



VIRGINIA POWER

February 7, 1985

Mr. Harold R. Denton, Director
Office of Nuclear Reactor Regulation
Attn: Mr. D. G. Eisenhut, Director
Division of Licensing
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

Serial No. 751
NO/TAH:pa
Docket Nos. 50-280
50-281
50-338
50-339
License Nos. DPR-32
DPR-37
NPF-4
NPF-7

Gentlemen:

VIRGINIA POWER
SURRY POWER STATION
NORTH ANNA POWER STATION
PROCEDURE GENERATION PACKAGE SAFETY EVALUATION

The December 14, 1984 Safety Evaluation of VEPCO's Emergency Procedure Generation Package and our letter of June 29, 1984, Serial No. 095A, listed several open items to be addressed within 45 days. We have further been granted extensions to February 8, 1985.

In response to these items, we are providing the attached additional information.

Very truly yours,

W. L. Stewart

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VIRGINIA POWER

Attachment 1: Surry Power Station Information
Attachment 2: North Anna Power Station Information

cc: Mr. James P. O'Reilly
Regional Administrator
Region II
USNRC
Suite 2900
101 Marietta St.
Atlanta, Georgia 30303

Mr. Steven A. Varga, Chief
Operating Reactors Branch No. 1
Division of Licensing

Mr. James R. Miller, Chief
Operating Reactors Branch No. 3
Division of Licensing

Mr. J. Don Neighbors
Surry Project Manager
Mailstop 438
7920 Norfolk Ave.
USNRC
Bethesda, Maryland 20014

Mr. Leon B. Engle
North Anna Project Manager
Mailstop 428
7920 Norfolk Ave.
USNRC
Bethesda, Maryland 20014

Mr. D. J. Burke
NRC Resident Inspector
Surry Power Station

Mr. M. W. Branch
NRC Resident Inspector
North Anna Power Station

SURRY POWER STATION

Procedure Generation Package Additional Clarification

A. Procedure Development Program

1. The procedures will be written by personnel with station operations background with review by station engineering staff, training personnel, station operations personnel and human factors trained personnel.
2. As stated in our June 29, 1984 letter, there will be no strategic deviations from the WOG ERGs. The Rev. 1 procedures have not been completed and the tactical deviations stemming from the "four safety significant differences from the reference plant" have not been identified. This item will be addressed by specific engineering studies during the development of the Rev. 1 based procedures. The results will be available prior to the implementation of the Rev. 1 procedures.

B. Writer's Guide

- 1.a. Line spacing will be addressed in the revised Writer's Guide for the Rev. 1 upgrade of the Emergency Procedures.
- 1.b. The intent of the statement "across the entire width of the page, is that the Caution Statement, including the demarcation devices, extends from margin to margin.
That is, it is not presented in a dual column format.
This will be clarified in the revised Writer's Guide.
- 1.c. The identification of steps, notes etc. that extends over more than one page will be covered in the revised Writer's Guide.
- 2.a. The WOG ERGs and thus the plant specific EPs are written so that each step or related group of steps include verification criteria for the action or actions required.
Refer to Table 3 of the Writer's Guide.
- 2.b. Conditions of a continuing concern or actions that must be repeated periodically are identified as a 'monitoring' function or a 'maintaining' action.
Refer to Table 1 of the Writer's Guide.
- 2.c. Generally, steps are performed sequentially but the completion of a step prior to the entry of the subsequent steps may not be required. If the completion is required or concurrent actions are required, this will be identified in the subsequent step or by Note or Caution statement.

