

Log # TXX-90053  
File # 10130  
IR 89-30  
IR 89-30  
Ref. # 10CFR2.201  
10CFR2.205

January 31, 1990

William J. Cahill, Jr.  
Executive Vice President

James Lieberman, Director  
Office of Enforcement  
ATTN: Document Control Desk  
U. S. Nuclear Regulatory Commission  
Washington, D. C. 20555

SUBJECT: COMANCHE PEAK STEAM ELECTRIC STATION (CPSES)  
DOCKET NO. 50-445  
RESPONSE TO NOTICE OF VIOLATION, EA 89-219  
REGARDING AFW SYSTEM BACKFLOW EVENTS

- REF: 1) NRC Letter from D. M. Crutchfield to William J. Cahill  
dated January 25, 1990  
2) TU Electric (Letter Logged TXX-89596) from  
William J. Cahill to the NRC dated August 18, 1989

Dear Mr. Lieberman:

In Reference 1, the NRC issued a Notice of Violation and Proposed Imposition of Civil Penalties (Notice) for certain circumstances related to events on April 23 and May 5, 1989, involving backflow through check valves in the Auxiliary Feedwater (AFW) System at CPSES Unit 1.

Attachment 2 provides TU Electric's reply to Notice of Violation pursuant to 10 CFR 2.201 and the terms of the Notice. TU Electric accepts the violations and has agreed to pay the proposed civil penalty. Please find enclosed a check in the amount of \$30,000.

In addition to the attached reply, we would like to comment on two statements made in Reference 1. First, the NRC states that the April 23 event occurred, in part, because "the operators did not have the proper sensitivity to the importance of system operability" and that the "attitudes and practices demonstrated by workers and management during these events, if carried over to future power operations, would have constituted a significant operational safety problem." At the time the events occurred, our personnel were working in a testing and construction environment. We recognized that some of the actions they took, though acceptable during construction and testing, would not be permitted during operations. Accordingly, shortly after the events occurred, we took steps to accelerate our transition to an operating attitude. Some of these steps are described on pages 35-38 of the Attachment to

9002060387 900131  
PDR ADOCK 05000445  
Q PDC

2/1/90  
\$30,000  
IEIA  
#21284872  
1/1

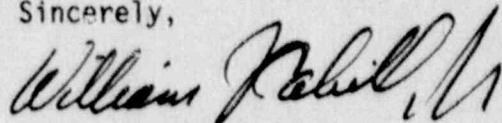
TXX-90053  
Page 2 of 2  
January 31, 1990

Reference 2. We believe that our personnel and management have shown great improvement in this area during the last several months and that they now possess the requisite attitude for operating CPSES Unit 1.

Second, the NRC states that "the operations personnel failed to effectively recognize and act on conditions adverse to quality" and that "employees have to take proper precautions to prevent problems and the recurrence of problems." As one of the lessons learned from these events, we also identified a need for improvement in ensuring that personnel are aware of plant events and equipment failures, and that effective and timely evaluations of such events and failures are performed in order to identify their causes and prevent their recurrence. The improvements we made in this area following the April 23 and May 5 events are discussed on pages 35-38 of the Attachment to Reference 2.

If you have any questions, please contact me.

Sincerely,



William J. Cahill, Jr.

TLH/daj  
Attachments  
Enclosure

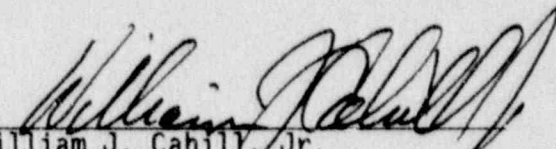
c - Mr. D. Crutchfield  
Mr. C. Grimes  
Mr. R. D. Martin, Region IV  
Mr. R. Warnick  
Resident Inspectors, CPSES (3)

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

In the Matter of )  
Texas Utilities Electric Company ) Docket No. 50-445  
(Comanche Peak Steam Electric )  
Station, Unit 1) )

