

RIC 2003

(Session F5)



# **Breakout Results/ Feedback**

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Office of Nuclear Reactor Regulation**

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# Panelists

- William Kane, DEDR/EDO/NRC
- Bill Borchardt, ADIP/NRR/NRC
- Brian Sheron, ADPT/NRR/NRC
- Michael Case, PMAS/NRR/NRC
- Hubert Miller, RA/RI/NRC
- Luis Reyes, RA/RII/NRC
- James Dyer, RA/RIII/NRC
- Ellis Merschoff, RA/RIII/NRC

# Overview

- NRC Performance Goals
- Reactor Arena Performance Measures
- Performance Results – Regulator
- Performance Results – Industry
- The Future
- Results of Regional Breakout Sessions

# NRC Performance Goals

*Additional stability for the agency is provided by continuous focus on, and evaluating new challenges against our performance goals:*

- Maintain safety and protect the environment
- Increase public confidence
- Make NRC activities and decisions more effective, efficient and realistic
- Reduce unnecessary regulatory burden on stakeholders

# Performance Measures

Maintain safety and protect the environment

- Industry trends in safety performance
- Events identified as significant precursors of nuclear accidents
- Radiation overexposures that exceed applicable regulatory limits
- Releases from nuclear reactors that exceed the regulatory limits
- Physical security breakdowns

# Performance Measures

Increase public confidence

- Milestones relating to information for measuring public confidence
- Public outreaches
- Agency allegation program effectiveness assessment plan
- Issue Directors Decisions under 2.206 within an average of 120 days

# Performance Measures

Make NRC activities and decisions more effective, efficient and realistic

- Milestones in Risk-Informed Regulation Implementation Plan
- Complete at least two key process improvements per year
- Complete all license renewal application reviews within 30 months

# Performance Measures

Reduce unnecessary regulatory burden  
on stakeholders

- Specific milestones to reduce unnecessary regulatory burden
  - Identify activities with greatest impact



# Performance Results - Regulator (Reactor Safety Arena)

For each of the four performance goals:

- All performance goal measure targets were met

# Performance Results - Industry

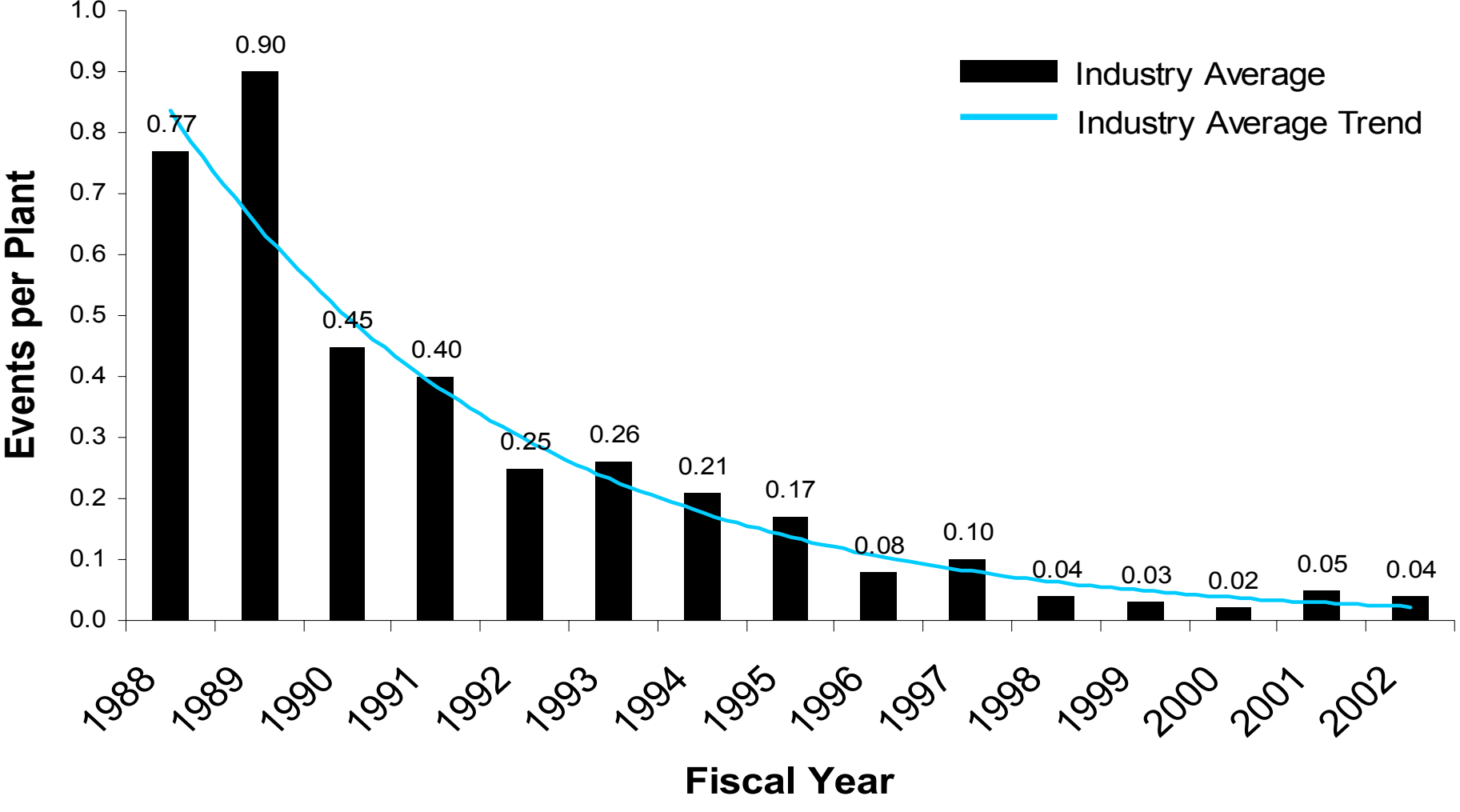
Industry-level performance indicators:

- Significant improvement in performance over past decade

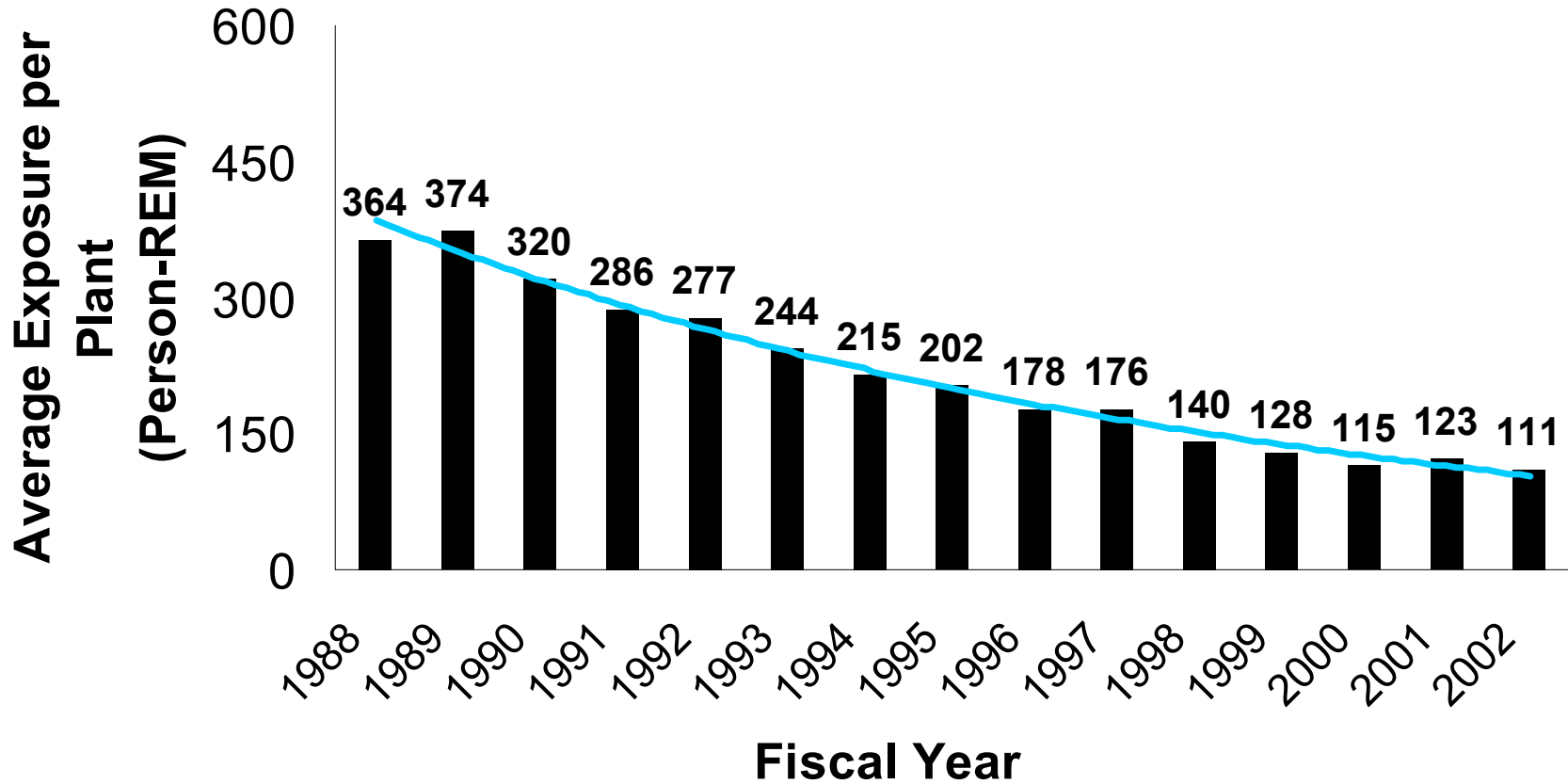
Individual plant performance:

- Trending by Reactor Oversight Process results

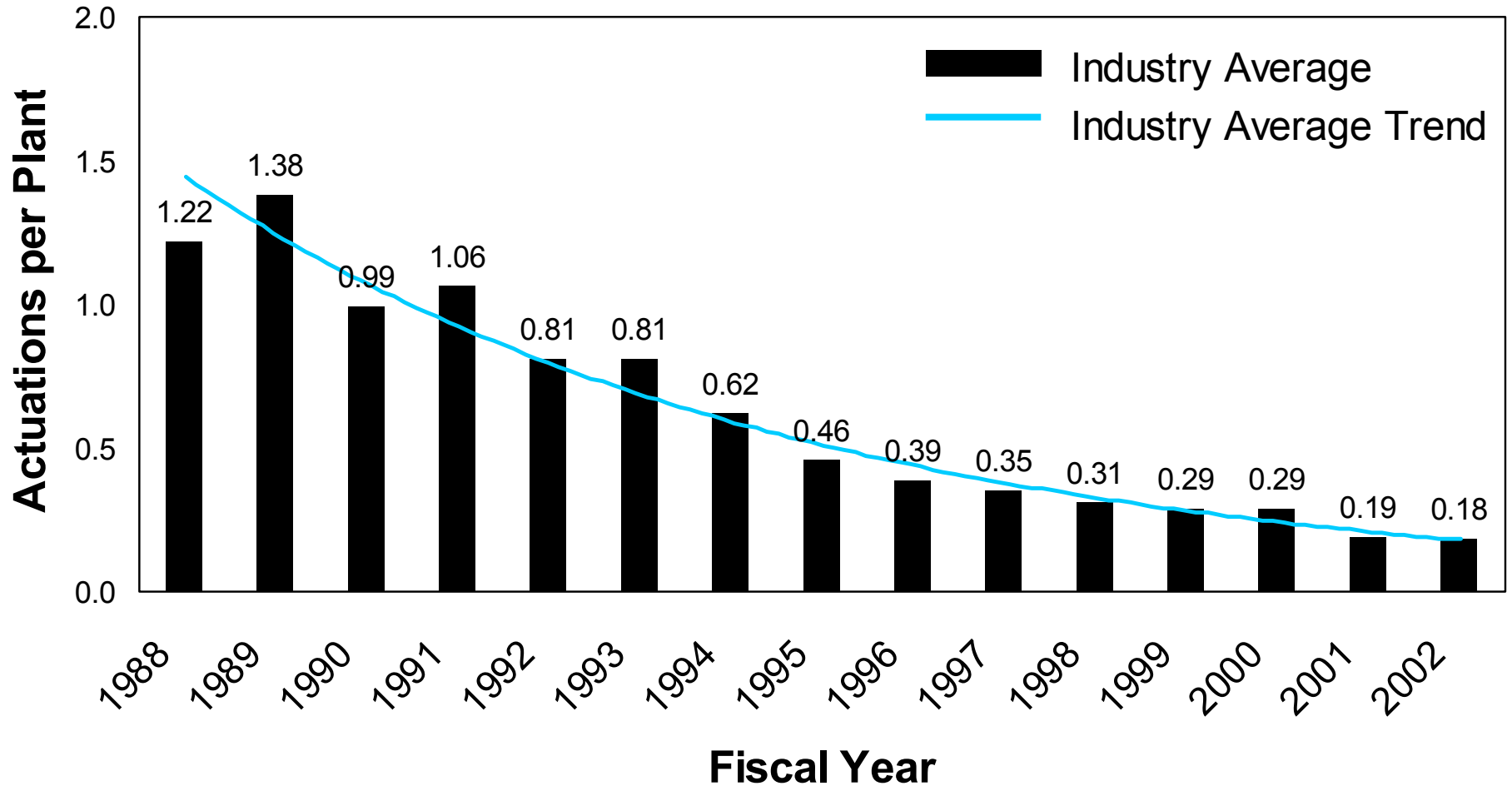
# Significant Events



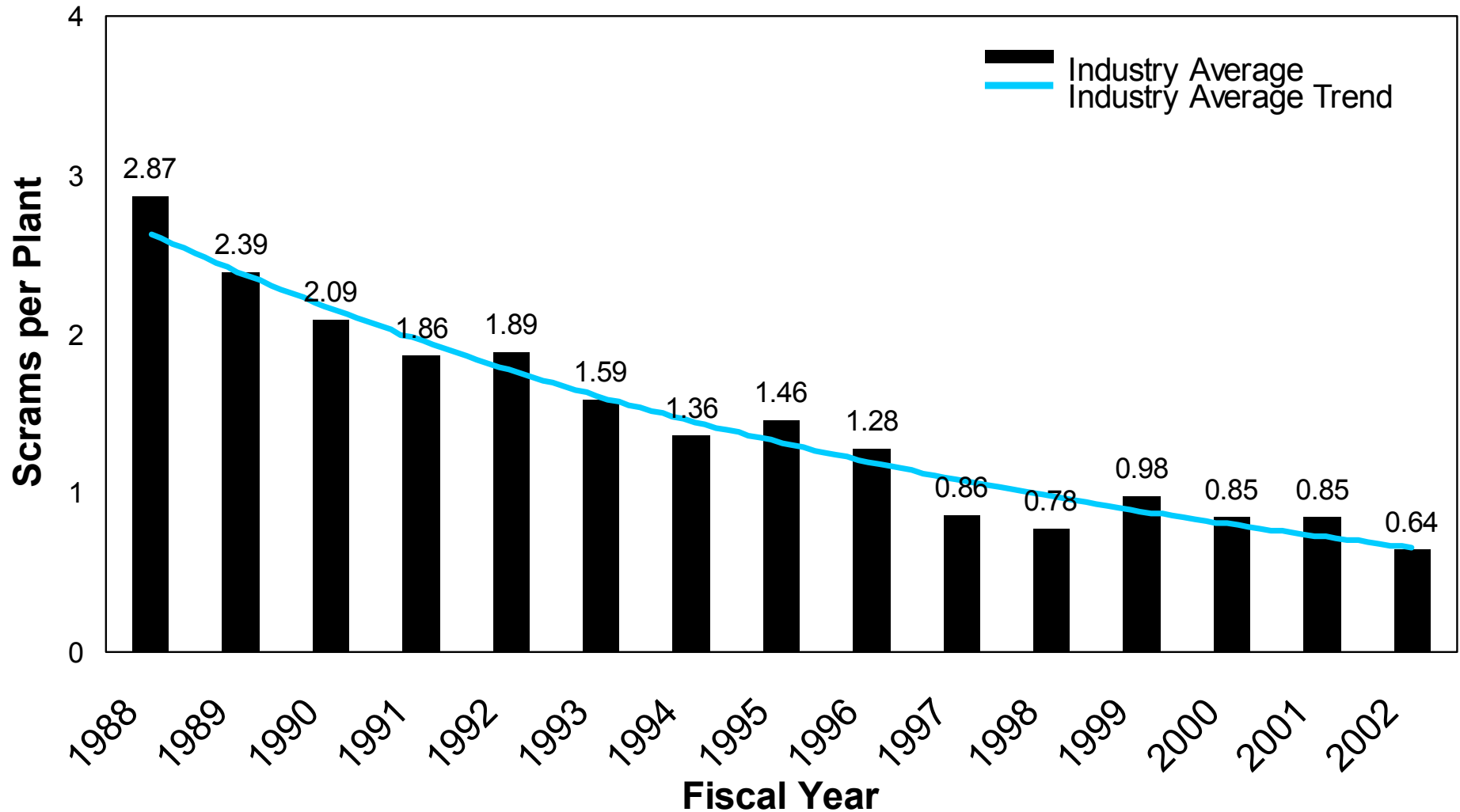
# Collective Radiation Exposure



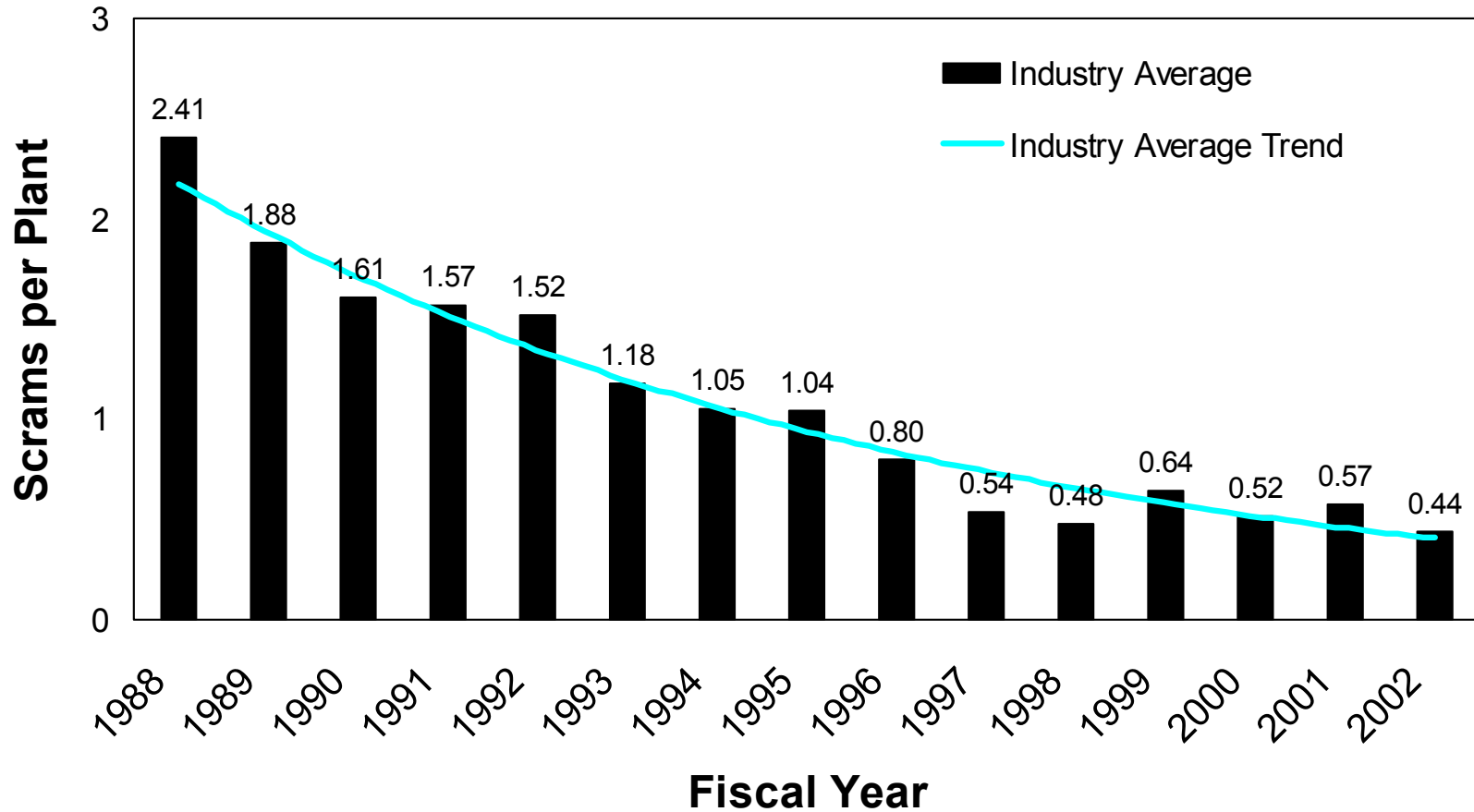
# Safety System Actuations



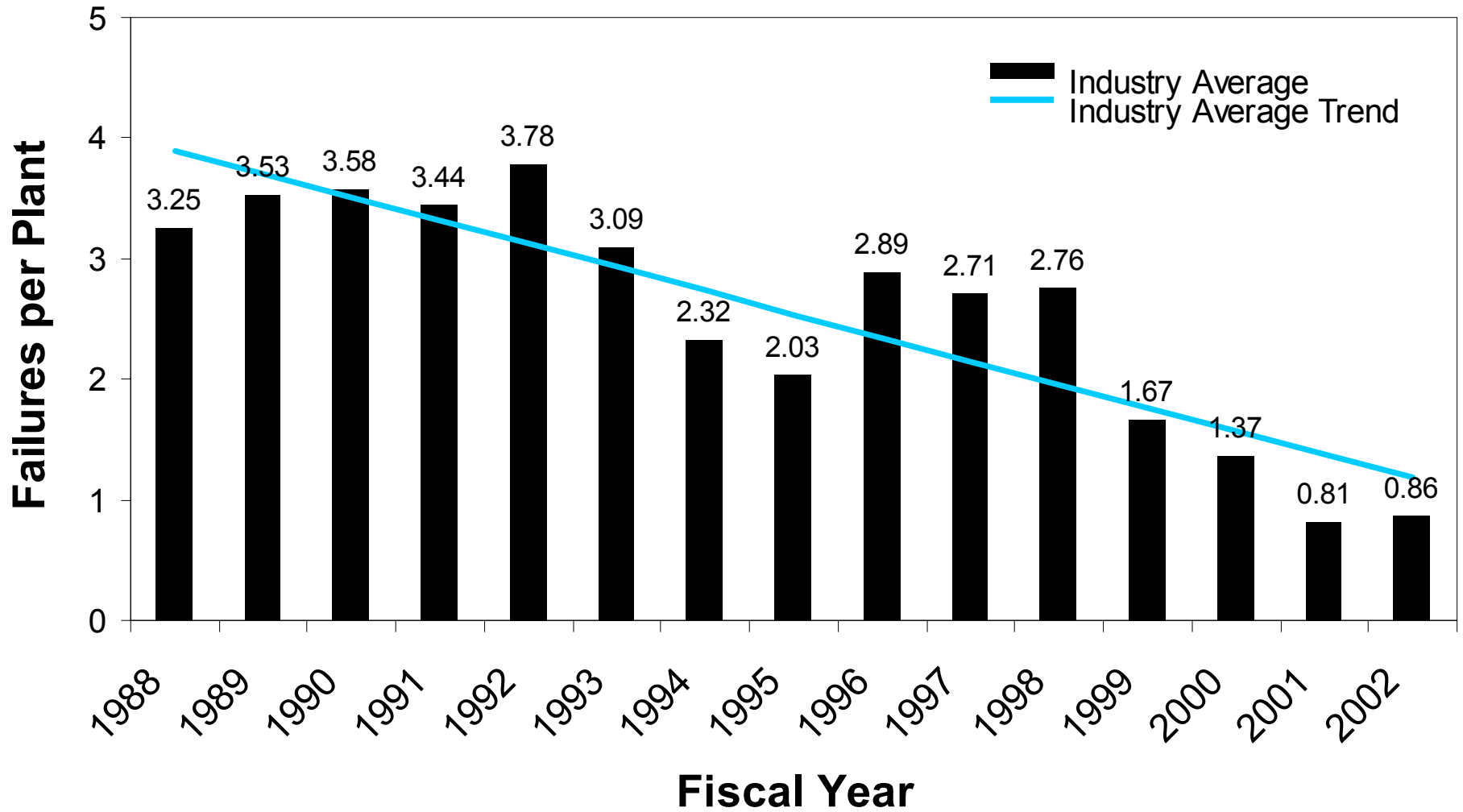
# Total Scrams While Critical



# Automatic Scrams While Critical

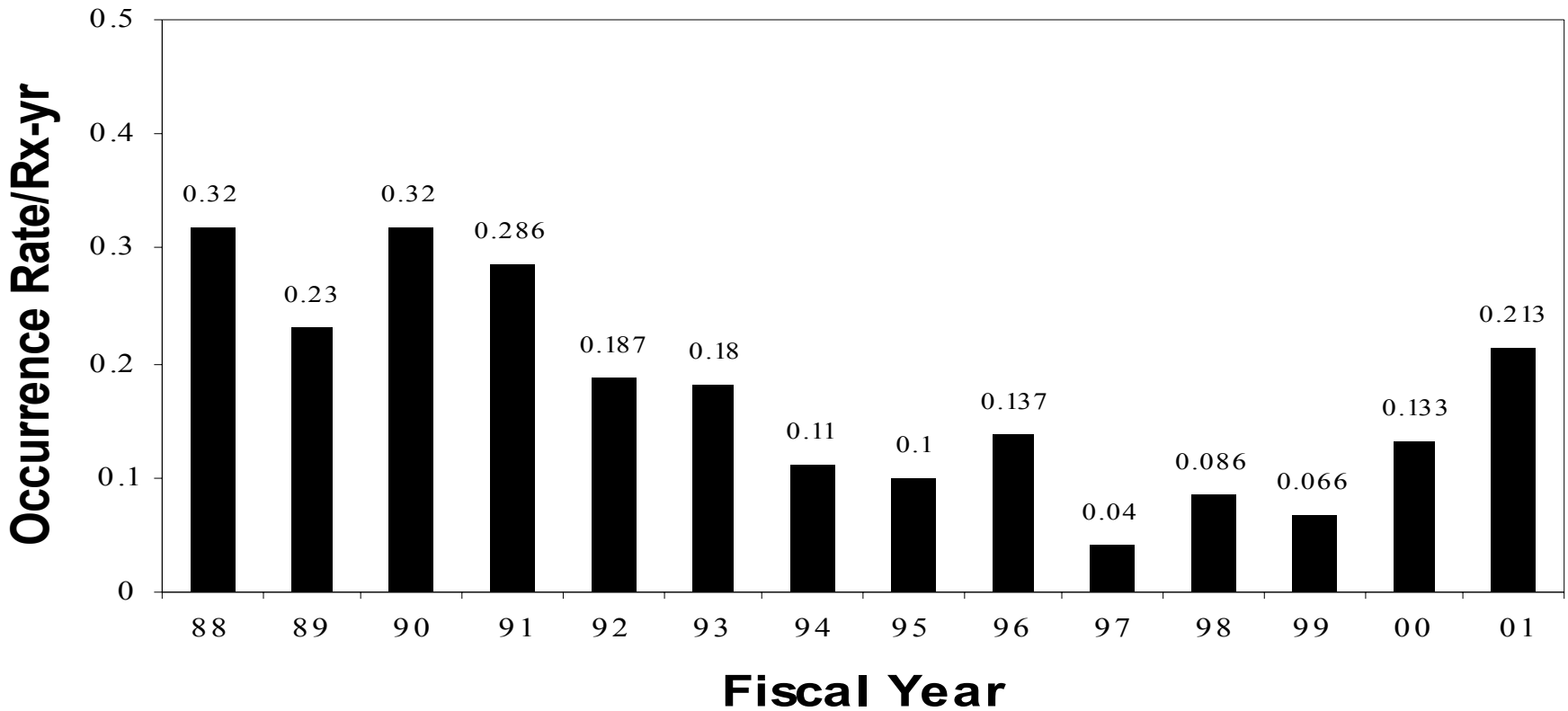


