

REGULATORY TRENDS

RIC 2006

PLENARY SESSION P3

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Director

**Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission**

March 7, 2006

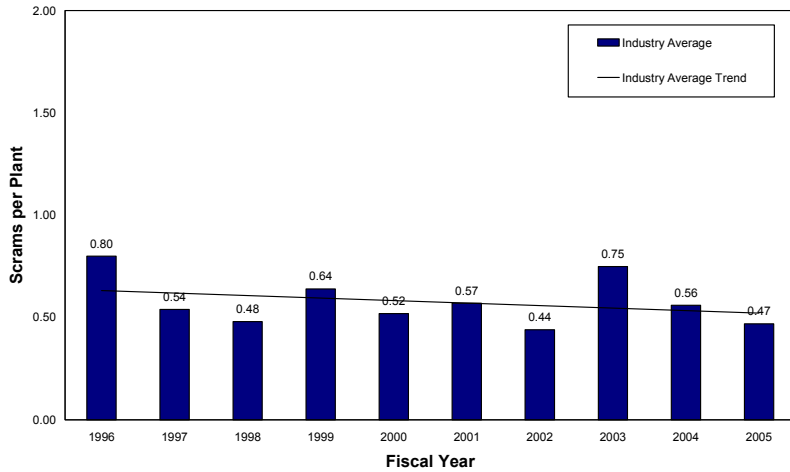


Industry Performance

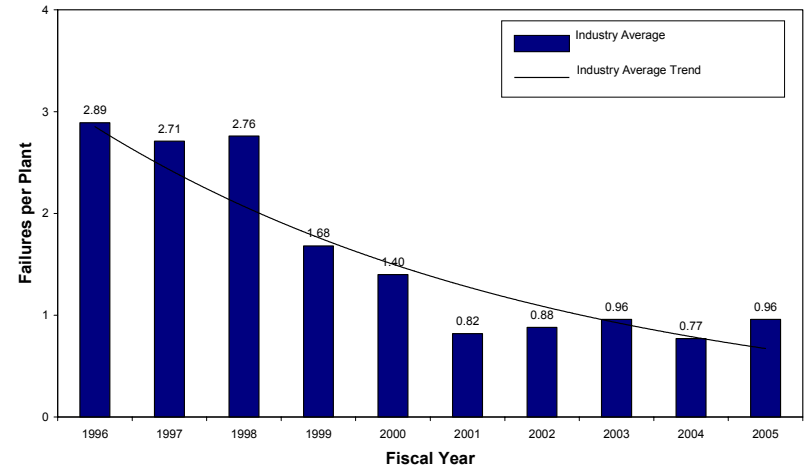
- The NRC monitors selected industry-level indicators
- Long-term trending is used to identify adverse trends, and reports any to Congress
- Short-term trending is conducted to identify issues so that the NRC can investigate before they become long-term trends

