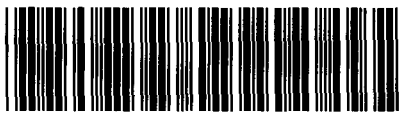

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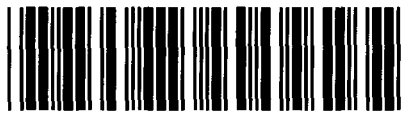

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PROJECT NO. 48539

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

COMMENTS FROM THE WIND COALITION

TO THE HONORABLE PUBLIC UTILITY COMMISSION ("COMMISSION") OF TEXAS:

COMES NOW, The Wind Coalition ("TWC"), and submits its answers to questions in the above-referenced proceeding pursuant to the request of Commission Staff. The Wind Coalition ("TWC") appreciates the Commission's thoughtful deliberation of this matter.

I. INTRODUCTION

The members of TWC represent a broad range of interests in the Texas electric market including significant investment in wholesale generation, transmission, and the retail electric market. TWC members are committed to supporting the continued success of the ERCOT market and believe that the proposal to include marginal losses in security constrained economic dispatch ("SCED") and the associated uncertainty surrounding the implementation of this proposal will lead to outcomes that are harmful for consumers in Texas and the majority of ERCOT market participants.

Marginal loss allocation is a fundamental change in the market that is not only inconsistent with nearly twenty years of Texas policy but if implemented, will undermine the very foundation of Texas' energy-only market by creating regulatory uncertainty by retroactively affecting prior investment decisions to the detriment of asset owners that bore the risk of developing generation in ERCOT. Regulatory certainty is critical to efficient investment and retirement decisions, particularly in an energy-only market. Material changes to market design should address specifically identified short-comings accompanied with well-defined goals and objectives that are cost-justified and consistent with state policy goals. To date, this threshold has not been met, in other words, no material issue has been identified as the short-coming or overriding benefit that the implementation of marginal losses in SCED would resolve.

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Given ERCOT's current situation it is important to maintain market signals to ensure adequate generation resources. According to a study conducted by the Brattle Group, implementing marginal losses in ERCOT decreases generator net revenue by $239 million annually impacting most generators and enriching a few. An ERCOT study revealed similar news for existing generators identifying generator net revenue loss of $212.5 million annually. Implementing any market change that significantly reduces generator net revenue while looking to developers to build more assets in ERCOT is counterintuitive. Such impacts to existing generation resources would negatively impact much of the ERCOT generation fleet which is located remotely as well as increase regulatory uncertainty. Such a signal could have a chilling effect on generation financing and investment. For these reasons, TWC opposes the implementation of marginal losses in SCED and believes the Commission should carefully consider the risks and unforeseeable outcomes before moving forward with this proposal.

II. Response to Questions

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?

Answer:

Currently, ERCOT's dispatch decisions are based upon the marginal cost of generation facilities and their congestion impact on the grid, irrespective of marginal losses. Lower cost generation is dispatched first without regard to the distance between the generator and load. This is in alignment with nearly twenty years of Texas policy designed to encourage the siting of more efficient, lower cost generation resources. It was in Senate Bill 7 that the Texas Legislature statutorily created the use of postage stamp pricing for transmission service in the ERCOT region, eliminating the distance sensitive component of transmission pricing and requiring that Load pay for the cost of transmission. Dovetailing this statutory provision, is the policy of postage stamp pricing for losses. Since its implementation, as generation developers invested billions of dollars in the ERCOT market, siting decisions were made with reliance on these policies. Regulatory certainty is a key component to the success of any competitive market

particularly in an energy-only market where the generation developer wears the risk without any certainty of a return on investment. To change the rules, knowing that a generator cannot simply pack up the iron and relocate their asset, would negatively impact the economics of existing generation and send the wrong message to the investment community. Any short-term benefit deemed as a gain should be measured against the reality of the long-standing ERCOT market structure and the importance of regulatory certainty.

The very near-term benefits of implementing marginal losses in SCED include the premise of providing more accurate price signals to generators when making siting decisions. Prospectively, that might be a benefit worth considering, however, to apply this policy retroactively would likely be harmful to existing generation built under the current market rules. The Brattle study demonstrates that a majority of ERCOT generators collectively stand to lose approximately $239 million in annual net-revenue. The ERCOT analysis indicates a reduction in generator net revenue of nearly $212.5 million. Presently, there are already high hurdles to meet for securing the necessary financing for building new generation assets in ERCOT, the impact of increasing regulatory uncertainty should be carefully considered.

There is no guarantee that the purported benefits of improved siting of new generation, lower congestion costs, and lower transmission investment will come to fruition. Theoretically, higher LMPs associated with marginal losses might send an economic signal that incentivizes generation investment in Houston or near other load centers. However, environmental permitting challenges, more costly economics, community opposition, and other factors led to the remote location of much of ERCOT's generation and continue to be present as developers consider where to site new generation, despite the higher LMP. Therefore, what does the market gain, other than under marginal losses allocation a few existing generators, primarily those located near Houston, will be enriched with higher dispatch frequency and will also be the beneficiaries of higher net-revenues stemming from the wealth transfer from almost all other generators who will realize a $239 million reduction in annual net-revenues. The long-term gains are simply not outweighed by the short and long-term risks particularly when billions of dollars of investment have already been committed under the current long-standing market construct

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.

Answer:

The cost imposed on most generators and the subsequent ramifications of this type of shift in policy are dramatically higher than the negligible benefits. Although economic theory would suggest that marginal losses could improve efficiencies of production at the margin, this by no means provides a certain benefit to consumers. The efficiency improvements are narrowly tailored to benefit a few generation resources located near Houston, and they are obtained at the cost of unnecessary disruptions and investor confidence in the overall energy market.

