



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

MAR 8 1979

MEMORANDUM FOR: *Response to D.C. Cook*
B. K. Grimes, A/D for Engineering and Projects, DOR, NRR
FROM: Samuel E. Bryan, A/D for Field Coordination, DROI, IE
SUBJECT: CLARIFICATION OF AND PROPOSED CHANGES TO STS:
AC & DC DISTRIBUTION

The enclosed memorandum to me from J. F. Streeter, dated January 29, 1979, describes an apparent deficiency in the Standard Technical Specifications (STS). It also cites a specific example (D.C. Cook 2). Furthermore, the memorandum suggests appropriate revisions to the STS for your consideration.

Please review the enclosed memorandum and advise us of any actions you propose to take that could correct the apparent deficiency.

Samuel E. Bryan
Samuel E. Bryan, A/D for Field
Coordination
Division of Reactor Operations
Inspection, IE

Enclosure:
Memo Streeter to Bryan
dated 1/29/79

cc: V. Thomas
D. Brinkman
G. Fiorelli
J. D. Smith
J. I. Riesland

CONTACT: J. I. Riesland
(x28019)

E/5

April 30, 1987

NOTE TO: File

FROM: Richard L. Emch, Section Chief
Review and Assessment Section
Division of Operational Events Assessment, NRR

SUBJECT: TS INTERPRETATION - T.S. 3.0.4/4.0.4

Issues: 1. When entering a lower mode, must the SR's for operability of a system required to be operable in the lower mode (but not the upper mode) be done before entering the lower mode?

Background: Clinton was in Mode 1 and wanted to go to Mode 2 to allow containment entry to checkout an inoperable SLCS pump. Intermediate Range Neutron Flux Monitors required in Mode 2, but not operable in Mode 1, can't be tested in Mode 1. Clinton wanted to know how to enter Mode 2.

Discussion and Position: When this issue has come up in past, licensees have been told that the operability SR's should be done immediately after entering the lower mode. However, a different rule applies to increasing Modes.

Special exclusions should be and are stated in the TS for operability SR's needed for a higher mode which can't be performed until after entry into the higher mode is achieved. Otherwise 3.0.4 stands - all systems needed in Mode must be operable before entering this higher Mode.

Issue: 2. Can a plant enter a lower mode if the plant is in an action statement because of inoperable equipment which is required to be operable in the lower mode?

Background: Clinton was in an action statement for an inoperable SLCS pump; action statement allowed operation for 7 days with one inoperable pump.

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Discussion and
Position:

From the bases of 3.0.4, the intent of 3.0.4 is to ensure unit operation is not initiated with inoperable equipment. The bases of Vogtle 3.0.3 say further that the orderly shutdown, required after the Action Statement allowed outage time is exceeded, can be started early. Essentially, Clinton's decision to go from Mode 1 to Mode 2 constitutes starting the shutdown required by 3.0.3 (after the 7 day allowed outage time for the inoperable SLCS pump) early and is therefore allowable. However, the plant can't go back to Mode 1 until the pump is operable per 3.0.4/4.0.4.

Original Signed by
Richard L. Emch, Jr.

Richard L. Emch, Section Chief
Review and Assessment Section
Division of Operational Events
Assessment, NRR

cc: B. Siegel

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(NOTE TO FILE FROM EMCH)

TSB:DOEA-NRR
RLEmch:dlp
04/80/87

AUG 10 1988

MEMORANDUM FOR: Robert D. Martin, Regional Administrator, Region IV

FROM: Thomas E. Murley, Director
Office of Nuclear Reactor Regulation

SUBJECT: VOLUNTARY ENTRY INTO TECHNICAL SPECIFICATION 3.0.3

Your memorandum of July 18, 1988, recommended that NRR issue a Generic Letter or Information Notice to reiterate NRC's position on the intended purpose of LCO 3.0.3 and clarify the NRC's expectation concerning licensee management control of entry into it. As you suggested, NRR has initiated development of a Generic Letter on this subject, which will be based on my June 17, 1987 memorandum to the Regional Administrators. In the interim, we still recommend that all regions increase communications with the resident inspectors and plant management on this subject, thereby promoting a heightened awareness by the inspectors, licensee management, and plant personnel of the intended limited use of LCO 3.0.3.

