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UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

July 1, 1980

Docket Nos.: 50-245
50-213

Mr. W. G. Council, Vice President
Nuclear Engineering & Operations
Connecticut Yankee Atomic Power Company
P.O. Box 270
Hartford, Connecticut 06 01

SUBJECT: POST-ACCIDENT SAMPLING SYSTEM (NUREG-0578) FOR HADDAM
NECK AND MILLSTONE UNIT NO. 1 (NNECO LETTER DATED
MAY 6, 1980)

Dear Mr. Council:

We have completed our review of the conceptual design of the post-accident sampling systems proposed for installation at the Haddam Neck and Millstone Unit No. 1 plants. We find the conceptual designs to be consistent with the purpose of NUREG-0578, Section 2.1.8.a, and with the guidance in our letter of clarification dated October 30, 1979. The proposed sample volumes are consistent with the source terms to be expected for the accident case. The adequacy of shielding around sampling lines, both leading to and from the sampling area and in the sampling area itself is not discussed in the presentation and can be a major consideration in the final design. Factors such as personnel access paths to the sampling area and the potential radiological conditions in the access paths must also be considered.

On-line analysis capability for dissolved gases, as described in the conceptual design, is acceptable. However, to minimize handling of highly radioactive sample material, the designers may want to consider on-line analysis for boron and chlorides, neither of which is amenable to analysis in a diluted form.

The conceptual design does not provide for transport of the sample(s) from the sampling station to the analytical facility. Similarly, the conceptual design does not discuss special provisions or descriptions of analytical facilities or procedures needed for analysis of highly radioactive samples.

On the basis of our review, we find the conceptual design of the post-accident sampling systems for the Haddam Neck and Millstone Unit No. 1 plants to be acceptable, subject to our comments above. The final designs

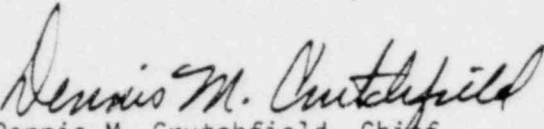
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Mr. W. G. Council

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will be reviewed and addressed by us in a separate letter as soon as they become available.


Dennis M. Crutchfield, Chief
Operating Reactors Branch #5
Division of Licensing

July 1, 1980

cc :

William H. Cuddy, Esquire
Day, Berry & Howard
Counselors at Law
One Constitution Plaza
Hartford, Connecticut 06103

Anthony Z. Roisman
Natural Resources Defense Council
917 15th Street, N. W.
Washington, D. C. 20005

Northeast Nuclear Energy Company
ATTN: Superintendent
Millstone Plant
P. O. Box 128
Waterford, Connecticut 06385

Mr. James R. Himmelwright
Northeast Utilities Service Company
P. O. Box 270
Hartford, Connecticut 06101

Resident Inspector
c/o U. S. NRC
P. O. Box Drawer KK
Niantic, Connecticut 06357

Waterford Public Library
Rope Ferry Road, Route 156
Waterford, Connecticut 06385

First Selectman of the Town
of Waterford
Hall of Records
200 Boston Post Road
Waterford, Connecticut 06385

Superintendent
Haddam Neck Plant
RFD #1
Post Office Box 127E
East Hampton, Connecticut 06424

Russell Library
119 Broad Street
Middletown, Connecticut 06457

Connecticut Energy Agency
ATTN: Assistant Director
Research and Policy
Development
Department of Planning and
Energy Policy
20 Grand Street
Hartford, Connecticut 06106

Director, Technical Assessment
Division
Office of Radiation Programs
(AW-459)
U. S. Environmental Protection
Agency
Crystal Mall #2
Arlington, Virginia 20460

U. S. Environmental Protection
Agency
Region I Office
ATTN: EIS COORDINATOR
JFK Federal Building
Boston, Massachusetts 02203

Board of Selectmen
Town Hall
Haddam, Connecticut 06103