

SUBJECT: Extending and expanding TERP and adding new air quality programs

COMMITTEE: Environmental Regulation — committee substitute recommended

VOTE: 7 ayes — Cook, Burnam, Farrar, Hancock, Legler, Veasey, Weber
0 nays
1 present not voting — Dunnam
1 absent — Chisum

SENATE VOTE: On final passage, April 14 — 22-8 (Estes, Fraser, Huffman, Jackson, Nelson, Nichols, Patrick, Shapiro)

WITNESSES: For — Ramon Alvarez, Environmental Defense Fund; Yvonne Castillo, Texas Society of Architects; Paul Cauduro, Texas Association of Builders; Kelly Frels, Texas Environmental Research Consortium; Wendi Hammond; Luke Metzger, Environment Texas; Nelson Nease, Cardinal Glass Industries; Adele Noel, Travis County; Deron Patterson, Texas Glass Association; Cyrus Reed, Lone Star Chapter, Sierra Club; Kate Robertson, Environmental Defense Fund; Tom Smith, Terry Thorn, Public Citizen; Michael Vasquez, Texas Conference of Urban Counties, Texas Clean Air Working Group; (*Registered, but did not testify*: Larry Casto, Texas Clean Air Cities Coalition; Deece Ekstein, Travis County Commissioners Court; John Esparza, Texas Motor Transportation Association; Karen Hadden, SEED Coalition; Joan Hilgers, Texas League of Women Voters; T.J. Patterson, City of Fort Worth; Chris Shields, TENASKA; Bill Stout, Green Party of Texas; Matthew Tejada, GHASP; Tammy Thompson)

Against —Walt Baum, Association of Electric Companies of Texas; Pat Carlson, Texas Eagle Forum; Amy Dempster, Consumer Electronics Association; Douglas Dinkins, Independent Pool & Spa Association; Debbie Hastings, Texas Oil and Gas Association; John Mann, Sunrise Solar of Dallas Ft. Worth Inc.; Celina Romero, Texas Pipeline Association; Kevin Tucker, Aquatic Professionals Education Council; (*Registered, but did not testify*: Kathy Barber, Texas Retailers)

Association; Trey Blocker, Texas Association of Manufacturers; Gregory Brazaitis, Energy Transfer Company; Marvin Brooke, Immigration Reform Coalition of Texas; James Clark, American Chemical Council; Jeffrey Clark, Technology Association of America; Rebecca Forest; Kinnan Golemon, Shell Oil; Hugo Gutierrez, Marathon Oil Corporation; Adam Haynes, TIPRO, Chris Hughes, International Power; Linda Koenig, Chevron Phillips Chemical; Maria Martinez; Warren Mayberry, DuPont; Cindy McCauley, LyondellBasell Industries; Mike Meroney, Huntsman Corporation; Julie W. Moore, Occidental Petroleum; Brent Munhofen; Bill Oswald, Koch Companies; Steve Perry, Chevron USA; Hector Rivero; Texas Chemical Council; Lindsay Sander, KinderMorgan; Tom Sellers, Conoco Phillips; Sara Tays, Exxon Mobil Corporation; Kathleen White, Texas Public Policy Foundation, Daryl Joyce, Randall Peterson)

On — James Bass, Texas Department of Transportation; William Gill, Central Texas Clean Air Coalition; Stephen Minick, Texas Association of Business; Dylan Dobecki, Ricard Hyde, David Schanbacher, TCEQ; (*Registered, but did not testify*: George Beatty, Texas Environmental Research Consortium; Kelley Stripling, Texas Department of Agriculture)

BACKGROUND: **TERP.** The 77th Legislature in 2001 enacted SB 5 by Brown to create the Texas Emissions Reduction Plan (TERP). TERP includes several financial-incentive and assistance programs designed to improve air quality in Texas. TERP is managed by the Texas Commission on Environmental Quality (TCEQ). TERP programs are intended to reduce pollutants, including emissions of nitrogen oxides (NOx). Counties in non-attainment and near-non-attainment areas are eligible for specific TERP incentive programs under SB 5. TERP and its funding sources are set to expire in 2013.

TERP's primary incentive program is the Emissions Reductions Incentive Grant (ERIG) program. This program provides grants to reduce NOx emissions from high-emissions diesel sources in affected counties. Grants can be used to fund new purchases, replacements, retrofit technologies, and qualifying fuels.

New Technology Research and Development Program. As a component of TERP, the New Technology Research and Development Program (NTRD) provides financial incentives to support research, development, and commercialization of technologies to reduce pollution. The Texas Environmental Research Consortium (TERC), a nonprofit

organization based in Houston, is administering the NTRD Program under a contract with TCEQ.

