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Via FedEx Overnight and Electronic Delivery: <u>Calvin.Huggins1@mail.house.gov</u>

Congress of the United States House of Representatives Calvin Huggins Legislative Clerk Committee on Energy and Commerce 2125 Rayburn House Office Building Washington, DC 20515-6115

RE: May 28, 2025 Request for Responses to Additional Questions for the Record

Dear Mr. Huggins:

Attached below please find my responses to the questions included in Chairman Latta's letter of May 28, 2025. If Members have any additional questions, please do not hesitate to contact me.

Sincerely,

/s/ Pablo Vegas

Pablo Vegas President and Chief Executive Officer Electric Reliability Council of Texas, Inc. (512) 248-6597 Pablo.Vegas@ercot.com

Attachment

Attachment—Responses to Additional Questions for the Record

The Honorable Robert E. Latta (R-OH)

1. As stated in President Trump's Executive Order "Removing Barriers to American Leadership in Artificial Intelligence" (AI EO) on January 23, 2025 "It 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." President Trump has made it clear that he wants the US to be the global leader in AI and unleash American energy. How does ERCOT plan to ensure sufficient supply of energy to meet the needs of data centers in a timely manner?

Many data centers have chosen to locate within the Electric Reliability Council of Texas (ERCOT) Region due to Texas's favorable business environment and the beneficial dynamics of relatively short interconnection time and reliable service available in the ERCOT Region. Approximately 6.5 gigawatts (GW) of data center load is currently located in the ERCOT Region and 44.1 GW of data center load is projected to be developed in the ERCOT Region by 2031:

ERCOT Data Center Load (in GW)*			
	Crypto	Non-Crypto	Total
As of January 2025	3.7	2.8	6.5
Projected 2026	6.6	5.2	11.8
Projected 2027	8.9	9.4	18.3
Projected 2028	11.4	16.8	28.2
Projected 2029	12.5	20.8	33.3
Projected 2030	15.1	25	40.1
Projected 2031	17.1	27	44.1
*Projections Based on ERCOT Adjusted Load Forecast			

Meeting this demand will require significant investment in new generation, a challenge the Texas Legislature has sought to address through the creation of the Texas Energy Fund, which incentivizes the development of dispatchable generation in Texas. Under the longstanding market design in the ERCOT Region of Texas, ERCOT's role in ensuring sufficiency of the generation supply is to provide private generation developers the information they need about current and future generation adequacy to make investment decisions. ERCOT provides semi-annual projections of resource adequacy in its Capacity, Demand, and Reserves (CDR) reports, the latest of which showed significant demands on ERCOT resources beginning in summer 2028.¹ ERCOT believes this information is useful to generation investors in planning new generation for the ERCOT Region. As further described below in response to Rep. Latta's second question, ERCOT has also announced

¹ The most recent CDR Report, revised in May 2025, is available on the Resource Adequacy page of the ERCOT website at: https://www.ercot.com/gridinfo/resource.

additional changes to its forecasting methodologies that will help ensure accurate projections for investors.

ERCOT has several initiatives in place and under development to ensure data centers can be reliably interconnected in a timely manner. In March 2022, ERCOT implemented an interim interconnection process for large loads.² ERCOT also established the Large Flexible Load Task Force (now known as the Large Load Working Group³) to provide a forum for stakeholder engagement on the development of large load interconnection processes, among other issues. On May 15, 2025, the Public Utility Commission of Texas (PUCT) approved Nodal Protocol Revision Request (NPRR) 1234 and Planning Guide Revision Request (PGRR) 115 to establish a permanent process for the interconnection of large loads in the ERCOT Region.⁴ These formalized the definition of "Large Load," established a Large Load Interconnection Study process akin to the interconnection study process used for generation, and adopted modeling and telemetry requirements to better support load forecasting and operational transparency.

