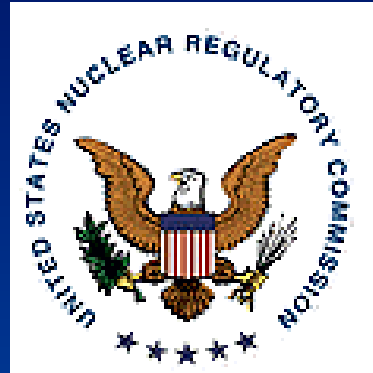


2000 REGULATORY INFORMATION CONFERENCE



REGULATORY TRENDS & CURRENT NRR INITIATIVES

SAMUEL J. COLLINS
Director, Office of Nuclear Reactor Regulation
March 28, 2000



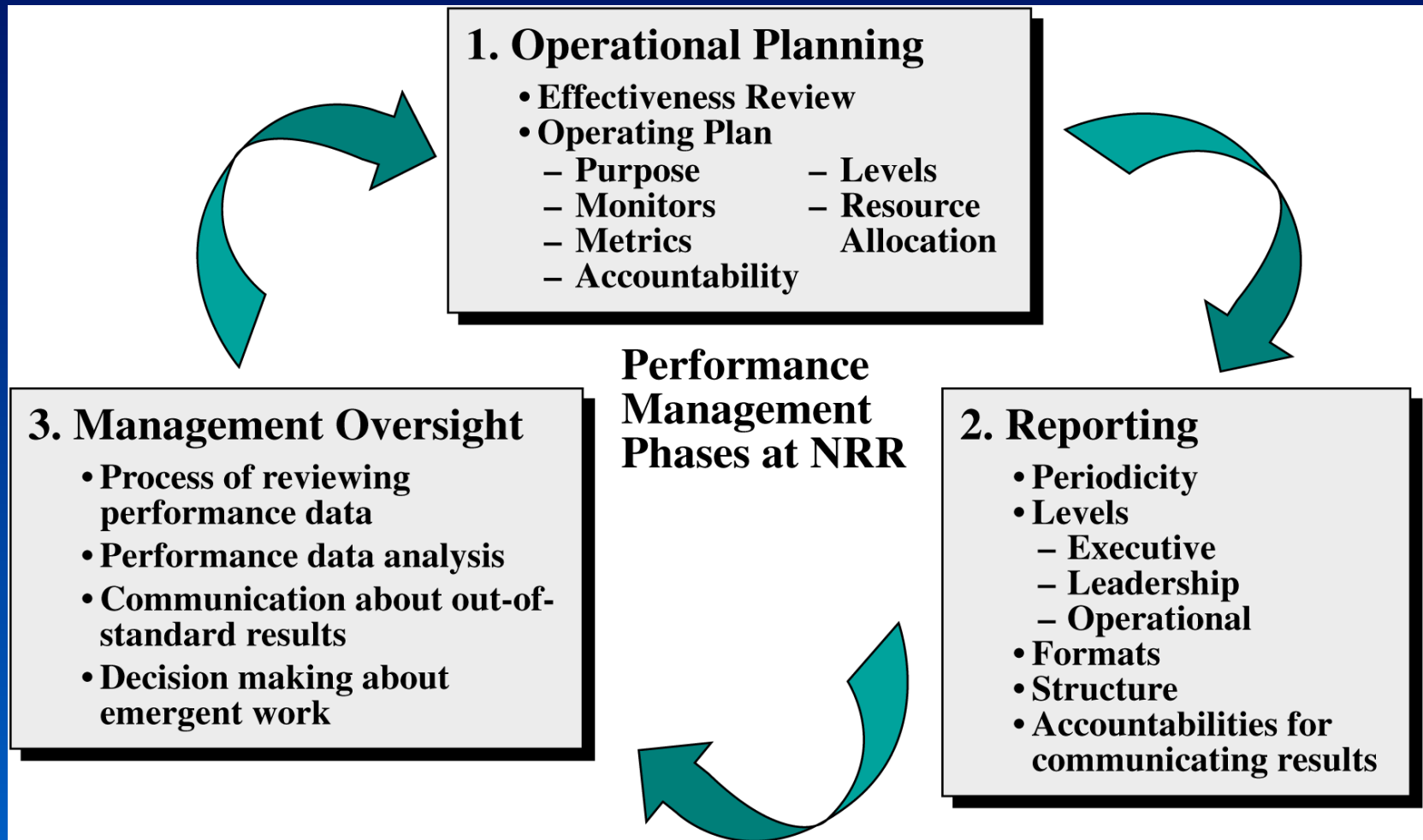
Nuclear Regulatory Commission

Performance Goals

1. **Maintain Safety**
2. Increase Public Confidence
3. Reduce Unnecessary Regulatory Burden
4. Make NRC Activities and Decisions more Effective, Efficient, and Realistic

