

Texas-New Mexico Power

Energy Efficiency Programs Bulletin

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Switching to Efficiency

By the numbers: 162,216 kWh | \$5,831 incentive

National Switchgear, a power distribution equipment and services provider, completed its first project in the Commercial Solutions program this year. Working with TNMP, representatives from the company identified savings opportunities in the warehouse and office building lighting. The retrofitted equipment will save more than 162,000 kilowatt-hours of energy annually, equivalent to reducing the carbon dioxide emissions from nearly 13,000 gallons of gasoline, according to U.S. Environmental Protection Agency calculations.

"We were able to start saving energy and money the minute we turned on a light switch," said Facility Operations Manager Billy Theriot. "With the amount we will save on energy costs, we can put more money towards other projects that will benefit our company."

National Switchgear committed to multiple years of energy efficiency projects by signing on to build its second warehouse and a training room with high efficiency lighting and HVAC systems. Additionally, the company plans to replace old HVAC units at their office and original warehouse.



Prioritizing Investments For Responsible Energy Use

By the numbers: 78,808 kWh | \$3,337 incentive

In 2011, TNMP helped Commercial Solutions partner Reeves County Hospital District revise blueprints for its new Rural Health Clinic. Program staff recommended replacing the proposed 13 SEER HVAC units with 16 SEER units. The new equipment is estimated to pay for itself in as little as 5 1/2 years, and save \$37,000 over the estimated useful life of the units.



"In order for hospitals to remain at the

forefront of providing modern health care, they must prioritize where to invest their limited capital," said Project Manager & Safety Director Lorenzo J. Serrano, MBA. "As health care facilities are some of the biggest consumers of energy, we believe it's our responsibility to always keep energy efficiency in mind when designing, replacing and modifying building systems."

The new equipment will save nearly 79,000 kilowatt-hours of energy annually, equivalent to reducing the carbon dioxide emissions of more than 6,000 gallons of gasoline, according to U.S. Environmental Protection Agency calculations.

"The money saved from implementing a higher efficient HVAC system...can be used to buy equipment or subsidize the cost of extra staff," said Serrano.

Texas-New Mexico Power offers the SCORESM Program to provide viable energy optimization for school districts, colleges and universities. Designed to educate institutions on energy management and encourage investment in energy efficiency, this program helps partners minimize the impact of volatile energy costs, ease budget pressures, improve infrastructure and optimize learning environments for students.

entities enhance energy efficiency, lower operating costs, improve air and environmental quality, and meet legislative and regulatory requirements.

Similar to SCORE and CitySmart, the TNMP Commercial Solutions Program provides technical and financial support to help commercial and industrial organizations identify and implement energy efficiency upgrade projects.

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The programs are sponsored by Texas-New Mexico Power and administered by CLEARresult. You can reach CLEARresult at (877) 338-8667 or tnmp@CLEARresult.com.

Visit us online: <http://eeprograms.net/tnmp>

PARTNER SUCCESS

The following partners were recently awarded for completed projects:

- A&A Machine: \$1,174
- Alvin ISD: \$5,692
- Angleton ISD: \$3,399
- Benchmark Electronics: \$5,987
- Blue Ridge ISD: \$2,235
- BREOF Convergence/Cyress One Data: \$7,923
- Fort Stockton, TX: \$1,067
- Friendswood, TX: \$1,735
- Gatesville, TX: \$160
- La Marque, TX: \$1,592
- League City, TX: \$10,206
- West Columbia, TX: \$280
- Clear Creek ISD: \$4,100
- Columbia Brazoria ISD: \$2,209
- Coryell Central Appraisal District: \$77
- Dickinson ISD: \$6,798
- Friendswood ISD: \$5,935
- Glen Rose ISD: \$12,115
- Gordon ISD: \$5,671
- Hope Lutheran Church: \$4,219
- Huffines Chevrolet Lewisville: \$1,161
- Lewisville ISD: \$7,827
- National Switch Gear Systems: \$5,831
- Pecos-Barstow-Toyah ISD: \$4,776
- Pilot Point ISD: \$1,221
- Reeves County Hospital District: \$3,337
- Rio Vista ISD: \$15,975
- Rivercrest ISD: \$2,077
- Terrell County ISD: \$1,369
- Terrell County: \$2,666
- Texas Advance Center: \$1,374
- Texas City ISD: \$45,696
- Texas Dept. of Criminal Justice: \$445
- Univ. of Texas Medical Branch: \$5,322
- West Texas Opportunities: \$415

Friendswood ISD Makes the Grade

By the numbers: 66,957 kWh | \$5,935 incentive

Friendswood Independent School District joined the SCORE Program in 2011 when officials made energy efficiency a top priority. The district benchmarked their facilities and participated in an Energy Master Planning Workshop to identify the least energy efficient buildings and prioritize projects.



The district's first round of projects included retrofitting the HVAC systems at Cline Elementary and Friendswood High, and replacing the roof at the Administrative Annex.

"Energy efficiency has become a primary focus in the district and we have had great response from our entire FSD team toward the push to be more energy efficient," said Assistant Superintendent Thad J. Roher. "We are seeing the numbers beginning to pay off."

The high efficiency equipment will save nearly 67,000 kilowatt-hours of energy annually, equivalent to reducing the carbon dioxide emissions of more than 5,000 gallons of gasoline, according to U.S. Environmental Protection Agency calculations. The district expects to save nearly \$8,000 a year on energy costs.

"All school districts across Texas are hurting in all areas from the budget shortfall we are facing," said Roher. "Right now energy efficiency means more money for kids and teachers and any savings to the district will be extremely beneficial. We are grateful for this program and the help we have received from TNMP."

Future lighting, HVAC and roofing projects have been identified for 2012 and 2013.

New 2012 T-8 Lighting Requirements = More Savings

By Kyle Hemmi

Due to new federal standards for linear fluorescents, standard T-8 electronic ballasts and lamps will no longer be eligible for utility incentives in retrofits starting in January. These new requirements, outlined to the right, are based on Consortium for Energy Efficiency (CEE) High Performance T-8 System (HPT8) standards. Detailed information and approved product listings can be found on the CEE website at <http://www.cee1.org/com/com-lt/com-lt-specs.pdf>.

The HPT8 systems offer **more savings potential** than standard systems and they make good technical and economic sense for program participants. In many cases, these systems can produce an **additional 25% savings** compared to standard electronic systems. And because the cost to install HPT8 systems is typically \$3 - \$5 per fixture, customers will usually experience a rapid payback. Other benefits include:

- longer lamp life
- better color rendering
- reduced maintenance and stocking costs

CEE High Performance T-8 (HPT8) Lighting Systems

Lamp Requirements*		Ballast Requirements	
Wattage	≤ 32	Ballast Factor	Low / Normal / High
CRI	≥ 80	Frequency	20 to 33 kHz or ≥ 40 kHz
Initial Lumens	≥ 3100	Power Factor	≥ 0.90
Mean Lumens	≥ 2900	Harmonic Distortion	≤ 20%
Life (hrs)	≥ 24,000	Ballast Efficacy Factor	See website

* For 30W/32W Products. See website for CEE requirements for reduced 25W & 28W products.

HPT8 System Efficacy: ≥ 90 Mean Lumens per Watt (MLPW) for Instant Start Ballast (all wattages) or ≥ 88 MLPW for Programmed Rapid Start Ballasts

While the new requirements do not affect new construction projects, HPT8 systems make the best sense in those projects for the same reasons. Take into account that IECC 2009 (ASHRAE 90.1-2007) lighting power densities are now the applicable energy code in Texas and you'll quickly realize that HPT8 is the most logical solution for new construction, too.