

SACRAMENTO METROPOLITAN AIR QUALITY MANAGEMENT DISTRICT

For Agenda of: March 24, 2005

To: Board of Directors
Sacramento Metropolitan Air quality Management District

From: Larry Greene
Air Pollution Control Officer

Subject: **Consideration of Request to Intervene in the Application of Pacific Gas and Electric Company for Rate and Line Extension for Conversion of Stationary Agricultural Internal Combustion to Electric Service**

Recommendation:

That the Board approve District intervention in the application of Pacific Gas and Electric Company for Rate and Line Extension for Conversion of Stationary Agricultural Internal Combustion to Electric Service.

Background:

Pollution from diesel engines has a major impact on the health of Californians, especially in the Sacramento and San Joaquin Valleys. These parts of the state are home to some of the world's most productive agricultural areas, but continue to suffer from having some of the worst air quality in the United States. Stationary diesel agricultural water pumps continue to be a major source of this pollution.

The Sacramento Metropolitan Air Quality Management District (SMAQMD) is committed to working with the Pacific Gas & Electric Company (PG&E) to develop strategies that reduce these emissions while providing a benefit to California's agricultural industry. The best strategy to meet this challenge is a combined effort between our agencies to provide incentive funding for farmers to replace their existing diesel pumps with electric versions while simultaneously implementing a lower rate structure for electricity.

The main issue preventing conversion back to electricity is energy cost. Farmers prefer running electric pumps, but cannot afford the expense. Based on a 3-yr summer historical average, off-road diesel fuel has averaged about \$1.12/gal for farmers. Using a conversion factor of 72 gal/MWh, this equals about \$80/MWh running diesel. Under PG&E Rate Schedule AG-5, an equivalent electric pump costs about \$100/MWh.

Our staff believes that the energy cost for farmers running electricity must at least be equivalent to their historical diesel cost to encourage the use of electricity. Because diesel and electric pumps have a similar purchase price, the additional cost of electricity makes diesel the cheaper option. To match the historical price of diesel, we support PG&E's proposed 20% electric rate reduction.

Reducing the off-season demand charges for farmers who replace their diesel pumps with electric pumps is also important, having a major impact on both operational costs and customer perception. Farmers are especially resistant to paying demand charges when their pumps are not in service. The seasonal nature of the agricultural industry makes it much easier for the farmer to pay demand charges during the summer months than in the winter months. We support PG&E's proposal to reduce off-season demand charges that will make electricity more attractive to the farmer.

Replacing just 1,000 existing diesel pumps with electric pumps will result in a reduction of about 2 tons/day of NOx emissions, equal to removing over 100,000 cars and trucks from the road. Eliminating these diesel pump emissions also will prevent over 40 premature deaths by 2015 and save Californians almost \$60 million annually in lower health care costs. Using these electric pumps also reduces foreign oil dependency by eliminating the use of over 5 million gallons of diesel fuel. This also results in 40,000 fewer tons of CO2 emissions into the atmosphere.

Through a working partnership between the Pacific Gas & Electric Company, California Public Utilities Commission, the Air Resources Board, Valley Air Districts, and the California agricultural industry, we can develop an effective program to encourage Valley farmers to convert their existing diesel pumps to cleaner electric pumps. This partnership requires both the funding of new electric pump equipment, the restructuring of electricity rates, and community support.

Replacement of polluting diesel pumps with electric pumps will enhance our efforts to reduce summer smog and eliminate exposure to toxic diesel particulate matter. The use of electric pumps reduces health care costs for our residents, decreases foreign oil dependency, and cuts global climate change emissions. All of these benefits will be realized without impacting the vital economic value of California's agricultural industry.

Conclusion:

Therefore, the SMAQMD requests that the Board allow the SMAQMD to request the Public Utilities Commission to grant it leave to intervene as an interested party in the proceeding where they are considering the rate changes described above.

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We are recommending that PG&E implement the following elements:

- Providing electricity at rates equal to historical off-road diesel prices
- Elimination of off-season demand charges for agricultural water pumps
- Destruction of the old diesel pump for permanent emission reduction
- Verification that existing electric pumps are not converted to diesel only to qualify for cheaper electricity

Respectfully submitted,

Larry Greene
Air Pollution Control Officer