



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D. C. 20555

NIAGARA MOHAWK POWER CORPORATION

DOCKET NO. 50-220

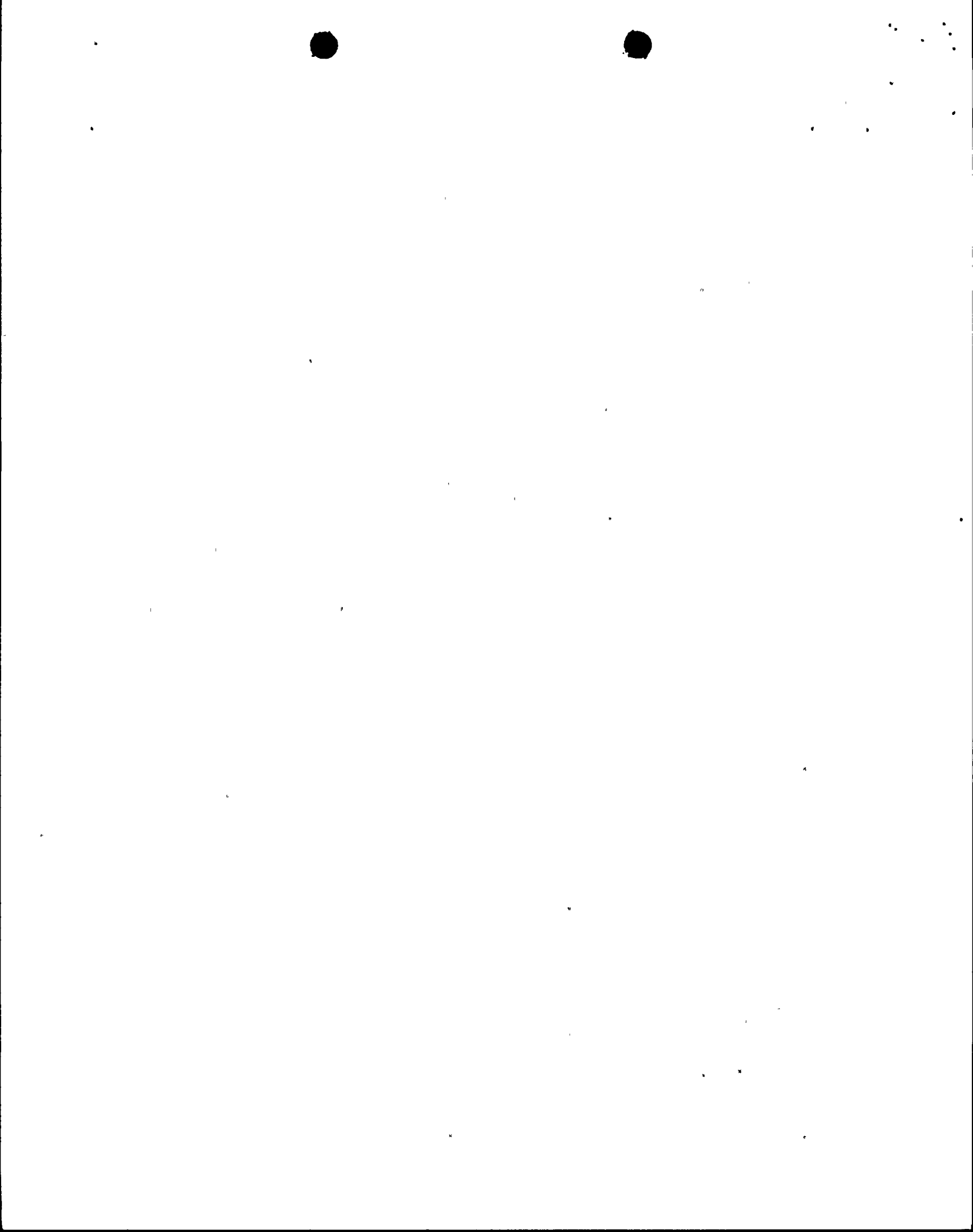
NINE MILE POINT NUCLEAR STATION, UNIT NO. 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 86  
License No. DPR-63

