NORTHEAST UTILITIES

THE CONNECTICUT LIGHT AND POWER COMPANY
WESTERN MASSACHUSETTS ELECTRIC COMPANY
HOLYOKE WATER POWER COMPANY
NORTHEAST UTILITIES SERVICE COMPANY
NORTHEAST NUCLEAR ENERGY COMPANY

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December 3, 1982

Docket No. 50-245
B10614

Director of Nuclear Reactor Regulation
Attn: Mr. Dennis M. Crutchfield, Chief
Operating Reactors Branch #5
U. S. Nuclear Regulatory Commission
Washington, DC 20555

References: (1) J. Shea letter to W. G. Counsil dated, June 30, 1982.

(2) W. G. Counsil letter to D. M. Crutchfield dated, September 22, 1982.

Gentlemen:

Millstone Nuclear Power Station, Unit No. 1
SEP Topic III-2, Wind and Tornado Loadings

In Reference (1), the Staff indentified the fact that the ventilation stack at the Millstone site does not meet current criteria for the design basis wind and tornado loadings. In Reference (2), Northeast Nuclear Energy Company (NNECO) committed to analyze the consequences of failure of the ventilation stack to demonstrate that failure of the stack would not prevent the plant from achieving and maintaining a safe shutdown condition. NNECO has completed the review of this issue and the results are documented as follows.

The stack extends from site grade (elevation 14 ft. O in.) to elevation 389 ft. NNECO has considered the worst case situation in which the stack fails at site grade and overturns. The radius for potential damage was assumed to be:

Height above adjacent grade:	375' 0"
Outside radius at base:	13' 9"
Total radius:	388' 9"

It was assumed that all structures and components within this radius were vulnerable to damage; the specific structures or components which would be damaged depends on the direction the stack would fall. The following structures or components are potentially vulnerable:

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Millstone Unit 1

- Condensate Storage Tank
- Waste Surge Tank
- Domestic Water Tank
- Radwaste Shipment Building
- Radwaste Storage Building
- Xenon-Krypton Building
- Reactor Building Access Lock

Millstone Unit 2

- Portions of the Auxiliary Building (specifically: Cyanaloc Tank and Pump Room, Railroad Bay Area, Maintenance Shop)

  Although the east wall of Unit 2 diesel generator room "B" is within the potential damage radius, the uneven terrain provides assurance that the top of the stack would most likely not reach this wall. However, even if contact were made on the southeast corner of the "B" diesel room, the damage would be limited to the east access door and the immediately surrounding area. The operability of the diesel generator would not be affected. Also, due to the angle of fall, areas directly above (diesel exhaust system) would not be affected.

Shared Facilities

- Fire Water Tanks (2)
- Fire Water Pumphouse
- Unit 1 & 2 Solidification Chemical Storage Building
- Alternate Access Point
- Transmission Towers (2)
- Various office facilities, warehouses, maintenance. facilities, and temporary construction facilities

Items which could potentially affect the safe operation of Unit 1 are limited to the Condensate Storage Tank, and the Fire Water Tanks and Pumphouse. Both of these water sources are used for makeup to the shell side of the isolation condenser. However, due to separation, it is not possible for the stack to damage both water sources, and thus, a makeup water source for the isolation condenser would always be available. Even if both sources were unavailable, there would still be alternate means of maintaining a safe shutdown condition.

Damage to the balance of the potentially vulnerable areas associated with Unit 1 and all of the areas associated with Unit 2 would not prevent either unit from achieving safe shutdown.

The attached drawing shows the areas that lie within the postulated damage radius. By separate transmittal, a copy of a topographic map of the site showing further detail of the areas of the site within the potential damage radius has been forwarded to the Integrated Assessment Project Manager for Millstone Unit 1.

We trust the Staff will find this information sufficient to resolve any concerns related to failure of the ventilation stack. Since the consequences of failure have been shown to be acceptable, no further action is planned.

