

First solar projects approved on federal lands

—by Juliet Eilperin and Steven Mufson

The Interior Department approved the first solar projects on public lands in early October, a move aimed at shifting the type of energy development on federal property in the years to come. The two ventures green-lighted in the Californian desert—the Imperial Valley and Chevron Lucerne Valley solar projects—could provide energy for hundreds of thousands of homes, though neither would start generating electricity for more than a year, at the earliest. “We have opened up a new chapter on renewable energy on our public lands in America,” Interior Secretary Ken Salazar told reporters. The move to expedite solar projects development was welcome among renewable-energy executives and some environmentalists.

This notwithstanding, the projects still face hurdles. The Imperial Valley solar project, for example, hinges on a new multibillion-dollar transmission line that crosses sensitive habitats. Another bottleneck appears to be the slow issuance of promised loan guarantees. The Solar Energy Industries Association says that only one loan guarantee has been issued under Section 1705 of the federal program and that 13 others are still “conditional.”

Another section, called the Financial Institution Partnership Program, has also resulted in just one loan guarantee. One applicant awaiting approval for nine months is the 905-megawatt Caithness Shepherds Flat wind power project in Oregon, the largest under construction in the world. Meanwhile, the project has already ordered General Electric turbines and sealed sales contracts with utilities.

Energy Department spokeswoman said the department has made “commitments” for \$23 billion worth of projects. “We will continue to increase the pace with which we approve these projects while ensuring that we are spending taxpayer dollars responsibly,” she said.

Renewable energy projects must start before Dec. 31 to qualify for federal grants under the American Recovery and Reinvestment Act. Earlier this year, Bureau of Land Management Director Bob Abbey testified that the agency hoped to sign off on 34 such projects before the end of 2010; in early October, BLM officials said they may approve 14 at most.

The solar—thermal project in Imperial Valley would rank as one of the world’s largest solar projects, providing as much as 709 megawatts of electricity from 28,630 solar dishes that could power 212,700 to 531,750 homes. The 45-megawatt Chevron Lucerne Valley project, which will occupy 422 acres compared with Imperial’s 6,360 acres, will use photovoltaic solar panels to provide electricity to between 13,500 to 33,750 homes.

The Imperial Valley project has sparked controversy among environmental groups, in part because it could imperil habitat for the desert’s flat-tailed horned lizard and bighorn sheep. After several groups filed a formal protest this summer, the company behind the project—Arizona-based Tessera Solar—made several concessions, including promising to set aside 6,000 acres for the two species and to use wastewater from a nearby water-treatment plant for its operations.

On a practical level, though, the Imperial Valley project has secured transmission lines for only 300 of its planned 709 megawatts of power. Transmission remains a huge issue in this otherwise commendable effort to jumpstart development of renewable energy in the California desert.



Since late August, the California Energy Commission has cleared plants with expected energy production totaling nearly 3,000 megawatts scattered across the desert regions. The 250-megawatt Genesis Solar Energy Project and the 709-megawatt Imperial Valley Solar Project were the fifth and sixth plants to get the go-ahead in recent months. California is attempting to meet a goal for utilities to draw 20% of their power from renewable energy by the end of this year and 33% by 2020. All projects are rushing to break ground before the end of the year in order to qualify for federal stimulus funding. The Genesis project is being developed by a subsidiary of NextEra Energy Resources and will involve two facilities using parabolic trough technology. Curved mirrors will collect the sun’s rays, heating fluid that will produce steam to run generators. The installation will be set up about 25 miles west of Blythe in Riverside County, where Chevron Energy Solutions and Solar Millennium plan to soon start building a similar 968-megawatt plant. The plant will sprawl over 1,800 acres in an undeveloped area of the Sonoran Desert. Tessera Solar’s Imperial Valley project will utilize solar dishes, or SunCatchers, across thousands of acres in a region bordering Arizona and Mexico. The two projects will result in nearly 2,000 construction jobs and more than 200 permanent jobs.—by Tiffany Hsu