1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by Niagara Mohawk Power Corporation (the licensee) dated March 21, 1984 as supplemented and clarified December 31, 1985 and April 24, 1986, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act) and the Commission's rules and regulations set forth in 10 CFR Chapter I;
  - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
  - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
  - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
  - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Facility Operating License No. DPR-63 is hereby amended to read as follows:

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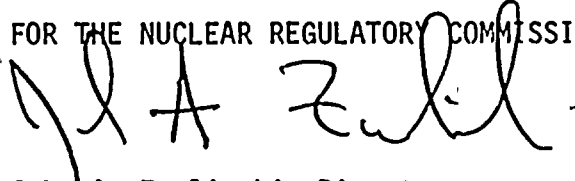


(2) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 86, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of the date of its issuance.

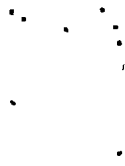
FOR THE NUCLEAR REGULATORY COMMISSION



John A. Zwolinski, Director  
BWR Project Directorate #1  
Division of BWR Licensing

Attachment:  
Changes to the Technical  
Specifications

Date of Issuance: June 12, 1986



ATTACHMENT TO LICENSE AMENDMENT NO. 86

FACILITY OPERATING LICENSE NO. DPR-63

DOCKET NO. 50-220

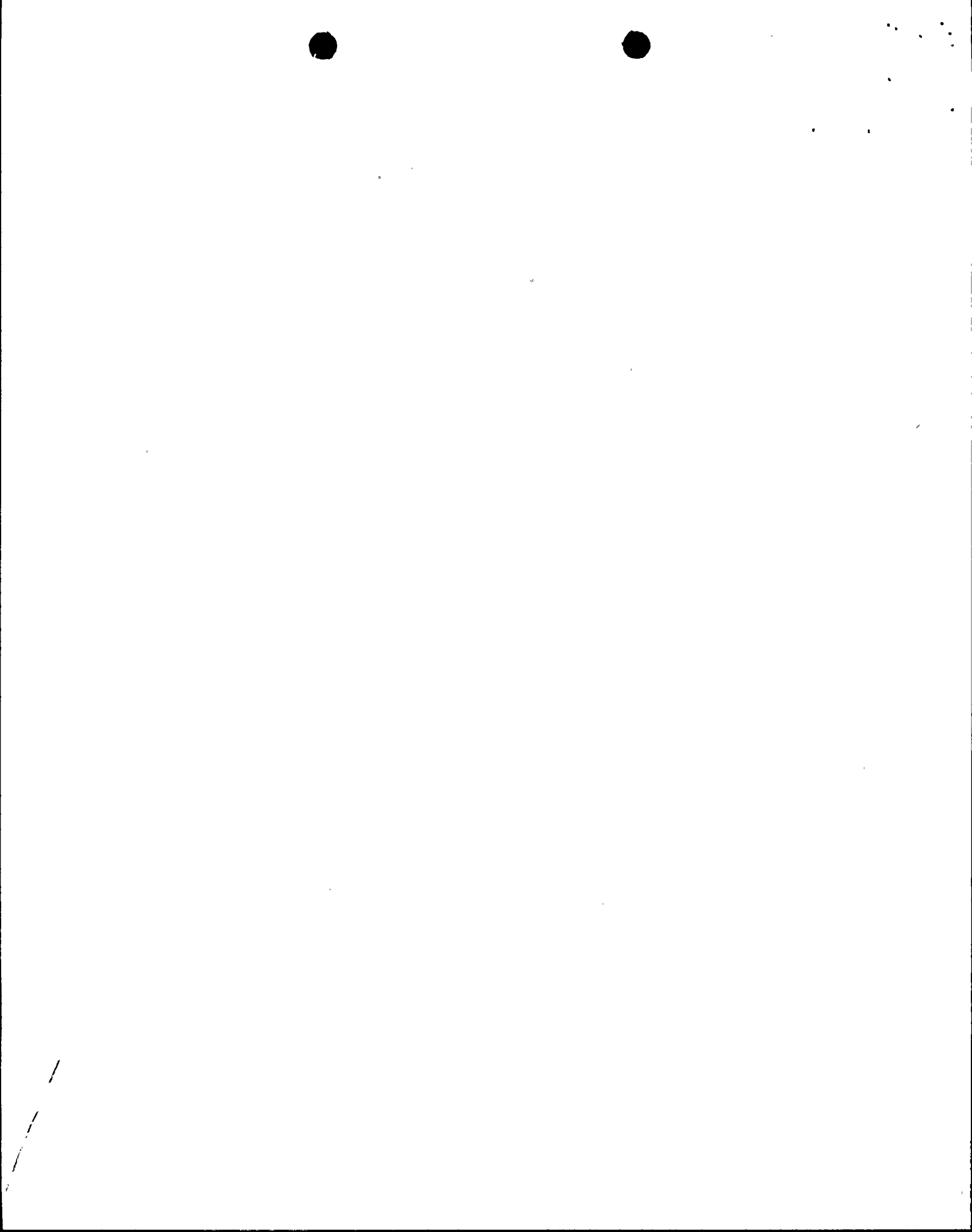
Revise the Appendix A Technical Specifications by removing the pages identified below and inserting the attached pages. The revised pages are identified by the captioned amendment number and contain marginal lines indicating the area of change.