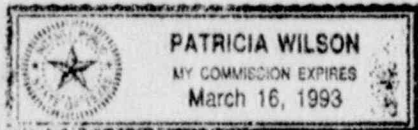
AFFIDAVIT

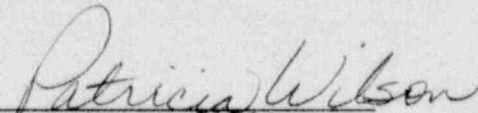
William J. Cahill, Jr. being duly sworn, hereby deposes and says that he is Executive Vice President, Nuclear of TU Electric, the lead Applicant herein; that he is duly authorized to sign and file with the Nuclear Regulatory Commission this response to Notice of Violation EA 89-219 regarding the Auxiliary Feedwater System backflow events; that he is familiar with the content thereof; and that the matters set forth therein are true and correct to the best of his knowledge, information and belief.

  
William J. Cahill, Jr.  
Executive Vice President, Nuclear

STATE OF TEXAS )  
COUNTY OF SOMERVELL )

Subscribed and sworn to before me, a Notary Public, on this 31ST day of  
January, 1990.



  
Notary Public



NOTICE OF VIOLATION  
ITEM A (445/8930-V-01)

- A. Criterion V of Appendix B to 10 CFR Part 50 as implemented by Section 5.0, Revision 1, of the TU Electric Quality Assurance Manual requires that activities affecting quality shall be prescribed by and accomplished in accordance with documented procedures.

CPSES Operations Department Administration (ODA) Manual Procedure ODA-407, Revision 1, Section 6.1, requires that plant systems and subsystems be operated in accordance with written approved procedures during normal, abnormal, and emergency conditions. Standard Operating Procedure SOP-304A, "Auxiliary Feedwater System," specifies steps necessary to perform various operations and alignments of the Auxiliary Feedwater System (AFW). The procedure specifically states that valve 1AF054 be closed prior to opening valve 1AF055.

Contrary to the above, on May 5, 1989, while performing steps in Procedure SOP-304A for system realignment, valves 1AF054 and 1AF055 were opened concurrently. This improper sequence allowed a reverse fluid flow path from the steam generators to the condensate storage tank via the AFW piping. This failure to follow procedure and the resulting reverse fluid flow were nearly identical to the event on April 23, 1989 (see Violation 445/8924-V-01).

RESPONSE TO NOTICE OF VIOLATION  
ITEM A (445/8930-V-01)

TU Electric accepts the violation and the requested information follows.

1. Reason for Violation

The Auxiliary Operators (AO's) failed to follow procedures which required that 1AF054 be closed before 1AF055 is opened. The failure to follow procedures was caused by a lack of understanding by the AO's concerning the administrative requirement to perform procedure steps in the sequence specified in the procedure. In particular, the AO's did not understand that, when more than one operator implemented a procedure, procedure steps could not be performed in parallel rather than in the sequence specified in the procedure.

2. Corrective Steps Taken and Results Achieved

The valve lineup was restored properly following the discovery of backflow. In addition the Manager, Operations met with the personnel involved in this event and counseled them on procedure usage and procedure compliance.

3. Corrective Steps Which Will be Taken to Avoid Further Violations

TU Electric has taken several actions to ensure that personnel perform procedural steps in the sequence specified in the procedure. These actions include revising administrative procedures to emphasize performance of procedural steps in sequence, implementing an action plan to enhance procedural compliance, including discussing the need for procedure compliance with the operating crews, and discussing these events as part of the requalification and replacement training programs for licensed and non-licensed operators. These and other relevant corrective actions are discussed in more detail on pages 32-34 of the Attachment to TXX-89596, dated August 18, 1989.

4. Date of Full Compliance

TU Electric is in full compliance.

