NRC INSPECTION MANUAL

TABLE OF CONTENTS

Table of Contents Current through Change Notice 04-027 Issued 12/01/04

<u>PART</u>	CHAPTER	
0000	NRC Inspec	ction Manual¹
	0030 0040	Policy and Guidance for Development of NRC Inspection Manual Programs 04/30/97 (97-005) Preparing, Revising, and Issuing Documents for the NRC Inspection Manual 02/02/04 (04-003)
0100	Program Res	sponsibilities
	0102 0111	Oversight and Objectivity of Inspectors and Examiners at Reactor Facilities 03/06/02 (02-008) Monitoring Activities for the DOE West Valley Demonstration Project 03/04/02 (02-006)
0200	Program Ma	nagement Reports
	0230	Morning Report 11/18/02 (02-043)
0300	O Inspection Policy	
	0300 0301	Announced and Unannounced Inspections 03/24/94 (94-010) Coordination of NRC Visits to Commercial Reactor Sites 08/24/01 (01-016)
	0303	Item Reporting 11/30/99 (99-019)
	0305 0306	Operating Reactor Assessment Program 01/29/04 (04-002) Information Technology Support For The Reactor Oversight Process 06/24/03 (03-021)
	0307	Reactor Oversight Process Self-Assessment Program 01/14/04 (04-001)
	0308	Reactor Oversight Process (ROP) Basis Document 07/27/04 (04-020)
	0308, Att 1	Technical Basis for Performance Indicators 10/06/04 (04-025)
	0308, Att 2	Technical Basis for Inspection Program 07/27/04 (04-020)
	0308, Att 3	Technical Basis for Significance Determination Process 09/10/04 (04-023)

¹The date and numbers in parentheses to the right of the chapter/inspection procedure title are the issue date and the change notice number under which the title was issued.

Issue Date: 12/01/04 - 1 - TABLE OF CONTENTS

PART CHAPTER

0308, Att 3, A	App A Technical Basis for At Power Significance Determination
0308, Att 3, A	Process 07/27/04 (04-020) App B Technical Basis for Emergency Preparedness Significance Determination Process 07/27/04 (04-020)
0308, Att 3, A	App C Technical Basis for Occupational Radiation Safety Significance Determination Process 07/27/04 (04-020)
0308, Att 3, A	App D Technical Basis for Public Radiation Safety Significance Determination Process 07/27/04 (04-020)
0308, Att 3, A	App F Technical Basis for Fire Protection Significance Determination Process [IMC 0609, Appendix F] At Power Operations 05/28/04 (04-016)
0308, Att 3, A	App G Technical Basis for Shutdown Operations Significance Determination Process 05/25/04 (04-015)
0308, Att 3, A	App H Technical Basis for Containment Integrity Significance Determination Process 05/06/04 (04-010)
0308, Att 3, A	App I Technical Basis for Operator Requalification Human Performance Significance Determination Process 07/27/04 (04-020)
0308, Att 3, A	App J Technical Basis for Steam Generator Tube Integrity Findings Significance Determination Process 05/06/04 (04-010)
0308, Att 4	Technical Basis for Assessment 07/27/04 (04-020)
0308, Att 5	Technical Basis for Enforcement 07/27/04 (04-020)
0309	Reactive Inspection Decision Basis For Reactors 11/05/03 (03-036)
0312	Technical Assistance for Radiation Safety Inspections at Nuclear Fuel Cycle Facilities and Materials Licensees' Sites 06/06/02 (02-023)
0330	Guidance for NRC Review of Licensee Draft Documents 07/08/96 (96-015)
0350	Oversight of Operating Reactor Facilities in a Shutdown Condition With Performance Problems 12/31/03 (03-042)

CHAPTER

0400 Enforcement Policy

0500 Tracking Systems

0600 <u>Documentation of Program Findings</u>

0608 0609 0609.01 0609.02	Performance Indicator Program 12/01/04 (04-027) Significance Determination Process 03/21/03 (03-010) Enforcement Review Panel 06/20/03 (03-021) Process For Appealing NRC Characterization of Inspection Findings (SDP Appeal Process) 04/30/02 (02-022)
0609.03 0609 App A	Senior Reactor Analyst Support Objectives 08/16/01 (01-015) Determining the Significance of Reactor Inspection Findings for At- Power Situations 12/01/04 (04-027)
0609 App B	Emergency Preparedness Significance Determination Process 03/06/03 (03-007)
0609 App C	Occupational Radiation Safety Significance Determination Process 12/16/03 (03-041)
0609 App D	Public Radiation Safety Significance Determination Process 07/24/03 (03-025)
0609 App E	Interim Physical Protection - Significance Determination Process 08/14/01 (01-014)
0609 App F	Fire Protection Significance Determination Process 05/28/04 (04-016)
0609, App F	, Att 1 Part 1: Fire Protection SDP Phase 1 Worksheet 05/28/04 (04-016)
0609, App F	, Att 2 Degradation Rating Guidance Specific to Various Fire Protection Program Elements 05/28/04 (04-016)
0609, App F	, Att 3 Guidance for Identifying Fire Growth and Damage Scenarios 05/28/04 (04-016)
0609, App F	, Att 4 Fire Ignition Source Mapping Information: Fire Frequency, Counting Instructions, Applicable Fire Severity Characteristics, and Applicable Manual Fire Suppression Curves 05/28/04 (04-016)
0609, App F	, Att 5 Characterizing Non-Simple Fire Ignition Sources 05/28/04 (04-016)
0609, App F	, Att 6 Guidance for the Identification of Targets and Their Ignition and Damage Criteria 05/28/04 (04-016)
0609, App F	, Att 7 Guidance for Fire Growth and Damage Time Analysis 05/28/04 (04-016)
0609, App F	, Att 8 Guidance for Fire Non-Suppression Probability Analysis 05/28/04 (04-016)
0609 App G	Shutdown Operations Significance Determination Process 05/25/04 (04-015)
0609, App G	6, Att 1 Shutdown Operations Significance Determination Process Phase 1 Operational Checklists for Both PWRs and BWRs 05/25/04 (04-015)
0609, App G	6, Att 2 Phase 2 Significance Determination Process Template for PWR During Shutdown 05/25/04 (04-015)
0609, App G	6, Att 3 Phase 2 Significance Determination Process Template for BWR During Shutdown 05/25/04 (04-015)

PART CHAPTER

0609 App H	Containment Integrity Significance Determination Process
0609 App I	05/06/04 (04-010) Operator Regualification - Human Performance Significance
	Determination Process 03/27/02 (02-011)
0609 App J	Steam Generator Tube Integrity Findings Significance
0610	Determination Process 05/06/04 (04-010) Inspection Reports 05/18/04 (04-014)
0010	1113pection (Xeports 03/10/04 (04-014)

CHAPTER

	0612, Exh 2 0612, Exh 3 0612, Exh 4 0612, App A 0612, App B 0612, App C	Standard Reactor Inspection Report Outline 06/20/03 (03-021) Inspection Report Documentation Matrix 06/20/03 (03-021) Sample Reactor Inspection Report 06/20/03 (03-021) Sample Cover Letters 06/20/03 (03-021) List of Acronyms Used in IMC 0612 06/20/03 (03-021) Issue Screening 06/20/03 (03-021) Documentation Guidance For Supplemental Inspections 06/20/03 (03-021)
		Guidance for Documenting Inspection Procedure 71152, "Identification and Resolution of Problems" 06/20/03 (03-021) Examples of Minor Issues 06/20/03 (03-021) Research and Test Reactor Inspection Reports
	0620	06/23/04 (04-018) Inspection Documents and Records
	0630	07/08/96 (96-015) Analysis of the Impact of Noncompliance with Physical Security Requirements 10/01/82 (82-09)
0700	Communicat	ions With Licensees
	0730	Generic Communications Regarding Materials and Fuel Cycle Issues 10/22/02 (02-040)
0800	Feedback - I	mproving the Regulatory Process
	0801	Reactor Oversight Process Feedback Program 03/05/02 (02-007)
0900	Reporting of	Events/Incidents
	0970	Potentially Generic Questions Identified by Regional Offices 12/11/00 (00-024)
1000	Regional Off	ice Program Interfaces
	1007	Interfacing Activities Between Regional Offices of NRC and OSHA 02/11/04 (04-006)
1100	Notifications	of Meetings and Conferences
	1120	Preliminary Notifications 12/16/03 (03-041)
1200	Inspector Re	quirements
	1201 1202	Conduct of Employees 06/29/99 (99-010) Senior Resident Inspector Site Turnover 01/17/02 (02-001)

