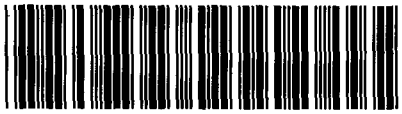

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REVIEW OF INCLUSION OF MARGINAL LOSSES IN SECURITY-CONSTRAINED ECONOMIC DISPATCH	§ § § §	**BEFORE THE PUBLIC UTILITY COMMISSION OF TEXAS**

INITIAL COMMENTS OF AUSTIN ENERGY

Austin Energy[1] files these comments in response to the request for comments issued by Commission staff on Aug. 9, 2018. Austin Energy appreciates the opportunity to offer its perspective on the effects of including marginal losses in security-constrained economic dispatch ("SCED") in the ERCOT wholesale electricity market.

Introduction

As a customer-driven organization, Austin Energy relies on the ERCOT market for two primary functions: fair market outcomes and exceptional reliability. In our view, incorporating marginal transmission losses in SCED will not significantly improve fair market outcomes or enhance reliability. While marginal transmission losses may better reflect the cost of moving power through ERCOT with the intent of incentivizing generation sited closer to load, the potential benefits do not outweigh the resulting cost shifting. ERCOT's transmission and generating resources were built, and have successfully matured, without adopting marginal transmission losses. The efficiencies gained from building generation close to load have been subordinated by design to capitalize on Texas' abundant resources in areas with low population, whether they be lignite coal, wind, or solar.

Absent protections for legacy resources and contracts, adopting marginal transmission losses at this late stage in ERCOT's market development will simply redistribute revenues among existing market participants. Despite decades of purposeful market design agreement and operational decisions based on that design, this would only serve to reward or punish generating

[1] City of Austin d/b/a Austin Energy

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companies for siting decisions made decades prior to today.[2] This seems to be an unfair system-wide outcome and while doing relatively little to enhance reliability.

Response to Specific Questions

Question 1: What are the benefits of implementing the use of marginal transmission losses rather than average transmission losses in the Electric Reliability Council of Texas (ERCOT) Security-Constrained Economic Dispatch (SCED) over the long term?

Austin Energy does not see an overall benefit to implementing marginal transmission losses in SCED over the long term. Marginal transmission losses would send more accurate price signals for the cost of moving electricity from generation to load. However, while it might be argued that this would help incentivize the building of generation closer to load, it does not appear that these price signals will be sufficient to substantially affect retirement and siting decisions. Other factors, including public acceptance, land costs near urban load centers, and variable costs of different generation technologies will likely continue to have the largest effect on siting and retirement decisions.

Question 2: Are the benefits identified in response to Question 1 sufficient to justify the near term costs to the market as a whole? Please consider individual stakeholder implementation costs as well as the costs to ERCOT identified in its study.

As stated above, Austin Energy does not see a substantial benefit to adopting marginal transmission losses. Given the sizeable share of renewable resources in ERCOT and the billions of dollars in CREZ and other transmission that was built to take advantage of their abundance, adopting marginal transmission losses will not produce the full intended benefits of pricing transmission losses accurately. At best, it may simply delay retiring units that are sited closer to load for a few more years, while not adequately addressing why these units are retiring in the first place. Austin Energy believes that the ERCOT market will continue to experience downward price pressure from renewables, and dispatch will not significantly change relative to today.[3]

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[2] Comments of Austin Energy, *Project to Assess Price-formation Rules in ERCOT's Energy-only Market*, Project No. 47199 at 3 (December 4, 2017).

[3] Comments of ERCOT, *Study of the System Benefits of Including Marginal Losses in Security-Constrained Economic Dispatch*, Pro.No.47199 (June 29, 2018).

Question 3: What are the effects on retail customers and the retail market from the implementation of marginal transmission losses?

Given current renewable resource technology, the higher costs of land closer to load centers, and increased customer demand, Austin Energy believes its renewable resources will continue to be located away from urban load centers. This is regardless of increased costs due to implementing marginal transmission losses. Austin Energy customers would likely see increased costs to current renewable contracts if ERCOT adopts marginal transmission losses. We see no significant changes in generation dispatch from implementing marginal transmission losses.

Question 4: The ERCOT study of using marginal transmission losses instead of average transmission losses in SCED simulated one year. How would cumulative, multi-year impacts of using marginal transmission losses be different, if at all?

A one year study is not sufficient to accurately reflect the results of adopting marginal transmission losses. Austin Energy would like to see an independent, third-party multi-year study completed to fully realize the multi-year impacts of implementing marginal transmission losses.

Austin Energy expects an incremental monetary benefit to generation sited closer to load. However, we do not see this as sufficient to incentivize building new local generation when uneconomic units are retired. We also expect an added cost to load for renewables that are not sited close to urban load centers. It does not appear that this cost will affect the continued build out of renewables given the favorable economics of renewable generation as well as customer demand.

Question 5: What costs would be incurred by market participants if marginal losses were implemented in the ERCOT market? Please provide an estimate of the costs that would be incurred by your company or companies or customers represented by your organization. Please describe the elements of those costs.

