Thank you Chairman Carona, Vice-Chairman Harris, and committee members. I am Bryan W. Shaw, Chairman, with the Texas Commission on Environmental Quality. With me as a resource is L’Oreal Stepney, Deputy Director for the TCEQ’s Office of Water.

2011 brought many challenges for Texans as we weathered the worst one year drought on record. At the beginning of October 2011, 97% of the state, including all or part of every county, was experiencing extreme or exceptional drought. Although recent rains have resulted in some improvement, as of December 27, 2011, the U.S. Drought Monitor continues to show 67% of Texas in extreme or exceptional drought conditions.

This unprecedented drought has given rise to challenges that TCEQ has never managed – and we find ourselves in uncharted territory as we make decisions and respond. Water supply for electric generation is among those challenges. Today, I am here to provide an overview of TCEQ’s drought related activities, including surface water rights and usage for electric generation.

**Water Rights**

The Texas Commission on Environmental Quality is the state agency charged with managing surface water rights in Texas and primarily accomplishes this through issuing and enforcing water right permits.

Under Chapter 11 of the Water Code, the TCEQ issues water use permits for a variety of uses including power generation (classified as an “industrial” use) and oil and gas production (“mining” use). TCEQ issues perpetual, term, and temporary water use permits. Perpetual permits do not expire, term permits are issued for a term of up to 10 years, and temporary permits expire after a term of no longer than three years.

- There are 114 industrial water rights and 40 water supply contracts being used for power generation statewide.
TCEQ Hearing Testimony

- Of the water rights with mining use, TCEQ has identified 43 perpetual water rights and 81 temporary water rights being used for oil and gas production.

By statute, surface water use under water rights and contracts is self-reported by calendar year in Water Use Reports. TCEQ relies on the water right holder to report their use accurately. The most recent use information available is for calendar year 2010:
  - Surface water right holders and water supply contract holders reported diverting approximately 20,400,000 acre feet of surface water for power generation. Of the surface water diverted, approximately 380,000 acre-feet was reported to have been consumptively used.
  - Surface water right holders identified as using their water for energy production reported diverting approximately 51,000 acre feet of surface water.

As a result of TCEQ’s Sunset Review, the agency’s sunset bill – House Bill 2694, amended the Texas Water Code to require water right holders to maintain water use information on a monthly basis when diverting water. Further, the bill allows the commission to request information during a drought or other emergency shortage of water.

For areas of the state needing more active management of water rights, watermaster programs monitor stream flows, reservoir levels, and water use, coordinate diversions during times of shortage, and ensure compliance with water rights. The TCEQ has three watermaster programs:
  - Rio Grande – serves the Rio Grande Basin below Fort Quitman to the gulf of Mexico and a portion of the Nueces-Rio Grande Coastal Basin;
  - Concho – serves the Concho River basin
Senior Calls

The TCEQ’s actions are guided by the priority doctrine, Texas Water Code Chapter 11. Domestic and livestock users have superior rights to any permitted surface water right holders. Between permitted water right holders, those permit holders that got their authorization first (senior water rights) are entitled to receive their water before those water right holders that got their authorization later (junior water rights). If a water right holder is not getting water they are entitled to, they can call upon the TCEQ to take action to enforce the priority doctrine – a senior call.

The TCEQ has received 15 senior calls, including calls on surface water in the Brazos, Guadalupe, Colorado, Sabine, and Neches River Basins. We are managing senior calls from users including the following types of users: municipal, industrial, irrigation, recreation, and domestic and livestock.

All total, these senior calls have resulted in the suspension or curtailment of over twelve hundred (1,200) water right permits. Additionally, the TCEQ has stopped issuing temporary water right permits in basins affected by these calls. Suspended water rights do not include junior municipal or power generation uses because of concerns about public health and safety.

TCEQ field staff enforced suspensions and curtailments through on-the-ground and aerial investigations. Field staff also conducted streamflow monitoring to help the agency make informed decisions regarding suspensions and management of senior calls.

In late 2010, as drought conditions began to develop and intensify, the TCEQ initiated outreach activities.

- TCEQ’s Drought Hotline and Webpage were established to provide information to the public and regulated community about drought conditions and the agency’s on-going monitoring and response.
- TCEQ’s reconvened the Drought Team, originally formed during the 2009 drought. The Drought Team continues to meet weekly to monitor drought conditions and impacts and to consider and evaluate response. State agency partners from the Texas Department of Emergency Management and Texas Water Development Board regularly attend.
TCEQ Hearing Testimony

- In April 2011, the TCEQ communicated with state leadership, legislative officials, county judges, county extension agents, water right permit holders, and the media regarding drought conditions and the possibility of permit suspensions and/or curtailments. The TCEQ has provided additional notification to local legislative officials, judges, and county extension agents; water right holders; and the media as part of the response to each senior call.

- The agency has provided legislative briefings and a webcast concerning drought.

- The TCEQ has also provided targeted monitoring and outreach to public water systems.

Public Water Systems

The TCEQ is the Texas state agency charged with ensuring that public water systems provide safe and adequate drinking water. As a result, the TCEQ has provided intensive, targeted outreach and assistance to public water systems during the drought.

TCEQ closely monitors the status of public water systems.

- The TCEQ has strongly encouraged all public water systems to provide regular status updates, allowing TCEQ to offer assistance to those experiencing critical conditions.

