



State of Vermont
Agency of Natural Resources

Air Pollution Control Division
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June 20, 2008

Frank Etori
VELCO
366 Pinnacle Ridge Road
Rutland, VT 05701

RE: Operating emergency generators during a grid capacity deficiency – OP 4

Dear Mr. Etori:

On April 2, 2008 Bruce Bentley of Central Vermont Public Service Corporation (CVPS) provided the Vermont Agency of Natural Resources, Department of Environmental Conservation, Air Pollution Control Division ("Agency") with a copy of the Vermont Electric Cooperative Inc.'s (VELCO) Operating Procedure OP 4. Additionally Mr. Bentley requested the Agency to expand its current policy "Department Procedure on Operation of Emergency Engines During a Grid Capacity Deficiency" ("Department Procedure") to allow the operation of emergency generators during a Vermont capacity deficiency under Actions 3-5, 7-10 and 12 of the VELCO OP 4.

As it is currently written, the above referenced Department Procedure limits the use of emergency generators to periods of power outages, routine testing and maintenance (maximum of 100 hrs/year) and periods of electrical capacity deficiencies when ISO New England implements either their Operating Procedure OP 4 or OP 7. Since the stated purpose of the Department Procedure was to allow the operation of emergency engines during periods when the electrical utility grid is experiencing capacity deficiencies, the Agency is receptive to expanding its policy accordingly. Before changing the language in the Department Procedure, the Agency reviewed the Department Procedure, ISO New England OP 4 and VELCO OP 4 to understand if any change in the written procedure is necessary.

This review identified that in Part III of ISO-New England OP 4, there is enabling language that provides for Local Control Centers to deal with a local capacity deficiency. VELCO Operating Procedure OP 4 is specifically listed as one of the Local Control Center Instructions in ISO New England Operating Procedure No. 4. Thus ISO New England OP 4 allows VELCO to initiate its own OP 4 to address local grid capacity deficiencies.

Therefore the Agency has determined that the Department Procedure already indirectly allows VELCO OP 4 and does not need to be changed. Since the local grid capacity deficiencies are not directly implemented by ISO New England, VELCO or the local utility is being required, by the Agency, to



document each time a local OP 4 event is implemented, including the OP 4 Action number initiated, the date, start time and end time. This information shall be retained for a minimum of 2 years and shall be available to the Agency upon request.

Since diesel engines are one of the 'dirtiest' sources of electricity with regards to the mass of air pollution per unit of energy produced, the Agency has emphasized minimizing their operation in favor of cleaner sources of power. The Agency believes that it is likely that some OP-4 events will be precipitated by a high demand for electricity that is brought on by hot, humid summer days when the air quality is already poor (elevated levels of fine particulate matter and/or ozone). The combination of operating diesel powered generators during these OP-4 events is anticipated to produce even worse localized air quality issues.

For these reasons, as VELCO and the electric utilities in Vermont move forward to identify emergency engines that would be utilized during a grid capacity deficiency event, the Agency would like to encourage the development of a dispatch hierarchy that gives preference to newer/cleaner emergency generators. For example, facilities with generators that are powered by engines which are Tier 2 or Tier 3 certified should be given preference over Tier 1 or older, non certified engines. Preference should also be given to Facilities that strictly use ultra low sulfur diesel (ULSD) fuel for their diesel generators. While the Agency is not making environmental dispatch a requirement at this time, this would likely be a component of any future revision to the Department Procedure. Alternatively, the Agency may choose to limit OP 4 enrollment to Tier 1, 2 or better engines using only ULSD fuel or its equivalent.

If you have any questions or comments regarding this matter please contact Steven Snook (802) 241-3856 or Doug Elliott (802) 241-3845.

Sincerely,

A handwritten signature in cursive script that reads "Richard A. Valentinetti".

Richard Valentinetti, Director
Air Pollution Control Division

c:
Steve Snook - APCD
Doug Elliott - APCD
Bruce Bentley - CVPS