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#### PUC PROJECT NO. 55718

# RELIABILITY PLAN FOR THE§BEFORE THEPERMIAN BASIN UNDER PURA § 39.167§PUBLIC UTILITY COMMISSION§OF TEXAS

#### LCRA TRANSMISSION SERVICES CORPORATION'S RESPONSE TO QUESTIONS FOR COMMENT

#### TO THE HONORABLE PUBLIC UTILITY COMMISSION OF TEXAS:

LCRA Transmission Services Corporation (LCRA TSC) submits these comments and executive summary in response to Commission Staff's questions on the Reliability Plan for the Permian Basin.

#### I. INTRODUCTION

LCRA TSC is one of the largest transmission service providers (TSPs) in the Electric Reliability Council of Texas (ERCOT) region, owning or operating more than 5,000 miles of transmission lines and facilities in more than 440 substations. LCRA TSC has actively participated in the development of the Reliability Plan for the Permian Basin with ERCOT staff and other key stakeholders since work on it began. In addition to providing load forecast data, cost estimates for the local transmission projects and 345-kilovolt (kV) import paths, and other information to support ERCOT's studies, LCRA TSC has participated in more than a dozen meetings related to the Permian Basin Reliability Study with ERCOT, affected TSPs, and other key stakeholders since late 2023.

LCRA TSC has extensive experience developing, planning, certificating, constructing, and operating high-voltage transmission projects throughout ERCOT, including in the Permian Basin region. In the ERCOT Delaware Basin Load Integration Study, a precursor to this effort, LCRA TSC had significant scope in the first two phases of the identified system improvements:

 LCRA TSC and South Texas Electric Cooperative (STEC) have nearly completed the "Stage 1" upgrade of that plan, which will add a second circuit to the 112.1-mile Bakersfield to Big Hill 345-kV transmission line and will connect to seven existing or planned substations owned and operated by LCRA TSC. LCRA TSC is also in the process of constructing the "Stage 2" upgrade of that plan: a new 88-mile double-circuit 345-kV transmission line from North McCamey to Sand Lake, in partnership with Oncor Electric Delivery Company, and a new 68-mile double-circuit 345-kV transmission line from North McCamey to Bearkat, in partnership with Wind Energy Transmission Texas (WETT), both of which received critical designation from the ERCOT Board of Directors.<sup>1</sup>

Due to its significant presence in the Permian Basin and Delaware Basin regions, ERCOT identified LCRA TSC as having scope in the transmission solutions identified in the final Permian Basin Reliability Plan Study report—both local 138-kV and 345-kV projects as well as new, greenfield 345-kV, 500-kV, and 765-kV transmission import paths. LCRA TSC is ready, willing, and fully capable of executing any and all of these projects and appreciates the opportunity to continue supporting economic development generally—and the oil and gas industry in particular—during this period of unprecedent growth in ERCOT.

## II. RESPONSE TO QUESTIONS

## PLAN

Question 1:

Should the Commission approve a phased plan for the Permian Basin? In other words, should there be a first phase to be implemented by 2030 and a second phase to be implemented by 2038? Or should the Commission approve a single, complete plan? Response:

A single, complete plan approving all the transmission system improvements needed to meet forecasted demand in the Permian Basin through 2038 is the most efficient and effective way to meet the Legislature's mandate. If the Commission adopts this approach, LCRA TSC recommends that it endorse the 345-kV import paths, rather than the 500-kV or 765-kV alternatives presented for consideration in ERCOT's study. Leveraging a tried and true technology, which is also shown to be the lowest cost alternative, is the best way to expedite the required buildout. A

<sup>&</sup>lt;sup>1</sup> The Commission issued final orders approving these projects in December 2023. See Joint Application of LCRA Transmission Services Corporation and Oncor Electric Delivery Company LLC to Amend Their Certificates of Convenience and Necessity for the North McCamey-to-Sand Lake 345-kV Transmission Line in Crane, Crockett, Pecos, Reeves, Upton, and Ward Counties, Docket No. 55121 (Dec. 1, 2023); Joint Application of LCRA Transmission Services Corporation and Wind Energy Transmission Texas, LLC to Amend Their Certificates of Convenience and Necessity for the North McCamey-to-Bearkat 345-kV Transmission Line in Glasscock, Reagan, and Upton Counties, Docket No. 55120 (Dec. 14, 2023).

policy decision as impactful as introducing 500-kV or 765-kV facilities into the ERCOT region should not be made lightly or without a full evaluation of the costs and benefits. At this stage, the potential costs of 500-kV and 765-kV facilities are uncertain, as ERCOT used a proxy value that could depart significantly from ERCOT TSPs' actual cost estimates.

