



**UNITED STATES
NUCLEAR REGULATORY COMMISSION**
REGION II
245 PEACHTREE CENTER AVENUE NE, SUITE 1200
ATLANTA, GEORGIA 30303-1257

December 15, 2015

MEMORANDUM TO: Leonard D. Wert, Jr.
Acting Regional Administrator

THRU: Laura A. Dudes **/RA/**
Deputy Regional Administrator

FROM: James Baptist, Acting Chief **/RA Christopher Even for/**
Reactor Projects Branch 8
Division of Reactor Projects

SUBJECT: INSPECTION MANUAL CHAPTER (IMC) 2514, APPENDIX A,
STARTUP TEST PROGRAM INSPECTION PROCEDURES,
GUIDANCE

In preparing for inspection of IMC 2514 startup testing at Watts Bar Unit 2, it was identified that there is a discrepancy within IMC 2514 Appendix A. This problem is discussed in detail in the Enclosure and the specifics were communicated to NRR's Division of Inspection and Regional Support (DIRS). The feedback from DIRS was that IMC 2514 and IMC 2517, Watts Bar 2 Inspection Program, provides the regional office the flexibility to alter the inspection program as needed to facilitate successful program execution. Consistent with this, I am informing the Regional Administrator that the proposed changes are implemented for the Watts Bar Unit 2 startup and power ascension testing program.

Enclosure: IMC 2514 Proposal

cc: M. Franke, RII/DRP

CONTACT: James Baptist, DRP/PB8
404-997-4506

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See Previous Concurrence

PUBLICLY AVAILABLE NON-PUBLICLY AVAILABLE SENSITIVE NON-SENSITIVE
ADAMS: Yes ACCESSION NUMBER: ML15350A309 SUNSI REVIEW COMPLETE FORM 665 ATTACHED

OFFICE	RII: DRP	RII: DRP	RII: ORA				
SIGNATURE	*12/11/15	*12/11/15	/RA/				
NAME	J. Baptist	M. Franke	L. Dudes				
DATE	12/10/2015	12/11/2015	12/15/2015	12/ /2015	12/ /2015	12/ /2015	12/ /2015
E-MAIL COPY?	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO

OFFICIAL RECORD COPY DOCUMENT NAME: G:\CC\DRP\IMC 2514 CAT1 MEMO R1.DOCX

IMC 2514 APP A Conflict Proposal

Problem Statement: IMC 2514, Appendix A, Table II – Startup Test Groups (Category I Tests) provides a listing of Category I tests applicable for PWR inspections. The Category I tests are sorted in Group A and B listing. Table II identifies the corresponding Inspection Procedures (IPs) for the various Category I tests. The concern is that the group classification for some of the tests listed in Table II conflicts with the grouping classification contained in the related IPs. Specifically, the following conflicts require resolution:

- IP 72566 identifies pressurizer effectiveness as a Group A test while Table II includes this as a Group B test.
- IP 72572 identifies moderator temperature coefficient as a Group A test while Table II includes this as a Group B test.
- IP 72584 lists pseudo rod ejection test as a Group B test. In Table II, the only testing associated with IP 72584 is the flux asymmetry test (Group A). There is no recognition of a Group B test for IP 72584 in Table II.
- IP 72582 identifies loss of offsite power as a Group A test only while Table II also includes this as a Group B test.

Discussion: IMC 2514 requires that, “For Category I tests, all three types of inspections (test procedure review, witnessing, and data evaluation) must be accomplished for either Group A or for Group B, Category I tests.” For the Category I tests not selected for these detailed inspections, IMC 2514 requires verification that the tests were performed under approved procedures and that the licensee satisfactorily evaluated the test results. While reviewing the Category I test groupings contained in IMC 2514 Appendix A Table II, it was determined that Group B would provide superior inspection insights for Watts Bar Unit 2. During the initial scoping of IMC 2514 and associated IPs, conflicts with the grouping classification between IMC 2514 Appendix A Table II and associated testing IPs were identified. Specifically, the titles of the individual IPs are not consistent with IMC 2514 Appendix A Table II.

IMC 2514 states that “The region has the option of selecting Group A or Group B, Category I tests. With approval of the Regional Administrator, the region has the discretion to substitute some Group A tests with Group B tests and vice versa”; however, the allowance to substitute Group A tests and Group B tests does not address the identified conflict between Table II and the subject IPs.

TABLE II

STARTUP TEST GROUPS

(Category I Tests)

PWR

<u>Group A</u>	<u>Group B</u>	<u>Reference1</u>	<u>Inspection Procedure</u>
	X	2c	Protective Trip Circuit and Manual Scram (72564)
X		2b	Rod Drop Measurements (72564)
X		2d	Reactor Coolant System Leak Test (72566)
	X	4p	Pressurizer Effectiveness (72566)
X	X		Initial Criticality (72570)
	X	4a	Moderator Temperature Coefficient Measurement (72572)
X		4b	Rod Worth (72572)
	X	4a	Boron Reactivity Worth Measurements (72572)
X		4c	Pseudo Rod Ejection (72572)
X		4t	Natural Circulation (72576)
	X	5a	Power Reactivity Coefficient (72576)
X	X	4e	Core Performance (72578)
X		5m	Generator Trip (72580)
	X	5ll	Turbine Trip (72580)
	X	5dd	Shutdown from Outside Control Room (72583)
X		4e	Flux Asymmetry (72584)
X	X	5jj	Loss of Offsite Power (72582)

INSPECTION PROCEDURE 72566
 PRECRITICAL TEST PROCEDURE REVIEW
 (RCS LEAK TEST OR PRESSURIZER EFFECTIVENESS)

02.01 Pressurizer Effectiveness (Group A)

02.02 Reactor Coolant System Leak Test (Group B)

INSPECTION PROCEDURE 72572
 LOW POWER TEST PROCEDURE REVIEW
 (MODERATOR TEMPERATURE COEFFICIENT AND CONTROL ROD WORTH OR
 BORON WORTH AND PSEUDO ROD EJECTION WORTH)

02.01 Moderator Temperature Coefficient, and Control Rod Worth (Group A)

02.02 Boron Worth and Pseudo Rod Ejection Worth (Group B)

INSPECTION PROCEDURE 72582
 POWER ASCENSION TEST PROCEDURE REVIEW:

LOSS OF OFFSITE POWER (GROUP A)

Proposed Resolution:

1. Region II will follow the Category I test classifications contained in IMC 2514, Appendix A, Table II and perform inspections for the Group B tests specified in Table II for Watts Bar 2. The Category I group classifications contained in the titles of the associated IPs for these tests will be disregarded. Region II will continue to follow the inspection guidance in the IPs for the applicable tests.
2. The pseudo rod ejection test, which is listed in IP 72584 as a Group B test, will not be inspected for Watts Bar 2. This is based, in part, on this test not being listed in Table II as a Group B test, but more importantly by the fact that pseudo rod ejection tests will not be performed at Watts Bar 2. Chapter 14, Initial Test Program, of the Watts Bar 2 FSAR has exceptions that TVA has taken to the Guidance in RG 1.68. Not performing this test is one of these exceptions.