

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

ELECTRONIC APPLICATION OF KENTUCKY)	
UTILITIES COMPANY AND LOUISVILLE GAS)	
AND ELECTRIC COMPANY FOR)	CASE NO. 2025-00045
CERTIFICATES OF PUBLIC CONVENIENCE)	
AND NECESSITY AND SITE COMPATIBILITY)	
CERTIFICATES)	

RESPONSE OF
KENTUCKY UTILITIES COMPANY
AND
LOUISVILLE GAS AND ELECTRIC COMPANY
TO
THE SOUTHERN RENEWABLE ENERGY ASSOCIATION’S SUPPLEMENTAL
REQUESTS FOR INFORMATION
DATED MAY 2, 2025

FILED: MAY 16, 2025

VERIFICATION


COMMONWEALTH OF KENTUCKY)
)
COUNTY OF JEFFERSON)

The undersigned, **Lonnie E. Bellar**, being duly sworn, deposes and says that he is Senior Vice President Engineering and Construction for PPL Services Corporation and he provides services to Louisville Gas and Electric Company and Kentucky Utilities Company, and that he has personal knowledge of the matters set forth in the responses for which he is identified as the witness, and the answers contained therein are true and correct to the best of his information, knowledge and belief.



Lonnie E. Bellar

Subscribed and sworn to before me, a Notary Public in and before said County and State, this 12th day of May 2025.



Notary Public
Notary Public ID No. KYNP63286

My Commission Expires:


January 22, 2027



VERIFICATION


COMMONWEALTH OF KENTUCKY)
)
COUNTY OF JEFFERSON)

The undersigned, **John Bevington**, being duly sworn, deposes and says that he is Senior Director – Business and Economic Development for PPL Services Corporation and he provides services to Louisville Gas and Electric Company and Kentucky Utilities Company, and that he has personal knowledge of the matters set forth in the responses for which he is identified as the witness, and the answers contained therein are true and correct to the best of his information, knowledge, and belief.



John Bevington

Subscribed and sworn to before me, a Notary Public in and before said County and State, this 12th day of May 2025.


Notary Public

Notary Public ID No. KINP63286

My Commission Expires:

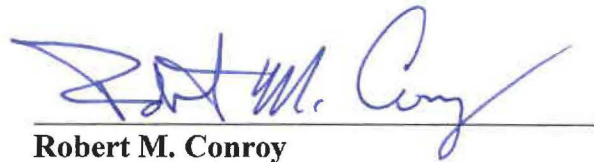
January 22, 2027



VERIFICATION

COMMONWEALTH OF KENTUCKY)
)
COUNTY OF JEFFERSON)

The undersigned, **Robert M. Conroy**, being duly sworn, deposes and says that he is Vice President, State Regulation and Rates, for Kentucky Utilities Company and Louisville Gas and Electric Company and an employee of LG&E and KU Services Company, and that he has personal knowledge of the matters set forth in the responses for which he is identified as the witness, and the answers contained therein are true and correct to the best of his information, knowledge, and belief.


Robert M. Conroy

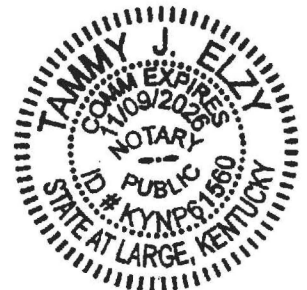
Subscribed and sworn to before me, a Notary Public in and before said County and State, this 15th day of May 2025.


Notary Public

Notary Public ID No. KYNP61560

My Commission Expires:

November 9, 2026



COMMONWEALTH OF KENTUCKY)

COUNTY OF JEFFERSON)

The undersigned, **Daniel Hawk**, being duly sworn, deposes and says that he is Director – Transmission Strategy and Planning for Kentucky Utilities Company and Louisville Gas and Electric Company and an employee of LG&E and KU Services Company, and that he has personal knowledge of the matters set forth in the responses for which he is identified as the witness, and the answers contained therein are true and correct to the best of his information, knowledge, and belief.

Daniel Hawk

Subscribed and sworn to before me, a Notary Public in and before said County
and State, this 13th day of May 2025.