LCRA TSC is supportive of the direction ERCOT is pursuing with EHV, but is concerned that not enough information is known at this stage to commit to the higher voltage import path options. LCRA TSC looks forward to working with ERCOT and the Commission in the coming months to finalize that analysis and determine a path forward to successfully introduce these higher voltage facilities in ERCOT, should they prove to be needed.

A single, comprehensive 345-kV plan is also the alternative that best adheres to the procedural process and timeline the Commission identified in its December 14, 2023 Order Directing ERCOT to Develop a Reliability Plan for the Permian Basin Region. Specifically, the December 14 order requires the Commission to adopt a final order approving a reliability plan for the Permian Basin in September 2024, with the expectation that TSPs will follow with applications to amend their Certificates of Convenience and Necessity (CCNs) thereafter. By contrast, the 500-kV and 765-kV project alternatives would require further consideration and study, are based on assumed costs that may not be reliable, and introduce uncertainty into what is otherwise a well-established process for TSPs to certificate, construct, and operate transmission facilities in ERCOT.

# Question 2:

To expedite the buildout of import paths into the Permian Basin while research and discussion of the optimal use of an Extra High Voltage (EHV) network in ERCOT system is underway in Project No. 55249, should this reliability plan consider a mixture of 345 kV and EHV options?

# Response:

At this stage, LCRA TSC believes there is not sufficient information to support approval of a hybrid plan that includes some 345-kV improvements and some "EHV" options. LCRA TSC recognizes that there are challenges in approving a single, long-term plan when many questions remain unanswered, including questions about the impact of ERCOT's comprehensive evaluation of transmission solutions at voltage levels above 345-kV (i.e., the "ERCOT EHV Study"). This study is underway, but is not expected to be completed until later this year.

Rather than approve an arbitrary mix of 345-kV and "EHV" options, the Commission could bifurcate its approval of the local transmission projects and the import paths, as contemplated in Question 3 below. Alternatively, the Commission could approve the local transmission projects and the 345-kV import paths needed to meet the demand forecasted for 2038 by the September 2024 deadline, with the understanding that the results of the ERCOT EHV Study, once it is complete, could require a reconsideration of the import paths. Under that approach, the Commission could direct ERCOT to include, as part of its EHV Study, a complete evaluation of the 500-kV and 765-kV alternatives identified in the Permian Basin Reliability Plan Study and an analysis of how these 500-kV and 765-kV import path alternatives fit into a comprehensive EHV overlay across the ERCOT system. Ultimately, if the ERCOT EHV Study produces compelling evidence to support the construction of EHV facilities for the Permian Basin, the Commission has authority to modify the Permian Basin Plan. Should it choose to proceed in this manner, the Commission would need to provide clear instruction at the outset, as part of its final order approving the plan next month, regarding the process for incorporating 500-kV and/or 765-kV solutions into the Permian Basin Plan and the timeline on which the affected TSPs should proceed.

# Question 3:

What would be the impact to implementation of the plan if the Commission approves the plan for all the common local transmission projects to permit the utilities to expeditiously file CCN applications but delayed the approval of the import paths until after ERCOT completed its EHV Study in 2024? Please address in detail both the benefits and risks of this potential process.

#### Response:

A potential benefit of approving only the local transmission projects at the outset particularly those projects that do not implicate end points for import path alternatives—is that ERCOT and stakeholders could continue to evaluate the design of the import path alternatives as part of the comprehensive ERCOT EHV Study and the 2024 ERCOT Regional Transmission Plan, both of which are scheduled to be completed by the end of the year.

If the Commission opts to bifurcate approval of the local transmission projects and the import paths, it should direct ERCOT to undertake a comprehensive study of the marginal loadserving capacity and the marginal estimated cost for each import path voltage class under consideration, as well as for the individual import paths themselves. That would be the most effective and most transparent way to evaluate which import paths bring the greatest benefitswhich may include a mix of 345-kV and EHV solutions—while being mindful of the costs that ratepayers will bear for these system improvements.

A primary risk of this approach is the introduction of uncertainty to the process and timeline previously approved by the Commission in its December 14, 2023 order.

# AFFORDABILITY AND COST

Question 4:

With the understanding that the cost of these projects will be passed along to all the ratepayers in ERCOT, what considerations should the Commission address to minimize rate impacts? Are there any guardrails the Commission should implement?

Response:

As discussed in response to Question 2, LCRA TSC sees benefits in requiring ERCOT to conduct and publish a comprehensive cost-benefit analysis of each of the 345-kV, 500-kV, and 765-kV import path alternatives, should the Commission desire to pursue EHV alternatives. This analysis would highlight which import paths would bring the greatest benefit, relative to their TSP-estimated costs, and would be the most effective and transparent way to identify and evaluate the costs, benefits, and risks of import path alternatives.