Advanced Clean Energy Projects. In 2007, the 80th Legislature enacted HB 3732 by Hardcastle, which put incentives in place for advanced clean energy projects, including the development of clean coal electricity generation projects, which take anthropogenic carbon dioxide and inject it into deep brine reservoirs for permanent storage. Clean coal projects can use sequestered carbon dioxide for enhanced oil recovery.

LIRAP. The 77th Legislature in 2001 created the Low Income Vehicle Assistance, Retrofit and Accelerated Vehicle Replacement Program (LIRAP) through the enactment of HB 2134 by Chisum. Administered by TCEQ, this program provides financial assistance for low-income vehicle owners who fail an emissions test. Eligible owners must have a household income at or below 300 percent of the federal poverty level. SB 12 by Averitt, enacted by the 80th Legislature in 2007, expanded LIRAP eligibility, and allowed for excess LIRAP funds to be used by local governments for air quality improvement projects.

DIGEST:

CSSB 16 would implement a number of provisions to improve air quality in Texas, including creating a new TERP program, expanding eligibility for the advanced clean energy projects program, and updating energy efficiency standards.

TEXAS EMISSIONS REDUCTION PLAN (TERP) REVISIONS

TERP objectives. TERP objectives would be expanded to include advancing new technologies that reduce NO_x emissions from stationary sources and focusing on non-attainment and near non-attainment areas with high concentrations of fine particulate matter from internal combustion engines.

Expiration dates. The bill would extend TERP until August 31, 2019. CSSB 16 also would extend the clean school bus program and the following TERP surcharges until August 31, 2019:

- heavy duty diesel equipment;
- on-road diesel vehicles weighing more than 14,000 lbs;
- vehicle title fees;
- truck-tractors; and
- commercial motor vehicles.

New Technology Implementation Grant Program. The bill would establish the New Technology Implementation Grant Program as a new TERP program. The program would provide grants aimed at reducing emissions from point sources by offsetting the incremental costs of emissions reductions.

Projects. The projects that could be eligible for new technology grants include:

- advanced clean energy projects;
- new technologies costing more than \$500 million that reduce pollution from point sources; and
- renewable energy electricity storage projects.

Funding. The program would be allocated a portion of the funding dedicated to the Diesel Emissions Reduction Program, which comprises 87.5 percent of the TERP Fund. The bill would allow for a defined amount of this funding to be set aside for renewable energy electricity storage projects.

Applications. TCEQ would evaluate each new technology implementation grant application for emissions reduction potential, cost-effectiveness, contributions to air quality goals, and the strength of the implementation plan. TCEQ would be required to calculate projected emissions reductions and project cost-effectiveness. TCEQ also would be required to ensure projects funded resulted in emissions reductions not otherwise required by state or federal law. Preference would be given to cost-effective projects that used Texas' natural resources, contained an energy efficacy component, or included use of a renewable energy source such as solar or wind.

Interagency review process. In the grant application review process, TCEQ would be required to obtain input from the comptroller, the Public Utility Commission (PUC) and the Railroad Commission. The comptroller would assess an applicant's financial stability, the project's economic benefit, and its job creation potential. The PUC would assess the reliability of proposed technology and the feasibility and cost-effectiveness of electric transition associated with the project. The Railroad Commission (RRC) would assess the cost and availability of fuel for the project. TCEQ also would solicit input from other agencies about matters relevant to a particular agency's functions.

Grants. Grant amounts could not exceed the incremental cost of a proposed project. Financial incentives, like tax breaks, that reduced the cost of a project would be subtracted from the project cost to determine the incremental cost. Applicants would be required to pay 50 percent of the costs associated with project implementation. The comptroller would review use of grant money. Grant money would be restricted to incremental costs and could not be used to pay costs of operating and maintaining emissions-reducing equipment.

Report. The bill would require TCEQ to submit an annual report detailing applications received and grants awarded. The program would end on August 31, 2019.

New Technology Research and Development Program. CSSB 16 would allow TCEQ to contract with nonprofits and institutions of higher education in administering the New Technology Research and Development Program.

Air quality research. The bill would add an air quality research component to the new technology research and development program. TCEQ would contract with a nonprofit or institution of higher education to carry out an air quality research program. The program would have a board of directors consisting of two individuals with relevant scientific expertise, not more than four county judges from the Houston-Galveston-Brazoria and Dallas-Fort Worth non-attainment areas, and not more than 11 members total. The board would oversee the allocation of new technology research and development grants. The air quality research program would receive 20 percent of the 9 percent of the TERP fund dedicated to the New Technology Research and Development Program.

