



UNITED STATES  
NUCLEAR REGULATORY COMMISSION

REGION IV

611 RYAN PLAZA DRIVE, SUITE 400  
ARLINGTON, TEXAS 76011-8064

DEC 12 1996

G. R. Horn, Senior Vice President  
of Energy Supply  
Nebraska Public Power District  
1414 15th Street  
Columbus, Nebraska 68601

SUBJECT: COOPER NUCLEAR STATION EMERGENCY PREPAREDNESS UPDATE

Dear Mr. Horn:

This refers to the meeting conducted in the Region IV office on December 10, 1996. This meeting related to the emergency preparedness program status.

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,

A handwritten signature in cursive script, appearing to read "Thomas P. Gwynn".

Thomas P. Gwynn, Director  
Division of Reactor Safety

Enclosures:

1. Attendance List
2. Licensee Presentation

cc:

John R. McPhail, General Counsel  
Nebraska Public Power District  
P.O. Box 499  
Columbus, Nebraska 68602-0499

9612170098 961212  
PDR ADOCK 05000298  
F PDR

P. D. Graham, Vice President of  
Nuclear Energy  
Nebraska Public Power District  
P.O. Box 98  
Brownville, Nebraska 68321

B. L. Houston, Nuclear Licensing  
and Safety Manager  
Nebraska Public Power District  
P.O. Box 98  
Brownville, Nebraska 68321

R. J. Singer, Manager-Nuclear  
Midwest Power  
907 Walnut Street  
P.O. Box 657  
Des Moines, Iowa 50303

Mr. Ron Stoddard  
Lincoln Electric System  
11th and O Streets  
Lincoln, Nebraska 68508

Randolph Wood, Director  
Nebraska Department of Environmental  
Quality  
P.O. Box 98922  
Lincoln, Nebraska 68509-8922

Chairman  
Nemaha County Board of Commissioners  
Nemaha County Courthouse  
1824 N Street  
Auburn, Nebraska 68305

Cheryl Rogers, LLRW Program Manager  
Environmental Protection Section  
Nebraska Department of Health  
301 Centennial Mall, South  
P.O. Box 95007  
Lincoln, Nebraska 68509-5007

Dr. Mark B. Horton, M.S.P.H.  
Director  
Nebraska Department of Health  
P.O. Box 950070  
Lincoln, Nebraska 68509-5007

R. A. Kucera, Department Director  
of Intergovernmental Cooperation  
Department of Natural Resources  
P.O. Box 176  
Jefferson City, Missouri 65102

Kansas Radiation Control Program Director

E-Mail report to D. Nelson (DJN)  
E-Mail report to NRR Event Tracking System (IPAS)

bcc to DMB (IE35)

bcc distrib. by RIV:

L. J. Callan  
DRP Director  
Branch Chief (DRP/C)  
Branch Chief (DRP/TSS)  
Project Engineer (DRP/C)

Resident Inspector  
DRS-PSB  
MIS System  
RIV File  
Leah Tremper (OC/LFDCB, MS: TWFN 9E10)

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GGood	GLG	BMurray	for	TGwynn				
12/1/96		12/1/96	GLG	12/1/96				

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E-Mail report to D. Nelson (DJN)  
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bcc to DMB (IE35)

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12/1/96		12/1/96	AG	12/1/96				

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ENCLOSURE 1

ATTENDANCE LIST



ENCLOSURE 2

LICENSEE PRESENTATION



# **COOPER NUCLEAR STATION**

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## **EMERGENCY PREPAREDNESS PROGRAM**

**December 10, 1996**

**EMERGENCY  
PREPAREDNESS**

CONTINUOUS IMPROVEMENT

# **TOPICS**

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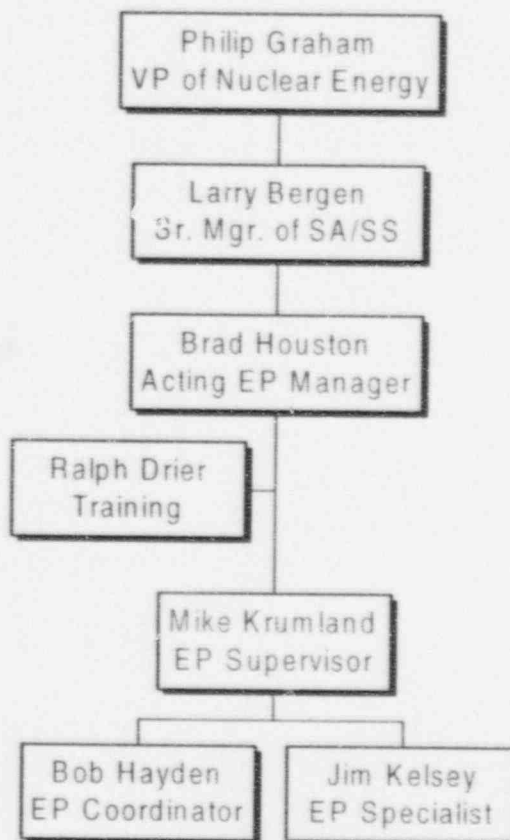
- EMERGENCY PREPAREDNESS ORGANIZATION
- SELF ASSESSMENTS
- EMERGENCY PREPAREDNESS IMPROVEMENT PLAN
- RECENT CHALLENGES
- EMERGENCY PREPAREDNESS FUTURE

# **ATTACHMENTS**

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- VISION STATEMENT
- PERFORMANCE INDICATORS
- IMPROVEMENT PLAN

# EMERGENCY PREPAREDNESS ORGANIZATION



# **SELF ASSESSMENTS**

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- **USAR REVIEW**
- **EMERGENCY PLAN/PROCEDURE  
AUDIT**
- **DEPARTMENTAL SELF  
ASSESSMENT EVALUATION**
- **DRILL AND EXERCISE PROGRAM**

# ***SELF ASSESSMENTS***

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## ■ **USAR REVIEW**

- **COMPLETED MAY 31, 1996**
- **PURPOSE IDENTIFY DISCREPANCIES BETWEEN THE EMERGENCY PLAN AND THE USAR**
- **RESULT - SEVERAL INCONSISTENCIES WERE IDENTIFIED. A USAR CHANGE WAS SUBMITTED TO LICENSING JUNE 6, 1996.**

# ***SELF ASSESSMENTS***

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- EMERGENCY PLAN/EMERGENCY IMPLEMENTING PROCEDURES REVIEW.
  - BROUGHT IN PEER FROM PALO VERDE TO REVIEW THE DOCUMENTS FOR CONSISTENCY.
  - INCONSISTENCIES WERE IDENTIFIED AND CORRECTED.



# **SELF ASSESSMENTS**

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## **DEPARTMENTAL SELF ASSESSMENT EVALUATION**

- **PURPOSE: DEVELOP A CONTINUOUS ASSESSMENT TOOL.**
- **RESULT: A SET OF PROCESS PERFORMANCE INDICATORS WERE DEVELOPED.**

# ***EMERGENCY PREPAREDNESS IMPROVEMENT PLAN***

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- 1996 HAD 9 IMPROVEMENT STRATEGIES
  - EMERGENCY RESPONSE ORGANIZATION
  - DRILL AND EXERCISE PROGRAM
  - TRAINING
  - EMERGENCY RESPONSE FACILITY UPGRADE
  - OFF-SITE ACTIVITIES
  - INTERNAL OPERATIONAL PROCESSES
  - EMERGENCY PLAN UPGRADE
  - SEVERE ACCIDENT MANAGEMENT GUIDELINES
  - ALERT AND NOTIFICATION SYSTEM

# **RECENT CHALLENGES**

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- SELF IDENTIFIED WEAKNESS IN CONTINUOUS ACCOUNTABILITY DURING 1996 EVALUATED EXERCISE
- EMERGENCY ALARM COVERAGE STUDY
- OFF-SITE AGENCIES
  - ATCHISON COUNTY, MISSOURI
  - 4 EXERCISE DEFICIENCIES

# ***EMERGENCY PREPAREDNESS FUTURE***

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- CONTINUE IMPROVEMENT PLAN
- IMPROVE DRILL PROGRAM
- OFF-SITE ISSUES FOCUS
- JOINT INFORMATION CENTER  
EVALUATION
- EMERGENCY PLAN REVISION

## Cooper Nuclear Station - Emergency Preparedness Vision

The Emergency Preparedness Program at Cooper Nuclear Station will be structured and conducted in a manner which will be recognized as a "World Class" program, respected as a leader in innovative initiatives, demonstrating consistently high quality activities and will be a model for cost effective operation.