REMOVE

57  
58  
59  
123

INSERT

57  
58  
59  
123  
123a



LIMITING CONDITION FOR OPERATION

3.1.5 SOLENOID-ACTUATED PRESSURE RELIEF VALVES  
(AUTOMATIC DEPRESSURIZATION SYSTEM)

Applicability:

Applies to the operational status of the solenoid-actuated relief valves.

Objective:

To assure the capability of the solenoid-actuated pressure relief valves to provide a means of depressurizing the reactor in the event of a small line break to allow full flow of the core spray system.

Specification:

- a. During power operating condition whenever the reactor coolant pressure is greater than 110 psig and the reactor coolant temperature is greater than saturation temperature, all six solenoid-actuated pressure relief valves shall be operable.
- b. If specification 3.1.5a above is not met, the reactor coolant pressure and the reactor coolant temperature shall be reduced to 110 psig or less and saturation temperature or less, respectively, within ten hours.

SURVEILLANCE REQUIREMENT

4.1.5 SOLENOID-ACTUATED PRESSURE RELIEF VALVES  
(AUTOMATIC DEPRESSURIZATION SYSTEM)

Applicability:

Applies to the periodic testing requirements for the solenoid-actuated pressure relief valves.

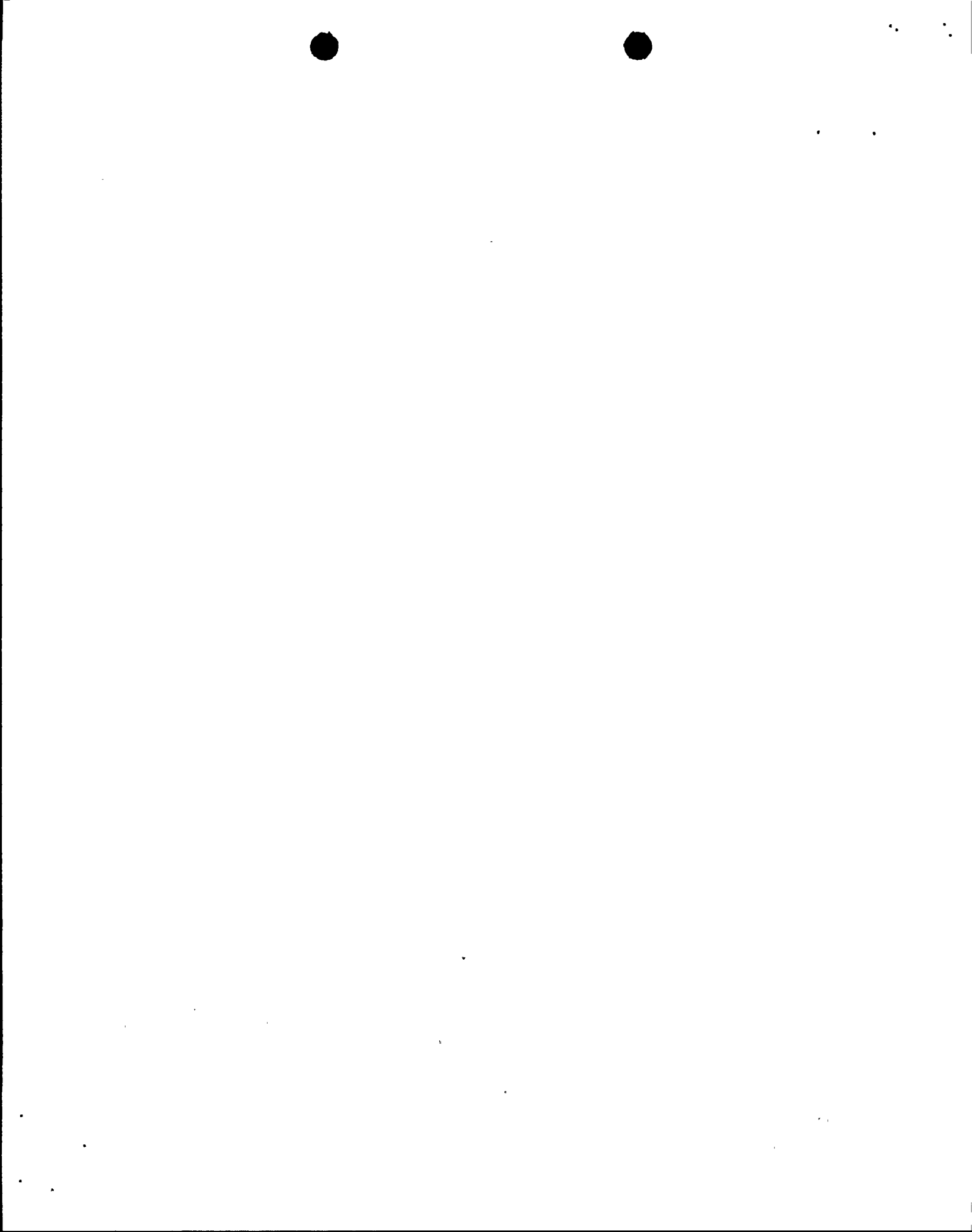
Objective:

To assure the operability of the solenoid-actuated pressure relief valves to perform their intended functions.

Specification:

