

JAN 13 1992



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION II  
101 MARIETTA STREET, N.W.  
ATLANTA, GEORGIA 30323

JAN 13 1992

MEMORANDUM FOR: William H. Rankin, Chief  
Emergency Preparedness Section

FROM: James L. Kreh, Radiation Specialist  
Emergency Preparedness Section

SUBJECT: REVIEW OF REVISION 33 TO EMERGENCY PLAN FOR  
SURRY POWER STATION  
DOCKET NOS. 50-280, 50-281

I. BACKGROUND

By transmittal letter dated March 25, 1991, Virginia Electric and Power Company submitted Revision 33 to the Surry Power Station Emergency Plan, dated February 21, 1991. In part because nearly 2 years had elapsed since the last revision to the Surry Plan, this one was unusually extensive, with the Emergency Action Levels (EALs) generally being the only section of the Plan not subject to comprehensive modifications. Wholesale transposition of a section or paragraph from one part of the Plan to another was discovered to have occurred in numerous instances, and often required time-consuming review and cross-check to determine whether licensee commitments had been deleted or altered. Revision 33 incorporated a multitude of minor editorial and administrative changes which did not alter the meaning or intent of the affected statements. Certain changes were found to be of a substantive nature and were reviewed for their impact on the effectiveness of the Plan and/or their potential safety significance. Only these substantive changes are discussed in Section II below; all other changes in the subject revision, including numerous EAL modifications, were determined to be nonsubstantive and without impact on the effectiveness of the Plan.

II. EVALUATION OF SUBSTANTIVE CHANGES

A. Section 5.0: Organizational Control of Emergencies

1. 5.2.1: A previous reference to Table 5.3, "Recommended Candidates for Emergency Response Positions", as well as Table 5.3 itself, was deleted in favor of a statement that interim, primary, and alternate candidates for emergency response organization (ERO) positions will be designated by station management and will be listed by normal duty titles in station

administrative procedures.

Comment: This revised approach is one that has long been used by almost all Region II licensees, since frequent modifications of the designees for ERO positions are typical. ERO titles and position descriptions continue to be listed in the Plan, and this change does not decrease its effectiveness.

2. 5.2.1.26: The deletion of Table 5.3 (see above), previously referenced here, resulted in the elimination of a requirement for including 2 Quality Control (QC) inspectors on each Damage Control Team.

Comment: Although in principle the inclusion of QC inspectors on each emergency repair team is an admirable idea, it seems unlikely that an adequate number of such inspectors would be available in an actual response. NRC guidance does not specify such QC coverage, and the reviewer knows of no other licensee committed to the concept of operation discussed here. This change does not materially decrease the effectiveness of the Plan.

3. Table 5.1: This table, entitled "Minimum Shift Manning Requirements", was revised to state that the position of Core - Technical Support Team Member (identified as "Core/Thermal Hydraulics" Engineer in Table B-1 of NUREG-0654) would be augmented within 60 minutes (rather than the previously committed 30 minutes), and that this position would be filled prior to augmentation by the Shift Technical Advisor (STA). The STA's previous ancillary responsibilities in the area of Plant Operations were eliminated.

Comment: The subject change was submitted to the NRC for approval prior to implementation. NRC approval was granted (for both Surry and North Anna) via letter to the licensee dated May 18, 1990 (copy attached for reference). Approval was contingent upon certain other factors remaining constant, which was verified by the reviewer to be the case. The licensee documented the referenced approval in a footnote to Table 5.1.

#### B. Section 6.0: Emergency Measures

1. 6.2.1 - 6.2.6: These subsections were deleted from Revision 33. They provided detailed listings of anticipated assessment actions for emergency conditions involving natural phenomena, personnel

hazards, and other onsite and offsite conditions, both radiological and nonradiological. The deleted material was moved to the appropriate implementing procedures.

Comment: The subject material, comprising about 4 pages of text, read very much like condensed versions of EIPs. Such information is not appropriate to an Emergency Plan, and its deletion from the Plan does not decrease the effectiveness of that Plan.

2. 6.3.1: This section references preplanned messages intended for transmittal to the public via the Emergency Broadcast System (EBS). Samples of such messages, which would be released to the media by State or local authorities, were previously included as Forms 6.1 - 6.5, but have been deleted from Revision 33.

Comment: Consistent with element II.E.5 of NUREG-0654, the content and authority for release of EBS messages are the responsibility of State and local governments, not the licensee. This change does not decrease the effectiveness of the Plan.

