

DETROIT EDISON - FERMI 2  
AUTOMATED RECORD MANAGEMENT  
DISTRIBUTION CONTROL LIST  
12/08/04

To: 00935

US NRC  
DOCUMENT CNTRL DESK

PAGE 1

WASHINGTON, DC 20555

Media: 8 1/2 X 11

DTC	Doc. Serial Number	Page	Rev	Number Copies	Cnt Lvl	Issue Date	Sec	Status
TMTRM	TRM VOL I	72		11	IR	12/08/04		AFC

Please destroy or mark all revised, superseded, or cancelled documents  
as such. CONTROLLED stamps must be voided by lining through and initialing.

=====  
Detroit Edison EF2, C/O Info Mgmt 140 NOC, 6400 North Dixie Highway,  
Newport MI 48166. (734) 586-4338 OR (734) 586-4061 for questions or concerns.

Ref: cb1461

A001

**LICENSING DOCUMENT TRANSMITTAL**  
**FERMI 2 TECHNICAL REQUIREMENTS MANUAL – VOL I**  
Revision 72 dated 12/08/04

Immediately, upon receipt of the item(s) below, please insert and/or remove the pages indicated. Destroy the removed pages. Be sure that Revision 71 has been inserted prior to inserting these pages.

<u>Location</u>	<u>Remove</u>	<u>Insert</u>
In Front of TRM Manual	Title Page Rev 71 11/30/04	Title Page Rev 72 12/08/04
Immediately following Title Page	List of Effective Pages LEP-1 through LEP- 4 Rev 71 11/30/04	List of Effective Pages LEP-1 through LEP- 4 Rev 72 12/08/04
3 TRLCO Applicability	Page TRM 3.0-2 Rev 63 Page TRM 3.0-4 Rev 31	Page TRM 3.0-2 Rev 72 Page TRM 3.0-4 Rev 72
3.3 Instrumentation	Page TRM 3.3-37 Rev 31 Page TRM 3.3-44 Rev 31	Page TRM 3.3-37 Rev 72 Page TRM 3.3-44 Rev 72
3.7 Plant Systems	Page TRM 3.7-12 Rev 31	Page TRM 3.7-12 Rev 72
<b>BASES</b>		
B3.0 TRLCO Applicability	Page TRM B3.0-2a Rev 63 Page TRM B3.0-2b Rev 63  Page TRM B3.0-6 Rev 54 Page TRM B3.0-7 Rev 54	Page TRM B3.0-2a Rev 72 Page TRM B 3.0-2b Rev 72 Page TRM B 3.0-2c Rev 72 Page TRM B 3.0-6 Rev 72 Page TRM B 3.0-7 Rev 72

END

# Fermi 2

## Technical Requirements Manual

Volume I

Detroit  
Edison

ARMS - INFORMATION			
DTC: TMTRM	File: 1754	DSN: TRM VOL I	Rev: 72
Date 12/08/04		Recipient 935	