Issue Date: 12/01/04 - 5 - TABLE OF CONTENTS

CHAPTER

	1220	Processing of NRC Form 241, "Report of Proposed Activities In Non-Agreement States," Areas of Exclusive Federal Jurisdiction and Offshore Waters, and Inspection of Agreement State Licensees Operating Under 10 CFR 150.20 05/01/03 (03-013)
	1220, APP I	Procedures and Guidelines For Processing NRC Form 241 05/01/03 (03-013)
*	1220, App II	Procedures Letter to be Sent to Licensees With Procedures and Information for Filing NRC Form 241 05/01/03 (03-013)
	0220. App II 1230	Unspection of Agreement State Licensees 05/01/03 (03-013) Quality Assurance Program for Radiological Confirmatory Measurements 10/01/83 (83-12)
	1232	Collection, Preparation, and Shipment of Independent Measurement Samples 11/18/86 (86-52)
	1240 1245	Unescorted Access At Power Reactors 12/01/04 (04-027) Qualification Program For the Office of Nuclear Reactor Regulation Programs 06/29/04 (04-019)
	1245 Att 1	General Overview of the Inspector Training and Qualification Program 05/01/03 (03-014)
	1245 Att 2	Inspector Competencies 04/05/02 (02-014)
	1245 Att3	General Orientation Topics 04/05/02 (02-014)
	1245 App A	
	1245 App B	General Proficiency-Level Training and Qualification Journal 06/29/04 (04-019)
	1245 App C1	Reactor Operations Inspector Technical Proficiency Training and Qualification Journal 08/24/04 (04-022)
	1245 App C2	
	1245 App C3	
	1245 C4	Reactor Safeguards Inspector Technical Proficiency Qualification Journal 04/05/02 (02-014)
	1245 C5	Research and Test Reactor Inspector Technical Proficiency Qualification Journal 04/05/02 (02-014)
	1245 App C6	
	1245 C8	Vender Inspector Technical Proficiency Qualification Journal 05-28/03 (03-017)
	1245 C9	Construction Inspector Technical Proficiency Qualification Journal 05/01/03 (03-014)
	1245 App C1	10 Operator Licensing (OL) Examiner Technical Proficiency Training and Qualification Journal 08/24/04 (04-022)
	1245 D1	Senior Reactor Analyst Training and Qualification Program 01/24/03 (03-001)
	1245 D3	Engineering Specialties Training Areas 04/05/02 (02-014)
	1246	Formal Qualification Programs in the Nuclear Material Safety and Safeguards Program Area 01/05/01 (01-002)
	1246 APP A	Training Activities 01/05/01 (01-002)
	Sec. I	Materials License Reviewer 01/05/01 (01-002)
	Sec. II	Materials Health Physics Inspector 01/05/01 (01-002)
	Sec. III	Fuel Cycle Safety Inspector 01/05/01 (01-002)
	Sec. IV	Fuel Cycle Safeguards Inspector Physical Security 01/05/01 (01-002)

CHAPTER

Sec.	V	NMSS Headquarters Fuel Cycle Safeguards Inspector Material
Sec.	VI	Control and Accounting 01/05/01 (01-002) NMSS Headquarters Transportation Packaging and Dry Storage
_		System Safety Inspector 01/05/01 (01-002)
Sec.		Fuel Cycle License Reviewer 01/05/01 (01-002)
Sec.	VIII	Waste Management Inspectors and License Réviewers 01/05/01 (01-002)
Sec.	IX	Decommissioning Inspectors 01/05/01 (01-002)
Sec.		Decommissioning Project Managers/Technical Reviewers 04/14/03 (03-012)
Sec.	XI	Materials Exempt Distribution License Reviewer
800	VII	01/05/01 (01-002)
Sec.		Uranium Recovery Inspector 01/05/01 (01-002)
Sec.	∧III	Uranium Recovery Project Manager/Technical Reviewer 01/05/01 (01-002)
Sec.	XIV	High-Level Waste Repository Inspector 04/14/03 (03-012)
Sec.		High-Level Waste Repository License Technical Reviewer 04/14/03 (03-012)
Sec.	Y \/I	Training Requirements for Sealed Source and Device Reviewers
OCC.	/\ V I	02/11/04 (04-006)
1246	APP B	NRC Inspector, License Reviewer and Project
		Manager/Technical Reviewer Training and Qualification Journal 01/05/01 (01-002)
Sec.	I	Materials License Reviewer 01/05/01 (01-002)
Sec.		Materials Health Physics Inspector 01/05/01 (01-002)
Sec.		Fuel Cycle Safety Inspector 01/05/01 (01-002)
Sec.		Fuel Cycle Safeguards Inspector - Physical Security
Sec.	\/	01/05/01 (01-002) NMSS Headquarters Fuel cycle Safeguards Inspector Material
occ.	V	Control and Accounting (MC&A) 01/05/01 (01-002)
Sec.	VI	NMSS Headquarters Transportation Packaging and Dry Storage
		System Safety Inspector 01/05/01 (01-002)
Sec.	VII	Fuel cycle License Reviewer 01/05/01 (01-002)
Sec.	VIII	Waste Management Inspector and License Reviewer 01/05/01 (01-002)
Sec.	IX	Decommissioning Ínspector 01/05/01 (01-002)
Sec.	Χ	Decommissioning Project Manager/Technical Reviewer 04/14/03 (03-012)
Sec.	XI	Materials Exempt Distribution License Reviewer
Sec.	ΧII	01/05/01 (01-002) Uranium Recovery Inspector 01/05/01 (01-002)
Sec.		Uranium Recovery Project Manager/Technical Reviewer
OCC.	XIII	01/05/01 (01-002)
Sec.	XIV	High-Level Waste Repository Inspector 04/14/03 (03-012)
Sec.		High-Level Waste Repository License Technical Reviewer 04/14/03 (03-012)
Sec.	XVI	Technical Reviewer Qualification Journal Byproduct Material Sealed Source and Device Reviewers 02/11/04 (04-006)

1300 Incident Response

1301 Response to Non-Emergency Incidents Involving Radioactive Material 10/20/00 (00-022)

PART	• -	
	<u>CHAPTER</u>	
	1302	Action Levels For Radiation Exposures and Contamination Associated With Materials Events Involving Members of the Public 12/31/97 (97-019)
	1303	Requesting Emergency Acceptance of Radioactive Material by the U.S. Department of Energy (DOE) 12/30/02 (02-046)
	1330	Response to Transportation Accidents Involving Radioactive Materials 10/06/04 (04-025)
	1360	Use of Physician and Scientific Consultants in the Medical Consultant Program 04/24/02 (02-020)
1400	Reserved	
	1415	State Contracts for Environmental Monitoring 06/28/91 (91-009)
1500	Reserved	
1600	Emergency Preparedness	
	1601	Communication Protocol For Assessing Offsite Emergency Preparedness Following a Natural Disaster 06/24/03 (03-020)
1700	Reserved	
1800	Reserved	
1900	Reserved	
2000	Reserved	
2100	Reserved	
2200	Nuclear Security and Incident Response	
	2201	Security and Safeguards Inspection Program For Commercial
	2201 App A	Power Reactors 02/19/04 (04-007) Security and Safeguards Baseline Inspection Program 02/19/04 (04-007)
	2201 App C	Supplemental Inspection Program 02/19/04 (04-007) Generic, Special, and Infrequent Inspections 02/19/04 (04-007) Facility Status Reviews 02/19/04 (04-007)

CHAPTER

2300 High Level Waste 2300 Yucca Mountain Pre-Operation Inspection Program 06/20/01 (01-013) 2400 Low Level Waste Program 2401 Near-Surface Low-Level Radioactive Waste Disposal Facility Inspection Program 11/27/01 (01-028) Conduct of Observation Audits 07/12/00 (00-012) 2410 2500 Reactor Inspection Program 2500/020 Inspection to Determine Compliance with ATWS Rule 10 CFR 50.62 08/06/03 (03-028) Nuclear Reactor Inspection Program - Early Site Permit) 2501 05/29/03 (03-018) Browns Ferry Unit 1 Restart Project Inspection Program 2509 09/08/03 (03-032) Light Water Reactor Inspection Program - Startup 2514 Testing Phase 08/21/89 (89-013) 2514 App A Startup Test Program Inspection Procedures 04/15/94 (94-018) Reactor Inspection Program - Operations Phase 2515 02/02/04 (04-003) 2515 App A Risk-Informed Baseline Inspection Program 01/17/02 (02-001) 2515 App B Supplemental Inspection Program 01/17/02 (02-001) Special and Infrequently Performed Inspections 2515 App C 05/06/04 (04-011) 2515 App D Plant Status 05/11/04 (04-013) 2515/111 Electrical Distribution System Followup Inspection 08/06/03 (03-028) 2515/142 Draindown During Shutdown and Common-Mode Failure (NRC Generic Letter 98-02)) 06/18/99 (99-009) 2515/147 Expanded Table-Top Drill Evaluation 08/14/02 (02-030) (Note this TI contains safeguards material) 2515/148 Inspection of Nuclear Reactor Safeguards - Interim Compensatory Measures 03/19/03 (03-009) Rev. 2 Mitigating systems Performance Index Pilot Verification 2515/149 09/24/02 (02-034) 2515/150 Reactor Pressure Vessel Head and Vessel Head Penetration Rev. 2 Nozzles (NRC Bulletin 2002-02) 08/04/03 (03-026) 2515/151 Expanded Pilot Force-on-Force Exercise Evaluation 02/06/03 (03-002) 2515/152 Reactor Pressure Vessel Lower Head Penetration Nozzles Rev. 1 (NRC Bulletin 2003-02) 11/05/03 (03-036) 2515/153 Reactor Containment Sump Blockage (NRC Bulletin 2003-01) 10/03/03 (03-035) Spent Fuel Material Control and Accounting at Nuclear Power 2515/154

