



UNITED STATES  
NUCLEAR REGULATORY COMMISSION

REGION IV  
611 RYAN PLAZA DRIVE, SUITE 460  
ARLINGTON, TEXAS 76011-8064

October 1, 1998

William A. Eaton, Vice President  
Operations - Grand Gulf Nuclear Station  
Entergy Operations, Inc.  
P.O. Box 756  
Port Gibson, Mississippi 39150

SUBJECT: GRAND GULF NUCLEAR STATION EMERGENCY PREPAREDNESS UPDATE

Dear Mr. Eaton:

This refers to the meeting conducted in the Region IV office on September 29, 1998. This meeting was conducted to discuss the emergency preparedness program status and direction. Specific topics covered included: implemented improvement items, planned improvement items, and future challenges.

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

Should you have any questions concerning this matter, we will be pleased to discuss them with you.

Sincerely,

Blaine Murray, Chief  
Plant Support Branch  
Division of Reactor Safety

Docket No.: 50-416  
License No.: NPF-29

Enclosures:  
1. Attendance List  
2. Licensee Presentation

cc w/enclosures:  
Executive Vice President  
and Chief Operating Officer  
Entergy Operations, Inc.  
P.O. Box 31995  
Jackson, Mississippi 39286-1995

9810070007 981001  
PDR ADOCK 05000416  
F PDR

Entergy Operations, Inc.

-2-

Wise, Carter, Child & Caraway  
P.O. Box 651  
Jackson, Mississippi 39205

Winston & Strawn  
1400 L Street, N.W. - 12th Floor  
Washington, D.C. 20005-3502

Sam Mabry, Director  
Division of Solid Waste Management  
Mississippi Department of Natural  
Resources  
P.O. Box 10385  
Jackson, Mississippi 39209

President  
Claiborne County Board of Supervisors  
Port Gibson, Mississippi 39150

General Manager  
Grand Gulf Nuclear Station  
Entergy Operations, Inc.  
P.O. Box 756  
Port Gibson, Mississippi 39150

The Honorable Richard Ieyoub  
Attorney General  
Department of Justice  
State of Louisiana  
P.O. Box 94005  
Baton Rouge, Louisiana 70804-9005

Office of the Governor  
State of Mississippi  
Jackson, Mississippi 39201

Mike Moore, Attorney General  
Frank Spencer, Asst. Attorney General  
State of Mississippi  
P.O. Box 22947  
Jackson, Mississippi 39225

Dr. F. E. Thompson, Jr.  
State Health Officer  
State Board of Health  
P.O. Box 1700  
Jackson, Mississippi 39205

Entergy Operations, Inc.

-3-

Robert W. Goff, Director  
State Liaison Officer  
Division of Radiation Health  
Mississippi Department of Health  
P.O. Box 1700  
Jackson, Mississippi 39215-1700

Vice President  
Operations Support  
Entergy Operations, Inc.  
P.O. Box 31995  
Jackson, Mississippi 39286-1995

Director, Nuclear Safety  
and Regulatory Affairs  
Entergy Operations, Inc.  
P.O. Box 756  
Port Gibson, Mississippi 39150

Vice President, Operations  
Grand Gulf Nuclear Station  
Entergy Operations, Inc.  
P.O. Box 756  
Port Gibson, Mississippi 39150



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- GG Resident Inspector
- DRS Director
- DRS Deputy Director
- DRP Director
- DRS-PSB
- Branch Chief (DRP/A)
- Project Engineer (DRP/A)
- Branch Chief (DRP/TSS)
- MIS System
- RIV File

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RIV:PSB	E	C:DRS\PSB	D:DRS					
GMGood:nh	<i>6/10</i>	BMurray	ATHowell III					
<i>9/30/98</i>		<i>10/1/98</i>	<i>1/98</i>					