Caroline J. Hansen

Notary Public

Notary Public ID No. KYNP63286

My Commission Expires:

January 22, 2027



VERIFICATION

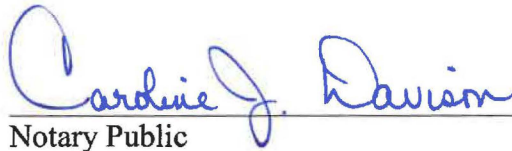
COMMONWEALTH OF KENTUCKY)
)
COUNTY OF JEFFERSON)

The undersigned, **Tim A. Jones**, being duly sworn, deposes and says that he is Senior Manager – Sales Analysis and Forecasting for LG&E and KU Services Company, and that he has personal knowledge of the matters set forth in the responses for which he is identified as the witness, and the answers contained therein are true and correct to the best of his information, knowledge and belief.



Tim A. Jones

Subscribed and sworn to before me, a Notary Public in and before said County and State, this 13th day of May 2025.

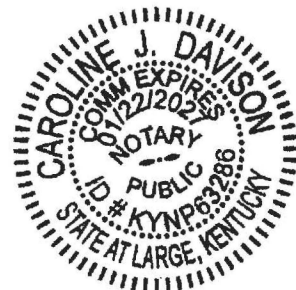


Notary Public

Notary Public ID No. KYNP62286

My Commission Expires:

January 22, 2027



COMMONWEALTH OF KENTUCKY)
)
COUNTY OF JEFFERSON)

Both M^c failed

Subscribed and sworn to before me, a Notary Public in and before said County
and State, this 15th day of May 2025.

Caroline J. Davison
Notary Public

Notary Public ID No. KYNPL63286

January 22, 2027



COMMONWEALTH OF KENTUCKY)
)
COUNTY OF JEFFERSON)


Charles R. Schram

Caroline J. Davison
Notary Public

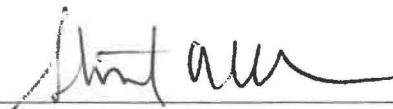
January 22, 2027



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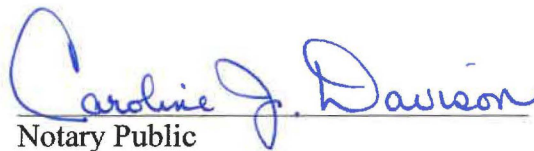
COMMONWEALTH OF KENTUCKY)
)
COUNTY OF JEFFERSON)

The undersigned, **Stuart A. Wilson**, being duly sworn, deposes and says that he is Director – Power Supply for Kentucky Utilities Company and Louisville Gas and Electric Company and is an employee of LG&E and KU Services Company, and that he has personal knowledge of the matters set forth in the responses for which he is identified as the witness, and the answers contained therein are true and correct to the best of his information, knowledge, and belief.



Stuart A. Wilson

Subscribed and sworn to before me, a Notary Public in and before said County and State, this 13th day of May 2025.



Notary Public

Notary Public ID No. KYNP63286

My Commission Expires:

January 22, 2027



**KENTUCKY UTILITIES COMPANY
AND
LOUISVILLE GAS AND ELECTRIC COMPANY**

**Response to Southern Renewable Energy Association's Supplemental Requests for
Information**

Dated May 2, 2025

Case No. 2025-00045

Question No. 1

Responding Witness: Lonnie E. Bellar / Tim A. Jones

Q-1. Reference: Response to Public Service Commission Staff's First Request for Information, Question 2(a) ("Staff 1-__").

- a. For each of the ten (10) wind installations, (i) identify the Kentucky County in which the facility is located and (ii) whether the facility is located within KU's certified service territory, LG&E's certified service territory, or not located within either Company's certified service territory.
- b. For the hydro installation, (i) identify the Kentucky County in which the facility is located and (ii) whether the facility is located within KU's certified service territory, LG&E's certified service territory, or not located within either Company's certified service territory.
- c. Clarify whether the Companies classify a battery storage installation as a "generation" resource. If the Companies classify battery storage as a generation resource, explain why.
- d. Response to Staff 1-5(b). With regard to electric vehicle charging, what are the Companies' assumptions regarding the percentage of electric vehicle charging that will take place at a residence as compared to electric vehicle charging that will take place at a non-residential charging station (in the hourly load forecast process)?