Mark I and Mark II Containment Vulnerabilities

12/12/03 (03-040) Note: TI withheld from public disclosure since

Plants 11/26/03 (03-038)

2515/155

CHAPTER

2515/156 2515/157	it contains sensitive security information. Offsite Power System Operational Readiness 04/29/04 (04-009) Mark I and Mark II Containment Operations
2515/15/	05/06/04 (04-012) Note: TI withheld from public disclosure since it contains sensitive security information
2515/158	Functional Review of Low Margin/Risk Significant Components and Human Actions 06/14/04 (04-017)
2515/159	Review of Generic Letter 89-13: Service Water System Problems Affecting Safety-Related Equipment 07/29/04 (04-021)
2515/160	Pressurizer Penetration Nozzles and Steam Space Piping Connections in U.S. Pressurized Water Reactors (NRC Bulletin 2004-01) 10/06/04 (04-025)
2516	Policy and Guidance For The License Renewal Inspection Program 04/10/02 (02-016)
2530	Integrated Design Inspection Program 04/24/85 (85-17)
2535	Design Verification Programs 03/24/89 (89-007)
2545	Research and Test Reactor Inspection Program 06/23/04 (04-018)
2561	Decommissioning Power Reactor Inspection Program 04/14/03 (03-012)
2561/003	Re-Examination of Year 2000 (Y2K) Program Activities at Selected Decommissioning Reactors 11/30/99 (99-019)
2561/004	Safeguards and Emergency Preparedness Inspection of Interim Compensatory Measures at Decommissioning Power Reactors 04/22/03 (03-011)

2600 Fuel Cycle Facility Inspection Program

2600	Fuel Cycle Facility Operational Safety and Safeguards
2600/003	Inspection Program 04/14/03 (03-012) Operational Safety Review 07/29/04 (04-021)
2600/006	Resident Inspector Program for Category I Fuel Cycle Facilities 07/29/04 (04-021)
2600/008	Inspection Guidance and Requirements for Interim Compensatory Measures (ICMs) at the Honeywell Conversion Plant, Metropolis, Illinois 07/11/02 (02-028)
2600/009	Inspection of Interim Compensatory Measures (ICMs) At Gaseous Diffusion Plants (GDP) 06/05/03 (03-019)
2600/010	1-Inch UF ₆ Cylinder Valve Testing 07/02/03 (03-022)
2601	Team Assessments of Fuel Cycle and Materials Licensees 05/04/90 (90-004)
2602	Decommissioning Inspection Program For Fuel Cycle Facilities and Materials Licensees 06/04/97 (97-007)
2603	Inspection of the Nuclear Chemical Process Safety Program at Fuel Cycle Facilities 01/16/96 (96-001)
2604	Licensee Performance Review 06/28/02 (02-024)
2605	Decommissioning Procedures For Fuel Cycle and Material Licensees 11/12/96 (96-022)
2610	Inspection Program at Nuclear Fuel Services Plant Erwin, Tennessee 01/09/86 (86-01)
2620	On-Site Construction Reviews of Remedial Action at Inactive Uranium Mill Tailing Sites (Title I, Uranium Mill Tailings Radiation Control Act) 10/05/01 (01-020)
2630	Gaseous Diffusion Plant Operational Safety and Safeguards Inspection Program 12/30/96 (96-026)

CHAPTER

2641	In-Situ Leach Facilities Inspection Program 08/25/00 (00-014)
2681	Physical Protection and Transport of SNM and Irradiated Fuel Inspections of Fuel Facilities 09/26/96 (96-020)
2681/007	Inspection of Safeguards Interim Compensatory Measures at Nuclear Fuel Facilities Possessing Strategic Special Nuclear Material (SNMM) 08/08/03 (03-029)
2682	Technical Assistance for Safeguards MC&A Inspections at Fuel Facilities 06/18/84 (84-18)
2683	MC&A Safeguards Inspection of Fuel Facilities 07/22/99 (99-011)
2690	Inspection Program For Dry Storage of Spent Reactor Fuel at Independent Spent Fuel Storage Installations 12/03/01 (01-029)
2690 App A	Inspection Program for an ISFSI Located at a Reactor Site 12/03/01 (01-029)
2690 App B	Inspection Program for an ISFSI Located Away From Any Reactor Site 12/03/01 (01-029)

2700 Licensee Contractor and Vendor Inspection Program

Vendor Inspection Program (VIP) 10/29/90 (90-013) 2700

2800 Materials Inspection Program

2800 2800/026	Materials Inspection Program 11/25/03 (03-037) Followup Inspection of Formerly-Licensed Sites Identified as Potentially Contaminated 07/12/00 (00-012)
2800/030	Verification of the Status of Devices Authorized For Use Under a General License 05/30/00 (00-011)
2800/032	Followup - Materials Safeguard Advisory 10/31/01 (01-023)
2800/034	Inspection of Panoramic and Underwater Irradiators Additional Security Measures 02/12/04 (04-005)
2800/035	Verification of Licensee Responses to NRC Bulletin 2003-04 Regarding Inventories of Source and Special Nuclear Materials Tracked in the Nuclear Materials Management and Safeguards System 07/29/04 (04-021)
2800/036	Inspection of Manufacturing and Distribution Licensees 09/13/04 (04-024)
2801	Uranium Mill 11e.(2) Byproduct Material Disposal Site and Facility Inspection Program 08/25/00 (00-014)
2810	Master Materials License Inspection Program 09/15/03 (03-034)
2815	Construction and Preoperational Inspection of Panoramic, Wet-Source-Storage Gamma Irradiators 03/27/01 (01-010)
2882	Transfer of NRC License Files to Agreement State(s) 12/03/01 (01-029)

2900 Performance Appraisal Program

2900	Performance Appraisal Program DI 04/04/85 (85-14)
2901	Team Inspections 08/24/01 (01-016)
2920	Construction Appraisal Team Inspection Program 03/29/85
2020	(85-11)

Issue Date: 12/01/04 - 11 -**TABLE OF CONTENTS**

PART PROCEDURE

3000	Management 30800B	Meetings Initial Management Meeting - Materials Licensees 10/01/76 (76-26)
3100	Reserved	
3200	Reserved	
3300	Reserved	
3400	Reserved	
3500	Quality Assur	<u>rance</u>
	35002	Early Site Permit Pre-Docketing Quality Assurance Controls
	35004	Meeting 05/29/03 (03-018) Pre-Docketing Early Site Permit Quality Assurance Controls
	35006	Inspection 05/29/03 (03-018) Post-Docketing Early Site Permit Quality Assurance Controls
	35012	Inspection 05/29/03 (03-018) Early Site Permit Quality Assurance Controls Assessment and
	35301 35501 35701	Conclusion 05/29/03 (03-018) Preoperational Testing - Quality Assurance 08/06/03 (03-028) QA for the Startup Test Program 01/20/84 (84-04) Quality Assurance Program Review 09/17/01 (01-017)
3600	3600 Organization and Administration	
	36100	10 CFR Part 21 Inspections at Nuclear Power Reactors
	36800 36801	08/30/91 (91-011) Organization 09/17/01 (01-017) Organization, Management, and Cost Controls at Permanently Shutdown Reactors 08/11/97 (97-012)
3700	Design, Design	gn Changes, Modifications
	37001 37550 37551 37700 37801	10 CFR 50.59 Safety Evaluation Program 06/24/98 (98-010) Engineering 11/15/99 (99-018) Onsite Engineering 06/24/98 (98-010) Design Changes, and Modifications 09/17/01 (01-017 Safety Reviews, Design Changes, and Modifications at Permanently Shutdown Reactors 08/11/97 (97-012)

PART	PROCEDUR	<u>E</u>
3800	Procurement	<u>!</u>
	38703	Commercial Grade Dedication 04/08/96 (96-007)
3900	Records	
	39701	Records Program 09/17/01 (01-017)
4000	Review and	<u>Audit</u>
	40001 40002 40500	Resolution of Employee Concerns 06/03/97 (97-006) Inspections to Review Allegations 06/28/02 (02-024) Effectiveness of Licensee Process to Identify, Resolve, and
	40801	Prevent Problems 05/03/99 (99-008) Self-Assessment, Auditing, and Corrective Action at Permanently Shutdown Reactors 08/11/97 (97-012)
4100	Training	
	41500	Training and Qualification Effectiveness 06/13/95 (95-007)
4200	<u>Procedures</u>	
	42001 42700	Emergency Operating Procedures 06/28/91 (91-009) Plant Procedures 11/15/95 (95-015)
4300	Vendor Proc	<u>edures</u>
	43001	Reactive Inspection of Nuclear Vendors 10/11/94 (94-018)
4400	Reserved	
4500	Geotechnica	I/Foundation