The Emergency Preparedness Program will provide strong assurance that the health and safety of the public will be protected in the unlikely event of an incident at the Cooper Nuclear Station.

The response of Cooper Nuclear Station personnel to any off-normal event will reflect the technical competence and management skills necessary to mitigate the onsite aspects of the event and protect the welfare of employees. Accurate and timely communications will be provided to satisfy the needs of offsite response organizations and governmental agencies responsible for protecting the health and safety of the public.

### Traits of the Cooper Nuclear Station Emergency Preparedness Program:

- The Emergency Response Organization will maintain sufficiently trained personnel to staff critical positions "three deep" at all times and strive to achieve "four deep" staffing. Emergency Response Organization members will be assigned on a weekly rotating basis, will remain within the required response time vicinities of the site and adhere to the Company's fitness for duty policies while on assignment.
- Cooper Nuclear Station communications with all external parties in support of decision making and public information needs during an event will be timely, accurate, and forthright.
- The working relationships with affected offsite government, private and volunteer agencies will be professional, supportive, responsible and cooperative.
- The response equipment and facilities will be maintained at the highest levels of readiness at all times. Inventories will be maintained full and surveilled on a frequent basis.
- The Emergency Preparedness Program will have a system of performance measures, visible to NPG personnel, to assure adequate levels of preparedness are being maintained.
- Line management will be held accountable to ensure assigned staff attend training and drills to maintain their Emergency Response Organization position qualification, and proficiency.

The Emergency Preparedness program at Cooper Nuclear Station is fully supported by line management.



Senior Manager Site Support



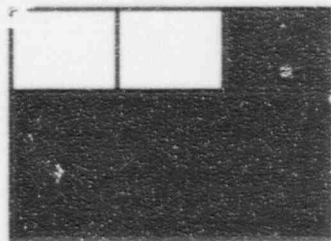
Plant Manager



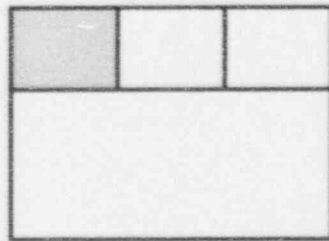
Site Manager

# Emergency Preparedness Department

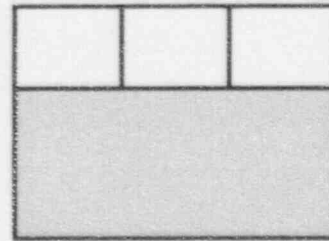
## Performance Indicators - December 1996