FERMI 2 - TECHNICAL REQUIREMENTS MANUAL VOL I

LIST OF EFFECTIVE PAGES

<u>Page</u>	<u>Revision</u>	<u>Page</u>	<u>Revision</u>
TRM i	Revision 31	TRM 3.3-31	Revision 31
TRM ii	Revision 70	TRM 3.3-32	Revision 31
TRM iii	Revision 31	TRM 3.3-33	Revision 31
TRM iv	Revision 34	TRM 3.3-34	Revision 31
TRM v	Revision 70	TRM 3.3-35	Revision 60
TRM vi	Revision 31	TRM 3.3-36	Revision 41
TRM 1.0-a	Revision 31	TRM 3.3-37	Revision 72
TRM 1.0-1	Revision 31	TRM 3.3-38	Revision 31
TRM 2.0-1	Revision 31	TRM 3.3-39	Revision 31
TRM 3.0-a	Revision 31	TRM 3.3-40	Revision 56
TRM 3.0-1	Revision 63	TRM 3.3-41	Revision 56
TRM 3.0-2	Revision 72	TRM 3.3-42	Revision 45
TRM 3.0-3	Revision 54	TRM 3.3-43	Revision 62
TRM 3.0-4	Revision 72	TRM 3.3-44	Revision 72
TRM 3.1-a	Revision 31	TRM 3.3-45	Revision 31
TRM 3.1-1	Revision 31	TRM 3.3-46	Revision 31
TRM 3.2-1	Revision 31	TRM 3.3-47	Revision 31
TRM 3.3-a	Revision 31	TRM 3.3-48	Revision 31
TRM 3.3-b	Revision 31	TRM 3.3-49	Revision 31
TRM 3.3-c	Revision 31	TRM 3.4-a	Revision 31
TRM 3.3-d	Revision 31	TRM 3.4-1	Revision 36
TRM 3.3-1	Revision 34	TRM 3.4-1a	Revision 71
TRM 3.3-2	Revision 59	TRM 3.4-1b	Revision 71
TRM 3.3-3	Revision 31	TRM 3.4-2	Revision 31
TRM 3.3-4	Revision 31	TRM 3.4-3	Revision 31
TRM 3.3-5	Revision 31	TRM 3.4-4	Revision 31
TRM 3.3-6	Revision 31	TRM 3.4-5	Revision 31
TRM 3.3-7	Revision 31	TRM 3.4-6	Revision 31
TRM 3.3-8	Revision 31	TRM 3.4-7	Revision 31
TRM 3.3-9	Revision 31	TRM 3.4-8	Revision 31
TRM 3.3-10	Revision 31	TRM 3.4-9	Revision 31
TRM 3.3-11	Revision 31	TRM 3.4-10	Revision 31
TRM 3.3-12	Revision 67	TRM 3.5-1	Revision 31
TRM 3.3-13	Revision 67	TRM 3.6-a	Revision 70
TRM 3.3-13a	Revision 67	TRM 3.6-1	Revision 60
TRM 3.3-14	Revision 67	TRM 3.6-2	Revision 67
TRM 3.3-15	Revision 31	TRM 3.6-3	Revision 31
TRM 3.3-16	Revision 31	TRM 3.6-4	Revision 55
TRM 3.3-17	Revision 31	TRM 3.6-5	Revision 31
TRM 3.3-18	Revision 52	TRM 3.6-6	Revision 33
TRM 3.3-19	Revision 31	TRM 3.6-7	Revision 31
TRM 3.3-20	Revision 31	TRM 3.6-8	Revision 31
TRM 3.3-21	Revision 59	TRM 3.6-9	Revision 66
TRM 3.3-22	Revision 31	TRM 3.6-10	Revision 31
TRM 3.3-23	Revision 31	TRM 3.6-11	Revision 31
TRM 3.3-24	Revision 31	TRM 3.6-12	Revision 31
TRM 3.3-25	Revision 31	TRM 3.6-13	Revision 71
TRM 3.3-26	Revision 31	TRM 3.6-14	Revision 31
TRM 3.3-27	Revision 31	TRM 3.6-15	Revision 31
TRM 3.3-28	Revision 31	TRM 3.6-16	Revision 31
TRM 3.3-29	Revision 31	TRM 3.6-17	Revision 31
TRM 3.3-30	Revision 31	TRM 3.6-18	Revision 31