NOTICE OF VIOLATION  
ITEM B (44E/8930-V-02)

- B. Criterion XVI of Appendix B to 10 CFR Part 50 as implemented by Section 16.0, Revision 1, of the TU Electric Quality Assurance Manual requires significant conditions adverse to quality or plant safety be promptly identified and corrected to preclude repetition. The identification of the significant condition adverse to quality shall be documented and reported to the appropriate levels of management.

Contrary to the above:

- B.1 In 1985, Problem Report (PR) 85-132 and Failure Analysis Report (FA) 85-001, Revision 0, identified a significant condition adverse to quality. The applicant failed to take adequate measures to assure that the cause of the failure was determined and corrective action taken to prevent recurrence. In the evaluation of a failure of check valve 1MS142, those reports concluded that the bonnet and retainer of the valve were installed too low in the valve body which prevented proper closure of the valve. The action to prevent recurrence stated in FA 85-001, Revision 0, included revising the assembly procedure and correctly reassembling the check valve. In addition, PR 85-132 recommended a design review. Upon further review, the applicant erroneously attributed the valve failure to harsh flow conditions, replaced the valve disk and stud, and reconditioned the valve seat, but did not perform the recommended design review. As a result of not following up on the initially identified cause of this precursor event, the applicant failed to take adequate corrective action and similar valve failures due to improper bonnet retainer installation occurred in 1989.
- B.2 During Hot Functional Testing (HFT) on April 5, 1989, the applicant identified significant condition adverse to quality regarding backleakage from the steam generators through three of the AFW supply lines. The applicant failed to take adequate measures to assure that the cause of the event was determined and corrective action taken to preclude recurrence. Work requests were written to repair the failed valves but did not adequately describe the backleakage. Consequently, the work requests were not given proper priority attention by management and a plant incident report was not written to require a prompt evaluation. As a result of not adequately identifying, evaluating, and correcting the cause of this precursor event, similar valve failures occurred on April 23 and again on May 5.
- B.3 On April 23, 1989, the applicant identified a significant condition adverse to quality regarding backleakage from the steam generators through the AFW supply line check valves wherein operators failed to adhere to Standard Operating Procedure (SOP) 304-A. The



applicant failed to take measures to assure that the cause of the event was adequately determined and corrective action taken to preclude recurrence. Consequently, a second failure to adhere to SCP 304-A resulted in a similar backleakage event on May 5, 1989.

- B.4 On May 5, 1989, the applicant identified a significant condition adverse to quality regarding backleakage from the steam generators through the AFW supply line check valves. The applicant failed to promptly document this significant condition adverse to quality and to report it to appropriate levels of management. Specifically, the task team that was assigned with the lead responsibility for investigating check valve failures was not promptly informed of the event. Even after being notified, the task team did not actively investigate or document the May 5 event on a plant incident report, as required by Procedure STA-503, until May 12, 1989, after the NRC's Augmented Inspection Team insisted that these actions take place.

RESPONSE TO NOTICE OF VIOLATION  
ITEM B (445/8930-V-02)

TU Electric accepts the violation and the requested information follows:

1. Reason for Violation B.1

In 1985, IMS-142 was found to have been damaged. The damage was initially believed to have been caused by improper reassembly of the valve in 1983 resulting in an elevation difference between the valve seat and disc. The suspected elevation difference was attributed to differences between manufacturing and field assembly instructions concerning adjustment of the elevation of the valve disc. During the manufacturing process, the vendor was able to visually determine the correct elevation in the shop; however, this was not possible in the field.

Subsequent investigations by TU Electric at the time indicated that the damage to valve IMS-142 was apparently caused by a flow transient. A representative of the vendor was contacted, who confirmed that a flow transient could have caused damage resulting in a mismatch between the valve seat and disc. Additionally, the vendor representative concluded that the differences in the manufacturing and field assembly instructions could only have resulted in minor elevation differences which would not have prevented the check valve disc from properly seating. At that time, it was not known that the elevation difference between the valve disc and seat could cause the disc to hang up under the seat, and hang up of the disc was not observed in valve IMS-142.

