

**Donna L. Nelson**  
Chairman



**Rick Perry**  
Governor

## *Public Utility Commission of Texas*

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February 9, 2012

The Honorable Kirk Watson  
Texas Senate  
P. O. Box 12068 – Capitol Station  
Austin, Texas 78711

Dear Senator Watson:

Thank you for your letter dated January 13, 2012 regarding resource adequacy issues. As I testified during the Business and Commerce Committee hearing, the Commission is taking a number of steps to address resource adequacy.

As a step to address resource adequacy issues, you request that the Commission adopt a 500 megawatt (MW) non-wind renewable energy mandate. As you know, the Commission declined to adopt such a rule last year after the Legislature took no action on this issue during the legislative session. I did not favor moving forward with the rule at that time because I believed that the Commission lacks the statutory authority to impose such a mandate. I also had concerns that the costs imposed on Texas ratepayers would outweigh the potential benefits.

I continue to believe that the Commission lacks the statutory authority to adopt a non-wind renewable mandate. Public Utility Regulatory Act §39.904 requires the installation of 5,880 MW of renewable capacity by January 1, 2015 and sets a *target* of 10,000 MW of installed renewable capacity by January 1, 2025. I am unaware of anyone who disputes the fact that the 10,000 MW *target* is not a mandate. In fact, as you may recall, efforts were made in 2005, 2007, 2009, and 2011 to increase the mandate to 10,000 MW and those efforts failed. When the Legislature established the 500 MW non-wind set aside, the Legislature stated that the Commission “shall establish a *target* of having at least 500 MW of capacity from a renewable energy technology other than a source using wind energy.” I believe that in the statute the Legislature clearly distinguished between mandates and targets, and I believe the Commission lacks the authority to impose a mandate in furtherance of the 500 MW non-wind target. I raised this concern when the Commission voted to publish the proposed rule, and numerous stakeholders made this same point in their comments on the proposed rule. Nevertheless, the Legislature declined to provide the Commission with express authority to adopt a non-wind renewable energy mandate.

In addition to these concerns with the Commission's statutory authority, I continue to believe that a non-wind renewable energy mandate would unreasonably increase the cost of electricity for Texas ratepayers. The following table provides the levelized capital cost for new generation resources entering service in 2016:

<b>Resource Type</b>	<b>Levelized Capital Cost (2009 \$/megawatt-hour)<sup>1</sup></b>
Conventional Combined Cycle Natural Gas	17.5
Biomass	55.3
Geothermal	79.3
Wind	83.9
Solar PV <sup>2</sup>	194.6

The costs for non-wind renewable generation range from to three to eleven times the cost of natural gas generation. These costs do not take into account federal subsidies for renewable energy resources, but even when those subsidies are considered, it is my understanding that the capital cost for solar PV ranges from \$100-120 per megawatt-hour.

The rule that the Commission declined to adopt last year allowed a retailer to make alternative compliance payments in lieu of purchasing renewable energy credits (RECs) from a non-wind renewable energy resource. The amounts set for the alternative compliance payments were likely less than the cost of generating energy with non-wind renewable resources in the event federal subsidies end. As a result, I believe that retailers would have simply paid the cost of the alternative compliance payments. Commission analysis showed that these payments could have totaled approximately \$1.2 billion over ten years beginning in 2014, or \$120 million per year. Those costs would almost certainly be passed on to retail consumers. And because retailers would simply pay the alternative compliance payment rather than purchasing RECs from a non-wind renewable energy resource, the rule would not have resulted in the installation of additional non-wind renewable generating capacity. The Commission does not have authority in the Appropriations Act to directly spend funds received as part of an alternative compliance payment mechanism, so the rule would have acted as a tax on ratepayers with no benefit to the electricity market. Because a non-wind renewable energy mandate would not facilitate the construction of additional generating capacity, I do not see such a mandate as a beneficial step toward addressing resource adequacy issues.

Furthermore, I do not believe that further Commission action is necessary to meet the 500 MW non-wind renewable energy target. Approximately 300 MW of non-wind renewable capacity has been installed in Texas since 1999. ERCOT projects that another 190 MW will begin commercial operations by the end of 2013. And more than 500 MW of additional non-wind renewable capacity projects have been publicly announced. Taken together, these

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<sup>1</sup> Energy Information Administration, Annual Energy Outlook 2011, December 2010, DOE/EIA-0383(2010).

<sup>2</sup> Costs are expressed in terms of net AC power available to the grid for the installed capacity.

projects should more than meet the 500 MW non-wind renewable energy target. Additionally, even if the Commission had authority to impose a non-wind renewable mandate, it could only impose that mandate on retail electric providers in the competitive market. Because much of the non-wind capacity is owned by municipally owned utilities and electric cooperatives, such a requirement would likely only shift the costs of existing projects away from the entities who decided to pursue them to the competitive market, with no increase in renewables.

The Commission continues work with all stakeholders and ERCOT to minimize the distortionary effect of administrative tools used by ERCOT to ensure reliability. This should help encourage generators to invest in additional generating capacity. The Commission is taking, or has taken, the following actions to improve market signals and encourage investment in additional generating capacity:

- Impose offer floors for On-Line and Off-Line Non-Spinning Reserve capacity to minimize the impact of reliability-driven administrative interventions in the market. ERCOT implemented this change on January 5, 2012 (Nodal Protocol Revision Request (NPRR) 428).
- Release On-Line Non-Spinning Reserve energy to Security-Constrained Economic Dispatch without the need for ERCOT to issue a Non-Spin deployment instruction. ERCOT implemented this change on January 5, 2012 (NPRR 426).
- Impose offer floors for Responsive Reserve Service and Regulation Up used for capacity to minimize the impact of reliability-driven administrative interventions in the market. ERCOT implemented this change on January 5, 2012 (NPRR 427).
- Formalize the process used to enter into Reliability Must Run agreements with generators to meet capacity needs. The ERCOT Board is currently scheduled to consider this issue at its February 2012 meeting (NPRR 432).
- Increase by 500 MW the amount of Response Reserve Service procured by ERCOT and decrease by 500 MW the amount of Non-Spinning Reserve Service procured by ERCOT. The ERCOT Board is currently scheduled to consider this issue at its February 2012 meeting (ERCOT Methodologies for Determining Ancillary Service Requirements governing document and NPRR 434).
- Establish an offer floor for RUC units deployed for capacity. The ERCOT Board is currently scheduled to consider this issue at its February 2012 meeting (NPRR 435).
- Examine the proper slope and magnitude of the Power Balance Penalty Curve. The Reliability Deployments Task Force at ERCOT is currently considering this issue.
- Examine whether the System Wide Offer Cap should be increased. The Commission issued a request for comments on this issue and will hold a workshop on February 23.
- Examine whether changes should be made to the Peaker Net Margin threshold and the Low System Wide Offer Cap. The Commission issued a request for comments on this issue and will hold a workshop on February 23.

- Examine whether changes should be made to address price suppression resulting from the “0 to LSL problem” when a unit is brought online through the Reliability Unit Commitment (RUC) process for capacity reasons. The Reliability Deployments Task Force at ERCOT is currently considering this issue.
- Examine the compensation for RUC units brought online to provide local reliability and transmission relief and to address whether and how the RUC claw-back should be adjusted. NPRR 416 was tabled by the Protocol Revision Subcommittee at ERCOT because of a potential dependency on NPRR 435.

The Commission is also considering the following options to remove barriers to storage technologies and to increase the amount of demand response that can be used when electricity supply threatens to exceed demand:

- Clarify rules regarding the regulatory treatment of energy purchased to charge a storage resource. The Commission has proposed amendments to its rules to address whether such purchases should be considered wholesale or retail transactions and whether such purchases should be settled on a nodal or zonal basis (Project No. 39917). The Commission is currently scheduled to consider the rule again in late February.
- Examine whether to give ERCOT authority to conduct pilot projects for new technologies like battery storage. The Commission is currently scheduled to consider a proposed rule in late February (Project No. 40150).
- Examine changes to the Emergency Interruptible Load Service (EILS) program. The Commission has proposed amendments to its EILS rule that would allow participation by certain distributed generators and provide more flexibility to ERCOT to encourage greater participation in the program (Project No. 39948). ERCOT currently acquires 400-500 MW of EILS, and ERCOT projects that it could acquire an additional 130-200 MW depending on the specific changes adopted by the Commission. The Commission is currently scheduled to consider the rule for final adoption in April.
- Examine distributed load demand response programs. ERCOT is working with CenterPoint and Oncor on a pilot project that would use advanced meters to aggregate the electric load of participating customers. ERCOT is still gathering data from potential providers to estimate the number of MW of demand response that could be acquired through this program.
- Examine the expansion of energy efficiency load management programs. The utilities acquired 112 MW of demand response through these programs in 2011, and ERCOT estimates that the utilities could acquire a total of 354 MW for 2012 with expansion of their load management programs.
- Publish non-binding near real-time forward prices to allow electric loads to voluntarily reduce their usage in response to high prices. The ERCOT Board

approved NPRR 351 in December 2011, and ERCOT expects to implement this change in June 2012.

- Develop messaging for electricity conservation. I am hosting a meeting of stakeholders on February 10<sup>th</sup> to help craft a conservation message that engages customers, avoids message fatigue, and assures the public that we will be able to provide them with reliable electricity. The Commission has also released a Request for Proposals to retain a consultant to develop and operate a new customer education program focused on energy conservation and energy efficiency, as well as coordinate our efforts with other state agencies, non-profits, utilities, ERCOT, and others to provide effective messaging to customers.

In my interactions with Texans, I have learned that electric customers in Texas primarily care about two things: the reliability and cost of electricity. As the Commission continues to work on the resource adequacy issue, my goal as the Chairman of the PUC is to hit that sweet spot in balancing between reliability and cost. And that is often difficult. In other words, keep the lights on, the air conditioner running, but keep the costs affordable for Texans. In order to continue to attract business to Texas, it is important that we have a reliable supply of electricity; it is also important that costs remain competitive.

Thank you again for your letter. I appreciate your concerns about resource adequacy. I continue to consider this issue to be my highest priority, and I am committed to taking steps to ensure that Texans enjoy reliable electricity at a reasonable cost. Please do not hesitate to contact me if you would like to discuss these issues further.

Sincerely,

Donna L. Nelson  
Chairman

cc: Commissioner Kenneth W. Anderson, Jr.  
Commissioner Rolando Pablos