A-1.

- a. See the table below.

Company	Type	Year	County	Service Territory
KU	Wind	2008	Fleming	KU
KU	Wind	2009	Bourbon	KU
KU	Wind	2009	Muhlenberg	KU
KU	Wind	2009	Bourbon	KU
LG&E	Wind	2009	Jefferson	LG&E
LG&E	Wind	2014	Jefferson	LG&E
LG&E	Wind	2014	Jefferson	LG&E
KU	Wind	2015	Hardin	KU
LG&E	Wind	2015	Jefferson	LG&E
LG&E	Wind	2018	Jefferson	LG&E

b. See the table below.

Company	Type	Year	County	Service Territory
KU	Hydro	2012	Scott	KU

c. See the response to Question No. 9.

d. 100% in terms of the load that has a unique load shape layered on to the hourly forecast. See also the Jones testimony at page 41, lines 15-17: “The Companies’ load forecast assumes primarily overnight EV charging that occurs at residences and has minimal impact on projected seasonal peak loads.”

**KENTUCKY UTILITIES COMPANY
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**Response to Southern Renewable Energy Association's Supplemental Requests for
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Dated May 2, 2025

Case No. 2025-00045

Question No. 2

Responding Witness: Lonnie E. Bellar

Q-2. Reference: Response to Staff 1-7.

- a. The response states: "The Companies have sufficient space at currently owned generation properties to construct the additional generation required to serve the noted additional load." In a scenario which the Companies are "required to serve" the entire 8,000 MW of load and projects, what considerations concerning transmission are relevant to selecting the property or properties that will be used in the construction of the additional generation facilities for this load and projects?
- b. If additional generation facilities (beyond those requested through the instant application and under the assumption that certificates are granted in the instant case) are sought in a subsequent case or cases prior to the completion of any transmission upgrade or modifications necessary for supporting service through the facilities sought through this application, is there a risk that costs will be incurred for transmission upgrades or modifications that will not be sufficient to support such additional (subsequently sought) generation facilities? Otherwise stated: Is there a risk that the Companies may spend funds on a transmission upgrade or modification project which will be inadequate (prior to going into service) due to subsequent increases in generation facilities beyond those sought by the Companies in the instant CPCN proceeding? If yes, explain any steps or measures the Companies are taking to minimize this risk. If no, explain why not.

A-2.

- a. The process used to determine the optimal location for future generation will be similar to the process used in this case. The Companies will identify viable siting alternatives based on a range of factors and evaluate the transmission costs associated with each site. Then, the Companies will

consider transmission and other costs to make resource decisions that support the provision of reliable service at the lowest reasonable cost.

- b. The Companies are not aware of circumstances where this situation would be a material risk.

**KENTUCKY UTILITIES COMPANY
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**Response to Southern Renewable Energy Association's Supplemental Requests for
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Dated May 2, 2025

Case No. 2025-00045

Question No. 3

Responding Witness: John Bevington

Q-3. Reference: Response to Staff 1-18(c).

- a. At pertinent part, concerning "Prospect" project stage status, the response includes the following statement: "There are currently six projects in this stage, representing 2,200 MW of peak demand. The Companies have submitted three TSRs for two projects in this stage." Have the Companies submitted more than one (1) TSR for either of the two projects for which the three (3) TSRs have been submitted? If yes, explain why there has been a submission of more than one (1) TSR for the same project. If no, explain why three (3) TSRs have been submitted for two (2) projects.
- b. At pertinent part, concerning "Imminent" project stage status, the response includes the following statement: "There is currently one project in this stage, representing 402 MW. The Companies have submitted two TSRs for this project." Explain why the submission of two (2) TSRs for this project is necessary or otherwise caused.
- c. With regard to "upgrades or modifications to the transmission system necessary to accommodate the TSR," are any costs associated with these upgrades or modifications collected from the developer prior to the customer receiving service from the upgraded or modified transmission system? If yes, (i) what costs are collected, and (ii) will the collection of these costs through the same collection mechanism used prior to service continue after service commences or will a different mechanism for collecting these costs apply?

A-3.