# Safety System Failures

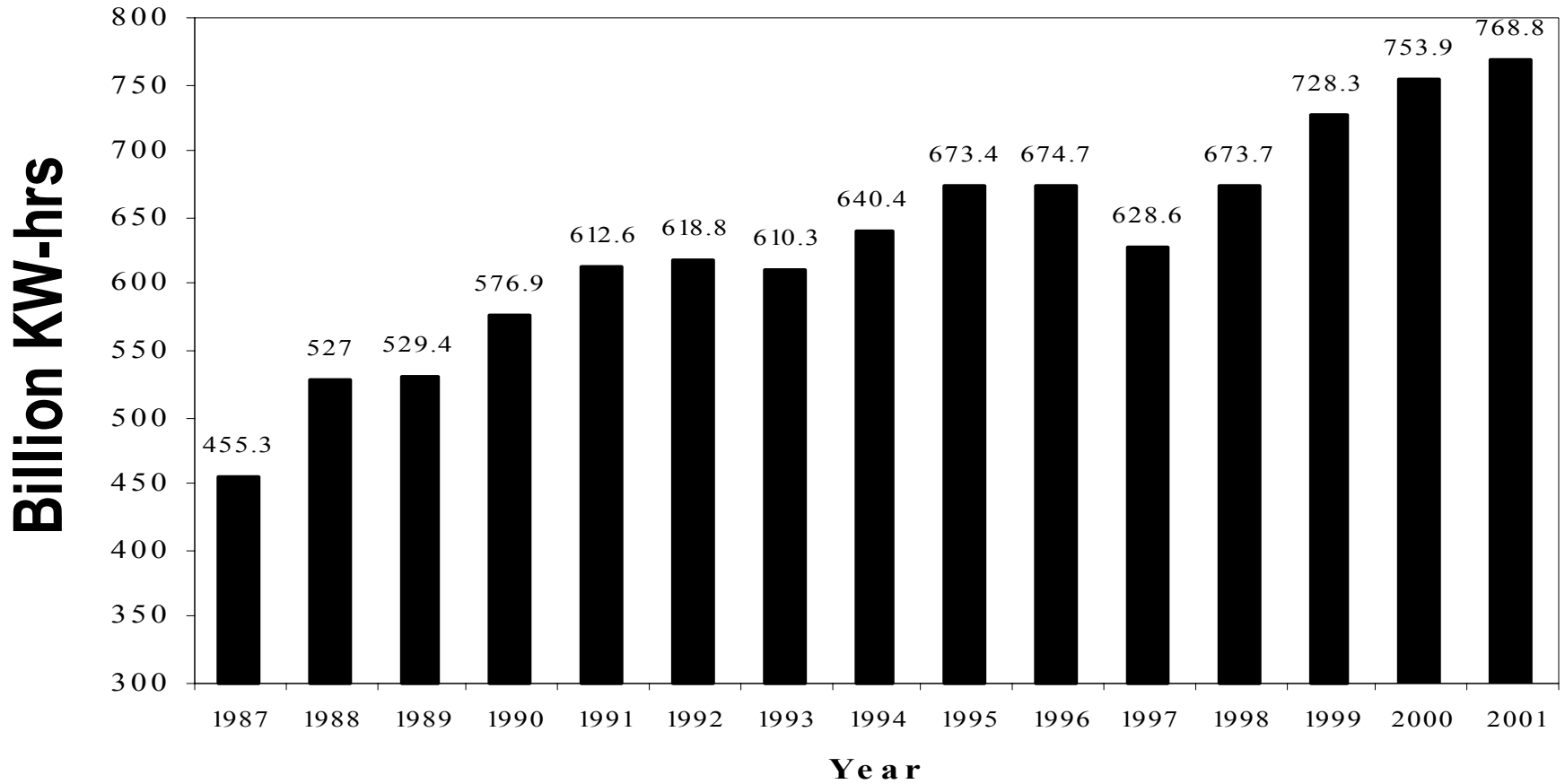




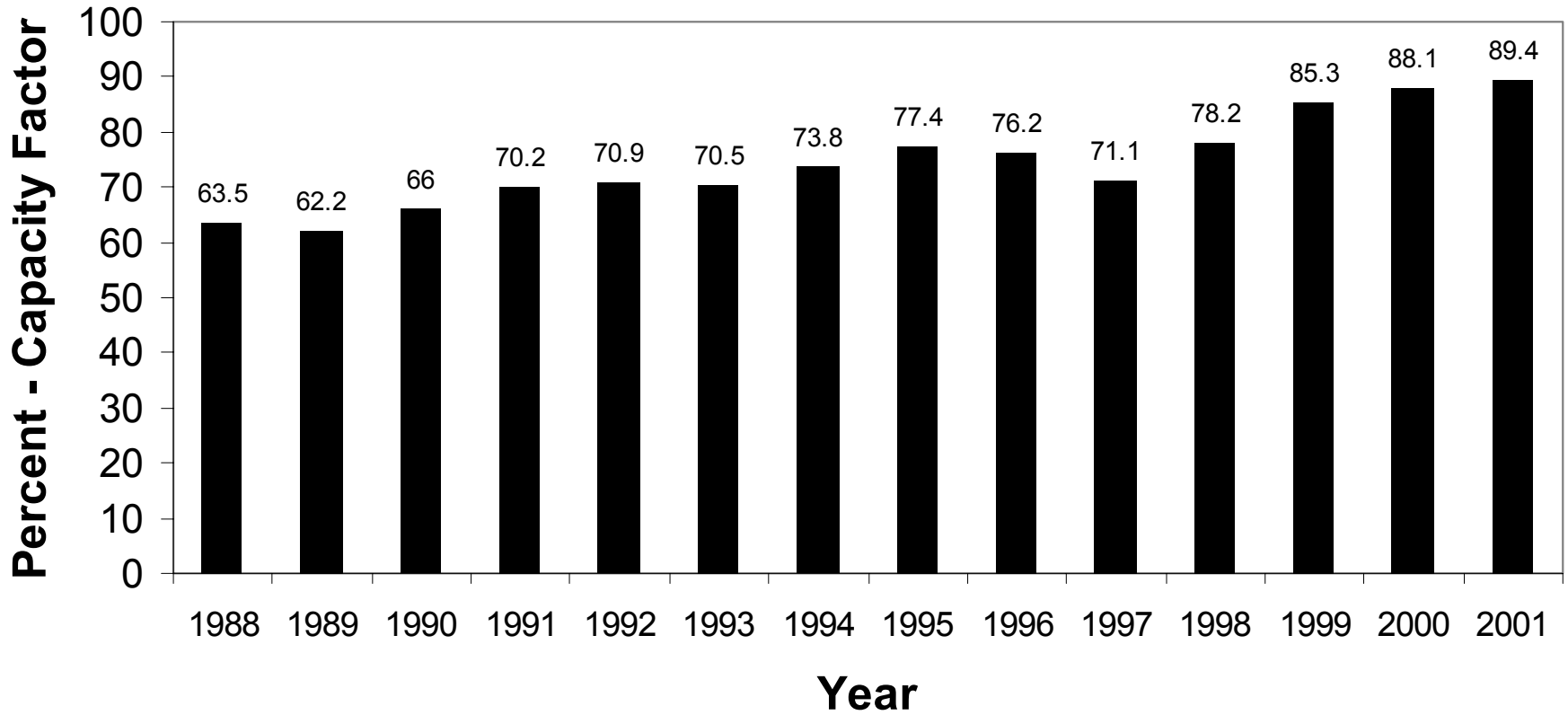
# Precursor Occurrence Rate



# Nuclear Power Generation



# Average Capacity Factor



# Results Summary

- The improvement in the safety record of nuclear power plants has been a result of the combined efforts of licensees and the NRC