Nuclear Regulatory Commission

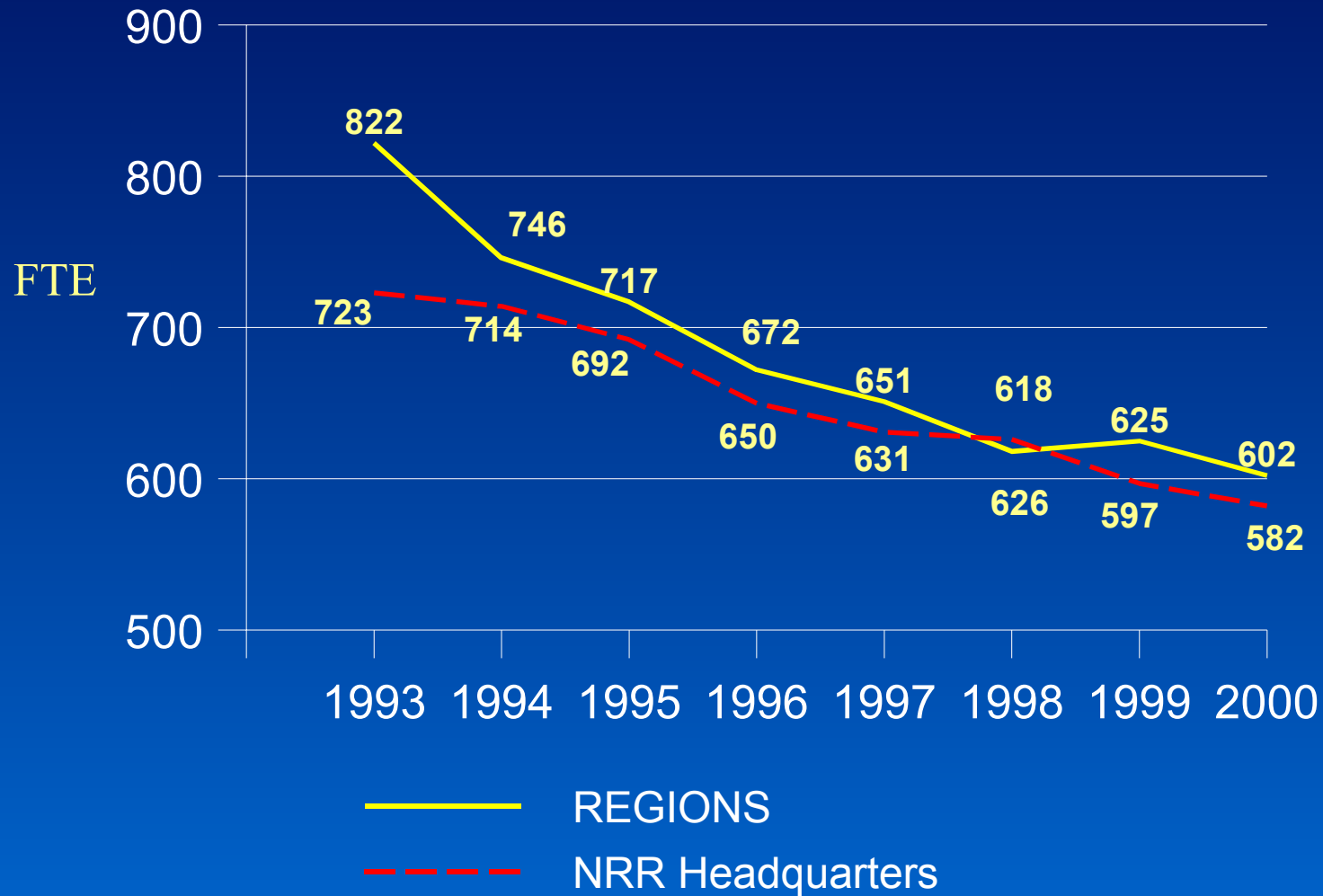
NRR Performance Management





Nuclear Regulatory Commission

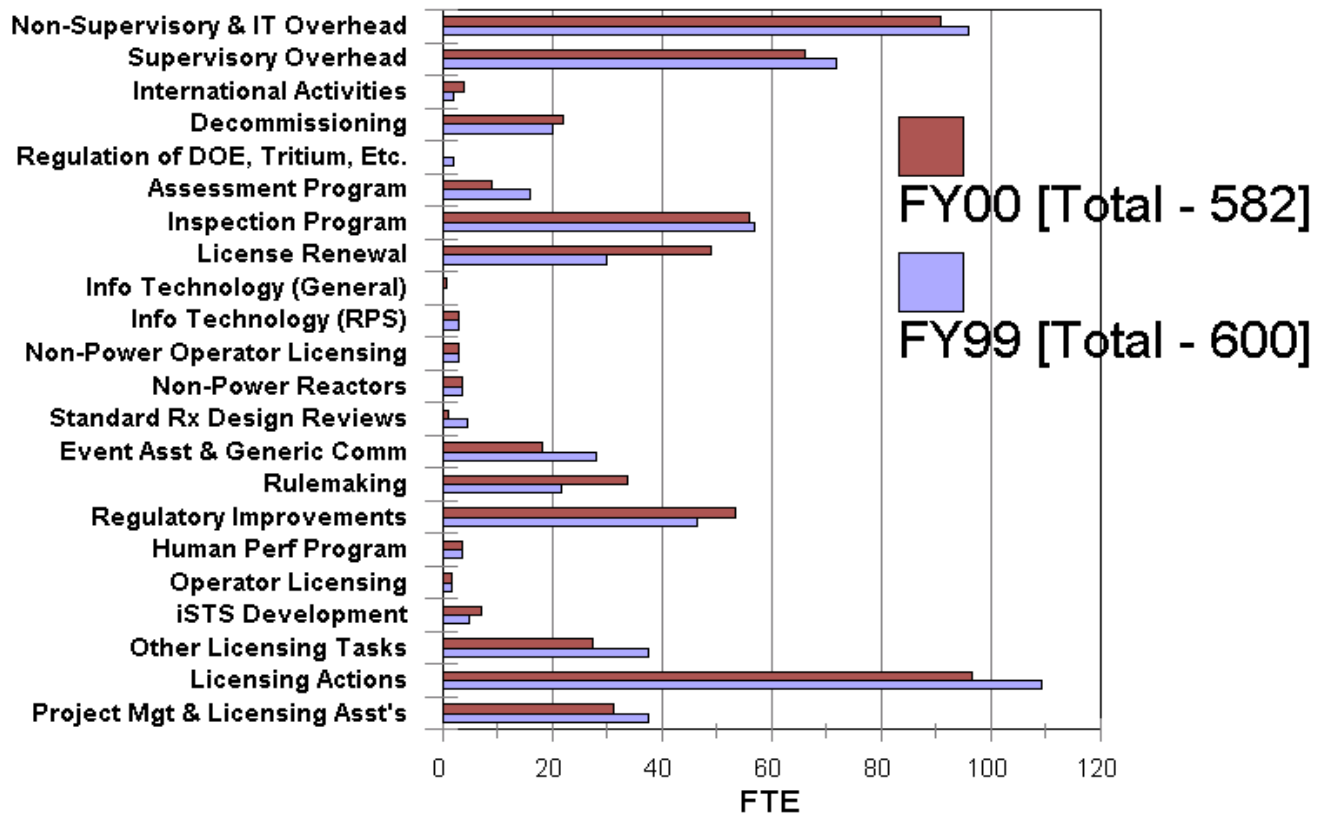
NRR HQ and REGIONS FTE





Nuclear Regulatory Commission

Budget Estimates for NRR



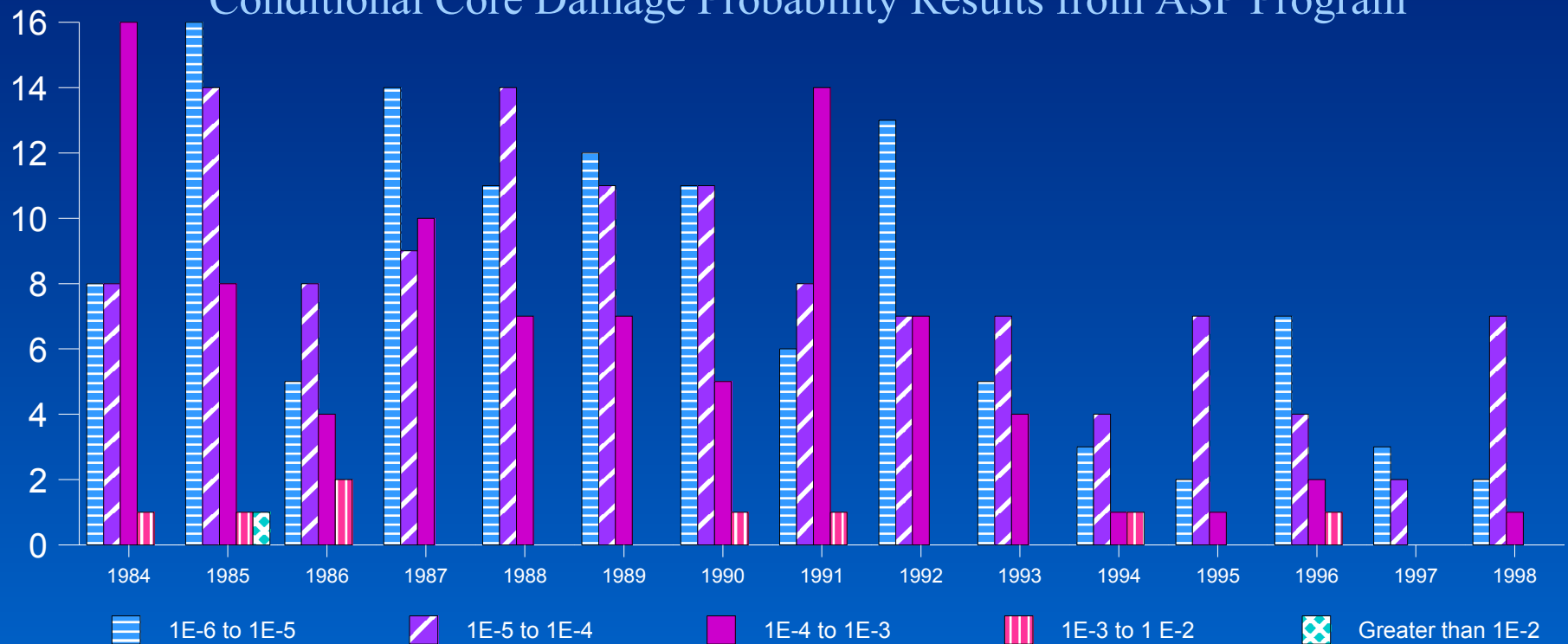


Performance Trends

Maintaining Safety

