FOR IMMEDIATE RELEASE
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The Rocky Mountain Oilfield Testing Center (RMOTC) is providing the following information on local activities:

Geothermal Research Initiative at RMOTC

(Casper, WY) – The Rocky Mountain Oilfield Testing Center (RMOTC) announces its involvement in a new collaboration between the U.S. Department of Energy's offices of Fossil Energy (FE) and Energy Efficiency and Renewable Energy's (EERE) to demonstrate low-temperature geothermal electrical power generation systems using oilfield fluids produced at the Naval Petroleum Reserve #3 (NPR-3) near Midwest, Wyo.

RMOTC, part of FE's Office of Oil and Natural Gas, will work directly with EERE's Geothermal Technologies Program (GTP) in a multi-year collaboration to demonstrate the versatility, reliability, and widespread deployment capabilities of low-temperature geothermal electricity production systems that work off of the co-produced water from oilfield operations. These systems turn otherwise discarded water into an energy resource by extracting the heat energy in the water.

This collaboration will support continuation of a test started in September, 2008 at NPR-3, site of the historic Teapot Dome oilfield, which is operated by RMOTC for DOE. The power system is a commercial standard design Ormat Organic Rankine Cycle (ORC) power plant. The binary power unit uses produced hot water as the heating fluid for a heat exchanger in the Ormat Energy Converter (OEC). In the heat exchanger, a secondary working fluid, an organic fluid with a low boiling point, is vaporized. That vapor is then used to spin a turbine coupled to a generator to produce electricity.

Under this collaboration, EERE is providing funding for the purchase of the existing power plant unit from Ormat Technologies, Inc. located in Reno, Nev. RMOTC will showcase its capability to serve as an optimal testing facility for geothermal technologies, while enhancing knowledge sharing between the geothermal and petroleum industries. With a producing oilfield and long standing expertise with fossil energy, this project provides a unique opportunity for FE to contribute its experience to emerging renewable energy fields.

This project is unique in its production of onsite renewable power and has the potential to increase the productivity and longevity of existing U.S. oil fields. Harnessing hot water produced during oil production to power the oil field could lead to more economical access to reserves, especially in older depleted fields. The produced electricity powers field production equipment, which offsets purchased electricity; other applications are being explored.

Ultimately the GTP hopes to collect operational and performance data for various climates and system configurations. This information will be freely available, educating the industry and

public about the high potential of geothermal renewable energy from co-produced hot water. With an estimated 10 barrels of hot water being produced along with each produced barrel of oil in the United States, there is significant resource potential for this technology.

This joint venture supports the integration of traditional and emerging energy technologies in a way that serves to generate both discussion and action around new strategies for energy generation. Collaboration between diverse programs of FE and EERE is good for DOE and provides enormous benefit by developing the nation's energy supply. This project will bridge a gap between two disciplines that can both benefit from synergistic activities. Low-temperature geothermal sources and co-produced fluids hold significant promise for electrical generation in the near term.

Websites:
DOE Fossil Energy - www.fossil.energy.gov
RMOTC - www.rmotc.doe.gov
DOE Energy Efficiency and Renewable Energy - www.eere.energy.gov
EERE Geothermal Technology Program - http://www.geothermal.energy.gov

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