In retrospect, the problem identified with valve IMS-142 in 1985 may have been attributable in part to the incorrect assembly instruction.

#### Reason for Violation B.2

On April 5, 1989, while filling the Steam Generators, backleakage from check valve IAF-106 was identified. Control room personnel added steps to an instruction for forward flushing the Turbine Driven AFW pump supply lines to determine if any other check valves were leaking. Two additional leaking check valves (IAF-078 and IAF-086) were identified. The Auxiliary Operator wrote three Work Requests (WR's) to document the observed valve leakage as required under the Operations corrective maintenance program, but did not specify the amount of leakage. A control room Senior Reactor Operator (SRO) reviewed the WR's, and assumed the valves were leaking, but had not failed. Therefore, no impact on personnel safety, equipment protection and test objectives was anticipated, and the WR's were assigned a routine priority and scheduled for completion after the HFT.

Because the severity of the backleakage was not documented on the WR's, these problems were not documented on a higher visibility document such as a Plant Incident Report (PIR). If this had been done, Operations management and/or other departments such as Engineering would have been procedurally required to review the event and to take appropriate corrective action.

#### Reason for Violation B.3

Promptly following the April 23 event, TU Electric determined that the event was caused by failure of the check valves (the cause of the check valve failures was not yet known) and a failure of the operators to perform procedural steps in the sequence specified in the operating procedure. On April 24, 1989, Operations management established a multi-disciplinary investigation team (which was transformed into the Task Team on May 1, 1989) to investigate the April 23 event, including the failed check valves and operator errors. Additionally, Operations management requested a human performance evaluation of the operator actions associated with the event.

As discussed in detail on pages 10, 12 and 13 of the Attachment to TXX-89744 dated October 13, 1989, Operations management determined that Hot Functional Testing could proceed pending completion of these evaluations. In particular, Operations management believed that the failure of operators on April 23 to operate the isolation valves in the sequence specified in the procedure was an isolated occurrence and not a generic problem. Therefore, Operations management believed that, even if a generic problem with the check valves existed, the procedural controls for the isolation valves would be sufficient to prevent recurrence of the April 23 event.



Nevertheless, Operations management took additional actions intended to prevent recurrence of the April 23 event. For example, on May 1, 1989, Operations management issued a letter to the operators stressing the need for procedural compliance, including the need to complete procedural steps in sequence. Additionally, the PIR on the April 23 event was placed in the control room for review by all shift personnel. However, for several reasons, the operators involved in the May 5 event were not made aware of the April 23 event through these and other methods. In particular, there was no requirement for operators to review the May 1 letter prior to returning to shift, the PIR on the April 23 event was removed from the control room before all operators had an opportunity to review it, and Operations management did not follow-up sufficiently to ensure that operators were made aware of the April 23 event through methods such as shift-to-shift communication.

#### Reason for Violation B.4

The May 5 event was initially understood to be similar to the April 23 event. Operations management planned to document the event on PIR-110 for the April 23 event, and the crew involved in the May 5 event was asked to submit personal statements. However, the shift involved in the event did not supply the statements until May 12 because they were off-shift. At the request of the Manager, Site Licensing, the May 5 event was documented on a separate PIR (PIR-129) on May 12, 1989. TU Electric's Task Team was aware of the May 5 event shortly after it occurred because the Manager, Operations, who was the leader of the Team, had knowledge of the May 5 event as a result of his responsibilities as the Manager, Operations.

#### 2. Corrective Steps Taken and Results Achieved

The check valves that were the subject of the 1985 event, the April 5 event, the April 23 event, and May 5 event, together with the remaining check valves of the types involved in these events, have been inspected, modified as necessary, and are undergoing testing to ensure they are properly seating. These actions are described in more detail on pages 29-31 of the Attachment to TXX-89596. Additionally, as discussed in Subsection 3 below, TU Electric has taken steps to improve the corrective action programs and has provided additional direction to personnel who evaluate plant events and equipment failures.