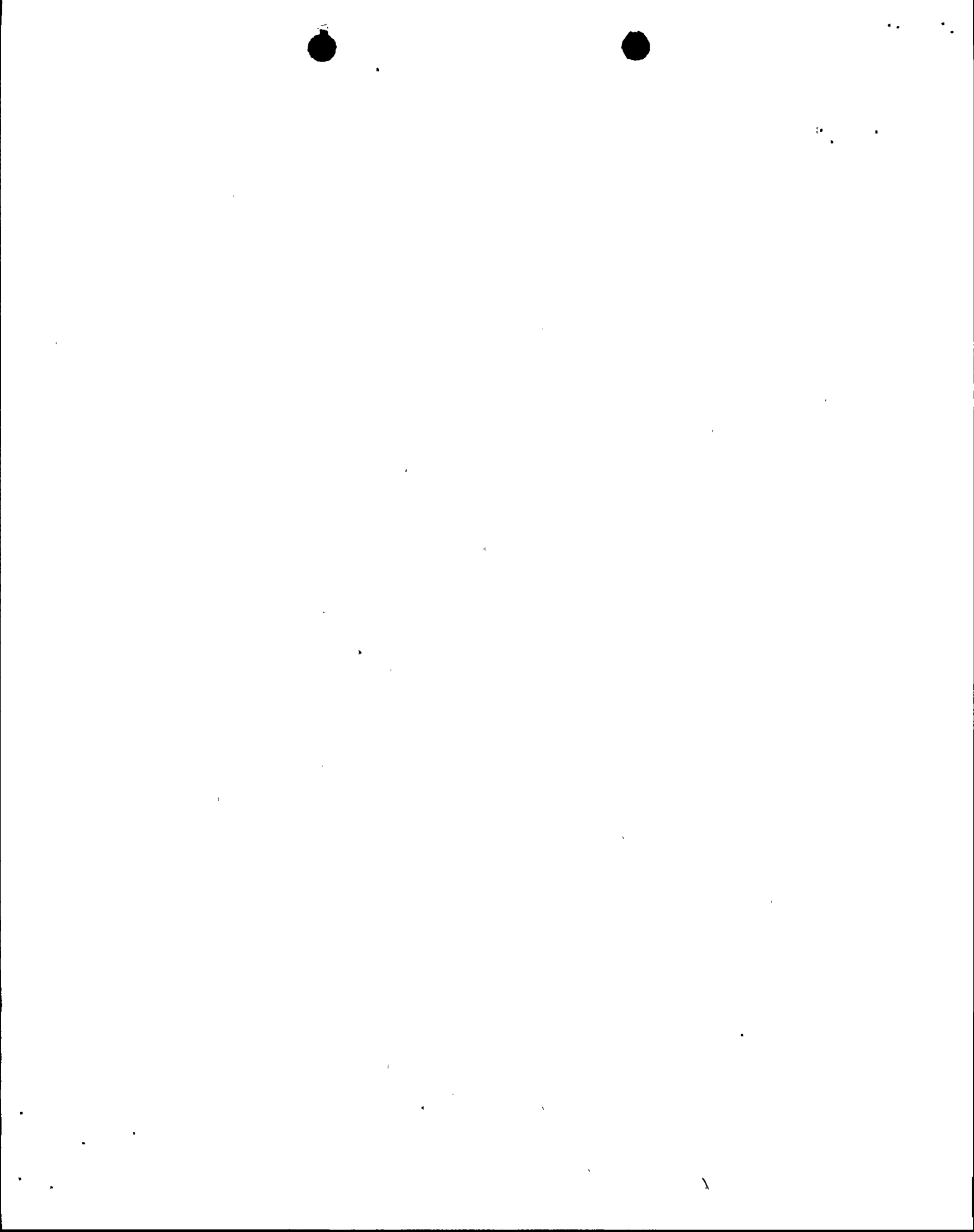
The solenoid-actuated pressure relief valve surveillance shall be performed as indicated below.

- a. At least once during each operating cycle with the reactor at pressure, each valve shall be manually opened until acoustic monitors or thermocouples downstream of the valve indicate that the valve has opened and steam is flowing from the valve.
- b. At least once during each operating cycle, automatic initiation shall be demonstrated.





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## BASES FOR 3.1.5 AND 4.1.5 SOLENOID-ACTUATED PRESSURE RELIEF VALVES

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### Pressure Blowdown

In the event of a small line break, substantial coolant loss could occur from the reactor vessel while it was still at relatively high pressures. A pressure blowdown system is provided which in conjunction with the core spray system will prevent significant fuel damage for all sized line breaks (Appendix E-11.2.0\*).