4600 <u>Structural Concrete</u>4700 <u>Containment (Post-Tensioning)</u>

4800 Structural Steel and Supports

45051

Issue Date: 12/01/04 - 13 - TABLE OF CONTENTS

Geotechnical/Foundation Activities Procedure Review 05/29/03 (03-018)

PART		
4900	PROCEDUR Piping	<u>(E</u>
	49001	Inspection of Erosion/Corrosion Monitoring Programs
	49055	12/11/98 (98-019) Reactor Coolant Pressure Boundary Piping Record Review 08/16/82 (82-07)
5000	<u>Mechanical</u>	Components and Equipment
	50001 50002 50090 50100	Steam Generator Replacement Inspection 09/06/00 (00-015) Steam Generators 12/31/96 (96-024) Pipe Support and Restraint Systems 08/06/03 (03-028) Heating, Ventilating, and Air Conditioning Systems 08/06/03 (03-028)
5100	Electrical Co	omponents and Systems
	51053	Electrical Components and systems - Work Observation 08/06/03 (03-028)
	51055	Electrical Components and Systems - Record Review 08/06/03 (03-028)
	51061	Electrical Cable - Procedure Review 08/06/03 (03-028)
5200	Instrumentat	tion Systems and Components
	52001 52002	Digital Retrofits Receiving Prior Approval 03/02/98 (98-003) Digital Retrofits Not Receiving Prior Approval 03/02/98 (98-003)
5300	Containmen	t Penetrations
5400	Cleanliness	
5500	Welding	
	55050	Nuclear Welding General Inspection Procedure
	55100	06/20/83 (83-06) Structural Welding General Inspection Procedure 06/20/83 (83-06)
5600	<u>Calibration</u>	

5600 <u>Calibration</u>

5700 Nondestructive Examination, Destructive Examination and Fabrication Testing

57050 Visual Testing Examination 03/09/99 (99-003)

PROCEDURE

57060	Liquid Penetrant Testing Examination 03/09/99 (99-003)
57070	Magnetic Particle Testing Examination 03/09/99 (99-003)
57080	Ultrasonic Testing Examination 03/09/99 (99-003)
57090	Nondestructive Examination Procedure Radiographic
	Examination Procedure Review/Work Observation/Record
	Review 06/14/93 (93-005)

5800 Special Processes

5900 Reserve Shutdown System

6000 Fuel Fabrication, Handling and Storage

60705 60710	Preparation for Refueling 07/27/95 (95-009) Refueling Activities 07/27/95 (95-009)
60801	Spent Fuel Pool Safety at Permanently Shutdown Reactors 08/11/97 (97-012)
60851	Design Control of ISFSI Components 08/08/03 (03-030)
60852	ISFSI Component Fabrication By Outside Fabricators 08/08/03 (03-030)
60853	On-Site Fabrication of Components and Construction of an ISFSI 02/11/04 (04-006)
60854	Preoperational Testing of an ISFSI 03/28/02 (02-012)
60854.1	Preoperational Testing of Independent Spent Fuel Storage Facility Installation at Operating Plants 02/02/04 (04-003)
60855	Operation of an ISFSI 03/28/02 (02-012)
60855.1	Operation of an Independent Spent Fuel Storage Installation at Operating Plants 02/02/04 (04-003)
60856	Review of 10 CFR 72.212(b) Evaluations 04/02/03 (03-008)
60856.1	Review of 10 CFR 72.212(b) Evaluations at Operating Plants 02/02/04 (04-003)
60857	Review of 10 CFR 72.48 Evaluations 03/09/01 (01-007)

6100 Surveillance

61705	Calibration of Nuclear Instrumentation Systems 05/12/86 (86-25)
61706	Core Thermal Power Evaluation 07/14/86 (86-36)
61707	Determination of Reactor Shutdown Margin 10/11/85 (85-31)
61708	Isothermal and Moderator Temperature Coefficient Determinations 10/11/85 (85-31)
61709	Total Power Coefficient of Reactivity at Pressurized Water Reactors 07/14/86 (86-36)
61710	Control Rod Worth Measurements (PWR) 10/11/85 (85-31)
61715	Verification of Containment Integrity 12/23/86 (86-60)
61720	Containment Local Leak Rate Testing 10/03/85 (85-30)

Issue Date: 12/01/04 - 15 - TABLE OF CONTENTS

PROCEDURE

61726	Surveillance Observations 06/24/98 (98-010)
61728	Independent Measurement of RCS Leak Rates for a PWR
	01/01/84 (84-02)

6200 Maintenance

62002	Inspection of Structures, Passive Components, and Civil
	Engineering Features at Nuclear Power Plants 12/31/96 (96-024)
62003	Inspection of Steel and Concrete Containments at Nuclear
	Power Plants 06/11/97 (97-008)
62706	Maintenance Rule 12/13/00 (00-028)
62709	Configuration Risk Assessment and Risk Management Process
	12/28/00 (00-029)
62710	Power-Operated Gate Valve Pressure Locking and Thermal
	Binding 01/17/02 (02-001)
62708	Motor-Operated Valve Capability 09/12/00 (00-018)
62801	Maintenance and Surveillance at Permanently Shutdown
	Reactors 08/11/97 (97-012)
	,

6300 Construction Testing

6400 Fire Prevention/Protection

64704 Fire Protection Program 06/24/98 (98-010)

6500 Reserved

6600 Reserved

6700 Reserved

6800 Reserved

6900 Non-Power Reactor Inspection

69001	Class II Research and Test Reactors 02/03/04 (04-004)
69002	Class III Research and Test Reactors 02/03/04 (04-004)
69003	Class I Research and Test Reactor Operator Licenses,
	Requalification, and Medical Examinations 02/03/04 (04-004)
69004	Class I Research and Test Reactor Effluent and Environmental
	Monitoring 02/03/047 (04-004)
69005	Class I Research and Test Reactor Experiments 02/03/04 (04-004)
69006	Class I Research and Test Reactors Organization and Operations
	and Maintenance Activities 02/03/04 (04-004)

	PROCEDUR	<u>E</u>
	69007	Class I Research and Test Reactor Review and Audit and Design Change Functions 02/03/04 (04-004)
	69008 69009	Class I Research and Test Reactor Procedures 02/03/04 (04-004) Class I Research and Test Reactor Fuel Movement 02/03/04 (04-004)
	69010 69011	Class I Research and Test Reactor Surveillance 02/03/04 (04-004) Class I Research and Test Reactor Emergency Preparedness 02/03/04 (04-004)
	69012	Class I Research and Test Reactors Radiation Protection 02/03/04 (04-004)
	69013	Research and Test Reactor Decommissioning 02/03/04 (04-004)
7000	Preoperation	al Testing
	70304	Engineered Safety Features Test - Preoperational Test Procedure Review 08/06/03 (03-028)
	70307	Containment Integrated Leak Rate Test - Procedure Review 03/07/86 (86-13)
	70313 70323	Containment Integrated Leak Rate Test 11/12/85 (85-36) Containment Leak Rate Test Results Evaluation 10/03/85 (85-30)
	70370	Testing Piping Support and Restraint Systems 03/07/86 (86-13)
7100	Operations (I	License & TS Requirements)
	71001	Licensed Operator Requalification Program Evaluation 07/23/98 (98-011)
	71002 71003	License Renewal Inspection 09/18/00 (00-019) Post-Approval Site Inspection for License Renewal 12/09/02 (02-044)
	71004 71005	Power Uprate 07/09/02 (02-027) Inspector Review of Licensing-Related Information 08/05/03 (03-027)
	71007 71111	Reactor Vessel Head Replacement Inspection 07/10/03 (03-024) Reactor Safety-Initiating Events, Mitigating Systems, Barrier Integrity 05/06/03 (03-015)
	71111.DS	Safety System Design and Performance Capability 05/06/03 (03-015)
	71111.EP 71111.HS 71111.ST 71111.01 71111.02	Equipment Availability, and Functional Capability 05/06/03 (03-015) Heat Sink Performance 05/06/03 (03-015) Post-Maintenance and Surveillance Testing 05/06/03 (03-015) Adverse Weather Protection 04/13/04 (04-008) Evaluation of changes, Tests, or Experiments 07/07/03 (03-023)
	71111.04 71111.05AQ 71111.05T 71111.06 71111.07 71111.08 71111.11 71111.12 71111.13	Equipment Alignment 01/17/02 (02-001) Fire Protection (Annual / Quarterly) 09/10/04 (04-023) Fire Protection (Triennial) 12/01/04 (04-027) Flood Protection Measures 01/17/02 (02-001) Heat Sink Performance 01/17/02 (02-001) Inservice Inspection Activities 05/11/04 (04-013) Licensed Operator Requalification Program 12/16/03 (03-041) Maintenance Effectiveness 07/01/02 (02-025) Maintenance Risk Assessments and Emergent Work Evaluation