Original signed by
Thomas E. Murley

Thomas E. Murley, Director
Office of Nuclear Reactor Regulation

cc: W. T. Russell, RI
J. N. Grace, RI
A. B. Davis, RI
J. B. Martin, RV

DISTRIBUTION:
see attached

(NOTE/MEMO/ROSSI/BUTCHER/BOB G.)
*(see previous concurrence)

*TSB:DOEA:NRR	*TSB:DOEA:NRR	*C:TSB:DOEA:NRR	*D:DOEA:NRR	*ADT:NRR
R:Giardina:pmc	CWMoon	EJButcher	CERossi	TTM:rtin
08/3/88	08/3/88	08/3/88	08/3/88	08/04/88

DB:NRR
JHS:piezek
08/9/88

TE:Murley
08/9/88

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APR 06 1990

MEMORANDUM FOR: R. Wessman, Director, Project Directorate I-3, NRR

FROM: J. Johnson, Chief, Reactor Projects Branch No. 3,
Region I

SUBJECT: VERMONT YANKEE PLANS TO OVERHAUL AN EMERGENCY
DIESEL GENERATOR WHILE AT FULL POWER

The purpose of this memorandum is to followup on our discussion of March 30, 1990 and to request that NRR evaluate the appropriateness of Vermont Yankee's plans to overhaul one of the two diesel generators while the plant is operating at full power. The diesel generator vendor initially recommended the overhaul every 12-18 months, but has since stated that a 22-24 month interval is acceptable. As of April, 1990, the overhaul interval for this diesel generator is 22 months; the interval will be extended to 27 months if the overhaul is delayed to the next refueling outage.

Although TS 3.5.H.1 allows a 7 day LCD for one diesel generator out-of-service and this time period is apparently sufficient to perform the overhaul, we question whether the removal of such an important piece of safety-related equipment is prudent when the plant is at power. While we note that Vermont Yankee has surveyed several utilities and found that this practice was not unique and that the bases of their TS do not indicate that this action is unacceptable, we remained concerned that this maintenance practice poses a noteworthy risk. The diesel generator will probably not be in a condition during the overhaul to be quickly restored to service should a loss of offsite power occur.

We request that you review this issue for a generic NRR position on this matter. A position was taken by NRR in 1987 regarding willful entry into Standard Technical Specification 3.0.3 for one hour LCDs with redundant equipment out-of-service, but that position is not considered applicable here. We would appreciate a prompt response to this matter because Vermont Yankee intends to enter this LCD on or about April 16, 1990. If this practice is deemed unacceptable, we need to contact Vermont Yankee management promptly.

Sincerely,

Jon Johnson, Chief
Reactor Projects Branch 3

cc:

B. Boger, NRR
W. Kane, RI
W. Pasclak, RI
J. Wiggins, RI

H. Eichenholz, SRI, Vermont Yankee
J. Durr, RI
R. Gallo, RI
R. Barkley, RI

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

APR 6 1990

MEMORANDUM FOR: R. Wessman, Project Director
Project Directorate 1-3
Division of Reactor Projects 1/11

FROM: Faust Rosa, Chief
Electrical Systems Branch
Division of Systems Technology

SUBJECT: VERMONT YANKEE - PLANS TO OVERHAUL AN EMERGENCY DIESEL
GENERATOR WHILE AT FULL POWER

In response to a memorandum (undated, received 4/5/90) from J. Johnson, Chief, Reactor Projects Branch No. 3, Region I to R. Wessman, Director, Project Directorate 1-3, NRR which requested NRR to review Vermont Yankee's (VY) plans to declare a seven day LCO to overhaul an emergency diesel generator (EDG) while at full power, the Electrical Systems Branch (SELB) has reviewed VY's emergency electrical distribution system for its adequacy in the context of this planned LCO. Our evaluation follows:

Our position on the subject matter is based on the following information:

1. According to VY's current Technical Specification (TS) 3.5.H.1, if one of the two EDGs found to be inoperable, continued reactor operation is permitted for seven days, i.e., seven days Limiting Conditions for Operation (LCO).
2. In addition to two onsite EDGs and four offsite power lines through two startup transformers at VY, there is Vernon hydro station tie line which is a dedicated line (one half mile away) that can be connected directly to either of the emergency buses from the VY control room. This switching operation is covered by the current plant procedures and operator training. This line has enough capacity to supply all the emergency power loads to safely shutdown the plant.
3. The hydro station is energized continuously, therefore, there is no need to startup any equipment; and it has excellent reliability demonstrated by having a history of only two unplanned outages (total of less than 3 hours) since 1965.

Contact:
P. Kang, SELB/DST
X20812

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4. To ensure more reliability, VY has committed to set up a preventive maintenance program which includes inspection of the line regularly and testing the line every other refueling by aligning it to one of the safety buses and supplying it with the needed power.
 5. We also agree with VY's survey that this practice (i.e., overhauling or performing 18 month EDG surveillance during power operation) by declaring a seven day LCO is not unique to VY. We find that such practice is necessary for those multi-unit plants which are designed and operated with shared EDG configurations (e.g., Brunswick).

