

PRIORITY 1

(ACCELERATED RIDS PROCESSING)

REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)

ACCESSION NBR: 9503210157 DOC. DATE: 95/03/15 NOTARIZED: NO DOCKET #
 FACIL: 50-269 Oconee Nuclear Station, Unit 1, Duke Power Co. 05000269
 50-270 Oconee Nuclear Station, Unit 2, Duke Power Co. 05000270
 50-287 Oconee Nuclear Station, Unit 3, Duke Power Co. 05000287

AUTH. NAME AUTHOR AFFILIATION
 HAMPTON, J.W. Duke Power Co.
 RECIP. NAME RECIPIENT AFFILIATION
 Document Control Branch (Document Control Desk)

SUBJECT: Responds to NRC 941219 ltr re violations noted in insp repts
 50-269/94-31, 50-270/94-31 & 50-287/94-31. Corrective action:
 major rev initiated to listed procedures & formal test
 acceptance criteria currently being developed.

DISTRIBUTION CODE: IE01D COPIES RECEIVED: LTR 1 ENCL 1 SIZE: 20
 TITLE: General (50 Dkt)-Insp Rept/Notice of Violation Response

NOTES:

	RECIPIENT ID CODE/NAME	COPIES	LTTR	ENCL	RECIPIENT ID CODE/NAME	COPIES	LTTR	ENCL
	PD2-3 PD	1		1	WIENS, L	1		1
INTERNAL:	ACRS	2		2	AEOD/DEIB	1		1
	AEOD/SPD/RAB	1		1	AEOD/SPD/RRAB	1		1
	AEOD/TTC	1		1	DEDRO	1		1
	FILE CENTER 02	1		1	NRR/DISP/PIPB	1		1
	NRR/DORS/OEAB	1		1	NRR/DRCH/HHFB	1		1
	NUDOCS-ABSTRACT	1		1	OE DIR	1		1
	OGC/HDS2	1		1	RGN2 FILE 01	1		1
EXTERNAL:	LITCO BRYCE, J H	1		1	NOAC	1		1
	NRC PDR	1		1				

NOTE TO ALL "RIDS" RECIPIENTS:

PLEASE HELP US TO REDUCE WASTE! CONTACT THE DOCUMENT CONTROL
 DESK, ROOM P1-37 (EXT. 504-2083) TO ELIMINATE YOUR NAME FROM
 DISTRIBUTION LISTS FOR DOCUMENTS YOU DON'T NEED!

TOTAL NUMBER OF COPIES REQUIRED: LTTR 20 ENCL 20

P
R
I
O
R
I
T
Y

D
O
C
U
M
E
N
T

Duke Power Company
Oconee Nuclear Site
P.O. Box 1439
Seneca, SC 29679

J. W. HAMPTON
Vice President
(803)885-3499 Office
(803)885-3564 Fax



DUKE POWER

March 15, 1995

U.S. Nuclear Regulatory Commission
Attention: Document Control Desk
Washington, DC 20555

Subject: Oconee Nuclear Site
Docket Nos. 50-269, -270, -287
Inspection Report 50-269, -270, -287/94-31
Reply to Notice of Violation

Dear Sir:

By letter dated December 19, 1994, the NRC issued a Notice of Violation as described in Inspection Report No. 50-269, 270, 287/94-31. Attachments 1, 2, and 3 contain Duke Power Company's responses to violations 94-31-01, 94-31-04, and 94-31-08 respectively.

Violation 94-31-01 was discussed during the February 24, 1995 SWSOPI meeting between Duke Power Company and the NRC. During this discussion, the NRC indicated that the four examples cited in Violation 94-31-01 may be indicative of programmatic problems in the engineering area. Al Gibson and Joe Davis agreed that a management meeting in the June to July timeframe would be beneficial to discuss programmatic initiatives in the engineering area. Since these programmatic initiatives will be discussed at this management meeting, the response to Violation 94-31-01 focuses on the specific examples that were cited.

Pursuant to the provisions of 10 CFR 2.201, I am submitting a written response to the violations identified in the subject Inspection Report.

