

Memorandum

To: County Judge Anthony Cobos, Commissioner Anna Perez,
Commissioner Veronica Escobar, Commissioner Willie Gandara Jr. and
Commissioner Daniel Haggerty

From: Rosemary Neill, Director, Family & Community Services Department

Date: 6/11/2009

Re: Consent Agenda Item for June 15, 2009, Commissioner's Court Meeting

Action Item

Authorize the County of El Paso Transportation Manager to pursue U.S. Department of Energy Geothermal Technology Program funding. The Project would be a joint venture between El Paso County and Fort Bliss. No county match will be required.

Fiscal Impact

No county match will be required.

Background

This item will authorize the County of El Paso Transportation Manager, Bob Geyer, to pursue U. S. Department of Energy funding in collaboration with Fort Bliss to produce up to 10 megawatts of renewable electricity utilizing low temperature geothermal technology on a site located on the Fort Bliss military reservation.

If funds were secured, the county would participate with Fort Bliss by purchasing geothermal electricity at a rate at or below what it currently pays for electricity currently generated by coal and other fossil fuel generation facilities. The funds obtained would be used to help construct the facility and thus "write down" the cost of electricity to the county. The facility currently contemplated would produce up to 10 megawatts of power. Fort Bliss would use 7 to 8 megawatts of the energy generated while the remaining 2 megawatts would be available to the County of El Paso.

Fort Bliss, in an effort to meet its internal mandates to generate up to 7% of its power from renewable sources by 2012, has already applied for grants to “scale” the geothermal resource. The grant funds provided by the County of El Paso would be aggregated with other federal funds from Fort Bliss and private sector investment to build the facility. Once completed, the power would be “fed” into the interstate electric transmission system roughly a mile from the geothermal power plant and would be credited against power actually consumed by Fort Bliss and the County of El Paso.

A private partner, once selected, would be required to provide the necessary funding to complete the project which would be sufficient to meet American Recovery and Reinvestment Act (ARRA) match requirements. Fort Bliss is currently interested in employing newly available low temperature geothermal technology. This technology operates in the 150 degrees Fahrenheit to 220 degrees Fahrenheit range that is substantially below the temperature required to drive traditional high temperature “steam” geothermal technologies.

Beyond the low temperature technology itself, perhaps the singular advantage of the effort is that this would be carbon free electricity and would provide the County of El Paso the opportunity to take a huge step forward in addressing long term global warming and sustainability issues. The useful life of the facility is currently estimated at 30 years.

This project will be coordinated between the County of El Paso, Fort Bliss, the U. S. Department of Energy and a private sector provider. Fort Bliss and the private sector provider will take the lead in the design, construction and operation of the plant.