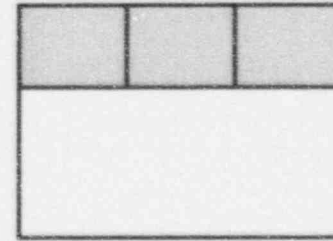
EP Staff Performance



Equipment



ERO

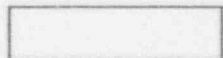


ERO Performance

**DEFINITIONS:**



Performance is excellent



Performance is satisfactory

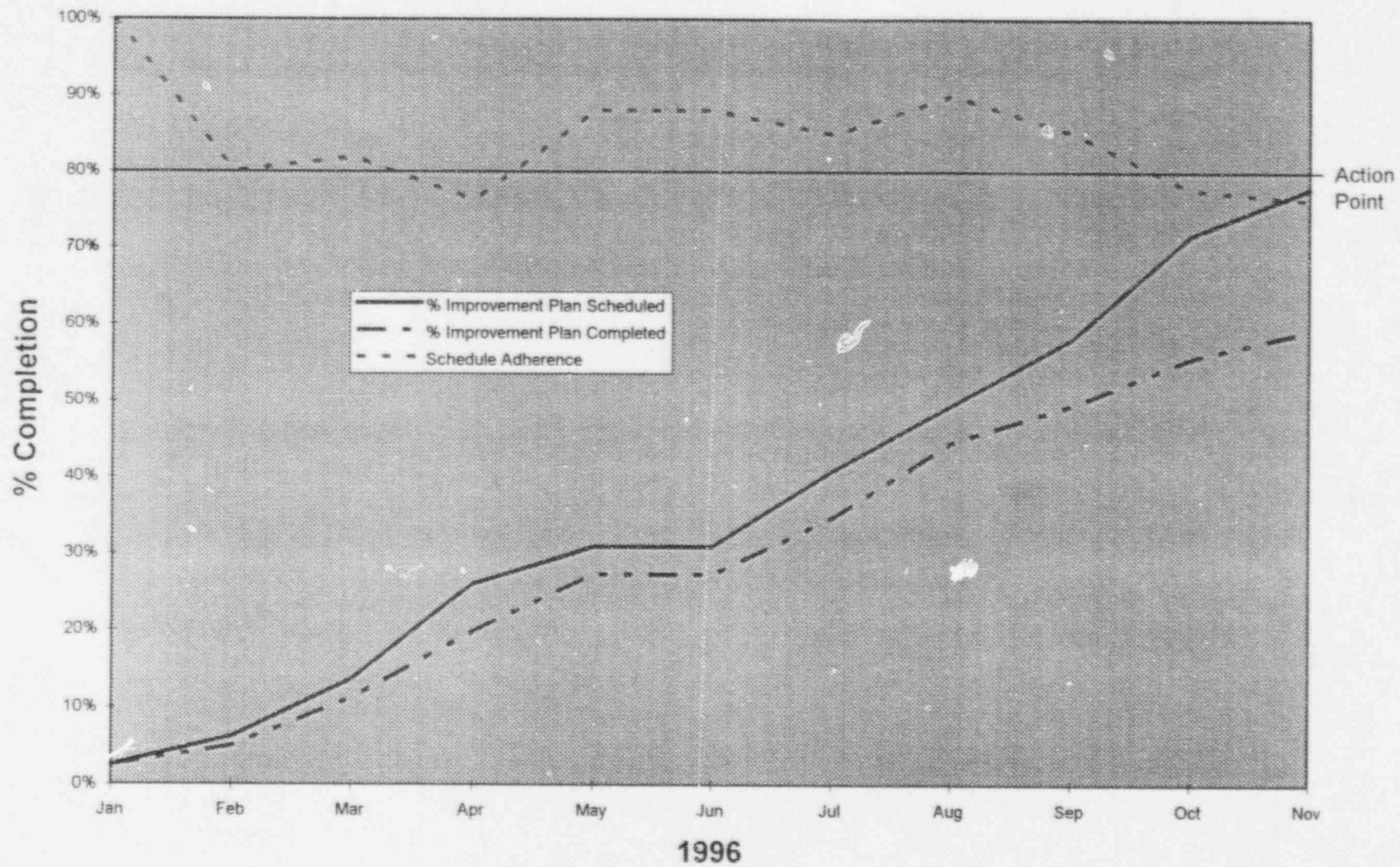


Performance requires improvement