Very truly yours,


J. W. Hampton

Attachment 1
Attachment 2
Attachment 3

Printed on recycled paper

210180
9503210157 950315
PDR ADDCK 05000269
Q PDR

LEO
11

Document Control Desk
March 15, 1995

cc: Mr. S. D. Ebnetter, Regional Administrator
U. S. Nuclear Regulatory Commission, Region II

Mr. L. A. Wiens, Project Manager
Office of Nuclear Reactor Regulation

Mr. P. E. Harmon
Senior Resident Inspector
Oconee Nuclear Site

Attachment 1
Reply to Notice of Violation
Violation 94-31-01 Severity Level IV

10 CFR 50, Appendix B, Criterion XVI, "Corrective Action" requires, in part, that measures shall be established to assure that conditions adverse to quality, such as failures, malfunctions, deficiencies, deviations, defective material and equipment and nonconformances are promptly identified and corrected. In the case of significant conditions adverse to quality, the measures established shall assure that the cause of the condition is determined and corrective action taken to preclude repetition. The identification of the significant condition adverse to quality, the cause of the condition, and the corrective action taken shall be documented and reported to appropriate levels of management.

The licensee's site directive on the problem identification process requires the initiation of a condition adverse to quality report, PIP, when there are errors in design bases documents and when documents are not updated.

Contrary to the above, the licensee failed to promptly identify, adequately document and/or take adequate corrective action for several examples of conditions adverse to quality listed below:

RESPONSE:

1. Duke Power Company accepts this violation and agrees that items a through d are examples of this violation.
2. The corrective actions taken and the results achieved are discussed below under each individual item.
3. The corrective actions that will be taken to avoid further violations are discussed below under each individual item.
4. Though some of the corrective actions will be completed earlier, full compliance with the criterion will be achieved by July 1, 1995.

Attachment 1
Reply to Notice of Violation
Violation 94-31-01 Severity Level IV

Example a:

As of September 28, 1994, the corrective action to Deviation 50-269,270,287/93-25-01 of creating Keowee Hydroelectric Power Station operating procedures was inadequate in that numerous valves in the Keowee service water systems, including all the generator thrust bearing cooler inlet valves and drain valves WL-1, 2, 5, and 6 for both units, were omitted.

1) *The reason for the violation:*

This violation involves two separate areas which will be addressed separately.

Drain Valves WL-1, WL-2, WL-5, and WL-6

As identified in the violation, service water strainer drain valves WL-1, WL-2, WL-5, and WL-6 were omitted from Keowee operating procedures. At the time the procedures were created, it was determined by Keowee Station supervision that these drain valves were to be omitted because there was no need to operate these valves for isolation of the systems. Additionally, it was determined that the drain valves were not to be included because at that time the maintenance practice was for the maintenance personnel to drain, or not drain, the system as their needs dictated. Furthermore, these drain valves are operated on a frequent basis by Keowee station personnel in other procedures; specifically: MP/1-2/A/2000/017 (Unit No. 1-2 Turbine, Governor, and Generator Weekly Preventive Maintenance) and MP/1-2/A/2000/018 (Unit No. 1-2 Turbine and Governor Monthly Preventive Maintenance). The Keowee operating personnel are trained and qualified to ETQS task O-TGS-GOS-016 which addresses the skills used to operate the drain valves listed. All Keowee personnel are trained to ETQS task O-GOM-MEC-012 which credits Keowee operating personnel with the knowledge to operate the specific valves listed above. The design of this system and acceptance requirements in the procedure make it apparent that this issue was not of safety significance to the station. However, Oconee agrees that the quality of the procedures is enhanced by including each of these valves in the appropriate procedure.

Attachment 1
Reply to Notice of Violation
Violation 94-31-01 Severity Level IV

Example a. 1) continued

Generator Thrust Bearing Cooler Inlet Valves

As identified in the violation, the inlet valves to the generator thrust bearing coolers were omitted from the Keowee operating procedures. At the time the procedures were created, it was determined by Keowee Station Supervision that due to the design of the system, the inlet valves to the coolers were not to be operated and therefore they were not listed in the procedure. The design of the system is such that there are no outlet valves to each thrust bearing cooler. There was no guidance to close the valves; therefore, there was no guidance to verify their open status.