- a. Yes. Project Meridian submitted two TSR applications because they were considering load at two different interconnection points.
- b. This project site layout initially indicated a project scope with a certain number of buildings and related capacity that equaled 335MW and a TSR

was submitted for this amount. As the project continued to progress, it was determined that an additional 67MW was of interest and could fit on the site and a separate TSR was submitted as a result. After continued evaluation, and discussions with possible tenants, the clients asked the Companies to study the transmission system adjacent to the site and determine if a total project size of 525MW could be served feasibly. That feasibility analysis led to the submission of a third TSR for an additional 123MW on 4/21/2025. See PSC 2-14(c).

- c. The Companies require the developer to execute an Engineering, Procurement and Construction Agreement prior to the Company incurring any costs on upgrades or modifications to the transmission system to accommodate the load. While no money is collected, the agreement requires the developer to provide security, in a form acceptable to the Company, that will protect the Company in the event the load does not come to fruition. Specifically, the developer will be liable for all costs incurred by the Company *until* electric service is taken under an executed contract for the provision of electric service. See the Companies' response to SC 2-22 in Case No. 2024-00326 for a further discussion of cost recovery of transmission related investments.

**KENTUCKY UTILITIES COMPANY
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**Response to Southern Renewable Energy Association's Supplemental Requests for
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Dated May 2, 2025

Case No. 2025-00045

Question No. 4

Responding Witness: Stuart A. Wilson

- Q-4. Reference: Response to Staff 1-23. At pertinent part, the response includes the following statement: "Therefore, to evaluate resources on an equal footing, the Companies completed the analysis with no transmission system upgrade costs." Explain whether and, if applicable, how the Companies' evaluation subsequently included transmission system upgrade costs in their analysis. If transmission system upgrade costs have been excluded from the analysis, is the exclusion premised upon such costs being immaterial?
- A-4. Transmission system upgrade costs were properly considered in the transmission siting study referenced in PSC 1-23. They were excluded only in the Stage One analysis to evaluate resources on an equal footing. The Stage One and Stage Two analyses demonstrated that two NGCCs and 400 MW of BESS are least-cost in the load scenario with 1,750 MW of data center load. Based on the results of the transmission siting study, the Companies will minimize transmission system upgrade costs by locating the second NGCC at Mill Creek and by locating 400 MW of BESS at Cane Run.

KENTUCKY UTILITIES COMPANY
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**Response to Southern Renewable Energy Association's Supplemental Requests for
Information
Dated May 2, 2025**

Case No. 2025-00045

Question No. 5

**Responding Witness: John Bevington / Robert M. Conroy / Daniel Hawk /
Elizabeth J. McFarland**

Q-5. Reference Response to Staff 1-28.

- a. When is a TSR required as a condition of receiving service or continuing to receive service under either one of the Companies' Retail Transmission Service (RTS) tariff?
- b. Can the Companies' transmission operator approve for either Company transmission service to a customer in the absence of a TSR? If yes, explain how.
- c. [Additional reference: The "Term of Contract" provision in each of the Companies' RTS tariff and Response to Staff 1-28(c).] At pertinent part, the response states: "Finally, regarding service terms for data center customers, the Companies anticipate a combination of minimum contract duration, minimum contract demand, and credit support, assurance, or security requirements will help mitigate the risks addressed in this request." For service under the RTS tariffs, since January 1, 2015, has either Company required a "longer fixed term of contract and termination notice because of conditions associated with the Customer's requirements for service"? If yes, (i) identify each instance in which such a longer fixed term of contract and termination notice has been required, (ii) the longer fixed term of contract and termination notice, and (iii) the conditions associated with the customer's requirements for service serving as the basis for the imposition of the requirement.
- d. Are there scenarios in which data centers or other projects that will have a twelve (12)-month-average monthly minimum demand exceeding 250 kVA could receive service from either of the Companies through a tariff and/or special contract other than a RTS tariff (or is the RTS tariff the exclusive means through which such a customer may receive service)?

- e. By Company, for both January 1, 2015 and separately again for January 1, 2025, provide a schedule indicating how many customers were receiving service under each Company's RTS tariff on each date?

A-5.