The renewable energy development contract between TCEQ and the Energy Systems Laboratory at the Texas Engineering Experiment Station would focus on statewide emissions reduction goals, rather than only on the Houston-Galveston-Brazoria and Dallas-Fort Worth non-attainment areas.

Other TERP revisions. The amount of the TERP fund dedicated to the New Technology Research and Development Program would be reduced from 9.5 percent to 9 percent, and the amount for TCEQ administrative costs would be increased from 1.5 percent to 2 percent. The bill would require natural gas recovery projects to operate in non-attainment areas or

affected counties in order to qualify for the diesel emissions reduction program

ADVANCED CLEAN ENERGY PROJECTS

Projects and baseline requirements. The bill would specify that projects using coal, biomass, solid waste, or other such fuels would qualify as advanced clean energy projects whether implemented in connection to a new facility or with upgrades to an existing facility, and that such projects could involve a portion of the facility's emissions. TCEQ would adopt baseline emissions reduction requirements, and projects would have to document compliance with these requirements.

Carbon capture and storage. Advanced clean energy projects would include carbon capture and sequestration projects that captured and stored at least 50 percent of a facility's emissions. Geologically stored carbon dioxide could be used for enhanced oil recovery. Carbon capture and storage pilot studies would not be required to capture at least 50 percent of a facility's emissions as long as the following conditions were met:

- the study's purpose was to test the technology's effectiveness;
- the study would be conducted for no more than two years;
- the applicant submitted documentation proving how the technology was expected to reduce overall harmful emissions; and
- a report was produced at the end of the study and made available to the public.

VEHICLES

LIRAP. The bill would increase from five to 10 days the amount of time counties had to provide a dealer with vehicle repair or replacement funds. Counties receiving LIRAP funding for local clean air projects would receive an incentive for implementing new technologies to combat the use of counterfeit state inspection stickers.

Idling of motor vehicles. The bill would allow vehicles weighing more than 8,500 pounds to idle at any time provided the vehicle was equipped with a 2008 or later heavy-duty diesel engine certified by the EPA or another agency to emit no more than 30 grams of NO_x per hour. This idling provision would expire on November 1, 2010.

The bill also would increase the maximum vehicle weight limit by an amount necessary to compensate for the additional weight of an idle reduction system not to exceed 400 pounds. The bill would require a driver to provide proof to a law enforcement officer or agency official that the idle reduction technology was fully functional and that the weight increase was only used for the idle reduction system.

HOMES AND BUILDINGS

Building energy codes. CSSB 16 would adopt the May 1, 2009, energy efficiency provisions of the International Residential Code for single family home construction in Texas beginning on January 1, 2012. Also, beginning on January 1, 2012, International Energy Conservation Code energy efficiency standards from May 1, 2009 would apply to all other residential, commercial and industrial buildings.

Housing partnership rebates. The bill would require the State Energy Conservation Office to use rebates to promote energy efficiency in residential housing. The bill also would allow SECO to contract with other state agencies.

OTHER CLEAN AIR PROVISIONS

Federal greenhouse gas reporting rule. CSSB 16 would direct TCEQ to partner with the RRC, the Texas Department of Agriculture (TDA) and the PUC to work with the federal government in the process of developing greenhouse gas reporting and registry requirements. TCEQ also would adopt rules for private and public facilities eligible for participation in the federal greenhouse gas registry. The bill would require TCEQ to establish a registry of voluntary actions taken by state agencies to reduce carbon dioxide emissions since September 1, 2001. TCEQ would work with the EPA to get credit for early action under any federal greenhouse gas regulations.

Point sources. The bill would establish a searchable online database of emissions from TCEQ-permitted point sources. The bill would add a federally required fee on stationary sources in severe non-attainment areas to the list of Clean Air Act fees.

Mercury monitoring. If the federal government imposed regulations on mercury emissions from coal-fired plants, power plant operators would have 18 months to install a monitor and track mercury emissions. In this

instance, the operator would have to report mercury emissions to TCEQ quarterly and make the information available publicly.

The bill would take effect September 1, 2009.

**SUPPORTERS
SAY:**

TERP. CSSB 16 would expand TERP to include incentives for reducing emissions from point sources. TERP has long been criticized for only offering incentives for emissions reductions from mobile sources, like cars and trucks, and overlooking point sources like power plants. Coal-fired power plants are notorious for emitting massive amounts of NO_x, which pollutes the air and endangers public health. The new technology implementation grant program set up by the bill would give matching grants to eligible power plants that took steps to reduce NO_x emissions.