Industry Performance

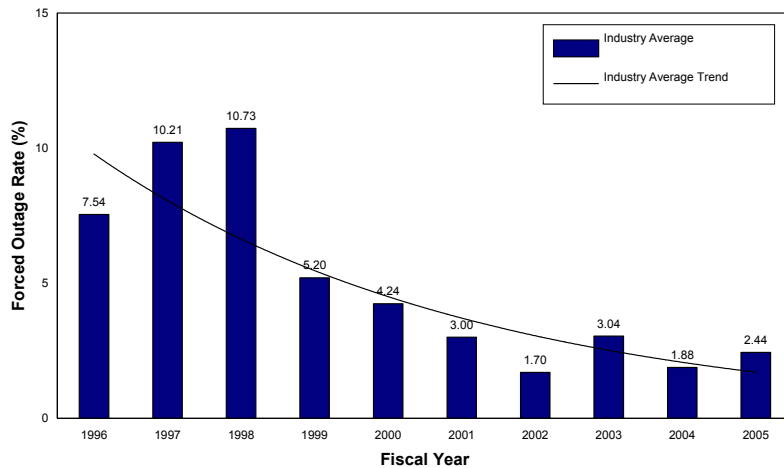
Automatic Scrams While Critical



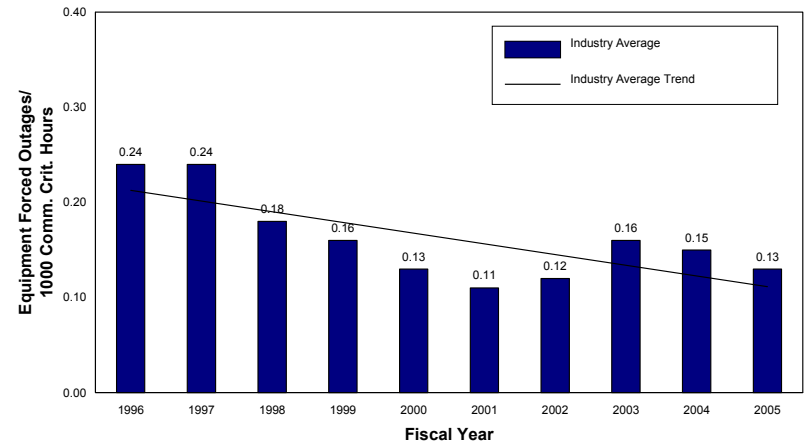
Safety System Failures



Forced Outage Rate (%)

