

VENTURA COUNTY
AIR POLLUTION CONTROL DISTRICT
Memorandum

TO: District Staff

DATE: October 27, 2000

FROM: Richard H. Baldwin

SUBJECT: Rule 23 Policy Change – Backup Utility Generators – Power Interruptions

Policy Statement

Engines with maximum continuous horsepower rating greater than 50 brake horsepower used as backup utility generators shall be required to obtain a Permit to Operate if the facility at which the generator is located has a contract with Southern California Edison, a load aggregator, or the California Independent System Operator requiring that some portion of the facility's electrical load be interrupted at the direction of the California Independent System Operator.

Background

Ventura County APCD Rule 23.D.7 exempts engines used in emergencies from the requirement to obtain a Permit to Operate. Rule 23.D.7 states:

Emergency internal combustion engines operated either during an emergency or during maintenance of the engine. Engine maintenance operation is limited to 50 hours per calendar year per engine.

For purpose of this section, an emergency internal combustion engine is either a portable engine used for emergency purposes; an engine that is used only when electrical power line or natural gas service fails; or an engine used for the emergency pumping of water for either fire protection or flood relief.

An emergency engine may not be operated to replace an internal combustion engine or a turbine that has failed or requires maintenance; to supplement a primary power source when the load capacity or rating of the primary power source has been either reached or exceeded; nor to reduce the demand for electrical power when normal electrical power line service has not failed.

The use of a backup utility generator (BUG) at a facility during a power interruption directed by the California Independent System Operator (ISO) is not covered under this exemption. Power interruptions are directed by the ISO to reduce demand for electrical power prior to electrical power line service failure. In the past, however, the District has not required permits for BUGs operated at these facilities because the power interruptions occurred only infrequently and the BUGs were an insignificant emissions source.

Although the BUGs are not exempt pursuant to Rule 23.D.7, some BUGs may be exempt pursuant to Rule 23.D.6 that exempts internal combustion engines having a maximum continuous horsepower rating of less than 50 brake horsepower. BUGs may also be exempt

pursuant to Rule 23.D.5 that exempts piston-driven internal combustion engines used for driving irrigation pumps.

Discussion

The decision to begin requiring permits for BUGs operated at facilities during power interruptions directed by the ISO is being made at this time for two primary reasons.

First, as a result of the power shortage in California during the past summer, the ISO directed facilities with interruptible contracts to be interrupted on several occasions. The forecast is that even more interruptions will be required in the summer of 2001. Thus, the BUGs at facilities with interruptible contracts are being used significantly more than in the past. In addition, some facilities that have interruptible contracts but that do not have BUGs are in the process of purchasing and installing BUGs. Finally, the days on which the ISO directs power interruptions are frequently days with a high potential for ozone formation.

Second, most BUGs are powered with diesel engines. Diesel engines produce significantly more NO_x emissions per megawatt of power than electrical power plants. In addition, the particulate matter emissions for diesel engines have been identified by the Air Resources Board to be a toxic air pollutant. Diesel particulate matter is linked to an increased incidence of lung cancer and non-cancer symptoms of respiratory illnesses such as asthma.

On September 28, 2000, the Air Resources Board adopted a “Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles”. The Air Resources Board also adopted “Risk Management Guidance for the Permitting of New Stationary Diesel-Fueled Engines”.

The change in policy directed in this memo is the first action being taken by the District to implement the new Air Resources Board risk management guidance for stationary diesel-fueled engines.