

Docket Nos: 50-413
and 50-414

OCT 19 1984

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Mr. H. B. Tucker, Vice President
Nuclear Production Department
Duke Power Company
422 South Church Street
Charlotte, North Carolina 28242

Dear Mr. Tucker:

Subject: Catawba Nuclear Station - Offsite Dose Calculation Manual (ODCM)
Acceptability and Transmittal of Agenda Items for a Meeting on
Inservice Testing Program for Catawba Unit 1

By letter dated August 16, 1984, you submitted Revision 4 to the "Offsite Dose Calculation Manual" for the Catawba Nuclear Station Units 1 and 2. This is to inform you that the staff has reviewed the Catawba ODCM and has determined that it uses documented and approved methods that are consistent with the methodology and guidelines in NUREG-0133. Therefore, the staff has concluded that the Catawba Nuclear Station, Units 1 and 2 ODCM, Revision 4, is an acceptable reference which is in compliance with Catawba Technical Specification 6.14.1.

In addition, the Enclosure to this letter contains the NRC staff agenda items for a meeting with your staff on the inservice testing program for Catawba Unit 1. The meeting will be held in Bethesda in the early part of November 1984.

If you require any clarification of these matters, please contact the project manager, Kahtan Jabbour, at (301) 492-7800.

Sincerely,

Elinor G. Adensam, Chief
Licensing Branch No. 4
Division of Licensing

Enclosure:
Agenda Items

DESIGNATED ORIGINAL

Certified By

Angela Hatton

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PDR ADOCK 05000413
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AGENDA ITEMS

CATAWBA UNIT 1

INSERVICE TESTING PROGRAM REVIEW

A. General Comments and Questions

1. Are valves that perform both containment isolation and pressure boundary isolation functions leak-rate tested to both Appendix J and Section XI criteria?
2. Are all containment isolation valves that are leak-rate tested to 10CFR50 Appendix J included in the IST Program and categorized "A" or "AC"?
3. The current NRC position is the Appendix J leak-rate testing requirements for containment isolation valves is a suitable alternative to the Section XI leak-rate testing requirements except for the requirements of subparagraphs IWV-3426 and IWV-3427 which must be met or specific relief requested.
4. The NRC staff has determined that fast-acting valves are defined as those valves with stroke times of two seconds or less and that valves with stroke time greater than two seconds should be tested in compliance with IWV-3413.

B. Steam Generator Blowdown System

1. Review the safety function of the following valves to determine if they should be included in the IST program and categorized as A/C.

<u>Valve</u>	<u>Location</u>
1B852	(K-5 P&ID CN 1580-1.0)
1B853	(I-5 P&ID CN 1580-1.0)
1B854	(F-5 P&ID CN 1580-1.0)
1B855	(D-5 P&ID CN 1580-1.0)

C. Auxiliary Feedwater System

1. Review the safety function of valves 1CA08, 1CA10 and 1CA12 (locations D-9, D-5, C-3 on P&ID CN 1592-1.0) to determine if they should be included in the IST program and categorized as A/C.

2. Provide a brief description of the criteria utilized to establish the maximum stroke time of 60 seconds for the following four inch air diaphragm operated valves:

1CA36	1CA52
1CA40	1CA56
1CA44	1CA60
1CA48	1CA64

3. Is valve 1CA38A normally open as indicated by the IST tables or normally closed as indicated on P&ID CN 1592-1.1?

D. Feedwater System

1. What is the safety function of the following valves?

1CF28	1CF30
1CF37	1CF39
1CF46	1CF48
1CF55	1CF57

E. Refueling Water System

1. How are check valves 1FW28 and 1FW56 full stroke exercised quarterly?

F. Component Cooling System

1. Review the safety function of the following valves to determine if they should be categorized "A".

1KC305B	1KC333A
1KC315B	1KC338B
1KC320A	1KC424B
1KC332B	1KC425A

2. Review the safety function of check valves 1KC322 and 1KC340 (location B-8 and E-12 P&ID CN 1573-1.3) to determine if they should be included in the IST program and categorized as "A/C".
3. Provide a more specific technical justification for not full stroke exercising valves 1KC333A and 1KC320A quarterly during power operations.

4. Review the safety functions of check valves 1KC280 and 1KC279 (location E-2 and K-5 P&ID CN 1573-1.3) to determine if they should be categorized "AC".

G. Reactor Coolant System

1. The current NRC position concerning pressurizer power operated reliefs (Branch Technical Position RSB 5-2) is that they should be full stroke exercised during cold shutdown vice quarterly during power operations due to the high probability of their sticking open. It also requires the PORV block valves be included in the IST program and be tested quarterly in accordance with Section XI. Review the safety function of valves 1NC31B, 1NC33A and 1NC35B for inclusion in the IST program and categorized as "B".
2. How are valves 1NC53B and 1NC54A fail safe tested quarterly?
3. Review the safety function of valve 1NC56B to determine if it should be categorized "A".
4. Review the safety function of the following valves to determine if they should be included in the IST program and categorized "B".

