

3.5.F Automatic Depressurization System
(ADS)1. Normal System Availability

The seven valves of the Automatic Depressurization System shall be operable:

- a. Prior to reactor startup from a cold shutdown, or
- b. When there is irradiated fuel in the reactor vessel and the reactor is above 113 psig except as stated in Specification 3.5.F.2.

2. Operation with Inoperable Components

If one of the seven ADS valves is known to be incapable of automatic operation, the reactor may remain in operation for a period not to exceed seven (7) days, provided the HPCI system is operable. (Note that the pressure relief function of these valves is assured by Specification 3.6.H; Specification 3.5.F only applies to the ADS function).

3. Shutdown Requirements

If Specification 3.5.F.1 or 3.5.F.2 cannot be met, an orderly shutdown will be initiated and the reactor pressure shall be reduced to 113 psig or less within 24 hours.

4.5.F Automatic Depressurization System
(ADS)1. Normal Operational Tests

- a. A simulated automatic actuation test shall be performed on the ADS prior to startup after each refueling outage. Surveillance of all relief valves is covered in Specification 4.6.H.
- b. A leak rate test of each ADS valve accumulator, check valve, and actuator assembly shall be performed during each refueling outage at a pressure of 90+18 psig. The leakage rate shall be verified to be ≤ 4.5 SCFH.

2. Surveillance with Inoperable Components

When it is determined that one of the seven ADS valves is incapable of automatic operation, the HPCI system and the actuation logic of the other ADS valves shall be demonstrated to be operable immediately and daily thereafter until all seven ADS valves are capable of automatic operation.

3.5.F.1 Normal System Availability (continued)

Specification 3.6 states the requirements for the pressure relief function of the valves. It is possible for any number of the valves assigned to the ADS to be incapable of performing their ADS functions because of instrumentation failures yet be fully capable of performing their pressure relief function.

Because the automatic depressurization system does not provide makeup to the reactor primary vessel, no credit is taken for the steam cooling of the core caused by the system actuation to provide further conservatism to the Core Standby Cooling Systems.

The ADS valve accumulators are sized such that, following loss of the pneumatic supply, at least two valve actuations will be possible with the drywell at 70% of its design pressure. This drywell pressure results from the largest break which could lead to the need for rapid depressurization through the ADS valves. The allowable accumulator leakage criterion ensures the above capability for 30 minutes following loss of the pneumatic supply.

2. Operation with Inoperable Components

With one ADS valve known to be incapable of automatic operation six valves remain operable to perform their ADS function. However, since the ECCS Loss of Coolant Accident analysis for small line breaks assumed that all seven ADS valves were operable, reactor operation with one ADS valve inoperable is only allowed to continue for seven (7) days provided that the HPCI system is demonstrated to be operable and that the actuation logic for the (remaining) six ADS valves is demonstrated to be operable.

3. Minimum Core and Containment Cooling Systems Availability

The purpose of this Specification is to assure that adequate core cooling equipment is available at all times. If, for example, one core spray loop were out of service and the diesel which powered the opposite core spray were out of service, only 2 RHR pumps would be available. Specification 3.9 must also be consulted to determine other requirements for the diesel generators. In addition, refer to definition 1.0.00 for Cumulative Downtime requirements.

This specification establishes conditions for the performance of major maintenance, such as draining of the suppression pool. The availability of the shutdown cooling subsystem of the RHR system and the RHR service water system ensure adequate supplies of reactor cooling and emergency makeup water when the reactor is in the Cold Shutdown condition. In addition this specification provides that, should major maintenance be performed, no work will be performed which could lead to draining the water from the reactor vessel.

ENCLOSURE 2

NRC DOCKET 50-366
OPERATING LICENSE NPF-5
EDWIN I. HATCH NUCLEAR PLANT UNIT 2
REQUEST TO AMEND TECHNICAL SPECIFICATIONS

The proposed change to the Unit 2 Technical Specifications (Appendix A to Operating License NPF-5) would be incorporated as follows:

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EMERGENCY CORE COOLING SYSTEMS

3/4.5.2 AUTOMATIC DEPRESSURIZATION SYSTEM

LIMITING CONDITION FOR OPERATION

3.5.2 The Automatic Depressurization System (ADS) shall be OPERABLE with at least seven OPERABLE ADS valves.

APPLICABILITY: CONDITIONS 1, 2 and 3 with reactor vessel steam dome pressure > 150 psig.

ACTION:

- a. With one of the above required ADS valves inoperable, POWER OPERATION may continue provided the HPCI, CSS and LPCI systems are OPERABLE; restore the inoperable ADS valve to OPERABLE status within 14 days or be in at least HOT SHUTDOWN within the next 12 hours and reduce reactor vessel steam dome pressure to ≤ 150 psig within the following 24 hours.
- b. With two or more of the above required ADS valves inoperable, be in at least HOT SHUTDOWN within 12 hours and reduce reactor steam dome pressure to 150 psig within the next 24 hours.
- c. With the Surveillance Requirement of Specification 4.5.2.b not performed at the required interval due to low reactor steam pressure, the provisions of Specification 4.0.4 are not applicable provided the appropriate surveillance is performed within 12 hours after reactor steam pressure is adequate to perform the tests.

