



# **An Overview of NRC Operations**

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## **NRC Mission**

*To regulate the nation's civilian use of byproduct, source, and special nuclear materials to ensure adequate protection of public health and safety, to promote the common defense and security, and to protect the environment*

# Our Regulated Community

- Operating Reactors: 104
- Materials Licensees: 22,500
- Uranium Recovery Licensees: 5
- Fuel Cycle Licensees: 14

## Budget

- 2010: \$1,067M
- Breakdown Across Programs
  - Reactors: 76%
  - Materials/waste: 24%
- 2011 President's Budget: \$1,054M

# Staffing

- 2010: 3,962 FTE
- Changing Workforce
- Knowledge Management is Key

# Enhancements to Support Doing an Even Better Job

- 3 White Flint North
- NewFlex/Workplace Flexibility
- Open, Collaborative Work Environment (OCWE)
- Open Government Initiative  
<http://www.nrc.gov/open.html>

# **Selected Current Topics with the Existing Fleet**

- Part 26, Subpart I Work Hour Controls
- Fire Protection/NFPA 805 Transition
- Part 73 Security Rule/Cyber Security
- Safety Culture

# **Additional Current Topics with the Existing Fleet**

- Buried Piping
- Underground Cable
- Operations Beyond 60 Years
- Aggregate Impact of Rulemaking



