OYSTER CREEK NUCLEAR GENERATING STATION
PROVISIONAL OPERATING LICENSE NO. DPR-16
DOCKET NO. 50-219
TECHNICAL SPECIFICATION CHANGE REQUEST NO. 195

Applicant hereby requests the Commission to change Appendix A to the above captioned license as indicated below.

1. Section to be Changed

The bases of Section 3.1, and Table 4.1.1.

2. Extent of Change

a. Section 3.1 Bases: delete the phrase "initiate reactor isolation" from the description of the High Drywell Pressure Trip System.

b. Table 4.1.1; Items 1,3,4 and 5b: change the surveillance frequencies due to the replacement of digital switches with analog transmitter and electronic circuitry.

c. Table 4.1.1 Item 5a. Change test frequency to once per 3 months and correct remark to state "By varying level in the sensor column".

d. Table 4.1.1 Item 27a: change remarks to "Calibrate by varying level in the sensor column" and reword the test interval from "every 3 months" to 1/3 months" for consistency.

3. Change Requested

Replace the old pages 3.1-4, 4.1-5, and 4.1-8.

4. Discussion

Refer to No Significant Hazards Analysis which immediately follows.

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This Technical Specification Change Request has been determined to contain No Significant Hazards as required by 10CFR50.91. These evaluations are specified in 10CFR50.92.

I. The first change is a correction to the bases of Technical Specification 3.1. An error was identified in the description of the control functions for the High Drywell Pressure trip system. The High Drywell Pressure Trip system does not initiate a reactor isolation function. Therefore, these words are being removed to correct the error. As the bases of the technical specifications are not part of the technical specifications, no significant hazard can exist in this error correction.

1 The second requested change is to Table 4.1.1, Items 1 - High Reactor Pressure, 3 - Low Reactor Water Level, and 4 - Low-Low Reactor Water Level are being changed to reflect modifications performed over the last two refueling cycles as part of the Reactor Protection System upgrade project. Digital switches were removed and analog instruments were installed for greater accuracy and drift characteristics. A daily channel check, which is already being performed, will be required on these instruments. A test program by the analog transmitter vendor demonstrated that drift on the transmitters in these instruments remained within 0.20% of the Upper Range Limit during a period of 30 months.

Table 4.1.1 Item 5b - High Water Level in the Scram Discharge Volume - Analog Scram is being changed to reflect modifications performed during the 1983-1984 refueling outage to comply with ATWS requirements for instrumentation. Over 6 years of data on these instruments was available for review.

An engineering calculation was performed to determine the surveillance interval with respect to maintaining drift within acceptable limits. It was determined that a transmitter calibration by application of test pressure of once per 12 months was acceptable to ensure continued detector operability. This requirement was placed in a new "Note 3". (The previous Note 3 expired in 1986 and is being replaced). Additionally, Note 3 requires a calibration of the electronic processing circuitry and output bistables once per 3 months by injection of an electronic test current. This quarterly test further ensures instrument operability. Finally, a monthly single point test of the functionality of the output bistable verifies that the control function will operate if called upon.

Table 4.1.1 Item 27a - Scram Discharge Volume, Water Level High, Analog Rod Block is being changed as a result of the engineering calculation of the surveillance test results documented since the installation of the modification during the 1983-1984 refueling outage to comply with ATWS requirements. The calculation has determined that the instrument performance does not exhibit excessive drift and that the existing calibration frequency of once each refueling cycle is acceptable. The change being requested is in the Remarks section to limit varying the level in the sensor column to the calibration test, only. The electronic circuitry will be tested once per three months by injection of an electronic test signal. As the electronic circuitry cannot distinguish between a signal from the detector and a signal from a test source, no significant change in test requirements results.

III. Table 4.1.1 Item 5a - High Water Level in the Scram Discharge Volume, Digital Scram is requested to be changed to allow instrument testing to be done once per 3 months. The instrument has an existing calibration by varying level in the sensor column of once per three months. An engineering calculation was performed and determined that a test interval of once per 3 months which coincided with the calibration requirement was acceptable to ensure operation within acceptable drift limits.

Additionally, the overall effect of the request for surveillance interval changes in Items 5a, 5b, and 27a (SDV instrumentation) would be to reduce the man-rem for these surveillances by approximately 60% to 80%. These SDV surveillances presently require the greatest radiation burden on the instrument and control technicians. This reduction in unnecessary exposure is included in the Oyster Creek REM Reduction Program.

Therefore, the requested change has been analyzed to contain No Significant Hazard in that it does not:

1. Involve a significant increase in the probability or consequences of an accident previously analyzed.

   As the requested change has been analyzed to ensure that acceptable drift limits are not exceeded and utilize existing installed hardware, no increase in the probability or consequences of a previously analyzed accident is possible.

2. Create the possibility of a new or different kind of accident from any accident previously evaluated.

   As the requested changes are only schedular and involve no changes to any installed system, no new or different type of accident than any previously analyzed is possible.

3. Involve a significant reduction in the margin of safety.

   As the requested changes are schedular and no not involve any setpoint changes, and the schoduler changes have been determined to meet acceptable drift limits no reduction in the margin of safety is possible.

particular protection instrument is not required; or the plant is placed in the protection or safe condition that the instrument initiates. This is accomplished in a normal manner without subjecting the plant to abnormal operations conditions. The action and out-of-service requirements apply to all instrumentation within a particular function, e.g., if the requirements on any one of the ten scram functions cannot be met then control rods shall be inserted.

The trip level settings not specified in Specification 2.3 have been included in this specification. The bases for these settings are discussed below.

