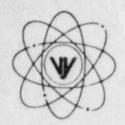
# VERMONT YANKEE NUCLEAR POWER CORPORATION



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REPLY TO:

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April 10, 1985 FVY 85-34

TELEPHONE 617-872-8100

United States Nuclear Regulatory Commission Washington, D. C. 20555

Attention:

Mr. Harold R. Denton, Director

Office of Nuclear Reactor Regulations

References:

(a) License No. DPR-28 (Docket No. 50-271)

(b) Letter, USNRC to All Power Reactor Licenses and all Applicants for Power Reactor Licenses, NVY 85-1, dated January 9, 1985, Generic Letter 85-01, Fire Protection

Policy Steering Committee Report

Subject:

Vermont Yankee Nuclear Power Corporation Comments on Generic Letter 85-01, Fire Protection Policy Steering Committee Report

Dear Sir:

On January 15, 1985, the Nuclear Regulatory Commission requested (50 Federal Register 2057) public comment on the Fire Protection Policy Steering Committee Report enclosed with Generic Letter 85-01, [Reference (b)]. The Steering Committee was directed to develop recommendations for resolution of certain fire protection issues including (1) the general adequacy of current guidance to the industry on Appendix R, (2) the validity of certain Staff interpretations of Appendix R requirements, (3) the treatment of future technical and schedular exemptions from Appendix R, and (4) the adequacy of the current inspection program. Enclosed with this letter are Vermont Yankee's specific comments and concerns associated with the Committee's Report. This enclosure was previously submitted to Mr. Vic Stello, Jr., Deputy Executive Director for Regional Operations and Generic Requirements in response to his request of March 4, 1985.

Vermont Yankee is supportive of the NRC's efforts to clarify 10CFR50 Appendix R guidance and is currently trying to bring this issue to a close for the Vermont Yankee S ation. As part of this effort, we will be submitting to NRR a comprehensive exemption request package for items which are not in literal conformance to Appendix R, recognizing that these requests may need to be revised and/or withdrawn should certain of the Committee's recommendations be adopted by NRC.

United States Nuclear Regulatory Commission Attention: Mr. Harold R. Denton April 10, 1985 Page 2

Vermont Yankee appreciates the opportunity to provide comments on the Steering Committee Report and assist in NRC's efforts to expedite completion of compliance with the fire protection requirements for nuclear power plants.

Very truly yours,

VERMONT YANKEE NUCLEAR POWER CORPORATION

R. W. Capstick

Licensing Engineer

RWC/tl

Enclosure

# Vermont 'inkee Comments on Generic Letter 85-01, Fire Protection Policy Steering Committee Report

#### 1. Control Room Fire Considerations (Ref. Encl. 6, Question 3.8.4)

#### a. Operator Action Prior to Control Room Evacuation

The answer to this question states that the only manual action that can be assumed to be taken prior to leaving the control room is reactor trip. Vermont Yankee Alternate Shutdown System was designed assuming MSIV closure in addition to reactor trip. This assumption was considered reasonable, since at Vermont Yankee both actions can be accomplished by actuation of a single switch. Since the Vermont Yankee design has been previously reviewed and approved by the NRC, we find the answer contradictory.

#### b. Post Fire Shutdown Capability

Although the Steering Committee Report did not address the question of whether fuse replacement is a "repair", this issue has been raised in a more recent NRC Information Notice (IN 85-09) and relates to control room fire considerations. IN 85-09 states that, if a control room evacuation is required, operability of the Alternate Shutdown System must exist without repairs, including replacement of fuses. At Vermont Yankee, we do not consider that a problem exists if fuses in the Alternate Shutdown Circuits are damaged prior to switchover. Because of closing the MSIV's prior to evacuating the control room, sufficient time would be available to permit fuse replacement before the Alternate Shutdown equipment is needed. Again, since the Vermont Yankee design has been previously approved by the NRC, we find the statement made in IN 85-09 contradictory.

# 2. Short Circuit Coordination Studies (Ref. Encl. 6, Question 5.3.8)

The answer to this question states that high impedance faults, including simultaneous high-impedance faults below the trip point for the breaker on each individual circuit, should be considered for all associated circuits located in the fire area of concern. Such considerations were not previously required and have not been addressed by Vermont Yankee as part of its coordination study. We believe that consideration of high impedance faults goes beyond the design review required by Appendix R.