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ENCLOSURE 2

GRAND GULF NUCLEAR STATION  
EMERGENCY PREPAREDNESS

PRESENTATION TO THE NUCLEAR  
REGULATORY COMMISSION  
REGION IV

SEPTEMBER 29, 1998



# **EMERGENCY PREPAREDNESS ISSUES**

- **IMPLEMENTED IMPROVEMENT ITEMS**
  - FROM JUNE, 1997 TO PRESENT
- **PLANNED IMPROVEMENT ITEMS**
  - 4TH QUARTER, 1998 Through 1999
- **FUTURE CHALLENGES**

# IMPLEMENTED IMPROVEMENT ITEMS

- Weekly Training with Operations Crew
  - Conducted in the Simulator
  - Includes Chemistry (Dose Assessment), Communicators and Emergency Preparedness
  - Conducted During each Training Cycle
- EP Performance Indicators
  - All EOI Sites Use the Same Indicators
  - Included as Part of Monthly Management Focus Meeting

# **IMPLEMENTED IMPROVEMENT ITEMS**

- Scenario Driven Table Top Drills
  - Conducted in March for All Facilities
  - Plan to Implement on a Regular Basis in 1999
  - Will Evaluate to Determine if Table Tops May Replace Some Classroom Training



# **IMPLEMENTED IMPROVEMENT ITEMS**

- ERO Notification Drills
  - Increased Frequency (Monthly)
  - Unannounced and Some are Off Hours
  - Improved ERO Awareness
  - Improved Response Times

# **IMPLEMENTED IMPROVEMENT ITEMS**

- Personnel Rotation
  - 1 Full Time Licensed SRO on EP Staff
  - 1 Full Time senior Health Physics Supervisor on EP Staff
  - 1 Emergency Planner to SRO Certification Class

# IMPLEMENTED IMPROVEMENT ITEMS

- Exercise Weaknesses
  - 82701 June, 1997
    - Dose Assessment Activities
    - Procedure Implementation
  - 1997 Emergency Exercise
    - Monitor and Replenish Supplies of Respiratory Protection Equipment
    - Provide Protective Measures for Personnel in Security Island
    - Properly Formulate PARs



## **PLANNED IMPROVEMENT ITEMS**

- Enhanced ERO Training
  - EP Day of the Week
    - 2-3 Hours/Week in Each Facility
    - Table Top Drills, Walk Through Discussion Groups, Site Mini Drills, Inter/Intra Facility Communication Drills
    - Begin in October, 1998 and Continue Until December. Then Check and Adjust.

## **PLANNED IMPROVEMENT ITEMS**

- Implement 4 Team Rotation
  - Maintain 4 Strong Teams with Reserve (Fifth) Team in Several Positions
  - Enhance Overall Team Strength
  - Effective October 12, 1998

## **PLANNED IMPROVEMENT ITEMS**

- **Management Involvement in ERO Process**
  - Enhanced Facility Process Owner (FPO) Involvement
  - EP Staff Assigned to Specific Facility
  - FPO Responsibilities
    - Provide Guidance and Management for ERF
    - Assign Personnel to ERF
    - Ensures Consistent ERF Operation
    - Participates in ERF and Site Drill Critique
    - Assigns Key ERO Position Leads



## **PLANNED IMPROVEMENT ITEMS**

- EP Self Assessment
  - Intrusive Look Into EP Program, Corrective Action Process, Drill/Critique Process, and EP Training Effectiveness
  - Team Includes Industry, EOI, and GGNS Personnel
    - STP, Comanche Peak, PECO, RBS and W-3
  - Conducted Week of November 15, 1998
    - Welcome NRC Involvement

## **PLANNED IMPROVEMENT ITEMS**

- Severe Accident Management
  - Procedures V & V Process Complete
  - ERO Training To Be Conducted in October
  - Operations Personnel Will Be Trained During November/December Training Cycle
  - Demonstration During November Site Drill

## **PLANNED IMPROVEMENT ITEMS**

- Evaluation of EP Training Process
  - Majority Currently Conducted in Classroom
  - Will Evaluate Practical Activities During 4th Quarter EP Day of the Week
  - Possible Replacement of Some Classroom Activities with Practical Training in ERFs.
    - Initial Training; Classroom Oriented
    - Continuing Training; ERF Practical