Very truly yours,

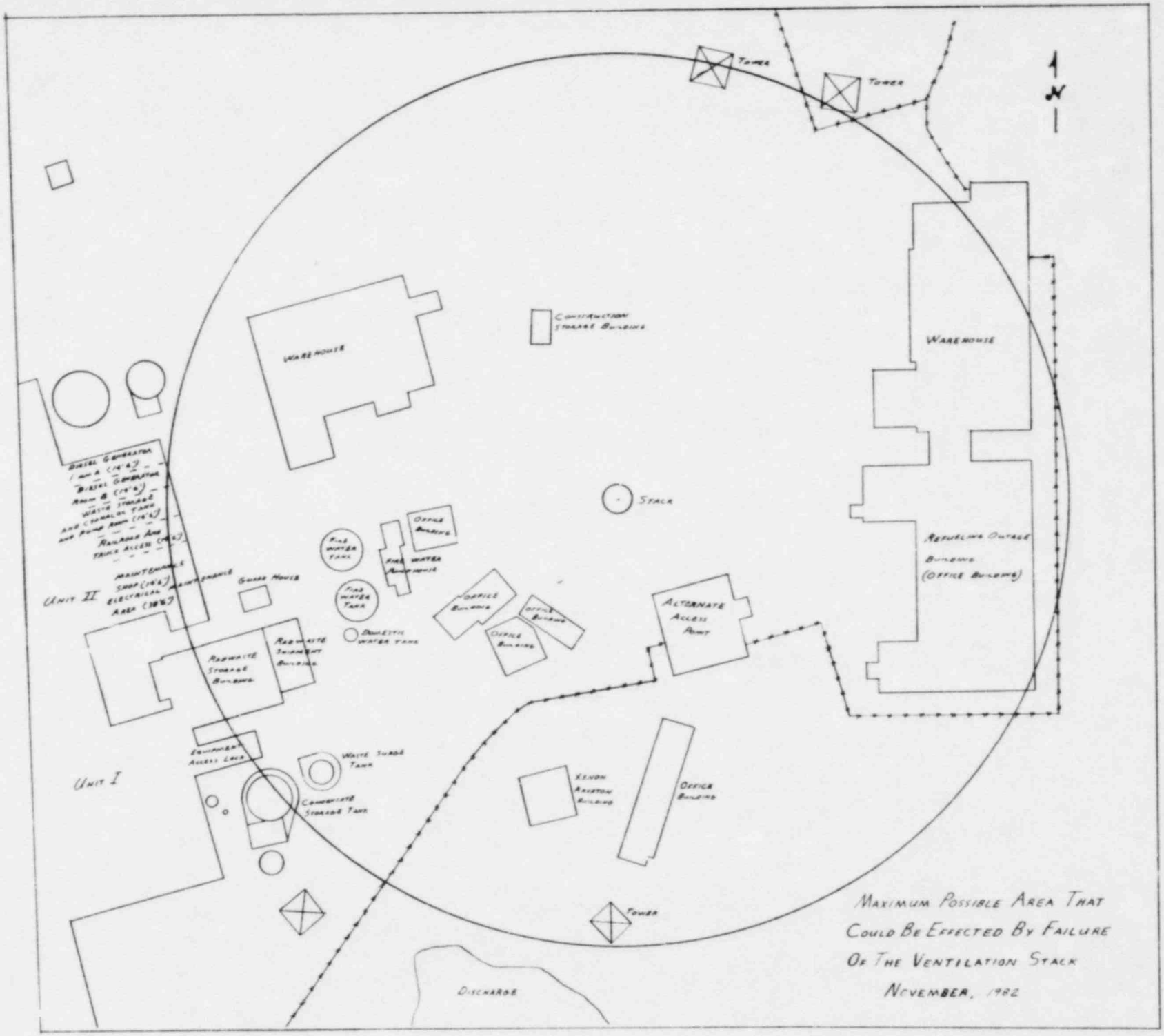
NORTHEAST NUCLEAR ENERGY COMPANY

W. G. Counsil

W. G. Counsil
Senior Vice President

J. P. Cagnetta

By: J. P. Cagnetta
Vice President Nuclear and
Environmental Engineering



Maximum Possible Area That Could Be Effected By Failure Of The Ventilation Stack November, 1982