1NC250A	(location L-7 P&ID CN 1553-1.1)
1NC251B	(location L-7 P&ID CN 1553-1.1)
1NC252B	(location K-7 P&ID CN 1553-1.1)
1NC253A	(location K-7 P&ID CN 1553-1.1)

H. Residual Heat Removal System

1. Review the safety function of valves 1ND1B and 1ND2A to determine if they should be categorized "A".
2. Does full stroke exercising valves 1ND10 and 1ND44 quarterly during power operations reduce the number of low head safety injection flow paths to less than minimum required by FSAR analysis?
3. Review the safety function of valves 1ND36B and 1ND37A to determine if they should be categorized "A".

I. Safety Injection System

1. Review the safety function of valves 1NI9A, 1NI10B and 1NI12 to determine if they should be categorized "A" or "AC".
2. Could exercising valves 1NI9A or 1NI10B quarterly during power operations result in flow of non preheated water through the injection lines and thermal shocking of the injection nozzles?
3. How would quarterly exercising of valve 1NI12 result in a decrease in reactor power?
4. Review the safety function of the following valves to determine if they should be categorized "AC".

1NI15	1NI351
1NI17	1NI352
1NI19	1NI353
1NI21	1NI354

5. How would quarterly exercising of the following valves result in a decrease in reactor power?

1NI15	1NI351
1NI17	1NI352
1NI19	1NI353
1NI21	1NI354

6. Review the safety function of valves 1NI11 and 1NI13 (location H-2 and G-3 P&ID CN 1562-1.0) to determine if they should be included in the IST program and categorized as "A" or "A-passive".

7. How are the following check valves full stroke exercised during cold shutdown?

1NI60	1NI82
1NI71	1NI94

8. Provide a technical justification for not partial stroke exercising the following valves during the approach to or startup from cold shutdown conditions.

1NI59	1NI81
1NI70	1NI93

9. Review the safety function of the following valves to determine if they should be categorized "A".

1NI120B	1NI152B
1NI121A	1NI153A
1NI122B	1NI154B
	1NI183B

10. Provide a brief description of how the valves listed in relief request H-11 are full stroke exercised during cold shutdown.

11. Provide a technical justification for not full stroke exercising and stroke timing the following category "A" valves:

1NI391	1NI395
1NI392	1NI396
1NI393	1NI397
1NI394	1NI398

12. Review the safety function of the following valves to determine if they should be categorized "A".

1NI162A	1NI184B
1NI173A	1NI185B
1NI178B	

13. Review the safety function of the following valves to determine if they should be included in the IST program and categorized "A".

1NI163	(location I-8 P&ID CN 1562-1.3)
1NI174	(location F-11 P&ID CN 1562-1.3)
1NI179	(location F-4 P&ID CN 1562-1.3)

14. Review the safety functions of the following valves to determine if they should be categorized "A".

1NI243A	1NI255B
1NI245A	1NI258A

J. Nuclear Sampling System

1. Review the safety function of the following valves to determine if they should be categorized "A".

1NM72B	1NM78B
1NM75B	1NM81B
1NM187A	1NM82A
1NM190A	1NM191B
1NM197B	1NM200B
1NM201A	1NM207A
1NM210A	1NM217B
1NM211B	1NM220B
1NM221A	

K. Containment Spray System

1. Review the safety function of the following valves to determine if they should be categorized as indicated.

<u>Category "A"</u>	<u>Category "AC"</u>
1NS12B	1NS13
1NS15B	1NS16
1NS29A	1NS30
1NS32A	1NS33
1NS38B	1NS41
1NS43A	1NS46

L. Chemical and Volume Control System

1. Review the safety functions of the following valves to determine if they should be included in the IST program and categorized as indicated.

Category "A"

1NV37A	(location L-7 P&ID CN 1554-1.0)
1NV1A	(location H-1 P&ID CN 1554-1.0)
1NV2A	(location H-2 P&ID CN 1554-1.0)
1NV862	(location J-9 P&ID CN 1554-1.0)

Category "AC"

1NV90	(location D-10 P&ID CN 1554-1.0)
1NV22	(location F-4 P&ID CN 1554-1.0)
1NV41	(location K-2 P&ID CN 1554-1.0)
1NV40	(location K-3 P&ID CN 1554-1.0)
1NV38	(location L-10 P&ID CN 1554-1.0)

1NV861	(location L-9 P&ID CN 1554-1.0)
1NV33	(location K-10 P&ID CN 1554-1.0)
1NV34	(location K-10 P&ID CN 1554-1.0)

2. Provide a brief description of how valves 1NV10A, 1NV11A and 1NV13A are fail position tested quarterly during power operation.
3. Review the safety function of the following valves to determine if they should be categorized "A".

