Florida Power Corporation Crystal River Energy Complex Mr. Roy A. Anderson (SA2A) Sr. VP. Nuclear Operations ATTN: Mgr., Nuclear Licensing 15760 West Power Line Street Crystal River, FL 34428-6708

SUBJECT: MEETING SUMMARY: CRYSTAL RIVER 3 RESTART PANEL

CRYSTAL RIVER 3 - DOCKET NO. 50-302

Dear Mr. Anderson:

This refers to the Restart Panel meeting conducted at the Crystal River facility on June 19, 1997. The purpose of the meeting was to discuss the items included on the NRC Manual Chapter 0350 restart matrix and the FPC restart list. A list of attendees and a copy of your handout is enclosed.

In accordance with Section 2.790 of the NRC's "Rule of Practice." Part 2. Title 10. Code of Federal Regulations, a copy of this letter and its enclosure will be placed in the NRC Public Document Room.

Should you have any questions concerning this letter, please contact me at (404) 562-4600.

Sincerely.

Orig signed by Harold Christensen

Johns P. Jaudon, Director Division of Reactor Safety

Docket No. 50-302 License Nos. DPR-72

Enclosures: 1. List of Attendees 2. FPC Handout

cc w/encls: John P. Cowan, Vice President Nuclear Production (NA2E) FPC. Crystal River Energy Complex 15760 West Power Line Street Crystal River, FL 34428-6708

cc w/encls: See page 2

OFFICIAL COPY

9707240176 970626 PDR ADOCK 05000302





cc w/encls: Continued B. J. Hickle. Director Nuclear Plant Operations (NA2C) FPC, Crystal River Energy Complex 15760 West Power Line Street Crystal River, FL 34428-6708

Robert E. Grazio, Director Nuclear Regulatory Affairs (SA2A) FPC, Crystal River Energy Complex 15760 West Power Line Street Crystal River, FL 34428-6708

James S. Baumstark, Director Quality Programs (SA2C) FPC. Crystal River Energy Complex 15760 West Power Line Street Crystal River, FL 34428-6708

R. Alexander Glenn, Corporate Counsel Florida Power Corporation MAC - A5A P. O. Box 14042 St. Petersburg, FL 33723-4042

Attorney General Department of Legal Affairs The Capitol Tallahassee, FL 32304

Bill Passetti
Office of Radiation Control
Department of Health and
Rehabilitative Services
1317 Winewood Boulevard
Tallahassee, FL 32399-0700

Joe Myers, Director Division of Emergency Preparedness Department of Community Affairs 2740 Centerview Drive Tallahassee, FL 32399-2100

Chairman Board of County Commissioners Citrus County 110 N. Apopka Avenue Inverness, FL 34450-4245

Robert B. Borsum Framatome Technologies 1700 Rockville Pike, Suite 525 Rockville, MD 20852-1631 Distribution w/encls: L. Raghavan, NRR B. Crowley, RII G. Hopper, RII PUBLIC

NRC Resident Inspector U.S. Nuclear Regulatory Commission 6745 N. Tallahassee Road Crystal River, FL 34428

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DA	TE	26.26	7 / 97	06 /	20/97	06 /	/ 97	06 /	/ 97	06 /	/ 97	06 /	/ 9
COP	Y?	(YES)	NO	(YES)	NO	YES	NO	YES	NO	YES	NO	YES	NO

LIST OF ATTENDEES

Florida Power Corporation

J. Baumstark, Director, Quality Programs

J. Cowan, Vice President, Nuclear Production

R. Grazio, Director, Regulatory Affairs

G. Hanlon, Assistant Plant Director

B. Hickle, Director, Restart

J. Holder, Engineering Director D. Kunsemiller, Manager, Nuclear Licensing

M. Marano, Director, Site and Business Restart J. Maseda, Manager, Engineering Programs,

C. Pardee, Director, Nuclear Plant Operations

F. Sullivan, Manager, Nuclear Operations Engineering J. Terry, Manager, Nuclear Plant Technical Support

T. Taylor, Director, Nuclear Training

E. Vilade. Communications

Nuclear Regulatory Commission

S. Cahill, Senior Resident Inspector, Crystal River

K. Clark, Senior Public Affairs, Region II

C. Christensen, Engineering Branch Chief, Division Reactor Safety M. Dapas, Executive Director for Operations Regional Coordinator F. Hebdon, Director II-3, Office Of Nuclear Reactor Regulations (NRR)

