

# NRC INSPECTION MANUAL

DQASIP

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## INSPECTION PROCEDURE 72532

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### POWER LEVEL PLATEAU DATA REVIEW (BWR)

PROGRAM APPLICABILITY: 2514

#### 72532-01 INSPECTION OBJECTIVES

01.01 Ascertain whether the licensee is performing an adequate evaluation of test results.

01.02 Evaluate the adequacy of the licensee's administrative practices in maintaining proper test discipline concerning test execution, test alteration, and test records.

01.03 Ascertain whether the licensee is following its procedures for review, evaluation, and acceptance of test results.

#### 72532-02 INSPECTION REQUIREMENTS

##### 02.01 Test Result Evaluation

- a. For the startup tests for which procedure review and test witnessing have been accomplished in accordance with IE MC 2514 and for which tests will be done at selected test conditions (see Appendices 1 and 2) inspect the test results using the method of IP 72301. Test results shall be inspected for each test condition for which the test is performed.
- b. For the startup test listed below (if not covered by Section 02.01a, above), inspect the test results using the method of IP 72301.

<u>Test</u>	<u>Test Condition*</u>
	*See App. 1
Reactor Core Isolation Cooling System	2
Main Steam Isolation Valves	1, 2, 5, & 6
Pressure Regulator	1, 2, 3, 4, 5 & 6
Feedwater System	1, 2, 3, 4, 5 & 6
Recirculation System	1, 3 & 6
Loss of Turbine Generator and Offsite Power	2

Shutdown from Outside the Control  
Room

02.02 Authorization to Raise Power. Before a licensee proceeds to the next plateau (test condition), review the licensee evaluation of the plateau test results and the licensee's authorization for proceeding to the next test plateau.

- a. Assure that all testing has been completed.
- b. Assure that all testing anomalies have been evaluated and resolved by the licensee.
- c. Assure that the licensee has reviewed technical specification requirements applicable to the next higher power level and has fully implemented them.
- d. Confirm that the licensee performed core and plant surveys to assure safe operation during the increase of power level and arrival at the new power plateau. These tests should include examination of flux distribution, core performance, reactor heat balance, and pressure boundary leakage.
- e. Confirm that the licensee has extrapolated the results of tests to this point in the power ascension program, and has compared this extrapolation with predicted plant performance. Assure that the licensee has determined that it is reasonable and prudent to continue the testing program to at least the next planned power level plateau.

#### 72532-03 INSPECTION GUIDANCE

03.01 Test Result Evaluation. Test power plateaus or test conditions may vary according to BWR class, licensee and/or initial test plans. Appendix 1 illustrates seven initial startup test conditions associated with a BWR/6 design. Appendix 2 illustrates the tests that may be associated with each of the test conditions. The inspector must use the test sequence submitted to the licensee (FSAR) and which has been accepted by NRR.

The following inspection procedures should be used as references in verifying licensee examination of test results:

61702 "Surveillance of Core Power Distribution"  
61703 "Calibration of LPRM System - GE"  
61704 "APRM Monitor Calibration (GE-NSSS)"

The licensee's test plans and procedures should be compared with the test results to determine completion of test requirements. Verify that the licensee has NRR documented authorization for deletion or nonperformance of a required test.

Anomalies occurring during testing should be resolved to assure that design requirements are satisfied in accordance with R.G. 1.68, Rev. 2, Appendix A, Section 5, "Power-Ascension Testing."

END

APPENDIX 1

TYPICAL TEST CONDITION (TC)

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APPENDIX 2

TYPICAL STARTUP TEST PROGRAM TEST SCHEDULE

Test Title	Test Condition						
	Heatup	1	2	3	4	5	6
Chemical and radiochemical	x	x		x		x	x
Radiation measurements	x	x		x			x
Full core shutdown margin							
Control rod drive system	x	x					x
SRM performance and control rod sequence	x	x					
Water level measurements	x	x	x	x	x	x	x
IRM performance	x	x	x	x	x	x	x
LRPM calibration		x		x			
APRM calibration	x	x	x	x		x	x
NSSS process computer	x	x					x
RCIC system	x		x				
Selected process temperature	x	x	x				
System expansion	x	x		x			
Core power distribution		x		x			
Core performance	x	x	x	x	x	x	x
Core power-void mode response			x		x		
Pressure regulator		x	x	x	x	x	x
Feedwater system		x	x	x	x	x	x
Turbine valve surveillance			x			x	x

Test Title	Test Condition						
	Heatup	1	2	3	4	5	6
Main steam isolation valves	x	x	x			x	x
Relief valves	x	x				x	x
Turbine trip and generator load rejection			x			x	x
Shutdown from outside control room		x					
Recirculation flow control system	x	x	x	x		x	
Recirculation system	x	x			x		
Loss of turbine/generator and offsite power			x				
Drywell piping vibration	x	x		x			
RPV internals vibration	x	x	x	x	x	x	x
Recirculation system flow calibration			x	x		x	
Reactor water cleanup system	x						
Residual heat removal system	x	x					
Drywell atmosphere cooling	x		x				x
Cooling water system	x						x
Offgas system	x		x	x		x	x
Suppression pool makeup system	x						
Inclined fuel transfer	x						