C. Section 8.0: Maintaining Emergency Preparedness

1. 8.3: This section, previously comprising a 5-page description of the onsite emergency preparedness training program, was reduced to a one-sentence reference to the Nuclear Power Station Emergency Preparedness Training (NPSEPT) Program Guide as the governing document in this area. In addition, Table 8.1, "Emergency Preparedness Training", previously referenced in this section, was deleted in its entirety (3 pages). This table specified and described the training modules required for each ERO position or function.

Comment: Section IV.F of Appendix E to 10 CFR Part 50 specifies that the Emergency Plan "shall include a description of specialized initial training and periodic retraining programs to be provided" to the various categories of ERO personnel. Surry's NPSEPT Program Guide (not provided for review) is probably similar to the sort of governing document that other licensees have developed for their EP training programs. However, other licensees have not, to this reviewer's knowledge, taken the step of merely referencing this governing document while deleting all description of onsite EP training from the Emergency Plan. The subject change to the Surry

Emergency Plan is not acceptable because the Plan no longer addresses the above-cited Appendix E requirement. This change decreases the effectiveness of the Plan.

2. **8.4:** In this section on training of offsite support personnel, an actual listing of agencies was deleted in favor of a statement that "the station offers site specific emergency response training on an annual basis to local offsite emergency support organizations which have agreed to provide assistance."

Comment: The deleted listing was information which continues to be available in Appendix 10.1, "Agreement Letters". This change does not decrease the effectiveness of the Plan.

3. **8.5:** A reference to Table 8.2 as well as the table itself were deleted.

Comment: The information in Table 8.2 regarding drill frequencies has been transposed to the individual subparagraphs in Section 8.5 addressing each of the 6 types of emergency drills that the licensee conducts (viz., communications, fire, medical emergency, environmental monitoring, post-accident sampling, and radiological monitoring). Since all previous commitments with respect to drill frequency have been retained, this change does not decrease the effectiveness of the Plan.

4. **8.6.1:** The commitments to conduct off-hours exercises and for some to be unannounced in accordance with NUREG-0654 criterion II.N.1.b were replaced by the following statement: "Emergency exercises will be scheduled to start at different times of the day with advance knowledge of the time held to a minimum."

Comment: The previous specific commitment regarding off-hour starting times was replaced by one which is vague and "unenforceable", since "different times of the day" do not even necessarily include off-hours. The current applicable guidance on this subject is contained in FEMA Guidance Memorandum PR-1, dated October 1, 1985. This document, development of which was coordinated with NRC, promulgated a slight revision to the original II.N.1.b criterion by specifying that "Each organization should make provisions to start an exercise between 6:00 p.m. and 4:00 a.m. once every six years... At least one exercise over a period of six years should be

unannounced." Although the stated guidance was specifically addressed to State and local governments, most Region II licensees have made adjustments to their commitments so as to either adopt or coordinate with the quoted criterion. In addition, it is not clear that the licensee's commitment to minimize advance knowledge of the starting time is equivalent to having some exercises unannounced. The subject changes are not acceptable because they decrease the effectiveness of the Plan.

5. 8.7: This 2-page description of the program for testing and maintenance of emergency equipment was reduced to a 1-sentence reference to Section 6.3 of VPAP-2601, "Maintaining Emergency Preparedness".

Comment: The subject change results in the Plan no longer addressing the following:

- 10 CFR 50.47(b)(8), which requires a description of how emergency facilities and equipment are maintained
- Section IV.E.9.d of Appendix E, which requires the licensee to commit to conducting periodic communications tests (including monthly for the ENS)

The subject change is not consistent with the cited regulatory requirements and decreases the effectiveness of the Plan.

D. Section 9.0: Recovery

1. 9.0: This section was considerably condensed, in particular eliminating the following: (1) specific numerical release limits for contaminated areas within the Exclusion Area, and (2) guidelines for emergency personnel exposure during recovery operations.

Comment: NRC guidance and requirements do not call for recovery criteria as specific and binding as those previously included for the release of contaminated surfaces. The deleted exposure guidelines were redundant because they were the same as those for the emergency phase of the response. The Plan provides appropriate general criteria and a management framework for the recovery process. This change does not decrease the effectiveness of the Plan.

2. 9.1: The previous revision contained this 2-sentence section entitled "Safety Analysis" which was deleted in its entirety.

Comment: This section appeared to be inappropriate for inclusion in an Emergency Plan since it addresses situations that would be covered by a Licensee Event Report. This change does not decrease the effectiveness of the Plan.

