

Project aims to bring new life to wells at The Geysers

Glenda Anderson, Santa Rosa Press Democrat, 12-25-09

Two defunct steam-generating wells at The Geysers will be revived this summer as part of a federally-supported project aimed at expanding and enhancing geothermal energy sources.

“The government is looking for these types of projects,” said Mike Rogers, vice president of operations for Calpine's geothermal project at The Geysers steam fields, which straddle Sonoma and Lake counties.

The project is funded in part by the Department of Energy, which has funneled more than \$400 million into its geothermal program this year. It will contribute \$5.7 million toward the cost of Calpine's project, estimated at almost \$12 million, according to energy department documents.

The Lawrence Berkeley National Laboratory is participating in the project.

Water will be injected into one of the two reopened wells to enhance naturally occurring underground steam production, as is done at Calpine's other electricity-generating wells at The Geysers, Rogers said.

The second well will be used to closely monitor and record the effects of the water infusion into hot rock formations beneath the earth's surface, he said.

Both wells are located in the northwestern portion of The Geysers fields in Sonoma County.

After a period of time, the functions of the two demonstration wells will be switched, Rogers said.

The difference between the demonstration project and current operations is the level of monitoring, which will include tracing the steam's source, movement and effects, Rogers said.

“The overarching intent here is to give us the best approach for expanding into the northwest corner of The Geysers,” he said.

Like the existing wells, the demonstration wells are expected to generate seismic activity, most of it unfelt. They're not expected to generate significant quakes, like those triggered by a controversial 2005 project in Basel, Switzerland. In the Swiss project, a company drilled three miles deep and generated steam by fracturing hot bedrock and then circulating water through it.

A proposal for similar drilling at The Geysers was halted this month by AltaRock Energy after the Swiss government permanently shut down the Basel operation.

Residents of Anderson Springs, a community of about 200 homes wedged in a narrow Lake County valley surrounded by geothermal wells, expressed relief that AltaRock had halted operations.

The valley is plagued by property-damaging earthquakes believed to be triggered by The Geysers' electricity generating wells.

Its residents also are pleased that Calpine is conducting its latest project some eight miles away from their homes. The study wells are located on the far northwestern section of The Geysers steam fields, which cover

about 30 square miles.

“We certainly are supportive of their efforts to test these technologies in areas that are a lot further from the community because it's less likely to have an impact,” said Jeff Gospe, president of the Anderson Springs Community Alliance.