<u>PART</u>	
PROCEDU	<u>RE</u>
	01/17/02 (02-001)
71111.14	Personnel Performance Related to Nonroutine Plant Evolutions
	and Events 07/07/03 (03-023)
71111.15	Operability Evaluations 02/02/04 (04-003)
71111.16	Operator Workarounds 01/17/02 (02-001)
71111.17	Permanent Plant modifications 01/17/02 (02-001)
71111.19	Post Maintenance Testing 01/17/02 (02-001)
71111.20	Refueling and Outage Activities 05/06/04 (04-011)
71111.21	Safety System Design and Performance Capability 04/13/04 (04-008)
71111.22	Surveillance Testing 05/11/04 (04-013)
71111.23	Temporary Plant Modifications 01/17/02 (02-001)
71114	Reactor Safety-Emergency Preparedness 07/09/02 (02-027)
71114.01	Exercise Evaluation 07/09/02 (02-027)
71114.02	Alert and Notification System Testing 07/09/02 (02-027)
71114.03	Emergency Response Organization Augmentation Testing 07/09/02 (02-027)
71114.04	Emergency Action Level and Emergency Plan Changes 07/09/02 (02-027)
71114.05	Correction of emergency Preparedness Weaknesses and Deficiencies 07/09/02 (02-027)
71114.06	Drill Evaluation 07/09/02 (02-027)
71121	Occupational Radiation Safety 03/06/02 (02-008)
71121.01	Access Control to Radiologically Significant Areas 03/06/02 (02-008)
71121.02	ALARA Planning and Controls 03/06/08 (02-008)
71121.03	Radiation Monitoring Instrumentation 03/06/02 (02-008)
71122	Public Radiation Safety 01/24/03 (03-001)
71122.01	Radioactive Gaseous and Liquid Effluent Treatment and Monitoring Systems 01/24/03 (03-001)
71122.02	Radioactive Material Processing and Transportation 01/24/03 (03-001)
71122.03	Radiological Environmental Monitoring Program (REMP) 01/24/03 (03-001)
71130	Physical Protection 02/19/04 (04-007)
71130.01	Access Authorization 02/19/04 (04-007)
71130.02	Access Control 02/16/04 (04-007)
71130.03	Contingency Response - Force-Ón-Force Testing 11/10/04 (04-026)
71130.04	Equipment Performance, Testing Maintenance 02/19/04 (04-007)
71130.05	Protective Strategy Evaluation 02/19/04 (04-007)
71130.06	Inspection of Security Plan Changes 02/19/04 (04-007)
71130.07	Security Training 02/19/04 (04-007)
71130.08	Fitness For Duty Training 02/19/04 (04-007)
71130.09	Owner-Controlled Area Controls 02/19/04 (04-007)
71150	Discrepant or Unreported Performance Indicator Data 03/06/01 (01-006)
71151	Performance Indicator Verification 10/06/04 (04-025)
71152	Identification and Resolution of Problems 09/08/03 (03-032)
71153	Event Followup 06/24/03 (03-020)
71707	Plant Operations 12/31/98 (98-020)
71714	Cold Weather Preparations 09/17/01 (01-017)
71715	Sustained Control Room and Plant Observation 04/14/92

PART PROCEDURE

	(92-004)
71750	Plant Support Activities 06/24/98 (98-010)
71801	Decommissioning Performance and Status Review at
	Permanently Shutdown Reactors 08/11/97 (97-012)
71841	Human Performance 12/12/00 (00-027)
71846B	Review of Conduct of Operations 10/01/76 (76-24)

7200 Startup Testing

72300 72301 72302	Startup Test Procedure Review 01/20/84 (84-04) Startup Test Results Evaluation 01/20/84 (84-04) Startup Test Witnessing and Observation 01/20/84 (84-04)
72400B 72500B 72502B 72504B 72508B	Overall Startup Test Program 07/01/80 (80-16) Initial Fuel Loading Procedure 04/30/75 (75-16) Initial Criticality Procedure Review (BWR) 04/30/75 (75-16) Heatup Phase Procedure Review 04/30/75 (75-16) Power Ascension Procedure Review: HPCI System 07/01/80
72509B	(80-16) Power Ascension Procedure Review: Control Rod Drive
72510B	System 07/01/80 (80-16) Power Ascension Procedure Review - Relief Valves and MSIVs 04/30/75 (75-16)
72512B	Startup Test Procedure Review - RCIC or Recirculation Pump Trip 04/30/75 (75-16)
72514B	Startup Test Procedure Review - Turbine Trip/Generator Trip 07/01/80 (80-16)
72516B	Startup Test Procedure Review - Shutdown From Outside the Control Room (Group A) 07/01/80 (80-16)
72517B	Startup Test Procedure Review: Loss of Offsite Power (Group A & B) 07/01/80 (80-16)
72518B	Startup Test Procedure Review - Core Performance 07/01/80 (80-16)
72524	Initial Fuel Loading Witnessing 01/20/84 (84-04)
72526	BWR Initial Criticality Witnessing 01/20/84 (84-04)
72532	Power Level Plateau Data Review (BWR) 01/20/84 (84-04)
72564B	Precritical Test Procedure Review - Protective Trip Circuit or Rod Drop Measurement 07/01/80 (80-16)
72566B	Precritical Test Procedure Review - RES Lead Test or or Pressurizer Effectiveness 07/01/80 (80-16)
72570B	Initial Criticality Procedure Review (PWR) 07/01/80 (80-16)
72572B	Low Power Test Procedures Review Moderator Temperature Coefficient and Boron Worth or Control Rod Worth and Pseudo Rod Ejection Worth 07/01/80 (80-16)
72576B	Power Ascension Test Procedure Review - Natural Circulation or Power Reactivity Coefficient Measurement 07/01/80 (80-16)

72578B	Power Ascension Test Procedure Review - Evaluation of
	Core Performance 07/01/80 (80-16)
72580B	Power Ascension Test Procedure Review - Turbine Trip
	or Generator Trip 07/01/80 (80-16)

- 19 -Issue Date: 12/01/04 TABLE OF CONTENTS

PART	_	
	PROCEDUR	
	72582B	Power Ascension Test Procedure Review - Loss of Offsite Power (Group A) 07/01/80 (80-16)
	72583B	Power Ascension Test Procedure Réview: Shutdown from Outside the Control Room (Group B) 07/01/80 (80-16)
	72584B	Power Ascension Test Procedure Review - Evaluation of Flux Asymmetry or Pseudo Rod Ejection Test 04/30/75 (75-16)
	72592 72596B	PWR Initial Criticality Witnessing 01/20/84 (84-04) Precritical Data Review 07/01/80 (80-16)
	72600B	Power Level Plateau Data Review (25% PWR) 07/01/80 (80-16)
	72608B	Power Level Plateau Data Review (50% PWR) 07/01/80 (80-16)
	72616B	Power Level Plateau Data Review (75% PWR) 07/01/80 (80-16)
	72624B	Power Level Plateau Data Review (100% PWR) 07/01/80 (80-16)
	72701	Modification Testing 04/14/92 (92-004)
7300	Inservice Ins	spection
	73051	Inservice Inspection - Review of Program 01/14/86 (86-03)
	73052	Inservice Inspection - Review of Procedures 01/14/86 (86-03)
	73753 73755	Inservice Inspection 06/24/98 (98-010) Inservice Inspection - Data Review and Evaluation
		01/14/86 (86-03)
	73756	Inservice Testing of Pumps and Valves 07/27/95 (95-009)
7400	Reserved	
7500	Reserved	
7600	Reserved	
7700	Reserved	
7800	High Level Waste	
	78060	Design Control (Pre-Licensing and Construction)
	78070	[04/02/03 (03-008)] Procurement Document Control (Pre-Licensing and Construction) [04/02/03 (03-008)]
	78080	Instruction, Procedures, and Drawings (Pre-Licensing and
		Construction) [04/02/03 (03-008)]
	78090	Document Control (Pre-Licensing and Construction) [04/02/03 (03-008)]