#### 3. Corrective Steps Which Will be Taken to Avoid Further Violations

TU Electric has taken several actions to ensure that plant events and equipment failures are properly documented, evaluated and corrected in a timely manner. These actions include the following: Operations personnel have been instructed to document the severity of problems that are reported on Work Requests, SRO's are now reviewing Work Requests to identify potentially significant multiple equipment failures and are

notifying management of such failures, operators have been directed to request assistance from System Engineers to help evaluate problems involving plant systems, the PIR program has been refined to include provisions for failure mode analyses and human performance evaluations, and PIR's are being discussed in the CPSES morning meetings on operations and plant events to provide for immediate management review and determination of the need for multi-discipline evaluations.

TU Electric has also taken several actions to ensure that personnel are made aware of plant events and equipment failures and to improve communications among shifts. In addition to the discussion of PIR's in the CPSES morning meetings on operations and plant events, administrative procedures have been revised to provide for the prompt transmission of plant incident information to Operations personnel including notification of oncoming shifts of plant events and lessons learned during the preceeding shifts, and referencing problems resulting in PIR's in the Station Log.

Finally, TU Electric has taken steps to ensure that personnel evaluate plant events and equipment failures with an operations attitude. These steps include directing personnel to immediately evaluate the impact of plant events and equipment failures on the operability of components and systems, directing personnel to review such events and failures for reportability under 10 CFR 50.72 and 50.73 and the Technical Specifications, improving provisions for notifying management of plant event and equipment failures, and reviewing work requests for operability concerns and mode restraints.

These and other relevant corrective actions are discussed in more detail on pages 35-38 of the Attachment to TXX-89596. In general, these actions include improvements in management and supervision of operations, improvements in corrective actions, improvements in communications among operators and shifts, and improvements in personnel awareness of operating events and equipment failures and of their implications for system operability.

4. Date of Full Compliance

TU Electric is in full compliance.



NOTICE OF VIOLATION  
ITEM C (445/8930-V-03)

- C. Criterion XI of Appendix B to 10 CFR Part 50 as implemented by Section 11.0, Revision 1, of the TU Electric Quality Assurance Manual requires testing to demonstrate that systems and components will perform satisfactorily in service, including requirements and acceptance limits in applicable design documents.

Contrary to the above:

- C.1 The applicant failed to provide post-modification and/or post-maintenance testing requirements for Borg-Warner check valves and did not perform testing of check valves whose internals were removed and reworked in 1983 and in 1985. As a result, the applicant failed to adequately demonstrate that these components would perform satisfactorily in service, in accordance with their applicable design requirements (see for example, the current Design Basis Documents (DBD)-ME-203 and DBD-ME-206).
- C.2 Under the applicant's preoperational test program, no testing was performed or planned, prior to plant operation, to ensure that AFW check valves were operable and capable of performing their intended function of preventing backflow. The in-service test program in effect during the conduct of hot functional testing in 1989 did not require reverse flow testing of check valves. The applicable post-work test Procedure STA-623, Revision 3, only provided reference retest guidelines for the reverse flow testing of check valves subsequent to disassembly/repair/rework. No procedures for reverse flow testing existed at the time of the April 23 and May 5, 1989 events for check valves other than those specified as reactor coolant system boundary valves and those required for containment integrity.

RESPONSE TO NOTICE OF VIOLATION  
ITEM C (445/8930-V-03)

TU Electric accepts the violation, subject to the clarifications provided below.

1. Reason for Violation C.1

Post-modification or post-maintenance backflow tests were not performed on the check valves whose internals were removed and reworked in 1983 and 1985. TU Electric believed that Section XI of the ASME code did not require that the AFW check valves be tested other than in the forward direction. Additionally, prior to issuance of Generic Letter 89-04 on April 3, 1989, TU Electric was unaware of any published regulatory guidance that required or recommended that check valves be tested for backleakage on a general basis. TU Electric believed, therefore, that its post-work test activities prior to 1988 were consistent with industry practice.

