



**NRC Performance Review
of Certified Activities**

Portsmouth Gaseous Diffusion Plant (PORTS)

November 9, 2004

PUBLIC MEETING





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Introduction

J. Morris Brown
Vice President, Operations



USEC Perspective on Performance

**Patrick D. Musser
General Manager**



Overview of Performance

- NRC review covered period from October 1, 2002 to August 7, 2004.
- Areas of Safety Operations, Facility Support, and Special Topics, as noted by NRC, have no identified specific areas needing improvement.
- Area of Radiological Controls, as noted by NRC, identify specific areas needing improvement. Specifically, improvements to our radioactive contamination control practices will be discussed.
- We are focusing our attention on existing challenges and opportunities for improvement.

Overview of Performance (Continued)

- Plant mission has changed:
 - Cold Standby Program
 - Contaminated Feed Cleanup Project
 - Gaseous Centrifuge Enrichment Plant (GCEP) Cleanup Project

Overview of Performance

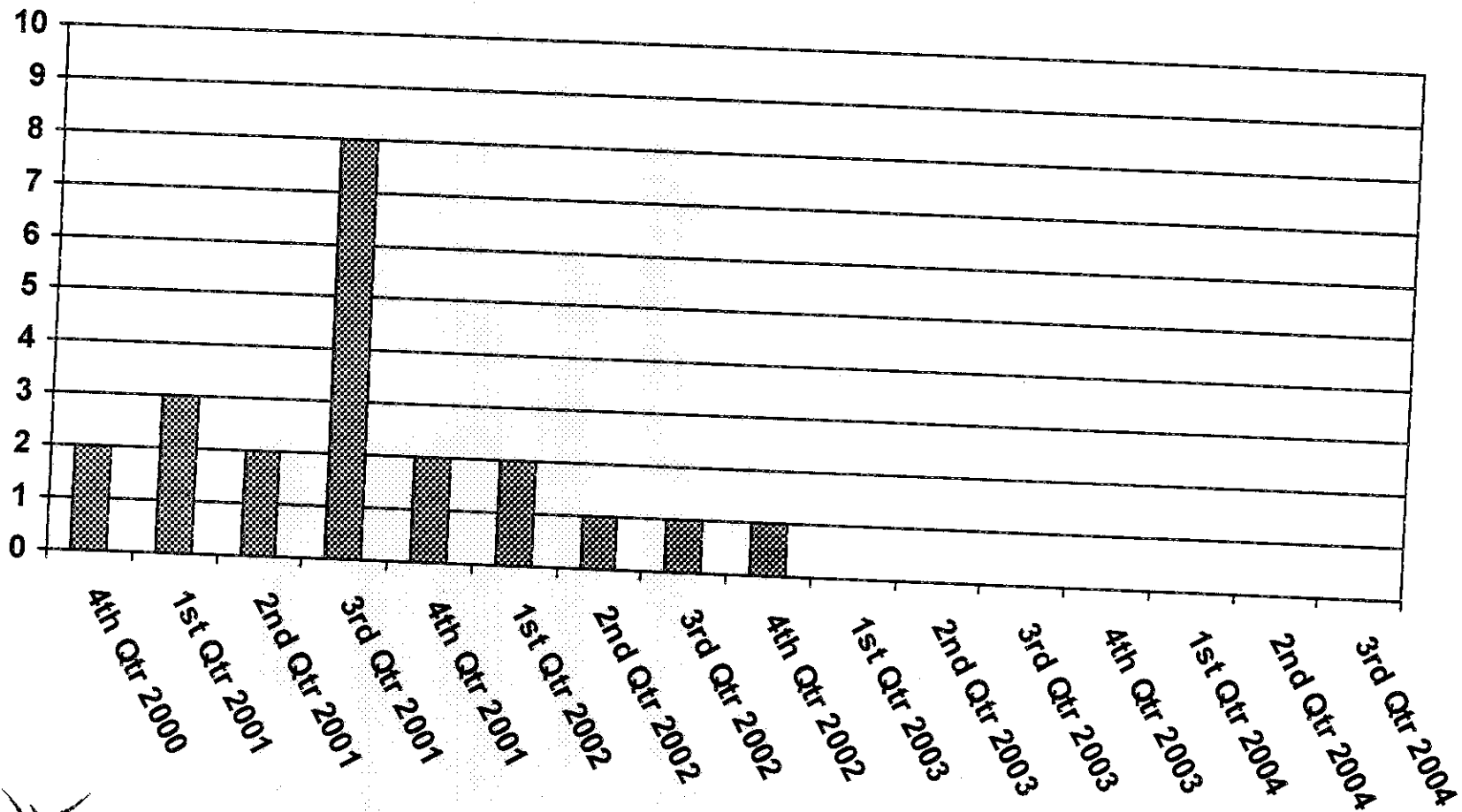
(Continued)