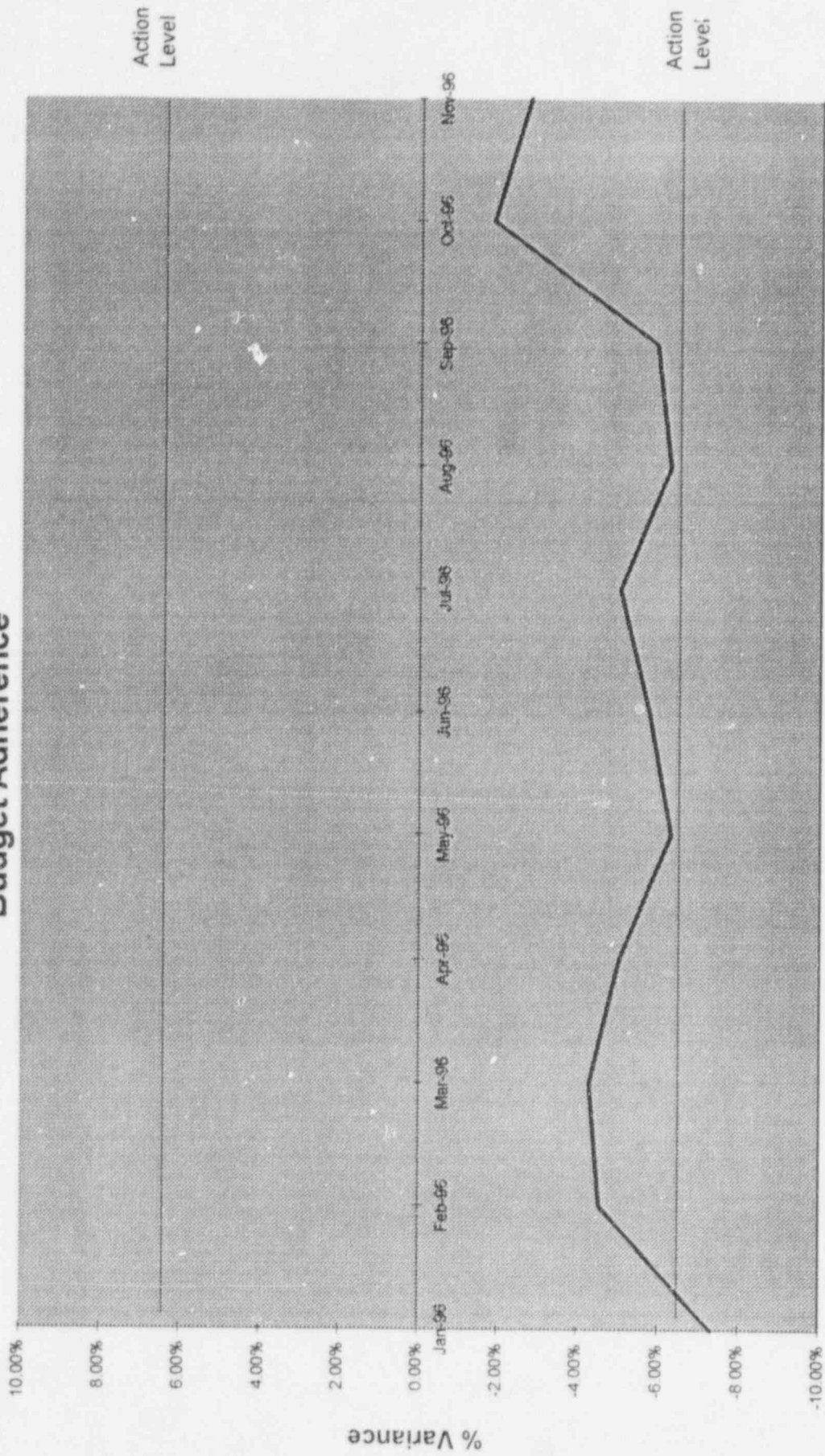
Performance needs additional monitoring

## EP Performance Improvement Plan



Owner: Brad Houston

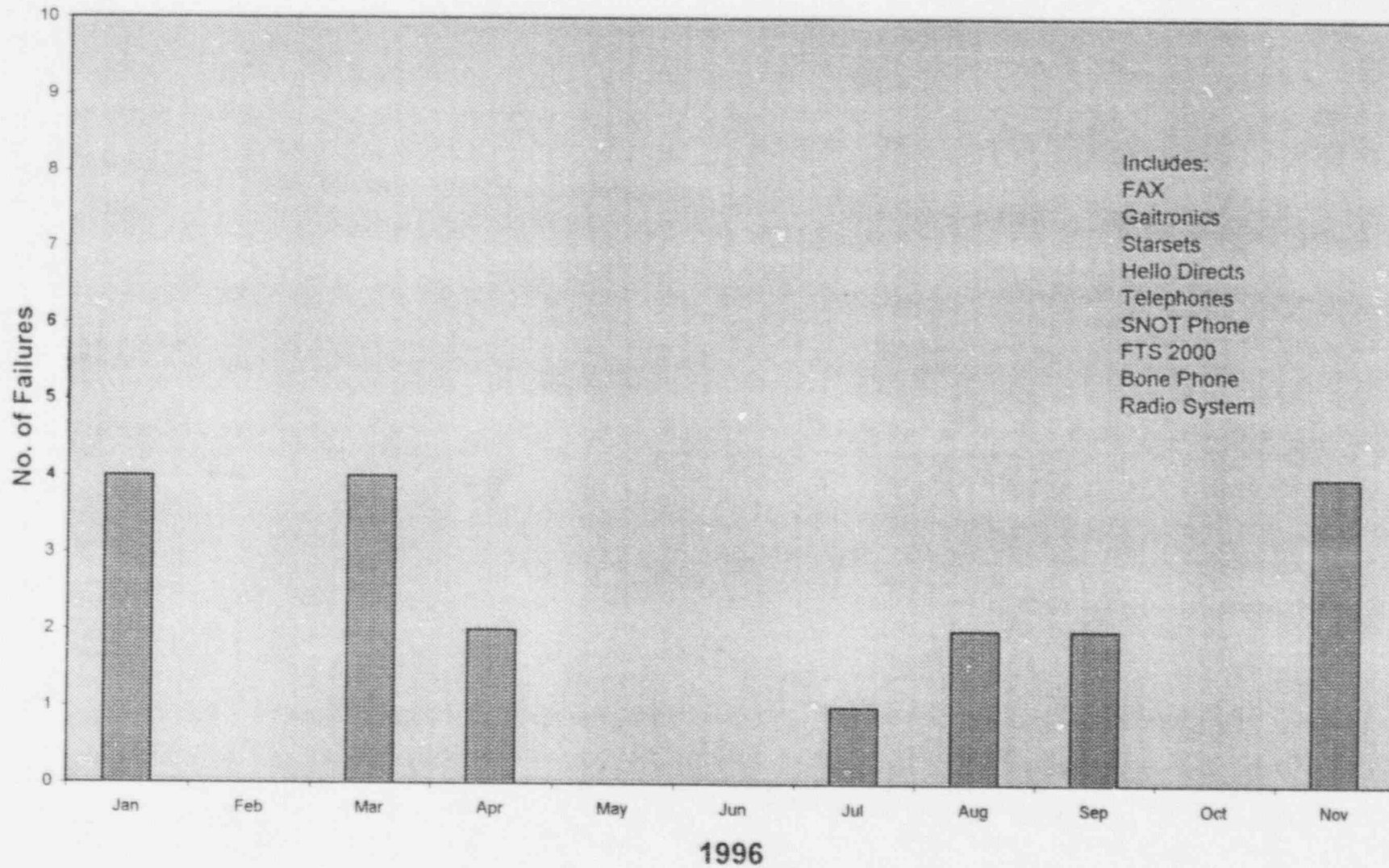
# Budget Adherence



1996

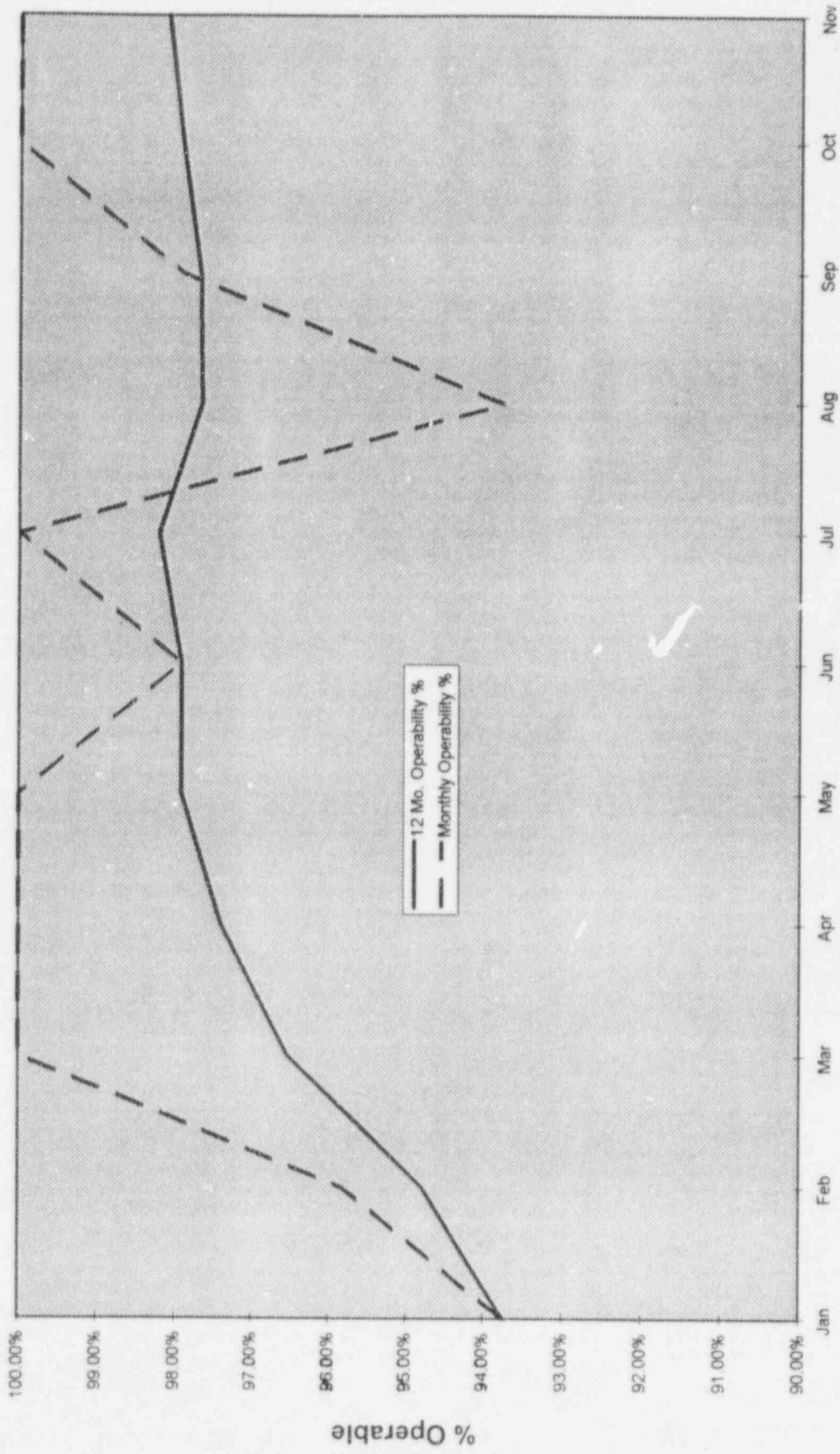