- Goal - One or less significant precursors (i.e., events with $> 1E-3$ probability of leading to an accident)

Conditional Core Damage Probability Results from ASP Program



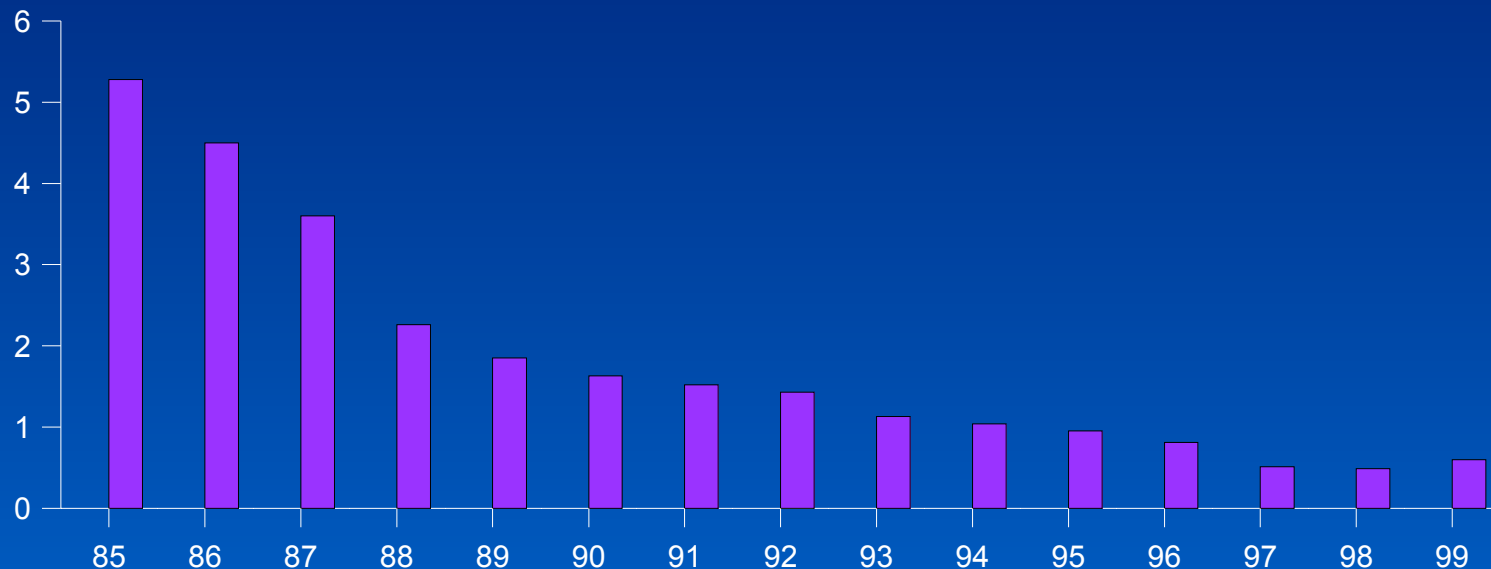


Performance Trends

Maintaining Safety

- Goal - No Statistically Significant Adverse Industry Trends in Safety Performance

Average Number of Reactor Scrams (while critical)