J. Jaudon, Director, DRS

C. Julian, Technical Assistant, DRS

K. Landis, Chief, Branch 3, Division of Reactor Projects

L. Plisco, Chief, Oversight Branch, NRR

L. Raghavan, Project Manager, Project Directorate II-3, NRR

Media Representatives and Other Interested Parties

R. Colthorpe, General Manager, NUS Information Services Inc.

I. James, Reporter, St. Petersburg Times

R. Russell. Research Assistant, Florida Public Service Commission

D. Sells, Consultant, Florida Municipal Power Agency M. Schmid, Producer/Reporter, Florida Public Television

A. Struck, Public J. Struck, Public

J. Tunstall, Reporter, Tampa Tribune



FPC CR-3



6/19/97

FLORIDA POWER CORPORATION

CRYSTAL RIVER - UNIT 3

FPC RESTART PROGRESS June 19, 1997



FLORIDA POWER CORPORATION **CRYSTAL RIVER - UNIT 3**





FPC RESTART **PROGRESS** June 19, 1997



AGENDA

FPC CR-3	
	•
	0
	•

Opening Remarks

J. P. Jaudon / J. P. Cowan

Restart Status

J. P. Cowan

Condition of CR-3 at Startup /

Metrics to Measure Performance

B. J. Hickle

Operations Focus Areas

C. G. Pardee

Engineering Progress

J. J. Holden

Configuration Document Integration Program

G. H. Halnon

Employee Concerns Program

J. S. Baumstark

MCAP II Progress

J. S. Baumstark

Concluding Statements J. P. Cowan / J. P. Jaudon

6/19/97



Current Status



6/19/97

- Electrical
 - 230 kV Line is Operable
 - 500 kV Line is Available
 - A and B Diesel Generators Operable
- · Primary System
 - Filled with Nitrogen in Pressurizer
 - Nozzle Dams for Steam Generator Installed
 - Steam Generator Open for Inspection
 - Decay Heat Removal Trains A and B Operable



FPC CR-3

CR - 3 Readiness Program Objectives

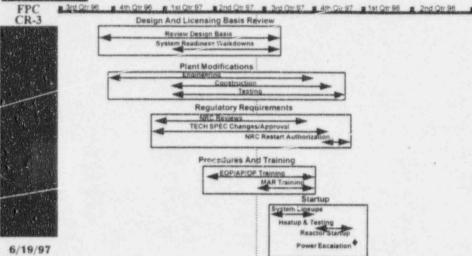
- 1. Frequent Open Communications
- 2. Resolution of Confirmatory Action Letter Issues
- 3. Close Book on First 20 Years of Operation
- 4. Invest for the Next 20 years of Operation
- 5. Integrate Startup Activities Into Long Term Improvement Plan

Do What Is Right For The Long Haul, Not Just What is Required For Startup

6/19/97



Restart Schedule





Confirmatory Action Letter

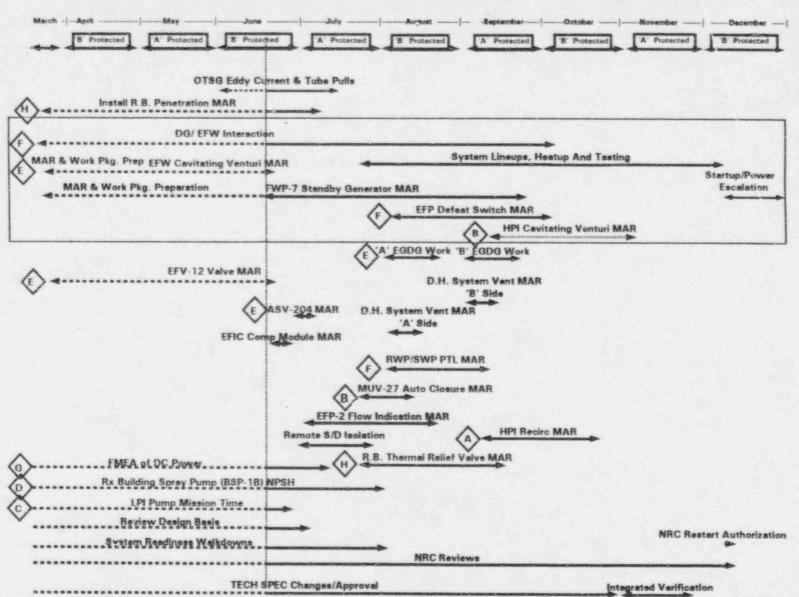


- 1 . Design Issues Identified in FPC Letter of 10/28/96
- 2 . Extent of Condition Reviews
- 3 . Resolution of Safety and Licensing Issues
- 4 . MCAP II Progress
- 5 . Regional Administrator Concurrence for Mode 2

6/19/97



Crystal River Unit #3 Restart





FPC CR-3

Resolution of Confirmatory Action Letter Design Issues From FPC Letter of 10/28/96