## Communications Equipment Operability

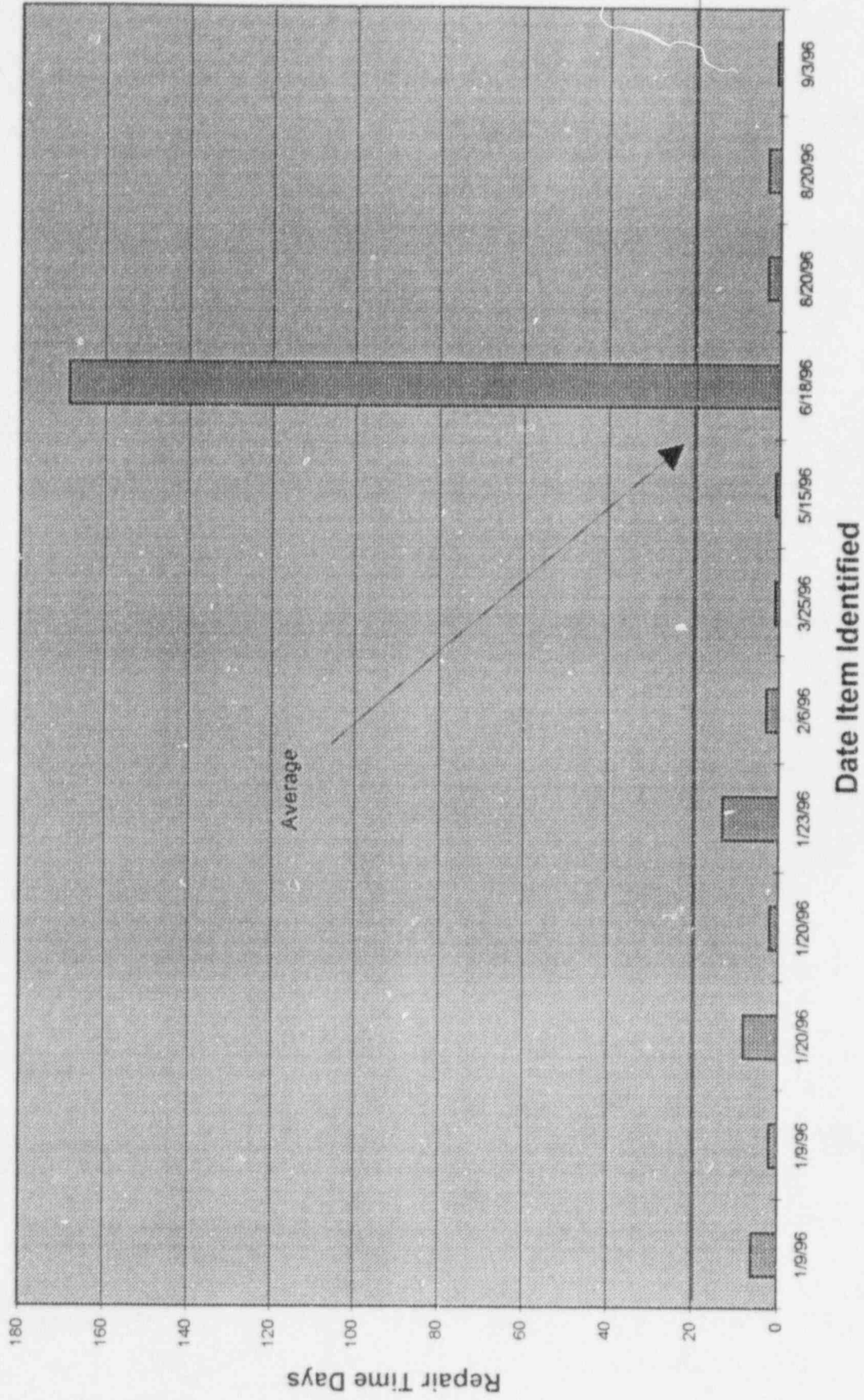


Owner: Jim Kelsay

# Siren Operability

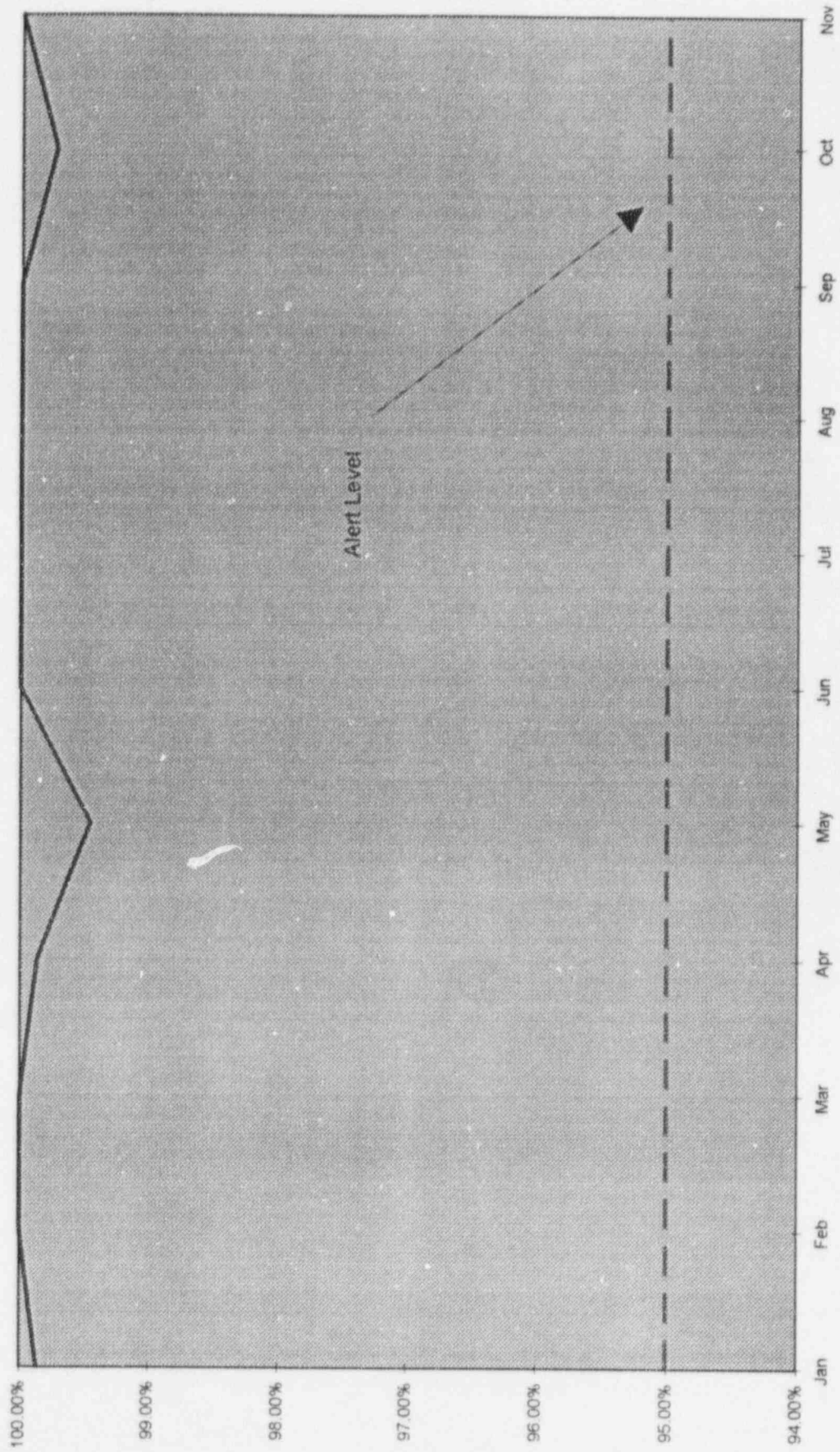


# Siren Maintenance Repair Time



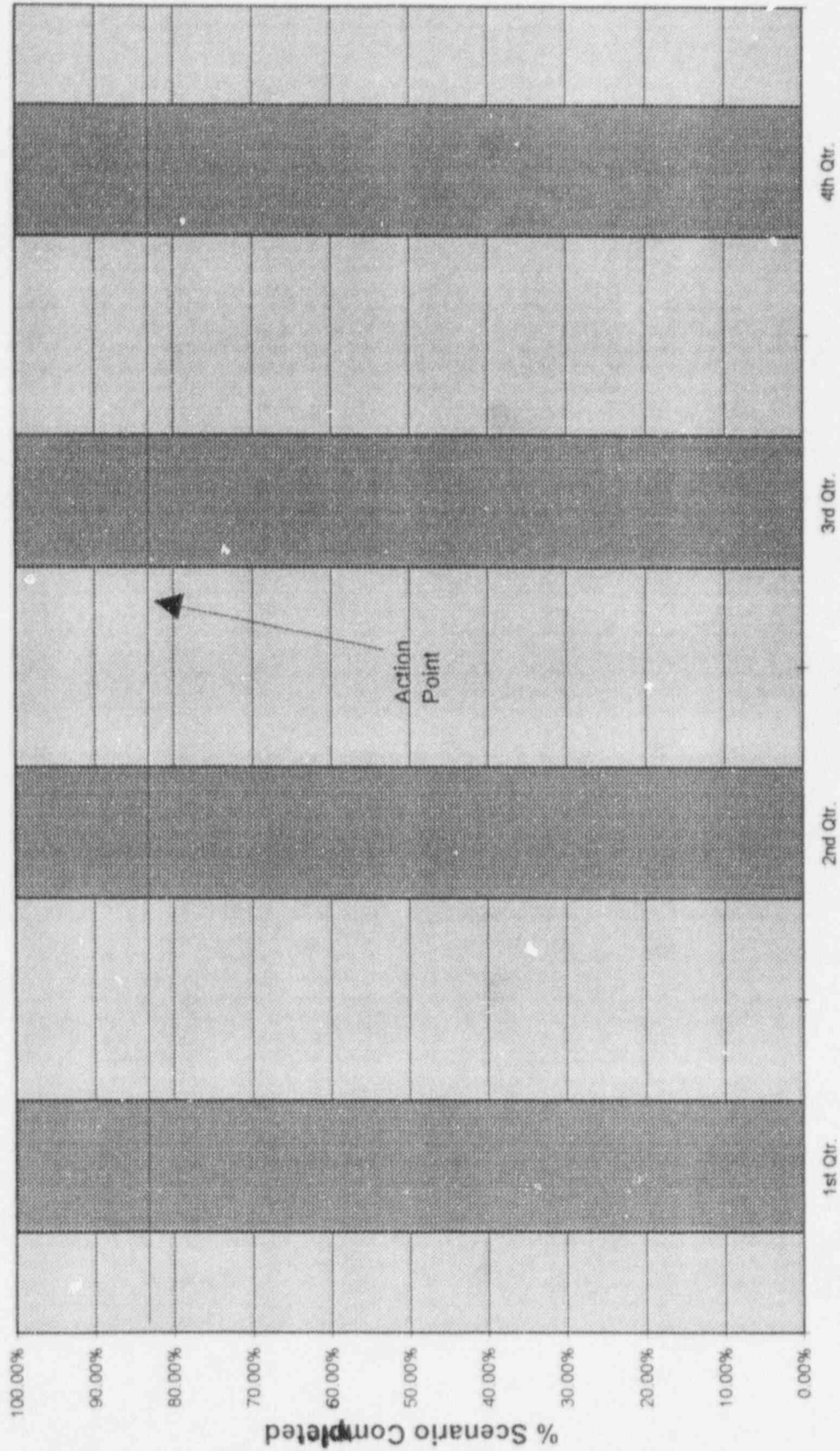
Owner: Jim Kelsay

# EBS Radio Operability

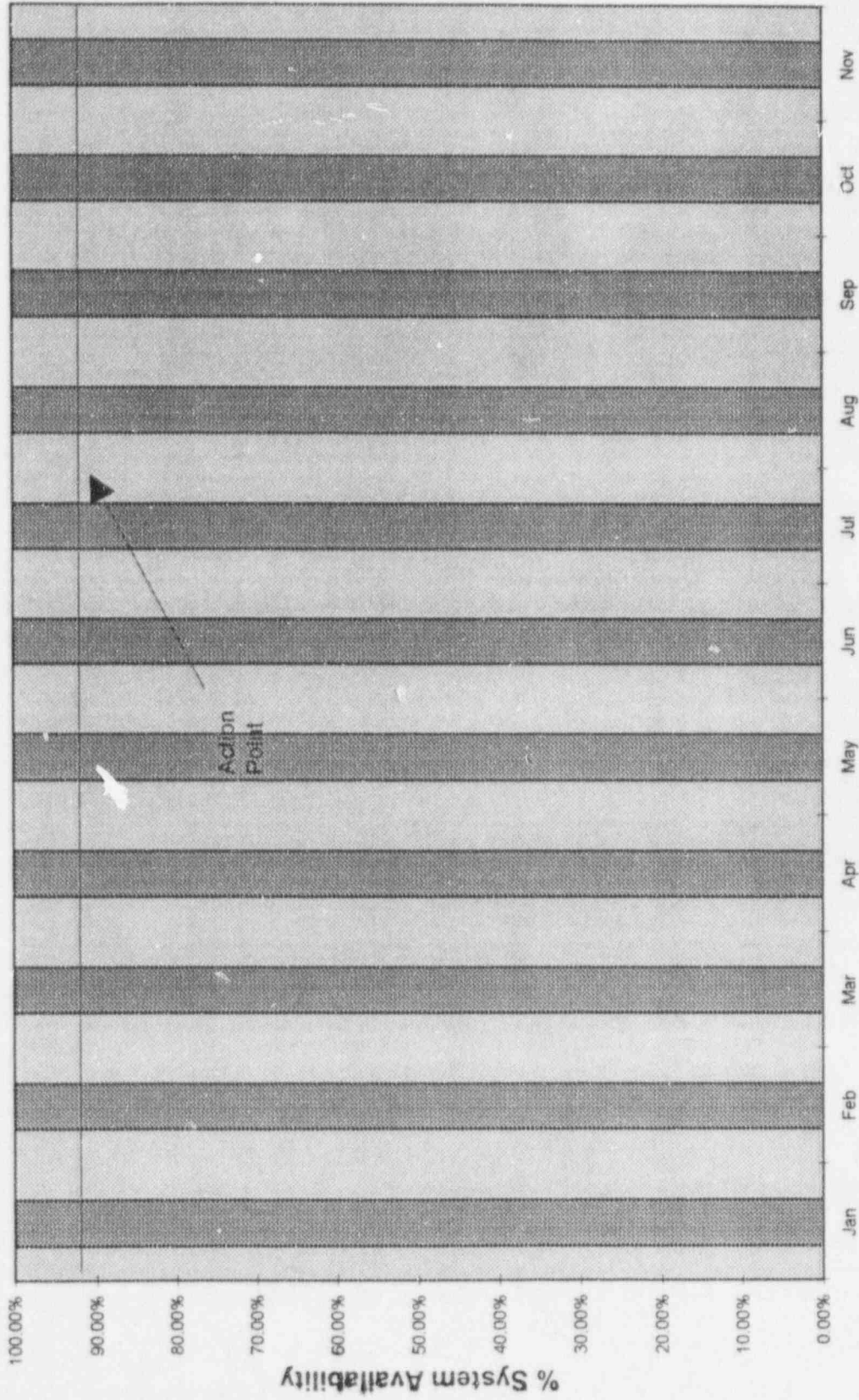