Reason for Violation C.2

TU Electric's preoperational test program is described in Chapter 14 of the Final Safety Analysis Report (FSAR) for CPSES. For the reasons stated with respect to Example C.1 above, this program did not include provisions for backflow tests of check valves.

2. Corrective Steps Taken and Results Achieved

As discussed in the corrective actions for violation 445/8930-V-02, TU Electric has inspected, modified as necessary, and is testing the type of valves involved in the 1983, 1985, April 23, and May 5 events to ensure that the valves are seating properly.

3. Corrective Steps Which Will be Taken to Prevent Recurrence

In 1989, based on an increasing body of information regarding problems with check valves, TU Electric revised its post-work test guidelines to include testing of check valves for backleakage. These post-work test guidelines are in addition to the provisions for backleakage tests under TU Electric's ASME Section XI Inservice Test (IST) Plan, which is discussed below.

In early 1989, TU Electric submitted a draft IST Plan for review by the Office of Nuclear Reactor Regulation (NRR). Based upon comments provided by NRR and independent of the April 23 and May 5 events, TU Electric revised and submitted its ASME Section XI IST Plan, Revision 3, to the NRC via TXX-89565 dated August 21, 1989. Also, in response to an NRC request for additional information, TU Electric submitted changes to Revision 3 of the IST Plan (Interim Change Request Nos. IST-R3-001 and IST-R3-002) via TXX-89734 dated November 15, 1989. This revised plan identified additional check valves requiring reverse flow testing. Such valves will be tested in the reverse direction except where plant configuration does not permit such testing. Check valves in this latter category will be verified operable through partial disassembly as reflected in the ASME Section XI exception process. The testing of valves covered by the IST Plan will be performed prior to declaring the associated system Technical Specification operable and periodically thereafter as prescribed by the TU Electric IST Plan. This testing will have the capability of detecting the potential for the type of backleakage that occurred during the April 23 and May 5 events.

4. Date of Full Compliance

TU Electric is in full compliance.



notifying management of such failures, operators have been directed to request assistance from System Engineers to help evaluate problems involving plant systems, the PIR program has been refined to include provisions for failure mode analyses and human performance evaluations, and PIR's are being discussed in the CPSES morning meetings on operations and plant events to provide for immediate management review and determination of the need for multi-discipline evaluations.

TU Electric has also taken several actions to ensure that personnel are made aware of plant events and equipment failures and to improve communications among shifts. In addition to the discussion of PIR's in the CPSES morning meetings on operations and plant events, administrative procedures have been revised to provide for the prompt transmission of plant incident information to Operations personnel including notification of oncoming shifts of plant events and lessons learned during the preceeding shifts, and referencing problems resulting in PIR's in the Station Log.

Finally, TU Electric has taken steps to ensure that personnel evaluate plant events and equipment failures with an operations attitude. These steps include directing personnel to immediately evaluate the impact of plant events and equipment failures on the operability of components and systems, directing personnel to review such events and failures for reportability under 10 CFR 50.72 and 50.73 and the Technical Specifications, improving provisions for notifying management of plant event and equipment failures, and reviewing work requests for operability concerns and mode restraints.

These and other relevant corrective actions are discussed in more detail on pages 35-38 of the Attachment to TXX-89596. In general, these actions include improvements in management and supervision of operations, improvements in corrective actions, improvements in communications among operators and shifts, and improvements in personnel awareness of operating events and equipment failures and of their implications for system operability.

4. Date of Full Compliance

TU Electric is in full compliance.