Based on the fact that the current VY's TS allows a seven day LCO for an inoperable EDG, this time period is apparently sufficient to perform the overhaul. At Brunswick for this case, the remaining three available EDGs would meet the single failure criterion for loss of offsite power safe shutdown but not for a DBA. The VY situation is exactly similar when the Vernon hydro is credited as being equivalent to a standby EDG.

Therefore we see no significant safety problem with VY's plans to overhaul an EDG during a seven day LCO while at full power.



Faust Rose, Chief
Electrical Systems Branch
Division of Systems Technology

cc: A. Thadani
M. Fairtile
J. Knight



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

April 13, 1990

Docket No. 50-271

MEMORANDUM FOR: Jon R. Johnson, Chief
Reactor Projects Branch III

FROM: Richard W. Wessman, Director
Project Directorate 1-3
Division of Reactor Projects 1/11

SUBJECT: TRANSMITTAL OF NRR ELECTRICAL SYSTEMS BRANCH MEMO ON
VERMONT YANKEE DIESEL-GENERATOR OVERHAUL AT FULL POWER
DATED APRIL 6, 1990

Enclosed is the subject memorandum which provides the NRR position on Vermont Yankee's plans to enter a seven-day LCD in order to perform a needed overhaul of one of the Station emergency diesel generators. We have previously faxed a copy of this memo to both you and the Resident's office at Vermont Yankee.

Richard W. Wessman, Director
Project Directorate 1-3
Division of Reactor Projects 1/11

Enclosure:
As stated

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5/12/92



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

April 13, 1990

MEMORANDUM FOR: David B. Matthews, Director
Project Directorate II-3
Division of Reactor Projects - 1/11

FROM: Jose F. Calvo, Chief
Technical Specifications Branch
Division of Operational Events Assessment

SUBJECT: TECHNICAL ASSISTANCE REQUEST: INSTRUMENTATION OF TECHNICAL
SPECIFICATION 3.4.1.4.2 AND THE VOLUNTARY ENTRY INTO ACTION
STATEMENTS CONTAINING NO ALLOWABLE OUTAGE TIMES OR THE WORD
"IMMEDIATELY"

References:

1. Memorandum for Gus C. Laines, Assistant Director for Region II Reactors, Division of Reactor Projects - 1/11, NRR from Luis A. Reyes, Director, Division of Reactor Projects, dated March 26, 1990, SUBJECT: Technical Assistance Request: Interpretation of Technical Specification 3.4.1.4.2 and the Voluntary Entry into Action Statements containing no Allowable Outage Times or the word Immediately.
2. Memorandum for Paul J. Kellogg, Region II from Richard L. Eich, Jr., Section Chief, Technical Specifications Branch, Division of Operational Events Assessment, NRR, dated March 23, 1990, SUBJECT: Vogtle Units 1 and 2 - Violation of TS 3.4.1.4.2.
3. Memorandum for G. Fiorelli, Chief, Reactor Operations and Nuclear Support Branch, RII from J. H. Sniezek, Assistant Director for Field Coordination, RO1/IE, dated: May 20, 1977, SUBJECT: Operability Demonstration of Redundant Systems (F3029CH1).

As your April 6, 1990, memorandum requested, the Technical Specifications Branch (OTSE) has reviewed the actions taken at the Vogtle plant to inject hydrogen peroxide into to reactor coolant system in October, 1988 against Vogtle Technical Specification 3.4.1.4.2. The opening of valves 1208-U4-176 and 1208-U4-177 at Vogtle in Mode 5 with the reactor coolant loops not filled in October, 1988 was a violation of Vogtle Technical Specification 3.4.1.4.2. Neither LCO 3.4.1.4.2, ACTION Statement c, nor the Bases allows for the opening of valves 1208-U4-176 and 1208-U4-177 in Mode 5 with reactor coolant loops not filled. The ACTION statement requires immediate closure of the valves if they are found open; it does not give permission to open the valves for any length of time.

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You also requested information on the definition of "immediate" as used in Technical Specifications. Reference 3 (copy enclosed) indicates that "immediate" as used in ACTION Statements in Technical Specifications is not defined as a specific length of time. The reason is that the situation or conditions at the time the action is taken govern the amount of time needed to perform the action. Generally speaking "immediate" means that an action is to be initiated and carried through to completion without delay.