Beyond improving the interconnection process for artificial intelligence (AI) data centers and other large loads, there is a greater need to move power from generation to load throughout the ERCOT Region. In April 2025, the PUCT approved a step change from the historical use of 345-kilovolt (kV) transmission voltage in the ERCOT Region by authorizing three transmission import/export paths between West and Central Texas using 765-kV transmission lines for the Permian Basin Reliability Plan.⁵ With many data centers choosing to site in West Texas, these larger, more efficient transmission lines will help to ensure that more power is available in that fast-growing area of the ERCOT Region. As part of the annual Regional Transmission Plan (RTP) process in 2024, ERCOT also identified the need for a set of 765-kV transmission lines in East Texas as part of the 765kV Strategic Transmission Expansion Plan (STEP).⁶

On June 1, 2025, the Texas Legislature passed Senate Bill (SB) 6, which establishes several requirements related to large loads, including AI data centers. Section 2 of SB 6 requires the PUCT to adopt a rule establishing standards for interconnection of large load customers in the ERCOT Region, including mandating disclosure by large load customers of on-site backup generating facilities. ERCOT is required to establish a threshold for certain energy emergency conditions in which it may direct large load customers with backup generating

² See Market Notice W-A032522-01: <u>https://www.ercot.com/services/comm/mkt_notices/W-A032522-01</u>.

³ <u>https://www.ercot.com/committees/tac/llwg</u>.

⁴ See NPRR1234, available on ERCOT's website at: <u>https://www.ercot.com/mktrules/issues/NPRR1234#summary;</u> see also PGRR115, available on ERCOT's website at <u>https://www.ercot.com/mktrules/issues/PGRR115</u>.

⁵ *Reliability Plan for the Permian Basin Region under PURA § 39.167*, PUCT Project No. 55718, Second Order Approving the Reliability Plan for the Permian Basin Region (Apr. 24, 2025); *see also*, ERCOT Permian Basin Reliability Plan Study and Addendum (Sept. 11, 2024), available on the ERCOT website at: <u>https://www.ercot.com/files/docs/2024/07/25/2024-ERCOT-Permian-Basin-Reliability-Plan-Study-Report-and-Addendum.zip</u>.

⁶ More information on the 765-kV STEP is available in ERCOT's January 2025 report available on ERCOT's website at: <u>2024-regional-transmission-plan-rtp-345-kv-plan-and-texas-765-kv-strategic-transmission-expans.pdf</u>.

facilities to deploy those facilities or curtail their load. SB 6 also specifies that several aspects of the large load interconnection process must be standardized, including establishing a flat fee for transmission screening studies, a method for large load customers to demonstrate site control, and uniform financial commitment requirements for the development of transmission needed to serve large load customers. Finally, SB 6 requires the PUCT to adopt criteria that will govern how ERCOT includes forecasted large loads in its transmission planning and resource adequacy models and reports. Together, these new measures will help to make the large load interconnection process more efficient and will also improve the accuracy and consistency of forecasting for large loads, which will better support investment decisions in transmission and generation development to serve those large loads.

2. Accurate and transparent electricity load forecasting is a linchpin of modern economic development. States rely on these forecasts to plan new industrial parks, data centers, and manufacturing hubs, while utilities use them to schedule grid expansions and major infrastructure investments. Despite the vital role of load forecasts in spurring economic growth, practices vary widely among states, utilities and RTO/ISOs, often leading to inconsistent data, misaligned investment signals, and unnecessary risk for both utilities, and both large and residential customers. Recent inconsistencies underscore how a patchwork of forecasting methodologies can exacerbate speculation in large load interconnection requests, inflate demand projections, and drive-up costs. These issues cross both state and federal jurisdictions and regional differences.

a. What steps is ERCOT taking to ensure its load forecasting is transparent, predictable and correctly anticipating future capacity and infrastructure needs to power AI infrastructure?

As noted in response to the prior question, the Texas Legislature recently passed SB 6, which requires the PUCT to adopt a rule establishing criteria governing ERCOT's inclusion of forecasted large loads in transmission planning and resource adequacy models and reports. Upon the PUCT's adoption of that rule, ERCOT anticipates that these criteria will help to ensure standardization of forecast methodologies and thereby further support the transparency, predictability, and accuracy of ERCOT's load forecasts.