- a. A TSR is required to be submitted for any new load delivery point. Additionally, a TSR is required to be submitted for any increase of 5MW or more at an existing 100kV or below load delivery point and an increase of 10MW or more at an existing load delivery point above 100kV.
- b. In no case does the Companies' Transmission Operator approve (or deny) TSRs. The Companies' Independent Transmission Organization (ITO) is the only entity that can approve or deny a TSR. Only in the specific cases described in part (a) can an increase in load occur without the submission of a TSR.
- c. No, that would require a special contract filing with the KPSC.
- d. Yes, a customer could receive TODP service.
- e. See the table below.

	RTS Customer Count	
	As of January 1, 2015	As of Jan 1, 2025
KU	30	21
LG&E	12	13

KENTUCKY UTILITIES COMPANY
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**Response to Southern Renewable Energy Association's Supplemental Requests for
Information
Dated May 2, 2025**

Case No. 2025-00045

Question No. 6

**Responding Witness: Lonnie E. Bellar / John Bevington / Robert M. Conroy /
Stuart A. Wilson**

Q-6. Reference: Response to Attorney General and Kentucky Industrial Utility Customers' Initial Data Request, Question No. 19 ("AG KIUC 1-__"): Staff 1-96. At pertinent part, the response states: "The Companies will not commit to serving data center load if they cannot do so reliably."

- a. Explain the role, if any, that TSRs serve in determining whether the data center load can be reliably served.
- b. Explain whether and, if applicable, how the Companies can decline to serve a data center or other large project (with a minimum demand or a proposed minimum demand exceeding 250 kVA).
- c. With regard to the term "commit" as that term is used in the response, (i) how do the Companies "commit," (ii) at what stage in the process of a data center or other large project proposal must the Companies either "commit" or decline to commit, and (iii) what role and/or responsibilities, if any, does the developer of a data center or other large project have concerning reliability including developer responsibility for funding any generation, transmission, and/or distribution upgrades or modifications necessary for reliable service for the proposed data center or other large project?

A-6.

- a. TSRs are used to evaluate the impact of new loads on the reliability of the transmission system.
- b. See the response to PSC 2-48.
- c.
 - (i) The Companies "commit" by entering into a contract for retail electric service.

- (ii) See the response to AG-KIUC 2-27(a)-(f).
- (iii) The Companies object to this request as irrelevant to the subject matter of this proceeding under KRS 278.020(1) and based on the Commission's legal standard of review of a request for a certificate of public convenience and necessity ("CPCN") stated in Case No. 2022-00402.¹ Without waiving these objections, engineering, procurement, and construction ("EPC") agreements address these issues (excluding generation) prior to taking retail electric service. Contracts for retail electric service address cost recovery thereafter.

¹ See, e.g., *Electronic Joint Application of Kentucky Utilities Company and Louisville Gas and Electric Company for Certificates of Public Convenience and Necessity and Site Compatibility Certificates and Approval of a Demand Side Management Plan and Approval of Fossil Fuel-Fired Generation Unit Retirements*, Case No. 2022-00402, Order at 10-12 (Ky. PSC Nov. 6, 2023) ("To obtain a CPCN, a utility must demonstrate a need for such facilities and an absence of wasteful duplication. ... 'Need' requires: [A] showing of a substantial inadequacy of existing service, involving a consumer market sufficiently large to make it economically feasible for the new system or facility to be constructed or operated. ... 'Wasteful duplication' is defined as 'an excess of capacity over need' and 'an excessive investment in relation to productivity or efficiency, and an unnecessary multiplicity of physical properties.' ... The fundamental principle of reasonable least-cost alternative is embedded in such an analysis. Selection of a proposal that ultimately costs more than an alternative does not necessarily result in wasteful duplication. All relevant factors must be balanced.") (internal citations omitted).

**KENTUCKY UTILITIES COMPANY
AND
LOUISVILLE GAS AND ELECTRIC COMPANY**

**Response to Southern Renewable Energy Association's Supplemental Requests for
Information**

Dated May 2, 2025

Case No. 2025-00045

Question No. 7

Responding Witness: Charles R. Schram

Q-7. Reference: Response to Louisville/Jefferson County Metro Government and Lexington-Fayette Urban County Government's First Request for Information, Question 16 ("Louisville Metro LFUCG 1-__").

