Public Utility Commission of Texas

Memorandum

TO: Chairman Donna L. Nelson
Commissioner Brandy Marty Marquez

FROM: Commissioner Kenneth W. Anderson, Jr.

DATE: December 17, 2014

RE: **Open Meeting of December 18, 2014, Agenda Item No. 19, Project No. 42302** – *Review of the Reliability Standard in the ERCOT Region*

In my original memorandum on this topic I proposed that "we should first analyze the appropriateness of the Electric Reliability Council of Texas' (ERCOT) reliability standard and whether a change in that reliability standard is warranted." [1] However, in the latest memorandum filed by Commission Staff[2], it appears to me that Staff is putting the cart before the horse, or at least laying out a plan to determine the number and breed of horses to buy before we have even decided the kind of cart that is needed. For example, in Staff's memorandum nearly every request for comment in some way deals with "reserve margin" issues. But an installed capacity reserve margin is not a reliability standard, and a reserve margin does not ensure an electric system's reliability standard is achieved, cost-effective or even economically rational. Accordingly, for the reasons discussed below, I believe that Staff's focus on installed capacity reserve margins is premature given the current status of this project.

To date, Staff has examined the history of reliability standards in the U.S. as well as in ERCOT.[3] Staff also has examined existing reliability standards in the U.S. and Europe, including the rationale, if any, underlying the reliability standard.[4] This is an excellent starting point for analyzing the appropriateness of ERCOT's existing one-in-ten year loss of load event (0.1 LOLE) standard. We now need to ask ourselves tough questions. How and why did ERCOT pick its current standard? What was the underlying rationale for the choice of the ERCOT standard? What are the fundamental economic and other factors necessary to consider when choosing a reliability standard? The rationale for the 0.1 LOLE standard is not clear. Was the standard just passed down through the mists of time from the era when electricity markets did not exist or from a time when major metropolitan areas of the state were not interconnected and each utility just used its own rule of thumb? Whatever its origins, for every reliability standard that we consider, this Commission must be able to explain how a particular standard is a useful, rational and cost effective way to measure reliability. Only then will the Commission be able to

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[1] Memorandum of Commissioner Kenneth W. Anderson, Jr., *Commission Proceeding to Ensure Resource Adequacy in Texas*, Project No. 40000, (February 5, 2014) at 2.
[2] Memorandum of Public Utility Commission of Texas Staff, *Review of the Reliability Standard in the ERCOT Region*, Project No. 42302, (December 11, 2014).
[3] Staff, *supra* note 2, at 1.
[4] *Id*.

compare each reliability standard to determine whether a change in ERCOT's reliability standard is warranted.

Therefore, we should first analyze the appropriateness of ERCOT's reliability standard, whether that reliability standard should be changed and, if so, how?[5] Although we have started down that path, we have neither (1) analyzed the appropriateness of ERCOT's existing standard nor (2) determined whether a change is warranted. While work in this area has occurred, Staff has made no formal presentation or recommendation as to reliability standards and the Commission has made no decision regarding these key points.

So where are we in this project? The ultimate objective of this project is to make an informed decision regarding a reliability standard for ERCOT. Each reliability standard under consideration should be defined, its underlying rationale clearly explained, its advantages and disadvantages and its costs and benefits set out, and, finally, its practical effects on electric consumers within ERCOT established. In this way can we compare the various reliability standards so that this Commission can determine which reliability standard is appropriate for ERCOT. Only after we have completed the side-by-side comparisons, selected a particular reliability standard based upon informed criteria and articulated the rationale for its choice, should we focus on the installed capacity reserve margin necessary to meet the reliability standard and address the issue of the nature of ERCOT's reserve margin. Personally, I believe the Brattle Group made a compelling case to abandon the 0.1 LOLE standard in their report, *Estimating the Economically Optimal Reserve Margin in ERCOT*[6], but I also believe that we are not yet at the stage in this project to make that decision.

I look forward to discussing all of these issues at the open meeting.

[5] Anderson, *supra* note 1, at 2.

[6] Sam Newell, et al., *Estimating the Economically Optimal Reserve Margin in ERCOT* at 42 (Jan. 31, 2014). "We recommend adopting normalized EUE as a preferred reliability metric for setting the reliability standard because it is a more robust and meaningful measure of reliability that can be compared across systems of many sizes, load shapes, and other uncertainty factors. Such a cross-system comparison is not meaningful for either LOLE or LOLH because neither metric considers the MW size of the outage endured nor the size of the system itself." For detailed discussion *see,* Section III.A.1. Physical Reliability Metrics, pp. 40-45.