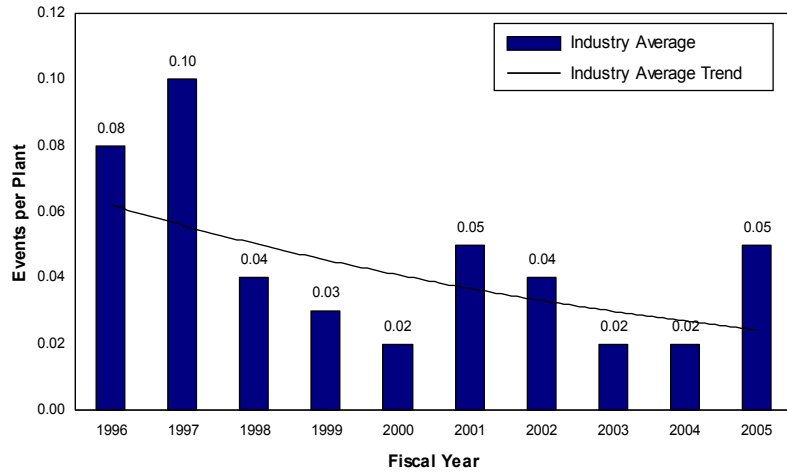


Equipment Forced Outages/
1000 Commercial Critical Hours

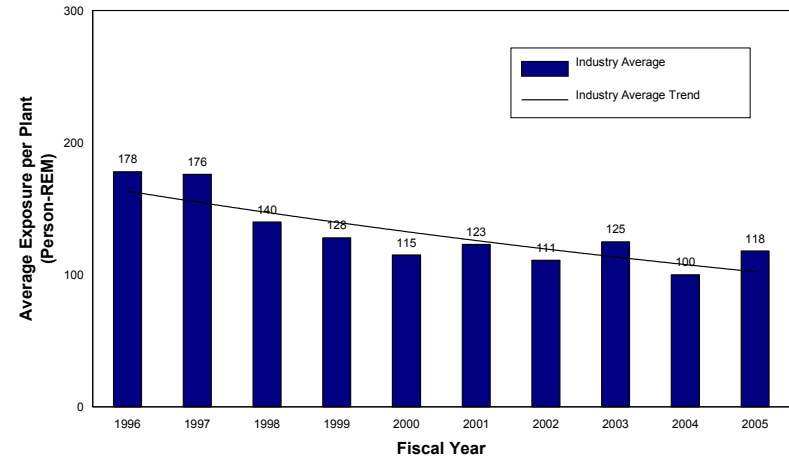


Industry Performance

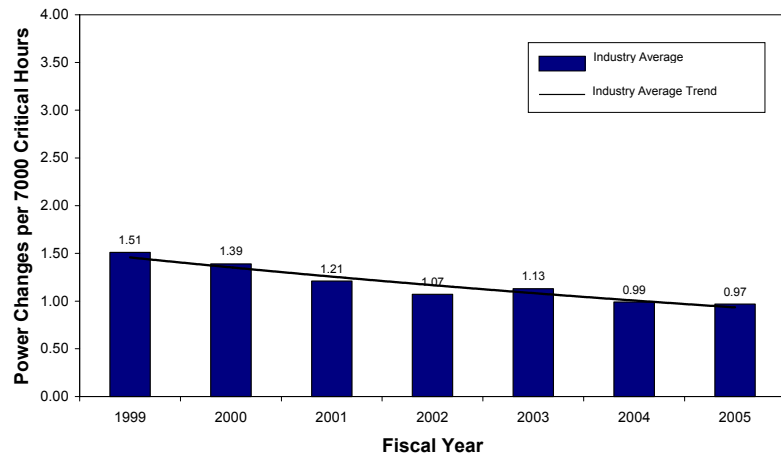
Significant Events



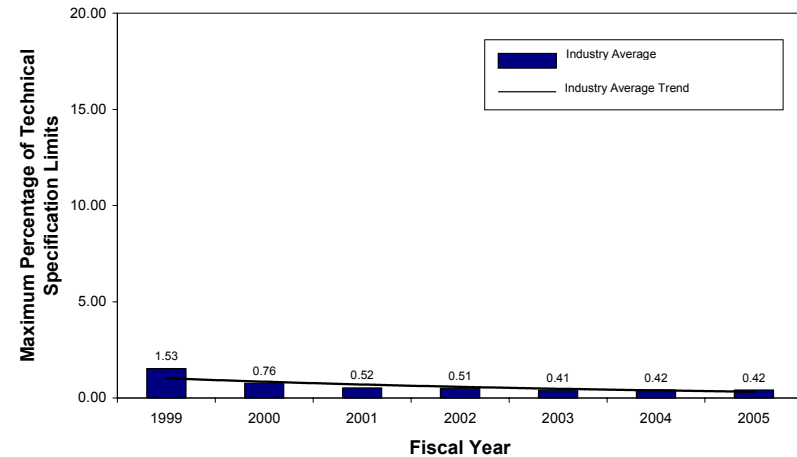
Collective Radiation Exposure



Unplanned Power Changes

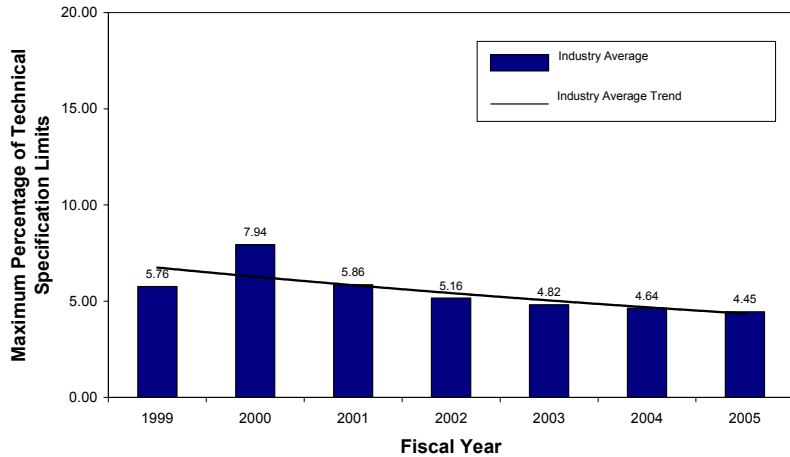