The removal from service method involved closing a main supply valve (WL-46) and a discharge valve (WL-76) for system isolation. The restoration method would verify all cooler drain valves were closed and then open the main supply and discharge valves. This remains the method for system isolation. The verification of inlet valves was added when their status was questioned during the audit. In the verification enclosure, a step required throttling a discharge valve to obtain required flow through the system (acceptance requirements of 150 gallons per minute). This could not have been completed if all inlet valves had been inadvertently closed by maintenance personnel. If the required flow had not been achieved, this condition would have indicated an abnormal system line-up. This would have initiated corrective action to align the system for normal operation before the system would have been returned to service. The design of this system and acceptance requirements in the procedure make it apparent that this issue was not of safety significance to the station. However, Oconee agrees that the quality of the procedures is enhanced by including each of these valves in the appropriate procedure.

Attachment 1
Reply to Notice of Violation
Violation 94-31-01 Severity Level IV

2) *The corrective steps that have been taken and the results achieved:*

On September 27, 1994, when the verification status of the valves was questioned, a major revision was initiated to the following procedures:

OP/1/A/2000/046	Unit No. 1 Turbine Guide Bearing Oil Heat Exchanger,
OP/2/A/2000/046	Unit No. 2 Turbine Guide Bearing Oil Heat Exchanger,
OP/1/A/2000/047	Unit No. 1 Thrust Bearing Oil Heat Exchanger,
OP/2/A/2000/047	Unit No. 2 Thrust Bearing Oil Heat Exchanger,
OP/1/A/2000/048	Unit No. 1 Generator Air Coolers,
OP/2/A/2000/048	Unit No. 2 Generator Air Coolers.

The revisions included the addition of the drain valves and inlet valves, as identified, in the appropriate alignment enclosures for each system. Each procedure, for the systems listed, was given a complete walk-down review along with a verification of the isolation method. All valves in the systems were identified and included in the procedure revisions. In addition, the procedures were compared to the appropriate flow diagrams (KFD-100A-1.1 and KFD-100A-2.1) to verify all valves required were included in the procedure revisions. The procedure revisions were made in order to achieve consistency between Keowee and Oconee operating practices. The major revisions and a complete retype of each procedure was approved on September 29, 1994, and copies were made available to the audit team.

3) *The corrective steps that will be taken to avoid further violations:*

No further corrective actions are planned on this item.

4) *The date when full compliance will be achieved:*

Oconee is currently in full compliance on this item.

Attachment 1
Reply to Notice of Violation
Violation 94-31-01 Severity Level IV

Example b.

As of September 28, 1994, the corrective actions to problem investigation form 0-093-0986 for drawings at Keowee not reflecting the as-built condition of the facility and to Violation 50-269, 270, 287/93-25-12C of verifying and reflecting the as-built condition of Keowee mechanical systems on drawings were inadequate, in that the revised drawings failed to show a drain valve on Unit 2 downstream of valve 2WL-3.

RESPONSE:

1) *The reason for the violation:*

A walkdown, to verify and, if necessary, to revise all Keowee flow diagrams, was originally performed in response to Violation 93-25-12, Example C. Oconee problem investigation process report (PIP) 093-0986 was written to document and track this corrective action. Personnel performing the walkdown located valve 2WL-3 and identified it as the drain valve for the line. Typically, a line of this type either enters a floor drain or is capped, with the drain valve (in this case, 2WL-3) providing isolation. Oconee flow diagrams do not show additional detail (such as caps on vents and drains) downstream of the last isolation valve. This particular line ended behind other equipment in an area not easily accessible. Instead of being capped, a temporary spigot was placed on the end of the pipe so that a hose (for washing down the area) could be attached. The inspection report identifies this spigot as the drain valve which was left off the drawing. A hose was not attached to the spigot at the time the walkdown was performed in response to Violation 93-25-12. The existence of a hose would have alerted personnel performing the walkdown to look for an additional valve (the spigot). As it was, having identified the drain valve providing isolation (2WL-3), it was assumed that there were no additional components downstream which led to the spigot being overlooked. It is believed that this portion of the walkdown was not complete.