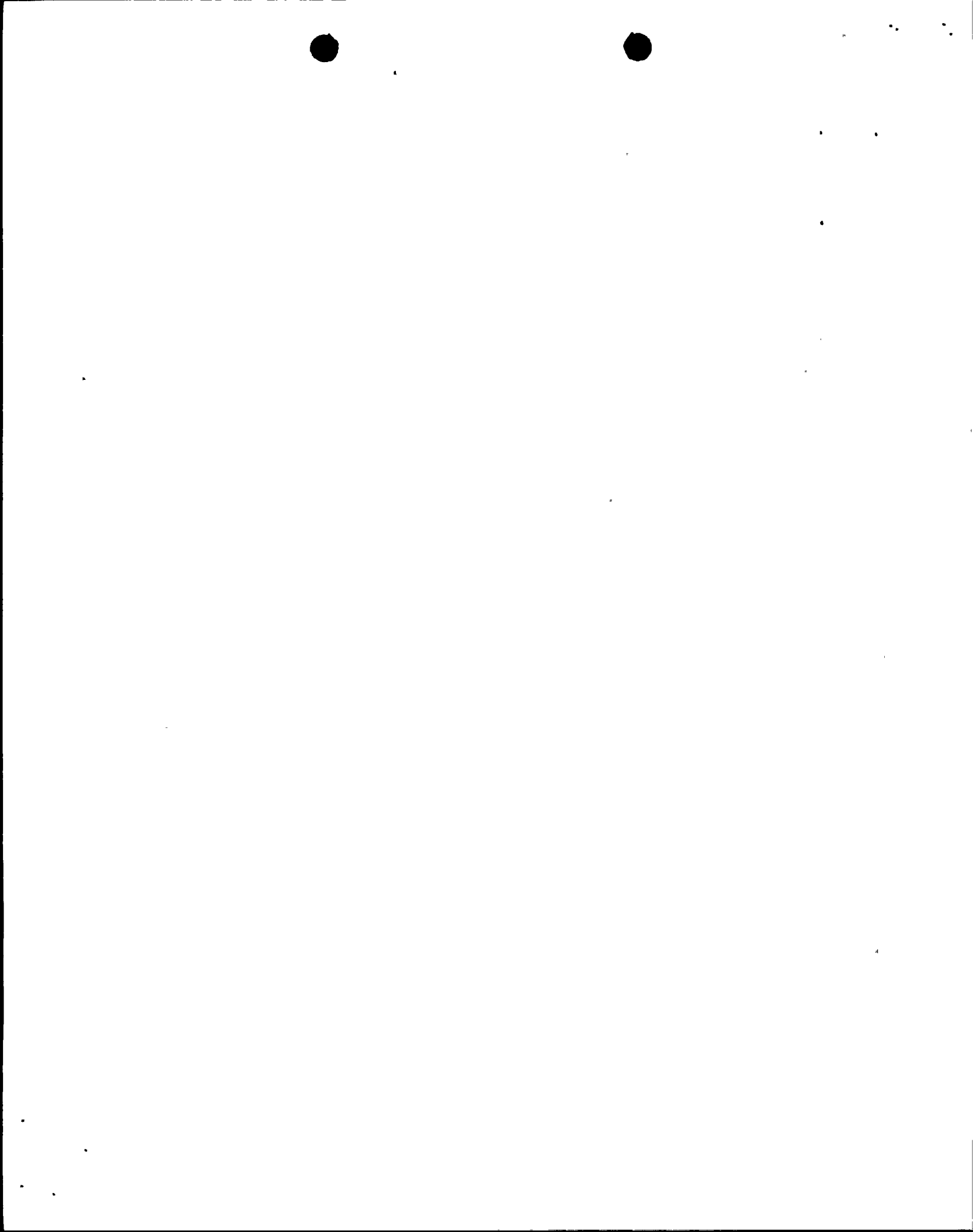
Operation of three solenoid-actuated pressure relief valves is sufficient to depressurize the primary system to 110 psig which will permit full flow of the core spray system within required time limits (Appendix E-11.2\*). Requiring all six of the relief valves to be operable, therefore, provides twice the minimum number required. Prior to or following refueling at low reactor pressure, each valve will be manually opened to verify valve operability. The malfunction analysis (Section II.XV, "Technical Supplement to Petition to Increase Power Level", dated April 1970) demonstrates that no serious consequences result if one valve fails to close since the resulting blowdown is well within design limits.