1996

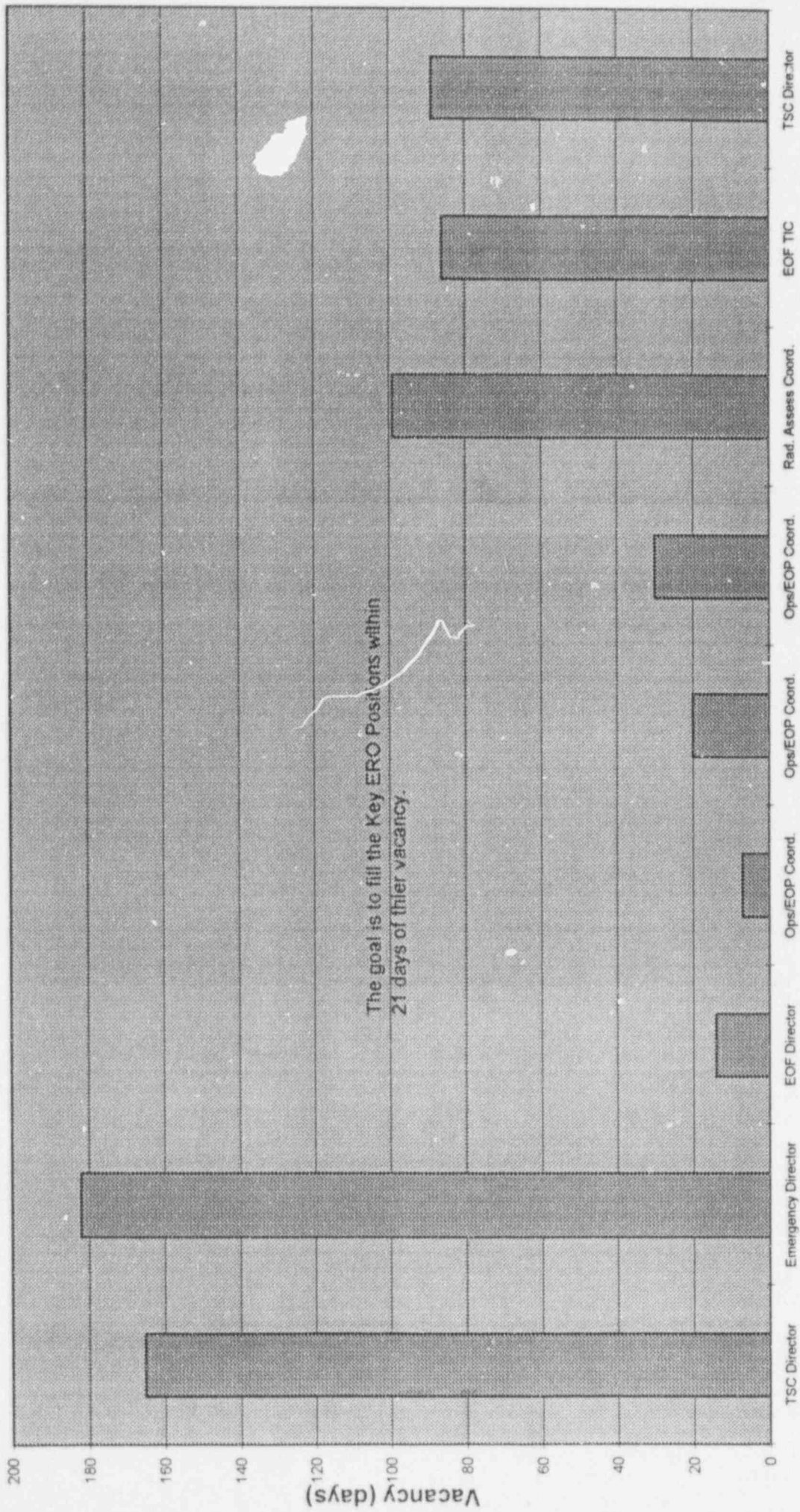
# Dialogic System Reliability



# Dialogic System Availability



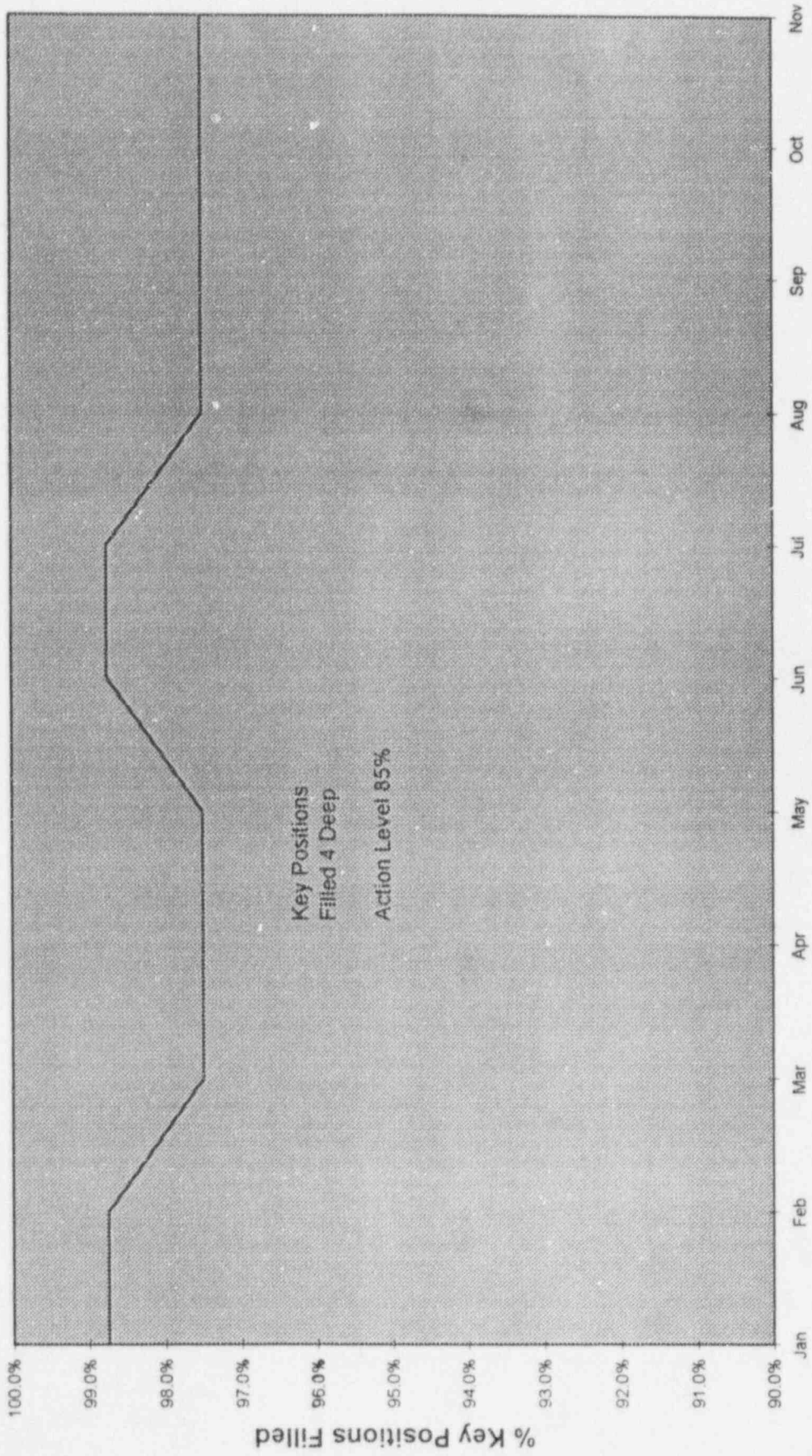
# Key ERO Open Positions



The goal is to fill the Key ERO Positions within 21 days of their vacancy.

