

# **GOVERNOR'S ENERGY EFFICIENCY RECOGNITION**

## **Riley County Public Works Complex**

In the new Riley County Public Works Complex, there are many energy efficiency features.

Natural lighting coupled with T-5 and T-8 light fixtures were used throughout buildings in the complex, thereby reducing energy costs for lighting up to 75% in comparison to conventional lighting.

By utilizing a geothermal system, no gas or electricity is needed to heat or the cool the air throughout many of the buildings. Energy costs are reduced about 60% from a conventional HVAC system.

Further costs reductions are realized utilizing a central control system.

A radiant gas heat system was installed overhead in the main shop. Radiant gas heat is considered to be the most energy efficient heating system for large open facilities.

An in-floor heating system was installed in the main shop and in the vehicle wash bay. This system utilizes piping in the concrete floor to store and emit heat for maintaining constant heat and provide quick recovery. A glycol and water solution is circulated through the piping to transfer heat. This system could be supplemented with a solar heating unit.

The ventilation system in the main shop consists of three exhaust fans with a heat recovery system. The recovery system improves energy efficiency by providing heated makeup air when fans are engaged to reduce loads on other heating systems.

Several features allow the conservation of water.

The county is considering and planning to incorporate solar and wind generation in the future, plus solar hot water.