3. The Emergency Procedures are in keeping with the philosophy of the Westinghouse Owners Group by not requiring sign-off or check-off spaces. The Writer's Guide does NOT explicitly rule out such provisions and in fact states that "these are not precluded." At Surry, training encourages operators to develop their own individual methods such as x-ing out step numbers or noting the time of completion for each step.
4. The procedures to be used by the operators are, by administrative procedure, maintained in the control room and are readily accessible by the control room staff.
- 5.a. The Emergency Procedures are written independent of manning requirements and are designed to be performed by the minimum Technical Specification Control Room crew. The revised Writer's Guide will reflect guidance to the writer to insure that this is accomplished.
- 5.b. Administrative Procedures define the roles of the operating staff and provide the Control Room Operator with the proper authority to implement the procedures unless specifically countermanded by a Senior Reactor Operator.
Where required, the procedure directs the operator to obtain the required advice and consent of other qualified personnel.
- 5.c. The Emergency Procedures are designed for implementation in the Control Room by as few as one licensed operator. The procedure validation will identify areas where interference between operators is of concern.
The Writer's Guide will be revised to insure that feedback from the validation process will be incorporated into the writing process.
- 5.d. One person directs the implementation of the procedures. This insures that all steps are performed in the correct sequence and that duplication of effort is minimized.
6. The identification of steps that may continue over more than one page, will be covered in the revised Writer's Guide and reviewed relative to your comments.

C. Validation/Verification

- 1.a. The Emergency Procedures will be validated.
Where practicable, the use of the plant specific real time simulators will be given top priority with other methods such as simulator walk throughs to be used as a secondary method.
- 1.b. Personnel trained in Human Factors principles will participate in the validation process. The validation operations will be performed by licensed operators. The scenarios will be selected by Senior Training personnel and will be reviewed by the plant staff. The selection of the scenarios will be guided by the WOG validation program (W-CAP 10599) and the capabilities of the simulator.

2.a. The Emergency Procedures will be exercised in accordance with their intended purposes including, where applicable, multiple and simultaneous failures.
The selected scenarios will reflect the design application of the WOG ERGs.

2.b. Please see the response to item C.1.b.

2.c. The principal mitigation procedures will be exercised by the real time simulation method. Although subsequent, duplicate or supplemental procedures may be validated by a walk through exercise, an attempt to validate them by real time simulation will be made.

3. Generally, the units within a site are identical and the only differences are those of identification markings. Notes and Cautions will be used to identify any significant differences between units.
This will be reflected in the revised Writer's Guide.
The procedures will be developed individually for the different sites.

D. Training Program

D.1 The Emergency Procedures will be exercised by licensed operators by real-time simulation, walk-throughs or table-top method.

D.2 The description of methods to be used for procedure training in areas not covered by site-specific simulator exercises will be provided prior to the implementation of the Rev. 1 based procedures.

D.3 The Emergency Procedures will be exercised in accordance with their intended purposes including, where appropriate, multiple and simultaneous failures.
The selected scenarios will reflect the design application of the WOG ERGs.

D.4 The NRC approved Licensed Operator Requalification Program which conforms to the requirements of ANSI 3.1 Draft 1979 and 10 CFR 55 will meet or exceed the objectives of Item D.4.

NORTH ANNA POWER STATION

Procedure Generation Package Additional Clarification

A. Procedure Development Program

1. The procedures will be written by personnel with station operations background with review by station engineering staff, training personnel, station operations personnel and human factors trained personnel.
2. As stated in our June 29, 1984 letter, there will be no strategic deviations from the WOG ERGs. The Rev. 1 procedures have not been completed and the tactical deviations stemming from the "four safety significant differences from the reference plant" have not been identified. This item will be addressed by specific engineering studies during the development of the Rev. 1 based procedures. The results will be available prior to the implementation of the Rev. 1 procedures.