FERMI 2 - TECHNICAL REQUIREMENTS MANUAL VOL ILIST OF EFFECTIVE PAGES

<u>Page</u>	<u>Revision</u>	<u>Page</u>	<u>Revision</u>
TRM 3.6-19	Revision 31	TRM 3.8-13	Revision 61
TRM 3.6-20	Revision 31	TRM 3.8-14	Revision 46
TRM 3.6-21	Revision 31	TRM 3.8-15	Revision 31
TRM 3.6-22	Revision 31	TRM 3.8-16	Revision 31
TRM 3.6-23	Revision 31	TRM 3.8-17	Revision 43
TRM 3.6-24	Revision 58	TRM 3.8-18	Revision 33
TRM 3.6-25	Revision 31	TRM 3.9-a	Revision 31
TRM 3.6-26	Revision 31	TRM 3.9-1	Revision 31
TRM 3.6-27	Revision 31	TRM 3.9-2	Revision 65
TRM 3.6-28	Revision 31	TRM 3.9-3	Revision 31
TRM 3.6-29	Revision 31	TRM 3.9-4	Revision 31
TRM 3.6-30	Revision 31	TRM 3.9-5	Revision 31
TRM 3.6-31	Revision 31	TRM 3.10-1	Revision 31
TRM 3.6-32	Revision 70	TRM 3.11-a	Revision 31
TRM 3.6-33	Revision 31	TRM 3.11-1	Revision 31
TRM 3.6-34	Revision 31	TRM 3.12-a	Revision 31
TRM 3.6-35	Revision 31	TRM 3.12-1	Revision 31
TRM 3.7-a	Revision 31	TRM 3.12-2	Revision 31
TRM 3.7-b	Revision 31	TRM 3.12-3	Revision 31
TRM 3.7-1	Revision 60	TRM 3.12-4	Revision 53
TRM 3.7-2	Revision 70	TRM 3.12-5	Revision 53
TRM 3.7-3	Revision 70	TRM 3.12-6	Revision 53
TRM 3.7-4	Revision 31	TRM 3.12-7	Revision 31
TRM 3.7-5	Revision 31	TRM 3.12-8	Revision 57
TRM 3.7-6	Revision 31	TRM 3.12-9	Revision 40
TRM 3.7-7	Revision 31	TRM 3.12-10	Revision 31
TRM 3.7-8	Revision 31	TRM 3.12-11	Revision 49
TRM 3.7-9	Revision 31	TRM 3.12-12	Revision 31
TRM 3.7-10	Revision 44	TRM 3.12-13	Revision 31
TRM 3.7-11	Revision 31	TRM 3.12-14	Revision 31
TRM 3.7-12	Revision 72	TRM 3.12-15	Revision 31
TRM 3.7-13	Revision 31	TRM 3.12-16	Revision 31
TRM 3.7-14	Revision 31	TRM 3.12-17	Revision 31
TRM 3.7-15	Revision 31	TRM 3.12-18	Revision 31
TRM 3.7-16	Revision 31	TRM 3.12-19	Revision 31
TRM 3.7-17	Revision 31	TRM 3.12-20	Revision 31
TRM 3.7-18	Revision 31	TRM 3.12-21	Revision 31
TRM 3.7-19	Revision 31	TRM 3.12-22	Revision 31
TRM 3.7-20	Revision 31	TRM 3.12-23	Revision 31
TRM 3.8-a	Revision 31	TRM 3.12-24	Revision 31
TRM 3.8-1	Revision 31	TRM 3.12-25	Revision 31
TRM 3.8-2	Revision 31	TRM 3.12-26	Revision 31
TRM 3.8-3	Revision 60	TRM 3.12-27	Revision 31
TRM 3.8-4	Revision 31	TRM 3.12-28	Revision 31
TRM 3.8-5	Revision 31	TRM 3.12-29	Revision 31
TRM 3.8-6	Revision 50	TRM 3.12-30	Revision 31
TRM 3.8-7	Revision 50	TRM 4.0-1	Revision 31
TRM 3.8-8	Revision 50	TRM 5.0-a	Revision 31
TRM 3.8-9	Revision 50	TRM 5.0-1	Revision 31
TRM 3.8-10	Revision 50	TRM 5.0-2	Revision 31
TRM 3.8-11	Revision 50	TRM 5.0-3	Revision 31
TRM 3.8-12	Revision 31	TRM 5.0-4	Revision 31