In the interim, ERCOT has worked to improve the transparency and accuracy of its load forecasts, including analyzing historical data related to large loads that actually materialized. Specifically, ERCOT evaluated megawatt levels and interconnection timelines at which those loads were ultimately energized and applied the rates of actualization to the utilities' most recent forecasted load data. On April 8, 2025, ERCOT presented this "ERCOT Adjusted Load Forecast" (EALF) to its Board of Directors.⁷

⁷ ERCOT's presentation of the ERCOT Adjusted Load Forecast to the ERCOT Board of Directors is available on ERCOT's website at: <u>https://www.ercot.com/files/docs/2025/04/07/8.1-Long-Term-Load-Forecast-Update-2025-2031-and-Methodology-Changes.pdf</u>.

ERCOT primarily uses load forecasts for two purposes: resource adequacy evaluations and transmission planning. Resource adequacy assesses the level of generation available to serve load, while transmission planning assesses the ability to move energy from generation to where it is needed on the grid to serve load. As described in ERCOT's filing to the PUCT on May 1, 2025, ERCOT is applying the EALF for resource adequacy evaluations.⁸ However, because developing transmission takes longer than developing generation, ERCOT utilized a different variation of the load forecast adjustment to develop the 2025 RTP: the ERCOT Transmission Planning Adjusted Load Forecast (ETPALF). Unlike the EALF, the ETPALF maintains the projected in-service dates provided by the entity responsible for providing retail delivery service to the load. ERCOT sought and received a good cause exception from the PUCT to deviate from the requirements of the ERCOT Planning Guide in order to apply this accuracy adjustment in the transmission planning context to the 2025 RTP.⁹ ERCOT is confident that use of the EALF for resource adequacy and the ETPALF for transmission planning will provide a more accurate forecast for developers and investors in the ERCOT Region to utilize for their development and investment decisions. ERCOT only anticipates these to be necessary as an interim measure until the PUCT adopts criteria to further guide the forecast development process.

b. What, if any, barriers exist to increased transparency on potential load growth from AI?

The first barrier ERCOT often encounters is that large load customers may be unwilling to share competitive or potentially sensitive information, including the type of load planned for a particular interconnection location. Without this information, it is difficult to determine whether a large load is an AI-related data center or another type of large load.

The second is that large load developers will often submit a planned load at multiple locations on the grid—sometimes in different power regions—to maintain optionality if one location is more advantageous or expeditious than another. There is no formal information sharing process among power regions to identify whether a large load submitted the same project in multiple regions. This significantly complicates load forecasting and planning efforts.

3. How can RTOs accelerate transmission expansion to support load growth without creating excessive costs for ratepayers?

Three areas of improvement would help ERCOT support acceleration of transmission development in the ERCOT Region. First, the ability to identify and remove speculative or duplicative loads would be instrumental in improving the accuracy of load forecasts. Public Utility Regulatory Act (PURA) § 37.0561(d), as adopted in Texas's SB 6, will

⁸ Reports of the Electric Reliability Council of Texas, PUCT Project No. 55999, Update on ERCOT's Adjusted Load Forecast and Request for Good Cause Exception for 2025 Regional Transmission Plan at 5 (May 1, 2025); see also, Reports of the Electric Reliability Council of Texas, PUCT Project No. 55999, ERCOT's Revisions to Adjusted Load Forecasts and Amended Draft Proposed Order at 5–6 (June 4, 2025).

⁹ *Reports of the Electric Reliability Council of Texas,* PUCT Project No. 55999, Order Granting Good Cause Exception (June 5, 2025).

require large loads to disclose substantially similar requests made within Texas. The development of processes to facilitate information sharing among power regions would help Independent System Operators¹⁰ (ISOs) and Regional Transmission Organizations (RTOs) identify duplicative loads outside their regions and account for them in their regional planning processes.

Second, requiring large loads to demonstrate robust financial commitments to support transmission construction—through the posting of security deposits or otherwise—will support accelerated transmission development and help reduce speculative loads. PURA § 37.0561(h), also adopted in SB 6, will establish uniform financial commitment requirements for the development of transmission infrastructure needed to serve a large load customer.

Third, the standardization of information included in ISO load forecasts will also make transmission development planning more efficient. As previously noted, PURA § 37.0561(m) requires the PUCT to establish criteria for ERCOT's inclusion of forecasted large loads in its transmission planning and resource adequacy models and reports.

