



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

JUL 11 1986

Report Nos.: 50-338/86-16 and 50-339/86-16

Licensee: Virginia Electric and Power Company
Richmond, VA 23261

Docket Nos.: 50-338 and 50-339

License Nos.: NPF-4 and NPF-7

Facility Name: North Anna 1 and 2

Inspection Conducted: June 17-19, 1986

Inspectors:

J. Dicker for
W. M. Sartor

7/11/86

Date Signed

J. Dicker for
M. Poston-Brown

7/11/86

Date Signed

Accompanying Personnel: L. K. Cohen, NRC, EPB
M. Stein, Battelle (Sonalyst)
J. Will, Battelle (Sonalyst)

Approved by:

J. Dicker
T. R. Decker, Section Chief

Division of Radiation Safety and Safeguards

7/11/86

Date Signed

SUMMARY

Scope: This was a routine, announced inspection of the licensee's performance and capabilities during an exercise of the emergency plan and procedures.

Results: Of the areas inspected, no violations or deviations were identified.

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REPORT DETAILS

1. Persons Contacted

Licensee Employees

- *W. L. Stewart, Vice President, Nuclear Operations
- *F. M. Cox, Supervisor, Emergency Planning
- *R. J. Hardwick, Manager, Nuclear Programs and Licensing
- *W. W. Cameron, Director, Health Physics
- *S. A. Harrison, Station Emergency Planning Coordinating
- *E. R. Smith, Jr., Assistant Station Manager (S&L)
- *G. E. Kane, Assistant Station Manager (O&M)

Other licensee employees contacted included station and corporate personnel in the areas of health physics, operations, security, and emergency response organization.

NRC Resident Inspector

J. Caldwell

*Attended exit interview

2. Exit Interview

The inspection scope and findings were summarized on June 19, 1986, with those persons indicated in paragraph 1 above. The inspector described the areas inspected and discussed in detail the inspection findings. No dissenting comments were received from the licensee. The licensee did not identify as proprietary any of the materials provided to or reviewed by the inspectors during this inspection.

3. Licensee Action on Previous Enforcement Matters (92700)

This subject was not addressed in the inspection.

4. Unresolved Items*

One unresolved item pertaining to the Recovery Manager's assumption of functional responsibilities assigned to the Station Emergency Manager in conflict with the licensee's emergency plan was identified and is discussed in paragraph 6.

*Unresolved items are matters about which more information is required to determine whether they are acceptable or may involve violations or deviations.

5. Exercise Scenario (82301)

The scenario for the emergency exercise was reviewed to determine that provisions had been made to test the integrated capability and a major portion of the basic elements existing within the licensee's emergency plan and organization as required by 10 CFR 50.47(b)(14), 10 CFR 50, Appendix E, paragraph IV.F and specific criteria in NUREG-0654, Section II.N.

The scenario was reviewed in advance of the scheduled exercise date and was discussed with licensee representatives. The inconsistencies identified were corrected by the licensee prior to the exercise. Although no significant problems with the scenario were observed during the exercise, it was identified to the licensee at the exit interview that the objectives were not fully met for demonstrating: (1) the ability to evacuate non-essential personnel from the site, and (2) the simulated transition into the recovery mode, to include making requests for simulated technical support as well as transmitting information to the facilities needed for recovery support. However, the exercise players demonstrated knowledge of the applicable procedures and a capability to have met the objectives if the controllers had required full execution. Additionally, the licensee identified in the critique that the objective for demonstrating that surrounding volunteer rescue squads can send supporting units to the station and simulate successful life support missions in coordination with station personnel assigned to the tasks was not met. The licensee determined that the failure of the volunteer rescue squad to participate was due to a misunderstanding regarding the off-site response and the licensee committed to a medical drill in the near future to demonstrate this objective.

No violations or deviations were identified.

6. Assignment of Responsibility (82301)

This area was observed to determine that primary responsibilities for emergency response by the licensee have been specifically established and that adequate staff was available to respond to an emergency as required by 10 CFR 50.47(b)(1), 10 CFR 50, Appendix E, paragraph IV.A, and specific criteria in NUREG-0654, Section II.A and II.B.