Design Issue Description		NRC Bri	efings	NRC Submittal &	Modification		Operations
		Tech Staff	Restart Panel	Follow-up Briefing	Work	Testing	Acceptance
A	. HPI Pump Recirculation Line	May 8	May 9	Jun 30 / Jul	10 %	Oct	Nev
B	. HPI System Modifications	May 8	May 9	Complete / Jun 24	40 %	Jul - Nov	Nov
0	. LPI Pump Mission Time	May 8	May 9	Complete	95 %	Complete	Sep
0	. Reactor Building Spray Pump - NPSH	May 8	May 9	IBD	70 %	Aug	Sep
£	. Emergency Feedwater System and Diesel Generator Load Impact	Mar 18	Mar 21	Complete / Jul	60 %	May - Sep	Nov
F	. Emergency Diesel Generator Loading	Mar 18 & May 8	Mar 21 & May 9	Sep 15	60 %	Jul - Sep	Oct
6	. Faiture Modes and Effects Analysis of Less of DC Powe	Jul er	Jul	Jul 30 / Aug	90 %	Jul	Sep
. #	. GL 96-06 - Containment Penetrations	May 8	May 9	Jul 10	60 %	Jul	Oct



Communications Readiness



• FPC Community Meeting Tonight at 6:30 PM in Armory

Employee Survey Results

6/19/97



FPC



6/19/97

Condition of CR-3 at Startup

Metrics to Measure Performance



Condition of CR-3 at Startup



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Performance Indicators

- Organizational Readiness
 - Restart Issue Closure
 - MCAP II Restart Item Closure
 - Self-Identified Precursors
 - Self-Identified Violations
- · System Readiness
 - Corrective Maintenance
 - Temporary Modifications
 - Requests for Engineering Assistance
 - Restart Modifications
 - Systems Accepted by Operations

Goal at Startup

)

0

No less than 60 %

No less than 67 %

No more than 200 Open Work Requests

No more than 5

No more than 200 Open

0

All 105 Systems Accepted



Condition of CR-3 at Startup

FPC CR-3

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Performance Indicators

- Operations Readiness
 - Control Board Deficiencies
 - Operator Work Arounds
 - Operating Procedures Comments
 - Emergency Operating Procedures
 - Abnormal Procedures

Regulatory Readiness

- License Amendments and Tech Spec Submittals
- Other NRC Restart Submittals
- Total 1997 Commitments

Goal at Startup

No more than 10 No more than 7

No more than 25

All EOPs Issued No more than 15 Comments

All Submittals Made

Complete by December 31



Condition of CR-3 at Startup



Performance Indicators

- Communications Readiness
 - Employee Surveys
 - Community Leaders
 - State & Federal Officials/Staff
 - Opportunity to Tour Plant
 - Open Communication with Media

Goal at Startup

Improving Results
Meet Prior to Startup
Meet Prior to Startup
All Elected Officials and
Staff Invited to Tour
Editorial Boards,
Interviews, and Plant Tours
Conducted for Those who

Routinely Cover CR-3

--- Goal = 0

- Workoff





200

180

Organizational Readiness Restart Issue Closure



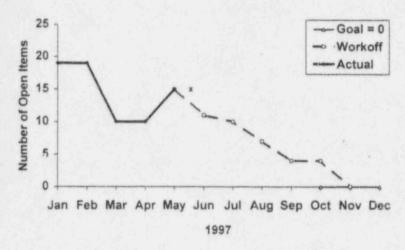
Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec

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Organizational Readiness MCAP II Restart Item Closure





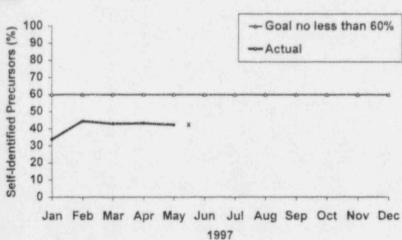
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Organizational Readiness Self-Identified Precursors



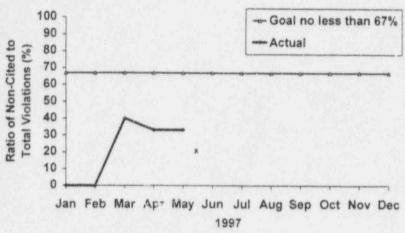
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Organizational Readiness Self-Identified Violations