4. From a siting and permitting perspective, what do you see as the challenges and barriers to constructing sufficient transmission infrastructure needed for reliable, safe, affordable, and timely delivery of power?

As the ISO, ERCOT does not engage in siting and permitting of transmission infrastructure and is not well placed to comment on challenges experienced in regard to these issues. From an ISO planning perspective, the need for transmission buildout would be minimized if large loads self-provide sufficient generation to serve their load, relying on the electric grid only for backup power. ERCOT understands that some large loads in the ERCOT Region currently self-provide generation or are planning to do so.

a. What role, if any, should Congress and FERC play in siting and permitting for regional or interregional transmission?

ERCOT does not see any benefit in Congress or the Federal Energy Regulatory Commission (FERC) playing a role in siting or permitting transmission facilities. In Texas, this is regulated by the PUCT, consistent with the historical practice of transmission siting being a matter of state, rather than federal, jurisdiction.¹¹ This has allowed Texas to prioritize rapid siting and permitting for transmission projects by establishing a statutory requirement that the PUCT approve or deny an application for a certificate of convenience

¹⁰ While ERCOT is not an RTO or an ISO as those terms are defined in Section 3 of the Federal Power Act (16 U.S.C. § 796), ERCOT performs many of the same functions in its role as the PUCT-certified independent organization for the ERCOT Region under Public Utility Regulatory Act § 39.151. Consequently, references to ERCOT as an ISO in these responses should be understood to be based on ERCOT's role under Texas state law rather than the Federal Power Act definition of an ISO.

¹¹ Subject to certain exceptions in which both federal and state approvals are required, such as where transmission facilities would cross federally owned land or property under the jurisdiction of the U.S. Army Corps of Engineers.

and necessity (CCN) 180 days after the application is filed.¹² This arrangement also allows flexibility in transmission planning to address current and future needs of the ERCOT System, such as the PUCT's recent approval of the first 765-kV transmission infrastructure in the ERCOT Region.¹³

5. Regarding planning for transmission, what specific impediments have you identified to current state, regional, and interregional planning for transmission projects?

In addition to some of the challenges noted in prior responses, ERCOT has experienced issues obtaining adequate modeling information for large loads, particularly dynamic modeling information for processor-based loads. ERCOT has robust requirements for generators to provide dynamic modeling information, but similar requirements do not currently exist for large loads. ERCOT has observed that large loads often do not ride through when a fault occurs on the system, which introduces a potentially significant reliability risk. Requiring these loads to provide dynamic models—not just steady-state models—would help ERCOT assess the impact of transmission faults on these loads and the areas where they interconnect. A workshop is scheduled for June 13, 2025, to discuss potential solutions to these and other issues with stakeholders.¹⁴ Better modeling information will ultimately assist ERCOT in identifying the necessary transmission improvements to accommodate the integration of large loads.

a. What are examples of impediments you have identified and what is necessary for system planners to overcome these impediments?

As noted in ERCOT's response to Question 2.b. from Rep. Latta, the difficulty in identifying speculative or duplicative loads complicates ERCOT's transmission planning efforts, and steps are being taken to address this issue. Additional measures that could help address these impediments are discussed in ERCOT's response to Question 5.b. from Rep. Latta.

b. What reforms do you recommend to improve state, regional, and interregional planning to overcome these impediments?

Establishing a national or international large load site development list and improving large load development forecasts would give transmission planners better insight into the overall development patterns of large loads, including instances in which a customer is considering multiple sites for a single project. Transmission planners do not currently have insight into how and whether projects will materialize, impacting their ability to plan for those that do ultimately seek to interconnect and energize.

¹² Public Utility Regulatory Act, Tex. Util. Code § 37.057.

¹³See Reliability Plan for the Permian Basin Region under PURA § 39.167, PUCT Project No. 55718, Second Order Approving the Reliability Plan for the Permian Basin Region (Apr. 24, 2025).

¹⁴ More information on the workshop will be posted to ERCOT's website at: https://www.ercot.com/calendar/06132025-Large-Load-Workshop.

