Presidio County, Texas shows promise for geothermal development

Researchers from the University of Texas at Austin have found significant potential for geothermal in Presidio County, Texas, particularly in the border region.

Researchers from the the Bureau of Economic Geology (BEG) at the University of Texas, Austin have identified the border region of Presidio County in Texas as a promising site for geothermal development. The results of the study were presented to the Presidio Municipal Development District (PMDD), whose members expressed excitement over the findings and encouraged progress to the project's next steps.

In mid-2023, the PMDD approved funding of USD 15,000 to conduct a feasibility study for a geothermal power plant in South Presidio County. The contract was soon awarded to the research team at the University of Texas, Austin, followed by a nine-month study.

“Bottom line is, the immediate area in Presidio, but the whole county, looks like a really good development target. As good or better than areas that are already being developed in Texas,” said Ken Wisian, geophysicists at the University of Texas and head of the research team.

Wisian added that the whole of Presidio County has the conditions necessary for geothermal development. The conditions are best along the Rio Grande west of Presidio, where favorable temperatures can be reached at about 2.5 kilometers depth. However, these temperatures can also be found in the northern parts of the county, albeit at greater depths of around 5 kilometers.

Support for funding
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Map highlighting the hot and warm regions in Presidio County, Texas (source: HotRock Geothermal Reuse Consortium)

Wisian said that drilling an initial well in Presidio County will cost millions, but that this will be the most expensive part of the process. “Geothermal projects have high upfront costs, and very, very low back-end costs.”

Expressing excitement over the results of the study, local officials were supportive of efforts to look into possible funding sources. “Let’s just put our brains together and come up with draft proposals, and then we go to the county and say look, this is what we’ve come up with,” said Trey Gerfers, who directs the county’s groundwater district.

“Geothermal is going to be a huge component, going to be one of our major initiatives,” added John T. Kennedy, an economic development consultant.

More details on the research done on the geothermal potential in Presidio County were discussed in a past webinar that ThinkGeoEnergy hosted with Ken Wisian and Malcolm Ross. The webinar recording is available below:

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