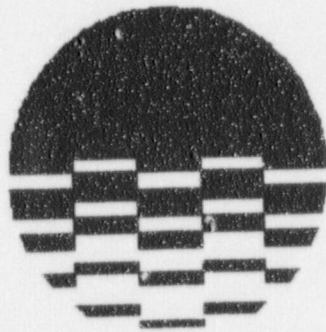
## **FUTURE CHALLENGES**

- Emergency Response Organization Performance During Drills/Exercise
  - Past Drills Lacked Effective Demonstration of Adequate Analysis of Simulated Emergency Conditions by Some Personnel
  - Ineffective Communication Within and Among Emergency Response Facilities

# GGNS SEVERE ACCIDENT MANAGEMENT CONCEPT

- Two Step Approach
  - EOPs to SAPs
  - When Adequate Core Cooling Not Assured
- Transfers Decision Making to ED
  - Allows Control Room to Focus on Plant Operations
  - Allows ERO to Coordinate Deliberate Actions that May Create Radiological Threats
    - Containment Venting/RPV Venting
    - Placing Restored Equipment in Operation

GGNS  
EMERGENCY  
PREPAREDNESS



**Entergy**

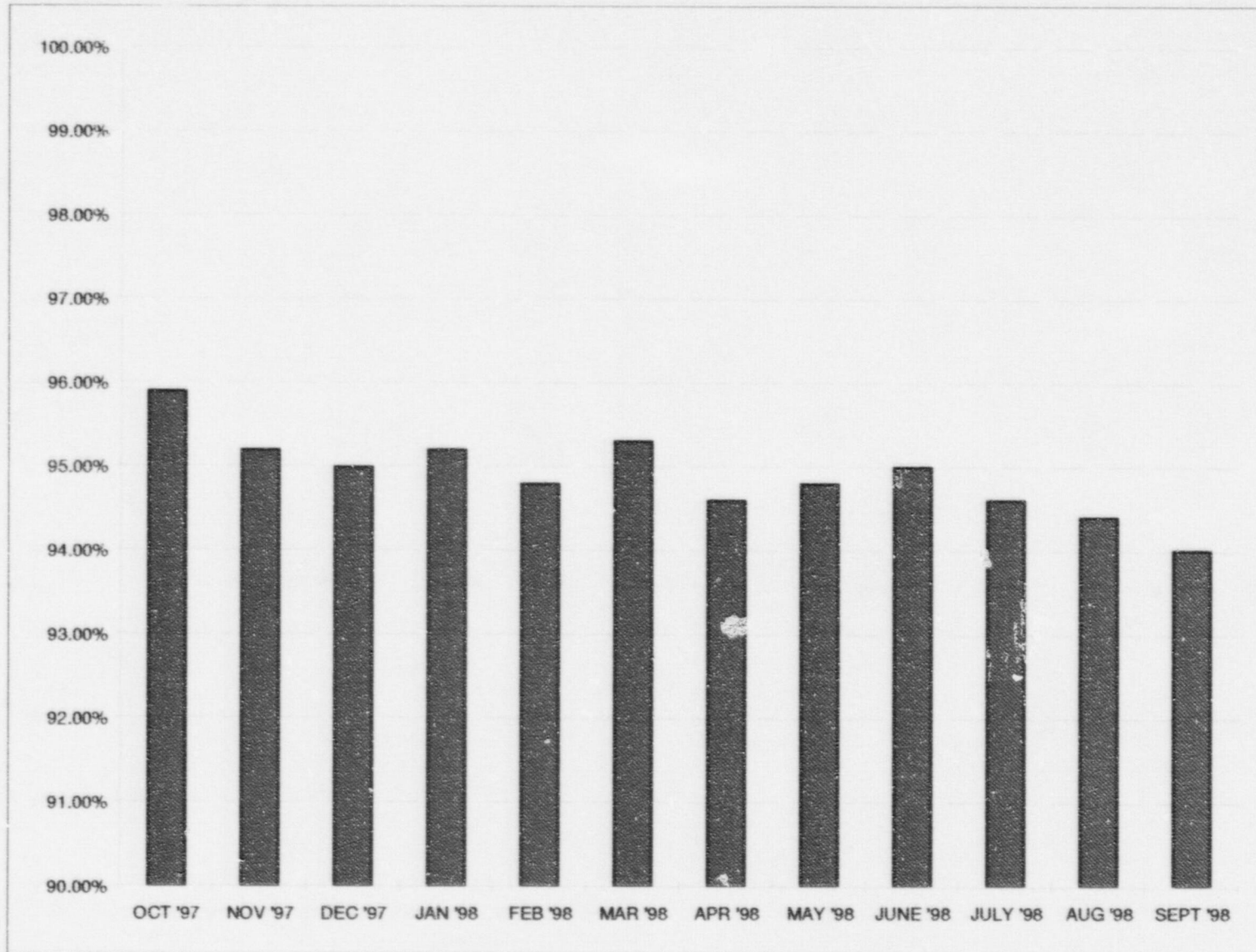
1998  
PERFORMANCE INDICATORS



GGNS Performance Monitoring

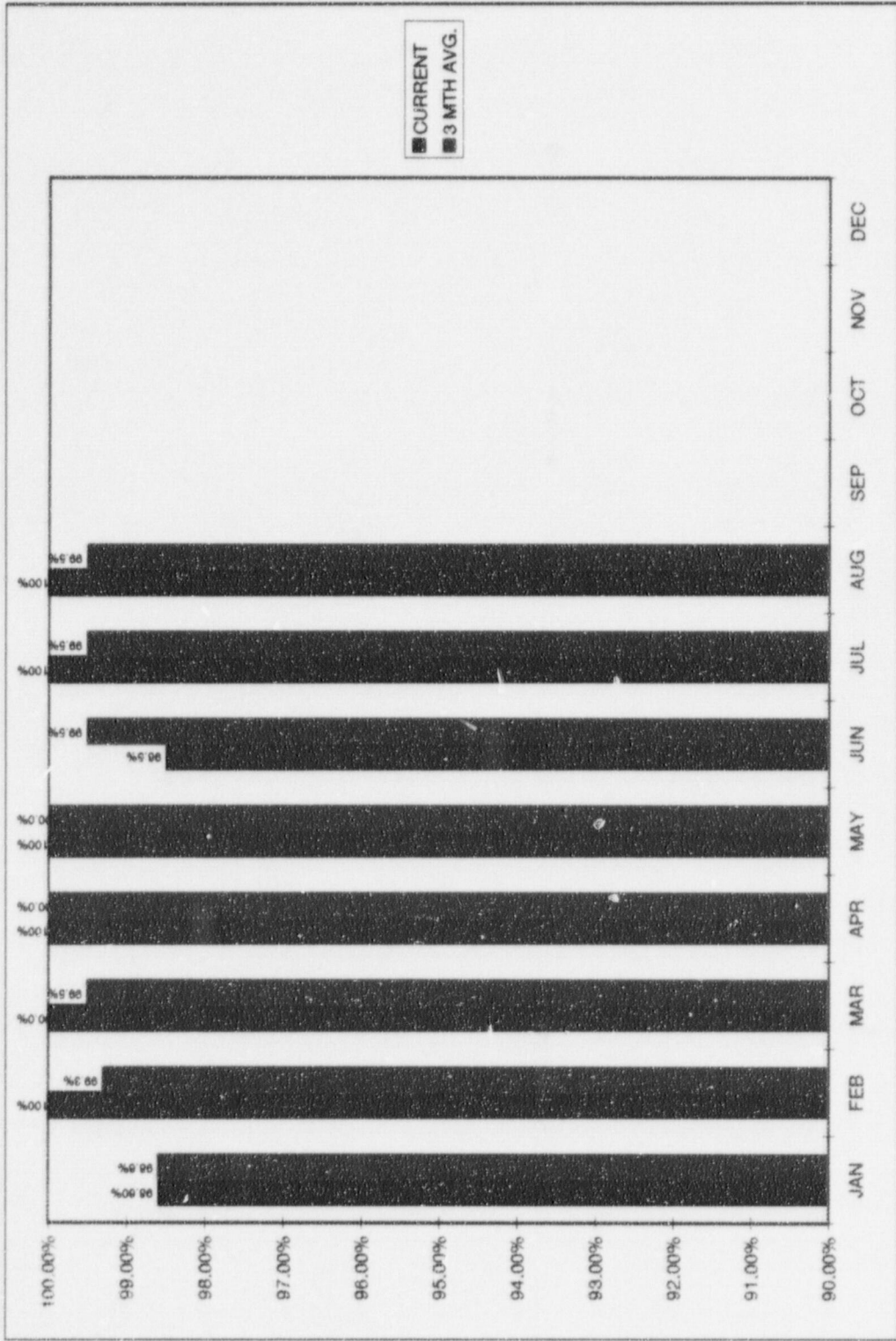