81073

81074

81078 81080

81084

PROCEDURE Control of Measuring and Test Equipment (Pre-Licensing and 78160 Construction) [04/02/03 (03-008)] Handling, Storage, and Shipping of Materials and Equipment 78170 (Pre-Licensing and Construction) [04/02/03 (03-008)] 78200 Corrective Action (Pre-Licensing and Construction) [04/02/03 (03-008)] Supplier/Vendor Inspection (Pre-Licensing and Construction) 78300 [04/02/03 (03-008)] 7900 Water Chemistry 79702 Control and monitoring of Radiological Source Term 04/17/00 (00-006) 8000 Environmental Protection 80721 Radiological Environmental Monitoring 09/17/01(01-017) 8100 Physical Security 81001 Independent Spent Fuel Storage Installations 09/17/01 (01-017) 81001.1 Independent Spent Fuel Storage Installation(s) at Operating Plants 02/02/04 (04-003) 81018 Security Plan and Implementing Procedures 05/09/84 (84-15) 81020 Management Effectiveness - Security Program 05/09/84 (84-15) Security Organization 05/09/84 (84-15) 81022 81034 Security Program Audit 05/09/84 (84-15) Records and Reports 05/09/84 (84-15) 81038 81042 Testing and Maintenance 05/09/84 (84-15) Locks, Keys, and Combinations 05/09/84 (84-15) 81046 Physical Barriers - Protected Areas 05/09/84 (84-15) 81052 81054 Physical Barriers - Vital Areas, Material Access Areas, and Controlled Access Areas 05/09/84 (84-15) Security System Power Supply 05/09/84 (84-15) 81058 81062 Lighting 05/09/84 (84-15) Compensatory Measures 05/09/84 (84-15) 81064 81066 Assessment Aids 05/09/84 (84-15) 81070 Access Control - Personnel 05/09/84 (84-15) Access Control (Power Reactor) - Packages 05/09/84 (84-15) 81072

81088	Communications 05/09/84 (84-15)
81110	Operational Safeguards Response Evaluation (OSRE)
	09/08/00 (00-017)
81310	Physical Protection of Shipments of Irradiated Fuel

Access Control - Vehicles 05/09/84 (84-15)

and SSNM 05/09/84 (84-15)

Alarm Stations 05/09/84 (84-15)

Access Control (Fuel Facility) - Packages, Material,

Detection Aids - Protected Areas 05/09/84 (84-15)

Detection Aids - VA, MAA, and CAA 05/09/84 (84-15)

PART	
PROCE	DURE
	02/20/86 (86-09)
81335	Physical Protection of Shipments of SNM of Moderate Strategic Significance (MSNM) 02/20/86 (86-09)
81340	Physical Protection of Shipments of SNM of Low Strategic Significance (LSNM) 02/20/86 (86-09)
81360	General Requirements for Physical Protection of Formula Quantities of Special Nuclear Material in Transit 08/20/86 (86-40)
81365	Records, Reports, and Planning for Physical Protection of Formula Quantities of Special Nuclear Material in Transit 08/20/86 (86-40)
81370	Specific Requirements for Physical Protection of Formula Quantities of Special Nuclear Materials in Transit 08/20/86 (86-40)
81401	Plans, Procedures, and Reviews 09/17/01 (01-017
81402	Reports of Safeguards Events 06/13/85 (85-23)
81403	Receipt of New Fuel at Reactor Facilities 09/17/01 (01-017
81411	Physical Protection for Reactors with Formula Quantities of Special Nuclear Material 11/04/85 (85-34)
81421	Fixed Site Physical Protection of Special Nuclear Material of Moderate Strategic Significance 06/13/85 (85-23)
81431	Fixed Site Physical Protection of Special Nuclear Material of Low Strategic Significance 09/17/01 (01-017)
81501	Personnel Training and Qualification - General Requirements 05/09/84 (84-15)
81502 81601	Fitness For Duty Program 05/31/91 (91-008) Safeguards Contingency Plan - Implementation Review 05/09/84 (84-15)
81700	Physical Security Program for Power Reactors 07/01/97 (97-010)
81810	Protection of Safeguards Information 02/09/87 (87-03)
81815	Authorizations for Access to National Security Information (NSI) and Restricted Data (RD) 04/30/97 (97-005)
81820	Physical Protection Facility Approval and Safeguarding of National Security Information (NSI) and Restricted Data (RD) 04/30/97 (97-005)
81910	Alarm Stations 02/19/91 (91-003)
81911	Assessment 02/19/91 (91-003)
81912	Badge Control 02/19/91 (91-003)
81913	Communications 02/19/91 (91-003)
81914 81915	Duress Alarms 02/19/91 (91-003) EECP Machine Performance - Explosive Detectors
	02/19/91 (91-003)
81916	EECP Machine Performance - Metal Detectors 02/19/91 (91-003)
81917	EECP Machine Performance - X-ray 02/19/91 (91-003)
81918 81919	Emergency Power Supply 02/19/91 (91-003) Interior Alarms 02/19/91 (91-003)
81920	Intrusion Detection System 02/19/91 (91-003)
81921	Isolation Zone 02/19/91 (91-003)
81922 81923	Keys, Locks, and Combinations 02/19/91 (91-003) Lighting 02/19/91 (91-003)

PROCEDURE 81924 MAA Barriers 02/19/91 (91-003) Personnel Searches 02/19/91 (91-003) 81925 81926 Preventative Maintenance 02/19/91 (91-003) 81927 Protected Area Barriers 02/19/91 (91-003) 81928 Protected Area Housekeeping 02/19/91 (91-003) Strategic Special Nuclear Material Exit Searches 81929 02/19/91 (91-003) 81930 Tactical Response Team Exercises 02/19/91 (91-003) Vehicle Barriers 02/19/91 (91-003) 81931 81932 Vehicle Escorts 02/19/91 (91-003) 81933 Vehicle Searches 03/18/91 (91-005) Warehouse Searches 03/18/91 (91-005) 81934 Weapons Qualification 02/19/91 (91-003) 81935 8200 Emergency Planning 82001 Evaluation of Emergency Preparedness 05/22/00 (00-010) 82301 **Evaluation of Exercises for Power Reactors** 12/31/96 (96-024) 82302 Review of Exercise Objectives and Scenarios for Power Reactors 06/24/98 (98-010) 82701 Operational Status of the Emergency Preparedness Program 12/31/96 (96-024) 8300 Radiation Protection 83100 Occupational Exposure During SAFSTOR and DECON 12/30/91 (91-022) Significant Uncontrolled Radiation Exposures 83501 04/17/00 (00-006) 83502.01 Radioactive Gaseous and Liquid Treatment and Monitoring Systems 04/17/00 (00-006) 83502.02 Radioactive Material Process and Transportation 04/17/00 (00-006) Radiological Environmental Monitoring Program and 83502.03 Radioactive Material Control Program 04/17/00 (00-006) 83521 Radiation Protection - Startup 01/01/84 (84-01) 83722 Radiation Protection, Plant Chemistry, and Radwaste: Organization and Management Controls (Minimum/Basic) 09/17/01 (01-017) General Employee, Radiation Safety, Plant Chemistry, 83723 Radwaste, and Transportation Training 12/16/03 (03-041) 83724 External Occupational Exposure Control and Personal Dosimetry 04/17/00 (00-006) Internal Exposure Control and Assessment 04/17/00 (00-006) 83725 83726 Control of Radioactive Materials and Contamination, Surveys, and Monitoring 09/17/01 (01-017) 83727 Facilities and Equipment (Basic) 09/17/01 (01-017) 83728 Maintaining Occupational Exposures ALARA 04/17/00 (00-006)Occupational Exposure During Extended Outages 12/31/91 83729

Issue Date: 12/01/04 - 23 - TABLE OF CONTENTS

PROCEDURE		
	83750 83801	(91-021) Occupational Radiation Exposure 06/06/02 (02-023) Inspection of Final Surveys at Permanently Shutdown Reactors 01/28/02 (02-003)
	83822 83890	Radiation Protection 09/07/00 (00-016) Closeout Inspection and Survey 05/01/03 (03-013)
8400	Radioactive	Waste Management
	84100	Special Nuclear Material Inspections At Near Surface Low-Level Waste Disposal Facilities In Agreement States 11/27/01 (01-028)
	84101 84521 84750	Radioactive Waste Management 12/30/91 (91-022) Radwaste - Startup 01/01/84 (84-01) Radioactive Waste Treatment, and Effluent and Environmental
	84850	Monitoring 03/15/94 (94-006) Radioactive Waste Management - Inspection of Waste Generator Requirements of 10 CFR 20 and 10 CFR 61 06/06/02 (02-023)
	84900	Low-Level Radioactive Waste Storage 10/20/00 (00-022)
8500	0 Material Control and Accountability	
	85102	Material Control and Accounting - Reactors 03/29/85 (85-10)
	85200	MC&A for Licensees Possessing Less Than or Equal to One Effective Kilogram of SNM 04/10/85 (85-15)
	85203	Facility Organization and Management Controls 01/17/86 (86-04)
	85205	Facility Operations and Internal Controls 04/10/85 (85-15)
	85207 85209 85211 85215 85301 85303	Measurement Systems 01/17/86 (86-04) Measurement Control and Statistics 04/10/85 (85-15) Physical Inventory 01/17/86 (86-04) Records and Reports 01/17/86 (86-04) MC&A for Imports and Exports 07/18/84 (84-22) MC&A Management Structure and Personnel Training and Qualification 03/18/91 (91-005)
	85305 85307 85309 85311 85313 85315 85401 85402	Item Monitoring 03/18/91 (91-005) Process Monitoring 03/18/91 (91-005) Measurement Systems and Control 03/18/91 (91-005) Physical Inventory 03/18/91 (91-005) Alarm Resolution 03/18/91 (91-005) Accounting and Internal Control 03/18/91 (91-005) Management Structure 07/22/99 (99-011) Measurement Control 07/22/99 (99-011)
	85403 85404 85405 85406	Measurement Control Program 07/22/99 (99-011) Physical Inventory 10/23/96 (96-021) Item Control Program 07/22/99 (99-011) Resolution Program 10/23/96 (96-021)