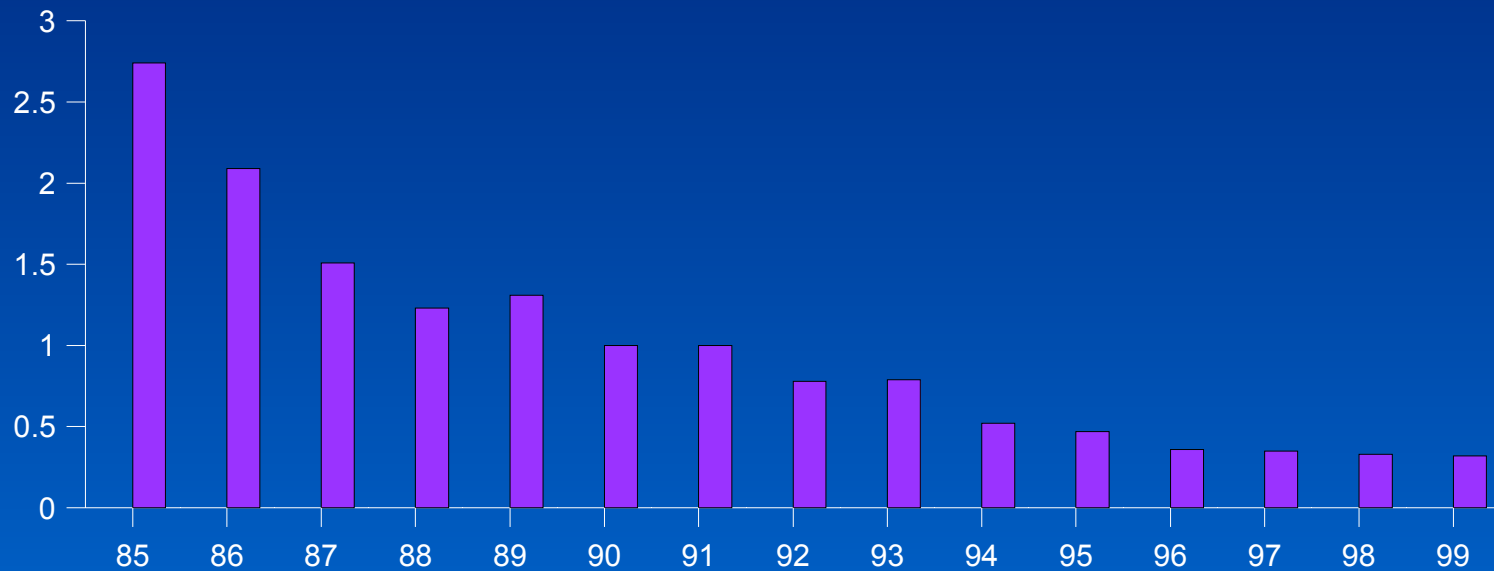


Performance Trends

Maintaining Safety

- Goal - No Statistically Significant Adverse Industry Trends in Safety Performance

Average Number of Safety System Actuations



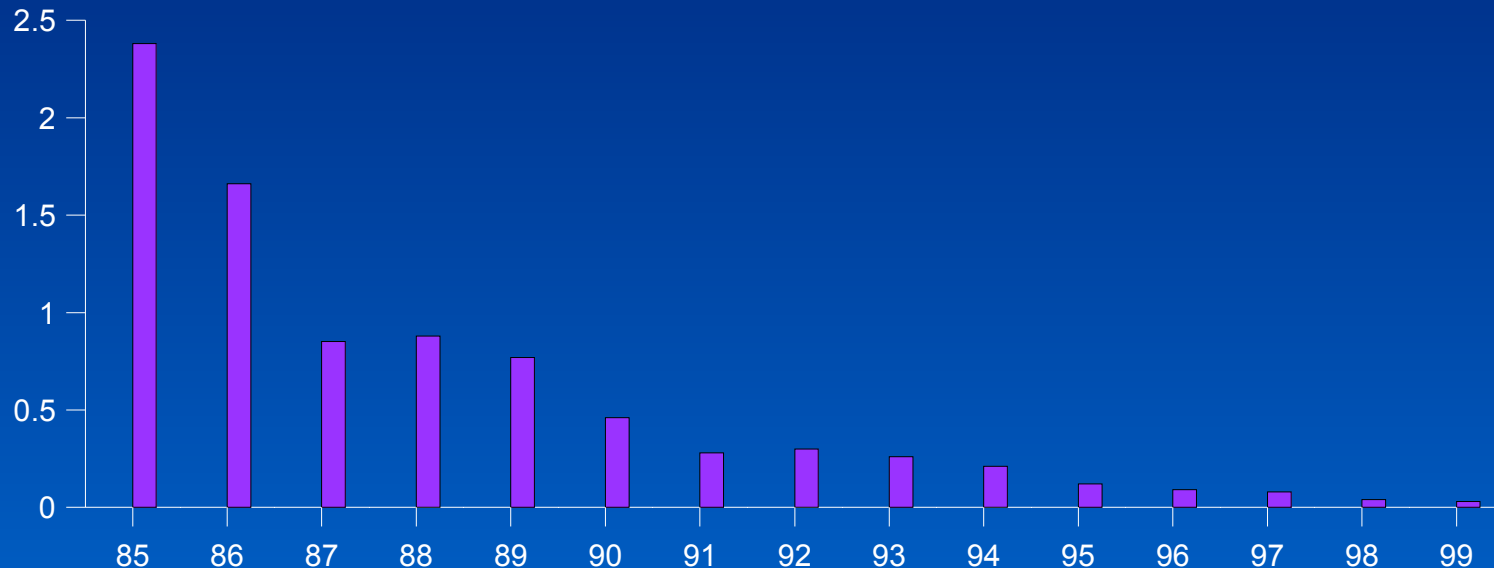


Performance Trends

Maintaining Safety

- Goal - No Statistically Significant Adverse Industry Trends in Safety Performance