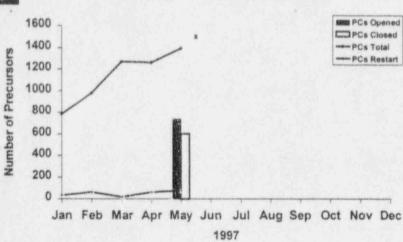


6/19/97 17

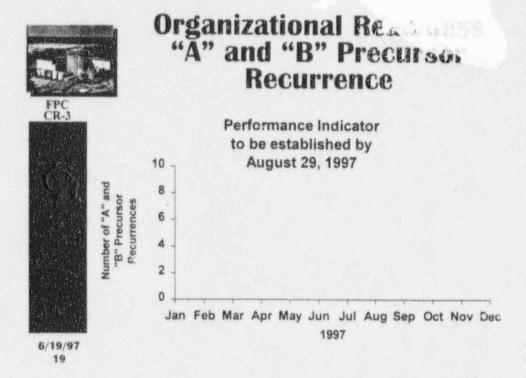


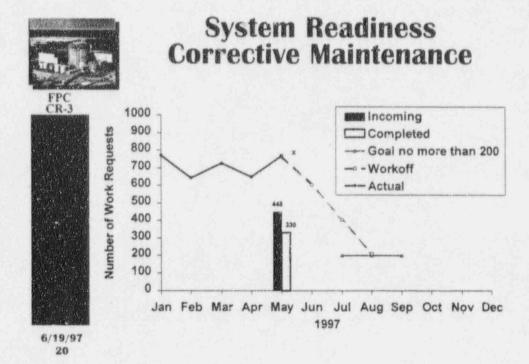
Organizational Readiness Total Number of Open Precursors





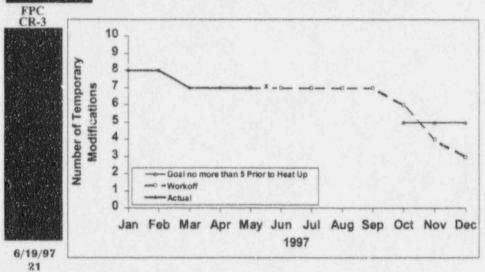
6/19/97 18

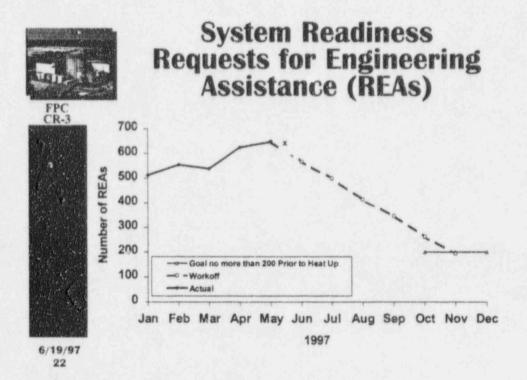


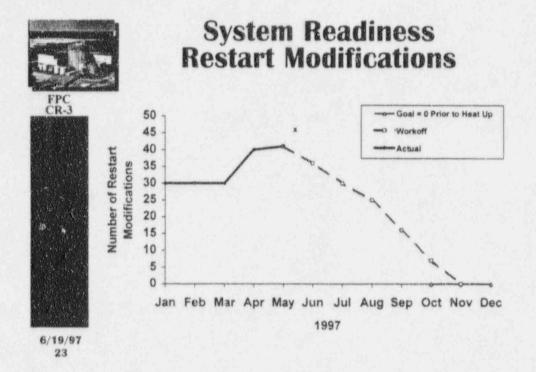


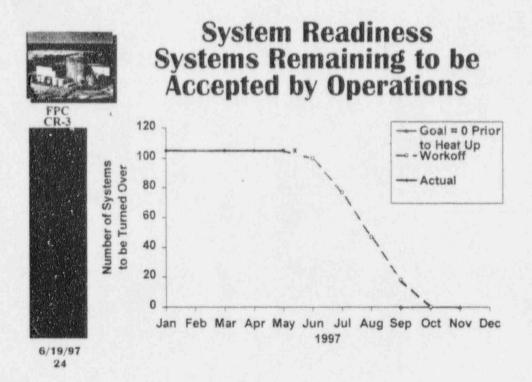


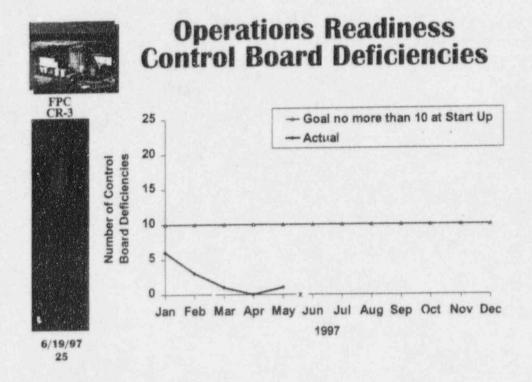
System Readiness Temporary Modifications