- Safety Operations
- Radiological Controls
- Facility Support
- Special Topics

Safety Operations

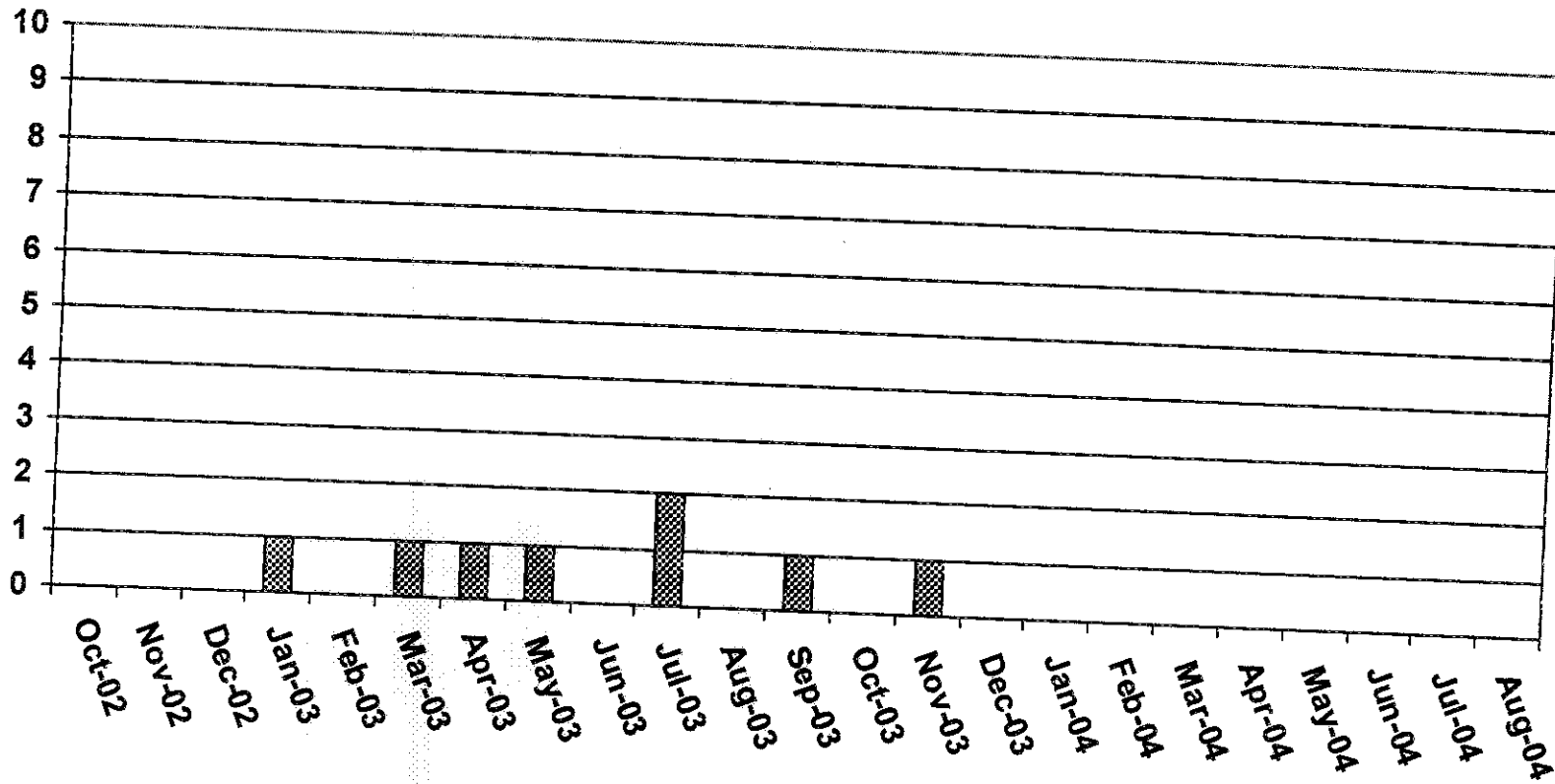
- Safety Performance has improved:
 - Nuclear Criticality Safety
 - Technical Safety Requirements
 - Reportable Events
 - In-Hand Procedure Compliance
 - Human Performance
 - Industrial Safety Recordable Injury and Illness Rate