Average Number of Significant Events



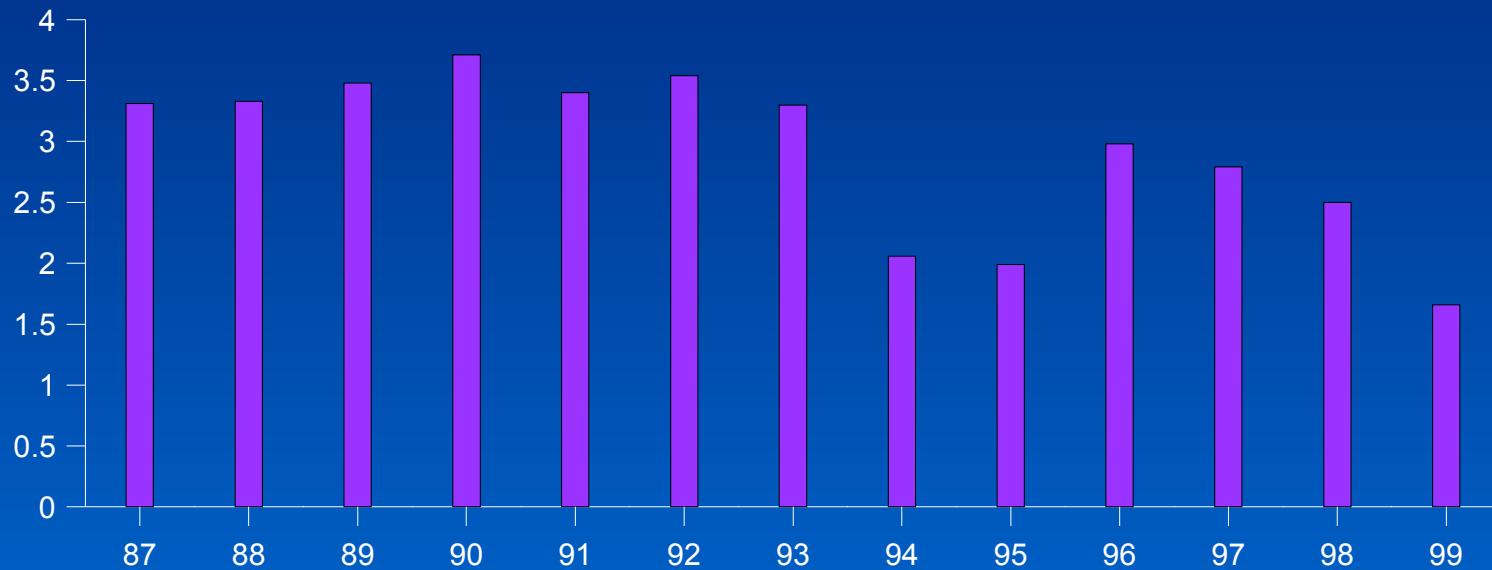


Performance Trends

Maintaining Safety

- Goal - No Statistically Significant Adverse Industry Trends in Safety Performance

Average Number of Safety System Failures



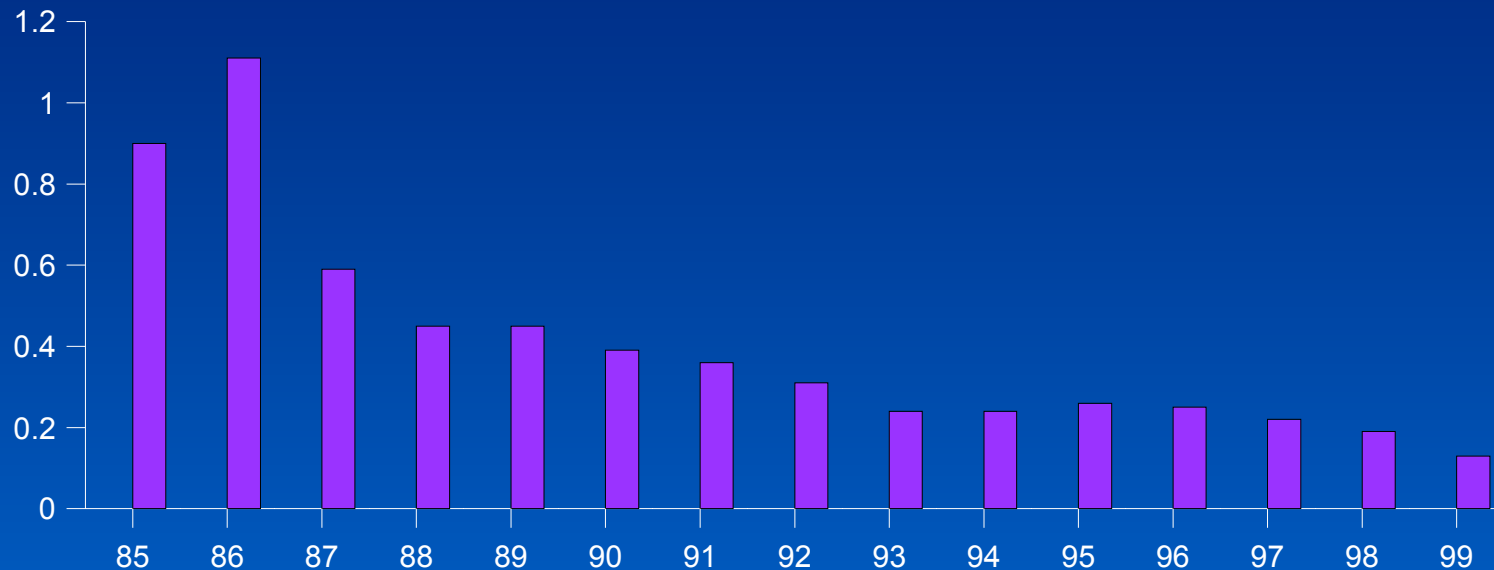


Performance Trends

Maintaining Safety

- Goal - No Statistically Significant Adverse Industry Trends in Safety Performance

Equipment Forced Outages/1000 Critical Hours





Performance Goal Measures

Maintaining Safety

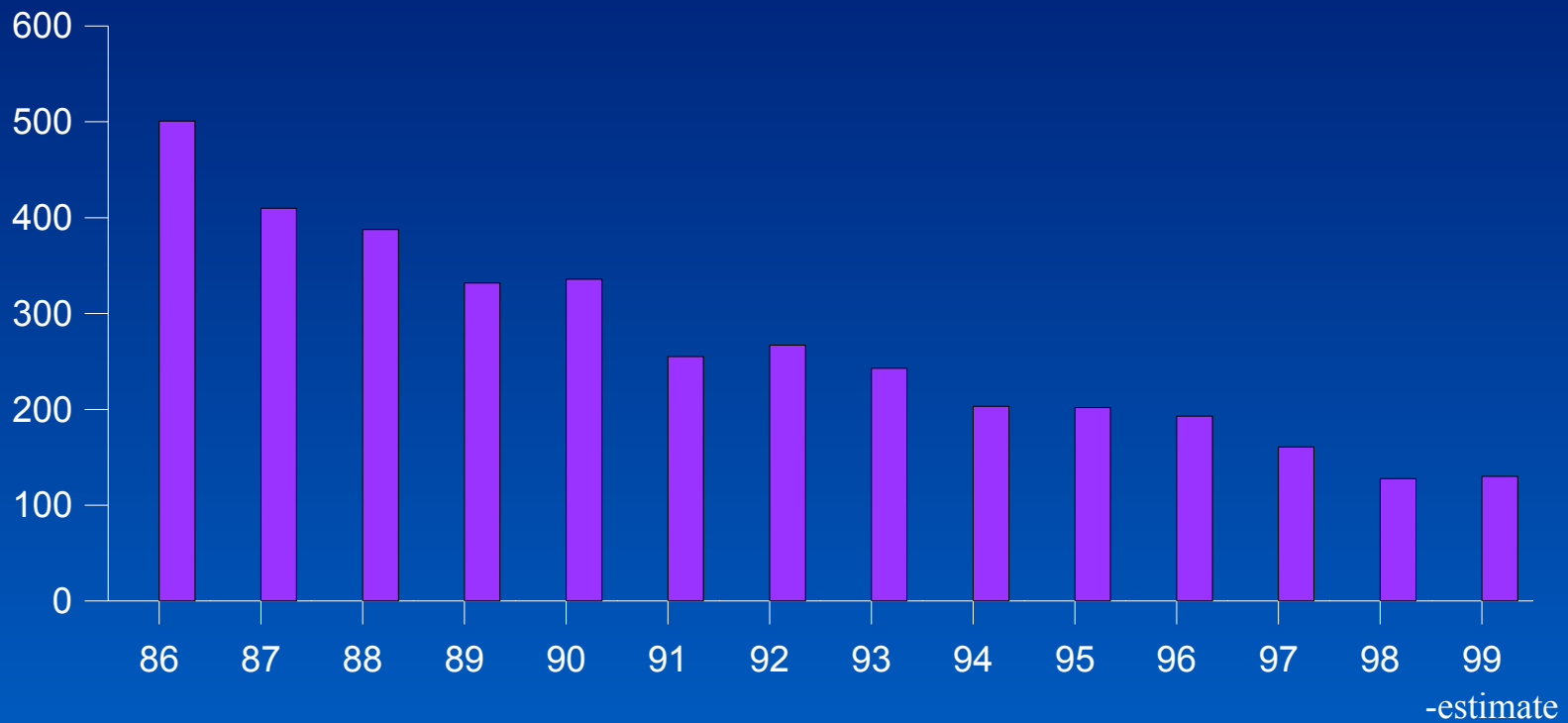
- No events resulting in overexposures exceeding regulatory limits ✓
- No more than 3 releases to environment that exceed regulatory requirements ✓
- No breakdowns in physical security that significantly weaken the protection against radiological sabotage or theft or diversion on special nuclear material ✓