The high drywell pressure trip setting is ≤ 3.5 psig. This trip will scram the reactor, initiate containment spray in conjunction with low low reactor water level, initiate core spray, initiate primary containment isolation, initiate automatic depressurization in conjunction with low-low-low-reactor water level, initiate the standby gas treatment system and isolate the reactor building. The scram function shuts the core down during the loss-of-coolant accidents. A steam leak of about 15 gpm and a liquid leak of about 35 gpm from the primary system will cause drywell pressure to reach the scram point; and, therefore, the scram provides protection for breaks greater than the above.

High drywell pressure provides a second means of initiating the core spray to mitigate the consequences of loss-of-coolant accident. Its trip setting of ≤3.5 psig initiates the core spray in time to provide adequate core cooling. The break size coverage of high drywell pressure was discussed above. Low-low water level and high drywell pressure in addition to initiating core spray also causes isolation valve closure. These settings are adequate to cause isolation to minimize the offsite dose within required limits.

It is permissible to make the drywell pressure instrument channels inoperable during performance of the integrated primary containment leakage rate test provided the reactor is in the cold shutdown condition. The reason for this is that the Engineered Safety Features, which are effective in case of a LOCA under these conditions, will still be effective because they will be activated (when the Engineered Safety Features system is required as identified in the technical specification of the system) by low-low reactor water level.*

The scram discharge volume has two separate instrument volumes utilized to detect water accumulation. The high water level is based on the design that the water in the SDIV's, as detected by either set of level instruments, shall not be allowed to exceed 29.0 gallons; thereby, permitting 137 control rods to scram. To provide further margin, an accumulation of not more than 14.0 gallons of water, as detected by either instrument volume, will result in a rod block and an alarm. The accumulation of not more than 7.0 gallons of water, as detected in either instrument volume will result in an alarm.

Detailed analyses of transients have shown that sufficient protection is provided by other scrams below 45% power to permit bypassing of the turbine trip and generator load rejection scrams. However, for operational convenience, 40% of rated power has been chosen as the setpoint below which these trips are bypassed. This setpoint is coincident with bypass valve capacity.

A low condenser vacuum scram trip of 23 inches Hg has been provided to protect the main condenser in the event that vacuum is lost. A loss of condenser vacuum would cause the turbine stop valves to close, resulting in a turbine trip

TABLE 4.1.1

MINIMUM CHECK, CALIBRATION AND TEST FREQUENCY FOR PROTECTIVE INSTRUMENTATION

	Instrument Channel	Check	Calibrate	Test	Remarks (Applies to Test and Calibration)
1.	High Reactor Pressure	1/d	Note 3	1/Mo	
2.	High Drywell Pressure (Scram)	N/A	1/3 mo.	Note 1	By application of test pressure
3.	Low Reactor Water Level	1/d	Note 3	1/Mo	
4.	Low-Low Water Level	1/d	Note 3	1/Mo	
5.	High Water Level in Scram Discharge Volume				
	a. Digital	N/A	1/3 mo.	1/3 mo.	By varying level in sensor columns
	b. Analog	N/A	Note 3	1 mo.	
6.	Low-Low-Low Water Level	N/A	1/3 mo.	Note 1	By application of test pressure
7.	High Flow in Main Steamline	1/d	1/3 mo.	Note 1	By application of test pressure
8.	Low Pressure in Main Steamline	N/A	1/3 mo.	Note 1	By application of test pressure
9.	High Drywell Pressure (Core Cooling)	1/d		Note 1	By application of test pressure
10.	Main Steam Isolation Valve (Scram)	N/A	N/A	1/3 mo.	By exercising valve.

NOTE 1: Initially once/month, thereafter according to Figure 4.1.1, with an interval not less than one month not more three months.

NOTE 2: At least daily during reactor power operation, the reactor neutron flux peaking factor shall be estimated and flow-referenced APRM scram and rod block settings shall be adjusted, if necessary, as specified in Section 2.3 Specifications (1) (a) and (2) (a).

NOTE 3: Calibrate electronic bistable trips by injection of an external test current once per 3 months. Calibrate transmitters by application of test pressure once per 12 months.

Amendment Nos: 95
Change 7

TABLE 4.1.1
(cont'd)

Instrument Channel	Check	Calibrate	Test	Remarks (Applies to Test and Calibration)
27. Scram Discharge Volume (Rod Block)				
a) Water level high	N/A	Each refueling outage	1/3 Mo	Calibrate by varying level in sensor column
b) Scram Trip bypass	N/A	N/A	Each refueling outage	
28. Loss of Power				
a) 4.16 KV Emergency Bus Undervoltage (Loss of voltage)	Daily	1/24 mos.	1/mo.	
b) 4.16 KV Emergency Bus Undervoltage (Degraded Voltage)	Daily	1/24 mos.	1/mo.	
29. Drywell High Radiation	N/A	Each refueling outage	Each refueling outage	

* Calibrate prior to startup and normal shutdown and thereafter check 1/s and test 1/wk until no longer required.

Legend: N/A = Not Applicable; 1/s = Once per shift; 1/d = Once per day; 1/3d = Once per three days; 1/wk = Once perweek; 1/3 mo = Once every 3 months; 1/18 mos. = Once every 18 months

The following notes are only for Item 15 of Table 4.1.1:

A channel may be taken out of service for the purpose of a check, calibration, test or maintenance without declaring the channel to be inoperable.

a. The channel functional test shall also demonstrate that control room alarm annunciation occurs if any of the following conditions exists:
   1) Instrument indicates measured levels above the alarm setpoint.
   2) Instrument indicates a downscale failure.
   3) Instrument controls not set in operate mode.
   4) Instrument electrical power loss.

Amendment Nos: 63, 80, 108, 116, 141
Change 5, 7