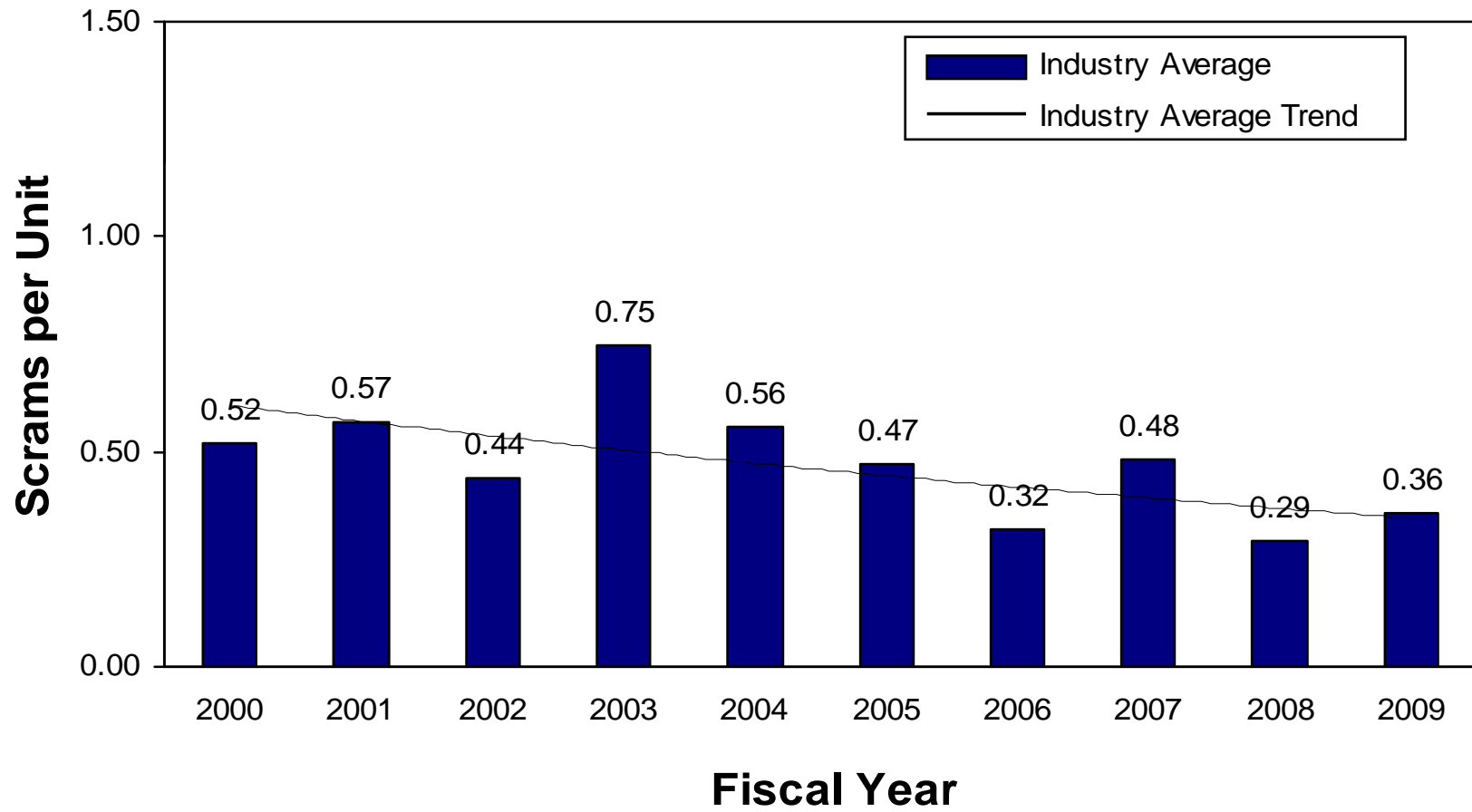
## **Reactor Industry Trends Program**

- Identifies Trends in Safety Performance
- Communicates Performance To Stakeholders
- Complements the Reactor Oversight Process
- Supports NRC Performance Goals

