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DUKE POWER

March 14, 1994

U. S. Nuclear Regulatory Commission ATTN: Document Control Desk Washington, D. C. 2055

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Subject: Catawba Nuclear Station Docket Nos. 50-413 and 50-414 Changes to the Emergency Procedure Development Process

References: Letter from M. S. Tuckman to NRC dated July 16, 1992 and Letter from M. S. Tuckman to NRC dated October 7, 1992

In the first letter referenced above, Catawba Nuclear Station responded to deficiencies which were identified in Catawba Requalification Examination Report 50-413/92-300. The information contained in that letter was also discussed in a management meeting held with the NRC on July 13, 1992, at Region II in Atlanta. In that letter, Catawba committed to upgrade/revise the existing Emergency Operating Procedures (EOPs) as necessary to correct the deficiencies noted in the report and to ensure their usability. It was additionally committed to in that letter, to completely upgrade all the Catawba EOPs to Revision IB of the Westinghouse Owners Group (WOG) Emergency Response Guidelines (ERGs). At that time, we felt it was necessary to change our EOP development program as described in our response to NUREG-0737, Supplement 1. Those changes were outlined in the second letter referenced above.

During the current process of upgrading the Catawba's EOPs to conform to the requirements of the WOG generic guidelines, several commitments made previously require deletion and/or modification to minimize the deviations from the ERGs.

Generically, the following items provide the justification used to evaluate and remove the previously stated commitments. Where a specific explanation is needed, due to the unique nature of the commitment, it is provided with the individual item.

- In response to Requalification Exam Report 50-413/92-300, Duke Power committed to upgrade our emergency procedures to conform to the requirements of the WOG ERGs.
- 2. The deviations that involved combining generic guidelines into one plant specific procedure, have been eliminated to conform to the structure of the generic guidelines. When guidelines were combined, the complexity of the resulting procedure made it confusing and difficult to understand.

3. The deviations that introduced actions that seemed to provide additional conservatism beyond that required by the generic guidelines, were eliminated. These additional actions consistently caused operator confusion and were generally difficult to perform. U. S. Nuclear Regulatory Commission Page 2 March 14, 1994

- 4. The deviations that accomplish the same mitigation strategy as that of the generic guidelines with the only difference being that the plant specific procedure containing the specific steps is different, have been deleted. Re-arranging actions into different plant specific procedures is insufficient technical justification to warrant a deviation from the ERGs and results in subsequent "cascading" deviations to ensure that the technical integrity of the generic guidelines is maintained.
- The active simulator portion of requalification exams have shown that the increased complexity of the procedures has resulted in inconsistent operator performance.
- 6. The deviations that resulted in adding additional conservatism beyond that required by the generic guidelines to specific setpoints have been deleted for the following reasons:
 - The use of the modified setpoints has routinely placed the operators, during simulator scenarios, in Critical Safety Function procedures while responding to design basis events.
 - Operator confidence in the procedure set is diminished since the ability of the procedures to distinguish between clear challenges to the Critical Safety Functions and design basis events is not apparent.
- 7. The deviations that deleted or modified the generic guidelines based on the initial judgement that the guidance was of perceived limited benefit have been deleted. There is not sufficient technical justification to warrant a deviation from the generic guidelines.

The following is a list of previously identified deviations from the ERGs that were approved by the NRC. The revised EOPs scheduled for implementation on March 31, 2994, will no longer deviate from the ERGs on these issues. Therefore, these deviations are no longer applicable. The numbers in brackets, [], following the deviation description corresponds to one or more of the generic justifications stated earlier. Additional explanation is provided as needed:

- 1. Catawba will now have a plant specific procedure equivalent to generic guideline ES-0.0 (Rediagnosis) [1,7].
- Catawba will now separate the generic guidelines ES-0.2 (Natural Circulation Cooldown) and ES-0.4 (Natural Circulation Cooldown with a Steam Void in Vessel) into two separate plant specific procedures [1,2,5].
- Catawba will no longer have a plant specific procedure that addresses only S/I termination resulting from a spurious S/I [1].
- Catawba will now address steam line breaks in the plant specific procedure equivalent to the generic guideline E-2 (Faulted S/G Isolation) regardless of location with respect to containment [1,2,4,5].
- Catawba will no longer have a plant specific procedure to terminate S/I following an excessive cooldown [1,3,5].
- Catawba will have a plant specific procedure equivalent to ES-3. (POST-SGTR Cooldown Using Blowdown) [1].
- Catawba will have a plant specific procedure equivalent to the generic guideline ECA-2.1 (Uncontrolled Depressurization of All S/Gs) [1,2,4,5]