NOTICE OF VIOLATION  
ITEM C (445/8930-V-03)

- C. Criterion XI of Appendix B to 10 CFR Part 50 as implemented by Section 11.0, Revision 1, of the TU Electric Quality Assurance Manual requires testing to demonstrate that systems and components will perform satisfactorily in service, including requirements and acceptance limits in applicable design documents.

Contrary to the above:

- C.1 The applicant failed to provide post-modification and/or post-maintenance testing requirements for Borg-Warner check valves and did not perform testing of check valves whose internals were removed and reworked in 1983 and in 1985. As a result, the applicant failed to adequately demonstrate that these components would perform satisfactorily in service, in accordance with their applicable design requirements (see for example, the current Design Basis Documents (DBD)-ME-203 and DBD-ME-206).
- C.2 Under the applicant's preoperational test program, no testing was performed or planned, prior to plant operation, to ensure that AFW check valves were operable and capable of performing their intended function of preventing backflow. The in-service test program in effect during the conduct of hot functional testing in 1989 did not require reverse flow testing of check valves. The applicable post-work test Procedure STA-623, Revision 3, only provided reference retest guidelines for the reverse flow testing of check valves subsequent to disassembly/repair/rework. No procedures for reverse flow testing existed at the time of the April 23 and May 5, 1989 events for check valves other than those specified as reactor coolant system boundary valves and those required for containment integrity.

RESPONSE TO NOTICE OF VIOLATION  
ITEM C (445/8930-V-03)

TU Electric accepts the violation, subject to the clarifications provided below.

1. Reason for Violation C.1

Post-modification or post-maintenance backflow tests were not performed on the check valves whose internals were removed and reworked in 1983 and 1985. TU Electric believed that Section XI of the ASME code did not require that the AFW check valves be tested other than in the forward direction. Additionally, prior to issuance of Generic Letter 89-04 on April 3, 1989, TU Electric was unaware of any published regulatory guidance that required or recommended that check valves be tested for backleakage on a general basis. TU Electric believed, therefore, that its post-work test activities prior to 1988 were consistent with industry practice.



Reason for Violation C.2

TU Electric's preoperational test program is described in Chapter 14 of the Final Safety Analysis Report (FSAR) for CPSES. For the reasons stated with respect to Example C.1 above, this program did not include provisions for backflow tests of check valves.

2. Corrective Steps Taken and Results Achieved

As discussed in the corrective actions for violation 445/8930-V-02, TU Electric has inspected, modified as necessary, and is testing the type of valves involved in the 1983, 1985, April 23, and May 5 events to ensure that the valves are seating properly.

3. Corrective Steps Which Will be Taken to Prevent Recurrence

In 1989, based on an increasing body of information regarding problems with check valves, TU Electric revised its post-work test guidelines to include testing of check valves for backleakage. These post-work test guidelines are in addition to the provisions for backleakage tests under TU Electric's ASME Section XI Inservice Test (IST) Plan, which is discussed below.

In early 1989, TU Electric submitted a draft IST Plan for review by the Office of Nuclear Reactor Regulation (NRR). Based upon comments provided by NRR and independent of the April 23 and May 5 events, TU Electric revised and submitted its ASME Section XI IST Plan, Revision 3, to the NRC via TXX-89565 dated August 21, 1989. Also, in response to an NRC request for additional information, TU Electric submitted changes to Revision 3 of the IST Plan (Interim Change Request Nos. IST-R3-001 and IST-R3-002) via TXX-89734 dated November 15, 1989. This revised plan identified additional check valves requiring reverse flow testing. Such valves will be tested in the reverse direction except where plant configuration does not permit such testing. Check valves in this latter category will be verified operable through partial disassembly as reflected in the ASME Section XI exception process. The testing of valves covered by the IST Plan will be performed prior to declaring the associated system Technical Specification operable and periodically thereafter as prescribed by the TU Electric IST Plan. This testing will have the capability of detecting the potential for the type of backleakage that occurred during the April 23 and May 5 events.

4. Date of Full Compliance

TU Electric is in full compliance.