DOCKET NO. 64A

AN APPLICATION FOR AN AMENDMENT TO THE CERTIFICATE OF ENVIRONMENTAL COMPATIBILITY AND PUBLIC NEED ISSUED IN DOCKET 64 TO THE DEXTER CORPORATION FOR THE CONSTRUCTION, MAINTENANCE, AND OPERATION OF A 48.5 MW COGENERATION FACILITY LOCATED IN WINDSOR LOCKS, CONNECTICUT.	:	Connecticut Siting Council
	:	May 19, 1988

FINDINGS OF FACT

1. The Dexter Corporation (Dexter), in accordance with provisions of section 16-50k and 16-501 of the Connecticut General Statutes (CGS), applied to the Connecticut Siting Council (Council) on July 2, 1986, for a Certificate of Environmental Compatibility and Public Need (Certificate) to construct a 48.5 MW (net) cogeneration facility in Windsor Locks, Connecticut (Facility). The project is known as the Dexter Corporation Cogeneration Facility.(Record)

2. On January 12, 1987, the Council issued a Certificate to Dexter for the construction, maintenance, and operation for the Facility. (Record)

3. Dexter, in accordance with the provisions of section 16-501(d) of the CGS, applied to the Council on April 12, 1988, for an amendment of the Certificate for the cogeneration facility. (Record)

4. The fee as prescribed by section 16-50v-1a(c) of the Regulations of State Agencies (RSA) accompanied the application. (Record)

5. The amendment application and notice thereof were served in accordance with CGS section 16-501(b) of Chapter 277a and section 16-501-1(e) of the RSA, to all specified persons. (Record)

6. Affidavits of newspaper notice as required by statute and section 16-501-1 of the RSA were received April 18, 1988. (Record)

7. The parties to the proceeding are the applicant and those persons and organizations whose names are listed in the Decision and Order which accompanies these findings. (Record)

8. At a meeting of the Council held on April 19, 1988, the Council decided that the changes would not result in any material increase in any environmental impact of the facility, and that no public hearing session would be necessary for the amendment pursuant to section 16-50m (b) of the CGS. (Record)

9. In the original design plan, the cogeneration power equipment was exposed to the elements. The amended design would enclose the cogeneration power equipment within a steel frame 130-foot by 210-foot by 75-foot high structure. The base elevation for the building would be above the 500 year flood level. (Amendment, pp. 4-5)

10. In the original design plan, the two above-ground fuel oil tanks were located on the south side of the facility. The amended design would locate the tanks at a positon to the north, behind the equipment building. This would reduce visual exposure from Elm Street. The new tank location would reduce the length of piping between the tanks and the facility, would provide improved access for oil delivery trucks, and would eliminate the need for a road between the facility and the south end of the site on the river side. (Amendment, pp. 5-6, Exhibit 5)

11. In the original design plan there was one 300,000 gallon tank and one 50,000 gallon tank. The amended design would equilize tank size, each with a capacity of 180,000 gallons. The two tanks would measure 30 feet in diameter by 29 feet tall. The tanks would be contained in a diked area which would have 110 percent of the capacity of the tanks. (Amendment, p.6)

12. In the original design plan, a duct burner was included among the major equipment items. The amended design would replace the duct burner with two 125 M lb. package boilers each with a design capacity of 125,000 lbs/hr of 625 psig steam at 750 degrees F. Each boiler would be designed for independent continuous operation from 100 percent of design capacity down to 10 percent of design capacity. Each boiler would be furnished with a condenser called a desuperheater to maintain a constant outlet steam temperature from 100 percent down to 50 percent of design capacity. Each boiler would be furnished with an economizer to maximize efficiency. A superheater with dedicated drain would be provided with each boiler. The boilers would be furnished with low-NOx burners. (Amendment, p.6, Exhibits 6-7)

13. All emissions would comply with project permit application requirements on file at the time of the contract signing. Boiler flue gas would be ducted to the common heat recovery steam generator (HRSG) chimney. The isolation of either boiler or the HRSG while the remaining units are in operation would be provided. (Amendment, p.6, Exhibit, 6-7)

14. The proposed boiler design would more reliably serve Dexter's steam needs, and provide back-up steam when the gas turbine was down. The change would take all three of the exisiting boilers out of service. They could remain in place as emergency back-up, or could be removed. (Amendment, p.6)

15. In the original design plan, number 2 fuel oil with a sulfur content of .5 percent was specified as the back-up fuel. The amended plan would use .3 percent number 2 fuel oil. Use of .3 percent sulfur fuel would reduce expected sulfur dioxide emissions. (Amendment, p.7)

16. Total cost of construction would increase an estimated $4.2 million, but anticipated off-setting economies in operation would result in no expected change in total project economics. (Amendment, pp. 7-8)