- The TCEQ intensively monitors a targeted list of public water systems that have either limited or an unknown supply of water remaining. This information is very dynamic since systems provide updated information often. The TCEQ has offered these systems Financial Managerial and Technical assistance that includes: identifying alternative water sources, coordination of emergency drinking water planning, and identification of possible funding sources for alternative sources of water.

- TCEQ's Drought Information Webpage includes guidance on emergency interconnections, emergency use of wells for public water supply, and a current list of companies that haul drinking water.

Texas Water Code, Chapter 11 requires the approximately 5,000 retail public water suppliers in Texas to have Drought Contingency Plans (DCPs). Drought Contingency Plans are strategies for temporary supply and demand management responses to temporary and potentially recurring water supply shortages and other water supply emergencies.
• The TCEQ has contacted all public water suppliers in Texas, strongly encouraging implementation of DCPs.

• In senior call areas the TCEQ has asked junior municipal water right holders to implement mandatory water restrictions that limit outdoor water use, when those junior municipal water rights have not been curtailed.

The TCEQ serves as a member of TDEM’s Emergency Drinking Water Task Force and Drought Preparedness Council, working with other state agencies to provide state-level emergency assistance. Recently, state agency partners developed the Emergency Drinking Water Annex, a document that details management and response for public water systems with 180 days or less of water supply.

**Power Generation**

The impact of the drought on electric generating capacity of increasing concern as the drought continues. TCEQ has worked with TDEM, the Electric Reliability Council of Texas (ERCOT), and the Public Utility Commission (PUC) on a number of items:

• In February and August of 2011, ERCOT contacted the TCEQ regarding assistance in regards to the power emergency brought on by extreme weather conditions. In both cases, TCEQ worked with ERCOT to establish a framework to provide guidance and enforcement discretion in cooperation with ERCOT’s efforts to support the grid. TCEQ has posted procedures for ERCOT or other electric reliability entities to request TCEQ enforcement discretion for a power emergency on the agency’s website.

• In October 2011, TDEM coordinating a meeting with TCEQ, ERCOT, and PUC regarding the potential impact of continuing drought on electric generation in Texas. TCEQ has been working with ERCOT to assist them in their effort to encourage contingency planning by power generators. TCEQ has provided ERCOT with water right information for certain power generators. TCEQ also provided survey questions for ERCOT to use to help identify the water supply needs of power generators during the drought.
The TCEQ’s Rio Grande Watermaster works with South Texas Electrical Cooperative to coordinate releases from Lake Amistad and Falcon Lake to assist in meeting emergency requests for power from ERCOT.

New Issues

Because of the exceptional and prolonged nature of the drought, TCEQ is responding to new issues, several of which are related to electric generation.

- The Governor’s Drought Proclamation suspended all rules and regulations that may inhibit or prevent prompt response. Examples of TCEQ actions under the Drought Proclamation include:
  - adding diversion points; and
  - the use of enforcement discretion at power plants so that regulatory and permitting burdens did not contribute to a loss of power.
- Of the 15 senior calls TCEQ has received, the TCEQ has never managed the following types of calls before in non-watermaster areas:
  - municipal call,
  - domestic and livestock calls, and
  - a river compact call.
- The TCEQ has worked with power plants in managing lake levels and temperatures.
- Suspended water rights do not include junior municipal or power generation uses because of concerns about public health and safety. The TCEQ has asked for increased stages of Drought Contingency Plans in senior call areas, including asking junior municipal water right holders to implement mandatory water restrictions that limit outdoor water use, when those junior water rights have not been curtailed.
- The TCEQ is working with the United States Army Corps of Engineers to coordinate releases from Lake Whitney in response to a senior call in the Brazos River Basin.
Other Related Agency Activities

TCEQ’s Sunset Bill amended the Texas Water Code to state that the Executive Director may temporarily suspend or adjust rights during times of drought or emergency shortage of water. TCEQ has proposed rules that define drought or other emergency shortage of water and specify conditions and terms under which the Executive Director may exercise authority. The TCEQ took public comment on those proposed rules through December 5, 2011.

HB2694 also requires the TCEQ’s Executive Director to assess the need for watermaster programs at least once every five years in basins where programs do not currently exist. At the September 28, 2011 agenda, the Commission approved the criteria, process, and schedule for watermaster program evaluation. The Executive Director will be evaluating The Brazos, Brazos-Colorado Coastal, Colorado, and Colorado-Lavaca Coastal Basins in 2012.

Groundwater

Chapter 36 of the Water Code provides for groundwater management by local groundwater conservation districts (GCDs). GCDs are charged to manage groundwater by providing for the conservation, preservation, protection, recharging, and prevention of waste of the groundwater resources within their jurisdictions.

Individual GCDs may have information about groundwater use for power generation. Chapter 36 of the Water Code guides the GCD permitting requirements for oil and gas exploration and production. Use of groundwater for oil and gas production activities is subject to the same district rules as any other permitted water well.

Under Chapters 35 and 36 of the Texas Water Code, the Commission is responsible for evaluating and designating Priority Groundwater Management Areas, or PGMAs, and creating groundwater conservation districts in response to landowner petitions or through the PGMA process. The Water Code does not provide TCEQ or any other state agency the authority to regulate groundwater production or use.