PROCEDURE

85407	Assessment Program 07/22/99 (99-011)
85408	Recordkeeping 07/22/99 (99-011)
85420	Inspection of IAEA Safeguards for Inspectors at Power
	Reactors 06/22/88 (88-07)
85425	Implementation of US/IAEA Safeguards Agreement at Fuel
	Facilities 06/22/88 (88-07)
85501	Inventory Program 07/22/99 (99-011)
85502	Detection Program 07/22/99 (99-011)
85503	Resolution Program 07/22/99 (99-011)

8600 Spent Fuel and Other Radioactive Material Packaging and Shipping

86001	Design, Fabrication, Testing, and Maintenance of
	Transportation Packagings 02/07/02 (02-004)
86700	Spent Fuel Pool Activities 09/17/01 (01-017)
86730	Transportation of Radioactive Materials (49 CFR Parts 100-
	179 and 10 CFR Part 71) 04/17/00 (00-006)
86740	Inspection of Transportation Activities 04/24/02 (02-020)
86750	Solid Radioactive Waste Management and Transportation
	of Radioactive Materials 03/15/94 (94-006)

8700 Materials Safety Inspection

87102	Maintaining Effluents From Materials Facilities As Low As Is Reasonably Achievable (ALRA) 04/04/00 (00-005)
87103	Inspection of Material Licensees Involved in an Incident or Bankruptcy Filing 11/03/00 (00-023)
87104	Decommissioning Inspection Procedure for Materials Licensees 07/29/02 (02-029)
87121	Industrial Radiográphy Programs 12/31/02 (02-047)
87122	Irradiator Programs 12/31/02 (02-047)
87123	Well Logging Programs 11/25/03 (03-037)
87124	Fixed and Portable Gauge Programs 11/25/03 (03-037)
87125	Materials Processor/Manufacturer Programs 12/31/02 (02-047)
87126	Industrial/Academic/Research Programs 12/31/02 (02-047)
87127	Radiopharmacy Programs 12/31/02 (02-047)
87129	Master Materials Program 09/15/03 (03-034)
87130	Nuclear Medicine Programs, Written Directive Not Required 10/24/02 (02-041)
87131	Nuclear Medicine Programs, Written Directive Required 10/24/02 (02-041)
87132	Brachytherapy Programs 10/24/02 (02-041)
87133	Medical Gamma Sterotactic Radiosurgery and Teletherapy Programs 10/24/02 (02-041)
87134	Medical Broad Scope Programs 10/24/02 (02-041)

87250	Locating Missing Materials Licensees 10/29/01 (01-022)
87654	Uranium Mill, In-Situ Uranium Recovery, and 11e.(2) Byproduct
	Material Site Decommissioning Inspection 03/19/02 (02-010)

Issue Date: 12/01/04 - 25 - TABLE OF CONTENTS

PROCEDURE

8800 Fuel Facility Inspection

	88001	On-Site Construction 04/15/94 (94-011)
	88002	Operational Event Review and Feedback Programs at Fuel Cycle Facilities 12/20/96 (96-025)
	88003	Reactive Inspection For Events At Fuel Cycle Facilities
		08/10/98 (98-012)
	88005	Management Organization and Controls 12/20/96 (96-025)
	88010	Operator Training/Retraining 05/23/84 (84-17)
	88015	Headquarters Nuclear Criticality Safety Program 12/20/96 (96-025)
	88020	Regional Criticality Safety Inspection Program
		12/20/96 (96-025)
	88025	Maintenance and Surveillance Testing 05/23/84 (84-17)
	88035	Radioactive Waste Management 05/23/84 (84-17)
	88045	Environmental Protection 05/23/84 (84-17)
	88050	Emergency Preparedness 04/08/96 (96-007)
	88055	Fire Protection 01/14/91 (91-001)
	88056 88057	Process Safety Information 01/16/96 (96-001) Hazard Identification Information 01/16/96 (96-001)
	88058	Standard Operating Procedures 01/16/96 (96-001)
	88059	Site-Wide Safety Procedures 01/16/96 (96-001)
	88060	Detection and Monitoring 01/16/96 (96-001)
	88061	Chemical Safety Training 01/16/96 (96-001)
	88062	Maintenance and Inspection 01/16/96 (96-001)
	88063	Management of Change 01/16/96 (96-001)
	88064	Emergency Response Procedures 01/16/96 (96-001)
	88065	Incident Investigation 01/16/96 (96-001)
	88066	Audits and Inspection 01/16/96 (96-001)
	88100	Plant Operations 12/30/96 (96-026)
	88101	Configuration Control 12/30/96 (96-026)
	88102	Surveillance Observations 12/30/96 (96-026)
	88103	Maintenance Observations 12/30/96 (96-026)
	88104	Decommissioning Inspection Procedure For Fuel Cycle Facilities 07/03/02 (02-026)
	88105	Management Organization and Controls 12/30/96 (96-026)
8900	Fuel Facility	and Materials Special Program

89001 In-Situ Leach (ISL) Facilities 09/02/97 (97-013)

9000 Reportable Matters and Report Reviews

90501B	Reportable Matters - Startup Test Program	04/30/75
	(75-16)	

90712	Inoffice Review of Written Reports of Nonroutine Events
	at Power Reactor Facilities 12/31/98 (98-020)
90713	In Office Review of Periodic and Special Reports
	09/17/01 (01-017)
90714	Nonroutine Reporting Program 09/17/01 (01-017)

PROCEDURE

9100 Title 10 Requirements

	•	
9200	Planned Non-Routine Activities	
	92050	Review of Quality Assurance For Extended Construction Delay 04/04/00 (00-005)
	92700	Onsite Followup of Written Reports of Nonroutine Events at Power Reactor Facilities 12/31/98 (98-020)
	92701 92702	Followup 03/14/94 (94-005) Followup on Corrective Actions for Violations and Deviations
	92703	03/14/94 (94-005) Followup of Confirmatory Action Letters 11/08/01 (01-025)
	92709 92711	Licensee Plans for Coping With Strikes 08/21/92 (92-010) Continued Implementation of Strike Plans During an Extended
	92712	Strike 08/21/92 (92-010) Resumption of Normal Operations After a Strike 08/21/92 (92-010)
	92901 92902 92903	Followup - Plant Operations 09/17/01 (01-017) Followup - Maintenance 09/17/01 (01-017) Followup - Engineering 09/17/01 (01-017)
	92904	Followup - Plant Support 09/17/01 (01-017)
9300	Non-Routine	<u>Activities</u>
	93001 93702	OHSA Interface Activities 02/11/04 (04-006) Prompt Onsite Response To Events At Operating Power Reactors 09/17/01 (01-017)
	93800 93801	Augmented Inspection Team 10/23/02 (02-039) Safety System Functional Inspection (SSFI) 07/25/96 (96-016)
	93802	Operational Safety Team Inspection (OSTI) 11/27/89 (89-015)
	93803	Safety Systems Outage Modifications Inspection 04/27/89 (89-008)
	93804	Risk-Based Operational Safety and Performance Inspection 01/15/92 (92-001)
	93805 93806	Maintenance Program 08/06/93 (93-070) Operational Readiness Assessment Team Inspections
	93807	09/29/98 (98-015) Systems Based Instrumentation and Control Inspection 01/29/93 (93-001)
	93809	Safety System Engineering Inspection (SSEI) 06/23/97 (97-009)
	93810	Service Water System Operational Performance Inspection
	93811	(SWSOPI) 09/14/98 (98-013) Electrical Distribution System Functional Inspection (EDSFI)
	93812	02/03/99 (99-002) Special Inspection 07/07/03 (03-023)

Issue Date: 12/01/04 - 27 -**TABLE OF CONTENTS**

PROCEDURE

9400 Technical Activities of an Administrative Nature

9500 Strategic Determination Actions

95001 Inspection for One or Two White Inputs in a Strategic Performance Area 05/23/03 (03-016)
95002 Inspection for One Degraded Cornerstone or Any three White Inputs in a Strategic Performance Area 05/23/03 (03-016)
95003 Inspection for Repetitive Degraded Cornerstones, Multiple Degraded Cornerstones, Multiple Yellow Inputs, or One

Red Input 01/17/02 (02-001)