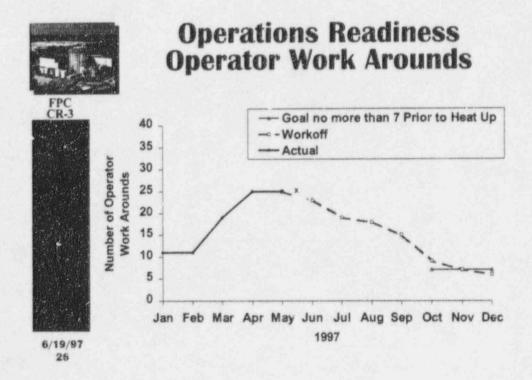


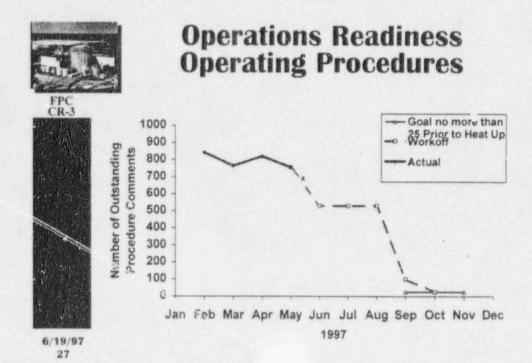


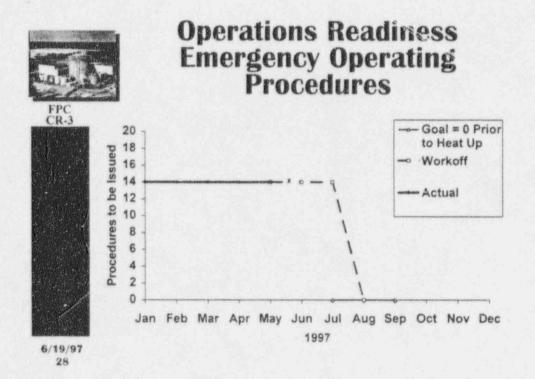


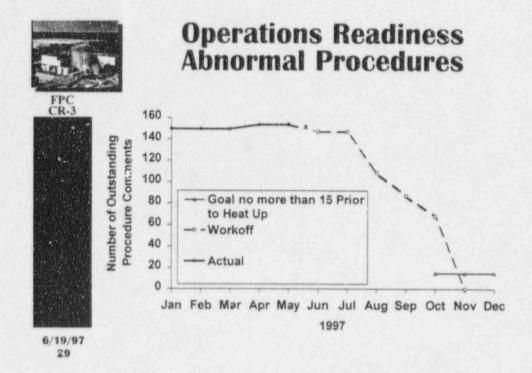


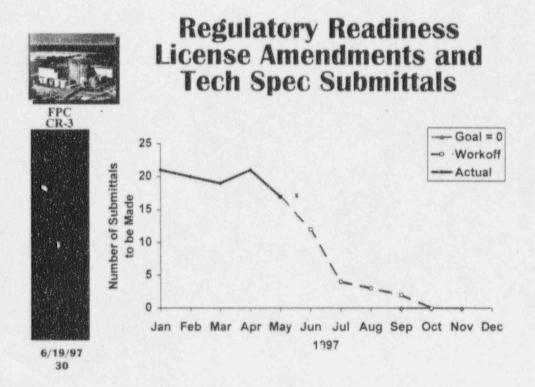


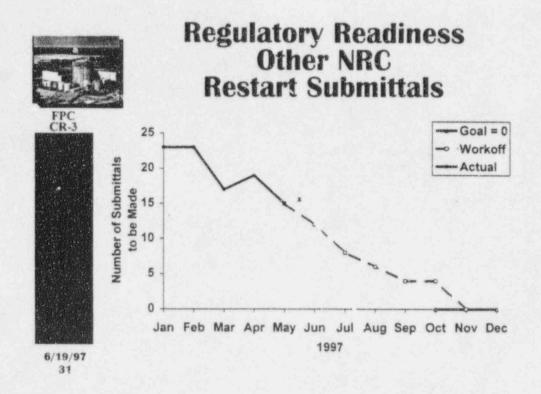


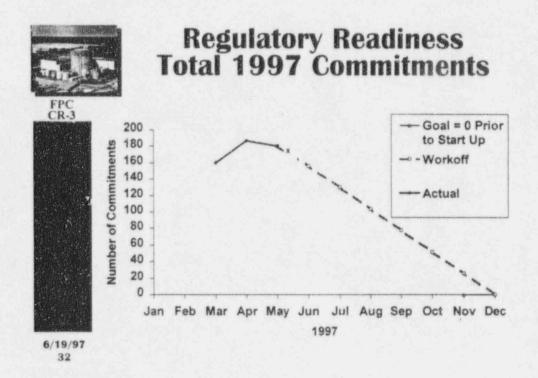














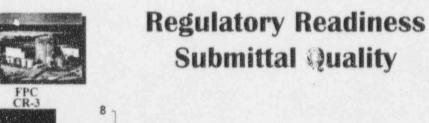
Regulatory Readiness Submittal Quality



- **Point-Based System**
 - Organization and Clarity
 - Technical Content
 - Timeliness
 - -Need for Supplement