FERMI 2 - TECHNICAL REQUIREMENTS MANUAL VOL I

LIST OF EFFECTIVE PAGES

<u>Page</u>	<u>Revision</u>	<u>Page</u>	<u>Revision</u>
TRM 5.0-5	Revision 31	TRM B3.4.7-1	Revision 31
TRM 5.0-6	Revision 31	TRM B3.5-1	Revision 31
TRM 5.0-7	Revision 31	TRM B3.6.1-1	Revision 31
TRM 5.0-8	Revision 31	TRM B3.6.2-1	Revision 67
TRM 5.0-9	Revision 31	TRM B3.6.3-1	Revision 68
TRM B1.0-1	Revision 31	TRM B3.6.4-1	Revision 31
TRM B2.0-1	Revision 31	TRM B3.6.5-1	Revision 31
TRM B3.0-1	Revision 63	TRM B3.6.6-1	Revision 70
TRM B3.0-2	Revision 63	TRM B3.6.7-1	Revision 31
TRM B3.0-2a	Revision 72	TRM B3.6.8-1	Revision 31
TRM B3.0-2b	Revision 72	TRM B3.7.1-1	Revision 31
TRM B3.0-2c	Revision 72	TRM B3.7.2-1	Revision 31
TRM B3.0-3	Revision 31	TRM B3.7.3-1	Revision 31
TRM B3.0-4	Revision 31	TRM B3.7.4-1	Revision 31
TRM B3.0-5	Revision 54	TRM B3.7.4-2	Revision 31
TRM B3.0-6	Revision 72	TRM B3.7.5-1	Revision 31
TRM B3.0-7	Revision 72	TRM B3.7.6-1	Revision 31
TRM B3.1-1	Revision 31	TRM B3.7.7-1	Revision 31
TRM B3.2-1	Revision 31	TRM B3.7.8-1	Revision 31
TRM B3.3.1-1	Revision 31	TRM B3.7.9-1	Revision 31
TRM B3.3.1-2	Revision 31	TRM B3.7.9-2	Revision 31
TRM B3.3.2-1	Revision 31	TRM B3.8.1-1	Revision 31
TRM B3.3.2-2	Revision 31	TRM B3.8.2-1	Revision 31
TRM B3.3.3-1	Revision 67	TRM B3.8.3-1	Revision 31
TRM B3.3.4-1	Revision 31	TRM B3.8.4-1	Revision 31
TRM B3.3.4-2	Revision 31	TRM B3.8.5-1	Revision 31
TRM B3.3.5-1	Revision 31	TRM B3.8.6-1	Revision 43
TRM B3.3.5-2	Revision 31	TRM B3.9.1-1	Revision 31
TRM B3.3.6-1	Revision 31	TRM B3.9.2-1	Revision 65
TRM B3.3.6-2	Revision 31	TRM B3.9.3-1	Revision 31
TRM B3.3.6-3	Revision 31	TRM B3.9.4-1	Revision 31
TRM B3.3.6-4	Revision 31	TRM B3.10-1	Revision 31
TRM B3.3.6-5	Revision 31	TRM B3.11.1-1	Revision 31
TRM B3.3.7-1	Revision 31	TRM B3.12.1-1	Revision 31
TRM B3.3.7-2	Revision 31	TRM B3.12.2-1	Revision 44
TRM B3.3.8-1	Revision 31	TRM B3.12.3-1	Revision 31
TRM B3.3.9-1	Revision 31	TRM B3.12.4-1	Revision 31
TRM B3.3.10-1	Revision 56	TRM B3.12.5-1	Revision 31
TRM B3.3.11-1	Revision 45	TRM B3.12.6-1	Revision 31
TRM B3.3.12-1	Revision 62	TRM B3.12.7-1	Revision 31
TRM B3.3.13-1	Revision 31	TRM B3.12.8-1	Revision 31
TRM B3.3.14-1	Revision 31		
TRM B3.4.1-1	Revision 31		
TRM B3.4.1-2	Revision 71		
TRM B3.4.1-3	Revision 71		
TRM B3.4.1-4	Revision 71		
TRM B3.4.1-5	Revision 71		
TRM B3.4.2-1	Revision 31		
TRM B3.4.3-1	Revision 31		
TRM B3.4.4-1	Revision 31		
TRM B3.4.5-1	Revision 31		
TRM B3.4.6-1	Revision 31		

