



Fresno County Bio-refinery development gets \$5 million boost

Mar. 1, 2013 California Energy Commission

The California Energy Commission awarded \$4,998,399 to Mendota Bioenergy, LLC.

The award will support the design, construction and operation of an advanced biorefinery demonstration plant in the Mendota area (Fresno County), where sugar beets will be used to create advanced biofuel ethanol.

“This award supporting the development of an advanced biorefinery will help to keep California as the leader in alternative fuel innovation,” said Energy Commission Chair Robert B. Weisenmiller. “Developing advanced fuels is essential to reducing greenhouse gas emissions to protect the environment and public health, and to meet the state’s climate change policies.”

The project is slated to use advanced enzyme and microbial techniques to convert 10,000 tons of sugar beets harvested throughout the year into 285,000 gallons of advanced biofuel ethanol. A demonstration plant will be built in Five Points, in the Mendota area. This project also supports the design and development of a future commercial-scale biorefinery center in Mendota, a town of less than 12,000 in western Fresno County. Eventually, the facility could produce 40 million gallons of biofuel annually.

The demonstration project is expected to create about 50 jobs, during construction and operation. The commercial biorefinery is expected to create approximately 250 direct and 50 indirect construction jobs, along with 100 long-term jobs, and 160 agricultural jobs.

The project provides an innovative use for an established local crop. Sugar beets have been grown in the area for more than 100 years, and were processed at a local Spreckels Sugar plant until it closed in 2008.

“This could be an excellent re-establishment of an old crop to a new end – to make advanced biofuels,” said Jim Tischer, project manager with Mendota Bioenergy. Tischer refers to the beets as “energy beets.”

Green advantage

This project is also notable for its technological and green aspects.

“This is the first energy beet project to advance to the pilot and demonstration phase in the United States,” Tischer said. With a year-round harvest schedule, the beet crop delivers ethanol yields that are greater per acre and have a lower carbon index than Brazilian sugar cane or North American corn.

Another green aspect of the biorefinery: Woody plant matter, as well as beets, will be used to produce about 15 percent of the ethanol at the Mendota plant. Also, the water in the beets will be captured during processing and recycled so that little water will be used in the plant.

The project will bring new jobs and opportunities to an area in need, and builds on the collaboration of dozens of beet farmers in the area who formed the Mendota Advanced Bioenergy Beet Cooperative

after the local sugar plant closed five years ago. This effort led to the establishment of Mendota Bioenergy, LLC, in 2011.

“This is going to be a great opportunity in an area hard-hit by drought and unemployment,” said Phil Larson, a Fresno County Supervisor whose district includes Mendota. “This puts the possibility of 35,000 acres being put back in production for a crop that disappeared five years ago.”

“We’re in a high unemployment area so these jobs mean a lot,” said Mendota Mayor Robert Silva. “These folks know how to grow those beets; it’s great to see the beet industry get on its feet again.”

The award approved today is made through the Commission’s Alternative and Renewable Fuel and Vehicle Technology Program, created by Assembly Bill 118. For the current fiscal year, the program is slated to invest approximately \$90 million to encourage the development and use of new technologies, and alternative and renewable fuels, to help the state meet its climate change goals. It is funded through vehicle and boat registration fees, as well as smog check and license plate fees.