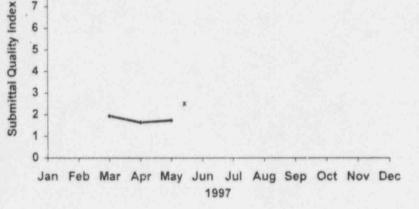


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Standard LER Timeline

FPC	
CR-3	
i. i.e.	
0	

ED	Name .	Duratio	3723 3730 476	April 4/20 4	/// 5/4 1/11
1	EVENT (DESCRIVERY)	0.0	-		T
1	ASSIGN RESPONSIBLE DIRECTOR	90			
1	ASSIGN RESPONSIBLE LEAD	98			1
4	DRAFT LES	7.24			
3	OBTAIN INFORMATION FROM PC AND APPARENT/ROOT FAUSE	5 6d			
-	MALTE FIRST DEAFT OF THE LER	7.28	Cumana		
7	REVIEW OF TIRST WRAFT	1.6d	To		
7	FINALIZE LER (RED FOLDER)	1.60		Dan Park	
7	REVIEW FIRML LER	3.24		E233	
10	SYSTEM ENGINEER	0.8d		0	100000
11	MANC MANAGER	0.00		0	
H	PRC CHAIRMAN/PRC REVIEW	0.8d	4-3/1	0	1000
13	DEPARTMENT MANAGER	A. Bei		0	
3.4	RETURN TO LER ORIGINATOR FOR FINAL REVISIONS	0.4d		0	
13	RESPONSIBLE DIRECTOR FOR FINAL APPROVAL/SIGNATURE	2.44		ETT.	
16	MAIL LER TO MRC	0.8d		n	1

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Standard NOV Timeline

FPC		June July
CR-3	10 Name 1 PRIOR TO NOW RECIEPT	5/25 6/1 6/8 6/35 6/22 6/29 5/6 7/23 7/20 8///////////////////////////////////
240000	2 POTENTIAL VIOLATION IDENTIFIED	•
	3 ASSIGN RESPONSIBLE DIRECTOR	
	4 ASSIGN RESPONSIBLE LEAD	
	S INITIATE PRECURSOR CARD	
	6 COMPLICT ROOT CAUSE EVALUATION	viiiiiiiiiiiiii
	7 CARR REVIEW OF RCE	
	8 CONCUR WITH POTENTIAL VIOLATION? YES/NO	
	9 ASSEMBLE PRECIMINARY RESPONSE AND VALIDATION	7772
	10 AFTER MOV PECEIPT	VIIIIIIIIIII
	11 RECEIVE NUTICE OF VIOLATION	•
	12 ANALYZE NOV - EVALUATE PRELIMENARY RESPONSE	2
65.7	13 UPDATE DRAFT NOV RESPONSE AND VALIDATION	2777
	14 MANAGEMENT REVIEW OF DRAFT RESPONSE	VZZ
	15 INCORPORATE COMMENTS	
	16 FINALIZE RED FOLDER	0
	17 VP MEYIEW	2
	18 INCORPORATE COMMENTS	
	19 VP FIMAL REVIEW AND SIGNATURE	
/19/97	JO MAIL LETTER TO MIC	

6/19/97 36



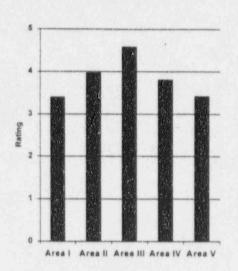
Communications Plan Organizational Communications Effectiveness



AREAS



- I My direct supervisor keeps me informed
- II I understand critical restart issues
- III I understand safety regulations and standards
- IV I know what is expected of me and how I fit into the "big picture"
- V Support communications materials enhance my understanding of CR-3 issues



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Operations Focus Areas



- Operations Ownership

- Operations Ownership

Improve Performance in

- Plant Configuration Control

6/19/97



Operations Focus Areas



6/19/97 39

- Reduction in Watchstander Distractions
 - Move Non-Critical Functions Outside of Control Room
 - Focus Operating Staff on
 - Striving for Flawless Execution
 - · Proactively Identifying/Driving Issues



Operations Focus Areas



6/19/97

- Consistent Application of Standards
 - Control Room Formality
 - Pre-Job Brief Quality
 - Self Assessment Effectiveness



Operations Focus Areas



- Staffing / Organization Structure
 - Clarity of Roles and Responsibilities
 - -Staffing Levels



6/19/97





6/19/97

Engineering Progress



Design Issues Identified in FPC Letter of 10/28/96



B. HPI SB LOCA Improvement Mods

- HPI Cavitating Venturis
 - Installed / Tested / Removed / Spool Pieces Re-installed
- HPI Crosstie Piping / Valves
 - 4 Additional Valves Installed-Locked Closed
- -Normal Make-Up Automatic Isolation
 - Modification Currently Being Performed



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F.

