


WESTCARB Annual Business Meeting


An Electric Cooperative Perspective on Climate Change

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Background



Arizona Electric Power Cooperative is a customer-owned electric utility located in southeastern part of the state. We are the owner/operator of Apache Generating Station, which supplies power to six electric distribution cooperatives serving more than 270,000 customers in Arizona, California, and New Mexico. The fuel mix for this facility is coal for the baseload units and natural gas for the peaking units.

WEST COAST REGIONAL CARBON SEQUESTRATION PARTNERSHIP



Climate Change (Carbon) Mitigation Strategy

- Fuel Switching
- Renewable Energy
- Sequestration
 - Geologic
 - Agricultural



Fuel Switching

Both of Apache Generating Station's baseload units are dual-fuel capable: coal and natural gas. While coal is the economic fuel of choice, natural gas is an option.



Renewable Energy

- AEPCO has been actively involved in the development of renewable energy resources in Arizona since 2004. Over the past four years, AEPCO developed and administered a program that has resulted in the installation of nearly 400 residential and agricultural solar energy projects in Arizona. In 2007, AEPCO installed a 25 kW solar photovoltaic facility at its corporate office.
- AEPCO is currently a participant, along with four other southwestern utilities, in the development of a 250 MW concentrated solar generating facility. Most recently, AEPCO has begun negotiating a contract to build a 45 MW concentrated solar generating addition at the Apache Generating Station; it is expected to be completed and operating by 2011. When these projects are completed, AEPCO will have met its renewable portfolio standard goal.



Sequestration

- Agricultural
 - AEPCO has also begun investigating agricultural carbon sequestration, using algae, as a mitigation strategy for Apache Generating Station. The intriguing aspect of using algae is that the carbon sequestration part represents only the first step in a “value chain.”
- Geologic
 - AEPCO is a relative newcomer to the Arizona Utilities CO₂ Storage Pilot. We believe that this investigation of the viability of geologic sequestration on Arizona’s Colorado Plateau is important. Once proven, this could represent a carbon offset opportunity for AEPCO.

