

Power plant additions help meet green energy goal

by Joel Danoy

Tracy Press, Friday, February 3, 2012

Progress to upgrade and improve a power plant on the outskirts of Tracy should be completed on time in July, according to a plant official.

GWF Energy is entering the final phase of construction to convert its peaker plant on West Schulte Road into a combined cycle plant. The move increases the plant's efficiency and doubles its capacity, said Vice President of Engineering Hal Moore, who oversees the project.

Three major changes are in the works, Moore said, the largest of which are two 128-foot-high boilers that are being installed onto the existing gas turbines. According to Moore, the boilers will capture heat created by the turbines and turn it into steam. The steam from the boilers will then be routed through a turbine, which generates electricity.

An air-cooled condenser, consisting of 25 200-horsepower fans, will capture steam and condense it into liquid so it can be pumped back into the boiler to create more steam — thus restarting the process.

The technology isn't new, Moore said, but it is the standard when moving forward with power plant construction in California.

"Before, the gas turbines ran to respond to a demand in electricity," Moore said. "A lot of times they were short runs, and all that heat out of the stack was energy that went away. Now we're taking that heat, we're capturing it and we are creating more electricity."

The condenser will replace a water-cooled process, which will save 700 million gallons of water a year — a critical change in a region starved of such resources, Moore said.

The new additions will generate 150 megawatts of power, bringing the plant's total capacity to about 340 megawatts.

The plant will also meet the state's 33 percent renewable energy mandate, in addition to reducing the per-megawatt daily output of greenhouse gases by 30 percent and emissions by 60 percent, though it will increase the gross total of emissions compared with the plant's peaker incarnation.

GWF is contracted by Pacific Gas and Electric Co. to generate the electricity and flow it to a company substation for distribution around the Bay Area and Northern California.

Under the terms of the contract, the plant can be required to go online twice a day. Start-up can take as little as 59 minutes, if the plant has been online in recent hours, or about three hours if started cold.

"We have to ready at all times," Moore said. "Failure to do so would cost us huge financial penalties."

The 18-month construction process has generated about 400 jobs and millions of dollars for the local economy, with millions more coming from business taxes, according to Riley Jones, spokesman for GWF Energy.

Without the plant, thousands of acres would be needed to install solar panels or windmills to meet the state's renewable energy use requirements, Jones said.

Strictly Business: Q&A with Brent Green, Shafter business development director

Bakersfield Californian, Friday, Feb. 3, 2012

Officials in Shafter are working on a multimillion-dollar project that could make the city a regional hub for rail and international trade. We asked the man in charge of that initiative to give us an update on its status.

NAME: Brent Green

TITLE: Shafter business development director

Question: For readers who are unfamiliar with it, what exactly is the Shafter Intermodal Rail Facility?

Answer: The Shafter Intermodal Rail Facility is part of a broader full-service rail facility that would provide an inland multi-modal transportation hub supported by air, ground and rail connections.

Q: Why build it, and why in Shafter?

A: Logistically, Shafter is located in the ideal location with access to existing infrastructure. Both class one railroads (BNSF and UP) are within the city limits with easy access to highway connections such as Highway 99, Interstate 5 and Seventh Standard Road. Seventh Standard also connects to I-5 and the new four lanes on Highway 46. The city has invested in infrastructure and has entitled land that is designated for industrial use, including a soon to be added municipal fiber optic ring. The city of Shafter is a rural city adjacent to an urban area, which is perfect to generate the synergy that imports and exports need to be efficient. Think about Shafter's location being within 300 miles of about 14 percent of the entire U.S. population.

Q: Is there enough freight in the ports of Los Angeles and Oakland to support the facility?

A: Global logistics is extremely complicated and constantly changing. The Shafter facility is not just about the goods coming to us locally or agricultural products being exported. This is about infusing our region into the world logistics chain. The Shafter facility would be designed to adjust to the current needs of the shipping community but be flexible enough to adjust to the next upturn or downturn in the economy. After the housing downturn and imports declining, we saw exports of agricultural products increase. It would be naive to only look locally to analyze the worth of this facility. Shafter would be a key link on the west coast of the United States, with access to two of the three commercial harbors.

