

**AECT (Association of Electric Companies of Texas)
Senate Business and Commerce Committee, January 10th, 2012**

Drought Impacts on Electric Generation:

Assess the impact of current and anticipated drought conditions on electric generation capacity. Identify those regions of Texas that will be most affected by a lack of capacity. Analyze response plans and make recommendations to improve and expedite those plans

- Good morning , to the Chairmen and members, my name is John Fainter. I am here on behalf of the Association of Electric Companies of Texas (AECT) to discuss the impact of current and anticipated drought conditions on electric generation capacity in Texas.
- Electric generating companies use water in the cooling process for electricity generation. This water is most often obtained from man-made cooling reservoirs that were constructed for the purpose of providing cooling water to the electric generation. It is non-consumptive use because most of the water is used for cooling, then returned to the cooling reservoirs from which it was obtained.
- Electric generating companies have built and developed reservoirs and water infrastructure across Texas and are among the largest private holders of water rights and water contracts in Texas. Generators have made substantial investments to secure water contracts and rights and groundwater resources in advance of actual use to ensure continued operation of existing electric generation units and to promote the development of new generation.
- AECT member companies have an outstanding record of stewardship and compliance with water regulations, and routinely conduct rigorous biological monitoring tests at generating facilities. Our companies also practice sound water conservation, restore aquatic habitats, preserve ecosystems and enhance and create valuable wetlands. On many facilities electric generating companies provide public recreation opportunities and provide land for state parks.
- Generators strive to reuse and conserve as much water as possible at generation sites.
- The reliable generation of electricity is necessary for pumping water to cities and farms, and for water treatment and sewage treatment – among other public health and safety necessities.
- Moreover, the reliability of Texas' electric generation is necessary for the state to meet the needs of our growing population and the new and growing businesses that fuel our state's economy.
- We've all felt the impact of the exceptional drought our state faced this summer. Our member companies are working hard to ensure adequate water supply for reliable electric generation, including building pipelines to remote water sources, seeking additional water rights, adding pumping capability, and use of effluent for cooling. Our members are participating in working groups at ERCOT to develop best practices for drought preparedness and are participating in the rulemaking at TCEQ to implement HB 2694's language on suspension or adjustment of water rights during water shortage. But these activities alone do not guarantee that we will continue to have enough water to maintain current levels of generation.

- Thus far, the actual impact of the drought on electric generation has been limited, with only 24 MW of generation placed offline due to the drought. ERCOT has estimated that if East Texas receives only half of its normal rainfall, unavailability of electric generation could go up to 434 MW by May 2012, and if there is no rain at all, unavailability could be as high as 3,044 MW.
- In short, we need to ensure that continued access to adequate water is available for electric generating units to maintain reliability, especially in times of drought or water shortage.
- Transmission and Distribution utilities have also experienced issues relating to the drought. The frequent wildfires resulting from the drought have burned many wooden T&D structures across the state, causing numerous localized outages. Once the wildfires are brought under control, these structures can be repaired or replaced and power restored.
- This past spring and summer there were outages related to high levels of air-borne contaminants (sea salt and dust) on transmission and distribution facilities. Coastal winds deposit sea salt and dust onto insulators, bushings and peripheral line equipment. The lack of any appreciable rain resulted in increased electrical faults due to higher than normal accumulations.
- The affected utilities have devoted significant resources to address the situation implementing plans and procedures to remove. Proactive washing including the use of helicopter-mounted rigs have been deployed until the natural rain washing cycle resumes. The PUC has initiated Project 39478 to review Transmission and Distribution Utility practices in addressing the contamination issue.
- In summary, AECT member companies have worked to maintain access to reliable and affordable power, and continue to plan for our state's energy needs. We look forward to continuing to work in collaboration with the agencies and water authorities in finding solutions for the future.