Nuclear Criticality Safety Non-Compliances

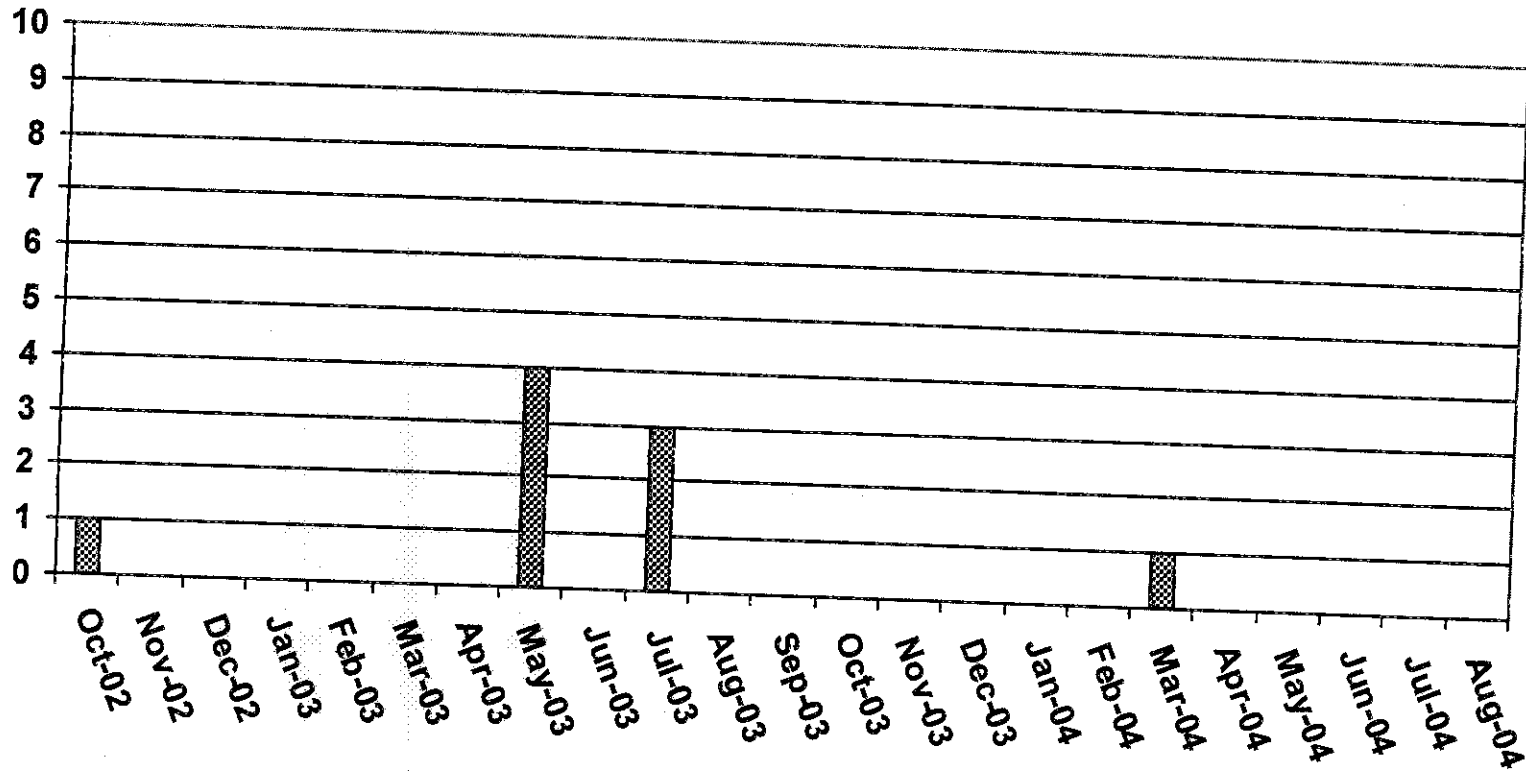


To August 2004