9600 Reserved

9700 Reserved

9800 Reserved

TECHNICAL GUIDANCE

9900 Guidance²

99000 Technical Guidance 05/12/86 (86-26) 99100 Health Physics Positions 10/30/92 (92-011)

Technical Guidance

<u>Lechnical Gi</u>	<u>uidance</u>
Reg. Guide 1.16,	Para. C.2.a(2) and C.2.b(2) - Reporting Requirements - Degraded Mode 04/01/79 (79-05)
Reg. Guide 1.16,	Para. C.2.a(3) - Reporting Requirements - Abnormal Degradation 04/01/78 (78-11)
Reg. Guide 1.16,	Para. C.2.a(4) - Reporting Requirements - Reactivity Anomalies 07/01/78 (78-24)
Reg. Guide 1.33 - "	Procedure Implementation" as used in Section 6.8.1 of Standard Technical Specifications 04/01/77 (77-05)
Reg. Guide 1.58 - 0	Qualifications of Nuclear Power Plant Inspection, Examination and Testing Personnel 04/01/77 (77-05)
ASME Secton III	American Society of Mechanical Engineers ASME Boiler and Pressure Vessel Code, Section III 06/16/89 (89-011)
ASME Section III	American Society of Mechanical Engineers ASME Boiler and & XI Pressure Vessel Code, Section III & XI 11/12/96 (96-022)
ASME Section IX	American Society of Mechanical Engineers ASME Boiler and Pressure Vessel Code, Section IX 05/12/86 (86-26)
ASME Section XI	American Society of Mechanical Engineers ASME Boiler and Pressure Vessel Code, Section XI 12/08/86 (86-54)
ASME Section XI	American Society of Mechanical Engineers ASME, Section XI 05/12/86 (86-26)
IEEE	Institute of Electrical and Electronic Engineers IEEE Standard 450-1975 05/12/86 (86-26)
ANSI	American National Standards Institute ANSI N18.7-1972 Section 5.1.5 05/12/86 (86-26)
ANSI	ANSI N18.7, Section 5.2.7 - Design and Construction Type Activities Conducted During the Operations Phase (Maintenance and Modifications) 04/01/77 (77-05)

Issue Date: 12/01/04 - 29 - TABLE OF CONTENTS

² [XXXX.XX] attached to each document in Part 9900, is the file name for that document.

TECHNICAL GUIDANCE

ANSI	ANSI N45.2.9, Section 5.5 - Records Storage Facility 1/01/82 (81-28)
ANSI	ANSI N45.2.9, Section 5.6 - NRC Criteria for Records Storage Facilities 07/01/80 (80-17)
ANSI	ANSI/ASME NQA-1-1989, Supplement 17S-1, Section 5 09/17/90 (CN-010) (90-010)
STS Sec 1.0	Operability 05/12/86 (86-26)
STS Sec 1.0	Definitions 12/08/86 (86-54)
STS Sec 1.0	Operable/Operability 10/31/91 (91-015)
STS Sec 3.0	Acceptable Measurement Tolerances for Technical Specification Limits 10/01/78 (78-35)
STS Sec 3.0	Operability and Action Statement Requirements 07/01/80 (80-17)
STS Sec 3.0	Voluntary Entry Into Action Statement 01/01/82 (81-28)
STS Sec 3.0	Resolution of Degraded and Nonconforming Conditions 10/23/97 (97-018) [STS30DEG.TG]
STS Sec 3.0.3	Limiting Conditions for Operations 08/31/87 (87-30)
STS Sec 3.0 and Sec 4.0	Limiting Conditions for Operation and Surveillance Requirements 07/22/87 (87-26)
STS Sec 3/4.6.4	Containment and Drywell Isolation Valves 06/09/88 (88-06)
STS Sec 3.7.5	Ultimate Heat Sink 11/25/88 (88-17)
STS Sec 3/4.8.1	TDI Diesel Generator Air Roll Tests 06/09/88 (88-06)
STS Sec 4.2.8.X.X	Surveillance Requirements - 125-Volt Battery Bank 10/01/79 (79-22)
STS Sec 4.5.1	Standard Technical Specifications (BWR) 05/12/86 (86-26)
STS Sec 4.7.9	Surveillance of Snubber Piston Settings 04/01/81 (81-08)
STS Sec 4.7.9.1.a	Establishment of Visual Inspection Intervals for Snubbers 10/01/78 (78-35)
STS Sec 4.7.9.1(a)	Hydraulic Snubber Inspection Schedule 01/01/79 (78-48)
STS Sec 4.7.9.6	Operability of Hydraulic Snubbers With Empty Reservoirs 10/01/80 (80-24)

TECHNICAL GUIDANCE

STS Sec 4.8.1.1.2 - 05/12/86 (86-26)

STS Sec 6.5.1	Onsite Committee Review of Unit Operations to Detect Potential
	Nuclear Safety Hazards 10/01/80 (80-24)

STS Sec 6.5.1.1 Licensee Review Responsibility for Matters Related to Nuclear Safety 01/01/82 (81-28)

STS Sec 6.5.1.6c Licensee Review Responsibility for Proposed Changes to and Sec 6.5 Facility Technical Specifications 01/01/82 (81-28)

STS Sec 6.5.2.8 Requirements for Off-Site Committee Audit Functions 10/01/78 (78-35)

STS Sec 6.9.1.7 Reporting Requirements - Reportable Occurrences 04/01/78 (78-11)

STS Surveillance Sections - Locked or Otherwise Secured Components 10/01/77 (77-25)

STS Interp Licensee Technical Specification Interpretations 02/03/97 (97-001)

Maintenance

Voluntary Entry Into Limiting Conditions For Operation Action Statements To Perform Preventive Maintenance 01/17/02 (02-001)

Assessing On-Line Leak Sealing of ASME Code Class 1 & 2 07/15/97 (97-011)

Filled Organic Coatings Used in Maintenance of Safety Related Equipment 10/11/94 (94-018)

Preconditioning of Structures, Systems, and Components (SSCs) Before Determining Operability 09/28/98 (98-014) [PRECOND.TG]

Mechanical

Freeze Plugs 06/14/93 (93-005)

Steam Generator Plugs and Sleeving Repairs 08/01/94 (94-014)

Steam Generator Tube-to-Secondary Leakage 09/09/03 (03-033) [TG_Mech SGTUBELKG.wpd]

Operations

Issue Date: 12/01/04 - 31 - TABLE OF CONTENTS

TECHNICAL GUIDANCE

Procedural Adherence 01/14/91 (91-001)

Notice of Enforcement Discretion 11/02/01 (01-024) [TG OpsNOED.wpd]

Notice of Enforcement Discretion For Gaseous Diffusion Plants 05/03/99 (99-008) [NOEDGAS.TG]

Safety and Compliance 09/09/97 (97-015) [SAFETY.TG]

10 CFR GUIDANCE

10 CFR GUIDANCE

	CFR Discussions Containment Integrated Leak Rate Testing 12/08/86 (86-54)
	Title 10 of the Code of Federal Regulations 12/08/86 (86-54)
10 CFR 30	License Condition, "Used by or under the supervision of" 10/01/79 (79-23)
10CFR71 and 49CFR171-178	Transportation of Radioactive Material 12/01/04 (04-027)
50	Byproduct Material Produced in Non-Power Reactors 09/30/88 (88-14)
50.34(a) & (b)	Status of PSAR After FSAR is Submitted 12/30/87 (87-39)
50.36	Changes to Facility Technical Specifications 01/01/77 (76-39)
50.54(o)	Guidance Relating to the Application of Appendix J -Primary Reactor Containment Leakage Testing for Water-Cooled Power Reactors 04/01/78 (78-11)
50.55(e)	Construction Deficiency Reporting 01/31/89 (89-002)
50.55a	Codes and Standards 02/22/73 (73-9)
50.55a(g)	Pump Operability Requirements 07/01/80 (80-17)
50.59	10 CFR 50.59, Changes, Tests, and Experiments 03/13/01 (01-008) [50_59.CFR]
50.109	Backfitting 01/01/82 (81-28)
Part 50, App A	Definition of Leak-Before-Break Analysis 09/26/96 (96-020)
Part 50, App B	Responsibility - Review and Approval of Licensee QA Plans for Operation, 10/01/80 (80-24)
Part 50, App B	Applicability of Appendix B to Chemicals and Reagents, 04/01/77 (77-05)
Part 50, App B	Criterion II - Maintenance of Proficiency for Personnel Performing Activities Affecting Quality 07/01/81 (81-19)
Part 50, App B	Criterion VII - Guidance - Use of Certificate of Conformance 04/01/80 (80-08)
Part 50, App B	Criterion VII - Guidance - Procurement of Spare and Replacement Parts, 01/01/82 (81-28)
Part 50, App B	Criterion VII - Control of Purchased Materials, Equipment and Services 06/02/71 (71-16)

Issue Date: 12/01/04 - 33 - TABLE OF CONTENTS

10 CFR GUIDANCE

Part 50, App B Criterion X & XVII - Inspection Documentation Guidance

01/14/88 (88-01)

Part 50 Appendix J, Containment Integrated Leak Rate Testing

12/08/86 (86-54)

70.51 Material Balance, Inventory, and Records Requirements

12/19/74 (74-11)

70.52 Report of Accidental Criticality or Loss of Special Nuclear

Material 11/15/74 (74-010)

Interpretations

Materials License Conditions - Interpretations 05/12/71 (71-12)

END