

Docket No. 60A - Request for an amendment to the Certificate of Environmental Compatibility and Public Need issued by the Connecticut Siting Council in Docket No. 60 to Flagg Energy Development Corporation on May 7, 1986.

CONNECTICUT SITING

COUNCIL

OCTOBER 22, 1987

OPINION

On March 3, 1986, Flagg Energy Development Corporation (FEDCO) of Meriden, Connecticut, applied to the Connecticut Siting Council (Council) for a Certificate of Environmental Compatibility and Public Need (Certificate) to construct a cogeneration facility at Hartford Hospital which would generate steam and electricity. On May 7, 1986, the Council issued a Certificate to FEDCO for the Hartford Hospital Cogeneration Facility. The Council numbered the proceeding as Docket 60. After the Council issued this Certificate, FEDCO negotiated changes in the electricity purchase agreement between FEDCO and Northeast Utilities (NU), which included substantial reductions in the price NU would pay for electricity purchased from FEDCO, and a requirement that the turbines installed in the Hartford Hospital Cogeneration Facility be dual-fuel turbines, enabling the Facility to operate entirely on either natural gas or No. 2 fuel oil. FEDCO submitted to the Council a request for an amendment to this Certificate on August 10, 1987.

The requirement for dual-fuel capability led FEDCO to redesign its exhaust stacks and enhance its nitrogen oxide (NO_x) controls. The exhaust stack redesign resulted in a

change from the originally proposed two 70-foot stacks to one 121-foot stack. Hartford Hospital now has two 150-foot stacks.

FEDCO's redesign of this project indicated that increased efficiencies in plant operation would be achieved through the selection of newly developed turbines. The primary turbines would be Allison Gas Turbine Model A-571-K in lieu of the General Electric LM 500 turbine. These turbine changes would result in an increase in the total electrical output of the plant from the originally proposed 9.25 MW to 11.158 MW. Approximately 89 million kilowatt hours (kWh) would be available to NU annually, an increase from the original 78 million kWhs.

Annual natural gas usage would be 42,520,000 cubic feet more than the amount originally estimated in Docket 60. Similarly, No. 2 fuel oil usage would be 12,760 gallons more per year than originally estimated. In addition, the two underground oil tanks would have a capacity of 48,000 gallons each, instead of the original 35,000-gallon capacity.

The changes detailed above would result in an increase in the amount of carbon monoxide and hydrocarbons emitted by the Facility. Modeling performed by FEDCO indicates that the quantity of carbon monoxide emitted would be insignificant as defined by the United States Environmental Protection Agency (EPA) and enforced by the DEP. Moreover, all emissions from

the Facility would be subject to regulation and strict standards set forth by the EPA and DEP to ensure that the operation of the Facility would not significantly jeopardize the air quality of the region.

The requested amendment submitted by FEDCO does not include any proposed changes in the size of the building containing the cogeneration facility, its ownership, location, or noise from the Facility. Other than the changes described above, the Facility would be constructed as described in Docket 60. In that docket, the Council stated in its Opinion that, "The project represents a contribution to efficient, diversified electric generation." The changes included in this amendment do not alter this conclusion. Therefore, the Council finds that the need for this project outweighs the environmental impacts resulting from its construction and operation. The Council will, therefore, grant the requested amendment to the Certificate issued in Docket 60, subject to the conditions of the Decision and Order accompanying this Opinion.