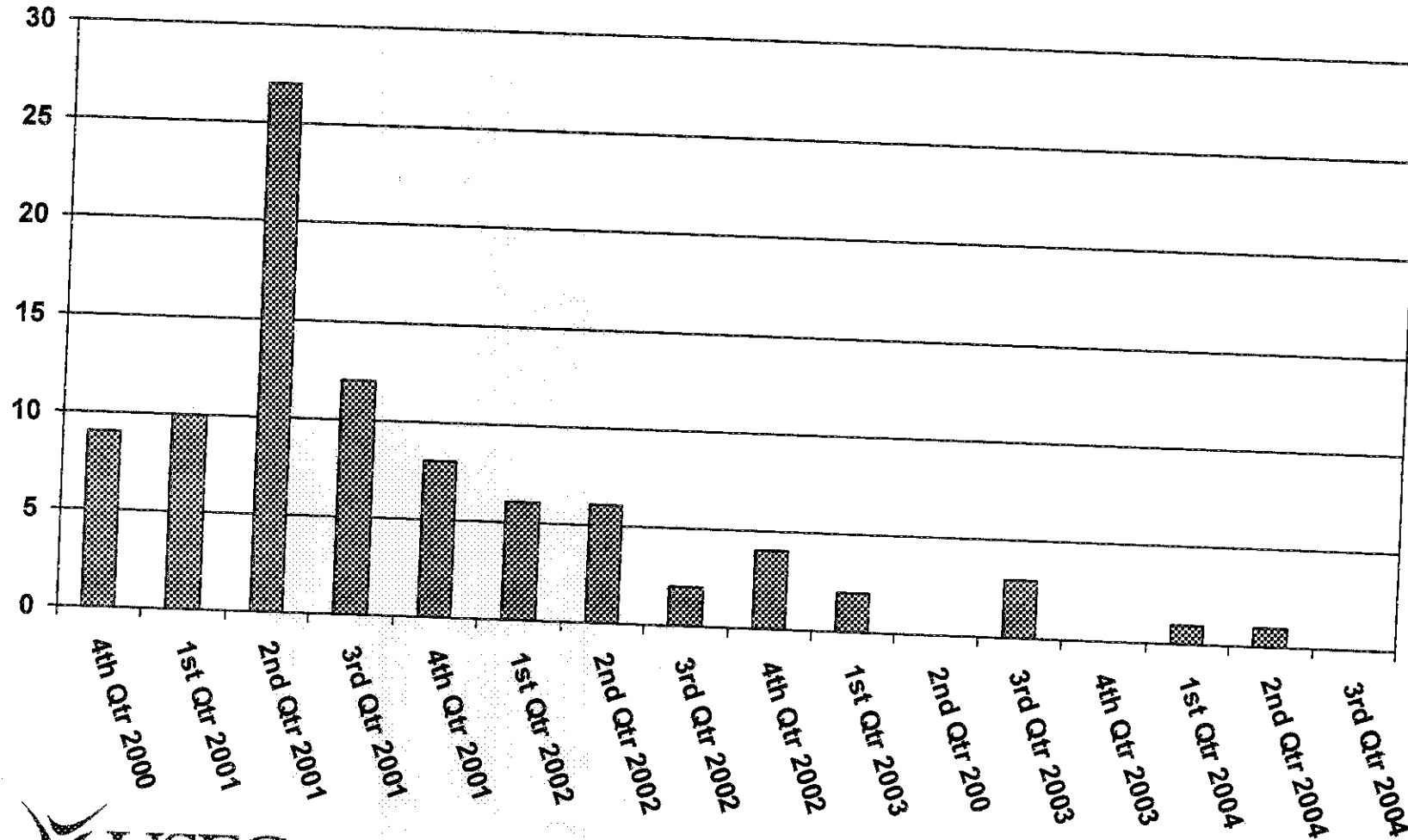
Technical Safety Requirement Non-Compliances



