Valley nuclear-solar plant deal inked

French company will study feasibility.

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By Tim Sheehan / The Fresno Bee

The Fresno Nuclear Energy Group has inked a contract with French energy conglomerate Areva to study the economic viability of a large solar-thermal power installation on the Valley's west side.

The 150-megawatt solar plant represents the first phase of a proposed energy park. Later phases would be dominated by two 1,600-megawatt nuclear reactors. Areva is also the company with which Fresno Nuclear is working on its nuclear power plans.

But it could take years for Fresno Nuclear and Areva to win approval for the nuclear plans -- if it happens at all.

"Now we've agreed to use [Areva's] solar technology and agreed to have them begin the planning stages," Fresno Nuclear president John Hutson said. "Depending on the study of water out there and the environmental issues, we'd like to be under construction in two years."

Unlike solar photovoltaic panels, which convert sunlight directly into direct-current electricity, solar-thermal plants use arrays of mirrors to focus sunlight on fluid-filled pipes, superheating water to create steam. The steam powers turbines to generate electricity, and the steam can also be used for industrial purposes.

Hutson said electricity from the solar plant would be used to power a water-treatment facility to clean up salt-laden irrigation runoff. Excess electricity would likely be sold to a utility company.

No site has been chosen yet for the energy park. Evaluating different locations will be part of the preliminary study, Areva spokesman Jarret Adams said. He added that he expects the evaluation to be done by the end of this year.

"If we get to the point where we build this, Areva has agreed to move their solar manufacturing next door," Hutson said.