FPC CR-3



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Design Issues Identified in FPC Letter of 10/28/96

Emergency Diesel Generator Loading

- Upgraded Both EDG Engines
- Currently Planning Radiator Change Out
- Improved kW Meter Accuracy



Appendix "R" Issues



- Reactor Coolant Pump Oil Collection
- Independent Assessment of Fire Study
- · Remote Shutdown Capability
- Information Notice 92-18 Evaluation
- Atmospheric Dump Valves





Appendix "R" Issues



Instrumentation Detectors
• Thermo-Lag

Procedure

- Implementation Plan Schedule

Control Room Evacuation

- Exemption Requests

Source Range Nuclear

6/19/97 46



Restart Issue Modifications



- Total Modifications 43
- Design Issued 19
- Ready For Field
 16

6/19/97 47

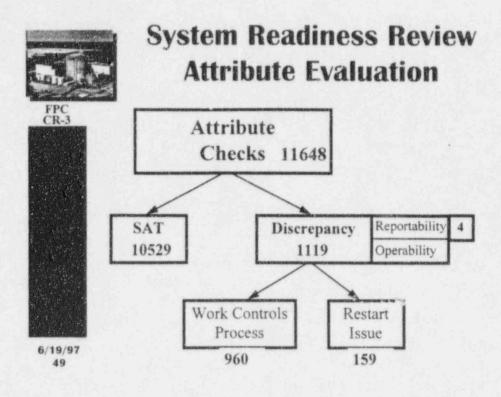


System Readiness Review Assessment Completion



- Level 1 Systems 100%
- Level 2 Systems 67%
- Level 3 Systems 19%

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Configuration Document Integration Project



Project Input Information From

- System Readiness Review, Precursor Cards, Problem Reports, Docket Review, Independent FSAR Review, Individual Reviews, Modifications, Analyses
- Consolidate Information Into Specific Plant System Information Sets
- Resolve Open Items
- · Update the Plant Documents
 - FSAR, EDBD, ITS Bases, ABD

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Configuration Document Integration Project Status



6/19/97 51

- Scope of FSAR Revision 24
- Revision 24 Will Be Technically Accurate
 - Restart Issues Will be Incorporated
 - Freeze Date for Non-Restart Issues is August 18, 1997
 - Chapter 14 Accident Analyses Being Reviewed to Ensure Properly Reflected
 - Design Basis Documents, ITS Bases, and Procedures Will Reflect the Same Changes



Configuration Document Integration Project Status



• Currently Compiled 21 of 49 System Information Sets

- Currently 1500 Open Items in the Database
 - -37 Items Currently Resolved
 - 142 Items Currently Being Worked
 - Remainder of Items Will be Addressed

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Configuration Document Integration Project Status



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- 16 of 49 FSAR Sections are Currently Being Revised
- Integrated Configuration
 Management Institutionalized in
 Nuclear Operations Department
 Procedure
 - Carry Concepts Forward to Facilitate Change Processes



Employee Concerns Program



6/19/97 54

- Established by Nuclear Operations
 Department Procedure (NOD-36) in
 May 1991
- Program Statistics

Year	Inpu
94 (outage)	110
95	14
96 (outage)	63
97 (to date)	13



Employee Concerns Program 1996/1997 Totals by Receipt Method

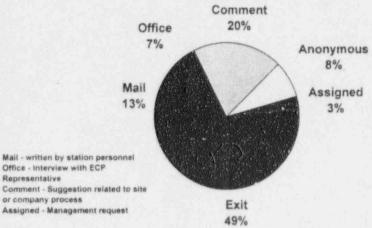


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Office 7% Mail 13%

Office - Interview with ECP Representative Comment - Suggestion related to site or company process

Assigned - Management request





Employee Concerns Program 1996/1997 Totals by Category

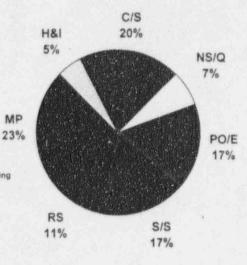


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NS/Q - Nuclear Safety / Quality PO/E - Plant Operations / Engineering S/S - Industrial Safety / Security RS - Radiological Safety

MP - Management and Personnel H&I - Harassment and Intimidation C/S - Comment / Suggestion





Employee Concerns Program Assessments



· June 1996

NRC

August 1996

Third Party

August 1996

NRC

June - July 1997 Third Party

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Employee Concerns Program Assessment Conclusions



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- · Program is Effective Based on:
 - Types of Concerns Submitted
 - Employee Willingness to Use Management and Our Corrective **Action Process**



Employee Concerns Program Initiatives



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- Third Party Assessment in June -July 1997
 - Evaluate Program Design and Implementation With Industry Best Practices
 - Determine Program Visibility and Credibility

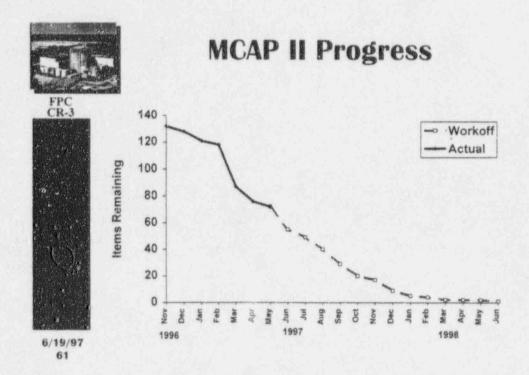


MCAP II Progress



- Rescrub For Restart Complete 7 Additional Items Identified
- · Status Update Provided Weekly
- · On Track With Revision 2
- Effectiveness Assessment in August