Reportable Events

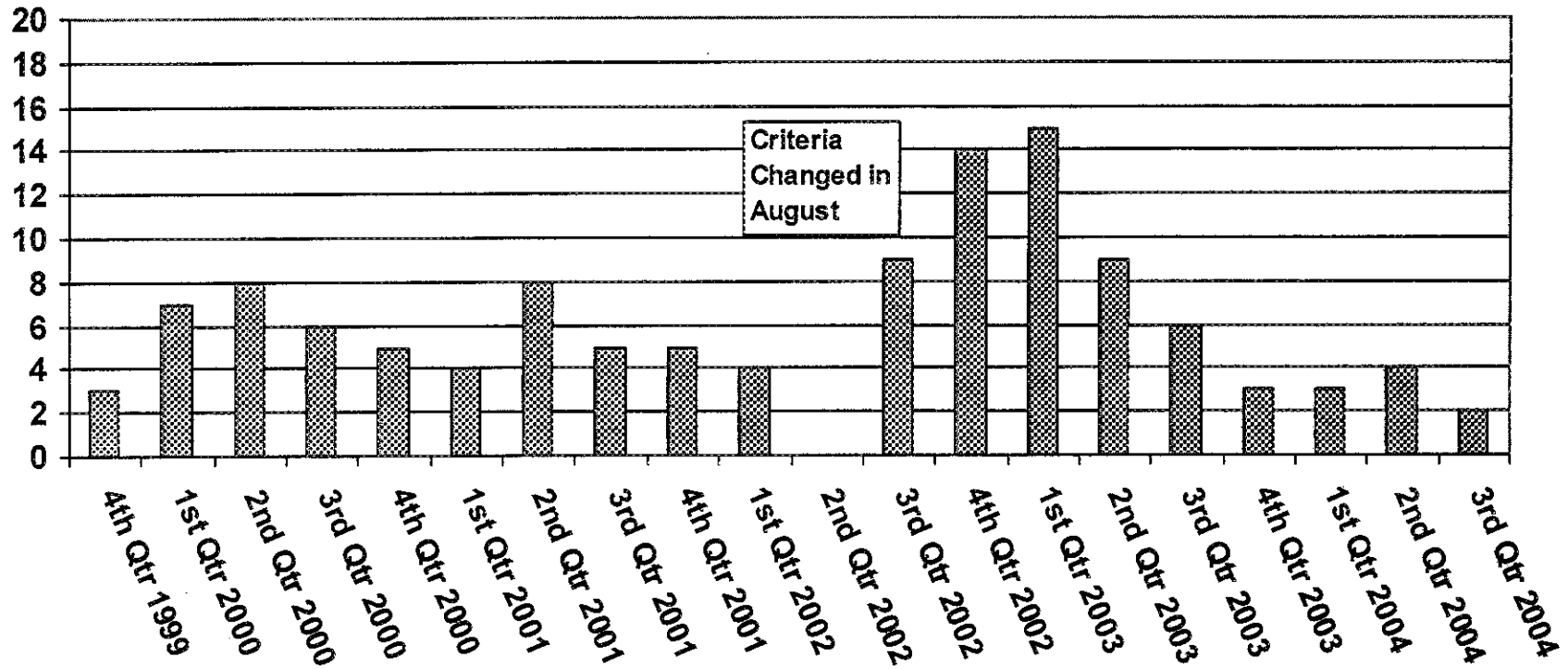


In-Hand Procedure Non-Compliances