Performance Trends

Maintaining Safety

Collective Radiation Exposure (Man-Rem)

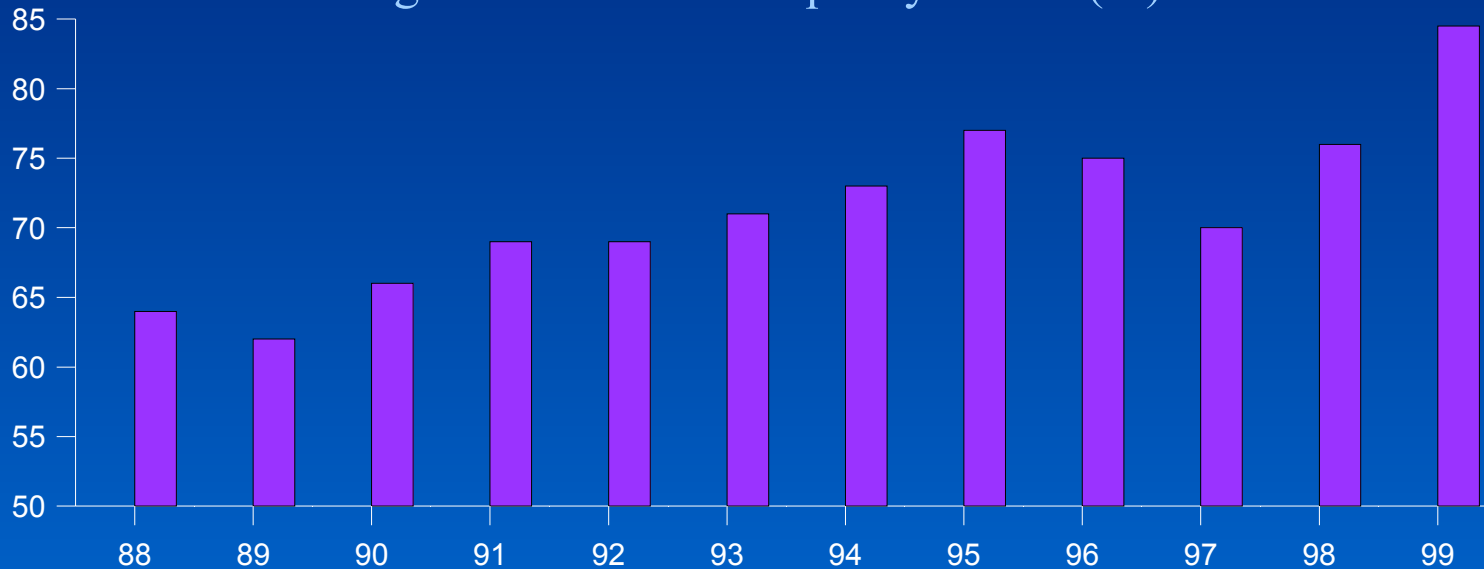




Performance Trends

- Goal - No Statistically Significant Adverse Industry Trends in Safety Performance
- Safety goals are not incompatible with economic and performance goals

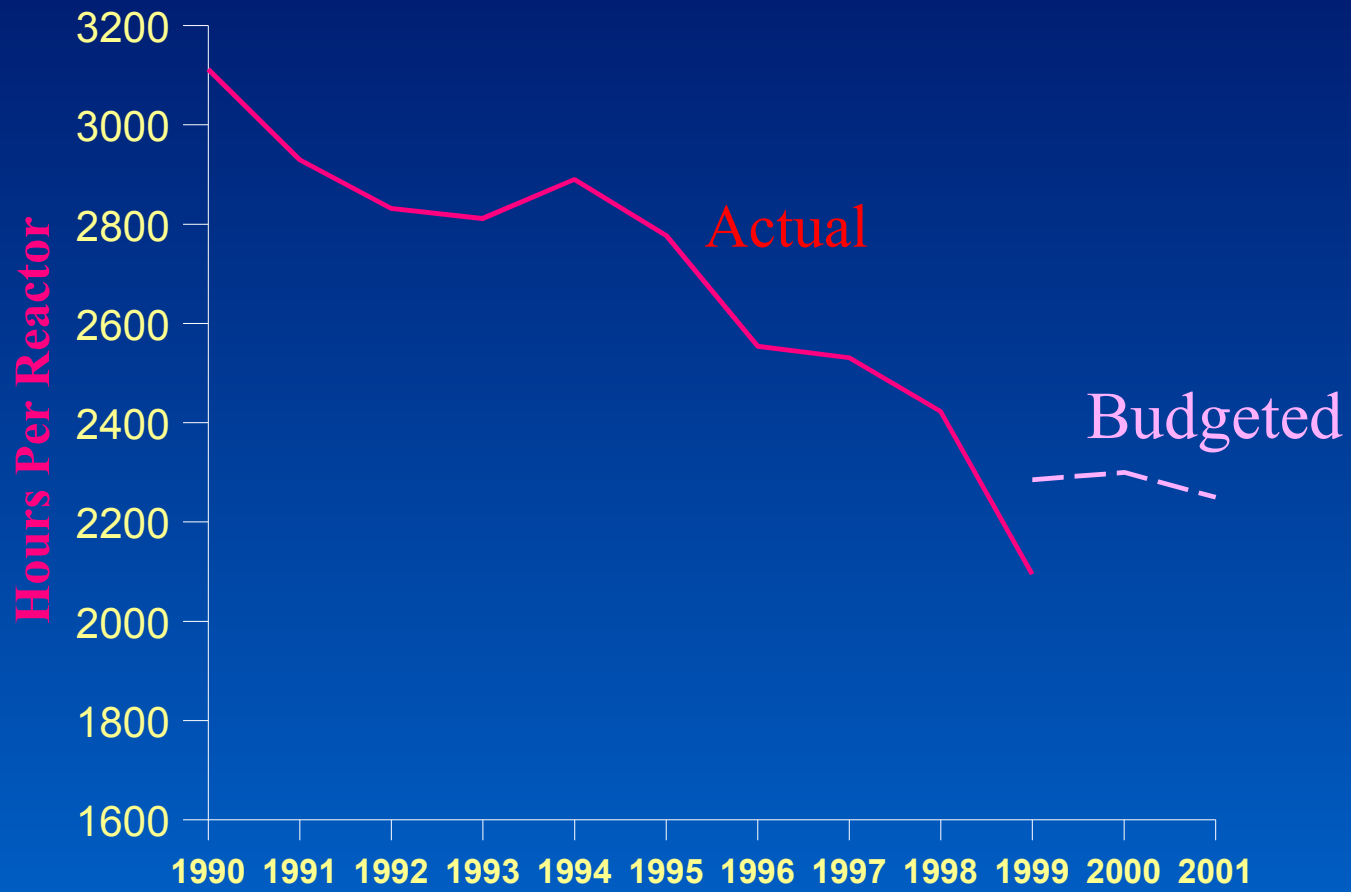
Average Gross Annual Capacity Factor (%)





