

August 21, 1991

Docket No. 50-443

Mr. Ted C. Feigenbaum
President and Chief Executive Officer
New Hampshire Yankee Division
Public Service Company of New Hampshire
Post Office Box 300
Seabrook, New Hampshire 03874

Dear Mr. Feigenbaum:

SUBJECT: ENVIRONMENTAL ASSESSMENT - SEABROOK STATION (TAC NO. 80043)

Enclosed is a copy of an Environmental Assessment relating to your March 18, 1991 application for a license amendment for the Seabrook Station. The proposed amendment would revise the provisions in the Technical Specifications (TS) relating to fuel enrichment. In addition, new TS are added for new fuel assembly storage and spent fuel assembly storage.

The original copy of the Notice of Environmental Assessment and Finding of No Significant Impact, has been forwarded to the Office of the Federal Register for publication.

Sincerely,

Original signed by
Gordon Edison, Senior Project Manager
Project Directorate I-3
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Enclosures:
Environmental Assessment Notice

cc w/enclosures:
See next page

OFC	:LA:PDI-3	:PM:PDI-3	:OGC	:APD:PDI-3
NAME	:MRushbrook	:GEdison	:APH	:SShankman
DATE	:8/21/91	:8/21/91	:8/21/91	:8/21/91

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Mr. Ted C. Feigenbaum

Seabrook

cc:

Thomas Dignan, Esq.
John A. Ritscher, Esq.
Ropes and Gray
One International Place
Boston, Massachusetts 02110-2624

Dr. Mauray Tye, President
Sun Valley Association
209 Summer Street
Haverhill, Massachusetts 01831

Barbara J. Saint Andres, Esquire
Kopelman & Paige, P.C.
Counsel for Amesbury, Newburyport &
Salisbury
101 Arch Street
Boston, Massachusetts 02110

Robert Backus, Esq.
Backus, Meyer and Solomon
116 Lowell Street
Manchester, New Hampshire 03106

Diane Curran, Esq.
Harmon and Weiss
2001 S Street, N.W.
Suite 430
Washington, DC 20009

Mr. Peter Brann
Assistant Attorney General
State House, Station #6
Augusta, Maine 04333

Seacoast Anti-Pollution League
5 Market Street
Portsmouth, New Hampshire 03801

Resident Inspector
U.S. Nuclear Regulatory Commission
Seabrook Nuclear Power Station
Post Office Box 1149
Seabrook, New Hampshire 03874

Mr. T. L. Harpster
Public Service Company of New Hampshire
Post Office Box 300
Seabrook, New Hampshire 03874

Regional Administrator, Region I
U.S. Nuclear Regulatory Commission
475 Allendale Road
King of Prussia, Pennsylvania 19406

Ashod N. Amirian, Esq.
145 South Main Street,
P.O. Box 38
Bradford, Massachusetts 03801

Mr. Alfred Sargent
Chairman
Board of Selectmen
Salisbury, Massachusetts 01960

Office of the Attorney General
One Ashburton Place
20th Floor
Boston, Massachusetts 02108

Durham Board of Selectmen
Town of Durham
Durham, New Hampshire 03824

Chairman, Board of Selectmen
RFD 2
South Hampton, New Hampshire 01950

R. Scott Hill-Whilton, Esquire
Lagoulis, Clark, Hill-Whilton
& Rotondi
79 State Street
Newburyport, Massachusetts 01950

Board of Selectmen
Town of Amesbury
Town Hall
Amesbury, Massachusetts 01913

Paul McEachern, Esquire
25 Maplewood Avenue
P.O. Box 360
Portsmouth, New Hampshire 03801

Mr. Ted C. Feigenbaum

Seabrook

cc:

Town of Exeter
10 Front Street
Exeter, New Hampshire 03823

Gerald Garfield, Esq.
Day, Berry and Howard
City Place
Hartford, Connecticut 06103-3499

Mr. J. F. Opeka
Northeast Utilities
P.O. Box 270
Hartford, Connecticut 06141-0270

Mr. R. M. Kacich
Northeast Utilities Service Company
P. O. Box 270
Hartford, Connecticut 06141-0270

Jane Spector
Federal Energy Regulatory Commission
825 North Capital Street, N.E.
Room 8105
Washington, D.C. 20426

Mr. Rob Sweeney
Three Metro Center
Suite 610
Bethesda, Maryland 20814

Mr. George L. Iverson, Director
New Hampshire Office of Emergency
Management
State Office Park South
107 Pleasant Street
Concord, New Hampshire 03301

Adjudicatory File (2)
Atomic Safety and Licensing Board
Panel Docket
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Mr. Leon Maglathlin
Public Service Company of New Hampshire
100 Elm Street
Manchester, New Hampshire 03105

