



Memorandum

MONTEREY REGIONAL WASTE MANAGEMENT DISTRICT

Reviewed by WMM Date 2-13-09
General Manager

DATE: February 12, 2009
TO: General Manager
FROM: Information Systems Manager
SUBJECT: Status Report on Renewable Energy Power Project

DISCUSSION

Contracts to Sell Renewable Power

At the January 2009 Board meeting, the Board authorized the General Manager to enter into a short term "bridge agreement" with PG&E to sell them the renewable power from Units 1 and 4 (which is under construction) along with the power they are already buying from Units 2 and 3. The District's intent is to increase revenues and have the administrative procedures in place to easily implement a new future 10 year contract. Unfortunately, some issues remain with the current purchaser of the power from Unit 1, 3 Phase Power, and with PG&E and the California Independent System Operator (ISO), which have delayed the signing of the interim agreement. Staff is still hoping the interim agreement can be signed and implemented by March 1st.

Staff continues to work on the 10 year contract with PG&E. The points of agreement reached are: contract length, price, and the flexibility to divert power to neighboring projects such as a regional water project as long as PG&E retains Renewable Energy Credit (REC) for the power. Still being discussed are: liability on scheduling delivery imbalances, RECs reporting methodology, and other contract details. Staff hopes to bring the 10 year agreement before the Board at the April or May meeting for consideration.

Biomass Gasification Plant

On January 22nd District staff met with Greg Stangl, CEO of Phoenix Energy, to hear about their process of gasifying wood waste to produce electricity. Essentially, in a closed system, the wood waste smolders and produces a hydrogen rich gas that powers Caterpillar 3516 engine/generator units to produce electricity. The residue material is a solid charcoal-like substance called biochar which can be used as a soil additive. A turnkey system to consume all the wood waste the District produces, and generate 1 MW of power, would cost \$3.5 million. With a 15-year PG&E Market Price Referent (MPR) power contract and renewable tax credits the project could pay for itself in 5 years.

This technology has been in use in Europe and Asia for decades. Phoenix Energy does not have an operating plant in the United States, but has received San Joaquin Valley Air Pollution Control District approval to construct a plant in Los Banos running on almond shells. Their competition has similar plants operating in the United States.

District staff was impressed with the simple, straightforward design of the plant and can envision the system as a solution for management of a portion of incoming greenwaste material while avoiding some of the environmental concerns, marketing challenges, and the expense of a large composting operation. Staff is interested in continuing to explore the technology to determine if such a system would work for the District. Staff proposes an internal analysis first to develop questions and look for any fatal flaws. If the project still looks promising, staff would propose that a firm be engaged to assist in preparation of a feasibility study on the project.

Five Megawatt Expansion to Power Plant

As described in the attached article from The Carmel Pine Cone, the California Public Utility Commission's (CPUC) Draft EIR for a regional water desalination project has been released for public comment. The EIR speaks favorably about two different projects located on the same portion of the Armstrong ranch adjacent to the District's southern boundary. One project, described as the North Marina alternative and supported by CalAm, does not list the District as its source of power. However, staff has learned that the District may be approached about supplying the power as the project develops. The second project, described in the EIR as the Regional Project alternative, is proposed by Water for Monterey County and is supported by the Marina Coast Water District (see attached letter). This project does list the District as its primary source of power.

Staff is proposing to address the power needs of either of these projects with a new 5 MW power plant. This power plant would coincide with the District's need for more cogeneration units to consume the additional landfill gas being created. Because the District does not yet generate enough landfill gas to supply the existing plant and a new plant, some natural gas would be purchased to make up the difference until enough landfill gas is produced. This new facility, and the flexibility included in a new power sales agreement with PG&E, would enable the District to supply power to either regional water project.

District Projects included with RMC Funding requests

On January 30th, District staff provided RMC (Engineering consultants representing Water for Monterey County Coalition [WFMCC] – formerly REPOG), with project descriptions and estimated budget costs of \$21.35 million for the power plant expansion and gasification plant. RMC offered to include the District's projects as a component of the Water for Monterey County project in the funding request they put together for Senator Feinstein's FY10 appropriations requests. RMC intends to include the same materials for Senator Boxer's and Representative Farr's appropriations requests. These funding requests do not bind the District to the water project but may provide a source of funding. They are also not necessarily part of the pending stimulus package but are initially intended for the regular appropriation process.



Don Prescott

Attachments



The Carmel Pine Cone

YOUR SOURCE FOR LOCAL NEWS, ARTS AND OPINION SINCE 1915

EIR favors Marina desalination plant

By **KELLY NIX**

Published: February 6, 2009

AN ENVIRONMENTAL study five years in the making was released last week by the California Public Utilities Commission, and it concludes that a desal plant in Marina is the best long-term solution to the Monterey Peninsula's perennial water shortage.

The plant, which would cost at least \$100 million, would not provide any new water for infill housing, remodels or building on lots of record, the EIR says.

"While any water supply project in Monterey County is controversial, a project that includes water for growth may be very controversial," according to the EIR.

If finalized by the CPUC, the document would put an end to California American Water Co.'s plan for a desal plant in Moss Landing.

"From an environmental perspective," said Eric Zigas, project manager for the EIR, "there is a better alternative to the Moss Landing project."

The EIR, released Jan. 30, says the 11 million-gallon-per-day desal plant proposed for North Marina would be better for the environment than Cal Am's Moss Landing project because of several factors. "You have five miles less pipeline; you don't have open water intakes or rely on once-through cooling," Zigas told The Pine Cone.