Beyond this, LCRA TSC believes the Commission's existing processes and oversight over transmission cost of service rates are robust and well suited for addressing future rate impacts.

Question 5:

Are there specific costs not captured in ERCOT's study, such as reactive compensation devices, auto transformers for EHV if the Commission chooses EHV, and series compensation equipment? If so, what are those costs?

Response:

As discussed above, generic costs for 500-kV and 765-kV projects were assumed by ERCOT and do not reflect TSPs' input. With that caveat, and assuming that any and all necessary improvements to underlying 345-kV and 138-kV networks have been fully evaluated and identified by ERCOT, LCRA TSC is not aware of any "above and beyond" costs for the EHV options in ERCOT's final report.

#### Question 6:

In approving this plan, how can the Commission ensure cost effectiveness for the listed projects? Please explain in detail and specifically address risks and offer potential mitigation solutions relating to:

- a) Load forecast, because this will be the first time the Commission will rely on load forecast methodology based on PURA § 37.056(c-1).
- b) Cost estimates, because projects will not be vetted through ERCOT's Regional Planning Group, the stakeholder committee that regularly reviews proposed transmission projects.

#### Response:

a) Regarding loads, the Commission should determine if system improvements driven by non-oil and gas loads supported only by a TSP officer letter (i.e., "non-confirmed" loads) should be included, or if some degree of additional vetting or scrutiny should be applied. Local transmission upgrades that were developed specifically to serve these very large non-oil and gas loads may bias the selection of local transmission upgrades in a way that is not true for local transmission upgrades that are designed to serve oil and gas load (as supported by the comprehensive S&P Global load forecast, which considered the geography and geology of resource availability). The same could be true for the import path upgrades designed to serve load growth in the Permian Basin region more generally. This risk can be mitigated by evaluating the sensitivity of the local transmission projects to specific non-confirmed, non-oil and gas loads and will help mitigate the risk that certain local transmission projects could be "stranded" if these very large non-confirmed, non-oil and gas loads do not materialize in these specific locations.

b) Regarding costs, LCRA TSC believes that the cost estimates for 345-kV, 138-kV, and 69-kV transmission upgrades included in the Permian Basin Reliability Plan Study report have received an appropriate level of scrutiny and due diligence from ERCOT and stakeholders that is equivalent to what they would have received through the Regional Planning Group review process. However, the generic cost estimates for 500-kV and 765-kV transmission facilities were assumed by ERCOT without substantive TSP or stakeholder input and may warrant additional scrutiny to confirm their accuracy and completeness.

#### LCRA TSC COMMENTS

# CCN PROCESS

Question 7:

How should the Commission address any project in the plan in which more than one Transmission Service Provider can claim the legal right to build it?

Response:

The Legislature provided clear and unambiguous direction when it amended the Public Utility Regulatory Act in 2019 to codify long-standing practice in ERCOT defining which TSPs can be certificated by the Commission to build, own, and operate new transmission facilities. Specifically, the Legislature mandated that:

A certificate to build, own, or operate a new transmission facility that directly interconnects with an existing electric utility facility or municipally owned utility facility may be granted only to the owner of that existing facility. If a new transmission facility will directly interconnect with facilities owned by different electric utilities or municipally owned utilities, each entity shall be certificated to build, own, or operate the new facility in separate and discrete equal parts unless they agree otherwise.<sup>2</sup>

PURA is dispositive of the matter, and LCRA TSC is not currently aware of any disputes regarding which TSP is authorized to build, own, and operate the projects identified in the Permian Basin Reliability Plan Study report. Nevertheless, if competing claims to projects do presently exist or arise once the plan is approved, the Commission should direct ERCOT to expeditiously identify them and direct Commission Staff to open a docket to resolve the disputes. In each instance, the right to build, own, and operate the new facilities is a question of law and should not require referral to the State Office of Administrative Hearings (SOAH) or the development of an evidentiary record.

<sup>&</sup>lt;sup>2</sup> PURA § 37.056(e), *added by* Senate Bill 1938 (86<sup>th</sup> R.S.). Note that prior legal challenges to this bill in the non-ERCOT areas of Texas do not impact its application within ERCOT, as no challenge to the "intrastate ERCOT network" were raised). *See NextEra Capital Holdings, Inc. v. Lake,* 48 F.4th 306, 310 (5th Cir. 2022); *see also id.* (Elrod, J., concurring in part and dissenting in part) ("Today's holding about S.B. 1938 applies only 'to the interstate electricity networks in Texas (but not the intrastate ERCOT network)." . . . Because the majority opinion specifically excludes the intrastate ERCOT grid, I concur in much of the majority's opinion.")