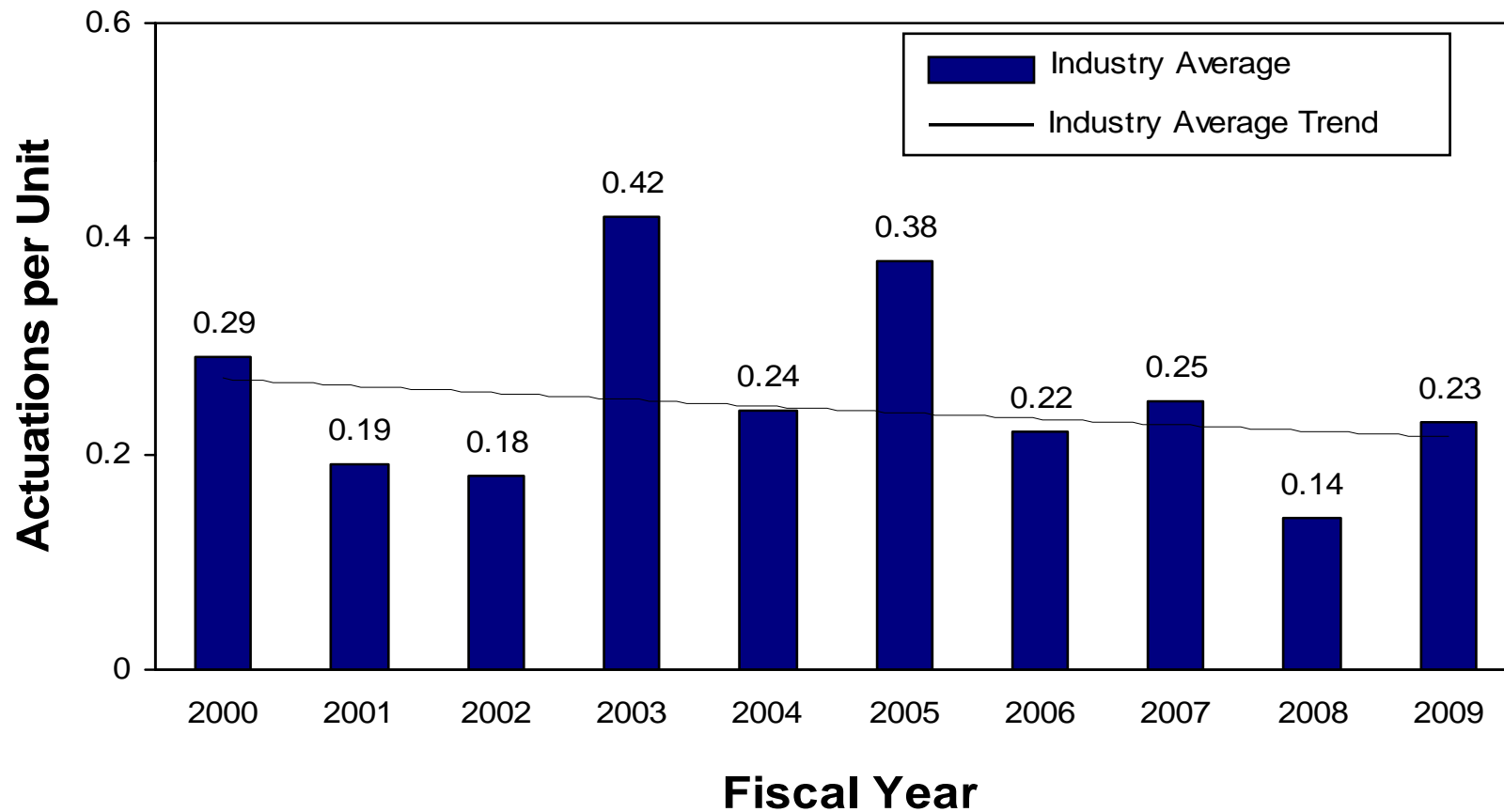
## **FY 2009 Results**

- No Statistically Significant Adverse Trends in Safety Performance
- No Short-term Prediction Limits Were Exceeded
- Baseline Risk Index for Initiating Events (BRIIE) Indicates Better-Than-Baseline Industry Performance

