

# BRAZOS G

WATER PLANNING GROUP

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Bell  
Bosque  
Brazos  
Burlison  
Callahan  
Comanche  
Coryell  
Eastland  
Erath  
Falls  
Fisher  
Grimes  
Hamilton  
Haskell  
Hill  
Hood  
Johnson  
Jones  
Kent  
Knox  
Lampasas  
Lee  
Limestone  
McLennan  
Milam  
Nolan  
Palo Pinto  
Robertson  
Shackelford  
Somervell  
Stephens  
Stonewall  
Taylor  
Throckmorton  
Washington  
Williamson  
Young

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June 17, 2008

Mr. Stuart Norvell  
Water Resources Planning Division  
Texas Water Development Board  
1700 North Congress Avenue  
Austin, Texas 78711-3231

Re. Comments regarding draft report titled "Water Demand Projections for Power Generation in Texas"

Dear Mr. Norvell,

The Brazos G Regional Water Planning Group (BGRWPG) has authorized me, as their Chairman, to offer several comments regarding the draft report recently released for review, titled "Water Demand Projections for Power Generation in Texas." Thank you for the opportunity to provide comments on a subject that so greatly impacts regional water planning.

The timing of scheduled BGRWPG meetings precludes our members from reviewing and formally approving this letter prior to the deadline for submission of comments. For this reason, we request that the deadline for comments be extended until mid-July to allow our members to review this letter and approve it at our meeting scheduled for July 9, 2008. In absence of an extension to the review deadline, the BGRWPG has authorized me to present this letter on their behalf.

The BGRWPG offers the following comments concerning the subject draft report:

1. The overall methodology for computing future electricity demands is not clearly articulated. It appears as if the high case is projected using an annual growth rate of 1.22%. However, there is no clear mention for how the low projection is computed.
2. It appears as if the methodology for computing future water demands for the different scenarios is shown in the Excel spreadsheets, which are discussed in some detail in Appendix A. The text does not clearly articulate how future conservation efficiencies were determined. It would be worthwhile if those computational spreadsheets had been made available so that reviewers could be afforded a more complete understanding of how the different water demand projections were

computed. As it stands, it is difficult to ascertain precisely how the projections were computed. In the relatively short amount of time we have had to review the report, it has been difficult to comment positively or negatively on the methodology used.

If the TWDB plans to use one of these scenarios as the basis for the statewide steam-electric water demand projections used in the regional and State water plans, this report and the projections presented could have a large impact on many stakeholders. The State would have been well served if the overall study approach had been distributed for stakeholder review prior to commencing the study.

3. An alternative methodology should be considered to distribute the projected statewide steam-electric water demands amongst the 16 planning areas. On page 44, the authors state:

*“To project regional water demand for power generation, we apportion the total Texas thermoelectric water demand according to the ratio of each fuel that is currently used in each Regional Water Planning Area. For example, approximately 20% of coal generation in 2006 occurred in Region D, and we assume that 20% of future water demands from coal generation will occur in Region D.”*

This assumption distributes the projected water demands based upon past fuel usage patterns. It incorrectly assumes that future distribution of water demands will follow present geographical patterns of fuel use. Present patterns of fuel use are based on the historical availability of proximate fuels (especially natural gas pipelines, and coal reserves or rail transportation for coal), proximate water supplies, and proximate transmission capacity. All three factors will change as we move into the future and should not be expected to remain static. Other considerations include the economics of decommissioning older technology plants versus building new facilities and other factors that may preclude construction of some technologies in some areas, such as air quality non-attainment area designations. One large plant of any fuel type could drastically alter this distribution. Further thought needs to go into distributing the statewide projections to the regional and county levels.

We offer two suggestions that may improve how future demands are distributed amongst the planning areas:

- a. **Consider revising the distribution methodology to site future generation capacity proximate to existing capacity.** Future generation capacity is more likely to be developed on brownfield sites, proximate to existing generation facilities, and little is likely to occur on greenfield sites. With the possible exception of new nuclear capacity, future generating units placed on brownfield sites will not necessarily utilize the same fuel as the existing facility. Those decisions will be based upon technological considerations and the economics of competing fuel sources at the time a new generating unit is constructed.

**b. Consider involving industry representatives to help decide how the statewide projections should be distributed geographically.** The projected demands should reflect industry expectations regarding where future generation is likely to occur.

4. The BGRWPG urges the TWDB to carefully consider which scenario will be used for the regional and State water plans. Only one of the scenarios presents a larger steam-electric water demand in Brazos G than what is contained in the 2006 Brazos G Regional Water Plan, and most are considerably smaller. Year 2030 projections (arguably the most important) range from 82 MGD to 225 MGD, and all but one are smaller than the Brazos G 2030 projection of 153 MGD (171,489 acft/yr). Several steam-electric generators have indicated plans for new plants in Brazos G that could shift the distribution of statewide steam-electric water demands.

5. The BGRWPG requests the TWDB to consider the possibility of allowing the regional water planning groups to “shift” future steam-electric demands between counties. Often, water supplies border multiple counties, and a future power plant could realistically be located in any of the adjacent counties and utilize the central water supply. In such cases, it would be helpful if the planning groups were allowed to shift steam-electric water demands between counties to account for better local or updated knowledge as to actual plans by power generators.

Thank you for the opportunity to comment on the draft report. We hope that you find our comments useful and we look forward to receiving the updated steam-electric demands to be used in the 2011 Brazos G Regional Water Plan.

Sincerely,

G. Scott Mack, Chairman  
Brazos G Regional Water Planning Group

cc: Brazos G RWPG  
Trey Buzbee, BRA  
David Dunn, HDR  
Matt Nelson, TWDB