- a. What additional steps and/or approvals (including local (Hardin County) government, board, or agency approvals), if any, are necessary for the Rhudes Creek Solar project to move forward into construction if construction has yet to commence?
- b. If the project is under construction such that it can be substantially completed in the absence of any additional local (Hardin County) government, board, or agency approvals, state the start date of the construction.
- c. When do the Companies expect the Rhudes Creek solar facility to go into service (and explain the basis for the expectation)?

A-7.

- a. The Companies' understanding is that the Rhudes Creek Solar project requires Hardin County approvals, potentially including conditional use permits, to commence construction.
- b. The Rhudes Creek Solar project is not under construction.
- c. The Companies anticipate that the in-service date for Rhudes Creek Solar would be approximately one year after construction begins.

**KENTUCKY UTILITIES COMPANY
AND
LOUISVILLE GAS AND ELECTRIC COMPANY**

**Response to Southern Renewable Energy Association's Supplemental Requests for
Information**

Dated May 2, 2025

Case No. 2025-00045

Question No. 8

Responding Witness: John Bevington

- Q-8. Reference: Response to Louisville Metro LFUCG 1-35. At pertinent part, the response states: "The EPC contract requires the potential customer to bear costs until the customer begins to take service, which can be tens of millions of dollars." What, with regard to the customer bearing costs, does the EPC contract require after the customer begins to take service?
- A-8. See the response to Question No. 3(c) and the response to SC 2-22.

**KENTUCKY UTILITIES COMPANY
AND
LOUISVILLE GAS AND ELECTRIC COMPANY**

**Response to Southern Renewable Energy Association's Supplemental Requests for
Information**

Dated May 2, 2025

Case No. 2025-00045

Question No. 9

Responding Witness: Lonnie E. Bellar / Robert M. Conroy

- Q-9. Reference: Southern Renewable Energy Association's Initial Request for Information, Question 5 ("SREA 1-___"). In that Mr. Conroy's direct testimony in support of the application does not enumerate battery storage among the identified "electric generation resources," is it the position of the Companies that battery storage, of itself, is an electric generation resource?
- A-9. The Companies in Case No 2022-00402, stated that all storage facilities, are not a source of "new" electricity. A battery energy storage system just moves the electron around in time at a cost of the facility and electricity losses – meaning one gets less electricity out of the battery than it took to charge the battery.

The Kentucky Public Service Commission in the November 6, 2023 Order in Case No. 2022-00402 stated the following.

Regarding Brown BESS, the Commission disagrees with LG&E/KU's argument that Brown BESS stores but does not generate electricity, and thus no site compatibility certificate is required. The Commission finds that, because battery energy storage systems convert electricity into other forms of energy, and then are able to produce electricity from converting the energy again, they do not store electricity, but instead generate it. Thus, battery energy storage systems are a generation source of electricity. With the finding that Brown BESS is generation and, with four-hour, 125 MW capacity, exceeds the 10 MW threshold established in KRS 278.216, the Commission finds that LG&E/KU must file an application in a separate proceeding requesting a site compatibility certificate for Brown BESS.

**KENTUCKY UTILITIES COMPANY
AND
LOUISVILLE GAS AND ELECTRIC COMPANY**

**Response to Southern Renewable Energy Association's Supplemental Requests for
Information**

Dated May 2, 2025

Case No. 2025-00045

Question No. 10

Responding Witness: Lonnie E. Bellar / John Bevington / Robert M. Conroy

- Q-10. Reference: SREA 1-6. By Company, and by year for each year from January 1, 2015 to present, identify the TSRs concerning a potential customer that have been withdrawn or terminated. For each TSR that was withdrawn or terminated, state the reason why the TSR was withdrawn or terminated.
- A-10. Under the FERC the Companies are registered as a single Load Serving Entity ("LSE"). They are not the only LSE registered under the FERC for service of LGEE (the transmission provider of the Companies) that may request a TSR. For example, EKPC, TVA, and BREC may submit a TSR for service off the Companies Transmission System. Reasons for each withdraw or termination are not required to be recorded per FERC and NAESB requirement and as previously stated in SREA 1-6 could be for a number of reasons.