ORIGINAL SIGNED BY JOSE A. CALVO

Jose A. Calvo, Chief
Technical Specifications Branch
Division of Operational Events Assessment

Enclosure:
As stated

Contact: R. J. Giardina
49-21188

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Document Name: MEMO TO D.B.MATTHEWS

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NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

May 2, 1990

NOTE FOR: Tom Murley
Frank Miraglia
Bill Russell

SUBJECT: VERMONT YANKEE

Attached is correspondence I discussed on May 1, 1990 regarding the propriety of Vermont Yankee's practice of using 7-day LCO to overhaul diesel generators. Your staff gave me a supportable legal answer. Given VY's claim that others do the same, should NRC discourage this practice as a matter of policy in light of the DG's key role in accident mitigation?


Tim

Enclosures:

1. Memo dtd 4/13/90 J. Johnson
fm R. Wessman
2. Memo dtd 4/6/90 R. Wessman
fm F. Rose
3. Memo dtd 4/6/90 R. Wessman
fm J. Johnson

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

MAY 18 1990

MEMORANDUM FOR: Thomas T. Martin
Regional Administrator, Region I

FROM: Thomas E. Murley, Director
Office of Nuclear Reactor Regulation

SUBJECT: USING THE OUTAGE TIME ALLOWED BY THE LIMITING CONDITION
FOR OPERATION FOR OVERHAULING AN EMERGENCY DIESEL GENERATOR
WITH THE PLANT OPERATING AT FULL POWER

I share the concern you expressed in your May 2, 1990 note (enclosure) to me regarding intentional entry into an LCO (limiting condition for operation) action statement in Mode 1 to overhaul a diesel generator. This concern relates to the broader issue of routine entry into LCOs to perform preventive maintenance, which appears to be a common practice among licensees. In the case of Vermont Yankee, certain design features and licensee commitments led the staff to conclude that an acceptable level of safety would be maintained while the licensee was overhauling the diesel generator at power. The question is whether it is acceptable for licensees whose plants have a less forgiving design to do the same. The staff does not want to discourage licensees from doing preventive maintenance at power, because of the potential for achieving better reliability; but it should be done in a manner that decreases overall plant risk.

The NRR staff is considering the issue of routine entry into LCO action statements for performing preventive maintenance. Diesel generator overhaul will, of course, be addressed.

In the interim, it may be appropriate for the regions to identify licensees that routinely overhaul diesel generators in Mode 1, and determine if they have evaluated the adequacy of the technical bases for doing so. Licensees that do this should adhere to the following conservative principles:

- (1) The practice should represent a net safety benefit and be warranted by operational necessity, not just by convenience.
- (2) The practice should not be abused by repeated entry into and exit from the LCO.
- (3) The removal from service of safety systems and important non-safety equipment should be minimized during the overhaul, including offsite power sources.
- (4) Any component testing or maintenance that increases the likelihood of a plant transient should be avoided; plant operation should be stable during the overhaul. (This could include consideration of degraded or out-of-service balance of plant equipment.)

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There may be other steps beyond these that licensees can take to minimize the risk associated with removing a diesel generator from service for an extended period of time.

NRR generally accepts the practice of licensees performing preventive maintenance at power, and this includes diesel generator overhauls, but only after careful planning and if the safety benefit is clear.

Original signed by
Thomas E. Murley

Thomas E. Murley, Director
Office of Nuclear Reactor Regulation

Enclosure:
As stated

cc: S. D. Ebner, RII
A. B. Davis, RIII
R. D. Martin, RIV
J. B. Martin, RV

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DOCUMENT NAME: MEMO MARTIN MURLEY LOBEL

*(See previous concurrence)

*OTSB:DOEA:NRR *C:OTSB:DOEA:NRR *Tech. Editor

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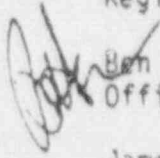



NUCLEAR REGULATORY COMMISSION
OFFICE OF INVESTIGATIONS FIELD OFFICE, REGION II
101 MARIETTA STREET NW, SUITE 2500
ATLANTA, GEORGIA 30323

June 19, 1990

MEMORANDUM FOR: Thomas E. Murley, Director
Office of Nuclear Reactor Regulation

Stewart D. Ebnetter, Regional Administrator
Region II

THRU:  Ben B. Hayes, Director
Office of Investigations

FROM: James Y. Vorse, Director 
Office of Investigations Field Office

SUBJECT: INTERPRETATION OF TECHNICAL SPECIFICATION 3.4.1.4.2
(1988 VERSION) AT THE VOGTLE ELECTRIC GENERATING PLANT,
GEORGIA POWER COMPANY

It is requested that you personally endorse the enclosed memorandum from Jose A. Calvo to David B. Matthews, dated April 13, 1990. Please indicate your endorsement in writing to this office at your earliest convenience.

The purpose of this requested endorsement is to solidify the overall NRR and Region II positions with respect to Mr. Calvo's interpretation of this technical specification.

Thank you for your assistance.

Enclosure:
As Stated

E/14