1996

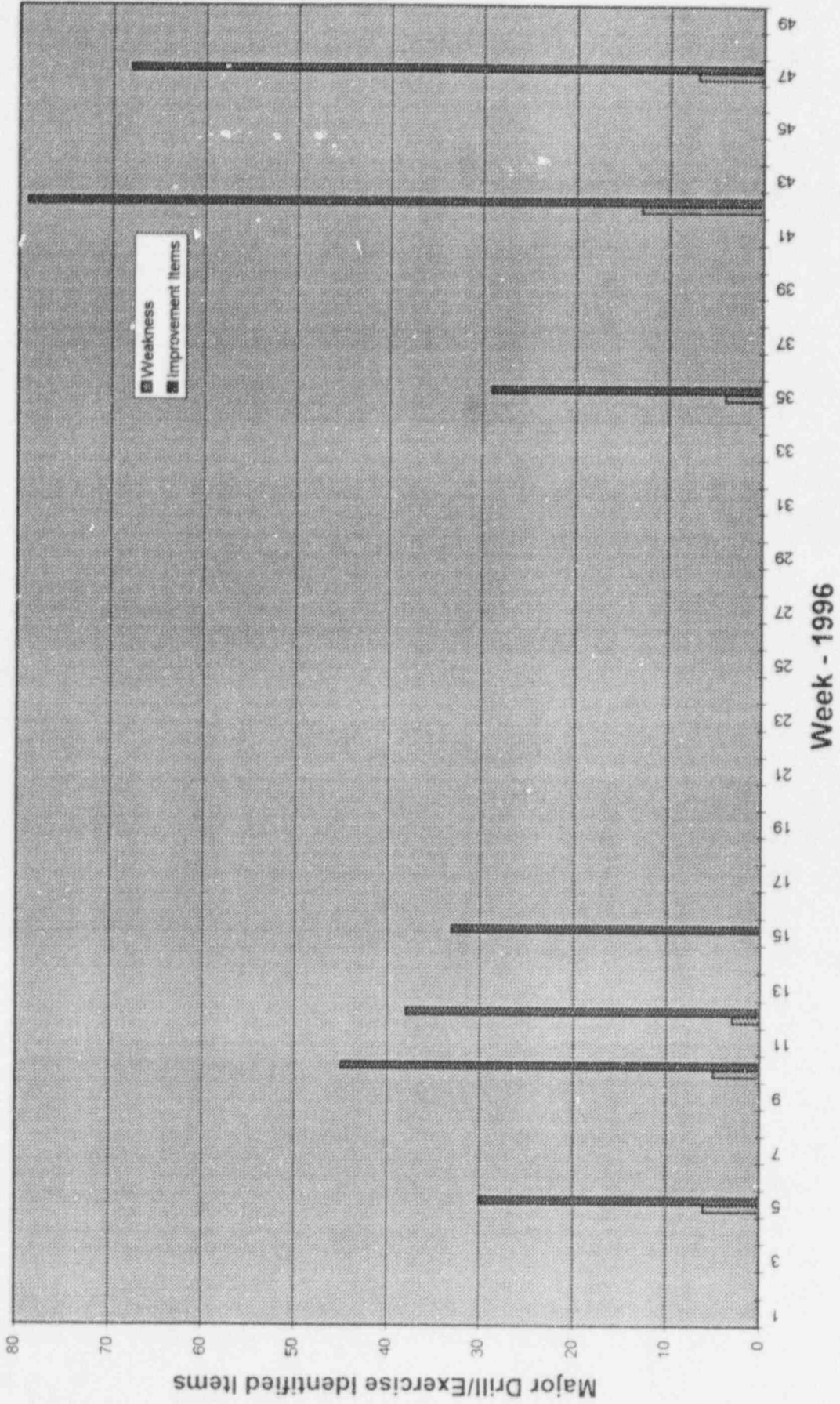
# ERO Staffing



1996

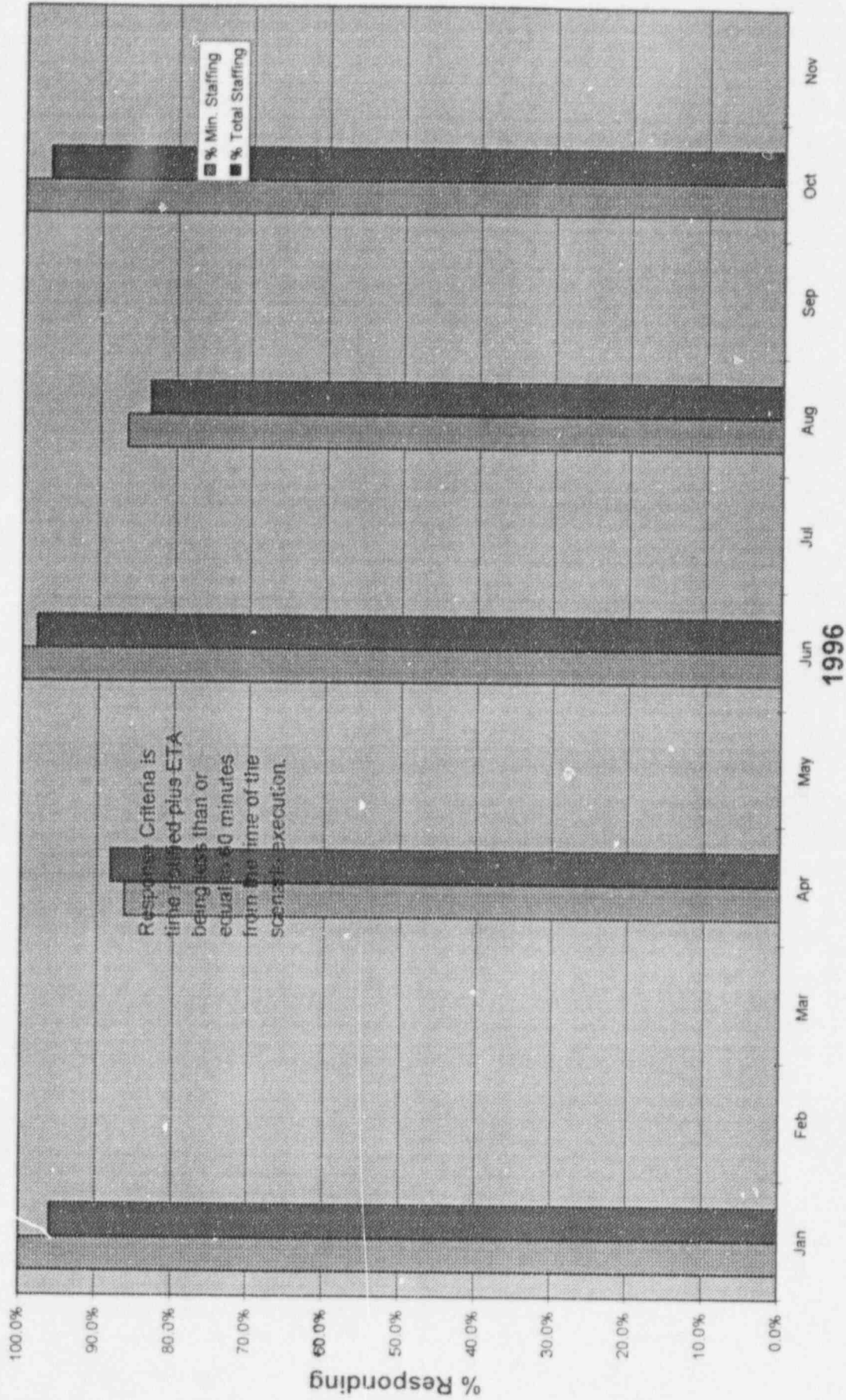


# ERO Performance



Owner: Mike Krumland

# ERO Call-In Response



## Action Plan 1.0

### Program Title

CNS Emergency Response Organization

### Program Manager

Robert Hayden

### Objective

Manage the CNS Emergency Response Organization. Improve the process for managing the Emergency Response Organization (ERO) to ensure sufficient depth is maintained at a reasonable cost. Selection of personnel and the maintenance of the database is a key area for focus.

### Program Completion Date

Identify ERO vacancies. March 30, 1996.

Formalize/refine existing EPDP guidance on ERO selection criteria. April 15, 1996.

Assign persons to begin the process of filling vacant ERO positions. April 15, 1996.

Notify Training of assignments. April 15, 1996.

Develop Access report identifying all permanent CNS NPPD employees not currently in the ERO. April 30, 1996.

Audit current ERO database against existing lists of all permanent NPPD employees assigned to CNS. May 15, 1996

Track completion of classroom training. April 15 through June 15, 1996.

Track qualification via drill participation (or other). (April 15 through June 15, 1996.

### Performance expectations

All ERO positions required to be filled for ERF activation (i.e. minimum staffing) will be maintained at a minimum of three deep.

Positions vacated will have an individual (or individuals) identified as potential replacement(s)

within 2 weeks.

ERO qualification will take no longer than 60 days from a vacancy to a fully qualified replacement.

## Action Plan 2.0

### Program Title

CNS Drill and Exercise program

### Program Manager

Robert Hayden

### Objective

Manage the CNS Drill and Exercise program to fulfill all regulatory requirements and also provide multiple opportunities for the Emergency Response Organization to train and gain experience.

### Program Completion Date

Select Scenario Development Committee (SDC) by March 1, 1996

Meet with SDC monthly (or more often) to develop or review/edit scenarios for mini-drill(s), Dress Rehearsal, and Annual Exercise.

Conduct, control, and critique all scheduled drills in accordance with the CNS Drill and Exercise Manual: January 30, March 5, March 19, April 9, August 27, October 8, November 19, and December 3. Additionally, unpublished unannounced drills will be completed. (PASS, medical, accountability, and call-in)

Submit scenario objectives and scenario to off-site agencies by due dates. 90 days and 60 days prior to the annual exercise.