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- 8. Catawba will no longer have a procedure and associated status tree logic to address a Response To High Reactor Coolant Pressure. This type of an event will be addressed by the plant specific procedures equivalent to FR-P.1 (Response to Imminent Pressurized Thermal Shock) and FR-P.2 (Response to Anticipated Pressurized Thermal Shock) [1,3,5].
- 9. Catawba will no longer enter the High Containment Pressure procedure due to an ORANGE condition if containment hydrogen concentration exceeds 0.5%. This has been modified to a YELLOW condition and a separate procedure is provided to address this concern [2,5].
 - The plant specific procedure equivalent to FR-Z.1 (Response to High Containment Pressure) initiate containment hydrogen monitoring and mitigation if needed as well as most all other ERG procedures where the potential for hydrogen formation ...1 release to containment exists.
- Catawba will have a plant specific procedure and associated status tree equivalent to generic guideline FR-7.2 (Response To Containment Flooding) [1,7].
- 11. Catawba will have a plant specific procedure and associated status tree logic equivalent to the generic guideline FR-Z.3 (Response to Containment High Radiation) [1,2].
- 12. Catawba will not longer have a procedure and associated status tree logic that addresses incomplete containment isolation [1].
 - The guidance to verify adequate containment isolation is contained in FR-Z.1 (Response To High Containment Pressure). Strict adherence to the rules of Critical Safety Function procedure usage will ensure that containment isolation is addressed when required by FR-Z.1 (Response To High Containment Pressure) and other procedures that require a verification of containment isolation.
- 13. The diagnostic steps of E-0 (Reactor Trip or Safety Injection) will be sequenced as described in the generic guideline E-0 [1,4].
- 14. The subcooling value used to verify the ability to terminate S/I in E-0 (Reactor Trip or Safety Injection) will be in accordance with the generic guideline E-0 [1,3].
- 15. The plant specific procedure equivalent to generic guideline ES-0.1 (Reactor Trip Response) will include a step to verify that offsite power is available [1].
- 16. The plant specific procedure equivalent to generic guideline E-1 (Loss of Reactor or Secondary Coolant) will not be modified to identify a large LOCA early and skip steps to await a transfer to cold leg recirculation [1,5,7].
 - The criteria requiring the need to transfer to cold leg recirculation also appears on the foldout page for the procedure and the performance of the steps in the interim does not delay initiating the transfer to cold leg recirculation when required.
- 17. Additional NC pump trip criteria will not be added to the foldout page for ES-1.1 (S/I Termination). The ERG bases for NC pump trip criteria will be followed [1,3,5].
- 18. The check of NC pump status will be sequenced in the plant specific procedure equivalent to E-3 (SGTR) as described in the generic

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guideline. This step has historically, based on simulator scenarios, resulted in delaying subsequent operator actions while trying to determine which NC pumps to start/stop [1,3,5].

- 19. The setpoints used to identify entry into FR-C.1 (Response to Inadequate Core Cooling) will be as described by the generic guideline [1,5,6].
- The setpoints used to identify entry into FR-P.1 and FR-P.2 will be as described in the generic guideline [1,5,6].
- 21. The action taken in FR-C.1 to depreseurize the NC System will not be performed early but as directed by the generic guideline [1,3,5].
 - By performing the depressurization as called for by the generic guideline, more time is available fc local actions to be successful, which may negate the need to perform this drastic evolution at all.
- 22. NC pumps will be operated as required by generic guideline FR-H.1 (Response to Loss of Secondary Heat Sink) [1,5].
- 23. Once "bleed and feed" is established, it will remain in that configuration until adequate heat sink is restored as required by the generic guideline FR-H.1 (Response to Loss of Secondary Heat Sink) [1,3,5].
- 24. Catawba will now follow the guidance found in generic guideline FR-I.3 (Response to Voids in Reactor Vessel) to determine the maximum time allowed to vent the reactor vessel head [1,3,5].

Deviation documents are being developed to address differences between the generic guidelines and the plant specific emergency procedures. There will be a deviation document for each plant specific emergency procedure written. These documents will be controlled and revised as procedures are revised.

The revised EOFS are currently scheduled for implementation at Catawba on March 31, 1994. These EOPs have been revised to the process described above. Please consider this letter formal notification of changes to the EOP revision process. Any questions may be directed to Z. L. Taylor, Regulatory Compliance Manager, (803) 831-3812.

Very truly yours,

D. L. Rehn

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xc: S. D. Ebneter Regional Administrator, Region II R. E. Martin, Region II L. L. Lawyer, Region II R. J. Freudenberger, SRI