FERMI 2 - TECHNICAL REQUIREMENTS MANUAL VOL I

LIST OF EFFECTIVE PAGES

CORE OPERATING LIMITS REPORT

COLR 11, Revision 0

Page

Revision

Notation Page

1	0
2	0
3	0
4	0
5	0
6	0
7	0
8	0
9	0
10	0
11	0
12	0
13	0
14	0
15	0
16	0
17	0
18	0
19	0
20	0
21	0
22	0

---

TR 3.0      TRLCO APPLICABILITY (continued)

---

- TRLCO 3.0.4      When a TRLCO is not met, entry into a MODE or other specified condition in the Applicability shall only be made:
- a.      When the associated ACTIONS to be entered permit continued operation in the MODE or other specified condition in the Applicability for an unlimited period of time, or
  - b.      After performance of a risk assessment addressing inoperable systems and components, consideration of the results, determination of the acceptability of entering the MODE or other specified condition in the Applicability, and establishment of risk management actions, if appropriate.

This Specification shall not prevent changes in MODES or other specified conditions in the Applicability that are required to comply with ACTIONS or that are part of a shutdown of the unit.

---

- TRCLO 3.0.5      Equipment removed from service or declared inoperable to comply with ACTIONS may be returned to service under administrative control solely to perform testing required to demonstrate its OPERABILITY or the OPERABILITY of other equipment. This is an exception to TRLCO 3.0.2 for the system returned to service under administrative control to perform the testing required to demonstrate OPERABILITY.
-



TR 3.0 TRSR APPLICABILITY (continued)

---

TRSR 3.0.4

Entry into a MODE or other specified condition in the Applicability of a TRLCO shall only be made when the TRLCO's Surveillances have been met within their specified Frequency, except as provided by TRSR 3.0.3. When a TRLCO is not met due to Surveillances not having been met, entry into a MODE or other specified condition in the Applicability shall only be made in accordance with TRLCO 3.0.4.

This provision shall not prevent entry into MODES or other specified conditions in the Applicability that are required to comply with Actions or that are part of a shutdown of the unit.

---

TR 3.3 INSTRUMENTATION

TR 3.3.9 Appendix R Alternative Shutdown Instrumentation

TRLCO 3.3.9 The alternative shutdown instrumentation channels shown in Table TR3.3.9-1 shall be OPERABLE.

APPLICABILITY: MODES 1, 2, and 3.

ACTIONS

-----NOTE-----  
Separate Condition entry is allowed for each Function.  
-----

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One or more Functions with one required channel inoperable.	A.1 Enter the Condition referenced in Table TR3.3.9-1 for the Channel.	Immediately
B. As required by Required Action A.1 and referenced in Table TR3.3.9-1.	B.1 Declare CTG 11-1 inoperable.	Immediately
	<u>AND</u> B.2 Enter the applicable Conditions and Required Actions of TR 3.7.7.	Immediately
C. As required by Required Action A.1 and referenced in Table TR3.3.9-1.	C.1 Declare SBFW System inoperable.	Immediately
	<u>AND</u> C.2 Enter the applicable Conditions and Required Actions of TR 3.7.7.	Immediately

(continued)

**ACTIONS (continued)**

CONDITION	REQUIRED ACTION	COMPLETION TIME
C. Required Action and associated Completion Time of Required Action A.3 not met.	C.1 Submit a Corrective Action Document explaining why the inoperability was not corrected in a timely manner.	Immediately
D. Offgas hydrogen concentration not within limit.	D.1 Restore hydrogen concentration to within the limit.	48 hours

**SURVEILLANCE REQUIREMENTS**

SURVEILLANCE	FREQUENCY
TRSR 3.3.12.1 Perform CHANNEL CHECK of the hydrogen monitor.	24 hours
TRSR 3.3.12.2 Perform CHANNEL FUNCTIONAL TEST of the hydrogen monitor.	31 days
TRSR 3.3.12.3 Perform CHANNEL CALIBRATION of the hydrogen monitor. The alarm setpoint shall be $\leq 4\%$ hydrogen by volume. Include the use of standard gas samples containing a nominal: <ul style="list-style-type: none"> <li>a. One volume percent hydrogen, balance nitrogen, and</li> <li>b. Four volume percent hydrogen, balance nitrogen.</li> </ul>	92 days