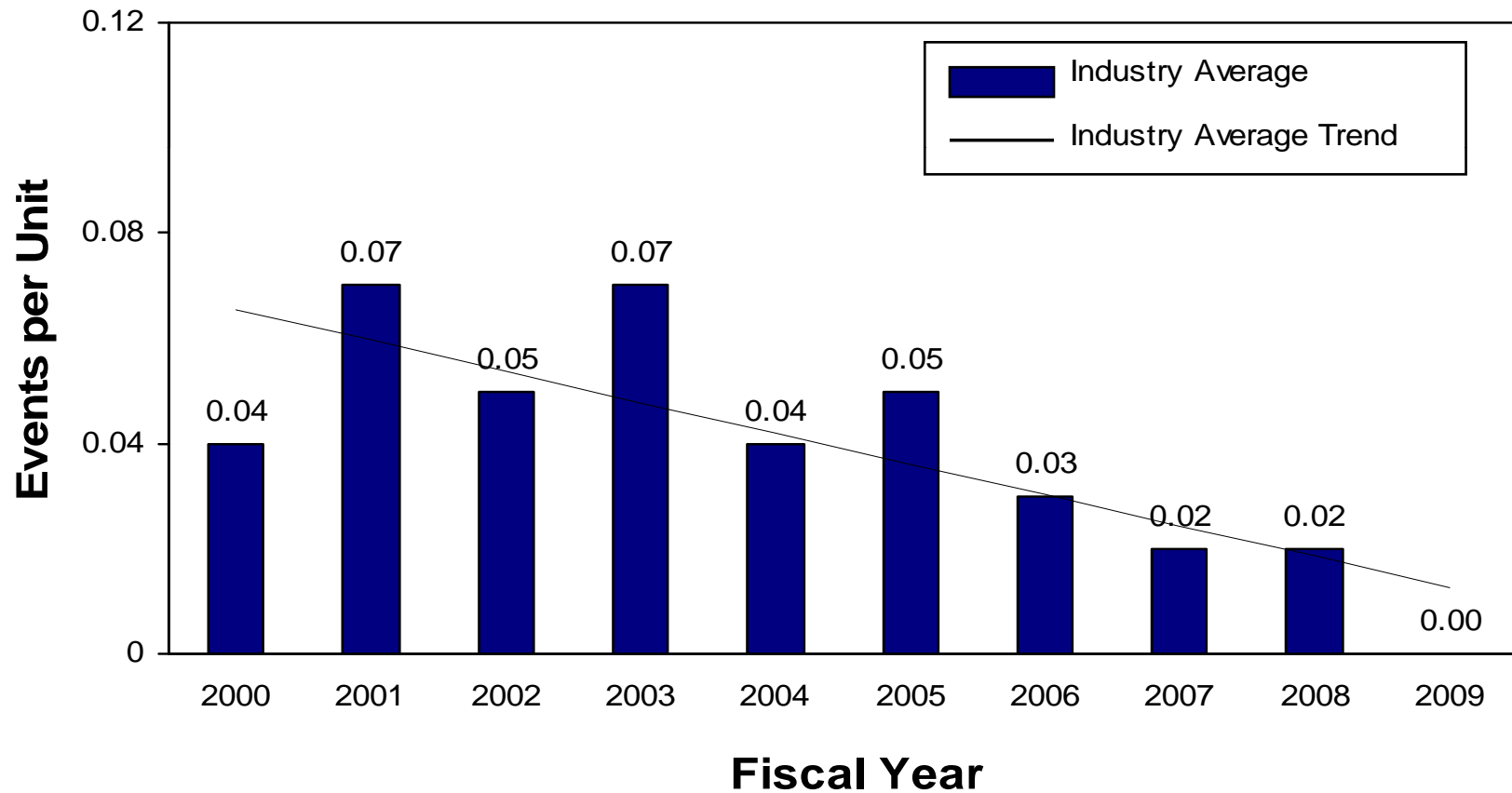
## Automatic Scrams While Critical



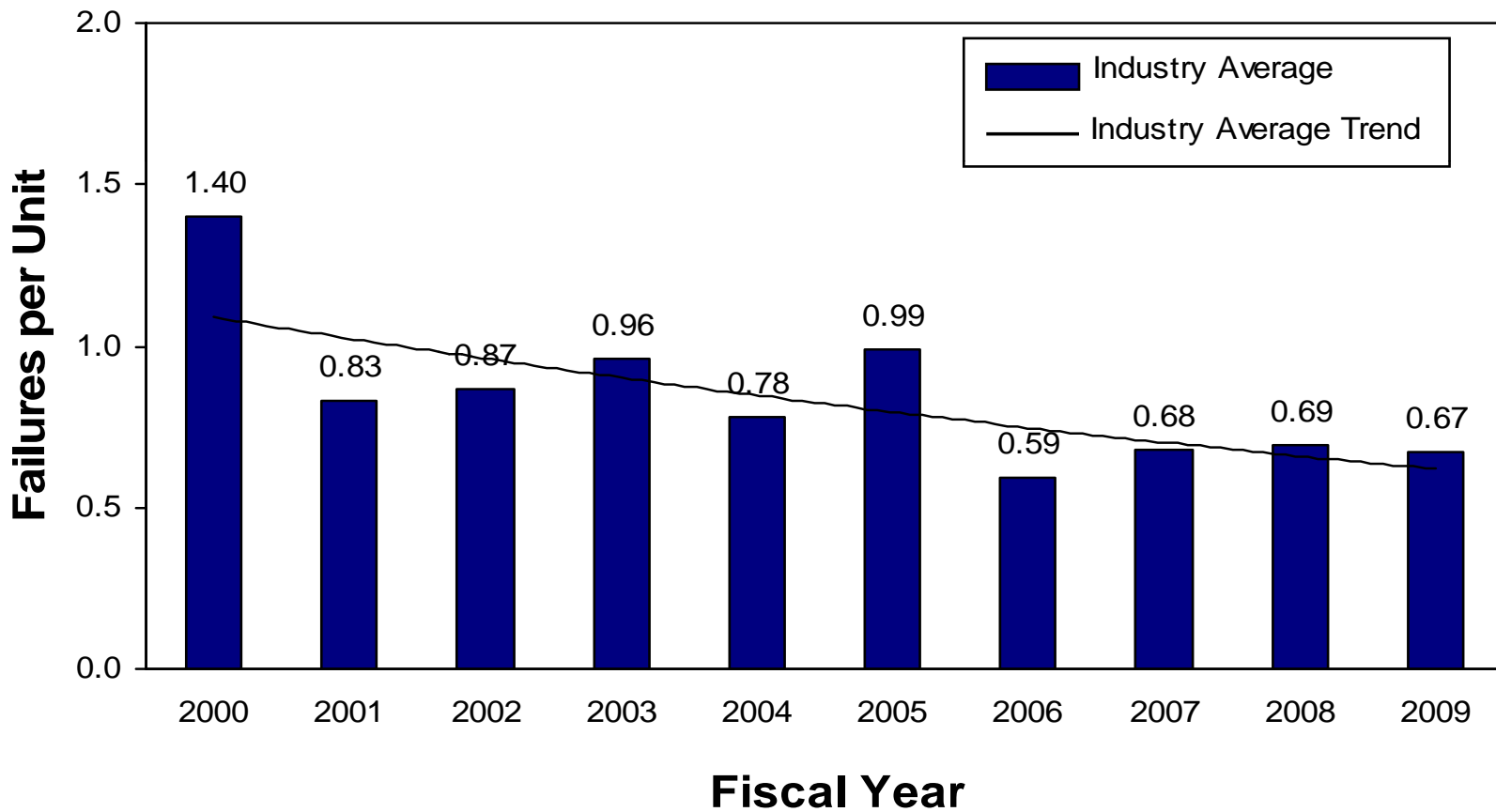
## Safety System Actuations



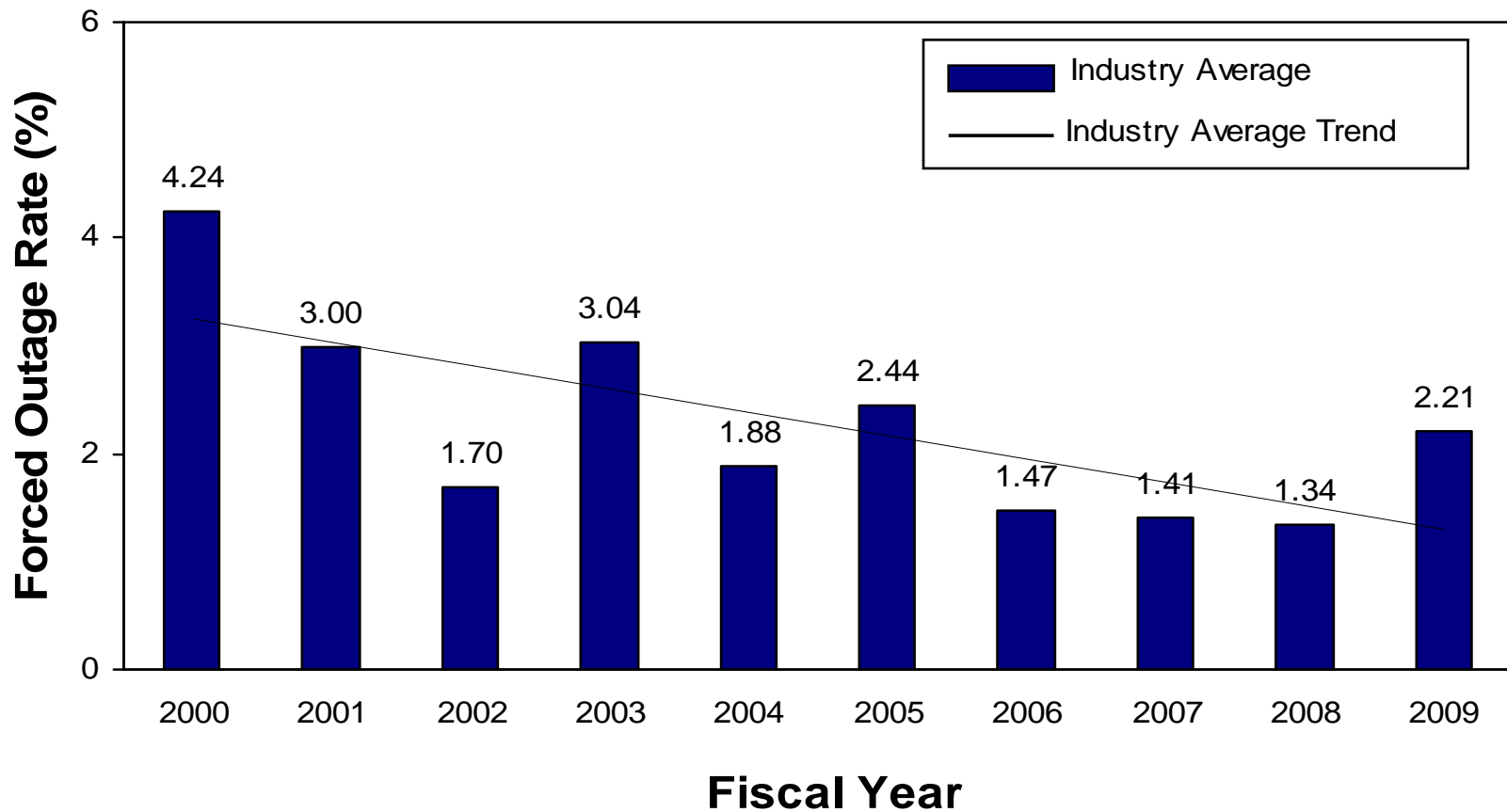
## Significant Events



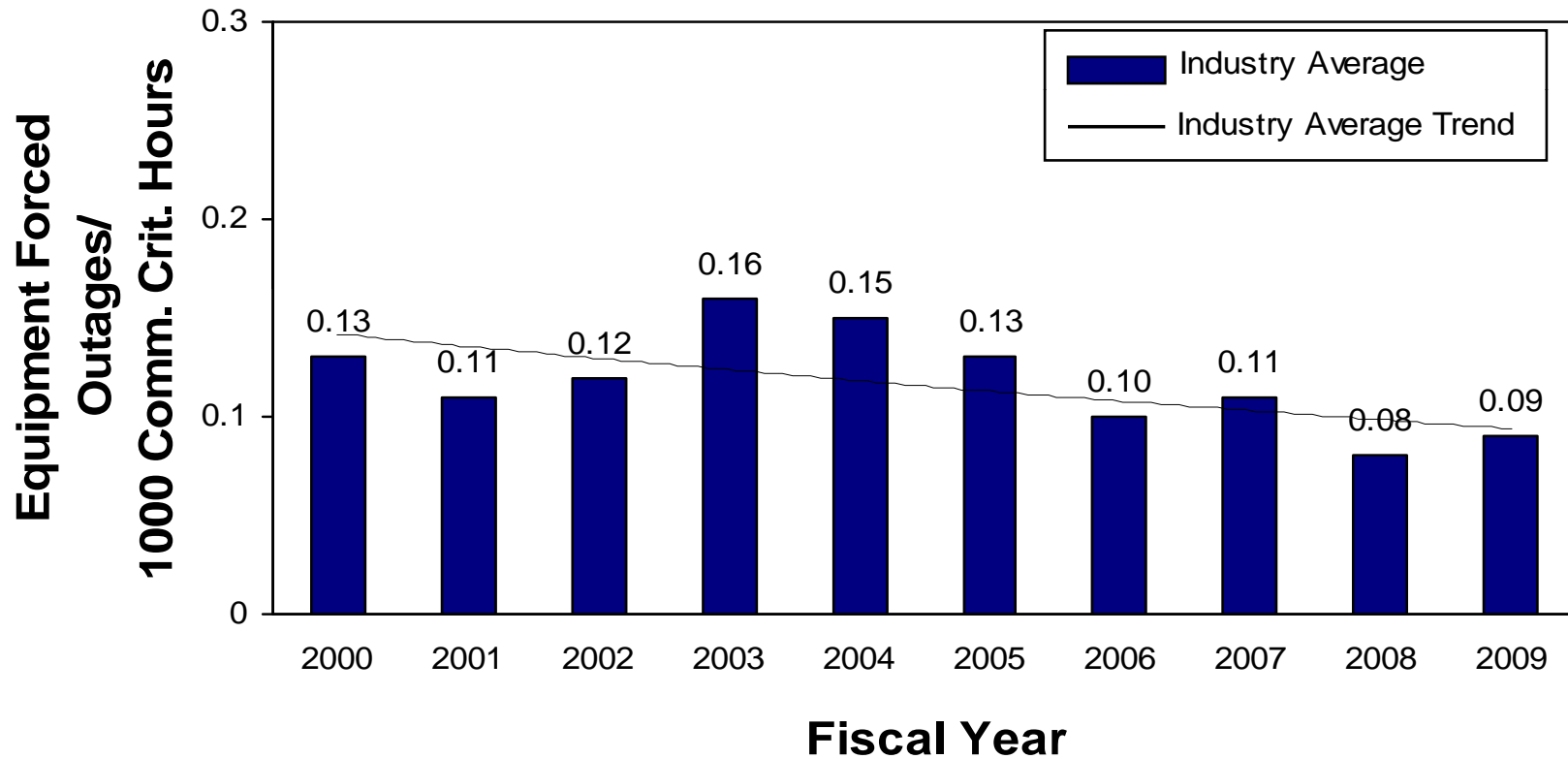