Q: Would the facility help or hurt air quality in the region?

A: Air quality is an issue, and today the valley is totally dependent on only trucks to move its goods. This rail facility would allow for more trade and more efficiency using the same or less trucks. By having more goods move by rail, we would be eliminating the movement of empty containers into or from the San Joaquin Valley on both import and export loads. Having a Shafter facility would also allow for a higher efficient trucking fleet to be based locally, providing better service with fewer emissions. Currently, the Clean Air Action Program in the Ports of L.A. and Long Beach push the older trucks to the outlying areas like here. A Shafter terminal would keep jobs and equipment local. Remember, not only is rail freight transportation three times more efficient than trucking, it's also three times less polluting.

Q: How large is it now and how big could it potentially be when it's finished?

A: Currently, the city is only servicing rail accounts that take boxcars, hoppers and tank cars. The facility has two mainline switches, more than 10,000 feet of track including switches and one Rail King switch engine. Additional track needs to be constructed on the BNSF site and the UP site before any serious intermodal services could be provided.

Q: How many jobs will be created?

A: Jobs are what Shafter builds best, but it would be complete speculation at this point. Other facilities like this within the U.S. can produce as many as 25,000 jobs, primarily from the users of the facility. The actual facility would probably be contracted to a terminal operator with experience handling rail terminals. Currently the Shafter public works employees are providing the switching services and are enjoying the new challenge. Remember, one out of every 22 jobs in Southern California comes from the port activity of the Port of Long Beach alone.

Q: To what extent would the facility complement the Tejon Ranch Commerce Center?

A: It would only be a plus as the Tejon facility does not have access to rail. In the world of logistics, the more options the better. Both class one railroads have traditionally resisted any short-haul rail within the state, so a Shafter facility would be a welcome change with huge benefits. Currently, the UP railroad is the only one to provide the city of Shafter with a memorandum of understanding to provide such a unique service.

Q: What benefits does this facility offer?

A: History shows us that great cities are usually built around trade centers. The southern San Joaquin Valley has been blessed with agriculture and oil based economy for many years; however, diversifying

our local economy could only be a blessing. In a day when Internet shopping replaces brick-and-mortar stores and when we shop all over the world via our computers, it would be exciting to have our local economy be an integral part of such a fundamental change in commerce.

Q: Who is going to use it?

A: The obvious answer would be exporters and importers; however, it would provide limitless opportunities to everyone from consumers who want their electronics faster and cheaper to the hungry person in a country in Southeast Asia who needs food from the U.S. The facts are the U.S. is the greatest producer of food and fiber while being one of the biggest importers of consumer goods in the world.

Q: What will this do for the local economy?

A: The local economy would be stimulated; however, this would allow the region to play on a much bigger stage and invite more companies to locate near this facility. It would provide more jobs and increased value to both land and housing, while better utilizing many of our current assets.

Q: How much will it cost to build it?

A: Rail track, switches and the necessary infrastructure to create such a facility are expensive. The city has more than 10,000 feet of track with 3,000 feet being added. Depending on demand it would be reasonable to expect up to 60,000 feet of track to allow multiple trains, which could run as high as \$15 million in track alone.

Q: Where is the money coming from?

A: The initial money for the current facility came in the form of a grant from the state. The city has been selected for an additional \$15 million of TCIF 1-B funds but given the timing and the requirements has not executed that commitment with the California Transportation Commission yet. The most likely scenario is the freight will pay the bill. Whether it is a terminal at the Port of Long Beach or a truck going down the road tradition says that the user of the facility will pay for the facility in the form of fees. Annual commitments are expected and guaranteed volumes address the size of any debt. The key is that the railroads provide rates and service that will justify the capital investment in the facility.

Q: When will it be finished and operational?

