Natural OUTLOOK
PD-020/14-06 SEPTEMBER 2014

TEXAS EMISSIONS REDUCTION PLAN (TERP)

THE SUCCESS CONTINUES

The primary goal is to obtain reductions of nitrogen oxides (NO_x), a major contributor to ozone formation. TERP is focused on areas of the state that are not attaining, or close to not attaining, the federal standard for ground-level ozone.

The Texas Emissions Reduction Plan (TERP), now in its 13th year, is achieving significant reductions in air emissions. And, over the past several years, TERP has expanded to include programs focused on helping to increase the use of alternative fuels for transportation.

TERP offers voluntary incentive programs to provide monetary grants to reduce emissions from vehicles and equipment operating in Texas. The primary goal is to obtain reductions of nitrogen oxides (NO_x), a major contributor to ozone formation. TERP is focused on areas of the state that are not attaining, or close to not attaining, the federal standard for ground-level ozone.

Emission Reductions from Large Diesel Engines

The most familiar TERP grant has been the Diesel Emissions Reduction Incentive, or DERI, Program. This program provides grants for the replacement, repower, or upgrade of heavy-duty vehicles, off-road equipment, locomotives, marine vessels, and certain stationary engines operating in the designated eligible counties.

Since TERP was established in 2001, the DERI Program has awarded over $905 million to 9,580 projects. These projects have replaced or upgraded over 15,623 vehicles and pieces of equipment and will reduce over 160,836 tons of NO_x over the period that the grant recipients have committed to operate the vehicles and equipment in the eligible areas. These projects have been very cost-effective, with an average cost of $5,627 per ton of NO_x reduced.

Emission Reductions through the Use of Alternative Fuels

With the increased interest in the use of alternative fuels for transportation, beginning in 2009 the Texas Legislature expanded the existing, smaller incentive programs under TERP to include programs specifically aimed at reductions in vehicle emissions through the use of alternative fuels. There has been significant interest and participation in these programs, as

Diesel Emissions Reductions Incentive (DERI) Program

~ Established 2001 ~

Over **$905 million** awarded to **9,580 projects** for replacing or upgrading over **15,623 vehicles** and pieces of equipment.
Reduction of **160,836 tons** of NO_x.

vehicle owners and operators look for alternatives that will help reduce fuel costs while reducing vehicle emissions.

The first of these new programs, the Texas Clean Fleet Program, was created in 2009. It was designed to encourage owners of larger fleets of diesel vehicles to replace those vehicles with vehicles powered by alternative fuels (including natural gas, liquefied petroleum gas [propane], hydrogen, methanol, and electricity) or with hybrid-drive vehicles.

In 2011, the focus on alternative fuels was expanded even further with the creation of the Texas Natural Gas Vehicle Grants Program. This program was established to encourage owners of medium- and heavy-duty diesel-powered vehicles operating in and between Houston, Dallas, Fort Worth, and San Antonio to replace those vehicles with vehicles powered by natural gas.

Other areas determined to be of concern for air quality and eligible under the DERI Program are also eligible under this program, ensuring continuity between the programs in helping to reduce air emissions in the areas of concern.

Through August 2014, these programs have awarded over $60 million for the replacement or repower of 1,019 diesel-powered vehicles with vehicles powered by natural gas and other alternative fuels. These include 802 vehicles powered by natural gas, 162 vehicles powered by propane, and 55 diesel-hybrid vehicles.

Another new program was added by the Legislature in 2013 to provide further incentives for the purchase of light-duty vehicles (i.e., cars and light trucks) powered by natural gas or electricity. This program is available to vehicle buyers statewide. The Light-Duty Motor Vehicle Purchase or Lease Incentive Program can provide a rebate of up to $2,500 for the purchase or lease of a new light-duty car or light truck powered by natural gas, liquefied petroleum gas, or electricity.

Through August 2014, this program awarded $690,625 for the purchase of 311 electric-drive vehicles and six natural-gas vehicles. Reservations were pending on rebates for an additional 67 natural-gas vehicles and 30 electric-drive vehicles that were on order, totaling $238,750. The current rebate period will continue through June 2015.

Providing Alternative Fuels

To help ensure that sufficient fueling sources are available to provide alternative fuels, in 2011 the Legislature created the Alternative Fueling Facilities Program and the Clean Transportation Triangle Program. The Alternative Fueling Facilities Program provides funding for the construction or upgrade of fueling facilities to provide alternative fuels, including natural gas, propane, biodiesel, hydrogen, methanol, and electricity. This program is limited to the nonattainment areas of Texas, to encourage the use of these fuels in those areas to help reduce air emissions.

The Clean Transportation Triangle Program was established in conjunction with the Texas Natural Gas Vehicle Grants Program to provide natural gas fueling services in and between the Houston, Dallas, Fort Worth, and San Antonio areas, as well as the other areas eligible for funding under the main DERI Program. This program is viewed by supporters as part of a larger, nationwide effort to establish an increasing number of highway corridors over which larger trucks may travel solely on natural gas.

Through August 2014, these programs had provided $5,686,602 for 22 natural gas fueling facilities. Additional awards totaling $15,414,153 for projects selected for funding in 2014 were pending, awaiting finalization and execution of their grant contracts. These pending projects included 32 natural gas fueling facilities and six facilities to provide electricity for charging electric-drive vehicles.

