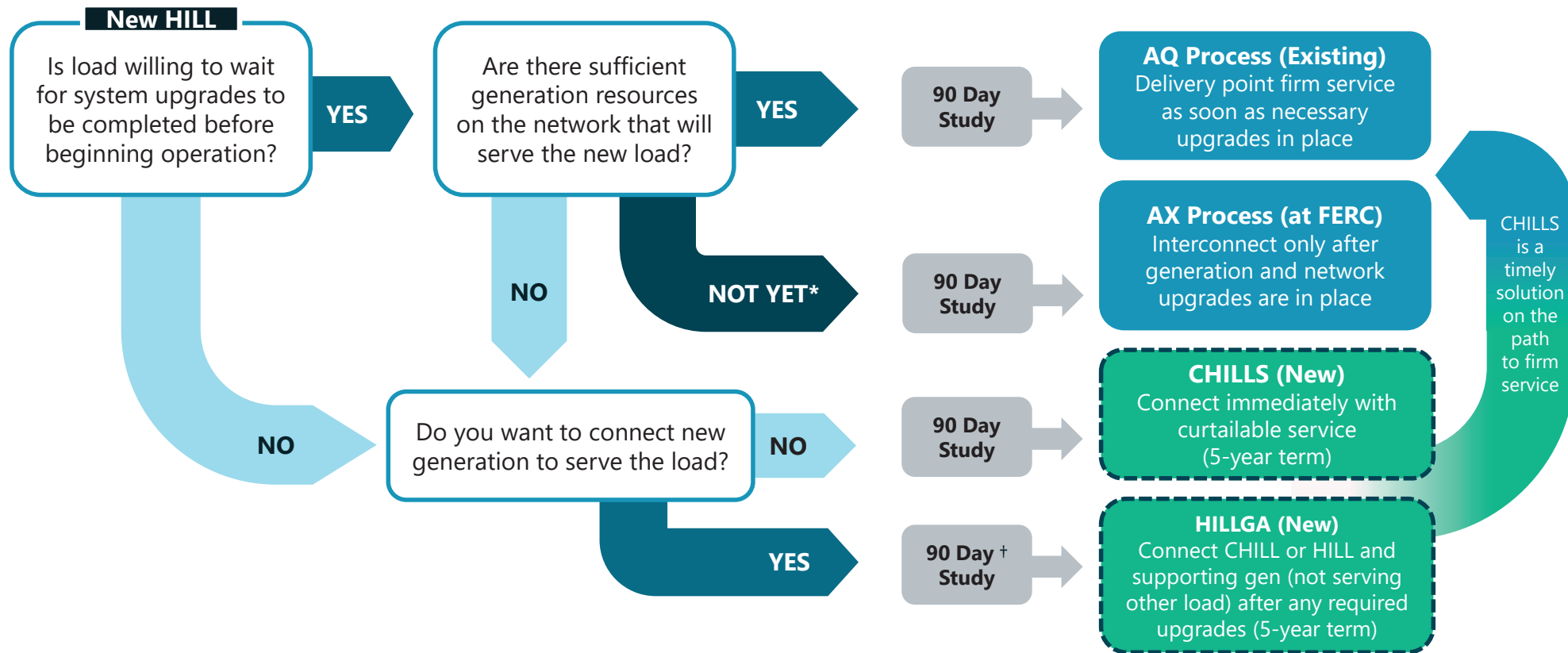
HILLGA PATH 3: DELIVERABILITY AREA



- HILL or CHILL and generation are in the same deliverability area
- Studied within 90 days* to determine costs for Network Resource Interconnection Service (NRIS) service
- Generation must be capable of a ramp rate of 20 MW/min and a total ramp equal to or greater than 50% of the HILL
- Projected accreditation must be equal to or greater than the HILL
- Supporting generation NRIS value is capped at load max plus reserve margin x 1.25
- Once granted, the NRIS service is permanent
- This Path 3 *process will sunset* with implementation of the CPP and its GRID-C fee requirements

**Does not include resource designation and Z2 assessment.*

HOW A NEW LOAD CAN GET CONNECTED IN SPP



Load may pursue multiple paths (AQ, AX, CHILL) simultaneously.

*"Not Yet": the utility has pending generation with rights (GIA), or planned generation

†HILLGA for "Common Bus" and "Local Area" to be completed in 90 days. HILLGA for larger "Deliverability Zone" requires additional study.