Reactor Coolant System Activity

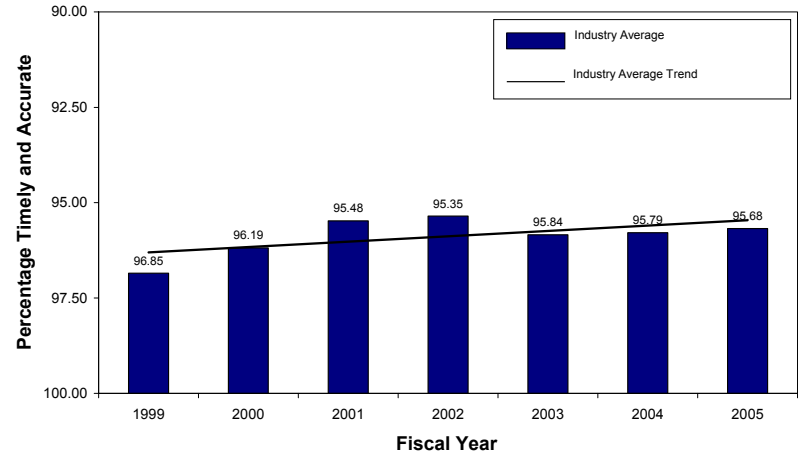


Industry Performance

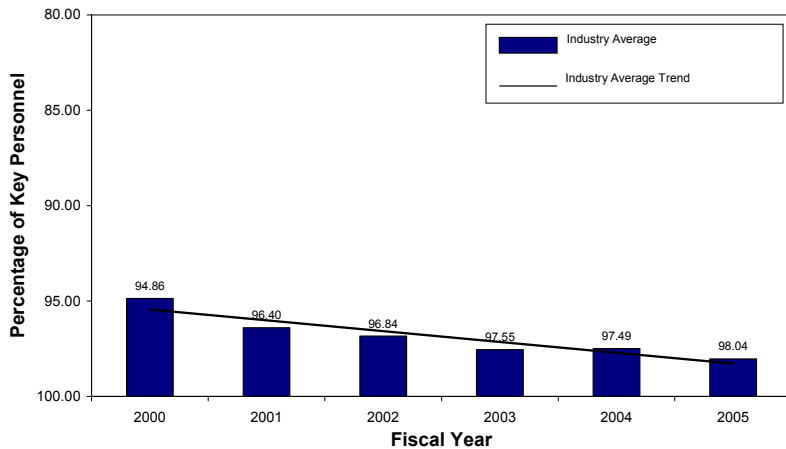
Reactor Coolant System Leakage



Drill/Exercise Performance

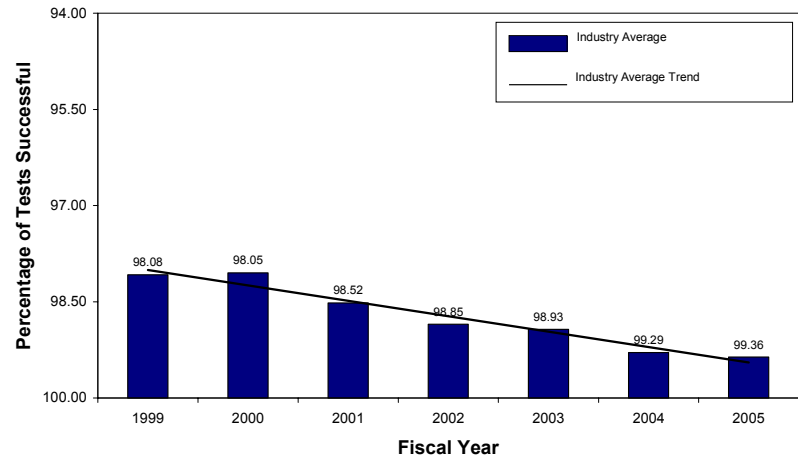


ERO Drill Participation

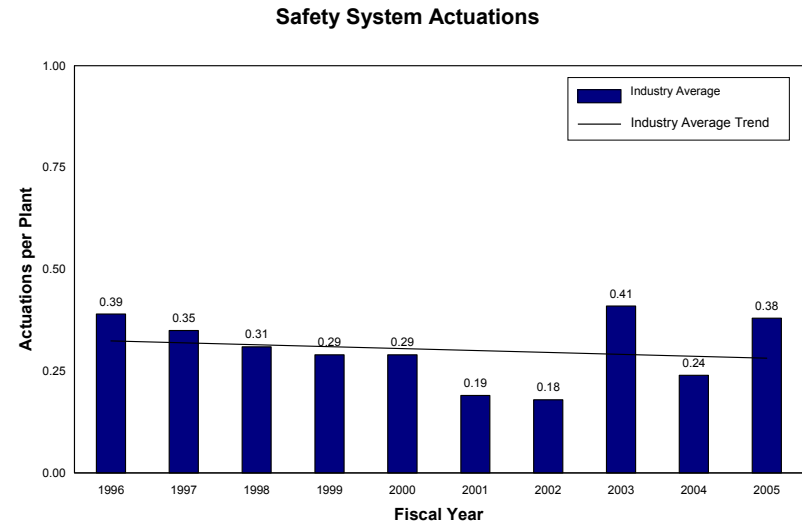
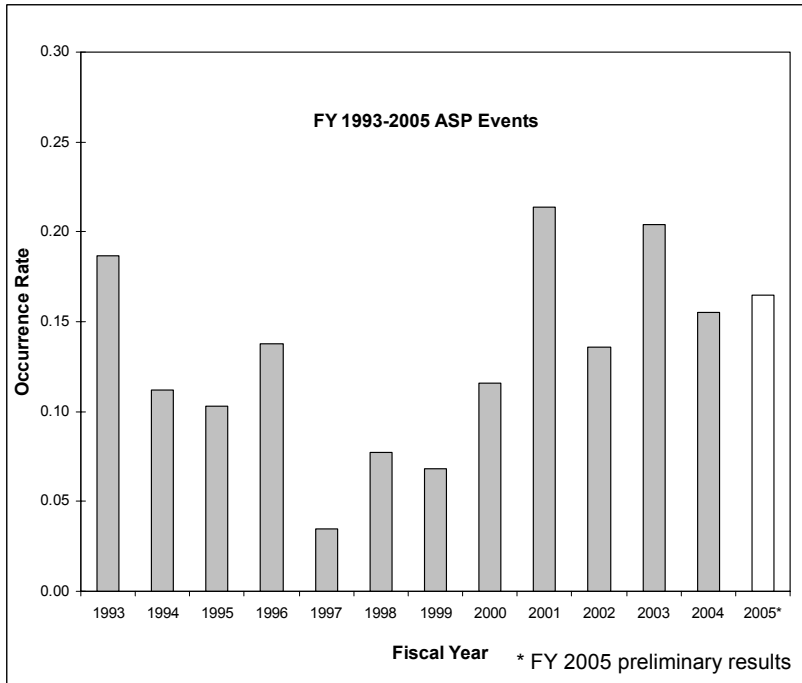