#### 3. Circuit Failure Modes (Ref. Encl. 6, Question 5.3.1)

The answer to this question discusses hot shorts, but does not provide any guidance concerning the <u>types</u> of hot shorts that are considered credible. A number of utility submittals have documented assumptions relating to this issue and our position is generally consistent with these assumptions. Nevertheless, the NRC has not yet provided a clear definition of what is acceptable. We believe that such definition would be helpful and avoid future problems.

#### 4. "Approved" Fire Protection Program (Enclosure 6, p.2, 43-44)

Enclosure 6 references an apparent "approved" Fire Protection Program. NRC has never formally required any approvals of Fire Protection Programs. This approval requirement does not appear in Appendix R and is considered a backfit.

#### 5. Submission of Changes (Enclosure 6, p.43-44)

Requirements to submit any changes to the fire protection provisions do not appear in Appendix R other than specific conditions requiring exemption. Enclosure 6 (Section 8.2 - p. 43-44) requires Commission approval of certain changes beyond those required of Appendix R.

#### 6. Engineering Lighting Standards (Enclosure 6, p.28)

Enclosure 6 references the Illuminating Engineering Society Handbook as a standard for emergency lighting levels. This is a new requirement not found in Appendix R and constitutes a backfit.

#### 7. Seismic and Fire Criteria (Enclosure 6, Section 2.2, p.41)

This section suggests additional requirements coupling seismic and fire events. Appendix R specifically says that fire protection systems do not have to consider seismic events. We consider this a backfit.

## 8. Openings and Solutions (Enclosure 6, Section 8.8, ...47)

This section provides specific engineering solutions to fire problems (ex. sealing of conduit at both ends). Utilities and fire protection engineers should be allowed the flexibility to design appropriate fire protection techniques.

#### 9. Other Concerns

#### a. Schedular Exemptions (Ref. Encl. 2, Section A)

We are concerned that the draft generic letter would not allow further exemptions under 10CFR 50.12, once the schedule deadlines of 10CFR 50.48 have expired. The door should be left open for justifiable exemptions.

#### b. Revised Inspection Program (Ref. Encl. 2, Section B)

We recommend that proposed inspections be scheduled <u>after</u> the new Staff guidance has been finalized and released to the industry. Licensees need time to assimilate the findings of the report, and the Commission may ultimately modify some the Staff's positions.

#### c. Quality Assurance Requirements (Ref. Encl. 2, Section D)

We disagree with the proposed new requirement that all fire protection systems must meet GDC-1. Also, we note that: (1) Appendix R makes no such statement and (2) the draft generic letter itself contradicts this.

#### d. Fire Damage (Ref. Encl. 3, Section 3)

We believe that the term "free from fire damage" is not sufficiently well defined and thus remains open to differing interpretations. A clearer definition would be helpful in avoiding future problems.

## e. Fire Protection License Condition (Ref. Encl. 4)

We object to the proposed license condition. Adequate enforceability exists for fire protection via the General Design Criteria. Also, 10CFR 50.59 reviews must be conducted for all proposed modifications. In this regard, however, we do not believe that 50.59 requires prior submittal of a full unreviewed safety question analysis made where no Technical Specification changes will be necessary.

# f. Fire Door Modifications (Ref. Encl. 6, Question 3.2.3)

The answer to this question in effect introduces the requirement to submit an exemption for <u>any</u> modification to a fire door. We believe that such a requirement is unnecessary and some reasonable qualification is needed.

# g. Fire Protection Features NFPA Conformance and NFPA Code Deviations (Ref. Encl. 6, Questions 3.8.1 and 8.9)

We note that answers to these questions introduce a new requirement that systems be designed in accordance with NFPA guidelines and that even minor deviations be identified in FSAR or Fire Hazards Analysis (FHA). The effort/cost associated with meeting this requirement will be substantial.

h. III G, J and O Exemptions for Future Modifications (Ref. Encl 6, Question 8.3)

The answer to this question appears to be a new Staff interpretation which requires that future modifications involving fire protection features outside the scope of III G, J and 'will need to comply with the appropriate part of Appendix R or qualify for an exemption. This could mean that eventually, all parts of Appendix R will apply to all plants, a backfit situation.

- i. It is still unclear what constitutes a basis for an exemption filing. Unless quickly clarified, VY will file under previous Staff guidance.
- j. Vermont Yankee utilized the concept of 20' separation zones to break up the Reactor Building into fire zones. No mention is made of this as acceptable guidance even though the approach has been used at other facilities and does make good fire protection engineering sense.
- k. We generally endorse the specific comments found in the February 14, 1985 letter from the Nuclear Utility Fire Protection Group to Harold Denton on the Report of the NRC Fire Protection Policy Steering Committee.