LARGE LOADS IN RESOURCE ADEQUACY

- Loads with conditional service (CHILL) will be considered non-market registered demand response for purposes of resource adequacy (RA) requirements.
- CHILL loads will be seen as non-market registered demand response for RA. Forecasts should follow current practices and will be subject to new demand response (DR) framework and LRE peak demand assessment.
- LREs must report CHILLS in their RA workbook
- Common bus generation can be attested as firm power for meeting resource adequacy (RA) requirements.
- Local area generation can achieve firm service with either aggregate study process or secondary network service

LARGE LOADS IN OPERATIONS

- HILL and CHILL will be subject to industry-leading requirements to mitigate reliability issues seen around the globe.
- Transmission and network customers must comply with ride-through requirement guidelines in Integrated Marketplace Market Protocols.
- CHILLs are subject to curtailment, in whole or in part, for reliability reasons when an emergency condition or other unforeseen condition threatens to impair or degrade the reliability of the transmission system or the systems directly or indirectly interconnected with the transmission system.
- HILLs are subject to Firm Load Shed and Transmission Emergency.

PROPOSED SOLUTIONS: A COMPARISON

	High Impact Large Loads	
	HILL with Firm Service	HILL with CHILLS
Study Timing	90 Days	90 Days
Transmission Service Type	Firm (AQ*)	CHILLS Non-Firm, up to Five-Year Interim (transition to firm using AQ or AX)
Resource Adequacy (RA) and Demand Response (DR)	Eligible as Market Registered or Reliability Registered DR Resource (MRDR, RRDR)	Curtable Load - Not eligible as RRDR or MRDR
Load		
Curtailability	Firm Load Shed and Transmission Emergency	Advisories, EEAs and Transmission Mitigation
Market Registration	Non-Conforming Load	Curtable, Non-Conforming Load
Metering	Required	Required
Demand Response Resource	Eligible	Curtable load, will be DR for RA
Network Upgrades	Base Plan Funding Eligible†	Sponsored Upgrades

*Attachment AX provides a provisional path to achieve firm service if generation is not yet available to serve load

†Under Attachment AX, upgrade costs are initially directly assigned. Remaining ATRR is eligible for base plan funding after generation is secured.



NEXT STEPS

ERIN CATHEY,
SUPERVISOR, MARKET
POLICY COORDINATION

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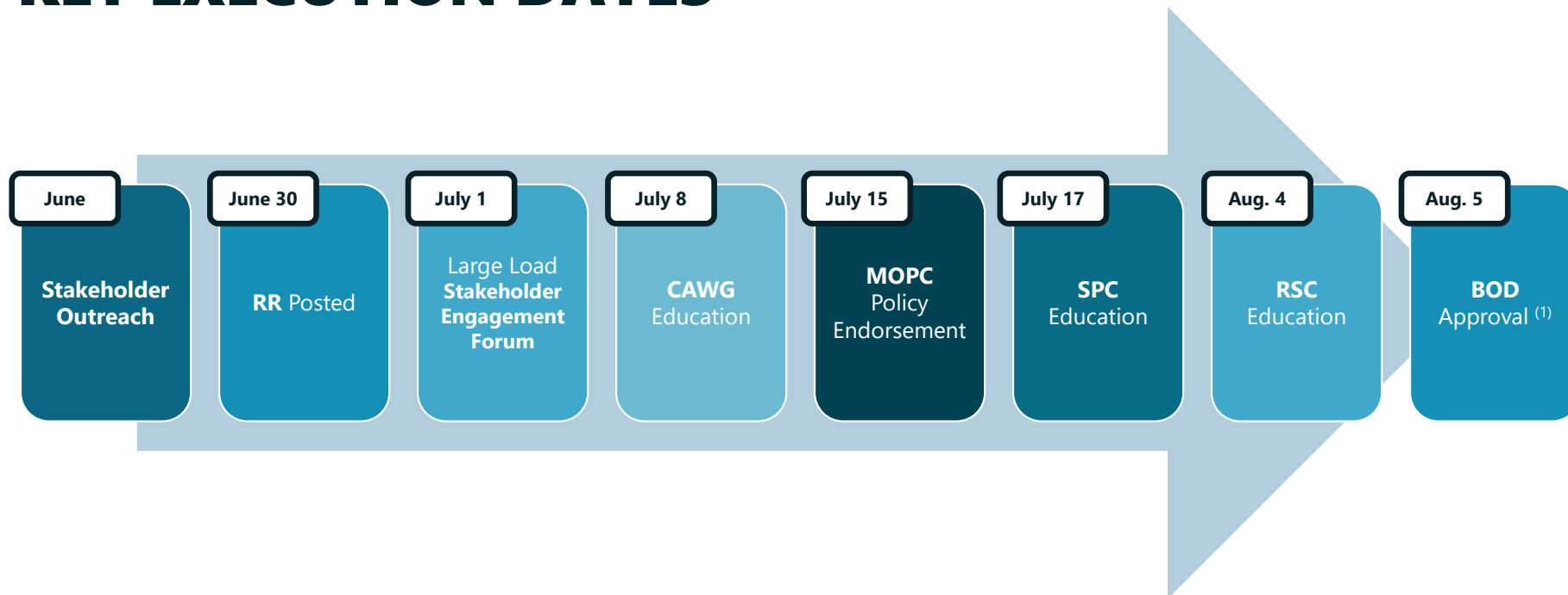


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KEY EXECUTION DATES



Target Effective Timing

Pre-approval submissions: August 2025 | Effective: Winter Season 2025/2026
(Timing contingent on implementation complexity and vendor availability.)

⁽¹⁾ Unless earlier approval by the Board, if a meeting the week of July 21 determined to be desirable.



QUESTIONS & DISCUSSION

DEREK WINGFIELD,
MANAGER, COMMUNICATIONS

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PRE-SUBMITTED QUESTIONS



WHAT NEW QUESTIONS DO YOU HAVE?

Use Webex raise hand feature
to join the queue



**THANK YOU FOR
YOUR ENGAGEMENT**

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Applicability:

Any customer taking service at 34 kV or greater except those served under the Small Primary rate schedule, Large Power rate schedule, or the Transmission Service rate schedule prior to January 1, 2026, or any customer with an expected 15-minute customer Non-Coincident Peak (NCP) of 25 kW or greater at a contiguous site (whether served through one or multiple meters) shall be subject to this Schedule LLCS.

In the event that a customer with a demand that did not exceed 25 MW prior to January 1, 2026, (1) increases its demand to 29 MW or greater, or (2) requires installation of facilities operating at transmission voltage to accommodate increases in its demand, Empire shall expeditiously work with such customer to execute a service agreement and fully comply with the provisions of this Schedule LLCS within 6 months of (1) the customer's notice that such customer's demand is expected to equal or exceed 29 MW or (2) Empire's determination that transmission facilities are required.

Customers eligible for service on the LLCS rate schedule are required to take service on this rate schedule.

Other Tariff Applicability:

Customers taking service under Schedule LLCS are not eligible for participation in:

1. Interruptible Service, Rider IR
2. Optional Time of Use Adjustment, Rider OTOU
3. Economic Development, Rider EDR
4. Limited Large Customer Economic Development, Rider SBEDR

Customers taking service under Schedule LLCS are required to take service under:

1. Fuel Adjustment Clause, Rider FAC
2. Securitized Utility Tariff Charge, Rider SUTC
3. Charges pursuant to any authorized program under the authority of the Missouri Energy Efficiency Investment Act.

Interconnection and Facility Extension:

- A. When applying for service, a prospective LLCS customer shall be responsible for prepayment of the transmission extension, which shall consist of all substations, conductors, devices, poles, conduits, transformers, and all appurtenant facilities and meter installation facilities installed by Company or for which the Company is financially responsible for installation, whether or not under the functional control of the Company, including any and all equipment necessary to ensure adequate power quality with the addition of prospective LLCS customer's load.
- B. Prior to construction of any electrical facilities for service to a prospective LLCS customer, the Company and the prospective LLCS customer shall prepay an estimate of the construction costs of the required facilities, including the cost of all materials, labor, rights-of-way, trench and backfill, together with all incidental underground and overhead expenses connected therewith.

- (1) The prospective LLCS customer will be responsible for nonrefundable charges for infrastructure that is owned and under the functional control of Empire, which would not have been constructed but-for the provision of service to the prospective LLCS customer.
- (2) The prospective LLCS customer will be responsible for refundable charges that may be reimbursed to that LLCS customer during the five years following completion of the transmission extension, and shall consist of (a) the portion of charges for infrastructure that is owned and under the functional control of Empire, which has been constructed in excess of the level of infrastructure that would not have been constructed but-for the provision of service to the prospective LLCS customer, and (b) the portion of charges for infrastructure that is not under the functional control of Empire, but for which Empire is compensated by entities other than its Missouri retail ratepayers.
- (3) To the extent that future prospective customers request service which utilizes the infrastructure referenced in part 2 within five years following the completion of construction, payment for such infrastructure, when obtained, shall be provided to the LLCS customer who initially funded such infrastructure.
- (4) Upon completion of construction, Empire shall prepare a reconciliation of the actual construction costs and estimate construction costs, which shall promptly be refunded to, or paid by, the LLCS customer, as applicable.

Service Agreement:

The form of the application for LLCS service shall be the Company's standard written application form *[which shall be approved by the Commission in this or another proceeding prior to utilization]*. This form shall include

- A. The customer's full corporate name and registration information, and that of any and all parent companies.
- B. The anticipated load, by month and year, for a minimum of 15 years. This shall include:
 - a. A description of weather sensitive load, in monthly kW and monthly kWh,
 - b. A description of non-weather sensitive load, in monthly kW and monthly kWh,
 - c. An explanation of the variables driving changes in non-weather sensitive load, in monthly kW and monthly kWh,
 - d. A commitment to provide updated load-forecasts for the upcoming year by January 1 of that year, in monthly kW and monthly kWh,
 - e. A commitment to notify Empire of any anticipated deviations of +/-10% or more of previously-anticipated load as soon as such potential deviations become anticipated;
 - f. A commitment to cooperate in daily load forecasting.
 - i. Information for load management purposes, including,
 1. Contact information for the person or persons responsible for the LLCS customer's load forecasting,
 2. Contact information for the person or persons responsible for executing curtailment of the LLCS load,
 3. A commitment to maintain updated contact information.
- C. A pledge of collateral or other security as ordered by the Commission in this proceeding, which shall equal or exceed the indicated termination fees.

- D. A commitment to pay or cause to be paid any applicable termination charges, as defined in the LLCS tariff. In the event that any additional termination provisions may be necessary or appropriate to address additional risk with a particular LLCS customer, those provisions shall be defined in the service agreement.
- E. The minimum term of service for a customer qualifying for service under LLCS shall be 10 years, following a ramp-up period of up to 5 years.
- F. Details pertinent to calculation and verification of rates for the Capacity Cost Sufficiency Rider, if applicable.

Capacity Cost Sufficiency Rider:

In the event that Empire does not have sufficient capacity to reliably serve a requesting LLCS customer and its other load in a given season of a given year of the anticipated Service term, Empire may obtain contractual capacity to reliably serve the requesting customer. Empire shall file an ET case and tariff with no less than 45 days effective date, and shall file testimony explaining the potential LLCS customer, that customer's energy and capacity needs, and the capacity arrangements applicable to reliably serving that customer. Empire may seek a protective order for portions of the testimony as appropriate, but any Capacity Cost Sufficiency Rider Rate to be charged to any LLCS customer must be contained in a published tariff. The Capacity Cost Sufficiency Rider tariff shall contain terms related to treatment of revenues generated by the rider to prevent other customer classes' rates from reflecting any unjust or unreasonable costs arising from service to such customers.

Monthly Charges for Service:

Brief Description	Empire	Determinant for Charge
Customer Charge	\$ 10,000	\$/Customer
Facilities Charge	\$ 0.03148	\$/ of Assets
Demand Charge 1 - Charge for Generation Capacity Cost of Service	\$ 22.04	\$/kW during demand window
Demand Charge 2 - Charge for Transmission Capacity Cost of Service	\$ 5.52	\$/kW during demand window
Energy Charges		
Summer Off Peak	\$ 0.0210	\$/kWh
Summer Intermediate	\$ 0.0313	\$/kWh
Summer On Peak	\$ 0.0460	\$/kWh
Fall Off Peak	\$ 0.0204	\$/kWh
Fall Intermediate	\$ 0.0342	\$/kWh
Fall On Peak	\$ 0.0540	\$/kWh
Winter Off Peak	\$ 0.0286	\$/kWh
Winter Intermediate	\$ 0.0339	\$/kWh
Winter On Peak	\$ 0.0372	\$/kWh
Spring Off Peak	\$ 0.0165	\$/kWh
Spring Intermediate	\$ 0.0300	\$/kWh
Spring On Peak	\$ 0.0492	\$/kWh
Load-servicing charge (Summer)	\$ 0.0020	\$/kWh
Load-servicing charge (Non-Summer)	\$ 0.0010	\$/kWh
RES compliance charge	\$ 0.0004	\$/kWh
Variable Fixed Revenue Contribution	24.36%	Percent of other charges
Stable Fixed Revenue Contribution	24.36%	Percent of other charges
Demand Deviation Charge		\$/kW of deviation
Imbalance Charge		\$/kW of deviation
EDD Responsibility Charge		\$/kWh
Capacity Shortfall Rate, if applicable		\$/kW
Capacity Cost Sufficiency Rider, if applicable		\$/Month
Reactive Demand Charge		\$/kVar