Note: Complete Fiscal Year 1999 Data not Available

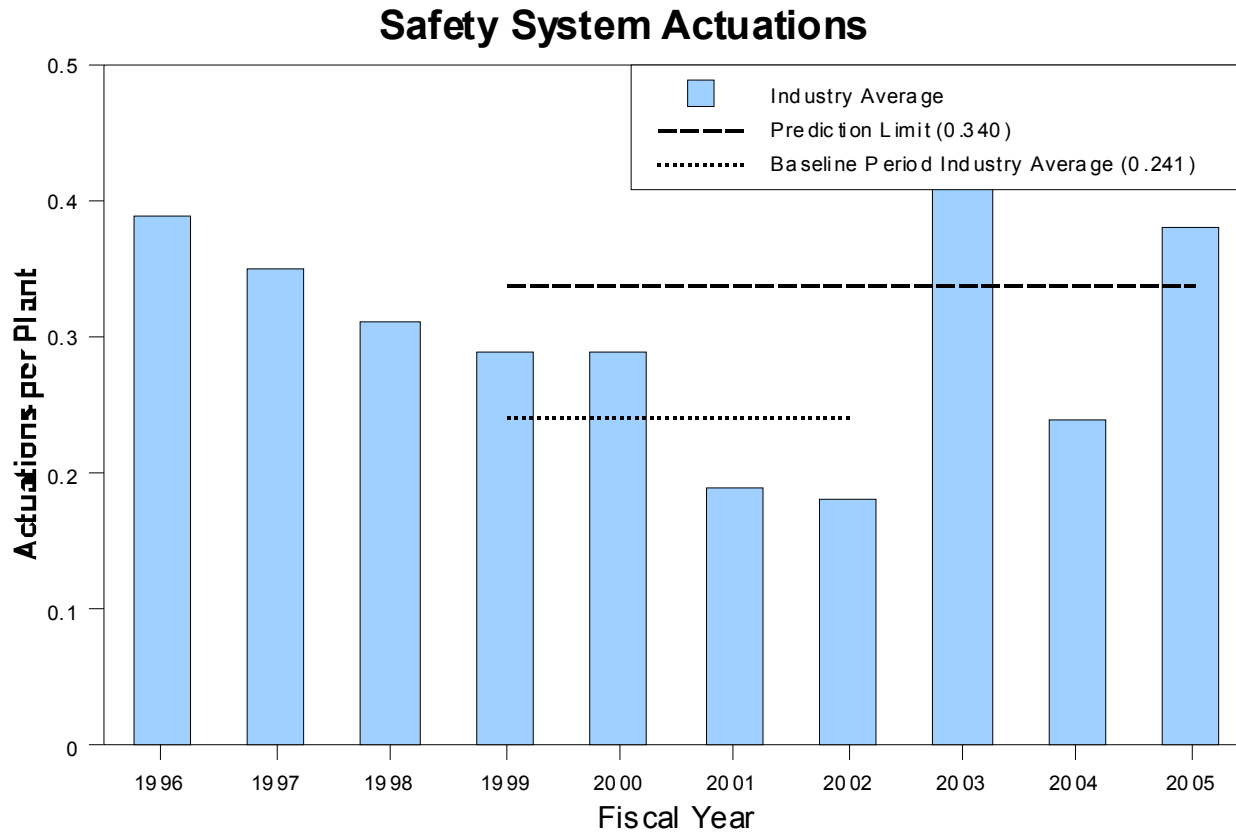
Alert and Notification System Reliability



