STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

1 CENTRAL PARK PLAZA • NEW BRITAIN, CONN. 06051

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PETITION NO. 84

On May 10, 1982 Gloria Dibble Pond, Colin Tait, Christopher Wood, Duncan Reid, and George Dunn met with representatives of United Illuminating: Mr. Leon Morgan, Executive Vice President - Operations, Engineering, and Customer Services; Mr. Marcus McCraven, Vice President - Environmental Engineering; Mr. Richard Grossi, Vice President - Corporate Planning and Development; Mr. Philip Olson, Senior Mechanical Engineer Supervisor; and Mr. David Damer, Manager of Environmental Engineering. The meeting was held at Bridgeport Harbor Station for a field review concerning the reconversion of Unit No. 3 of that facility to a dual-fuel (coal/oil) capability as described in UI's petition for declaratory ruling dated April 23, 1982. Supplemental information was provided in an orientation and report titled Coal Reconversion. This was followed by a site review.

The orientation and report provided some information which was not contained in the petition, relative to the determination of whether the project constitutes a "modification" and if so whether it may have "substantial adverse environmental effect." Mr. Grossi provided an overview of why the project was appropriate including advantages of the coal reconversion, the company's criteria for the project, and the technical conclusions drawn from the planning process. He also stated that this was an initial conversion which might be expanded over the 250 MW now planned for unit 3 or which might encourage the conversion of Units No. 1 and No. 2 (on the same site) to dual-fired capability.

Mr. Olson outlined the construction work involved in the project. This work included the equipment completions, rebuilds, replacements, and upgradings and the new equipment and facility establishment described in the petition.

Work will be required on coal receiving, handling, and storage systems; the boiler; the bottom and removal system; the electrostatic precipitator; the fly ash removal system; and the wastewater treatment system, all of which were observed by the review team. Additional detail was provided in the field on the dust suppression system. The frequency of coal barge arrival was estimated at one every 3 to 4 days, and eight truck loads of ash per day would be removed from the site compared to the one truck per week required to remove oil generated ash.

The environmental compatibility issues were presented by Mr. Damer. He discussed the effects of the high quality coal proposed for use (0.6-0.7% sulfur with 6-7% ash) and the reduced operating load on the facility's ability to remain within emission limits. UI predicts that SO_2 emission rates will remain the same without the installation of "scrubbers." The total suspended particulates (TSP) rate will double but still not exceed 50% of the allowable limit and NO_x rates will increase over 2.5x but remain within the allowable limit.

UI modeled the effects of projected TSP emissions on ambient conditions because a present non-attainment status exists for the secondary (welfare-related) 24 hour standard of 150 micrograms per cubic meter (ug/m^3). Their modeling indicates a change from the present oil impact of 3 ug/m^3 to a maximum coal impact of 7 ug/m^3. UI did not model the impacts of the projected SO_2 and NO_x emission levels on ambient conditions. These impacts would be dependent on the capacity factor of the unit.

Ash production was calculated based on 60% capacity factor. No specific plan has been developed for the disposal of these wastes. The company is still looking into a number of possibilities including transport to their New Haven Harbor site, marketing for various uses, or the use of state approved Connecticut landfills or out of state landfills.

Mr. McCravan stated that the January, 1984 completion date was an optimistic one and no regulatory review schedule had been developed. This is in part due to the possibility of additional permits or petitions which may be required when more definative information exists relative to the ash disposal plans, waste water treatment and discharge, and storage pile runoff system.

George A. Dunn
Environmentalist
May 12, 1982

GAD:kp