Appendix R Alternative Shutdown Auxiliary Systems  
TR 3.7.7

TR 3.7 PLANT SYSTEMS

TR 3.7.7 Appendix R Alternative Shutdown Auxiliary Systems

TRLCO 3.7.7 The Appendix R Alternative Shutdown auxiliary systems shall be OPERABLE as described below:

- a. A Standby Feedwater (SBFW) system consisting of two OPERABLE SBFW pumps and an OPERABLE flow path from the condensate storage tank to the reactor vessel.
- b. An OPERABLE CTG 11 Unit 1 and power train capable of supplying power to the Peaker Bus.
- c. Two OPERABLE Drywell Cooling Units (Units 1 and 2) consisting of a fan and cooling coil capable of being supplied with cooling water from the EECW system.
- d. The OPERABLE Appendix R Alternative Shutdown control circuits listed in Table TR3.7.7-1 that support OPERABLE Appendix R Alternative Shutdown auxiliary systems.

APPLICABILITY: MODES 1, 2, and 3.

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One SBFW pump inoperable.	A.1 Perform TRSR 3.7.7.4 using the OPERABLE pump.	7 days  <u>AND</u>  Once per 31 days thereafter
B. SBFW system inoperable for reasons other than Condition A.	B.1 Restore SBFW system to OPERABLE status.	7 days

(continued)

BASES

TRLCO 3.0.4

TRLCO 3.0.4 establishes limitations on changes in MODES or other specified conditions in the Applicability when a TRLCO is not met. It allows placing the unit in a MODE or other specified condition stated in that Applicability (e.g., the Applicability desired to be entered) when unit conditions are such that the requirements of the TRLCO would not be met, in accordance with LCO 3.0.4.a or LCO 3.0.4.b.

TRLCO 3.0.4.a allows entry into a MODE or other specified condition in the Applicability with the LCO not met when the associated ACTIONS to be entered permit continued operation in the MODE or other specified condition in the Applicability for an unlimited period of time. Compliance with Required Actions that permit continued operation of the unit for an unlimited period of time in a MODE or other specified condition provides an acceptable level of safety for continued operation. This is without regard to the status of the unit before or after the MODE change. Therefore, in such cases, entry into a MODE or other specified condition in the Applicability may be made in accordance with the provisions of the Required Actions.

TRLCO 3.0.4.b allows entry into a MODE or other specified condition in the Applicability with the LCO not met after performance of a risk assessment addressing inoperable systems and components, consideration of the results, determination of the acceptability of entering the MODE or other specified condition in the Applicability, and establishment of risk management actions, if appropriate.

The risk assessment may use quantitative, qualitative, or blended approaches, and the risk assessment will be conducted using the plant program, procedures, and criteria in place to implement 10 CFR 50.65(a)(4), which requires that risk impacts of maintenance activities to be assessed and managed. The risk assessment, for the purposes of TRLCO 3.0.4 (b), must take into account all inoperable Technical Specification equipment regardless of whether the equipment is included in the normal 10 CFR 50.65(a)(4) risk assessment scope. The risk assessments will be conducted using the procedures and guidance endorsed by Regulatory Guide 1.182, "Assessing and Managing Risk Before Maintenance Activities at Nuclear Power Plants." Regulatory Guide 1.182 endorses the guidance in Section 11 of NUMARC 93-01, "Industry Guideline for Monitoring the Effectiveness of Maintenance at Nuclear Power Plants." These documents address general guidance for conduct of the risk assessment, quantitative and qualitative guidelines for establishing risk management actions, and example risk management actions. These include actions to plan and conduct other activities in a manner that controls overall risk, increased risk awareness by shift and management personnel, actions to reduce the duration of the condition, actions to minimize the magnitude of risk increases (establishment of backup success paths or compensatory measures), and determination that the proposed MODE change is acceptable. Consideration should also be given to the probability of completing restoration such that the

(continued)

BASES

TRLCO 3.0.4  
(Continued)

requirements of the TRLCO would be met prior to the expiration of ACTIONS Completion Times that would require exiting the Applicability.