2) *The corrective steps that have been taken and the results achieved:*

In response to this issue, the spigot downstream of 2WL-3 was removed and the line capped on November 1, 1994. Oconee problem investigation process report (PIP) 94-1404 was written and

Attachment 1
Reply to Notice of Violation
Violation 94-31-01 Severity Level IV

Example b. continued:

2) *continued*

Keowee flow diagrams were re-verified by performing a field walkdown with independent review and identifying changes ("red-marking" the discrepancies) on the applicable flow diagrams. This effort was completed December 14, 1994.

3) *The corrective steps that will be taken to avoid further violations:*

The affected flow diagrams will be updated to "as-built" status, under minor modification OE-7150, by July 1, 1995.

4) *The date when full compliance will be achieved:*

Oconee will achieve full compliance on this item by July 1, 1995.

Attachment 1
Reply to Notice of Violation
Violation 94-31-01 Severity Level IV

Example c:

As of October 23, 1994, technical errors associated with actual available suction source inventory in calculation OSC-0864, "RC System DH Removal following a Loss of Intake Structure," although known by engineering personnel, were not identified as a condition adverse to quality through the initiation of a problem investigation form.

RESPONSE:

1) The reason for the violation:

As stated in the inspection report, engineering personnel were aware of the technical errors associated with actual available suction source inventory for the auxiliary service water (ASW) pump in calculation OSC-864, although a problem investigation process (PIP) report was not written. Oconee documents the identification of conditions adverse to quality and tracks the completion of the appropriate corrective action(s) through the PIP process. The severity of the technical errors in this calculation (and a related calculation, OSC-5125) was assessed in order to determine the appropriate response. This issue was judged not to represent a challenge to the operability of the ASW pump since the ultimate result was potentially a 10 percent decrease in the amount of time (from 37 days to approximately 33 days) the suction inventory is estimated to last. Existing procedures were adequate to respond to this range of time and station operation was not adversely affected. Therefore, the determination was made that this issue did not necessarily meet the threshold for the generation of a PIP.

It was recognized that the calculations needed to be revised and this activity was prioritized by the appropriate system engineer and his supervision. The decision not to write a PIP was questioned during the followup inspection documented in inspection report 94-31. During the ensuing discussion, the system engineer agreed that it would have been consistent with Oconee policy and expectations to have written a PIP in order to document the identification of this situation and track the already identified corrective actions to conclusion.

Attachment 1
Reply to Notice of Violation
Violation 94-31-01 Severity Level IV

Example c. continued:

2) *The corrective steps that have been taken and the results achieved:*

Oconee PIP 94-1500 was written on October 24, 1994 to document the need to revise engineering calculations OSC-864 and OSC-5125. This PIP documents the fact that incorrect assumptions were originally made in these calculations which may have led to non-conservative results. The corrective actions identified and documented in this PIP are to revise these calculations. This PIP will track these corrective actions to completion.

3) *The corrective steps that will be taken to avoid further violations:*

Engineering calculations OSC-864 and OSC-5125 will be revised to correct technical inaccuracies associated with ASW pump Net Positive Suction Head (NPSH) and the resulting available suction inventory, by June 1, 1995.

4) *The date when full compliance will be achieved:*

Oconee will achieve full compliance on this item by June 1, 1995.

Attachment 1
Reply to Notice of Violation
Violation 94-31-01 Severity Level IV

Example d:

As of October 11, 1994, the condition adverse to quality corrective actions to problem investigation form 0-94-0313 of poor condenser cooling water pump cooling/sealing flow rotameter material condition were inadequate in that 10 of the rotameters contained significant slime contamination, one contained 3 clams and 11 were pegged at the high end of the scale.

