

ADMINISTRATIVE CONTROLS

6.8.3 Temporary changes to procedures of 6.8.1 above may be made provided:

- a. The intent of the original procedure is not altered.
- b. The change is approved by two members of the plant management staff, at least one of whom holds a Senior Reactor Operator's License on the unit affected.
- c. The change is documented, reviewed by the SRB and approved by the Station Superintendent within 14 days of implementation.

ADD → 6.8.4 SEE ATTACHED

6.9 REPORTING REQUIREMENTS

ROUTINE REPORTS AND REPORTABLE OCCURRENCES

6.9.1 In addition to the applicable reporting requirements of Title 10, Code of Federal Regulations, the following reports shall be submitted to the Director of the Regional Office of Inspection and Enforcement unless otherwise noted.

STARTUP REPORT

6.9.1.1 A summary report of plant startup and power escalation testing shall be submitted following (1) receipt of an operating license, (2) amendment to the license involving a planned increase in power level, (3) installation of fuel that has a different design or has been manufactured by a different fuel supplier, and (4) modifications that may have significantly altered the nuclear, thermal, or hydraulic performance of the plant.

6.9.1.2 The report shall address each of the tests identified in the FSAR and shall include a description of the measured values of the operating conditions or characteristics obtained during the test program and a comparison of these values with design predictions and specifications. Any corrective actions that were required to obtain satisfactory operation shall also be described. Any additional specific details required in license conditions based on other commitments shall be included in this report.

6.9.1.3 Startup reports shall be submitted within (1) 90 days following completion of the startup test program, (2) 90 days following resumption or commencement of commercial power operation, or (3) 9 months following initial criticality, whichever is earliest. If the Startup Report does not cover all three events (i.e., initial criticality, completion of startup test program, and resumption or commencement of commercial

6.8.4 The following programs shall be established, implemented, and maintained:

a. Primary Coolant Sources Outside Containment

A program to reduce leakage from those portions of systems outside containment that could contain highly radioactive fluids during a serious transient or accident to as low as practical levels. The systems include makeup, letdown, seal injection, seal return, low pressure injection, containment spray, high pressure injection, waste gas, primary sampling and reactor coolant drain systems. The program shall include the following:

- (i) Preventive maintenance and/or periodic visual inspection requirements, and
- (ii) Integrated leak test requirements for each system at refueling cycle intervals or less.

b. In-Plant Radiation Monitoring

A program which will ensure the capability to accurately determine the airborne iodine concentration in vital areas under accident conditions. This program shall include the following:

- (i) Training of personnel,
- (ii) Procedures for monitoring, and
- (iii) Provisions for maintenance of sampling and analysis equipment.

Docket No. 50-346

License No. NPF-3

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Attachment II

- I. Change to Davis-Besse Nuclear Power Station Unit 1, Appendix A
Technical Specifications Section 3.3.2.3, 4.3.2.3, Table 3.3-15,
4.3-15 and bases
 - A. Time required to Implement
This change is to be effective upon NRC approval and installation
of the ARTS System
 - B. Reason for Change (Facility Change Request 79-283 Rev. A & B)
To comply with NUREG 0737 Item II K.2.10 Safety-Grade Trip
(Final ARTS)
 - C. Safety Evaluation
See Attached

SAFETY EVALUATION

This License Amendment Request (LAR) provides new Technical Specifications for "Limiting Condition for Operation" and surveillance requirements for the safety grade Anticipatory Reactor Trip System (ARTS). This LAR also calls for withdrawing the original submittal (July 13, 1979 Serial 527) of Technical Specification for the control grade interim ARTS. The previous submittal has not been acted upon by the NRC and since the control grade ARTS will be superceded by the safety grade ARTS following the 1982 refueling outage, further action on the previous submittal is not required and this withdrawal does not involve an unreviewed safety question.

Without the institution of ARTS in the facility, when the main turbine trips at reactor power greater than 25% of full power, the ICS will initiate a reactor power runback and the unit should stabilize when the reactor power reaches a level less than 25% full power. However, if the ICS is not properly tuned, high RCS pressure may occur causing a RPS reactor trip. The institution of ARTS, in this case, is to prevent the ICS from challenging the RPS. In the event that both of the main feed pump turbines are lost, the ARTS will anticipate the problem and trip the reactor before the RCS reaches the RPS high pressure trip setpoint. ARTS is not required for the case when the main turbine trips at reactor power less than 25% full power since the turbine bypass valves are designed to fully handle this condition without challenging the RPS for tripping the reactor or without changing the reactor power or turbine header pressure.

The installation of Arts will not degrade any safety function of the Reactor Protection System or SFRCS since ARTS is not intended to replace RPS or SFRCS. The safety grades ARTS will replace all of the functions of the control grade ARTS.

The new Technical Specifications are considered to be adequate to demonstrate and ensure the continued operability of ARTS. The surveillance requirement specified for this system ensure that the overall system functional capability is maintained and the periodic surveillance tests performed at the minimum frequencies are sufficient to demonstrate this capability.

Pursuant to the above, it is concluded that the proposed Technical Specifications changes do not involve an unreviewed safety question.