Given the size of many of these projects, the difference between having each interconnection request materialize versus just one materialize has a significant impact on the transmission planning necessary to reliably serve anticipated future load. Because of this, reforms that improve the accuracy of forecasting the development of large loads will help overcome impediments to planning reliable transmission. Such reforms could include a site development list or some other mechanism for developers to share additional details with transmission planners about their intentions, such as which interconnection requests are associated with which projects and realistic development timelines for multi-stage projects.

Establishing standards governing how large loads ride through grid disturbances will create consistent behaviors that will also help remove impediments to reliable transmission planning. The North American Electric Reliability Corporation (NERC) recently analyzed a significant loss of data center load in the Eastern Interconnection caused by the response of a data center's equipment to a transmission fault that would not typically have resulted in significant loss of load.¹⁵ This incident illustrates the significant impact on system stability of the failure of large loads to ride through system disturbances. Ensuring predictable behavior from large loads in response to system disturbances will greatly assist in reliable transmission planning by reducing the number of potential scenarios planners need to consider over the course of the planning process.

6. In the last Congress and the previous administration, there was a lot of talk about transmission policy reform.

a. How does your organization plan transmission in your region and with other regions? What should Members understand about the nature of transmission planning as it exists today?

ERCOT plans transmission through the annual development of the RTP and the biennial development of the Long-Term System Assessment (LTSA), each of which is governed by the ERCOT Planning Guide.¹⁶ The RTP was adopted to satisfy NERC Reliability Standards and uses a six-year planning horizon to identify regional and ERCOT-wide reliability and economic transmission needs in the medium term. The RTP identifies specific transmission projects that address identified reliability and economic needs. Transmission Service Providers subsequently submit individual transmission projects to the ERCOT stakeholder-composed Regional Planning Group (RPG) for evaluation and recommendation before bringing certain types of transmission projects to the PUCT for review and approval in the CCN process. The LTSA is a longer-term evaluation that forecasts the needs of the ERCOT System through the next 20 years. As described in ERCOT Planning Guide § 3.1.1.1(1), due to the significant uncertainty of a 20-year planning horizon, the LTSA is not intended to recommend specific system upgrades; rather, it evaluates a wide range of scenarios to identify robust upgrades across a range of

https://www.nerc.com/pa/rrm/ea/Documents/Incident_Review_Large_Load_Loss.pdf.

¹⁵ NERC's analysis of this incident is available at

¹⁶ See ERCOT Planning Guide § 3, available at: <u>https://www.ercot.com/mktrules/guides/planning/current</u>.

scenarios or those that might be more economical than upgrades that only consider the sixyear horizon evaluated in the RTP process. Because the ERCOT Region is not part of the Eastern or Western Interconnections but is instead an independent interconnection, ERCOT has not historically engaged in formalized transmission planning with other power regions. Transmission planning in the ERCOT Region is solely regulated by the PUCT, which has generally allowed transmission development to occur more quickly than other power regions in the United States.

b. Does a top-down approach, through FERC, serve the interests of utilities and grid operators that are already expending tremendous time and engineering resources on design new transmission?

For the ERCOT Region of Texas, a top-down approach through FERC would not serve the interests of utilities and grid operators in developing new transmission. As noted in ERCOT's response to question 4.a. from Rep. Latta, regulating transmission policy, planning, and development at the state level has served Texas and the ERCOT System well by allowing fast, flexible transmission siting and permitting. Requiring FERC regulation of transmission planning in Texas would likely slow the transmission development process, which would inhibit ERCOT utilities' ability to meet anticipated future system needs.

7. What would be your top priority or need from states, FERC or Congress to assist you in meeting new demand —especially if we need even more power than projected? Are you equipped today to meet increased future demand at the pace needed and to maintain affordability and competitive rates?

As new demand grows, a lack of generation resources will quickly limit the ability to serve it. The best way for states and Congress to assist in meeting new demand while maintaining affordability and competitive rates is to preserve ERCOT's independence from plenary FERC jurisdiction, revise relevant regulations to allow for more rapid development and deployment of new generating resources—including nuclear—and to allow aging thermal generation resources to extend their operational lifespans to the greatest extent possible. While existing thermal generation resources will ultimately need to be retired, keeping them operational for as long as is feasible allows them to serve as a bridge solution to ensure demand can be served reliably while new generation resources are developed.