Austin Energy estimates that the costs incurred by market participants will largely be due to lower generation revenues for generation assets farther from urban load centers.

Austin Energy owns and operates thermal units, in addition to maintaining contracts for renewables, located far from urban load centers. We anticipate one of our older conventional power

plants — built close to our load — will see a small benefit from implementing marginal transmission losses. However, this benefit is not enough to keep the plant in service after it has met the end of its useful life. The unit will still be retired as planned. In addition, our long-term contracts for renewable generation will likely see decreased revenue, increasing costs to our customers.

If the Commission does decide to move forward with implementing marginal transmission losses, Austin Energy believes the Commission should direct an independent third party to provide a study to the market regarding the impact of marginal transmission losses in ERCOT over multiple years.

Question 6: How would a decision to use marginal transmission losses affect your company's market systems?

Austin Energy estimates that adopting marginal transmission losses will negatively impact our company's market systems. Austin Energy settlement systems will need to expand to handle new reports, new invoices, shadow excess revenue and updates for many other applications. Austin Energy believes the majority of the costs to implement marginal transmission losses will be borne by ERCOT. However, it is not clear how this market change would be implemented or whether the costs will be charged to market participants based on load share.

Question 7: How would a decision to use marginal transmission losses affect your company's internal operations?

Austin Energy may experience operational challenges to mitigate the risk in supplying our load. Adopting marginal transmission losses may also lead to a slightly different dispatch of Austin Energy units and slight changes in economics when selecting renewable generation for contract. Load Serving Entities like Austin Energy, cannot hedge the cost of marginal losses in a long-term auction. It increases the risk of supplying our load due to the adverse price movements introduced by marginal transmission losses.

Question 8: What are the effects on reliability on the ERCOT grid of using marginal transmission losses instead of average transmission losses in SCED?

Austin Energy observes that the market is operating as it was designed. Implementing marginal transmission losses will not have a significant impact on reliability. Given ERCOT's diverse generation mix, the improved price signals will not result in a significant change in dispatch. Adopting marginal transmission losses will not increase wholesale market revenues enough to decrease out-of-market reliability actions.

Question 9: What effects, if any, would marginal transmission losses have on grid hardening and resilience?

Austin Energy does not expect any appreciable impact on grid hardening or resilience.

Question 10: What effects would the use of marginal transmission losses in SCED have on grid reliability in regions of the ERCOT grid where non-synchronous generation is more prevalent?

Considering the strong customer demand and economic return for renewable resources, Austin Energy does not expect marginal transmission losses to slow the further build-out of wind and solar generation in ERCOT. We also do not expect that it will significantly impact siting of conventional generating resources.

Question 11: How would a decision to implement marginal transmission losses affect investment in new generation resources in ERCOT over the next five years, the next 10 years, and in the years beyond 10 years?

Given the abundance of renewable resources in ERCOT, Austin Energy expects the bulk of new investment to continue to be in solar, wind, and distributed generation, including the use of storage. Building large conventional generation close to urban load centers is generally difficult for many factors, such as higher real estate prices. Implementing marginal transmission losses will not send enough of a price signal to offset land prices or incent conventional generation to re-enter the market in a significant way.

Question 12: How would the implementation of marginal transmission losses affect the composition of the generation fleet in ERCOT?

Implementing marginal transmission losses may defer some near-term retirement decisions for conventional generation. However, Austin Energy believes it will not alter the current trend toward investing in renewable resources seen in the ERCOT market. It is expected that the ERCOT market will see continued investments in solar and wind and the development of commercially viable storage and distributed energy resources.

Question 13: Assuming the Commission decided to go forward with implementation of marginal transmission losses, what are the key issues related to determining the appropriate treatment and allocation of the marginal transmission loss surplus revenues?

The allocation of surplus revenue should consider the current market reality. Load is responsible for transmission costs and maintenance of the grid, thus any surplus should be allocated to load. The Commission should also take into account that a sizeable share of renewable resources have entered into contracts with ERCOT load under average line loss pricing. Implementing marginal transmission losses that would affect previously contracted energy transactions for distant renewable resources will result in a cost to those loads. Therefore, it is reasonable to allocate any loss surplus to load and existing contracts, renewable or otherwise.

Question 14: Does the ERCOT analysis of the benefits of including marginal transmission losses in SCED accurately measure such benefits? Are potential costs to the market or to market participants adequately accounted for?

Austin Energy believes the benefit may be overstated. Given the low offer prices for certain types of generation, the price signals do not appear to return the intended benefit as the dispatch of generating units will not significantly change.

Question 15: What ERCOT operational changes would need to be made that are not considered in ERCOT's studies?

If the Commission decides to move forward with implementing marginal transmission losses, Austin Energy believes that the Commission should direct an independent third party to provide a study of the market regarding the impact of marginal transmission losses in ERCOT over

multiple years. Such a study would better assess any needed operational changes that may not have been considered in prior studies.