TRLCO 3.0.4.b may be used with single, or multiple systems and components unavailable. NUMARC 93-01 provides guidance relative to consideration of simultaneous unavailability of multiple systems and components.

The results of the risk assessment shall be considered in determining the acceptability of entering the MODE or other specified condition in the Applicability, and any corresponding risk management actions. The TRLCO 3.0.4.b risk assessments do not have to be documented.

The TRM Specifications allow continued operation with equipment unavailable in MODE 1 for the duration of the Completion Time. Since this is allowable, and since, in general, the risk impact in that particular MODE bounds the risk of transitioning into and through the applicable MODES or other specified conditions in the Applicability of the TRLCO, the use of the TRLCO 3.0.4.b allowance should be generally acceptable, as long as the risk is assessed and managed as stated above.

The provisions of this Specification should not be interpreted as endorsing the failure to exercise the good practice of restoring systems or components to OPERABLE status before entering an associated MODE or other specified condition in the Applicability.

The provisions of TRLCO 3.0.4 shall not prevent changes in MODES or other specified conditions in the Applicability that are required to comply with ACTIONS. In addition, the provisions of TRLCO 3.0.4 shall not prevent changes in MODES or other specified conditions in the Applicability that result from any unit shutdown. In this context, a unit shutdown is defined as a change in MODE or other specified condition in the Applicability associated with transitioning from MODE 1 to MODE 2, MODE 2 to MODE 3, and MODE 3 to MODE 4.

Upon entry into a MODE or other specified condition in the Applicability with the TRLCO not met, TRLCO 3.0.1 and TRLCO 3.0.2 require entry into the applicable Conditions and Required Actions until the Condition is resolved, until the TRLCO is met, or until the unit is not within the Applicability of the Specification.

Surveillances do not have to be performed on the associated inoperable equipment (or on variables outside the specified limits), as permitted by TRSR 3.0.1. Therefore, utilizing TRLCO 3.0.4 is not a violation of TRSR 3.0.1 or TRSR 3.0.4 for any Surveillances that have not been performed on inoperable equipment. However, TRSRs must be met to ensure OPERABILITY prior to declaring the associated equipment OPERABLE (or variable within limits) and restoring compliance with the affected TRLCO.

(continued)

BASES

---

TRLCO 3.05

LCO 3.0.5 establishes the allowance for restoring equipment to service under administrative controls when it has been removed from service or declared inoperable to comply with ACTIONS. The sole purpose of this Specification is to provide an exception to LCO 3.0.2 (e.g., to not comply with the applicable Required Action(s)) to allow the performance of required testing to demonstrate:

- a. The OPERABILITY of the equipment being returned to service; or
- b. The OPERABILITY of other equipment.

The administrative controls ensure the time the equipment is returned to service in conflict with the requirements of the ACTIONS is limited to the time absolutely necessary to perform the required testing to demonstrate OPERABILITY. This Specification does not provide time to perform any other preventive or corrective maintenance.

An example of demonstrating the OPERABILITY of the equipment being returned to service is reopening a containment isolation valve that has been closed to comply with Required Actions and must be reopened to perform the required testing.

An example of demonstrating the OPERABILITY of other equipment is taking an inoperable channel or trip system out of the tripped condition to prevent the trip function from occurring during the performance of required testing on another channel in the other trip system. A similar example of demonstrating the OPERABILITY of other equipment is taking an inoperable channel or trip system out of the tripped condition to permit the logic to function and indicate the appropriate response during the performance of required testing on another channel in the same trip system.

---

BASES

---

TRSR 3.0.3  
(continued)

assumptions, in addition to unit conditions, planning, availability of personnel, and the time required to perform the Surveillance. This risk impact should be managed through the program in place to implement 10 CFR 50.65(a)(4) and its implementation guidance, NRC Regulatory Guide 1.182, "Assessing and Managing Risk Before Maintenance Activities at Nuclear Power Plants." This Regulatory Guide addresses consideration of temporary and aggregate risk impacts, determination of risk management action thresholds, and risk management action up to and including plant shutdown. The missed Surveillance should be treated as an emergent condition as discussed in the Regulatory Guide. The risk evaluation may use quantitative, qualitative, or blended methods. The degree of depth and rigor of the evaluation should be commensurate with the importance of the component. Missed Surveillances for important components should be analyzed quantitatively. If the results of the risk evaluation determine the risk increase is significant, this evaluation should be used to determine the safest course of action. All missed Surveillances will be placed in the licensee's Corrective Action Program.

