

Geothermal backers set their sights on Calif.

Debra Kahn, Environment & Energy Publishing, 1-19-12

SAN FRANCISCO -- A gloomy federal policy outlook has the geothermal industry looking to California for help.

One of geothermal's key selling points is its ability to fill baseline electricity demand, unlike intermittent renewables. But low natural gas prices and a dearth of long-term federal incentives have hurt its chances, industry officials said at a conference here yesterday.

If concerns over hydraulic fracturing stall natural gas drilling, "that could be a game-changer," said Jonathan Weisgall, vice president of legislative and regulatory affairs at MidAmerican Energy Holdings Co.

The industry's federal wish list includes a clean energy standard, a price on carbon, some type of program to lower the cost of drilling and exploration, and a long-term extension of the production tax credit, which expires next year for geothermal. None of those appears likely in 2012, observers said, save for a bill from Sen. Jon Tester (D-Mont.) to create loans for developing high-risk exploration wells that passed the Senate Energy and Natural Resources Committee last month.

"For an industry that has to invest tens of millions of dollars in its drilling program, you can't expect it to be wondering after it's drilled every well if there's going to be a PTC," said Luka Erceg, CEO of Simbol Materials, which is trying to extract lithium and other valuable metals from geothermal wastewater.

The Geothermal Energy Association moved its annual conference from New York to San Francisco this year, touting the Bay Area's venture capital and technology expertise. "We're not quite where our wind and solar brethren are, but I think we can get there with help from California," said Karl Gawell, the group's executive director.

California Gov. Jerry Brown (D) has announced a goal of 8,000 megawatts of large-scale solar, wind and geothermal power by 2020. At about 2,600 MW currently, geothermal contributes twice as much as any other renewable resource in the state, but most of the plants are from the 1970s and '80s.

California state regulators have approved only one geothermal project in the past 20 years: CalEnergy Generation's 159 MW Black Rock project in the Imperial Valley, in 2011. Most of the other plants that have come online or been proposed in recent years have been 50 MW or less, to avoid the California Energy Commission's threshold for permitting.

Michael Picker, one of Brown's top energy advisers, said the state had made considerable progress on permitting renewables in general. But "without new financing models, the industry's going to start to slow down," he warned. "Like wind, it goes into hibernation every five years as Congress changes directions." That, in turn, forces the state to move faster on building transmission capacity, he said.

With its high upfront capital costs, long lead time and small carbon footprint, geothermal is similar to nuclear. California Energy Commissioner Karen Douglas said that geothermal would make an ideal replacement for nuclear as the state's two nuclear plants age.

"This is where geothermal power is our bread and butter," she said.

Although CalEnergy has a permit in hand, it's not going to build the project until it has a power purchase agreement and adequate transmission, said Weisgall, whose MidAmerican Energy Holdings owns CalEnergy. But low photovoltaic prices are also getting in the way, he said.

"At some point, I think the separate value of these renewable resources will have to be recognized by policymakers," he said.

There were also more unconventional proposals. Besides extracting minerals from wastewater, other ideas included forming a cooperative with a municipality and nearby industrial users, or siting a solar facility on the same land as geothermal to reduce overall environmental effects and spread the financial risk.

"The bad news is, they've got all these minerals," Gawell said. "The good news is, if you can extract them, you've got the table of the elements."