The inspectors verified that the licensee made specific assignments to the emergency organization. The inspectors observed the activation, staffing, and operation of the emergency organization in the Control Room, the Technical Support Center (TSC), the Operations Support Center (OSC), and the Local Emergency Operations Facility (LEOF). At each of these centers, the assignment of emergency staff personnel appeared to be consistent with the licensee's emergency plan. However, the licensee's assignment of the functional responsibilities for communicating with the offsite agencies and for recommending protective actions appeared to be ambiguous once the Local Emergency Operations Facility was activated. This occurred because section 5.2.1.1 of the North Anna Emergency Plan states in part that the Station Emergency Manager may not delegate the responsibilities for notifying offsite agencies of the emergency status and for recommending protective

actions; whereas, the Recovery Manager assumed these responsibilities with the activation of the LEOF. This inconsistency was acknowledged by the licensee with the explanation that the Station Emergency Manager was not delegating because the Recovery Manager was a higher level of licensee management. This apparent ambiguous assignment of responsibilities for emergency response is an unresolved item pending clarification by the licensee which was committed to at the exit briefing (50-338/86-16-01, 50-339/86-16-01).

7. Emergency Response Support and Resources (82301)

This area was observed to determine that arrangements for requesting and effectively using assistance resources had been made and that other organizations capable of augmenting the planned response were identified as required by 10 CFR 50.47(b)(3), 10 CFR 50, Appendix E, paragraph IV.A, and specific criteria in NUREG-0654, Section II.C.

An inspector observed that licensee contact with offsite organizations was prompt. The offsite fire response was timely and effectively utilized. State resources that participated in the exercise at the LEOF were adequately accommodated.

No violations or deviations were identified.

8. Emergency Classification System (82301)

This area was observed to determine that a standard emergency classification and action level was in use by the nuclear facility licensee as required by 10 CFR 50.47(b)(4), 10 CFR 50, Appendix E, paragraph IV.C, and specific criteria in NUREG-0654, Section II.D.

An inspector observed that the emergency classification system was in effect as stated in the radiological emergency plan and the implementing procedures. The system appeared to be adequate for the classification of the simulated accident and the emergency procedures provided for initial and continuing mitigating actions during the simulated emergency.

No violations or deviations were identified.

9. Notification Methods and Procedures (82301)

This area was observed to determine that procedures had been established for notification by the licensee of State and local response organizations and emergency personnel, and that the content of initial and followup messages to response organizations had been established; and means to provide early notification to the populace within the plume exposure pathway have been established as required by 50.47(b)(5), 10 CFR 50, Appendix E, paragraph IV.D, and specific criteria in NUREG-0654, Section II.E.

An inspector observed that notification methods and procedures had been established to provide information concerning the simulated emergency

conditions to Federal, State, and local response organizations and to alert the licensee's augmented emergency response organization.

10. Emergency Communications (82301)

This area was observed to determine that provisions, existed for prompt communications among the principal response organization and emergency personnel as required by 10 CFR 50.47(b)(6), 10 CFR 50, Appendix E, paragraph IV.E, and specific criteria in NUREG-0654, Section II.F.

The necessary equipment and procedures were in place to provide adequate communications among the emergency response facilities. The inspectors observed during the exercise that some equipment problems existed between the TSC and LEOF; however, the licensee personnel made adequate use of back-up communications to pass required information. The inspectors also observed that the TSC did not actively seek suggestions and opinions from the Control Room personnel as an additional source of information in accident mitigation, and this was identified as a suggested improvement item to the licensee.

No violations or deviations were identified.

11. Public Education and Information (82301)

This area was observed to determine that information concerning the simulated emergency has been made available for dissemination to the public as required by 10 CFR 50.47(b)(7), 10 CFR 50, Appendix E, paragraph IV.D, and specific criteria in NUREG-0654, Section II.G.

Information was provided to the media and the public in advance of the exercise. The licensee established its Local Media Center and provided periodic news announcements. In the exercise critique, the licensee identified the need for better coordination between its Corporate Emergency Response Center (CERC) and its Local Media Center. An inspector in the LEOF observed that the copy of the news release declaring a Site Area Emergency was not annotated "THIS IS A DRILL". This was identified to the licensee at the exit briefing and is an inspector followup item for review during subsequent exercises (50-338/86-16-02, 50-339/86-16-02).

No violations or deviations were identified.

12. Emergency Facilities and Equipment (82301)

This area was observed to determine that adequate emergency facilities and equipment to support an emergency response were provided and maintained as required by 10 CFR 50.47(b)(8), 10 CFR 50, Appendix E, paragraph IV.E, and specific criteria in NUREG-0654, Section II.H.

The emergency response facilities were activated and promptly staffed during the exercise. The facilities appeared to be adequately equipped to support the emergency response.

No violations or deviations were identified.

13. Accident Assessment (83201)

This area was observed to determine that adequate methods, systems, and equipment for assessing and monitoring actual or potential offsite consequences of a radiological emergency condition were in use as required by 10 CFR 50.48(b)(9), 10 CFR 50, Appendix E, paragraph IV.B, and specific criteria in NUREG-0654, Section II.I.

