



# Sure Bet for Schools



## School-Wide Lighting Retrofit

### Elko County School District, Grammar #2 Elementary School

#### Project Description:

Elko County School District replaced outdated and inefficient T12 fluorescent lighting with T8 fixtures. Incandescent overhead fixtures, which were possibly the last such fixtures in the state school system, were also replaced with state-of-the-art T8 fluorescent fixtures. Extremely inefficient “encased” Metal Halide fixtures in the gym were replaced with T5 fixtures.

*Contractors: Codale Electric Supply, Inc., Columbia Electric Supply and Quantum Electric*

#### Results/Benefits:

The District's Building Operations & Construction Manager, has tried for 10 years to get the district to replace outdated and inefficient lighting at Grammar #2 School. After the completion of the T5 retrofit in the gym, the principal turned on the lights and all of the students started clapping as they were so excited to have new lights! The old 300 Watt fixtures provided a combination of direct light and reflective light from the ceiling which produced inadequate light output. Due to the size of the project a few dark areas were “reworked” to insure adequate light levels throughout each classroom, which is not unusual for a retrofit of this scale. Due to decreased heat output from the new fixtures there will be cooling savings along with decreased maintenance costs due to the longer life of the fluorescent lamps.

#### Project Details:

	<b>Total</b>
On-Peak Demand Savings	9.8 kW
Annual Energy Savings	78,638 kWh
Total Project Cost	\$44,122
Annual Energy Cost Savings*	\$8,650

\* Assumes that the electricity rate is \$0.11/per kWh

**See pictures on following page**



Incandescent Lighting in classroom



T8 Fluorescent Retrofit



500 W Incandescent Fixtures in Gym



New T5 Fixtures in Gym