A: I would hope that it would never be finished. In a world that is changing it would be expected that this facility would change with the evolving needs. The facility is currently operating with one customer, and will have three steady rail users by this summer. Ongoing discussions on a plethora of other projects and products will show us where the market is.

[Fresno Bee editorial, Monday, Feb. 6, 2012:](#)

State's cleaner car goal won't work without buyers

The California Air Resources Board has unanimously approved new regulations that mandate car manufacturers to cut smog emissions from new vehicles by 75% by 2025 and greenhouse gases by 34%.

To produce that level of emission reductions, CARB has set an ambitious target. The aim is that 15.4% of cars sold in California in 2025 will either be hybrids, which run partially on gasoline and electricity, or pure zero-emission vehicles (ZEVs) powered by electric batteries or hydrogen fuel cells.

As they implement the rules, regulators must do what the businesses they are regulating have to do, keep a sharp eye on the market and be prepared to pivot. By 2025, technology may take us in a new direction.

In past years automakers have sued to block CARB rules. This time, somewhat reluctantly, they supported the new rules. According to a spokeswoman for the Auto Manufacturers Association, car companies already produce 35 models of CARB-designated clean cars and they, too, want to see that market segment grow.

The California New Car Dealers Association is adamantly opposed to the new rules. Dealers note that electric and hybrid vehicles now on the market cost between \$13,000 and \$11,000 more on average than comparable gasoline-powered cars.

Moreover, they require a change in consumer habits. Drivers will need to calculate how far they can go on a charge, for example.

Success will depend on the price of gasoline. If it remains relatively flat or goes lower, sales of electric vehicles are likely to fall. Dealers say they look at regulations from the "transaction level" where the customer meets the car. Holding on to inventory that does not move is costly both in the loss of time and opportunity for profits from sales of vehicles that customers want to buy.

The Obama administration has poured \$2 billion of stimulus funds into trying to jump-start the electric car industry. Results have been mixed. Factories have been built and thousands of jobs created, but some companies that received stimulus funds have gone bankrupt.

The administration, like regulators in California, is waiting and hoping electric car sales eventually take off. Both the economy and the environment could use the lift.

[Bakersfield Californian Editorial, Sunday, Feb. 5, 2012:](#)

OUR VIEW: Supervisors' HSR vote is premature

The Kern County Board of Supervisors would be premature to hold a vote Tuesday on the California High-Speed Rail project, either in support or opposition.

A postponement of the vote makes the most sense at this juncture. Here's why:

The draft business plan released in November was just that: a draft. The public comment period ended Jan. 17, barely two weeks ago, and a revised and final plan will be coming that takes into account the concerns raised in Kern County and elsewhere. It makes no sense to take a vote on a plan that will likely change in a few weeks when the final draft is released. If the supervisors still have problems with the business plan, that would be the time to say so.

County supervisors also need to work with county staff to straighten out their position on the high-speed rail maintenance facility. The county has submitted three bids to host the facility at locations near Shafter or Wasco. The facility would bring 1,500 jobs to the area and up to \$250 million a year in economic benefits. Supporters of the maintenance facility hope the bid won't be hurt if supervisors vote against the high-speed rail project. It's hard to believe it wouldn't be. Political support from county leaders for the project is critical.

Californians are justified in their concerns about high-speed rail. Most notable is the price tag, which has jumped from about \$40 billion in 2008, when voters approved the project, to the current \$100 billion. There have also been challenges within the underfunded High-Speed Rail Authority. A new chief is about to take over and the office has been blasted for not managing unwieldy contractors, who outnumber staff 25-to-1.

But we also know this: High-speed rail will be beneficial to Kern County in terms of jobs, economic development, connectivity and better air quality. Will those benefits approach the expectations established by the High-Speed Rail Authority? Many Californians have their doubts. But given the potential benefits that could accrue to Kern County, we owe it to ourselves to have the fullest picture possible of the project's pros and cons before drawing our line in the sand. The time for Kern County government to cast any sort of judgment on the project is not upon us yet.