Resource Trends

DIRECT HQ and REGIONAL INSPECTION HOURS FOR OPERATING REACTORS





Performance Goal Measures

Increase Public Confidence Measures

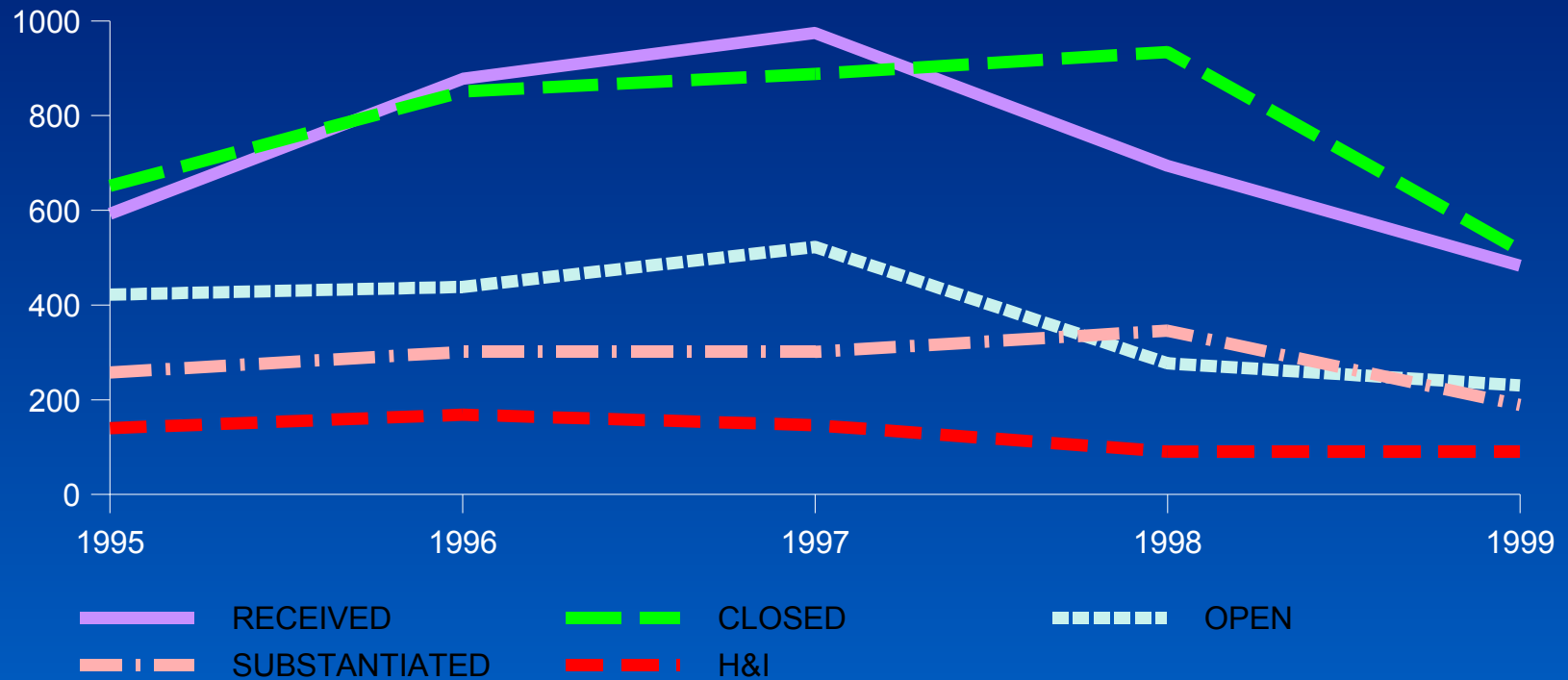
- All milestones completed in plan to assess effectiveness of allegations program discussed in SECY-99-071
- No more than (TBD) significant regulatory issues per year for which outreach activities were not conducted in the vicinity of nuclear facilities
- Issue Directors Decisions for petitions filed under 10 CFR 2.206 within an average of 120 days from date of receipt