#### Question 8:

Should the Commission consider any procedural changes to its traditional CCN process to account for the complexity and magnitude of the CCN cases? Response:

It will be helpful for the Commission to clarify in the final order approving the plan whether need for purposes of PURA § 37.056(c)(2) is being determined for all projects included in the plan, or whether need will be subject to contest in the TSP's CCN amendment application. It would significantly streamline the preparation of CCN applications and allow the parties to ensure that the statutory 180-day deadlines will be met if the issues in controversy are narrowed to the greatest extent possible.

# FINAL ORDER

## Question 9:

What, if any, specific items should the Commission's final order include to provide clear and consistent directions for the implementation of the plan to the TSPs, ERCOT, and Staff? Response:

First and foremost, the final order should identify with specificity which projects are included in the approved plan. The final order should also include, for all projects in the approved plan, the necessary findings of fact, conclusions of law, and ordering paragraphs supporting the Commission's determination that the project is "needed" for purposes of PURA § 37.056(c)(2), which can be referenced and relied upon in the affected TSPs' subsequent CCN applications. In addition, the Commission should provide guidance to the Office of Policy and Docket Management regarding expectations for the efficient processing of the CCN applications, including timelines for referral to SOAH.

#### **OPEN QUESTIONS**

#### Question 10:

What unintended impacts or risks might arise out of approving or implementing ERCOT's proposed plan? How could they be avoided or mitigated? Are there any lessons from the Competitive Renewable Energy Zones implementation that the Commission should consider?

#### Response:

The potential selection of EHV import paths should be balanced with the broader ERCOTwide EHV design considerations. A rushed decision on EHV import paths that fails to consider the broader, system-wide plan for EHV across ERCOT would be unwise.

When the Commission approves a reliability plan for the Permian Basin region, it should consider the unintended risks of approving EHV import paths that are not harmonious with the wider reliability needs of the ERCOT region. These risks can be avoided or mitigated (a) by asking ERCOT and stakeholders to work together to develop a more comprehensive cost-benefit analysis of the 345-kV, 500-kV, and 765-kV import path alternatives proposed in the Permian Basin Reliability Plan Study, and (b) encouraging ERCOT and stakeholders to continue to work together to develop reliability plans for different areas of the ERCOT region that will anticipate and plan for needs beyond the typical 5-to-7 year time-frame. In this project, the Permian Basin reliability plan can and should be designed to provide reliability for growing load centers in areas like central Texas, and an unintended impact of a rushed decision on EHV import paths is that it may constrain or limit future development of EHV and 345-kV transmission lines and facilities in other areas of the ERCOT region in ways that were not considered in the Permian Basin Reliability Plan Study.

#### III. CONCLUSION

LCRA TSC appreciates the Commission's consideration of these comments and looks forward to supporting the Commission's adoption of a reliability plan for the Permian Basin.

Respectfully submitted,

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#### PUC PROJECT NO. 55718

# RELIABILITY PLAN FOR THE§BEFORE THEPERMIAN BASE UNDER PURA § 39.167§PUBLIC UTILITY COMMISSION§OF TEXAS

#### EXECUTIVE SUMMARY TO LCRA TSC'S RESPONSE TO QUESTIONS

- A single, complete plan approving all the transmission system improvements needed to meet forecasted demand in the Permian Basin through 2038 is the most efficient and effective way to meet the Legislature's mandate. LCRA TSC recommends that the Commission endorse the 345-kV import paths, rather than the 500-kV or 765-kV alternatives presented for consideration in ERCOT's study. Leveraging a tried and true technology, which is also shown to be the lowest cost alternative, is the best way to expedite the required buildout.
- LCRA TSC supports the direction ERCOT is pursuing with EHV, but is concerned that not enough information is known at this stage to commit to the higher voltage import path options.
- If the Commission opts to bifurcate approval of the local transmission projects and the import paths, it should direct ERCOT to undertake a comprehensive study of the marginal load-serving capacity and the marginal estimated cost for each import path voltage class under consideration, as well as for the individual import paths themselves. That would be the most effective and most transparent way to evaluate which import paths bring the greatest benefits—which may include a mix of 345-kV and EHV solutions—while being mindful of the costs that ratepayers will bear for these system improvements.
- PURA is clear and unambiguous regarding which transmission service providers are authorized to build, own, and operate new transmission facilities in ERCOT. Nevertheless, if competing claims to projects do presently exist or arise once the plan is approved, the Commission should direct ERCOT to expeditiously identify them and direct Commission Staff to open a docket to resolve the disputes, post-plan approval.
- The Commission should clarify in the final order approving the plan whether need for purposes of PURA § 37.056(c)(2) is being determined for all projects included in the plan, or whether need will be subject to contest in the subsequent CCN proceedings.