- External stakeholders have had valuable input to our processes – contributing to improved performance as a regulator
- Noted increase in Accident Sequence Precursor Occurrence Rate over last few years

# Regulatory Performance

- Critical Self-Assessments
  - Davis-Besse Lessons Learned Task Force
  - Significance Determination Process Task Group
  - Operating Experience Task Force
- Seeking Continuous Improvement
  - Implementation of new Process Improvement Program (PIP)
  - Improvement Initiatives:
    - Work Planning Center
    - Maintaining Human Capital
    - Roles and Responsibilities Review
    - Quality Initiative
  - Involvement with International Community

# The Future

- Power Upgrades
- License Renewal
- Reactor Inspection and Performance Assessment Program
- Risk-Informed Initiatives
- New Reactor Licensing
- Continuous Improvement of Regulatory Programs/Processes

# Results of Regional Breakouts

- Regional Administrators:
  - Hubert J. Miller, Region 1
  - Luis A. Reyes, Region 2
  - James E. Dyer, Region 3
  - Ellis W. Merschoff, Region 4
- Guest Panelists:
  - William F. Kane, Deputy EDO for Reactors
  - R. William Borchardt, Associate Director for Inspection & Programs, NRR
  - Brian Sheron, Associate Director for Project Licensing & Technical Analysis, NRR
  - Michael J. Case, Director, Program Mgmt, Policy Development and Planning Staff, NRR

# Conference Closing

- Thanks for another great RIC!
- Feedback Forms
- See you in 2004!