STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

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Petition No. 331
Northeast Utilities
Proposed Transmission Line Tower Modifications
in Montville, Stratford, and Milford, Connecticut
Staff Report
October 20, 1994

On October 17, 1994, Connecticut Siting Council (Council) member William H. Smith, the Council's Executive Director, Joel M. Rinebold, and Siting Analyst Stephen M. Howard, met with Dorian Hill of Northeast Utilities (NU) at the sites of the proposed modifications. NU's proposing to add aviation lighting to transmission line towers at an existing crossing of the Thames River in Montville and Ledyard and at an existing crossing of the Housatonic River in Stratford and Milford.

At the Thames River crossing, NU is proposing to install aviation lighting on the northwesterly tower (#7103) which supports the Montville - Buddington 1410 Circuit (115-kV) and the Montville - Gales Ferry 100 Circuit (69-kV). NU is proposing to install 3 medium-intensity white strobe lights in accordance with Federal Aviation Administration (FAA) advisory circular AC 7017469-1H, the top light being omni-directional and the middle and bottom lights limited to a 240^0 horizontal range. Daytime light intensity would be 20,000 candelas with 2,000 candelas at night.

At the Housatonic River crossing, NU is proposing to install aviation lighting on two towers (#287 and #288) in Stratford and Milford which support the Devon-Pequonnock-Weston 1730 circuit (115-kV) and a second de-energized line. On each tower, NU is proposing to install 3 medium-intensity white strobe lights in accordance with FAA advisory circular AC 70/7460-1H in the same pattern and intensity as is proposed for the Thames River crossing.

NU has considered three options available for bringing the towers in compliance with the FAA's advisory circular: 1) red flashing (day) and steady burning red beacons (night) often used in conjunction with painting for day visibility, 2) medium-intensity white strobe lights operating day and night, and 3) medium-intensity dual, white (day) and red (night) strobe lights.

NU has proposed the medium-intensity white strobe lights operating day and night for the following reasons:

- Other options might require the lighting and marking of additional towers;
- Initial and maintenance costs associated with painting towers;
- More narrow beam than red fresnel-lens beacons would intersect the ground plane at a distance further from the towers likely resulting in reduced visibility; and,
- Cost of $130,000 for proposed system versus $172,000 for the dual lighting options.

NU proposes that this modification would not have a substantial environmental effect and, therefore, would not require a Certificate of Environmental Compatibility and Public Need.

Stephen M. Howard
Siting Analyst

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