

July 10, 2012

Testimony Submitted to the Texas Senate Business and Commerce Committee  
Comments of Jeffrey Clark, Executive Director – The Wind Coalition

Mr. Chairman and Members of the Committee,

Electricity production harnessing the immense power of Texas wind is expanding and continues to provide much-needed generation capacity while helping to hold down the cost of electricity for consumers across our state. The expansion of the industry harnessing this clean, renewable resource is contributing to our state's economic development and the growth of our manufacturing base.

Over the last decade, Texas' installed wind energy capacity has expanded dramatically and today has more than 10,000 MW of installed capacity. With Texas' enviable position as the fastest growing state in the nation comes a growing need for energy to fuel our economy, and the supply of wind energy is growing with it. Recently, the Electric Reliability Council of Texas (ERCOT) set a new wind-power output record of 8,368 MW at which point wind energy was supplying 17.64% of the total system load, which was 47,452 MW.

As Texas looks at the issue of resource adequacy to meet our needs for electric power, it has frequently been noted by witnesses before this committee that there is no "silver bullet." We need a diverse generation fleet that maximizes the impact of all available generation technologies to meet our state's needs. Wind energy, sometimes called "intermittent", can be more accurately described as "variable", as it ramps up and down with a certain level of predictability over the course of a day. variable This variability, however, it is a critical contributor to the state's overall power supply and, on an annual basis, contributes greater than 8.5% of the total system load at low cost to consumers. Moreover, the increased presence of wind as a critical component of the Texas energy mix has resulted in reductions in wholesale prices as documented in previous PUCT reports to the Legislature. And, because the fuel cost of Texas wind will always be zero, in the longer term wind energy helps to provide price stability that benefits all consumers.

As part of this committee's role in providing effective policy oversight to the functioning of the ERCOT market, you have been asked to examine whether ERCOT protocols provide advantages to select generation types. As a general matter, The Wind Coalition believes that existing ERCOT protocols appropriately recognize the unique characteristics of different generation technologies with no resulting competitive advantage or disadvantage for any one type of generation. The ERCOT protocols are not designed to advantage any one generation source, but rather to ensure the dispatch of the most efficient and lowest-cost resource, which has made the Texas market one of the most vigorously competitive markets in the nation.

Moreover, The Wind Coalition believes that the current process at both the PUC and ERCOT provide the technical resources and flexibility needed to respond to changes in the ERCOT market and to encourage

energy storage and other innovative technologies. These organizations and their staffs are uniquely capable of weighing the highly complex and technical issues that such revisions create with ongoing policy oversight from this committee.

The Wind Coalition would additionally offer the following observations to assist the committee in its consideration of this interim charge:

- ERCOT protocols do recognize inherent differences in different generation technologies.** As ERCOT CEO Trip Doggett notes in his testimony presented to the committee, this is not limited to wind. Just as a nuclear plant will be the last resource required to power down under ERCOT protocols because a nuclear power plant is not designed to cycle rapidly, ERCOT protocols recognize that wind and solar are inherently dependent on weather due to the nature of the technology. Therefore, the ERCOT protocols provide slightly higher tolerances for deviations from schedule by variable generators. This does not result in any competitive advantage to wind or other variable resources, but simply recognizes the nature of the resource to ensure optimal functioning of the market. Moreover, it should be noted that where curtailment is required to ensure system reliability, wind and other variable resources are held to the same standard as any other type of generation.

As storage and other new technologies come online, The Wind Coalition shares the view expressed by Association of Electric Companies of Texas (AECT) that it will be important to ensure flexibility in ERCOT protocols to address difference in new energy technologies such as energy storage.

- Ancillary service costs are system costs.** Ancillary services are services provided at the system level by ERCOT to account for minute-by-minute fluctuations in load across the ERCOT grid.

Type of Service	Description
Responsive Reserve	Responsive or “spinning” reserves are daily operating reserves that will respond quickly to restore interconnection frequency in case of a disruption.
Non-Spinning Reserve	This service provides additional electrical generation capacity within 30 minutes.
Replacement Reserve	This service is utilized when additional capacity is called on to provide additional Balancing Energy Bids, to cover system capacity or congestion.
Out of Merit Capacity	Similar to Replacement Reserve, but not acquired through the Replacement Reserve market process due to immediate operational needs.
Black Start	This service, acquired by ERCOT for the benefit of all customers, is power that can be generated without the support of the ERCOT transmission grid in case of a partial or total blackout.
Reliability Must-Run Capacity	This is capacity from a generator that would otherwise be mothballed or retired except that it is necessary to provide “voltage support, stability or management of localized transmission constraints.” <sup>2</sup>

Source: Electric Reliability Council of Texas (ERCOT)

Because these costs are transmission costs incurred to ensure the effective delivery of power to load, these costs have been allocated to retail electric providers (also referred to as “load serving entities” or LSE’s) because ancillary services effectively serve as “insurance” for grid reliability and allow these LSE’s to reliably provide needed power to retail customers. These costs are allocated to LSEs based on their overall share of load within the ERCOT market.

One witness appearing before the committee has suggested that a possible policy option would be to treat variable resources like load for purposes of assigning ancillary services costs. By comparing variable resources to load, what such proposals ignore is the resulting competitive disadvantage that would result from allocating ancillary services costs to only one type of generation. According to the testimony presented to the committee, such a proposal would have resulted in minimal reductions in ancillary services costs to LSEs while imposing additional costs on wind generators of \$1.40/MWh. This represents adding an additional 3-4% in cost per MWh to wind that is not applied to any other generator to the resulting competitive disadvantage of wind generation.

Moreover, it should be noted that these ancillary services costs fluctuate according to the market clearing price which is set by the price of natural gas in the ERCOT market. While natural gas prices are at historic lows currently, we know from recent experience that these markets are volatile and can rise from current prices of \$2-\$3/mcf to \$12/mcf or higher. The result would be dramatically increased costs for wind generators that would not be borne by any other generation source. As a result, we believe that any proposal to allocate ancillary services costs to only one type of generation would unfairly disadvantage one type of generation as compared to other generation technologies within the ERCOT market.

Thank you for the opportunity to submit these comments for your consideration. As always, The Wind Coalition and its members stand ready to provide you with any information that you may require to assist you in the evaluation of this interim charge or on other matters before the committee.