

A new idea for clean energy in Kern County

But some air activists object to projected pollution

By Mark Grossi

The Fresno Bee, Saturday, Sept. 18, 2010

A \$2 billion power plant in Kern County using notoriously dirty coal and petroleum coke conjures images of soot pouring into a brown skyline — an idea seemingly dead on arrival in one of the nation's worst air basins.

But it may become a model for clean energy instead.

Forget the smoke. Imagine 2,600-degree heat in a sealed chamber vaporizing coal and petroleum coke — hard, black leftovers from refineries — to extract a highly prized fuel: hydrogen.

Using the dregs of fossil fuel, this proposed project west of Bakersfield would be the state's first large, hydrogen-fired electricity project. Many experts say there is no similar project of this size anywhere in the nation.

The main stumbling block: It would produce more ozone-making gas than comparable natural gas-fired plants, which would be a deal-breaker for many environmentalists.

But project owner Hydrogen Energy California of Long Beach says the problem would be cleared up in the first two years of operation. The company, a joint venture of global energy giants BP and Rio Tinto, put up nearly \$700,000 to help reduce nearby farm and city pollution during that time. It hopes to open the plant in 2015.

The California Energy Commission's initial report released this year was positive, and the state energy permit is expected to be granted next year. Valley air quality officials think the company can control the ozone-making gas. And Kern County elected officials are impressed with the plans.

Activists are not satisfied with Hydrogen Energy's plan to reduce the ozone-making gas. Nor do they like the idea of the pollution coming from rail transportation of coal from Utah or trucking of the petroleum coke from Los Angeles or other areas.

The nonprofit Association of Irrigated Residents in Kern County is opposing the plant's state permit, which is the last major permitting hurdle for the plant.

"We cannot afford more needless pollution, such as this experimental power plant," said Tom Franz of the association. "It is outrageous that they will bring such dirty fuels to Kern County."

Kern is a good location, close to trucking and rail lines to bring in the coal and petroleum coke, Hydrogen Energy officials said. The established oil fields nearby provide a convenient and safe place to bury climate-warming carbon dioxide from the project.

The plant, proposed on 473 acres in an isolated place seven miles west of Bakersfield, would produce about 250 megawatts, funneled into California's electric grid. It could provide power for about 150,000 homes.

The construction phase would create 1,500 jobs for three years, said spokeswoman Tiffany Rau. After construction, the plant would provide 100 to 150 skilled jobs.

Hydrogen Energy also promises a lot of environmentally friendly features. Aside from extracting hydrogen cleanly from dirty fuels, it would capture 90% of the carbon dioxide produced in the process.

The production of carbon dioxide is unavoidable, officials say. It occurs when the coal and petroleum coke are broken down with high heat in a process called "gasification" to harvest hydrogen.

The gasification is needed because hydrogen isn't readily available in pure form. It must be separated from such sources as coal and petroleum coke, both of which are rich in carbon.

To dispose of carbon dioxide, industries around the globe have been injecting it into the ground. In the Kern project, the carbon dioxide will be converted to a liquid under high pressure and injected thousands of feet below the Valley floor.

Underground in the Elk Hills oil fields, west of Bakersfield, the carbon dioxide would become permanently entombed in partially depleted geological formations, Hydrogen Energy officials said.

The injection also may help loosen some of the embedded oil to help with petroleum pumping operations in the area.

That leaves the issue of the ozone-making pollution. What's the source?

The hydrogen-powered turbine that creates the electricity must take in some outside air to function. The air in combination with the heat in the turbine creates oxides of nitrogen, or NOx — one of the Valley's biggest air-quality villains.

NOx is a building block of ozone, the corrosive summertime pollutant that triggers asthma and other lung problems. The Valley has never achieved the state or federal ozone standard, and the Bakersfield area often has some of the region's worst ozone.

The NOx emissions from the Hydrogen Energy project would be double the amount allowed for a natural gas-fired plant. But the control technology for the pollutant should evolve enough to bring the plant into compliance, says the San Joaquin Valley Air Pollution Control District.

"We fully expect them to be operating" within the accepted limit at some point in the first two years, said Dave Warner, director of district permit services.

Hydrogen Energy has agreed to offset the excess pollution by paying \$681,262 to help farmers in the area replace old tractors and polluting water pump motors. The money also could be used for such projects as replacing old school buses in nearby towns, such as Tupman or Buttonwillow.

The payments would continue in future years if the pollution emissions are not reduced enough, air officials said.

Activist Franz says the company should pay that amount every year they operate until the Valley's air meets federal standards.

He said, "They are getting off cheap."

Rendering plant set for expansion

Foster Farms: Odor won't increase, just tax revenues

By Mike North

Modesto Bee, Monday, Sept. 20, 2010

LIVINGSTON -- Foster Farms is set to begin the expansion of its rendering plant, which is expected to create six new full-time jobs and more tax revenue for the city and county.

The City Council approved the expansion on a 4-0 vote during an Aug. 17 meeting. Mayor Daniel Varela Sr. abstained from the vote because he works for Foster Farms.

The rendering plant processes material the poultry producer generates, said Jim Marnatti, Foster Farms director of environmental affairs. What otherwise would be waste is converted to a protein meal for pets and other products.

Foster Farms' facilities produce odor that can be noticed in Livingston, a concern for some residents and city officials. However, the expansion of the rendering plant isn't expected to increase it, Marnatti said.

"This will be a fully enclosed, state-of-the-art project," he said. "It is not anticipated through any reviews to have any significant impact on odor or on the environment in any fashion."

Features that make the expansion state of the art include emissions control, a negative air system similar to a whole-house fan, scrubber systems on the roof and a high-intensity odor-control system that's 99 percent effective in controlling emissions going through it, Marnatti said.