E. Section 10.0: Appendices

1. 10.2: This appendix formerly contained the Medical College of Virginia Radiation Emergency Plan in its entirety (48 pages). That plan was deleted in favor of a statement that it is now "Maintained under separate cover by Corporate Nuclear Emergency Preparedness. Available upon request".

Comment: The document in question is background material which has been appropriately factored into the Plan and implementing procedures. The deletion of the subject document does not decrease the effectiveness of the Plan.

2. 10.3: This appendix formerly contained the Department of Energy Radiological Assistance Plan in its entirety (45 pages). That document was deleted in favor of a statement that it is now "Maintained under separate cover by Corporate Nuclear Emergency Preparedness. Available upon request".

Comment: Same as for item II.E.1.

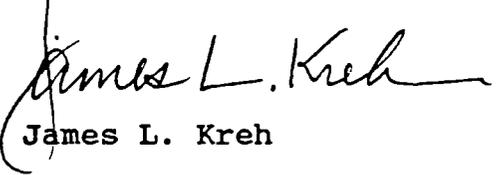
3. 10.4: This appendix formerly contained the documentation (50 pages) of a March 1981 study of evacuation times for the area around the Surry Power Station. This document is no longer included in the Plan but is instead noted to be "Maintained under separate cover by Corporate Nuclear Emergency Preparedness. Available upon request".

Comment: Same as for item II.E.1.

III. SUMMARY AND CONCLUSION

This review of Revision 33 to the Emergency Plan for the Surry Power Station identified three major changes which reduced the effectiveness of the Plan, as discussed above in

Section II.C, items 1, 4, and 5. All other changes in the referenced submittal were determined to be consistent with the provisions of 10 CFR 50.54(q), 10 CFR 50.47(b), Appendix E to 10 CFR Part 50, and NUREG-0654. The letter to the licensee will cite the deficiencies referenced above, as well as the commitment for corrective action made by E. Collins during a telephone conversation on January 7, 1992. You and I discussed the acceptability of that commitment on the same date, and you concurred verbally.



James L. Kreh

Attachment: NRC Letter dated  
May 18, 1990 (as stated in  
Section II.A.3, above)

Reading

MAY 18 1990

Docket Nos. 50-338, 50-339, 50-280, 50-281  
License Nos. NPF-4, NPF-7, DPR-32, DPR-37

Virginia Electric and Power Company  
ATTN: Mr. W. L. Stewart  
Senior Vice President - Nuclear  
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Gentlemen:

SUBJECT: SURRY AND NORTH ANNA PROPOSED EMERGENCY PLAN CHANGES

We have completed our review of the proposed revisions to the Surry and North Anna Emergency Plans submitted pursuant to 10 CFR 50.54(q) on January 17, 1990. The proposed changes involved Table 5.1, "Minimum Staffing Requirements for Emergencies," of each Plan, particularly the response times and the duties of the Core/Thermal Hydraulic Engineer and the Shift Technical Advisor.

The proposed revisions would allow the Core/Thermal Hydraulic Engineer position to be augmented in 60 minutes following an emergency declaration rather than in current 30 minutes. In the first 60 minutes, the Shift Technical Advisor would assume the responsibilities of the Core/Thermal Hydraulics position.

Based on our review of the specific changes to the North Anna and Surry Emergency Plans and the detailed functional analysis provided by your staff for the two response positions, the NRC has determined that the changes are consistent with the provisions of 10 CFR 50.47(b), Appendix E to 10 CFR Part 50, and Supplement 1 to NUREG-0737. It should be noted, however, that this conclusion is based on the following information: (1) the current functional description of the Shift Technical Advisor; (2) the qualification of the Shift Technical Advisor to perform core/thermal assessments; (3) overall control room staffing level and distribution of responsibilities; and (4) the basic requirement to declare the Technical Support Center fully operational within 60 minutes of an emergency has not been affected. Therefore, approval of the proposed changes is contingent on the above factors remaining constant.

Please be reminded that 10 CFR 50.54(q) requires that proposed changes which decrease the effectiveness of your Emergency Plan shall not be implemented without application to and approval by the Commission. However, changes may be made without Commission approval if such changes, do not decrease the effectiveness of the Plan, and the Plan, as changed, continues to meet the standards of 10 CFR 50.47(b) and the requirements of Appendix E to 10 CFR 50. If a change is made without approval, you should furnish copies in accordance with 10 CFR 50.54(q). Also, any changes to the Emergency Plan Implementing Procedures should be made in accordance with the requirements to 10 CFR 50, Appendix E, Section V.

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Should you have any questions regarding this letter, please contact Mr. Douglas M. Collins of our staff at (404) 331-5586.

Sincerely,

APPROVED BY  
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