Question 16: Would the use of marginal transmission losses in SCED change the ERCOT transmission planning process and transmission build-out?

Austin Energy believes that this question is best answered by ERCOT.

Question 17: Assuming that the implementation of marginal transmission losses results in the location of generation closer to load, what advantages and disadvantages would there be during an emergency event or a market restart to having generation located closer to load?

Implementing marginal transmission losses will not be sufficient to incentivize building new generation or black start resources. Black start is a service paid for by ERCOT and the market. The current black start process is not broken and working as intended.

Question 18: What effects, if any, would the implementation of marginal transmission losses have on the Congestion Revenue Rights (CRR) market?

Austin Energy believes that the ERCOT market will continue to experience downward price pressure from renewables and that dispatch will not significantly change relative to today.[4] Though marginal transmission losses may have limited impact on congestion patterns, Austin Energy strongly suggests that ERCOT give sufficient time to settle existing CRRs prior to the possible implementation of marginal transmission losses.

Question 19: How should the commission direct ERCOT to implement marginal transmission losses in a way that mitigates any deleterious effects on the CRR market?

ERCOT should refrain from implementing marginal transmission losses until a period that all current CRR positions have settled. That would allow market participants to factor in marginal transmission losses into bids and offer strategies.

[4] *Id.*

Question 20: Does your assessment of the incorporation of marginal transmission losses change based on the timeline of implementation?

The benefits of building generation close to load have been subordinated by design to capitalize on Texas' abundant resources in areas with low population, whether they be lignite coal, wind or solar. Had marginal transmission losses been implemented many years ago before significant amounts of renewable generation entered the market, then the market and its participants may have garnered some benefits. Given the amount of mature renewables already generating in ERCOT or coming online regardless of whether marginal transmission losses are implemented, a timeline for implementation may be an ineffective measure for an ineffective tool. Additionally, existing contracts that will be affected by a change in rules to the market should be honored.

Austin Energy agrees that the economic theory of incorporating marginal transmission losses is sound; however, the wholesale market has had nearly two decades to mature under a market design that does not include those losses in the real-time energy price. Billions of dollars of investment decisions have been made without that theory. Only now, when price pressures have compounded year-over-year, has this issue gained traction in an effort to claw back those decisions and create new winners and new losers without a clear net benefit.

Question 21: What are the effects of implementing both Real-Time Co-optimization (RTC) and marginal transmission losses on reliability and price formation?

RTC should reduce price spikes that occur due to less efficient dispatch and short-term ramping issues. However, RTC would not change price formations due to near-term scarcity within the market. Marginal transmission losses will increase value for generation assets closer to load centers while reducing the value for generation assets farther from load centers. However, this will not meaningfully change future generation investment and therefore its effects on price formation will vary regionally but will be minimal to the overall market.

Question 22: Are there any synergies that may result from contemporaneous adoption of both RTC and marginal transmission losses?

Austin Energy does not believe that implementing marginal transmission losses will produce its intended benefits. Thus, the market will not realize any meaningful synergies resulting from contemporaneous adoption with RTC.

Question 23: What are the effects on retail customers and the retail market from the implementation of both RTC and marginal transmission losses?

The effects on retail customers and the retail market from RTC should result in lower overall annual energy costs after the initial implementation costs are absorbed. The effect on retail customers and the retail market from marginal transmission losses will vary by region and appear to result in a cost without clear or significant benefit.

Conclusion

Austin Energy believes that the ERCOT energy-only market is working well and does not support implementing marginal transmission losses in SCED. Fair market outcomes call for predictability when making long-term market decisions. Adopting marginal transmission losses in ERCOT at this late stage will undoubtedly pick new winners and losers based on past decisions, and may have a chilling effect on major market investments moving forward in a market that is already suffering from a lack of investment. Even minor changes to a market that is working efficiently may have unintended consequences, creating uncertainty for all market participants.

Adopting marginal transmission losses will not enhance reliability as intended by siting generation closer to load or sending an adequate price signal to invest in new conventional generation. If the Commission seeks to promote reliability objectives in ERCOT with efficiency of pricing, Austin Energy would instead recommend a re-examining of several ideas proposed in *Commission Proceeding to Ensure Resource Adequacy in Texas*, Project No. 40000.

All market participants have played by and relied on the same set of rules for almost two decades. One has to question the fairness of changing those rules now and whether such a change would assist customers that are already benefitting from historically low prices. Should the Commission elect to adopt marginal transmission losses, however, Austin Energy would

recommend the Commission impose a long enough timeframe for the rule to become effective to allow for the natural conclusion of pre-existing positions, whether bilateral energy trades, power purchase agreements, or physical or financial hedges.[5]

Austin Energy greatly appreciates the opportunity to offer its perspective and recommendations on this project. We look forward to continuing to work with the Commission and other parties as this project moves forward.

Respectfully submitted,

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[5] Comments of Austin Energy, *Project to Assess Price-formation Rules in ERCOT's Energy-only Market*, Project No. 47199 at 8 (December 4, 2017).