To prevent odor emissions, no material will be exposed to the air, he added.

Foster Farms officials don't expect an increase in odor, but they do expect their new operation will generate more tax revenue.

The expansion is expected to provide the city with an additional \$30,000 a year in taxes and more than \$80,000 a year for the county, Marnatti said.

Foster Farms isn't changing what it does at the plant, just expanding its operation, he said. The existing building, which is about 6,300 square feet, will be expanded by 2,500 square feet.

The project, which successfully negotiated provisions of the California Environmental Quality Act, has received approval from various environmental agencies, Marnatti said.

Foster Farms still is working to complete building permits with the city for the expansion, Marnatti said. Construction is expected to be finished within a year.

Central Valley air-quality alert issued because of fires

By Teresa Douglass

Visalia Times-Delta and Tulare Advance-Register, Saturday, Sept. 18, 2010

Smoke from two fires — one in Fresno County and one in Tulare County — are contributing to an air quality alert that is in effect until noon Saturday. The alert was issued by the San Joaquin Valley Air Pollution Control District.

The two fires couldn't be more different in the way they started, what they threatened and the way they are being managed.

The Sheep Fire in Cedar Grove in Kings Canyon National Park has been monitored but not suppressed since it started about July 16 from lightning. Firefighters are keeping the fire from jumping north over the Kings River and threatening a restaurant, lodge, visitor center, four campgrounds, employee housing and offices.

As the smoke has become more of a problem, firefighters are slowing the progress of the fire, said Deb Sweizer, fire education specialist for Sequoia and Kings Canyon national parks.

On Friday, only 115 fire personnel were working the 6,191-acre Sheep Fire.

But an aggressive attack by more than 1,600 fire personnel on the ground and in the air was warranted in the Canyon Fire in Kern County when it headed toward the town of Bodfish, population 1,800, said Clare Delaney, spokeswoman for firefighters on the Canyon Fire.

"One structure was lost near Bodfish," she said.

The cause of the Canyon Fire is under investigation, she said.

On Friday, 1,668 firefighters from around the state, including more than 85 from Tulare County, worked to contain the 9,820-acre fire at 75 percent, Delaney said.

"The Canyon Fire had an aggressive attack," said Larry Pendarvis, public information officer for CAL FIRE.

On Friday, one strike team returned to Tulare County, he said.

The pace is much slower in Cedar Grove, where the Sheep Fire is slowly munching on 100 years of dead and fallen vegetation, Sweizer said.

"The forest floor is getting cleaned up," she said. "The trees are fine.

"Next year, a lot of people will not even know that a fire was here," she said. "This is not a destroyed forest."

EPA gives Chem Waste more time to address PCBs

By Eiji Yamshita

Hanford Sentinel, Saturday, Sept. 18, 2010

Federal regulators are giving the Kettleman Hills hazardous waste facility at the heart of a birth-defect controversy more time to clean up the release of cancer-causing chemicals found earlier this year.

In a recent letter, officials with the U. S. Environmental Protection Agency gave Chemical Waste Management until Oct. 28 to address all problems with the facility's handling of PCBs, or polychlorinated biphenyls, which is transformer oil banned in 1979. Chem Waste is in the process of renewing its PCB permit.

Nearby residents and activists are fighting the company's application to continue storing PCBs as well as its plan to expand its toxic-waste landfills.

Meanwhile, the governor-ordered state health investigation is still under way into the unusual spike in birth defects found in Kettleman City.

U.S. EPA officials sent a notice of violation to the company in April based on issues found during an on-site inspection in February. Chem Waste cleaned up all the problems by June, but federal inspectors found more released on a concrete pad in the storage site and in soil underneath, triggering another notice of violation.

The agency gave Chem Waste 60 days to address new PCB violations in June but didn't issue its inspection report until this month.

As a result, the agency issued a 45-day extension not just to give Chem Waste more time to come to full compliance, but also to give itself more time to review the company's work plan received on Aug. 25.

Along with the inspection report, the agency also issued a new notice of violation about a slightly elevated PCB level found in a wipe sample from the floor, said Kathleen Johnson, EPA spokeswoman.

"Basically at this point, Chem Waste is already working on a work plan for the pad and under the pad, and we think this [recent notice] will prompt them to tell us what their plan is to deal with the smaller problem with the wipe sample on the floor. We're tightening up loose ends."

Johnson said the agency has full confidence in the company's ability to fix the problem in time.

"We feel comfortable that they are getting to a place where everything is going to be fine," Johnson said.

For now, Kettleman Hills Facility is being allowed to receive PCB waste as well as Superfund cleanup waste. But lack of compliance could strip the facility of these privileges and impose fines.

[Stockton Record and Lodi News Sentinel, Letter to the Editor, Monday, Sept. 20, 2010:](#)

Who really thinks air quality fines will help?

Brilliant, I must say, in regard to the headline Aug. 27 about the \$29 million fine to be levied to improve air quality. The temperature, over which we in the Valley have no control, probably added in a lot of the pollution that enters the Valley from the Bay Area. We don't have any control over that, either, but I would be willing to bet a lot of money that a lot of what we have to put up with comes from there.

Added in to the mix is the fact that it is the harvest, so, yes, there are a lot of tractors, trucks and harvest machinery running in the Valley.

So here we have some bunch of desk jockeys working away, on our dollar, mind you, to fine the residents of this Valley. The objective should be to find ways to diminish the problem, not to create a way to make the problem worse by creating a fine for those who are unable to resist or fight back. It's just nuts; the government is not for the people, by the people or of the people, it's just the same phrase with desk jockeys in place of the word "people"!

I think what we really need is to split the fine between Washington and Sacramento for the members to pay personally! Maybe we could get their attention.

Daryl B. Payne, Woodbridge