Mr. Jack Dolan
Federal Emergency Management Agency
Region I
J.W. McCormack Post Office &
Courthouse Building, Room 442
Boston, Massachusetts 02109

Mr. J. M. Peschel
Public Service Company of New Hampshire
P.O. Box 300
Seabrook, New Hampshire 03874

Stephen G. Burns, Director
Office of Commission Appellate
Adjudication
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Mr. David Rodham, Director
Massachusetts Civil Defense Agency
400 Worcester Road
P.O.Box 1496
Framingham, Massachusetts 01701-0317
ATTN: James Muckerheide

Atomic Safety and Licensing Board
Panel
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

John P. Arnold, Attorney General
G. Dana Bisbee, Associate Attorney
General
Attorney General's Office
25 Capitol Street
Concord, New Hampshire 03301

Congressman Nicholas Mavroules
U. S. House of Representatives
70 Washington Street
Salem, Massachusetts 01970

UNITED STATES NUCLEAR REGULATORY COMMISSION
PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE
DOCKET NO. 50-443
ENVIRONMENTAL ASSESSMENT AND FINDING OF
NO SIGNIFICANT IMPACT

The U.S. Nuclear Regulatory Commission (the Commission) is considering issuance of an amendment to Facility Operating License No. NPF-86 issued to the Public Service Company of New Hampshire (PSNH or the licensee) for operation of the Seabrook Station located in Rockingham County, New Hampshire.

ENVIRONMENTAL ASSESSMENT

Identification of Proposed Action:

The proposed amendment would revise the provisions in the Technical Specifications (TS) relating to fuel enrichment. In addition, new TS are added for new fuel assembly storage and spent fuel assembly storage.

The proposed action is in accordance with the licensee's application for amendment dated March 18, 1991.

The Need for the Proposed Action:

The proposed changes are needed so that the licensee can use higher fuel enrichment, and provides the flexibility of extending the fuel irradiation and permitting operation for longer fuel cycles.

Environmental Impacts of the Proposed Action:

The Commission has completed its evaluation of the proposed revisions to the Technical Specifications. The proposed revisions would permit use of fuel enrichment with Uranium 235 up to 5.0 weight percent. The safety considerations associated with reactor operation with higher enrichment and extended irradiation have been evaluated by the NRC staff. The staff has concluded that

such changes would not adversely affect plant safety. The proposed changes have no adverse effect on the probability of any accident. The increased burnup and higher enrichment may slightly change the mix of fission products that might be released in the event of a serious accident, but such small changes would not significantly affect the consequences of serious accidents. No changes are being made in the types or amounts of any radiological effluents that may be released offsite. There is no significant increase in the allowable individual or cumulative occupational radiation exposure.

With regard to potential nonradiological impacts of reactor operation with higher enrichment and extended irradiation, the proposed changes to the TS involve systems located within the restricted area, as defined in 10 CFR Part 20. They do not affect nonradiological plant effluents and have no other environmental impact.

The environmental impacts of transportation resulting from the use of higher enrichment fuel and extended irradiation were published and discussed in the staff assessment entitled, "NRC Assessment of the Environmental Effects of Transportation Resulting from Extended Fuel Enrichment and Irradiation," dated July 7, 1988, and published in the Federal Register (53 FR 30355) on August 11, 1988. As indicated therein, the environmental cost contribution of the proposed increase in the fuel enrichment and irradiation limits are either unchanged or may, in fact, be reduced from those summarized in Table S-4 as set forth in 10 CFR 51.52(c).

Therefore, the Commission concludes that there are no significant radiological or nonradiological environmental impacts associated with the proposed amendment.

Alternative to the Proposed Action:

Since the Commission concluded that there are no significant environmental effects that would result from the proposed action, any alternatives with equal or greater environmental impacts need not be evaluated.

The principal alternative would be to deny the requested amendment. This would not reduce environmental impacts of plant operation and would result in reduced operational flexibility.

Alternative Use of Resources:

This action does not involve the use of any resources not previously considered in the Final Environmental Statement for the Seabrook Station.

Agencies and Persons Consulted:

The NRC staff reviewed the licensee's request and did not consult other agencies or persons.

FINDING OF NO SIGNIFICANT IMPACT

The Commission has determined not to prepare an environmental impact statement for the proposed license amendment.

Based upon the foregoing environmental assessment, we conclude that the proposed action will not have a significant effect on the quality of the human environment.

For further details with respect to this action, see the application for amendment dated March 18, 1991, which is available for public inspection at the Commission's Public Document Room, 2120 L Street, N.W., Washington, D.C. 20555, and at the Exeter Public Library, 47 Front Street, Exeter, New Hampshire 03833.

Dated at Rockville, Maryland, this 21st day of August 1991.

FOR THE NUCLEAR REGULATORY COMMISSION



Susan F. Shankman, Acting Director
Project Directorate I-3
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation