



**SIERRA
CLUB**
FOUNDED 1892

Lone Star Chapter

October 26, 2010

**Chief, Rulemaking, Directives and Editing Branch
Mail Stop: TWB-05-B01M
U.S Nuclear Regulatory Commission
Washington, DC 20555-0001**

Comments by Lone Star Chapter, Sierra Club

Draft Environmental Impact Statement for Combined Licenses for Comanche Peak Units 3 and 4, NUREG-1943

The Lone Star Chapter of the Sierra Club appreciates the opportunity to comment on the draft Environmental Impact Statement for the Combined Licenses (COLs) for Comanche Peak Nuclear Power Plant Units 3 and 4. While we have a variety of concerns about the proposed expansion of the plant and the draft environmental impact study, we are most concerned about the actual need for the power itself and alternatives -- whether 3200 MWs of power will be needed by the time the plant would be built, as well as the lack of analysis to alternatives to the proposed plant itself.

We believe that the demand analysis contained in the DEIS seriously underestimates the reduction in demands and additional resources that will be arriving from energy efficiency, demand response, advanced meters, onsite solar and large-scale renewables resources like wind and solar. In fact, we believe the need for a large 3200 MW baseload plant for hire is questionable at best. Instead, Texas is more likely to need flexible, smaller plants to meet energy needs at peak times, as well as a combination of energy storage and renewable energy and existing plants – such as those provided by natural gas -- to meet baseload. Interestingly, the applicant, Luminant, is indeed involved in and exploring options like energy storage and large-scale renewables, while the other companies owned by Energy Future Holdings, Oncor and TXU Energy – while not generation companies – have been actively involved in designing and implementing onsite solar and energy efficiency programs for their customers.

PO Box 1931, Austin, TX 78767

tel: (512) 477-1729

fax: (512) 477-8526

lonestar.chapter@sierraclub.org



vegetable inks

use, it should reduce energy use from new buildings by 10 to 15% according to the independent analysis done in September of 2009 by the Energy Systems Laboratory. Only in the last year, Austin, El Paso, College Station and Laredo among others have adopted the 2009 IECC as their base code, in some cases with local amendments that make the codes stricter for new construction. This week, delegates at the International Code Council will be approving a new version of the IECC codes – the 2012 Codes – and it should be expected that codes will continue to get more stringent in terms of energy use in new buildings.

Moreover, in August of 2010, the Public Utility Commission approved new rules for the Energy Efficiency Program, which currently requires the seven Transmission and Distribution Companies to meet at least 20 percent of the average growth in peak demand – as well as a corresponding energy goal – in 2010. The new rules will raise that goal to 25% in 2012 and 30% in 2013 and thereafter. Again, while not a huge factor, the approved rules should drive more money into reducing both peak demand and overall energy use. An independent analysis attached suggests that these rule changes will not have major impacts on the programs through 2014, but afterwards, as energy demand grows, they could become major drivers to reduce demand in Texas. The NRC should consider the impact of this rulemaking on overall demand in Texas.

The third major change in Texas involves the spending of nearly \$800 million in weatherization, energy efficiency and conservation block grants and programs run by the State Energy Conservation Office as part of funding provided by the American Recovery and Renewal Act (ARRA).

In addition to these three changes, the analysis seems to admit the buildout of wind in Texas on the one hand, but then fails to consider the additional capacity that would result from that build-out. The analysis also relies on the ERCOT valuation of wind at peak as only providing 8.7 percent of name capacity, even though the number is acknowledged by most as undervaluing wind's contribution at peak. Indeed, even if assuming wind's capacity is only 8.7 percent in hot summer afternoons, the analysis should provide wind's overall capacity during a year, since presumably nuclear power would be a base resource and not a peak resource.

In addition to these changes in the competitive energy market, several other factors within municipalities in Texas may also impact overall energy demand, meaning the need for such power plants as the proposed Comanche Peak units will shrink.

San Antonio Plan

Thus, there is no discussion about CPS Energy laudatory plan to reduce peak demand by 771 MWs by 2020, there is no attempt to assess how this would impact overall demand or the need for baseload power in the state as a whole. Thus, CPS Energy itself recently discovered that the combination of reduced demand, energy efficiency goals and increasing investments in renewable energy had made its initial plan to buy 1,200 MWs of power from nuclear plants – in this case the South Texas Plant -- unnecessary. Indeed,

ALTERNATIVES ARE CHEAPER, QUICKER AND BETTER

While the previous sections discussed why the need for the new nuclear plants are overstated in the EIS, we would also note that even if additional power is needed, Luminant has other options besides the nuclear plant to meet those needs and compete for share in the market. Indeed, the EIS admits as much, and presents several alternative scenarios for Luminant to build out 3200 MWs of power.

One such scenario – replacing the nuke investments with wind power – is discounted by the EIS even though ERCOT is incorporating at least 18,000 MWs of power from West Texas, even as wind from East Texas along the coast is being developed as well. Thus, the analysis seems to discount the potential for a combination of east Texas and West Texas wind to do away with the need for the nuclear power plant even as other utilities like Austin Energy and CPS Energy are making large-scale investments in wind power even as they decide not to make major investments in nuclear energy.

In addition, the analysis fails to consider that solar could be an available option for Luminant, since the land needed to generate a similar amount of power would be vast. However, again the analysis is based on available California plants and does not take into account more recent developments in both concentrated solar plants and PV plants that are currently being developed that are much more efficient in terms of power generated per acre of land.

The analysis also fails to take into account an expected rule change presented as a “strawman” by the PUC earlier this year to implement a provision of Texas law which would require some 500 MWs of renewable energy other than wind to be developed by 2015. While it is still too early to predict whether this rulemaking will go forward – PUC has indicated it could propose a rule later this year or in early 2011, the final EIS should at least analyze the impact of this change in the ERCOT market.

Indeed, we now have three announced utility-scale solar plants announced in Texas, including the Austin Energy Webberville project and two announced plants being pursued by CPS Energy. While these projects are relatively small – 30 or 14 MWs as opposed to 3,200 MWs – they point to the potential to replace a large project with several smaller-scale flexible projects throughout Texas. As mentioned, both Austin Energy and CPS Energy have made long-term commitments to obtain hundreds of Megawatts of electricity from solar over the next 10 years.

In addition to the utility-scale announcements, Texas has begun to install onsite photovoltaic solar production. Thus, while still a tiny part of the market – perhaps 5 to 10 MWs currently – a series of announcements in San Antonio, Austin and especially the Oncor Service territory suggest that onsite solar will lead to further reduction in demand for power from the proposed plant. Thus, earlier this year, SolarCity, a California company, announced a partnership in the Oncor Service Territory. Under this partnership, SolarCity will build solar installations on homes in return for the ONCOR solar rebate and then charge homes only \$35 per month.

new clean energy plans from San Antonio and Austin municipal utilities, and PACE financing districts. All of these developments will lessen the need for additional power from the expansion of the South Texas Nuclear Power Plant. In fact, the Lone Star Chapter believes given its high cost, inflexibility and lengthy implementation schedule, Texas would be better served by developing smaller, more flexible, cheaper alternatives like on and off-site solar, additional natural gas plants, energy efficiency, coastal wind, energy storage and geothermal resources.

The Lone Star Chapter appreciates the opportunity to share these comments.

Sincerely



Cyrus Reed, PHD Conservation Director
Lone Star Chapter, Sierra Club