Emergency Preparedness	Goals/Criteria																Annunciators						
	Green	White	Yellow	Red	1998 1st Qtr				1998 2nd Qtr				1998 3rd Qtr				1998 4th Qtr				YTD	Annunciator Color	Values
					J	F	M	A	M	J	J	A	S	O	N	D							
Siren Availability (12 Months rolling average)	>95%	<95% >92.5%	<92.5% >90%	<90%	95.2%	94.8%	94.4%	94.6%	94.8%	95.0%	94.6%	94.2%	94.0%						WHITE	2			
					97.7%	90.7%	95.3%	90.7%	93.0%	93.0%	93.0%	95.3%	95.3%										
Notification System Response (3 month rolling average)	>96%	<96% >94%	<94% >92%	<92%	98.6%	99.3%	99.5%	100.0%	100.0%	99.5%	99.5%	100%							GREEN	1			
					98.6%	100.0%	100.0%	100.0%	100.0%	98.5%	100.0%	100.0%											
Regulatory Performance Total Overdue QA or FEMA issues	0	2	4	>4	0	0	0	NA	0	0	0	0	0						GREEN	1			
ERO PARTICIPATION																							
% Attendance Drills	>98%	<98% >94%	>95% >90%	<90%	ND	100%	ND	ND	ND	100%	ND	100%	ND						GREEN	1			
% Attendance Tabletops	>98%	<98% >94%	>95% >90%	<90%	ND	83%	ND	ND	ND	67.7%	ND	84%	ND						RED	4			
% Attendance Classroom	>98%	<98% >94%	>95% >90%	<90%	ND	ND	ND	ND	ND	89%	93%	91%	50%						YELLOW	3			
Lapsed ERO Qualls	0	1	2	>3	0	3	2	0	1	2	0	5	2						RED	4			
Management Observation (Supervisors & Up)	>6	5-4	3-2	1	ND	9	ND	ND	ND	4	ND	4	ND						WHITE	2			
CR Performance	0	1	2	>2	0	0	0	0	0	1	0	0	0						GREEN	1			
Average Annunciator Value																					2.11		
Final Color																			WHITE	2			
Criteria	Values	Values	Values	Values																			
	1	2	3	4																			
TOTAL	GREEN	WHITE	YELLOW	RED																			
	4	3	1	1																			
Green Criteria	No Red Windows, No Yellow Windows and >=50% Green Windows																						
White Criteria	Annunciator Average <2.5 and <=1 Red Window																						
Yellow Criteria	Annunciator Average >=2.5																						
Red Criteria	>=25% Red Windows																						