In the event of a small line break, considerable time is available for the operator to permit core spray operation by manually depressurizing the vessel using the solenoid-actuated valves. However, to ensure that the depressurization will be accomplished, automatic features are provided. The relief valves shall be capable of automatic initiation from simultaneous low-low-low water level (6 feet, 3 inches below minimum normal water level at Elevation 302'-9", -10 inches indicator scale) and high containment pressure (3.5 psig). The system response to small breaks requiring depressurization is discussed in Section VII-A.3.3\* and the time available to take operator action is summarized in Table VII-1\*. Additional information is included in the answers to Questions III-1 and III-5 of the First Supplement.

Steam from the reactor vessel is discharged to the suppression chamber during valve testing. Conducting the tests with the reactor at nominal operating pressure is appropriate because 1) adequate redundant safety systems are provided to ensure adequate core cooling in the event of a small break loss of feedwater, and multiple relief valve failures, 2) dynamic loads and suppression pool heatups associated with high pressure testing are within allowable limits, and 3) testing at nominal operating pressures enhances plant safety and availability by assuring the relief valves can operate under normal operating conditions.

The test interval of once per operating cycle results in a system failure probability of  $7.0 \times 10^{-7}$  (Fifth Supplement, p. 115)\* and is consistent with practical consideration.

\* FSAR



LIMITING CONDITION FOR OPERATION

SURVEILLANCE REQUIREMENT

3.2.9 PRESSURE RELIEF SYSTEMS - SOLENOID-ACTUATED PRESSURE RELIEF VALVES (OVERPRESSURIZATION)

Applicability:

Applies to the operational status of the solenoid-actuated pressure relief valves.

Objective:

To assure the capability of the solenoid-actuated pressure relief valves to limit reactor overpressure below the lowest safety valve setpoint in the event of rapid reactor isolation.

Specification:

- a. During the power operating condition and whenever the reactor coolant pressure is greater than 110 psig and temperature greater than saturation, five of the six solenoid-actuated pressure relief valves shall be operable.
- b. If Specification 3.2.9a is not met, the reactor coolant pressure and temperature shall be reduced to 110 psig or less and saturation temperature or less, respectively, within ten hours.

4.2.9 PRESSURE RELIEF SYSTEMS - SOLENOID-ACTUATED PRESSURE RELIEF VALVES (OVERPRESSURIZATION)

Applicability:

Applies to the periodic testing requirements for the solenoid-actuated pressure relief valves.

Objective:

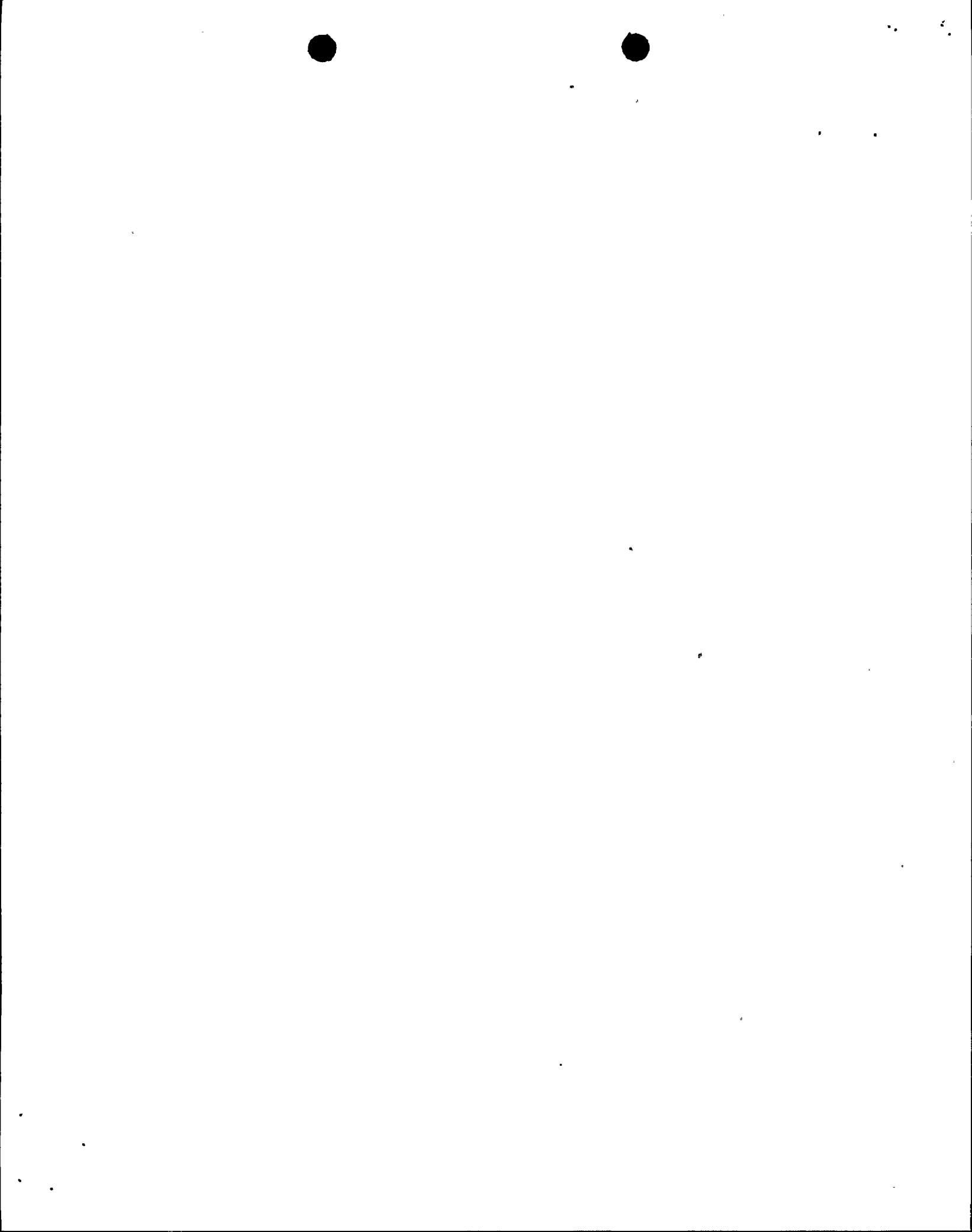
To assure the operability of the solenoid-actuated pressure relief valves to limit reactor overpressure in the event of rapid reactor isolation.

Specification:

The solenoid-actuated pressure relief valve surveillance shall be performed as indicated below.

- a. The setpoints of the six relief valves shall be as follows:

<u>No. of Valves</u>	<u>Setpoint</u>
2	≤ 1090 psig
2	≤ 1095 psig
2	≤ 1100 psig



LIMITING CONDITION FOR OPERATION

SURVEILLANCE REQUIREMENT

4.2.9 PRESSURE RELIEF SYSTEMS - SOLENOID-ACTUATED  
PRESSURE RELIEF VALVES (OVERPRESSURIZATION)

Specification: (Continued)

- b. At least once during each operating cycle with the reactor at pressure, each valve shall be manually opened until acoustic monitors or thermocouples downstream of the valve indicate that the valve has opened and steam is flowing from the valve.
- c. At least once during each operating cycle, relief valve setpoints shall be verified.