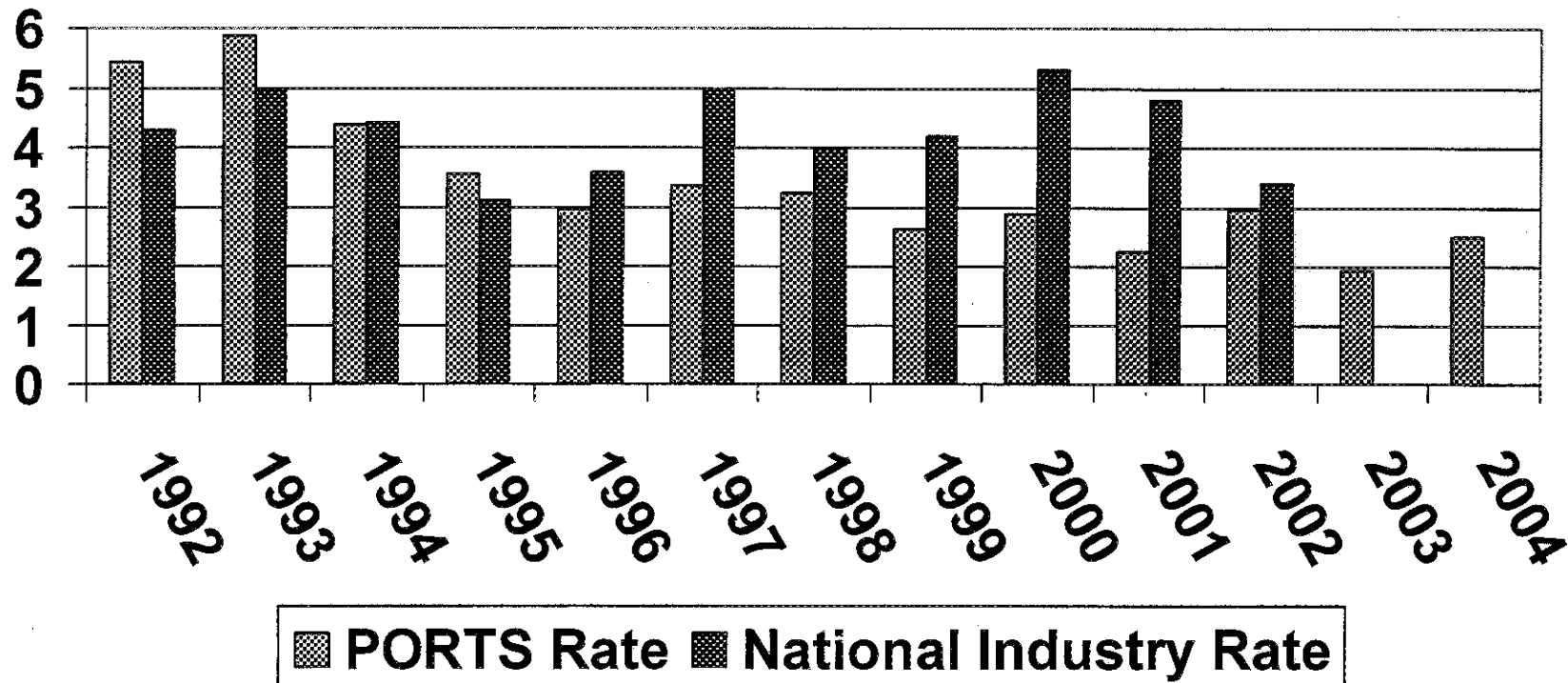
To August 2004

Significant Human Performance Errors



To August 2004

Recordable Injury and