Other Sources of Air Emissions

TERP is multifaceted in its approach toward reducing emissions. There are other programs funded under TERP aimed at reducing air emissions.

The Texas Clean School Bus Program funds the installation of retrofit systems on school buses throughout the state to reduce emissions of particulate matter (soot and other particles) in and near the bus, thereby reducing the exposure of schoolchildren to these materials. Through August 2014, this program has awarded $25.9 million to 188 school districts for the upgrade of over 7,100 school buses.

TERP
TEXAS EMISSIONS REDUCTION PLAN
A PROGRAM OF THE TCEQ

Texas Clean Fleet Program
~ Established 2009 ~

Texas Natural Gas Vehicle Grants Program
~ Established 2011 ~

Combined awards of over **$60 million** for the replacement or repower of **1,019 vehicles** from diesel to natural gas, propane, and diesel-hybrids.

SCHOOL BUS
STOP
Texas Clean School Bus Program

Texas Clean School Bus Program
~ Through August 2014 ~

Awarded **$25.9 million** to **188 school districts** for the upgrade of over **7,100 school buses**.

The New Technology Implementation Grants Program was established in 2009 to help offset the incremental costs of emission reductions of pollutants from electricity-generation facilities and other stationary sources. This included support for advanced clean-energy projects, support for new-technology projects that reduce emissions of regulated pollutants from point sources, and support for electricity-storage projects related to renewable energy.

In 2011, the program funded a project to store energy generated from wind-power sources underground using compressed air. This year, additional projects are being considered for funding, including two electricity storage projects, a new-technology project, and an advanced clean-energy project.

In addition to the programs administered by the TCEQ, other agencies have responsibilities under TERP for programs aimed at energy efficiency.

The State Energy Conservation Office, housed in the office of the Texas Comptroller of Public Accounts, works with institutions of higher education and other governmental entities to establish and implement plans to reduce the use of electricity.

The Public Utility Commission of Texas tracks and reports on efforts by electricity providers to implement energy-efficiency measures and programs.

New statewide energy-efficiency code requirements were adopted under TERP, and the Energy Systems Laboratory, a division of the Texas A&M Engineering Experiment Station, assists the TCEQ and these other agencies and governmental entities to assess the impact on air emissions from these and other energy-efficiency programs.

Monitoring and Oversight

The TERP incentive programs have awarded nearly $1 billion in grants since 2001. With the amount of money involved, the TCEQ performs substantial monitoring and oversight of the grant-funded projects. The TCEQ works with a monitoring contractor to conduct over 500 field visits per year to review records and confirm compliance. The TERP staff processes over 5,400 reports from grantees each year to document the use of the grant-funded vehicles and equipment.

When grantees are not meeting their grant commitments for the amount of use of the grant-funded vehicles and equipment, a first step is to work with them to improve performance. The TCEQ issues over 200 low-performance notifications each year, which starts a process to help the grantees improve. For grantees that are not able to meet their commitments, TERP staff will work with them to retrieve a portion of the grant funds based on the amount of emission reductions that were not achieved.

As with any program of this size, stricter action is sometimes necessary.

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In these instances, the TCEQ must refer a grantee to the office of the Attorney General of Texas for possible civil action to recover grant funds based on not meeting the grant commitments.

In one example, a grantee defaulted on a loan for three pieces of equipment soon after receiving the grant reimbursement for the down payment made on the purchases. After threat of further civil action, the grantee agreed in a settlement to repay the $72,000 owed the state because the equipment was repossessed and could no longer be operated by the company according to the grant requirements.

In addition, potential fraud is investigated and referred to the district

attorney for possible criminal prosecution. There have been several prosecutions for fraud, with fines and jail time or probation assessed. For example, a company and its owner pleaded guilty to felonies for securing execution of grant documents by deception. The owner was sentenced to 10 years' probation and the owner and the company were required to pay restitution and fines totaling $100,000.

In another case, TERP staff identified numerous inconsistencies with applications that had been submitted through a particular consultant working with dealers and applicants to complete the application process. Those applications were pulled from consideration and were referred for further investigation, which revealed evidence that the consultant was possibly falsifying signatures and other information on the applications and the attendant documentation. The consultant's probation on a previous conviction was revoked and he went back to jail.

TERP Revenue Sources

TERP is funded from several fees and surcharges related to heavy-duty vehicles and equipment, as follows:

- A portion of the fee on obtaining a vehicle certificate of title: $20 for applicants in nonattainment counties and other affected counties, and $15 for applicants in other counties.
- A 2% surcharge on the sale, lease, or rental of new or used off-road heavy-duty diesel equipment (this same surcharge is imposed on the storage, use, or other consumption of this type of equipment).
- A 2.5% surcharge of the total consideration on the sale, lease, or use of a pre-2007 model year heavy-duty diesel vehicle (over 14,000 pounds) and a 1% surcharge for a model year 2007 or newer.
- A 10% surcharge on the total fees due for registration of truck-tractors and commercial motor vehicles.
- A $10 fee on the safety inspection of commercial motor vehicles.

Information Online

TERP program and incentives
TERPgrants.org

Texas Clean School Bus program
TexasCleanSchoolBus.org

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