RESPONSE:

1) The reason for the violation, or if contested, the basis for disputing the violation:

The reason for the violation is the ineffectiveness of a.) the preventative maintenance procedure (IP/0/B/0261/004) associated with the rotameters and b.) operations procedure OP/2/A/1102/20, "Shift Turnover", Enclosure 5.11, "SSF/Outside Non-Licensed Operator Round Sheet," to maintain the appropriate material condition of the condenser circulating water (CCW) pump rotameters. It should be noted that, due to the association with raw water, some biofouling is expected. However, gross fouling would be necessary before the cooling/sealing function would be significantly affected. There was no indication this event affected cooling/sealing to the CCW pumps.

2) The corrective steps that have been taken and the results achieved:

In response to this issue, a work request was written to clean the rotameters, using IP/0/B/0261/004. The non-licensed operator (NLO) round sheet (OP/2/A/1102/20, Enclosure 5.11) has also been revised to include enhanced guidance on how to read the rotameters (including illustrations) and guidance on how to determine material condition of the rotameters. It is the responsibility of the NLOs to notify the Unit Supervisor and to initiate a work request and/or call SPOC for assistance on any "off" normal parameter found during the performance of the round sheet.

Attachment 1
Reply to Notice of Violation
Violation 94-31-01 Severity Level IV

Example d continued:

3) *The corrective steps that will be taken to avoid further violations:*

Preventative maintenance procedure IP/0/B/0261/004 will be revised to delete a.) the reference to the red dot indicator and b.) the step to read the float from the bottom to determine rotameter flow. These changes are scheduled to be implemented by March 31, 1995. In addition, the rotameters and their associated piping are within the scope of NSM-52932, "CCW Upgrade Modification." Any design changes deemed appropriate will be incorporated into this modification. Implementation of this modification will be completed on all three units by December 1997 (U2EOC16).

4) *The date when full compliance will be achieved:*

Oconee will achieve full compliance by March 31, 1995.

Attachment 2
Reply to Notice of Violation
Violation 94-31-04 Severity Level IV

10CFR50, Appendix B, Criterion XI, "Test Control", requires in part that operational test procedures be established to demonstrate that systems and components will perform satisfactorily within the acceptance limits contained in applicable design documents.

10 CFR 50, Appendix B, Criterion V, "Instructions, Procedures and Drawings," requires in part, that activities affecting quality shall be prescribed by documented procedures. The procedures shall include appropriate quantitative or qualitative acceptance criteria.

Technical Specifications Surveillance Requirement 4.1.2, table 4.1-2, item 7, specifies a condenser cooling water system gravity flow test be performed each refueling.

FSAR Section 9.2.2.2.1, "Condenser Circulating Water System (CCW)," states that the CCW systems are designed to take advantage of the siphon effect so the pumps are required only to overcome pipe and condenser function loss... under a loss-of-power situation, the emergency discharge line will automatically open and the CCW system will continue to operate as an unassisted siphon system... the siphon system is the emergency condenser circulating water (ECCW) system and can be divided into two distinct parts. The "first siphon" takes suction from the CCW intake canal and supplies flow to the CCW crossover header in the Turbine Building basement, where the LPSW System takes its suction... In a loss of off-site power (LOOP) situation, the CCW pumps will be tripped by a load shed command from the Engineered Safeguards System and the first siphon is required to supply suction to LPSW System until a CCW pump can be manually restarted by the control room operator."

Contrary to the above, as of October 27, 1994, the condenser cooling water system gravity flow test, an operational test procedure performed each refueling by the licensee, did not demonstrate that the system would perform satisfactorily within the acceptance criteria identified in the FSAR (applicable design document). Specifically, the test would not demonstrate that the portion of the condenser cooling water system providing the suction source for the low pressure service water system when the condenser cooling water pumps are off will perform satisfactorily within the acceptance limits contained in the FSAR section 9.2.2.1 and did not contain appropriate quantitative or qualitative acceptance criteria for that portion of the condenser cooling water system.

Attachment 2
Reply to Notice of Violation
Violation 94-31-04 Severity Level IV

RESPONSE:

1) The reason for the violation:

Duke Power Company accepts this violation, but requests that consideration be given to re-classifying it as a Non-Cited Violation. Our basis for this request is that we recognized that a violation existed and had corrective actions underway to resolve it prior to the inspection.