The ERCOT and Brattle Group studies on the impact of marginal losses have both shown a minimal change in production costs, only relatively modest decreases in costs to consumers, and equally modest reductions in overall system transmission losses. The decrease in the cost to consumers would not be uniformly allocated across all consumers. Some consumers will see a reduction in costs while others will receive an increase in costs. TWC believes any potential financial benefit that some consumers may receive would be negligible compared to the harm that will arise if marginal loss allocation leads to further erosion of ERCOT's reserve margin particularly, if the reallocation of generator revenue that occurs with the implementation of marginal losses triggers additional generator retirements.

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

Answer:

ERCOT's study indicates that consumers may realize a benefit from the implementation of marginal losses in SCED ranging from $76 MM to $170 MM. However, it is important to note that multiple studies have shown that the savings is not uniformly allocated across all consumers. In fact, consumers in major economic hubs of the state could be deprived of accessing the lowest-cost energy and ultimately endure higher energy costs. It would be highly speculative to draw conclusions based upon ERCOT's single year analysis because it does not

address other second order effects that may arise from marginal losses implementation. The impact of lower generator revenues on generator retirements, reserve margins, reliability, and prices could cause significant adverse impacts on customers as well as the wholesale and retail markets. This could place even more financial burden upon generation assets that are already struggling to survive in the current market giving way to more unexpected retirements.

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?

Answer:

A static one-year analysis of the impact of marginal losses in SCED will not demonstrate the cumulative, multi-year impact that market participants and consumers will experience. The ongoing redistribution of generator net-revenue from generators in the North and West Zones to generators located primarily in the Houston and South Zones will have unintended consequences that are not knowable or foreseeable in a one-year analysis. It is an open question as to how generators will respond to the effects of marginal losses and how that response will impact reliability and generator retirements. The true market cost of these retirements and the cost of mitigating the reliability impacts that new retirements create will not be captured in a study that simulates just one year. Until this is quantified, it is not possible to know the true long-term impact to consumers.

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.

Answer:

The Brattle Study estimates that the implementation of marginal losses in SCED would result in a massive wealth transfer whereby a majority of ERCOT generators will lose approximately $239 million in annual generator net revenues and coastal generators, mainly those located in

the Houston area, will receive the bulk of the wealth transfer between generators. Wind generators in ERCOT would experience a reduction in annual net revenue of approximately $151 million. It is important to note that the Brattle study, as well as ERCOT's study, found that marginal loss implementation will have no impact on wind generation output.

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

Answer:

It is unclear at this time how marginal loss implementation may fully impact TWC member systems. It is likely that modifications would be necessary to various member company market systems including risk management, shadow settlements, accounting and retail pricing and billing systems.

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

Answer:

The internal operations of most existing asset owners would be negatively impacted as a result of reduced economics, lower return on investment and reduced revenues. The potential finance and development of new generation assets of all types will face new challenges under marginal losses because of a higher threshold to meet the same return on investment.

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

Answer:

ERCOT's modeling of the impact of marginal losses in SCED raises significant reliability concerns because in each area of ERCOT, but for Houston, there are significant adders to generation resources. ERCOT's own marginal losses study concluded that total generator revenues in these areas decline by over $212.5 million in a single year if marginal losses are implemented.

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

Answer:

To the extent marginal loss implementation made some generating resources uneconomic it is possible such resources could be mothballed or retired. Transmission company efforts to harden the grid should not be affected.

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?

Answer:

Synchonous and non-synchronous generation locate remotely from load centers for many reasons such as emission limitations, available transmission and access to fuel supply. Marginal loss implementation could provide a disincentive for resources providing local voltage control to locate in these areas.

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?

Answer:

PA Consulting's Study evaluated the impact of marginal losses on future investment in generation between 2018 and 2037 and found that marginal losses implementation produces no additional combined cycle capacity, suppresses investment in both wind and solar generation, raises production costs by $5.1 billion, eliminates nearly $4.6 billion in production cost savings and reduces overall installed capacity by almost 2 GW.

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

Answer:

The composition of the fleet of generation resources in ERCOT will likely change if marginal losses are implemented. The Brattle Study indicates that while marginal loss allocation would have no impact on renewable generator output, there is a shift of thermal generator dispatch in favor of the Coastal Weather Zone. The impact of this shift in dispatch is not fully quantified, however the possibility that generators in the non-Coast Weather Zones may become uneconomic spurring additional retirements and reductions in fuel diversity is problematic.

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?

Answer

If the Commission goes forward with the implementation of marginal losses, an equitable allocation of the substantial over-collected revenues would be an important policy question for the Commission to determine.

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?

Answer:

The ERCOT analysis of implementing marginal losses does not fully identify all the benefits and risks. Further, the ERCOT study only looked at a single year. A policy change of this magnitude should be studied in a more comprehensive manner covering multiple years into the future under varying scenarios. It is difficult to determine the true impact to market participants, particularly consumers.

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

Answer:

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

Answer:

The implementation of marginal losses will change overall power dispatch, power flows and generation resource mix. It is likely that these changes will require additional transmission builds to support reliable operations.

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?

Answer:

Siting additional generation closer to load reduces the benefits of having a geographically diverse resource mix and provides little if any benefit during an emergency. More generation would be susceptible to individual grid events leading to an increased amount of procurement of contingency resources. Remote areas could be increasing exposed to a lack of black-start capability.

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

Answer:

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

Answer:

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

Answer:

No.

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

Answer:

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

Answer:

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

Answer:

The Wind Coalition appreciates the Commission providing us the opportunity to respond to staff's questions.

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