8. The balance of your resource mix is an important component of reliably operating the grid. No matter how much wind and solar you build, you need baseload, dispatchable energy to support the system when the sun doesn't shine and the wind doesn't blow. In your testimony, you highlighted that less than 5% of queued generation capacity is natural gas; meanwhile, over 94% of the queue is made up of wind, solar, and storage. Can you describe the impact that losing this balance of resource mix would have on the system? Should the federal government create incentives for the development of reliable, dispatchable power?

Losing sufficient dispatchable thermal generation in the balance of the resource mix will result in controlled customer outages during extended periods in which low output from

weather-dependent renewable resources is coupled with high demand, especially during situations involving extreme weather, such as winter storms and certain summer weather patterns. While batteries can help cover short gaps in output from weather-dependent renewable resources, existing batteries fully discharge in a matter of hours at their maximum output, making them a poor substitute for dispatchable thermal generation in serving load during the longer gaps in output from weather-dependent renewable resources, which are likely to occur on a more frequent basis. For context, the development of gridscale batteries in the ERCOT Region in the past five years-totaling almost 15,000 megawatt hours of energy storage capability—has only resulted in the equivalent energy delivered of a single large gas-fired combined cycle plant running for approximately 12 hours. Consequently, dispatchable thermal resources will remain a vital part of the resource mix for the foreseeable future, and it therefore would be beneficial for the federal government to reconsider regulations that disincentivize or otherwise hinder the operation and upkeep of existing dispatchable thermal generation and the development of new dispatchable thermal generation. The Texas Legislature has introduced a state-level incentive to put dispatchable megawatts on the grid quickly through the Texas Energy Fund, which is administered by the PUCT.

The Honorable Rick Allen (R-GA)

1. Nearly twenty percent of our nation's electricity is generated by 94 nuclear reactors. Constructed forty to fifty years ago, these reactors represent enduring assets that continue to deliver significant value long after the visionary decisions to build them were made. Today's market conditions, however, would likely discourage companies from pursuing such generational investments. As states grapple with rising power demands, they are seeking innovative tools to drive the deployment of next-generation nuclear facilities.

a. How can these potential state actions fit within your markets?

Four nuclear units at two generation plants operate in the ERCOT Region today—namely, Comanche Peak in Glen Rose, Texas, and the South Texas Project in Bay City, Texas. ERCOT supports the addition of more nuclear facilities in the ERCOT Region. In August 2023, Texas Governor Greg Abbott directed the PUCT to establish a working group to identify means of eliminating impediments to the development of advanced nuclear reactors in Texas.¹⁷ Led by then-PUCT Commissioner Jimmy Glotfelty, the PUCT established the Texas Advanced Nuclear Reactor Working Group to perform this evaluation. Comprising over 100 stakeholders and nuclear experts, the working group collectively spent over 50,000 hours performing this evaluation and presented its conclusions in the report *Deploying a World-Renowned Advanced Nuclear Industry in Texas: Considerations and Recommendations for Action.*¹⁸ The report identified the

¹⁷ Available on the Governor's website at: <u>https://gov.texas.gov/uploads/files/press/Jackson, Kathleen_08.16.23.pdf</u>.

¹⁸ Texas Advanced Nuclear Reactor Working Group, PUCT Project No. 55421, Deploying a World-Renowned Advanced Nuclear Industry in Texas: Considerations and Recommendations for Action (Nov. 18, 2024), available at: https://gov.texas.gov/uploads/files/press/TANRWG Advanced Nuclear Report v11.17.24c .pdf.

benefits of supporting advanced nuclear power in Texas and proposed seven recommendations for legislative action. The 89th Texas Legislature passed House Bill 14 to establish the Texas Advanced Nuclear Energy Office and invest \$350 million in grants to eligible nuclear construction projects to jumpstart next-generation nuclear development in Texas. By streamlining the nuclear development process so that development time and costs can be more competitive, these state actions move Texas to the forefront of advanced nuclear development and are anticipated to position the ERCOT Region for growth in this crucial baseload generation technology.