The accident assessment program included both an engineering assessment of plant status and an assessment of radiological hazards to both onsite and offsite personnel resulting from the accident. The licensee's offsite monitoring teams performance was observed by the licensee evaluators only and no problems were identified.

No violations or deviations were identified.

14. Protective Responses (82301)

This area was observed to determine that guidelines for protective actions during the emergency, consistent with Federal guidance, were developed and in place, and protective actions for emergency workers, including evacuation of nonessential personnel, were implemented promptly as required by 10 CFR 50.47(b)(10), and specific criteria in NUREG-0654, Section II.J.

An inspector verified that the licensee had emergency procedures for formulating protective action recommendations for offsite populations within the ten mile EPZ. The licensee's protective action recommendations were consistent with the EPA and other criteria. The inspector observed that the Recovery Manager was initially requested to provide protective action recommendations by the State prior to the Recovery Manager being fully apprised of the radiological status. Although the recommendations made were correct, it was not apparent that this was an informed decision. It was not observed that the Radiological Assessment Coordinator was aggressively gathering and evaluating plant parameters and field monitoring data to formulate protective action recommendations for the Recovery Manager. Further questions by the inspector revealed that the impetus behind the State's request for an early protective action recommendation was the desire to activate the sirens at the same time that the normal monthly siren test was conducted. In spite of this exercise artificiality, the need for the Radiological Assessment Coordinator and his staff to be actively gathering and evaluating information to ensure the Recovery Manager is adequately informed prior to making protective action recommendations warrants additional attention and will be an inspector followup item during subsequent inspections (50-338/86-16-03, 50-339/86-16-03).

No violations or deviations were identified.

15. Medical and Public Health Support (82301)

This area was observed to determine that arrangements were made for medical services for contaminated injured individuals as required by 10 CFR 50.47(b)(12), 10 CFR 50, Appendix E, paragraph IV.E, and specific criteria in NUREG-0654, Section II.L.

An inspector observed the emergency medical rescue activities at the accident scene. Excessive simulation on the parts of both the exercise controller and players made it difficult to evaluate either the adequacy of first aid treatment or the decontamination of the patient and contamination control. The failure to meet the medical first aid objective is discussed above in paragraph 5.

No violations or deviations were identified.

16. Recovery and Reentry Planning (82301)

This area was observed to determine that general plans were made for recovery and reentry as required by 10 CFR 50.47(b)(13), 10 CFR 50, Appendix E, paragraph IV.H, and specific criteria in NUREG-0654, Section II.M.

The licensee developed general plans and procedures for reentry and recovery which addressed both existing and potential conditions.

No violations or deviations were identified.

17. Exercise Critique (83201)

The licensee's critique of the emergency exercise was observed to determine that deficiencies identified as a result of the exercise and weaknesses noted in the licensee's emergency response organizations were formally presented to licensee management for corrective actions as required by 10 CFR 50.47(b)(14), 10 CFR 50, Appendix E, paragraph IV.E, and specific criteria in NUREG-0654, Section II.N.

The licensee conducted a post-exercise critique on June 18, 1986. The results of the critique were presented to licensee management on June 19, 1986, and included some 24 findings listed as requiring additional investigation or corrective actions. The licensee's actions taken to resolve these findings will be reviewed during subsequent inspections (50-338/86-16-04, 50-339/86-16-04). Following the management critique, the NRC inspector provided preliminary findings observed during the exercise.

No violations or deviations were identified.

18. Inspection Followup (92701)

- a. (Closed) Inspector Followup Item (IFI) 50-338/84-42-01: Correct Scenario Weaknesses. The licensee was responsive and thorough in making recommended improvements to the scenario package.
- b. (Closed) IFI 50-338/84-42-02: Emergency Work Tagout Procedures. The licensee did not permit emergency workers to tagout. Procedures are in place for equipment tagout.
- c. (Closed) IFI 50-338/84-42-03: Improved Dose Assessment Procedure. The field measurements data and dose projections data were more in agreement than previously.
- d. (Closed) IFI 50-338/84-06-04: Installation of ERF Hardware and Software. The ERF hardware and software are in place and training has commenced.
- e. (Closed) IFI 50-338/85-14-01, 50-339/85-14-01: A Superficial Treatment of the Exercise Comments by the Licensee Staff. The licensee's critique was critical and thorough.

19. Federal Evaluation Team Report

The report by the Federal Evaluation Team (Regional Assistance Committee and Federal Emergency Management Agency, Region II staff) concerning the activities of offsite agencies during the exercise will be forwarded by separate correspondence.