Illness Rate Comparison



To August 2004

Safety Operations

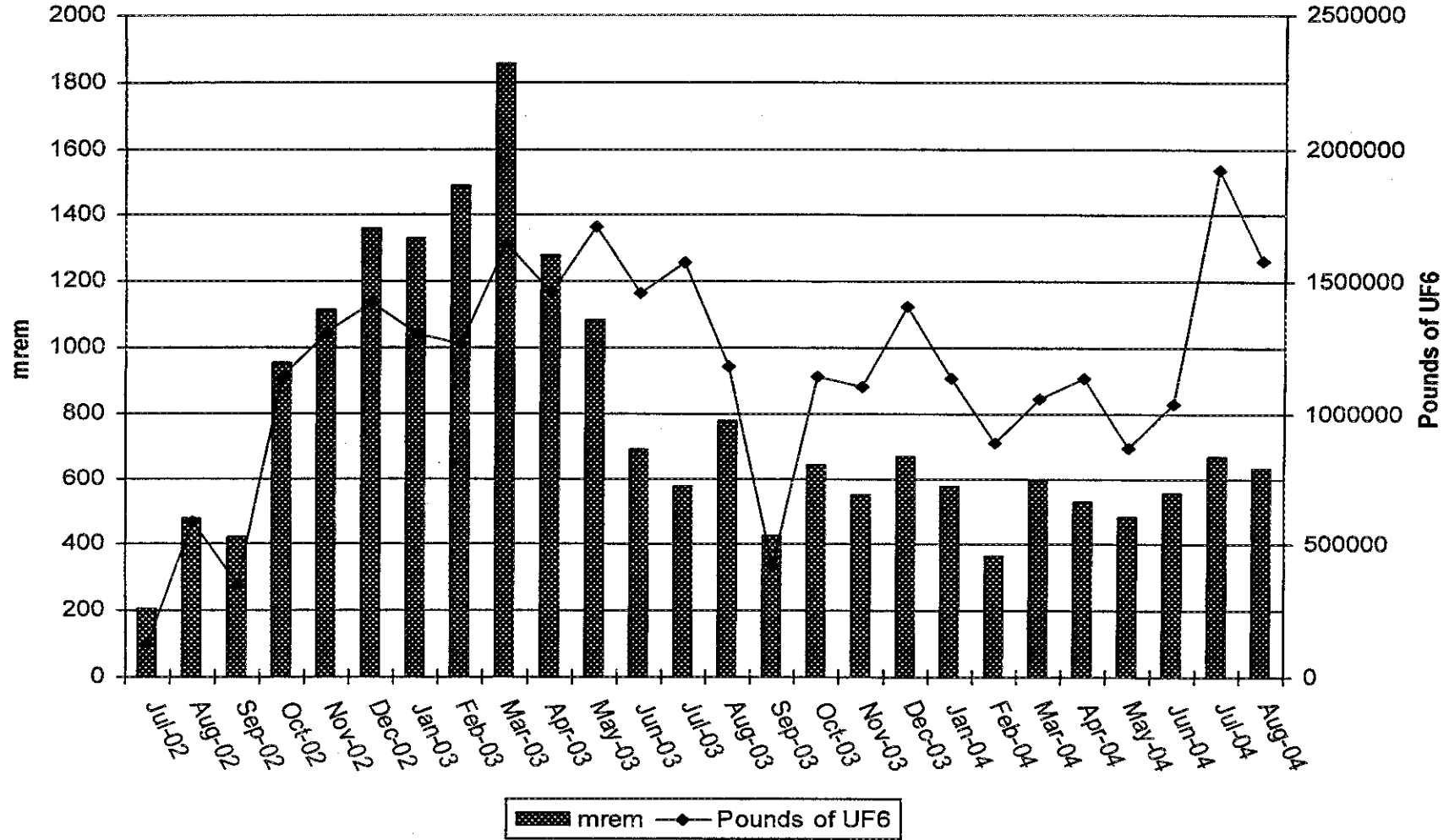
(Continued)