1NV10A	1NV15B
1NV11A	1NV89A
1NV13A	1NV91B

4. Provide a brief description of how check valve 1NV254 is partial stroke exercised during cold shutdown.
5. Review the safety functions of valve 1NV314B to determine if it should be categorized "A".
6. Review the safety function of check valve 1NV306 (location J-10 P&ID CN 1554-1.2) to determine if it should be included in the IST program and categorized "C".
7. Review the safety function of valve 1NV865A to determine if it should be categorized "A".

M. Containment Valve Injection Water System

1. Review the safety function of the following valves to determine if they should be categorized "A" or "AC".

1NW105B	1NW107
1NW035A	1NW37

N. Interior Fire Protection System

1. Review the safety function of valves 1RF389B and 1RF447B to determine if they should be categorized "A".

O. Nuclear Service Water System

1. Review the safety function of valves 1RN404B and 1RN437B to determine if they should be categorized "A".

2. Review the safety function of the following valves to determine if they should be categorized "A".

1RN429A	1RN484A
1RN432B	1RN487B

P. Main Steam to Auxiliary Equipment

1. Review the safety function of the following valves to determine if they should be included in the IST program and categorized as indicated.

Category "C"

1SA6	(location H-5 P&ID CN 1593-1.1)
1SA3	(location G-5 P&ID CN 1593-1.1)

Category "B"

Auxiliary Feedwater Pump Turbine Stop Valve
(location G-10 P&ID CN 1593-1.1)

Q. Main Steam System

1. Provide a more detailed technical justification for not full stroke exercising the following valves quarterly during power operations.
(Relief Request N01)

1SM1	1SM5
1SM3	1SM7

R. Diesel Generator Engine Starting Air

1. Review the safety function of the following check valves to determine if they should be included in the IST Program and categorized "C".

1VG5	(location J-2 P&ID CN 1609-4.0)
1VG6	(location J-13 P&ID CN 1609-4.0)
1VG7	(location I-2 P&ID CN 1609-4.0)
1VG8	(location I-13 P&ID CN 1609-4.0)
1VG49	(location J-2 P&ID CN 1609-4.1)
1VG50	(location J-13 P&ID CN 1609-4.1)
1VG51	(location I-2 P&ID CN 1609-4.1)
1VG52	(location I-13 P&ID CN 1609-4.1)

2. What alternate tests have been considered for individual valve operability verification for the check valves identified in relief request W01?
3. Are each of the four diesel engine air start solenoid valves individually verified operable during quarterly testing?

S. Instrument Air System

1. Review the safety function of the following check valves to determine if they should be included in the IST Program and categorized "C".

1VI367	(location L-13 P&ID CN 1605-1.1)
1VI368	(location K-13 P&ID CN 1605-1.1)
1VI369	(location L-13 P&ID CN 1605-1.1)
1VI370	(location J-13 P&ID CN 1605-1.1)
1VI98	(location G-13 P&ID CN 1605-1.1)
1VI99	(location G-13 P&ID CN 1605-1.1)
1VI113	(location F-13 P&ID CN 1605-1.1)
1VI114	(location F-13 P&ID CN 1605-1.1)
1VI103	(location D-13 P&ID CN 1605-1.1)
1VI104	(location D-13 P&ID CN 1605-1.1)
1VI108	(location B-13 P&ID CN 1605-1.1)
1VI109	(location B-13 P&ID CN 1605-1.1)

T. Liquid Radwaste System

1. Review the safety function of valves 1WL807B and 1WL805A to determine if they should be categorized "A".
2. Review the safety function of check valve 1WL 806 (location I-8 P&ID CN-1565-2.0) to determine if it should be included in the IST program and categorized "AC".
3. Review the safety function of valves 1WL825B and 1WL827B to determine if they should be categorized "A".
4. Review the safety function of check valve 1WL321 (location H-6 P&ID CN-1565-2.4) to determine if it should be included in the IST Program and categorized "AC".

5. Review the safety function of valves 1WL867A and 1WL869B to determine if they should be categorized "A".

U. Control Area Chilled Water System

1. Do valves 1YC58 and 1YC26 (location E-6, E-12 P&ID CN-1578-2.0) have a required fail-safe position?
2. Do valves 1YC100 and 1YC150 (location E-12, E-6 P&ID CN-1578-2.2) have a required fail-safe position?