B. Writer's Guide

- 1.a. Line spacing will be addressed in the revised Writer's Guide for the Rev. 1 upgrade of the Emergency Procedures.
- 1.b. The intent of the statement "across the entire width of the page, is that the Caution Statement, including the demarcation devices, extends from margin to margin. That is, it is not presented in a dual column format. This will be clarified in the revised Writer's Guide.
- 1.c. The identification of steps, notes etc. that extends over more than one page will be covered in the revised Writer's Guide.
- 2.a. The WOG ERGs and thus the plant specific EPs are written so that each step or related group of steps include verification criteria for the action or actions required.
Refer to Table 3 of the Writer's Guide.
- 2.b. Conditions of a continuing concern or actions that must be repeated periodically are identified as a 'monitoring' function or a 'maintaining' action.
Refer to Table 1 of the Writer's Guide.
- 2.c. Generally, steps are performed sequentially but the completion of a step prior to the entry of the subsequent steps may not be required. If the completion is required or concurrent actions are required, this will be identified in the subsequent step or by Note or Caution statement.

3. The Emergency Procedures are in keeping with the philosophy of the Westinghouse Owners Group by not requiring sign-off or check-off spaces. The Writer's Guide does NOT explicitly rule out such provisions and in fact states that "these are not precluded." North Anna uses step check-off spaces at the specific request of the operators.
4. The procedures to be used by the operators are, by administrative procedure, maintained in the control room and are readily accessible by the control room staff.
- 5.a. The Emergency Procedures are written independent of manning requirements and are designed to be performed by the minimum Technical Specification Control Room crew. The revised Writer's Guide will reflect guidance to the writer to insure that this is accomplished.
- 5.b. Administrative Procedures define the roles of the operating staff and provide the Control Room Operator with the proper authority to implement the procedures unless specifically redirected by a shift supervisor who is a Senior Reactor Operator. Where required, the procedure directs the operator to obtain the required advice and consent of other qualified personnel.
- 5.c. The Emergency Procedures are designed for implementation in the Control Room by as few as one licensed operator. The procedure validation will identify areas where interference between operators is of concern. The Writer's Guide will be revised to insure that feedback from the validation process will be incorporated into the writing process.
- 5.d. One person directs the implementation of the procedures. This insures that all steps are performed in the correct sequence and that duplication of effort is minimized.
6. The identification of steps that may continue over more than one page, will be covered in the revised Writer's Guide and reviewed relative to the Safety Evaluation comments.

C. Validation/Verification

- 1.a. The Emergency Procedures will be validated. Where practicable, the use of the plant specific real time simulations will be given top priority with other methods such as simulator walk throughs to be used as a secondary method.
- 1.b. Personnel trained in Human Factors principles will participate in the validation process. The validation operations will be performed by experienced and licensed operators. The scenarios will be selected by Senior Training personnel and will be reviewed by the plant engineering staff. The selection of the scenarios will be guided by the WOG validation program (W-CAP 10599) and the capabilities of the simulator.

2.a. The Emergency Procedures will be exercised in accordance with their intended purposes including, where applicable, multiple and simultaneous failures.
The selected scenarios will reflect the design application of the WOG ERGs.

2.b. Please see the response to item C.1.b.

2.c. The principal mitigation procedures will be exercised by the real time simulation method. Although subsequent, duplicate or supplemental procedures may be validated by a walk through exercise, an attempt to validate them by real time simulation will be made.

3. Generally, the units within a site are identical and the only differences are those of identification markings. Notes and Cautions will be used to identify any significant differences between units.

This will be reflected in the revised Writer's Guide.

The procedures will be developed individually for the different sites.

D. Training Program

D.1 The Emergency Procedures will be exercised by licensed operators by real-time simulation, walk-throughs or table-top method, prior to the end of 1985.

D.2 The description of methods to be used for procedure training in areas not covered by site-specific simulator exercises will be provided prior to the implementation of the Rev. 1 based procedures.

D.3 The Emergency Procedures will be exercised in accordance with their intended purposes including, where appropriate, multiple and simultaneous failures.

The selected scenarios will reflect the design application of the WOG ERGs.

D.4 The NRC approved Licensed Operator Requalification Program which conforms to the requirements of ANSI 3.1 Draft 1979 and 10 CFR 55 will meet or exceed the objectives of Item D.4.