Emergency condenser circulating water (ECCW) siphon flow has been tested during each refueling outage, in accordance with Technical Specification 4.1.2. This surveillance was performed to demonstrate ECCW siphon flow through the condenser, which used to be a requirement of Technical Specification 3.4, Secondary System Decay Heat Removal. The requirement for ECCW was based on ensuring adequate heat removal following a loss of all AC power. During a loss of all AC power, the condenser would be the only load receiving flow. Appropriate test procedures and test acceptance criteria have been in place and have been used to demonstrate operability of ECCW siphon flow through the condenser.

Following NRC's acceptance of Oconee's submittal in response to the Station Blackout (SBO) Rule, the requirement for ECCW siphon flow through the condenser was removed from Technical Specification 3.4 (October 1994). At the same time, the surveillance requirement of Technical Specification 4.1.2 was revised to state that the function being verified is ECCW siphon flow to the suction of the low pressure service water (LPSW) System. During a design basis LOCA involving a loss of offsite power, ECCW siphon flow is required to supply suction to the LPSW pumps until forced flow can be re-established. Oconee Engineering recognized that the documented test acceptance criteria in place to verify the operability of ECCW siphon flow through the condenser was not adequate to verify ECCW siphon flow to the suction of the LPSW System.

Oconee recognized the need to more clearly demonstrate that ECCW siphon flow could support the design basis function of LPSW following a loss of offsite power which loadshed the CCW pumps. During the Unit 3 outage in early 1994, ECCW siphon flow to the LPSW pumps was tested, with LPSW flow demand at its maximum expected accident flow, as part of the integrated LPSW System test. ECCW siphon flow to LPSW was first tested as part of the integrated LPSW System test during the Unit 2 outage in June 1993. Informal test acceptance criteria (in the possession of the engineers performing the test but not formally documented) were used to

Attachment 2
Reply to Notice of Violation
Violation 94-31-04 Severity Level IV

1) continued

verify operability of ECCW siphon flow to LPSW. The need to formally issue test acceptance criteria, to support the verification of adequate ECCW siphon flow to LPSW, was documented August 1994 in Oconee problem investigation process report (PIP) 94-0957 prior to NRC Inspection 94-31.

2) The corrective steps that have been taken and the results achieved:

An investigation of ECCW test results from the 1994 Unit 2 outage has indicated that ECCW siphon flow would have supported LPSW suction during a design basis LOCA with loss of off-site power. Formal test acceptance criteria, to support the verification of adequate ECCW siphon flow to the suction of LPSW, are currently being developed and documented.

3) The corrective steps that will be taken to avoid further violations:

Formal test acceptance criteria, to support the verification of adequate ECCW siphon flow to the suction of LPSW, will be completed and in place by May 1, 1995.

4) The date when full compliance will be achieved:

Full compliance will be achieved by May 1, 1995.

Attachment 3
Reply to Notice of Violation
Violation 94-31-08 Severity Level IV

10CFR 50.55(a) paragraph (f)(1) and (4) requires in part that the safety-related valves of a pressurized water-cooled nuclear power facility whose construction permit was issued prior to January 1, 1971, be classified as ASME Code Class 1, 2, or 3 and meet the test requirements set forth in Section XI of editions of the ASME Boiler and Pressure Vessel Code and Addenda.

Contrary to the above, as of October 27, 1994, atmospheric relief valves, check valves from the ASW Pump to HPI Pump Motor Coolers, and the turbine oil cooling manual bypass valve which perform safety-related functions, were not tested to the requirements set forth in Section XI of the ASME Boiler and Pressure Vessel Code.

RESPONSE:

1) *The reason for the violation, or if contested, the basis for disputing the violation.*

Duke denies this violation based on the following discussion:

Oconee Nuclear Station (ONS) Units 1, 2 and 3 are in compliance with the requirements set forth in Section XI of the ASME Boiler and Pressure Vessel Code. The Oconee program for compliance with ASME Section XI was approved by the NRC in the Safety Evaluation Report dated November 23, 1994 for Revision 21 of the Oconee IST program.