SURVEILLANCE REQUIREMENTS

4.5.2 The ADS shall be demonstrated OPERABLE at least once per 18 months by:

- a. Performing a system functional test which includes simulated automatic actuation of the system throughout its emergency operating sequence, but excluding actual valve actuation.
- b. Manually opening each ADS valve when the reactor steam dome pressure is ≥ 100 psig and observing that either;
 1. The control valve or bypass valve position responds accordingly, or
 2. There is a corresponding change in the measured steam flow.
- c. Performing a leak rate test of each ADS valve accumulator, check valve, and actuator assembly at a pressure of 90 ± 18 psig. The leakage rate shall be verified to be ≤ 4.5 SCFH.

EMERGENCY CORE COOLING SYSTEMS

BASES

AUTOMATIC DEPRESSURIZATION SYSTEM (Continued)

ADS automatically controls seven selected safety-relief valves although the hazards analysis only takes credit for six valves. It is therefore appropriate to permit one valve to be out-of-service for 14 days without materially reducing system reliability.

The ADS valve accumulators are sized such that, following loss of the pneumatic supply, at least two valve actuations will be possible with the drywell at 70% of its design pressure. This drywell pressure results from the largest break which could lead to the need for rapid depressurization through the ADS valves. The allowable accumulator leakage criterion ensures the above capability for 30 minutes following loss of the pneumatic supply.

3/4.5.3 LOW PRESSURE CORE COOLING SYSTEMS

3/4.5.3.1 CORE SPRAY SYSTEM

The core spray system (CSS) is provided to assure that the core adequately cooled following a loss-of-coolant accident. Two subsystems provide adequate core cooling capacity for all break sizes from 0.2 ft² up to and including the double-ended reactor recirculation line break, and for smaller breaks following depressurization by the ADS.

The CSS specifications are applicable during all OPERATIONAL CONDITIONS because the CSS is a primary source of emergency core cooling after the reactor vessel is depressurized and to provide a source for flooding of the core in case of accidental draining.

When in CONDITION 1, 2 or 3 with one CSS subsystem inoperable, the OPERABILITY of the redundant full capacity CSS subsystem and the full capacity low pressure coolant injection mode of the RHR system provides assurance of adequate core cooling and justifies the specified 7 day out-of-service period.

When in CONDITION 4 or 5 with neither CSS subsystem OPERABLE, prohibition of all operations which have a potential for draining the reactor vessel minimizes the probability of emergency core cooling being required. The required OPERABILITY of both LPCI subsystems or, in CONDITION 5 only, requiring the reactor vessel to be flooded with the fuel pool gates removed, provides assurance of adequate core flooding and the restrictions on operations are not applicable.

The surveillance requirements provide adequate assurance that the CSS will be OPERABLE when required. Although all active components are testable and full flow can be demonstrated by recirculation during reactor operation, a complete functional test requires reactor shutdown. The pump discharge piping is maintained full to prevent water hammer damage to piping and to start cooling at the earliest moment.

ENCLOSURE 3

NRC DOCKETS 50-321, 50-366
OPERATING LICENSES DPR-57, NPF-5
EDWIN I. HATCH NUCLEAR PLANT UNITS 1, 2
REQUEST TO AMEND TECHNICAL SPECIFICATIONS

Pursuant to 10 CFR 50.92, Georgia Power Company has evaluated the attached proposed amendments and has determined that their adoption would not involve a significant hazard. The basis for this determination is as follows:

a. PROPOSED CHANGE

Add to the ADS surveillance requirements (Unit 1 Technical Specification 4.5.F.1 and Unit 2 Technical Specification 4.5.2) a leak rate test of each ADS accumulator system which is to be performed at least once per operating cycle. The test is to be performed at a pressure of 90 ± 18 psig and the acceptance criterion for leakage is to be 4.5 SCFH or less.

BASIS

This change constitutes an additional restriction not presently included in the Technical Specifications. This change does not affect the probability or consequences of an accident or malfunction analyzed in the FSAR. This change does not create the possibility of an accident or malfunction of a different type than any analyzed in the FSAR. The margin of safety as defined in the basis for any Technical Specification is not affected by this change. The effect of this change is therefore within the acceptance criteria and the change is consistent with Item (ii) of "Examples of Amendments that are Considered Not Likely to Involve Significant Hazards Considerations" listed on page 14,870 of the April 6, 1983 issue of the Federal Register.

b. PROPOSED CHANGE

Change bases to reflect the above change.

BASIS

This is a purely administrative change to the Technical Specifications. This change does not affect the probability or consequences of an accident or malfunction analyzed in the FSAR. The margin of safety as defined in the basis for any Technical Specification is not affected. The effect of this change is therefore within the acceptance criteria and the change is consistent with Item (i) of the "Examples of Amendments that are Considered Not Likely to Involve Significant Hazards Considerations" listed on page 14,870 of the April 6, 1983, issue of the Federal Register.