- Continued annual refresher training on “Nuclear Safety Culture”.
- Worker integration and ownership of safety programs:
 - Team effort between management, PACE and SPFPA
 - Triangle of Prevention Program investigations
 - Union monthly safety meeting presentations
 - Worker-led area safety committees

Radiological Controls

- The change in mission at PORTS has brought new challenges to the radiation protection program:
 - Contaminated Feed Cleanup Project created high radiation areas

Contaminated Feed Cleanup Project Dose Trend



Radiological Controls (Continued)

- Contaminated Feed Cleanup Project required work to be performed in high radiation areas:
 - Increased focus on As Low As Reasonably Achievable
 - Implementation of engineering and administrative controls to reduce dose
 - Additional worker involvement and training for high radiation area workers
 - Corrective actions taken for noted deficiencies

Radiological Controls (Continued)

- Radioactive contamination control practices have not been fully effective:
 - Enforcement of management's expectations not carried out at the floor level for tasks that were once routine but are now performed less frequently
 - Audits and evaluations lack depth
- Corrective Actions completed:
 - Utilized industry peer from nuclear power plant, benchmarked nuclear facilities in March 2004
 - Performed in-depth assessment of radiological worker training program
 - Revised programs to require management observation and coaching of workers in August 2004
 - Installed respirator tracking program and reporting system

Radiological Controls (Continued)

- Corrective Actions in-progress:
 - Union/Management developed and is presenting mandatory crew briefings with workers outlining expectations
 - Incorporation of radiological error lab into the training program
 - Development of an interactive computer-based radworker training program
 - Organizational management expectations presentations being given to all managers
 - Raising the significance of radiological procedure non-compliances in the corrective action program

Radiological Controls (Continued)

- Goals of Corrective Actions:
 - Refocus management and worker attention on radiological procedural adherence
 - Self-identify weaknesses before they become a problem
 - Self-identify adverse trends
 - Continue to re-enforce management's expectations at the floor level

Radiological Controls (Continued)

- USEC recognizes the need for improvement in the radiation protection program.
- Overall program elements have been successful in:
 - reducing dose
 - maintaining control of radioactive material to designated areas
 - improving self-identification
- USEC identified the need to enhance enforcement related to procedural compliance and to ensure that all program requirements are being followed.

Facility Support

- Maintenance and Surveillance
- Emergency Management
- Management Organization and Controls

Facility Support (Continued)

Maintenance and Surveillance

- Formal system health program began November 2002.
- Tracking systems critical to plant missions and infrastructure.
- Focusing on nuclear safety significant systems first.
- System health has improved by 30 percent since November 2002.

Facility Support (Continued)

Emergency Management

- No open NRC identified items during PORTS 2001 and 2003 Biennial Emergency Preparedness Exercises.
- Drills & Exercises.
- 11 Mutual Aid Agreements.
- Off-site response agencies participate in quarterly Emergency Management exercises.

Facility Support (Continued)

Management Organization and Controls

- Corrective Action Program improvements:
 - Formal expectations communicated to all personnel performing problem report investigations
 - Corrective Action Program modified – All site-wide Significant Conditions Adverse to Quality investigations reviewed by multi-disciplined review board
 - Random reviews of Corrective Action Plans performed by multi-disciplined review board
 - Signature authority for corrective action responses limited to organization manager or designee during absences

Special Topics

- SARUP implementation on September 12, 2003.
- Renewed Collective Bargaining Agreements:
 - PACE effective March 11, 2004, through May 2, 2010
 - SPFPA effective August 4, 2002, through August 4, 2007

Closing Remarks

J. Morris Brown

Vice President, Operations

1997 2000 2003 2006 2009 2012 2015 2018 2021 2024