The Honorable Kathy Castor (D-FL)

1. This past winter, when much of the East Coast experienced record demand, wholesale electric prices soared to approximately \$700 in certain areas. In contrast, when ERCOT faced similar cold weather challenges, wholesale prices were dramatically lower than in other regions. Can you explain how the availability and amounts of wind, solar and storage resources in ERCOT helped to limit wholesale prices and helped maintain reliability in your respective regions?

Weatherization of all generation resources under standards promulgated by the PUCT¹⁹ helped ensure that all types of resources remained operational and available to serve demand during the cold weather event, which—in addition to effective demand response provided by industrial loads—helped maintain system reliability. The strong wind that accompanied ERCOT's recent periods of cold weather also helped limit wholesale prices, but there is no guarantee that future cold weather events will include strong wind, particularly during cloudy or nighttime conditions when solar production is reduced or nonexistent.

The Honorable Scott Peters (D-CA)

1. Have you experienced permitting delays that this committee should better understand? What are some key/important examples?

While ERCOT does not own generation or transmission facilities and therefore is not generally involved in permitting processes, ERCOT is impacted by the outcomes of these processes. The transmission permitting process in Texas is highly efficient, with a 180-day statutory deadline for the PUCT to grant or deny CCNs for transmission facilities. Consequently, ERCOT has not generally been impacted by permitting delays with respect to transmission facilities. In regard to permitting delays for generation facilities, any streamlining or expediting of permits provided by the Nuclear Regulatory Commission for development of nuclear generation facilities would be beneficial in supporting the development of this key generation type.

¹⁹ See 16 Tex. Admin. Code § 25.55.

2. What laws (on permitting specifically, but also planning, siting, interconnection, cost allocation, etc.) should be changed/amended/improved with regard to permitting?

Based on ERCOT's experience with the transmission siting and permitting process overseen by the PUCT, state-level permitting has proven to be a highly effective way to develop and construct transmission facilities. Consequently, any permitting-related changes at the federal level should focus on maintaining and enhancing state autonomy in the permitting arena. However, ERCOT has occasionally encountered scenarios in which relief in the form of an order issued under section 202(c) of the Federal Power Act²⁰ was necessary to ensure limitations contained in emissions permits did not jeopardize reliability during periods of anticipated high demand or severe weather.²¹ Consequently, the permitting process and regime for generation resources should be reformed to maximize the operational flexibility of dispatchable thermal resources, which are (and will remain) crucial to ensuring system reliability.

3. What are your specific challenges when it comes to planning and cost allocating high voltage transmission lines?

High voltage transmission lines, such as the 765-kV voltage level approved in May 2025 by the PUCT for use as export/import paths between West and Central Texas in the Permian Basin Reliability Plan²² and anticipated to be used in Central and East Texas under the 765-kV STEP plan,²³ are expected to complement the existing 345-kV transmission network to act as backbone grid lines that more efficiently transfer higher amounts of power between areas of the ERCOT Region with less right of way required and lower amounts of line losses. Higher-voltage transmission lines should be evaluated in planning processes based on their ability to move power regionally and on the increased resilience they offer.

Cost allocation of transmission investments in the ERCOT Region is established by statute in PURA § 35.004(d)–(d-3) and is regulated by the PUCT. Cost allocation of transmission in the ERCOT Region does not vary based on voltage level, with the exception of allowances for transmission-level generation interconnection costs.

²⁰ 16 U.S.C. § 824a(c).

²¹ See, e.g., <u>https://www.ercot.com/services/comm/mkt_notices/M-C090723-01</u>.

²² See Reliability Plan for the Permian Basin Region under PURA § 39.167, PUCT Project No. 55718, Second Order Approving the Reliability Plan for the Permian Basin Region (Apr. 24, 2025).

²³ More information on the 765-kV STEP is available in ERCOT's January 2025 report available on ERCOT's website at: 2024-regional-transmission-plan-rtp-345-kv-plan-and-texas-765-kv-strategic-transmission-expans.pdf.