CSSB 16 would enhance TERP and other state programs designed to improve air quality in areas of Texas that do not meet federal standards. Three metropolitan areas in Texas have air pollution levels that exceed the EPA eight-hour ozone standard: Houston-Galveston-Brazoria; Dallas-Fort Worth; and Beaumont-Port Arthur. Several other areas have rising pollution levels that are nearing non-attainment status. In order not to jeopardize federal highway funding, the state must implement more aggressive measures to reduce NO_x emissions.

Through the reduction of NO_x emissions, TERP protects the environment and health of Texas residents. Besides smog creation, NO_x emissions can contribute to acid rain and oxygen depletion in bodies of water. Also, NO_x emissions result in health problems, such as asthma and emphysema, while also aggravating heart disease and damaging lung tissue. By bolstering TERP, the bill would help reduce future costs to the state in public health and environmental remediation.

Advanced clean energy projects. The bill would expand eligibility requirements for qualifying a project as an advanced clean energy project. TCEQ has yet to receive an application for the program since it was established in 2007. Relaxing the program criteria to allow for projects that involve a reduction in a portion of the emission from an existing facility would open the program to more applicants.

As the demand for electric power grows and the externalities of carbon-based fuels become more apparent, Texans increasingly have called for more environmentally clean technologies. CSSB 16 would allow more

clean coal plants to qualify as advanced clean energy projects and receive the streamlined permitting and tax breaks associated with the program. Encouraging advanced clean energy projects would ensure that Texas would be positioned to attract the cleanest carbon-fueled power plants in the nation. Advanced clean energy has the potential to lessen the impact of federal carbon regulation by advancing technology to enable Texas to use the lowest cost and most reliable fuel available.

Vehicle idling. CSSB 16 would allow trucks with new clean diesel engine technology to idle. Trucks equipped with an EPA-certified “clean idle” engine contribute no more than 30 grams of dangerous nitrogen oxide emissions per hour when idling. Even California, a state known for strict air quality standards, allows these clean engine trucks to idle at any time. CSSB 16 would give the trucking industry more than a year to upgrade trucks to cleaner engine technology.

The bill also would promote the use of Auxiliary Power Units in the trucking industry, which present a viable and eco-friendly alternative to idling. Auxiliary Power Units are small generators that allow trucks to operate heat and air conditioning systems without running the primary engine. These units use much less fuel and therefore emit much less pollution than standard truck engines. CSSB 16 would prevent the weight of Auxiliary Power Units from being applied to the maximum vehicle weight allowable for trucks.

Greenhouse gases. The bill would bring Texas to the table in federal discussions on the regulation of carbon dioxide and other greenhouse gases. In April 2009, the EPA declared greenhouse gases to be a threat to public health, which represents the first step in the federal emissions regulating process. The bill would direct TCEQ to work with other state agencies in deliberations with the EPA to ensure that Texas receives credit for actions that already have been taken to reduce greenhouse gas emissions.

**OPPONENTS
SAY:**

Advanced Clean Energy Projects. Carbon capture and storage (CCS) technologies have not been proven and do not represent the most environmentally friendly option for combating global warming. CCS is still in its technological infancy and needs much more research to advance to viability. Texas should focus on proven renewable energy sources, like solar and wind, rather than search for ways to continue to burn coal. Mining for coal has significant negative environmental effects, and

transporting coal requires a lot of energy. Fossil fuels should be phased out entirely over time because their net impact on the environment will always be negative.

CSSB 16 would set too low the percentage of CO2 to be sequestered. Some companies are boasting that they could design plants that would capture as much as 90 percent of their CO2 emissions. If this is possible, then making 50 percent the standard might be a disincentive for innovation. Incentives should be given for going beyond what already can be achieved. Standards should be strengthened every few years in order to continue to improve emission standards as new technology became available.

Vehicle idling. The bill would apply to too broad of a range of trucks, including farm trucks, recreational vehicles, and ranch trucks, all of which can weigh more than 8,500 pounds. The goal of idling legislation should be to target large commercial trucks that emit the largest amount of harmful particulate matter

OTHER
OPPONENTS
SAY:

The House committee substitute version of the bill deleted a number of important provisions that would have enhanced the bill's effectiveness. Plug-in hybrids incentives, the energy efficiency appliance purchase incentive program, and consideration of cumulative effects of emissions in TCEQ permitting all are important components of improving air quality in Texas.

NOTES:

The fiscal note indicates the bill would cost general revenue \$1,182,226 in fiscal 2010-2011.

The House committee substitute deleted the following provisions from the Senate-passed version of the bill:

- the plug-in hybrid motor vehicle purchase credit program;
- the energy efficient appliance purchase incentive program;
- appliance efficiency standards; and
- consideration of cumulative effects of a facility's emissions in the TCEQ power plant permitting process.