Publish annual drill and exercise schedule for following year by December 31, 1996

### Performance expectations

No scenario-oriented weaknesses identified at the annual exercise.

No late submittals.

## ACTION PLAN 3.0

### Program Title

Provide direction to the CNS Training department to ensure continuous growth in the area of EP Training. This includes initial and requalification training that will lead to improved performance.

### Program Manager

Brad Houston

### Program Completion Date

December 31, 1996

### Program Description

This program describes the overall upgrade to the Emergency Preparedness Training Program. The working relationship between EP and CNS Training personnel will be established to ensure ownership of the program by the EP Department. Actual development will be accomplished by the training personnel with close oversight by EP.

### Objectives

The objective of this program is to ensure that "hands on training" is provided to ERO personnel in the most cost effective way. As a minimum, the following objectives will be met.

- Ensure ownership through the Training Effectiveness Review Committee
- Ensure the effectiveness of coordination meetings
- Establish new initial training program. (Hands on)
- Establish new requal program based on drill participation and Qualification Cards
- Ensure program is regulatory sound
- Establish OJE/OJT program

### Performance Expectations

The success of this program will be measured against drill performance.

## ACTION PLAN 4.0

### Program Title

Complete upgrade to the CNS Emergency Facilities leading to an improved emergency response capability.

### Program Manager

Brad Houston

### Program Completion Date

July 30, 1996

### Description

This program includes an overall upgrade to the CNS Technical Support Center, Operational Support Center, and Emergency Operations Facility. Data acquisition and display will be the primary focus in order to get the right data to decision makers in a timely fashion. The overall layout will be modified to separate teams into the desired working space. Human factors will be improved through this layout, furniture, etc. Dual purpose lay outs will be used where possible and cost will be kept to a minimum.

### Objectives

The objective of this program is to enhance our Emergency Response capability by improving facilities. This enhancement will increase overall efficiency and reduce the number of personnel required in each facility. As a minimum, the following areas will be addressed:

- Create a "Think Tank" environment for decision makers in each facility.
- Improved furniture lay out to improve communications.
- Data acquisition and display system with multiple inputs.
- Improved intercom system.
- New carpet, paint, lighting, etc.
- Improved aids such as maps / drawings

### Performance Expectations

No specific performance expectations other than completing this plan at or below budget.

## Action Plan 5.0

### Program Title

Off Site Activities

### Program Manager

K. M. Krumland

### Program Completion Date

Task Force Meetings: April, July, August, September, October, and November.

Radiological Orientation Training for local law enforcement agencies will be conducted in July.

Training for Nemaha County Community Hospital will be conducted in June or July.

Training for the fire departments has not been scheduled. A training plan will be in place by June 1, 1996.

Training for Sheriff's Dispatchers will be provided in October.

JIC Staffing - April 1, 1996

JIC Training - April 30, 1996

Non-Technical EAL Guide - June 1, 1996

JIC Drills - August 27, October 8, and November 19, 1996

Public Information Program - December 31, 1996

JIC Location Selection - December 31, 1996

### Description

Manage all offsite issues to ensure the off site emergency preparedness program is maintained to protect the health and safety of the public. This includes the public information program, the Joint Information Center, the CNS EP Task Force project, and the relationships of the off site agencies.

### Objectives

Provide overall interface between CNS and our off site agencies including managing the CNS Task Force and ensuring training is conducted off site per our letters of agreement.

The public information program will also be examined for adequacy and possible improvement.



This includes the JIC staffing and training. The calendar's effectiveness and distribution will be examined. The annual media day program will also be scrutinized for effectiveness. A non-technical EAL guide will be developed to aid off site decision makers.

#### Performance Objectives

All CNS Task Force meetings are scheduled and completed. Meetings minute notes are published, action items assigned, and action items completed.

Fire drills/practice are scheduled for the volunteer fire departments. At least one of the drills will interface with the CNS Fire Brigade.

Radiological orientation training for the local law enforcement agencies will be conducted.

Training for the Nemaha County Hospital will be conducted.

Training for the Nemaha County Sheriff's Office and the Atchison County Sheriff's on the Alert and Notification System will be provided.

The JIC will be an area of strength at the 1996 Exercise.

#### Performance Expectations

1. No weakness associated with the medical drills.
2. No overdue task force action assignments.
3. No remedial exercises.

## ACTION PLAN 6.0

### Program Title

Review of the CNS Emergency Preparedness Department internal operational processes to identify and implement the actions necessary for better efficiency and improved performance.

### Program Manager

J. Kelsay

### Program Completion Date

September 30, 1996

### Description

This program shall include an overall assessment of the internal operational processes used within the CNS Emergency Preparedness Department. Emphasis shall be focused on the elimination of low value activities, consolidation of similar activities, transfer of selected activities to other departments where they can be performed more effectively, and an evaluation of intra-departmental communications.

### Objectives

The objective of this program is to enhance the day to day operation of CNS Emergency Preparedness Department so that its small but dedicated staff can perform the massive amount of work that is required in a more efficient manner. Relationships and communications with other departments shall also be enhanced to improve overall performance. Enhancements to EP Department operations shall include:

- Development of performance indicators for all major aspects of the Emergency Preparedness Program.
- Elimination of low-value work items; transfer of some work items to other more appropriate departments
- Implementation of a new EP department work scheduling/tracking methodology.
- A standardized document control program within the EP Department which utilizes the station document control procedures and equipment.
- Conduct of Preventive Maintenance Items such as equipment testing, offsite responder training, and administrative duties as defined by EPDP #14.
- Update the Emergency Telephone Directory Quarterly as per EPDP #17.
- Provide maintenance and sustained operability of the CNS Automated Notification System.

Performance Expectations

Performance expectations shall meet or exceed those specific performance indicators as developed per the Section 6.1 of this Plan.

## Action Plan 7.0

### Program Title

Emergency Plan

### Program Manager

K. M. Krumland

### Program Completion Date

August 30, 1996

### Description

Revise the Emergency Plan to reflect a new format.

### Objectives

The objective of the Emergency Plan format revision is to make the document more auditable and simpler to maintain. The format of the revision will be similar to NUREG-0654.

### Performance Objectives

Completion of the project will require NRC approval prior to implementation.

### Performance Expectations

No performance indicators other than maintaining the project on schedule.

## Action Plan 8.0

### Program Title

Severe Accident Management Guideline development and testing

### Program Manager

Robert Hayden

### Objective

Integrate the implementation of Severe Accident Management Guides at CNS with the Emergency Plan.

### Program Completion Date

Attend SAMG committee meetings as scheduled. March 1996 through December 1997.

Identify SAMG consultants. November 1, 1996.

Select and hire a SAMG consultant. February 1, 1997.

Identify SAMG-specific drill objectives. March 1, 1997.

Observe CNS Operations training on SAMG's. (anticipated) June 30, 1997.

Develop a drill or exercise package aimed at demonstrating CNS SAMG's. August 30, 1997.

Conduct a successful CNS SAMG drill. September 30, 1997.

Full implementation December 1, 1997

### Performance expectations

Support the larger SAMG development team in achieving their goals.

Aggressively pursue EP demonstration of SAMGs through development and conduct of a SAMG-specific drill.

## ACTION PLAN 9.0

### Program Title

Complete review of the design and operation of the CNS Alert and Notification System to identify and implement the actions necessary for improved performance.

### Program Manager

J. Kelsay

### Program Completion Date

July 31, 1997

### Description

This program shall include an overall assessment of the past and current performance of all portions of the CNS Alert and Notification System including the fixed sirens, EBS radio station interfaces, and tone-alert radios. Emphasis shall be placed on establishing the steps necessary for converting from the current EBS to the new EAS.

### Objectives

The objective of this program is to enhance the CNS Alert and Notification System by implementing improvements that are identified through a thorough assessment of the current system design configuration and theory of operation. Necessary changes shall be made to the design of the system to accommodate the new EAS. Enhancements to the system shall include:

- Upgrade of tone-alert radios with newer equipment which shall be capable of receiving the new EAS digital transmissions.
- Improved operability of the entire Alert and Notification System through better maintenance and faster repair service.
- Review of the location of fixed sirens with emphasis on possible fixed siren relocation based on shifting population concentrations within the 10 mile EPZ.
- Implementation of a new database of residences and businesses within the 10 mile EPZ for issuance and trending/tracking of Alert and Notification System materials and components.

### Performance Expectations

Performance expectations shall meet or exceed those specific performance indicators as determined for this area in Action Plan 6.0.