If a Surveillance is not completed within the allowed delay period, then the equipment is considered inoperable or the variable is considered outside the specified limits and the Completion Times of the Required Actions for the applicable TRLCO Conditions begin immediately upon expiration of the delay period. If a Surveillance is failed within the delay period, then the equipment is inoperable, or the variable is outside the specified limits and the Completion Times of the Required Actions for the applicable TRLCO Conditions begin immediately upon the failure of the Surveillance.

Completion of the Surveillance within the delay period allowed by this Specification, or within the Completion Time of the ACTIONS, restores compliance with TRSR 3.0.1.

---

TRSR 3.0.4

TRSR 3.0.4 establishes the requirement that all applicable SRs must be met before entry into a MODE or other specified condition in the Applicability.

This Specification ensures that system and component OPERABILITY requirements and variable limits are met before entry into MODES or other specified conditions in the Applicability for which these systems and components ensure safe operation of the unit. The provisions of this Specification should not be interpreted as endorsing the failure to exercise the good practice of restoring systems or components to OPERABLE status before entering an associated MODE or other specified condition in the Applicability.

A provision is included to allow entry into a MODE or other specified condition in the Applicability when a TRLCO is not met due to Surveillance not being met in accordance with TRLCO 3.0.4.

---

(continued)



BASES

TRSR 3.0.4  
(continued)

However, in certain circumstances, failing to meet a TRSR will not result in TRSR 3.0.4 restricting a MODE change or other specified condition change. When a system, subsystem, division, component, device, or variable is inoperable or outside its specified limits, the associated TRSR(s) are not required to be performed per, TRSR 3.0.1, which states that surveillances do not have to be performed on inoperable equipment. When equipment is inoperable, TRSR 3.0.4 does not apply to the associated TRSR(s) since the requirement for the TRSR(s) to be performed is removed. Therefore, failing to perform the Surveillance(s) within the specified Frequency does not result in a TRSR 3.0.4 restriction to changing MODES or other specified conditions of the Applicability. However, since the TRLCO is not met in this instance, TRLCO 3.0.4 will govern any restrictions that may (or may not) apply to MODE or other specified condition changes. TRSR 3.0.4 does not restrict changing MODES or other specified conditions of the Applicability when a Surveillance has not been performed within the specified Frequency, provided the requirement to declare the TRLCO not met has been delayed in accordance with TRSR 3.0.3.

The provisions of TRSR 3.0.4 shall not prevent entry into MODES or other specified conditions in the Applicability that are required to comply with the ACTIONS. In addition, the provisions of TRSR 3.0.4 shall not prevent changes in MODES or other specified conditions in the Applicability that result from any unit shutdown. In this context, a unit shutdown is defined as a change in MODE or other specified condition in the Applicability associated with transitioning from MODE 1 to MODE 2, MODE 2 to MODE 3, and MODE 3 to MODE 4.

The precise requirements for performance of TRSRs are specified such that exceptions to TRSR 3.0.4 are not necessary. The specific time frames and conditions necessary for meeting the TRSRs are specified in the Frequency, in the Surveillance, or both. This allows performance of Surveillances when the prerequisite condition(s) specified in a Surveillance procedure require entry into the MODE or other specified condition in the Applicability of the associated TRLCO prior to the performance or completion of a Surveillance. A Surveillance that could not be performed until after entering the TRLCO's Applicability, would have its Frequency specified such that it is not "due" until the specific conditions needed are met. Alternately, the Surveillance may be stated in the form of a Note, as not required (to be met or performed) until a particular event, condition, or time has been reached. Further discussion of the specific formats of TRSRs' annotation is found in Section 1.4, Frequency