**GGNS  
EMERGENCY PREPAREDNESS  
SIREN AVAILABILITY**



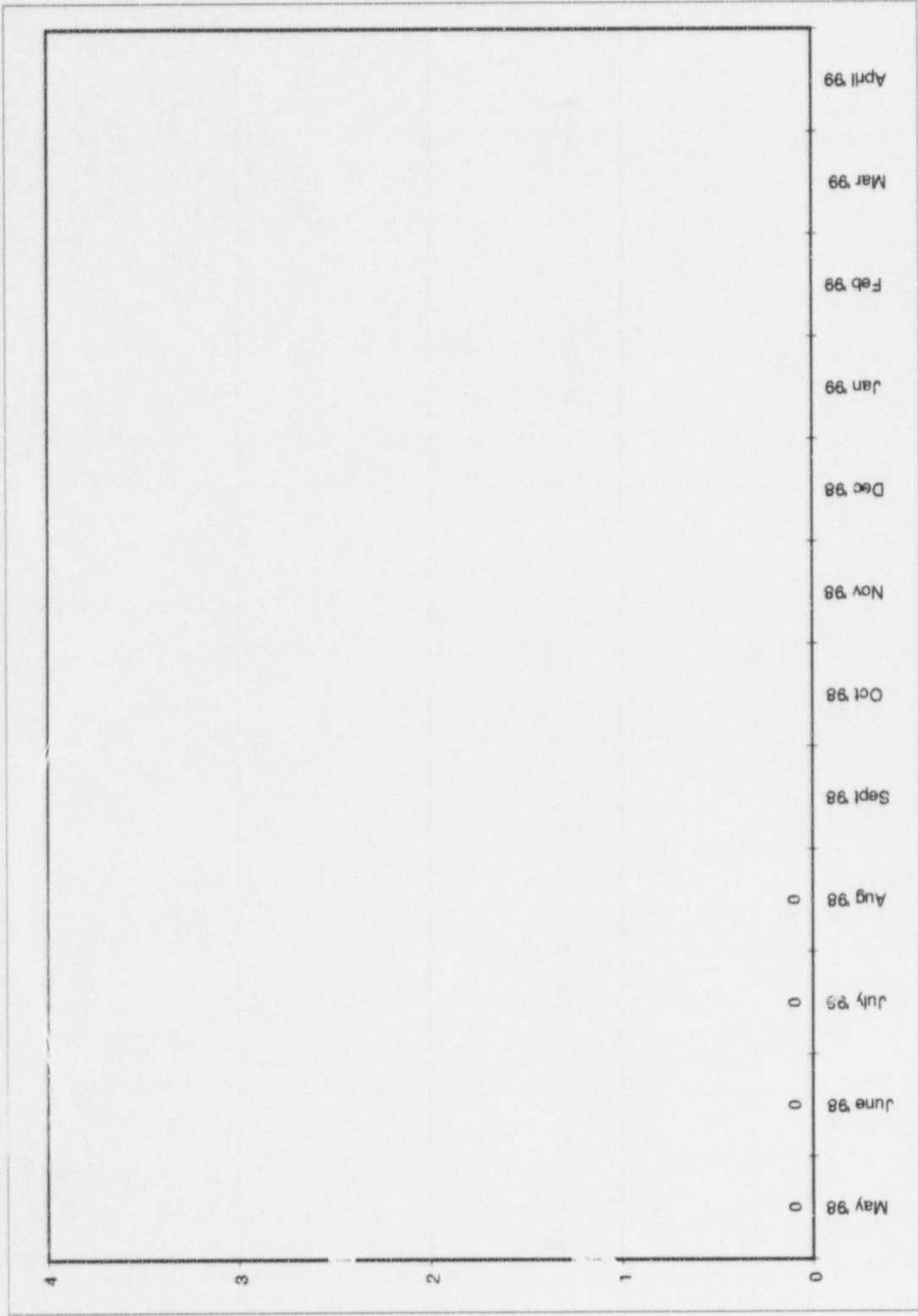


**GGNS EMERGENCY PREPAREDNESS  
VIP RESPONSE**





GGNS EMERGENCY PREPAREDNESS  
REGULATORY PERFORMANCE



Updated: 9/28/98  
By: Beverly A. Raines

**GGNS  
EMERGENCY PREPAREDNESS  
TABLETOP ATTENDANCE  
(12 month average)**

