Nation's Largest Solar Plant To Be Built In NM

ALBUQUERQUE, N.M. (AP) -- Utility officials announced plans Thursday to build a giant solar energy plant in the New Mexico desert in what is believed to be the largest such project in the nation.

The 92-megawatt solar thermal plant could produce enough electricity to power 74,000 homes, far exceeding the size of other solar plants in the United States. The largest solar thermal plant in operation now is about 70 megawatts, said Dave Knox, a spokesman for New Jersey-based NRG Energy, the company building and running the facility.

"This is larger than anything in existence in America so far today," he said.

The plant was announced at a time when communities around the country are drawing up plans for solar and other alternative energy projects, especially with millions of dollars in stimulus money available.

El Paso Electric Co. has a 20-year agreement to buy the electricity the plant generates. David Stevens, the company's chief executive officer, said the utility was interested in the project because New Mexico has "some of the best solar hot spots in the country."

The plant -- to be called the Suntower -- will be built on 450 acres of private land near the Santa Teresa port of entry in far southern New Mexico near El Paso, Texas.

It will be similar in many respects to a steam plant, using the sun instead of fossil fuel to generate steam and produce electricity, said Michael Liebelson, president of NRG and chief of development for its low-carbon technologies.

It will look like a giant field of mirrors relatively low to the ground, interspersed with 180-foot towers topped by boilers. Motors on the mirrors will keep them aligned with the sun.

"The more ability you have to focus the mirrors, the more sunlight you capture," Liebelson said.

Construction is expected to start early next year. El Paso Electric says it will take up to 16 months to build the plant, which is expected to be in full operation by the summer of 2011.

New Mexico state law requires utilities to get 6 percent of their total energy sales from renewable energy, such as solar or wind. The requirement goes to 10 percent

in 2011, 15 percent in 2015 and 20 percent in 2020.

In February, NRG and eSolar, founded in 2007 in California to develop and build modular, scalable solar thermal power plants, announced plans to develop up to 500 megawatts of solar thermal power in California and the Southwest.

Stevens believes it's only a first step.

"As these types of technologies get into place, people are going to learn from them," he said. "I think they will get better, more efficient and hopefully, cheaper."

Bill Gross, chief executive officer of eSolar, said solar thermal has the greatest potential of all solar technologies because "the price is so good you can actually compete with fossil fuels."

Gross suggests sunshine "could be like a cash crop," with New Mexico producing enough electricity from solar to export outside its borders.

He said solar thermal would need only eight sections -- or eight miles by eight miles -- to meet all the electricity needs for the entire state of New Mexico.

"We hope after this project is successful we can replicate this all over New Mexico," he said.

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