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**SIERRA
CLUB**

LONE STAR CHAPTER

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PUBLIC UTILITY COMMISSION
FILED CLERK

PROJECT NO. 48539

**Review of the Inclusion of Marginal
Losses in Security Constrained
Economic Dispatch**

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**PUBLIC UTILITY COMMISSION
OF
TEXAS**

**COMMENTS OF LONE STAR CHAPTER, SIERRA CLUB REGARDING
PROPOSAL TO INCLUDE MARGINAL LOSSES IN ENERGY MARKET**

The Lone Star Chapter of the Sierra Club is pleased to offer these brief comments on the discussion about including marginal losses in SCED, thus impacting market prices and potentially location decisions. Sierra Club is a member of ERCOT and participates in several committees at ERCOT, including the Reliability and Operations Subcommittee. We do not believe there is a reliability reason to include marginal losses in the LMP price, but this proposed project is intended to review whether including marginal losses (rather than average transmission loss) over the long-term would be an improvement for the market. We have carefully reviewed the study produced by ERCOT on June 29th, 2018 and our main conclusion is that the juice is not worth the squeeze.

According to the ERCOT study, the main benefits of including the marginal line loss in pricing would be -- in a base case - to save about 0.12% in production costs, reduce overall costs by 0.25%, decrease generator revenues by some 1.75% and save consumers about one percent overall. However, there would be significant geographic impacts depending on where generation was located. Thus, broadly speaking, generation located in the South and Houston area would enjoy slightly higher revenues, while generation located in the North and West would get paid less. Thus, there would be a geographic redistribution of wealth among some generation units from West and North to South and East. While this could in theory lead to an incentive for more location of generation in population pockets in Houston and South Texas, the same analysis did not find major

changes as the changes in revenue were not sufficient to incent new builds in these areas. In addition, the study found increased start-up costs and make-whole payments, which are out of market mechanisms. Thus, the main impact in the medium term would be a slight consumer savings (theoretically), and a redistribution of revenues among generators.

However, the downsides are significant. First it would undermine the nature of Texas's market. Essentially, we have created a "plug-and-play" giant system where generators are free to locate anywhere they can reasonably interconnect and take advantage of existing transmission lines, resources like coal mines, gas lines, good wind or solar, and water resources needed for steam generation or cooling. In essence we have created one giant bathtub where hundreds of spouts pour water (ie electricity) into the bathtub, and drains (loads) then take out that electricity. Marginal line loss would pick winners and losers.

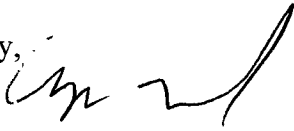
Second, even with marginal line loss being included in energy prices, as the analysis shows the impact will not be great in terms of what gets built in Texas. Thus, economics still favors increased investment in wind and solar -- which by their nature will locate where these resources are most abundant which are often many miles from load pockets. There are not likely to be new coal and nuclear power plants installed in ERCOT because of high upfront, regulatory and operating costs, while other resources like gas and storage may be built. But even gas plants might choose not to locate very near major load pockets because of environmental regulations that increase in non-attainment areas, or because of opposition from local neighbors. Thus, the main impact of marginal line loss is likely to just favor some existing generators that already happen to be located near load centers in Houston and South Texas.

Furthermore, many existing contracts with load serving entities, commercial and industrial customers and retail electric providers were entered into without inclusion of marginal line loss as part of the calculation. As an example, many public utilities and major corporations have long-term PPAs with wind and solar providers. While every contract is different, essentially the load-serving entity, industrial or commercial consumer or REP pays a per MWh fee, while the developer may enjoy any tax benefit offered at the federal level. The customer generally also receives any LMP that the resource is settled at at a particular node, which helps lower the overall cost to the customer. Trying to suddenly add a marginal line loss to these existing contracts would not be beneficial to the market.

The Lone Star Chapter of the Sierra Club does not favor a change in our ERCOT market to suddenly incorporate marginal line losses in our energy prices. We believe that there are benefits to generation locating close to load, but a better way to accomplish this would to better incorporate demand response and distributed generation resources into our market. Allowing distributed resources and demand response to more fully participate

in SCED would tend to favor generation -- or decreasing energy use -- that is tied closer to load without disrupting our "bathtub" or impacting existing contracts.

Sincerely,

A handwritten signature in black ink, appearing to read "Cyrus Reed", written in a cursive style.

Cyrus Reed
Conservation Director, Sierra Club
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