The ONS IST program has gone through three major phases from 1976 to 1994.

The initial phase began in April 1976 when the NRC informed ONS that 10CFR50.55(a) had been revised. This revision to the regulations required "testing in accordance with ASME Code Section XI... which may conflict with existing Technical Specifications". The NRC requested that ONS submit a revision to the Technical Specifications and advise them where Section XI requirements could not be met. It was recognized that this was a requirement that was not in force at the time of plant design, so the NRC required ONS to meet Section XI to the extent that was consistent with the original design (i.e., ONS was not required to put in instruments to measure certain parameters where instruments did not previously exist).

Attachment 3
Reply to Notice of Violation
Violation 94-31-08 Severity Level IV

On October 1, 1976 a response to the above request was submitted to the NRC for Unit 1. This submittal generically defined the IST program scope as, "... Duke Power Class A, B, and C piping and components (corresponding to ASME Code Section 1, 2, and 3, respectively)... except for stated exceptions, primarily based on design limitations".

ONS expanded the IST valve list beyond the defined scope to include containment isolation valves which are Duke Class F. The Atmospheric relief valves (MS-153-156 & MS-161-164), auxiliary service water pump check valve to the high pressure injection motor cooler (LPSW-502) and the turbine oil cooling manual bypass valve (LPSW-53) did not fall within the scope of the IST program because they were classified as Duke Piping Class F or G and did not serve a containment isolation function. These components did not meet this program scope and therefore were not included in the IST program.

This valve scope was supported by temporary approval of the ONS IST program in March of 1978. In this letter the NRC acknowledged that ONS was expanding the scope of its previous test program, and they agreed that "design limitations" prevented ONS from meeting Section XI in its entirety.

In May, 1979, a summary of the IST submittals for Units 1, 2 and 3 was submitted to the NRC. The scope of the IST program was unchanged from the submittal for Unit 1 in 1976. A review of the valves in this submittal supports this fact. Only Duke Class A, B or C and containment isolation valves were included in the list. This list was expanded slightly over the 1976 list to include some additional containment isolation valves. No other changes were noted.

In November, 1980, ONS received the IST program Safety Evaluation Report for Units 1, 2 and 3. Some relief requests were granted, some not; however, no problems were identified with the scope of the IST program which was unchanged from the original submittal in October 1976.

The second phase of the ONS IST program began in the early 1980s and lasted until 1990. During this time the basic scope of the IST program was unchanged, but additional Duke Class F valves were added to the program such as the Atmospheric relief valves. Most of the additional

Attachment 3
Reply to Notice of Violation
Violation 94-31-08 Severity Level IV

Duke Class F valves were added to the IST program because of expanding safety concerns that went beyond design basis accidents described in FSAR Chapter 15. The auxiliary service water check valve to the high pressure injection motor cooler (Duke Class F) and the turbine oil cooling manual bypass valve (Duke Class G) were not added. In the second phase, the method of determining whether the IST program was applicable to a structure, system or component did not provide for a clear methodology in determining what additional valves should be added to the IST program.

The third phase of the ONS IST program started in 1990. During the first part of this phase the IST program scope was clearly defined to resolve and clarify the concerns experienced during the 1980's. The new scope was defined as the following:

- a) All Category A valves that fall within the Duke ISI Class A, B, or C boundaries.
- b) All Category B and C valves that fall within the Duke Class A, B, or C boundaries and are active in the mitigation of Design Basis Accidents (Design Basis Accident is defined as those described in FSAR Chapter 15)
- c) Valves in systems specifically required by Technical Specifications to be tested per ASME Section XI or required by Technical Specifications for system operability.

ONS also recognized that the accidents postulated in the late sixties and early seventies for PWRs are considerably different from accidents postulated for newer plants. For this reason ONS expanded its testing by developing a supplemental program called the "Appendix B Test program". The Appendix B program was created out of a need to proceduralize the testing of additional pumps and valves that are important to safety. All of the pumps and valves in the Appendix B program are treated the same as components in the IST program (i.e. test frequency, acceptance criteria...), except ONS is not required to submit relief requests to the NRC.