Industry Performance

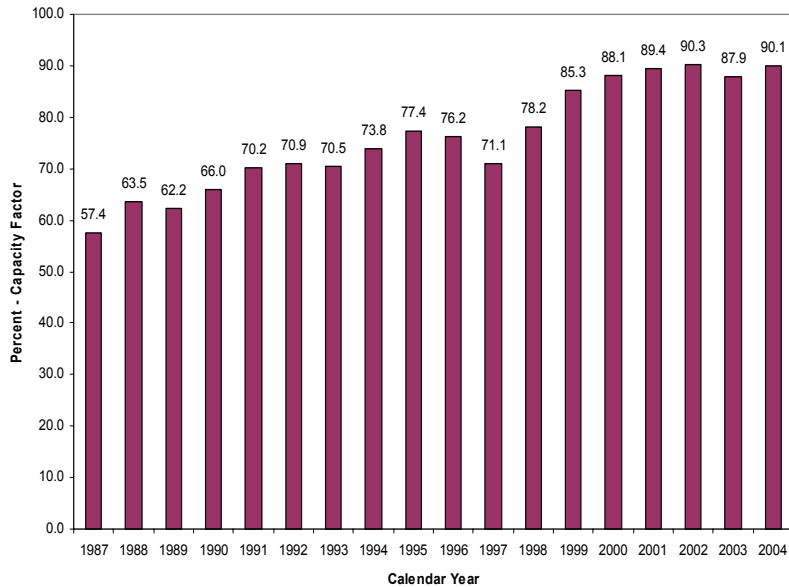


Industry Performance



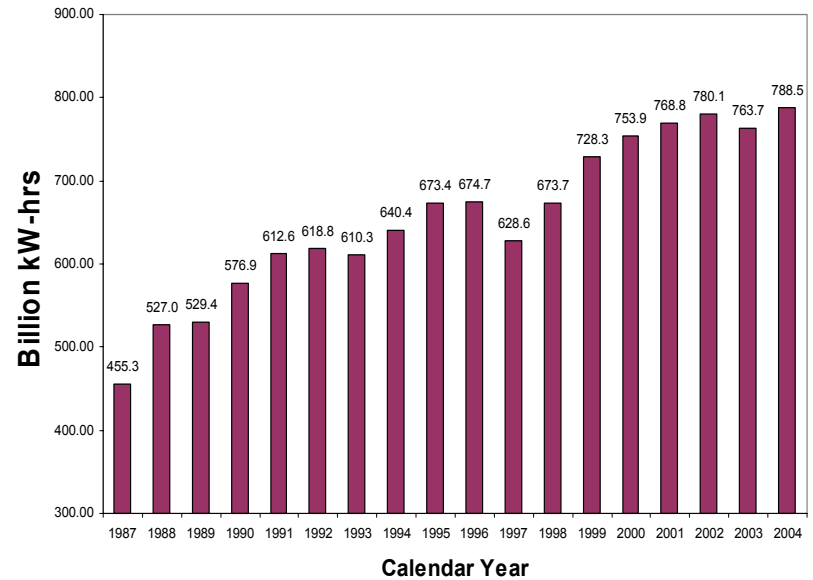
Other Industry Performance Information

Average Capacity Factor



Source: DOE/EIA Monthly Energy Review

Nuclear Power Generation



Operating Experience

- Safe shutdown was potentially challenged by turbine building flooding (*design/design control*)
- Safety injection system became inoperable due to nitrogen gas intrusion (*gas intrusion into safety systems*)
- A BWR with Mark I containment had a through-wall cracking of a torus (*passive component degradation*)
- Configuration issues resulted in a vacuum being drawn into the reactor coolant system during a draindown evolution (*shutdown/low-power events*)

Conclusions

- Our Industry Trends Program revealed no adverse trends
- The Industry Trends Program continues to evolve
 - Future enhancements include a risk-informed indicator
- Our reactor operating experience program actively collects, communicates, evaluates, and applies operating experience