3.3.2.3 The Anticipatory Reactor Trip System instrumentation channels of Table 3.3-15 shall be OPERABLE.

APPLICABILITY: As shown in Table 3.3-15

ACTION: AS SHOWN IN TABLE 3.3-15

SURVEILLANCE REQUIREMENTS

4.3.2.3 The Anticipatory Reactor Trip System shall be demonstrated OPERABLE by the performance of the CHANNEL CHECK, CHANNEL CALIBRATION and CHANNEL FUNCTIONAL TEST during the modes and at the frequencies shown in Table 4.3-15.

INSTRUMENTATION

ANTICIPATORY REACTOR TRIP SYSTEM INSTRUMENTATION

LIMITING CONDITION FOR OPERATION

3.3.2.3 The Anticipatory Reactor Trip System instrumentation channels of Table 3.3-15 shall be OPERABLE.

APPLICABILITY: As shown in Table 3.3-15

ACTION: AS SHOWN IN TABLE 3.3-15

SURVEILLANCE REQUIREMENTS

4.3.2.3 The Anticipatory Reactor Trip System shall be demonstrated OPERABLE by the performance of the CHANNEL CHECK, CHANNEL CALIBRATION and CHANNEL FUNCTIONAL TEST during the modes and at the frequencies shown in Table 4.3-15.

TABLE 3.3-15

ANTICIPATORY REACTOR TRIP SYSTEM INSTRUMENTATION

<u>FUNCTIONAL UNIT</u>	<u>TOTAL NO. OF CHANNELS</u>	<u>CHANNELS TO TRIP</u>	<u>MINIMUM CHANNELS OPERABLE</u>	<u>APPLIC- ABLE MODES</u>	<u>ACTION</u>
1. Turbine Trip	4	2	3	1*	16
2. Main Feed Pump Turbine Trip	4	2	3	1,2	17
3. Output Logic	4	2	3	1,2	18

ACTION 16 - With the number of channels OPERABLE one less than required by the Minimum Channels OPERABLE requirements, restore the inoperable channel to OPERABLE status within 72 hours or reduce reactor power to less than 25% full power within the next 6 hours.

ACTION 17 - With the number of channels OPERABLE one less than required by the Minimum Channels OPERABLE requirements, restore the inoperable channel to OPERABLE status within 72 hours or be in at least HOT STANDBY within the next 6 hours.

ACTION 18 - With the number of OPERABLE channels one less than the Total Number of Channels, STARTUP and POWER OPERATION may proceed provided both of the following conditions are satisfied:

- a) The control rod drive trip breaker associated with the inoperable channel is placed in the tripped condition within one hour.
- b) The Minimum Channels OPERABLE requirement is met; however, one additional control rod drive trip breaker associated with another channel may be tripped for up to 2 hours for surveillance testing per Specification 4.3.2.3, after reclosing the control rod drive trip breaker opened in a) above.

*Applicable only above 25% reactor power.

TABLE 4.3-15

ANTICIPATORY REACTOR TRIP SYSTEM INSTRUMENTATION SURVEILLANCE REQUIREMENTS

<u>FUNCTIONAL UNIT</u>	<u>CHANNEL CHECK</u>	<u>CHANNEL CALIBRATION</u>	<u>CHANNEL FUNCTIONAL TEST</u>	<u>MODES IN WHICH SURVEILLANCE IS REQUIRED</u>
1. Turbine Trip	S	N.A.	M	1*
2. Main Feed Pump Turbine Trip	S	N.A.	M	1,2
3. Output Logic	N.A.	N.A.	M	1,2

* Applicable only above 25% reactor power

BASES

3/4.3.2.3 ANTICIPATORY REACTOR TRIP SYSTEM (ARTS).

The OPERABILITY of the Anticipatory Reactor Trip System instrumentation ensures that 1) the associated reactor trip action will be initiated when the main turbine trips (above 25% full power) or both of the main feed pump turbines trip 2) the specified coincidence logic is maintained 3) sufficient redundancy is maintained to permit a channel to be out of service for testing or maintenance.

The OPERABILITY of this system is required to minimize the impact of transients in the secondary systems on the primary system. Without the ARTS when the main turbine trips at reactor power greater than 25% full power, the ICS will initiate a runback of reactor power. The unit should stabilize when reactor power reaches a level less than 25% full power. However, if ICS is not properly tuned, high RCS pressure may occur during the power runback causing a reactor trip. The institution of ARTS, in this case, is to prevent the ICS from challenging the RPS.

ARTS is not required for the case when the main turbine trips at reactor power less than 25% of full power since the turbine bypass valves are designed to fully handle this condition without challenging the RPS or without a reactor power change or without a turbine header pressure change.

In the event of a loss of both main feed pump turbines, the ARTS will anticipate the problem and will initiate reactor trip prior to RPS reaching the high ^{RCS} pressure trip setpoint.

BASES

The surveillance requirements specified for this system ensure that the overall system functional capability is maintained comparable to the original design standards. The periodic surveillance tests performed at the minimum frequencies are sufficient to demonstrate this capability.