The new IST scope and the Appendix B program were discussed with the NRC at an information meeting on November 14, 1990. The NRC did not reject this new scope and all IST program submittals thereafter have reflected this scope.

Attachment 3
Reply to Notice of Violation
Violation 94-31-08 Severity Level IV

With the creation of the Appendix B program, the Atmospheric relief valves (MS-153-156 & MS-161-164), were included in the Appendix B program. The auxiliary service water pump check valve to the high pressure injection motor cooler (LPSW-502) was recently added to the Appendix B program and testing will start with the next Unit 3 refueling outage (6/95). As was discussed at the February 24, 1995 SWSOPI meeting between Duke Power and the NRC, the turbine oil cooling manual bypass valve (LPSW-53) will be added to the Appendix B program. The need to maintain LPSW-53 in the Appendix B program will be further evaluated when the CCW upgrade modification is completed. These valves do not meet the requirements for inclusion in the IST program.

In July 1993 ONS received its second 10 year submittal approval. There were no objections to the scope. The NRC granted relief from testing cold shutdown valves as part of the formal IST program. The NRC recognized ONS tested these valves within the Appendix B program, and commented... " The licensee has proposed to test these valves in accordance with their Appendix B program... the licensee has stated in the basis that the component's operability would be assured during normal plant shutdown. Based on the determination that the licensee's proposed alternative would provide an acceptable level of quality and safety, it is recommended that the alternative be authorized in accordance with 50.55a."

Summary:

ONS defined the scope of the IST program in 1976 and subsequently included many valves into the IST program which were beyond this initial scope through 1990. The NRC reviewed and approved the IST program submittals throughout this period. ONS clearly defined the scope of valves to be included in the IST program in 1990. This scope was discussed in a meeting with the NRC and has also been described in recent IST submittals.

The Appendix B program is adequate to provide an acceptable level of quality and safety for pumps and valves important to safety that are not required to be in the IST program.

The Atmospheric relief valves (MS-153-156 & MS-161-164), auxiliary service water pump check valve to the high pressure injection motor cooler (LPSW-502) and the turbine oil cooling manual bypass valve (LPSW-53) were not included in the IST program because they do not meet the program scope.

2) *The corrective steps that have been taken and the results achieved:*

None

Attachment 3
Reply to Notice of Violation
Violation 94-31-08 Severity Level IV

3) *The corrective steps that will be taken to avoid further violations :*

None

4) *The date when full compliance will be achieved:*

ONS is currently in full compliance on this item.

References

1. April 26, 1976 Letter from R. A. Purple (NRC) to W. O. Parker, Jr. (DPC) on 10 CFR 50.55a Rule Change.
2. October 1, 1976 Letter from W. O. Parker, Jr. (DPC) to B. C. Rusche (NRC) on ONS-1 Inservice Examination Program.
3. March 27, 1978 Letter from R. W. Reid (NRC) to W. O. Parker, Jr. (DPC) on Interim Approval of ONS-1 Inservice Examination Program.
4. May 15, 1979 Letter from W. O. Parker, Jr. (DPC) to H. R. Denton (NRC) on ONS-1, 2, and 3 Inservice Examination Programs.
5. November 7, 1980 Letter from R. W. Reid (NRC) to W. O. Parker, Jr. (DPC) on Approval for ONS-1, 2, and 3 Inservice Examination Program.
6. November 21, 1990 DPC Memorandum to File by S. G. Benesole (DPC) on November 14, 1990 Meeting with NRR to discuss Duke Submittal on Generic Letter 89-04.
7. December 6, 1990 Letter from L. A. Weins (NRC) to Oconee N. S. (DPC) on Meeting Summary of November 14, 1990 Meeting with DPC Concerning Revision to ONS Inservice Testing Program.
8. July 23, 1993 Letter from D. B. Matthews (NRC) to J. W. Hampton (DPC) on Safety Evaluation for the Third Interval IST Program, ONS-1, 2, and 3.