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Testimony to the Texas State Legislature: SB 1191

Jeff S. Haberl, Ph.D., P.E.

Associate Director, Energy Systems Laboratory

Texas Engineering Experiment Station, Texas A&M University System

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- Thank you for the opportunity to testify for SB 1191 - relating to the statewide peak electric demand through demand response and load management.
- As requested by Senator Ellis and Watson's staff, the ESL has calculated the potential electricity and NOx emissions reductions from a 1% to 5% peak electric demand reduction across the ERCOT region during peak ozone period.
- If we use the peak demand using August of 2007 (i.e., 62,188 MW), a 1% to 5% demand reduction would be 622 MW to 3,110 MW.
- The MWh can be converted to NOx values using the 2007 edition of the USEPA's eGRID database after proportioning the electricity sales data in the ERCOT region according to the published electricity sales data for Texas in 1998. The results show that the NOx emissions reduction from one hour of electricity savings of 622 MWh to 3,110 MWh would be 0.45 to 2.24 tons-NOx. These procedures use the same analysis the ESL developed for the TCEQ for NOx emissions credits from the USEPA, which would allow the results from this program to be converted into creditable NOx emissions credits.
- If the peak demand reduction were to continue for a four hour period, (12:00 Noon to 4:00 PM), the electricity reduction would be 2,488 to 12,440 MWh, with a corresponding NOx emissions reduction of 1.80 to 8.96 tons-NOx.

- By comparison, in 2005 it was estimated that the average daily electricity savings from the code-compliant new construction for single family residential during an ozone season day (OSD) was 776 MWh, with a corresponding NO_x emissions reduction of 0.76 tons-NO_x/OSD.