## Safety System Failures



## Forced Outage Rate (%)

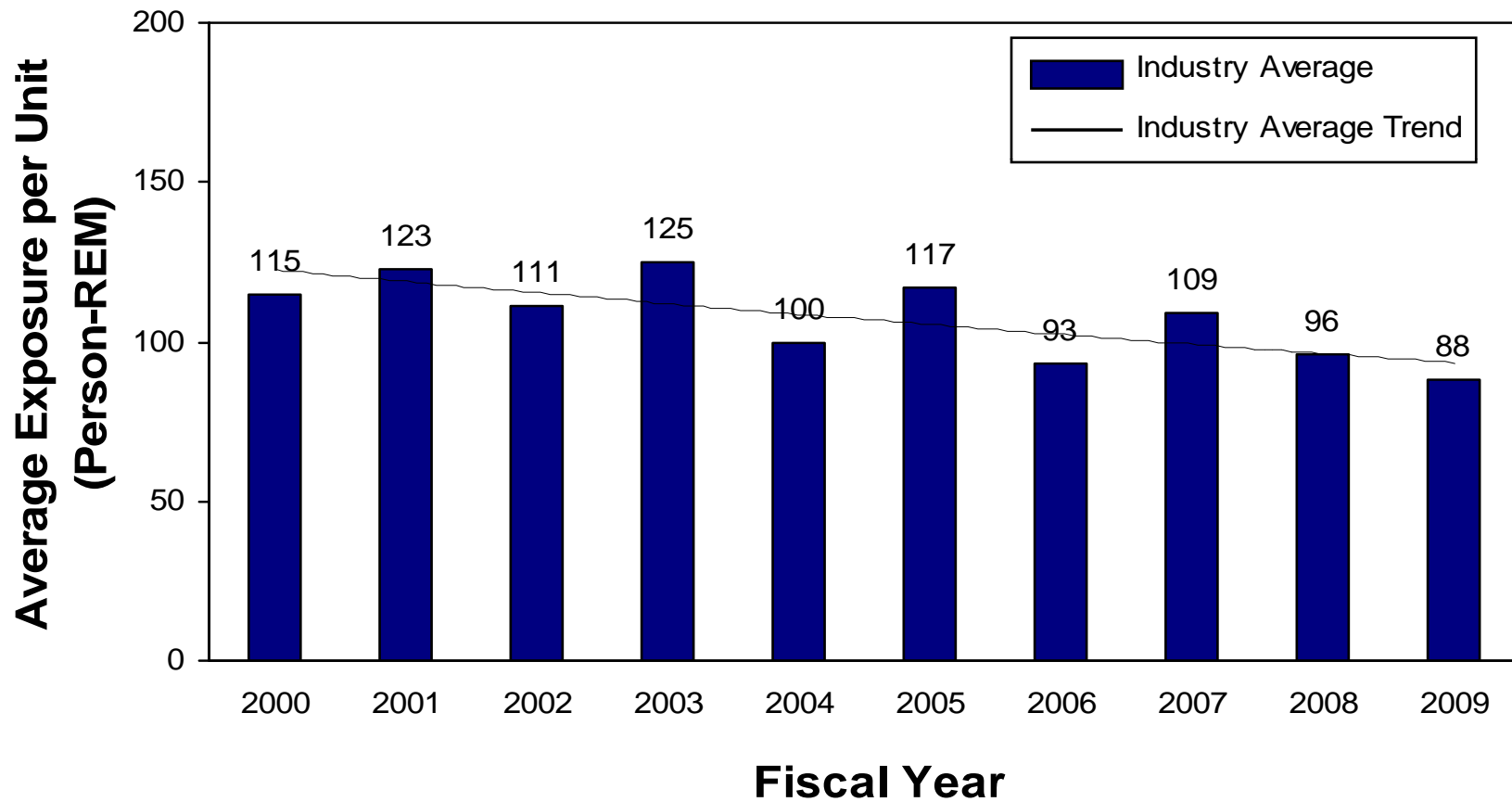


## Equipment Forced Outages/1000 Commercial Critical Hours

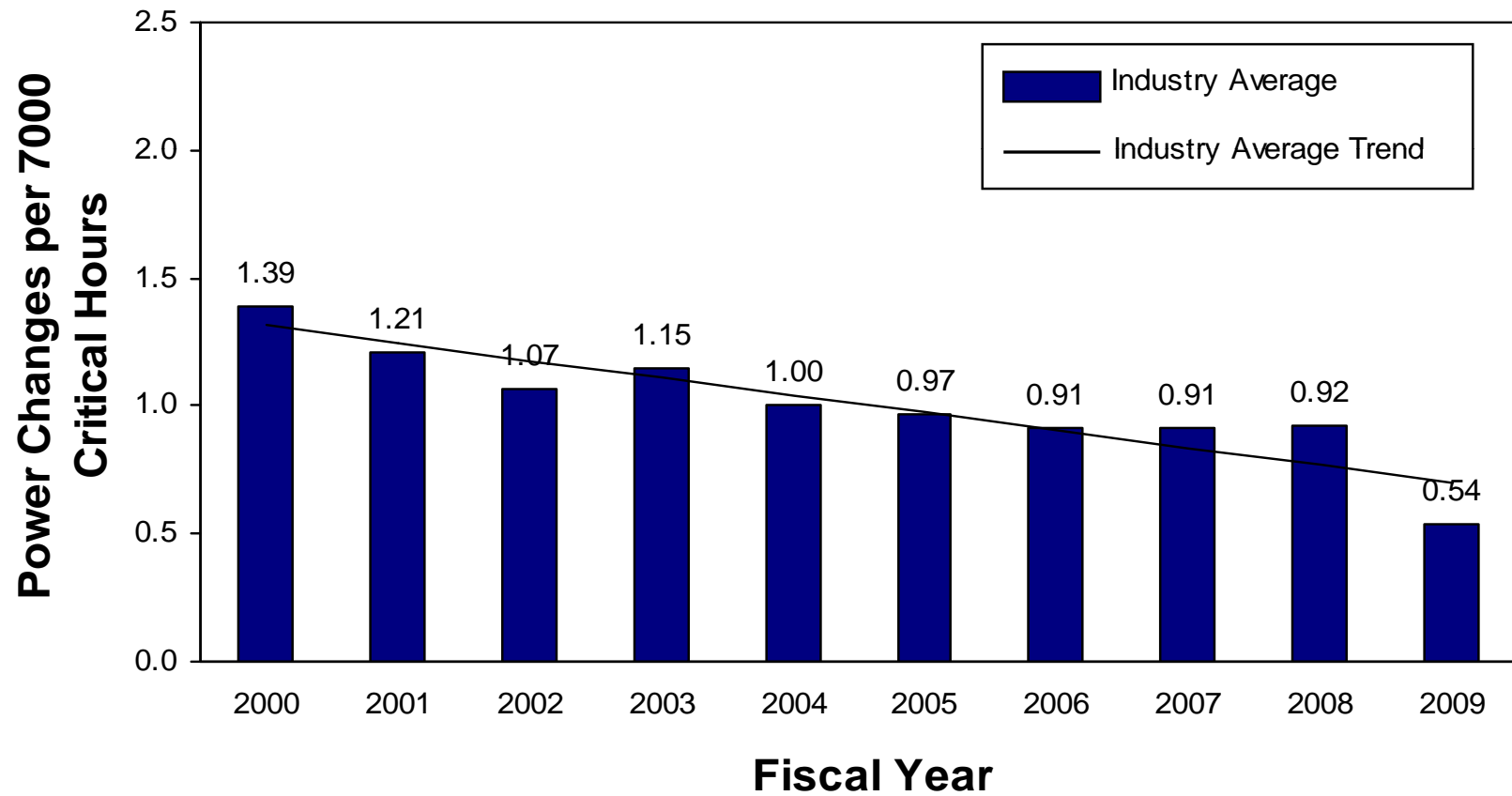




## Collective Radiation Exposure



## Unplanned Power Changes



## **New Reactors**

- Design Certification and Combined License (COL) Applications
- Vendor Inspections/Construction Inspection Program
- Advanced Reactors

## **Selected Non-Reactor Key Topics**

- Integrated Spent Fuel Management
- Oversight of Master Materials Licensees  
(Patient Treatment with Radioisotopes)
- Fuel Cycle/Uranium Recovery  
Construction and Applications
- Fuel Cycle Oversight Process

# International Activities

- Technical Cooperation
- Support for New Nuclear Programs
- International Peer Reviews
- IRRS Mission to US NRC

## Conclusion

- Safety of Current Facilities is the Top Priority
- Responding Well to Emerging Demands
- Positioned for Continued Success
- Communications with Stakeholders is Vital