

Background Information Regarding Load Calculation Requirements

Implementation of SB5 from the 77th Legislative Session in 2001 and SB 12 from the 80th Session in 2007 set standards for Air Quality in Texas as well as energy reduction based on the following factors. The Energy Systems Laboratory at Texas A&M is responsible for efficiency measures dealing with the Energy Codes and HVAC related implementations.

<http://www.seco.cpa.state.tx.us/sb5compliance.php>

Texas Energy Partnership - SB5/SB12 Compliance

SB 5/SB 12: Energy Efficiency Programs in Certain Political Subdivisions

Background

In 2001, the 77th Texas Legislature passed Senate Bill 5 (SB5), also known as the Texas Emissions Reduction Plan, to amend the Texas Health and Safety Code. The legislation required ambitious, fundamental changes in energy use to help the state comply with federal Clean Air Act standards. It applied to all political subdivisions within 38 designated counties, later expanded to 41 counties.

In 2007, the 80th Texas Legislature passed Senate Bill 12 (SB 12) which among other things extended the timeline set in SB 5 for emission reductions. Where SB 5 required political subdivisions to reduce their electrical consumption by five percent (5%) for five years beginning January 1, 2002, the SB 12 legislation requires that such entities establish a goal to make the five percent (5%) reductions each year for six years, effective September 1, 2007.

SB 12 amended the Health and Safety Code Section 388.005, in part, by requiring affected political subdivisions to: implement all cost-effective energy-efficiency measures, establish a goal to reduce electricity consumption by 5 percent each year for 6 years, and report efforts and progress annually to the State Energy Conservation Office (SECO). The report details the efforts being undertaken by SECO to provide assistance and information to affected entities, as well as the progress and efforts made by political subdivisions in meeting the energy efficiency mandates of SB 5/SB 12.

Meeting your energy efficiency goals

In terms of energy efficiency, the biggest step is requiring new buildings to meet the state's energy performance standards. These standards call for better weather stripping, more efficient air conditioners, stricter insulation guidelines, switches to turn off water heaters, tighter building envelopes and energy-efficient windows for new buildings. Under the new law, municipalities and counties can continue to make local amendments to the state energy codes as long as they are not less stringent than the statewide standard.

Energy Systems Laboratory

The Energy Systems Laboratory (ESL) is a division of the Texas Engineering Experiment Station, a member of the Texas A&M University System. The ESL is affiliated with the Energy Systems Group in the Department of Mechanical Engineering at Texas A&M University. The ESL develops and transfers energy efficiency technology for the public benefit to enable substantial energy savings while improving comfort and productivity. **With the passage of SB5, the ESL assumed responsibility for the following:**

- To report energy savings to the Texas Public Utility Commission and the Texas Natural Resources Conservation Commission for the purpose of assisting Texas to obtain emissions reduction credits in the State Implementation Plan (SIP) with the US EPA.
- **To assist communities in evaluating and quantifying code amendments to the International Residential Code which now define the minimum energy efficiency standards for the State of Texas.**
- To train builders, code inspectors and officials, manufacturers, homeowners and other interested groups on how to cost effectively implement the energy efficiency standards of the codes.
- To develop a self-certification form for builders outside of municipalities.
- To evaluate Home Energy Rating System (HERS) packages. The ESL will evaluate HERS offerings and assist in defining changes required for the State of Texas.

http://www.tceq.texas.gov/airquality/terp/program_info.html

What is the TERP?

The Texas Emissions Reduction Plan (TERP) was established by the 77th Texas Legislature in 2001, through enactment of Senate Bill (SB) 5. The TERP includes a number of voluntary financial incentive programs, as well as other assistance programs, to help improve the air quality in Texas.

The goals of the TERP, as set forth in SB5, are to:

- assure that the air in this state is safe to breathe and meets minimum federal standards established under the Federal Clean Air Act (42 U.S.C. section 7407);
- develop multipollutant approaches to solving the state's environmental problems; and
- adequately fund research and development that will make the state a leader in new technologies that can solve its environmental problems while creating new business and industry in the state.

In addition to these general goals, a primary purpose of the TERP is to replace, through voluntary incentive programs, the reductions in emissions of oxides of nitrogen that would have been achieved through two mandatory measures that SB5 directed the TCEQ to remove from the State Implementation Plan (SIP) for the Dallas–Fort Worth (DFW) and Houston-Galveston (HGA) ozone nonattainment areas. Those reductions totaled 35.2 tons per day (tpd), to be achieved in 2007. The two strategies that were removed were:

- a limit on the use of construction and industrial equipment from 6 a.m. to 10 a.m. and

- a requirement that the owners and operators of diesel-powered construction, industrial, commercial, and lawn and garden equipment 50 hp and above replace their affected equipment with newer Tier 2 and Tier 3 equipment within certain designated deadlines.

It was also envisioned that TERP incentives could be used to achieve up to an additional 20 tpd of NOx reductions, out of 56 tpd of reductions remaining to be identified in the SIP for the HGA area.

Incentive funding was also expected to be available to help achieve reductions in counties located in the other two nonattainment areas (Beaumont–Port Arthur and El Paso County) and in designated near-nonattainment areas, where air quality is approaching nonattainment levels

- **Texas Building Energy Performance Standards**

To achieve energy conservation in residential construction, the TERP included adoption of the energy-efficiency chapter of the International Residential Code as the energy code in Texas for single-family residential construction. For all other residential, commercial, and industrial construction, the International Energy Conservation Code was adopted as the energy code for use in Texas.

The Energy Systems Laboratory at the Texas Engineering Experiment Station of the Texas A&M University System is responsible for helping municipalities and counties determine the relative impacts of local amendments to the codes, and to report to the TCEQ on the status and effect of the local codes.

Energy Efficiency Programs in Certain Political Subdivisions

Under the TERP, affected counties and political subdivisions, other than a school district, in a nonattainment area or in an affected county are asked to implement energy-efficiency measures and to establish a goal to reduce the electric consumption by the political subdivision by five percent each year for five years, beginning January 1, 2002.

Affected political subdivisions are to report annually to the Texas Comptroller's State Energy Conservation Office (SECO) regarding the political subdivision's efforts and progress. SECO is to provide assistance and information to political subdivisions to help in meeting the goals of the program.