6/19/97 60





Concluding Statements

NRC RESTART LICENSING SUBMITTALS

Restart License Amendments

Issue 1. Small Break LOCA Analysis	Submittal Date Complete
2. Decay Heat - Flow Instrument Removal	7/11/97
3. Appendix R Thermolag Resolution Schedule (address exemption request)	7/25/97
4. Appendix R (III.O - Reactor Coolant Pump Oil Cooling) Potential Exemption Withdrawal/Revision - When "A" pump is in compliance	10/8/97
5. System Readiness Review - Potential License Amendment if needed	6/23/97
6. Low Temp Over Pressurization (LTOPs) - Code Case N-514 exemption	Complete
7. LTOPs - 15 Effective Full Power Years (EFPY) License Amendment	7/16/97
8. Emergency Operating Procedures (EOP) - Operator Actions License Amendment (If required)	7/1497
9. EOP Letdown Rupture Line (Manual Action- Potential USQ)	7/14/97
10. Integrated Leak Rate Test, App. J Option B	Complete
11. Integrated Leak Rate Test, App. J Option B, Rev. 1	Complete
12. RWP Cyclone Separator Fouling (Potential USQ)	6/23/97
13. Control Complex Habitability Envelope Technical Specification Change	7/28/97
Items 14-20, Potential USQ's Submittals 14. High Pressure Injection Pump Recirc 15. MUV-31(Pressurizer Level Control Valve) Control Logic 16. Emergency Diesel Generator Protective Trips during Engineered Safety Actuation and Loss of Offsite Power 17. High Pressure Injection Analysis (without cavitations, venturis) 18. High Pressure Injection Nozzle Cycles(Contained in the FSAR R.23 letter) 19. Air Handling Filter-1/2 20. Makeup Supply Valve (MUV-27) - Add automatic closure upon receipt of	6/30/97 6/30/97 Complete Complete 7/7/97 6/30/97 Complete
#1500 signal	

21. Once Through Steam Generator (OTSG) License Amendment 211	Complete
22. OTSG, License Amendment 211, Resubmit Sholly Notice	Complete
23 .OTSG Response to Additional Information Request from NRC	8/1/97
24 500kV Backfeed Revise Bases 3.8.1 & 3.8.2	9/1/97
25. License Amendment to revise Table 3.3.18-1 for functions/instruments	9/27/97
26. Reg. Guide 1.97 Issue (EDG kW Meters)	7/15/97
Licensing Restart Submittal (Non-License Amendments)	
Boron Precipitation Letter (If needed)	9/2/97
2. Appendix R Issues - Independent Assessment Summary	8/4/97
2a. Appendix R - Revise response to address 72 hr. cold shutdown	9/1/97
3. System Readiness Review - Summary Report	11/5/97
4. Generic Letter 96-01 - Summary Report	7/21/97
5. FSAR Revision 23 - USQ Review	7/7/97
6 Generic Letter 96-06 - Summary Report	7/10/97
7. Tendon Surveillance Report (If needed)	9/15/97
8. Maintenance Rule Structural Baseline - Walkdown Summary Report	7/15/97
9. Integrated Safety Assessment of Current Outage Modifications - Summary Report	10.27/97
10. FSAR Rev. 24 upgrade program description	12/4/97
11. Restart Request Letter	12/1/97
12. RCS Attached Piping - Respond to NRC 4/7/97 Letter	Complete
13. Supplemental response on jet impingement, Re: FPC Letter 6/5/97 on Dynamic Load analysis	9/28/97
14. Loss of DC Power, Failure Modes Effect Analysis - Summary Report	7/30/97

15. FSAR Rev. 24/25 Upgrade Program Description	7/28/97
16. 50.54(f) Letter to address discrepancies (If needed)	8/19/97
17. HPI Nozzle Cycles Fatigue Analysis - change in Licensing Basis	Under Review
18. Review of Implementation of License Conditions	Complete
19. Licensing Basis for Dynamic Loads - Response to NRC 4/10/97 letter	Complete
20. Low Pressure Injection - Mission Time	Complete
21. Appendix R - Atmospheric Dump Valve 30 day Response	Complete
22. System Readiness Review Plan	Complete
23. EOP/AP Operator Action - Commitment Date Change	Complete
24. GL 96-06, Letter regarding Service Water fittings	Complete
25. ASME Section XI - Code Case Relief Request	Complete
26. MCAP-II, Rev. 2	Complete
27. ITS Bases Submittal	Complete