Treatment of LLCS Customer Revenues:

- A. Until a rate case recognizing the customer at the full level of projected demand, the difference between the revenue for each charge considered for that customer in the last general rate case, and the current level of revenue for that charge will be recorded to a regulatory liability account. This treatment is applicable to revenue from all charges except the Customer Charge, Facilities Charge, Demand Deviation Charge, Imbalance Charge, Capacity Shortfall Rate, the Capacity Cost Sufficiency Rider, and the RES Compliance Charge. The resulting regulatory liability will be treated as an offset to production ratebase with a 50 year amortization. The annualized and normalized revenue from these charges shall be reflected in each rate case.
- B. All revenue billed under charge the RES Compliance charge will be recorded to a regulatory liability, and that regulatory liability will be treated as an offset to production ratebase with a 50 year amortization. Revenue for the RES Compliance charge will only be addressed through this accumulated regulatory liability, and shall not be considered as rate revenue in rate cases.
- C. All revenue billed under the Demand Deviation Charge, Imbalance Charge, Capacity Shortfall Rate, and the Capacity Cost Sufficiency Rider will be used to offset expense associated with the increased cost of service caused by the LLCS customer in any applicable rate case or through the FAC, if applicable.

Early Termination:

In the event that an LLCS customer's monthly load (in kWh) is 50% or less of its expected load under its updated contract load for 3 consecutive months, the customer will be required to pay, or cause to be paid, all amounts expected for the remainder of the contract under the following charges: Facilities Charge, Demand Charge for Generation Capacity, Demand Charge for Transmission Capacity, Variable Fixed Revenue Contribution, and Stable Fixed Revenue Contribution.

- A. If a customer anticipates a temporary closure or load reduction related to retooling, construction, or other temporary causation, this anticipated reduction shall not trigger the termination charges described above until the anticipated load reduction has exceeded the anticipated duration by three months;
- B. The amount due under the Variable Fixed Revenue Contribution Charge in the event of early termination shall be due at the level associated with normal usage in the most recent applicable rate proceeding. If a rate proceeding has not occurred establishing normal usage, or if the customer was not recognized at the anticipated contract maximum load in the prior rate proceeding, the amount due under the Variable Fixed Revenue Contribution Charge shall be at the level associated with the contract projected usage;
- C. In the event an LLCS customer either declares bankruptcy, the facility is closed, or is more than 5 business days late in payment of a properly-rendered bill for service, termination charges are immediately due;
- D. Except in the case of bankruptcy, closure, or lack of timely payment, termination charges are due on the due date of the bill for the third month of 50% or lower usage;

- E. The portion of termination charge revenue associated with the Facilities Charge shall be recorded as a regulatory liability, and treated as an offset to transmission plant. The amortization period for this regulatory liability shall be set to coincide as closely as is practicable with the depreciable life of the transmission-related infrastructure associated with the LLCS customer;
- F. The remaining termination charge revenue shall be recorded as a regulatory liability and treated as an offset to production ratebase with a 50 year amortization;
- G. Provisions contained herein supersede the Termination of Service provisions of the Rules and Regulations of the generally-applicable tariff.

Other Terms:

- A. LLCS customers shall be billed on a calendar month basis.
- B. LLCS bills shall be rendered by the fifth business day of the following calendar month.
- C. LLCS bills shall be paid by the fifteenth business day of the month issued.
- D. Demand is measured as four times the sum of the energy consumed in three consecutive five minute intervals in which the most energy is consumed.
- E. Service on this schedule is limited to 33% of Empire's annual Missouri jurisdictional load.
- F. Prior to execution of a Service Agreement with a prospective LLCS customer, Empire shall ensure that it has adequate capacity available for resource adequacy calculations to serve all existing customers and the prospective LLCS customer. In the event Empire executes a Service Agreement without adequate capacity, Empire's existing customers shall be held harmless from any SPP or other RTO capacity charges, and held harmless from any penalties assessed by any entity related to those capacity shortfalls.

CASE NO. EO-2025-0154

APPENDIX 2

SCHEDULE 5

HAS BEEN DEEMED

CONFIDENTIAL

IN ITS ENTIRETY