A desal operation in North Marina would draw seawater and brackish groundwater from coastal wells instead of taking water from the Moss Landing harbor and pumping it through the power plant's once-through cooling system, a system disliked by environmentalists because it kills fish and other marine organisms.

Two scenarios in Marina

A regional water supply project, proposed by Water for Monterey County, is also analyzed in the EIR. That project would also utilize a desal plant in Marina, and would draw excess winter flows from the Salinas River.

Though the EIR says the North Marina project would be "slightly environmentally superior" to the regional project, the CPUC could reverse the priority in favor of the regional project, or it could decide to combine components from those projects.

"The commission can mix and match," Zigas said.

Steve Kasower, coordinator for the regional project, said he believed the EIR was fair. But he said the document didn't examine important aspects of the regional plan.

"Our project has some unique values not reflected in the EIR," he said. "For example, we are proposing to use green power for the entire project. The EIR doesn't explore the green power issue because it's a water EIR."

Cease and desist order possible

The release of the EIR comes just a few weeks before the State Water Resources Control Board is expected to issue a decision on whether to impose a cease and desist order on Cal Am, compelling the water company to drastically curtail pumping from the Carmel River.

Cal Am has a right to draw 3,376 acre-feet of water each year from the Carmel River but has been allowed to withdraw 11,285 while trying to come up with another project.

All projects flawed

The EIR indicates all the projects have "significant and unavoidable impacts" on the environment, because of greenhouse gas emissions, noise, air quality and erosion.

The document also outlines unresolved issues, including relationships and agreements among water agencies, and the future of once-through cooling at Moss Landing.

Cal Am officials declined to discuss the EIR in detail because they hadn't gone through the entire lengthy document, but they made a general statement.

"We are so glad the document is out," said Cal Am community relations manager Catherine Bowie.

"This is a huge milestone in terms of getting a new water project."

The public will have a chance to weigh in on the EIR during a 60-day public comment period. In March, there will also be four public meetings. Zigas said the CPUC mailed 47,000 public-hearing notices to Peninsula water customers and any property owner within 300 feet of any proposed facility.

After the EIR process, the analysis will be presented to the CPUC, which will incorporate the final EIR into the review process for Cal Am's application to build a water project. The CPUC will then make a decision about which, if any, project or alternative Cal Am should pursue.

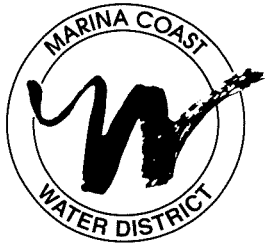
The final EIR is expected to be released sometime in the summer, said Andrew Barnsdale, staff member with the CPUC.

"We encourage everybody's comments," Barnsdale told a group at a Water for Monterey County meeting in Marina Wednesday. "Let us know how you feel about it."

The three phone book-size volumes of the EIR took a staff of 17 people to write and cost at least \$2 million to prepare, Zigas said.

The public meetings for the EIR will be Monday, March 2, at 1:30 p.m. and 6:30 p.m. at Embassy Suites, 1441 Canyon Del Rey Blvd., Seaside; Tuesday, March 3, at 6:30 p.m. at North County Recreation Center, 11261 Crane St., Castroville, and Wednesday, March 4, at 6:30 p.m. at Rancho Cañada Golf Course, 4860 Carmel Valley Road.

The EIR is available at several locations, including Pacific Grove and Monterey city libraries and the county library in Carmel Valley. To view the EIR online, visit www.cwp-eir.com



MARINA COAST WATER DISTRICT

11 RESERVATION ROAD • MARINA, CA 93933-2099

Home Page: www.mcwd.org

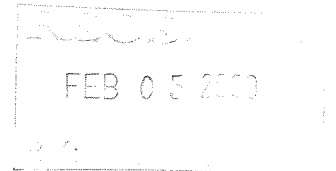
TEL: (831) 384-6131 • FAX: (831) 883-5995

DIRECTORS
HOWARD GUSTAFSON
President

WILLIAM Y. LEE
Vice-President

THOMAS P. MOORE
KENNETH K. NISHI
DAN BURNS

February 3, 2009



William Merry
General Manager
Monterey Regional Waste Management District
14201 Del Monte Boulevard
P.O. Box 1670
Marina, CA 93933-1670

Subject: Letter of Support for Regional Landfill Gas Power Project

Dear Mr. Merry:

Marina Coast Water District supports your District's continued work towards providing green energy for the *Water for Monterey County Program* and Monterey County, and your on-going efforts to minimize greenhouse gas emissions from your landfill. By expanding the existing cogeneration plant at the Monterey Regional Waste Management District's landfill to capture both existing and future methane releases, more renewable energy will be attained which will benefit the environment, the *Water for Monterey County Program*, the Monterey region, and communities within the region. The proposed Regional Landfill Gas Power Project would be located adjacent to the proposed Desalination Facility and Surface Water Treatment Plant included in the *Water for Monterey County Program* and could therefore easily supply needed energy to those two plants (reducing the carbon footprint for these essential facilities). Energy produce in excess of that needed for the *Water for Monterey County Program* can be sent back to the local energy grid providing much needed additional energy to a growing Monterey County.

We appreciate your role in developing a regional solution to Monterey County's pending water crisis and are pleased to support your co-generation project which will benefit everyone in the region.

Sincerely,

Jim Heitzman
General Manager,
Marina Coast Water District