Trends

Increase Public Confidence - Allegations Program

REACTOR ALLEGATIONS TRENDS

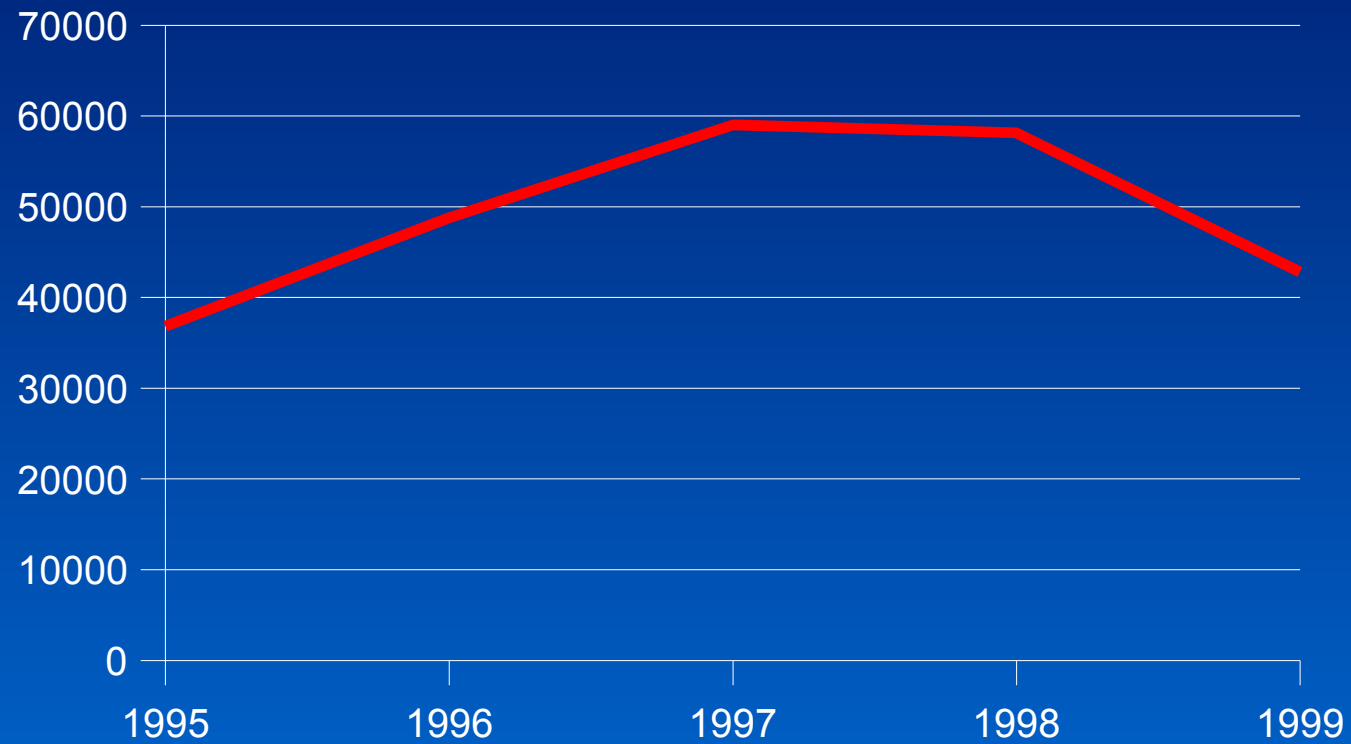




Trends

Increase Public Confidence - Allegations Program

Hours Expended on Reactor Allegations

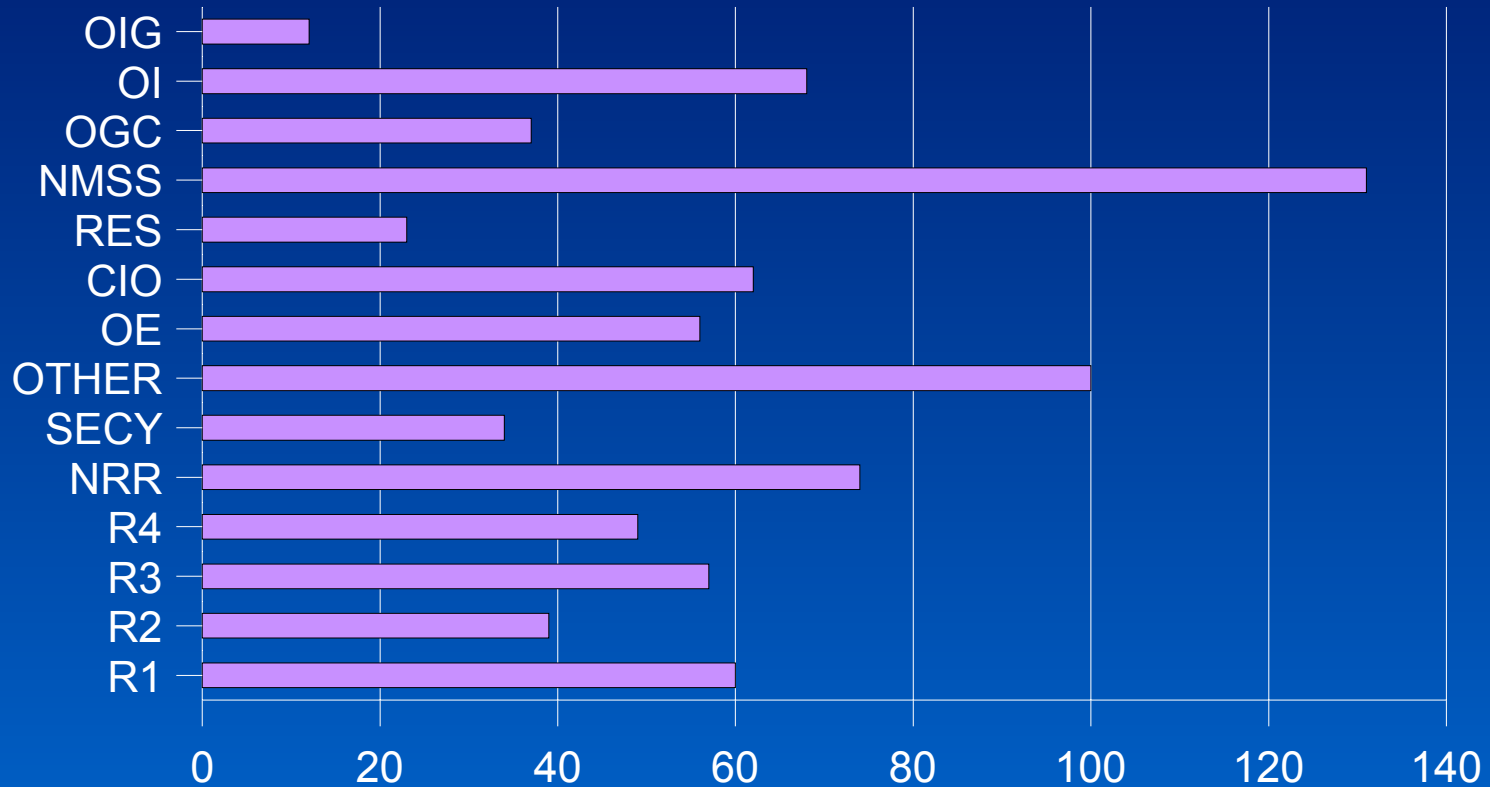




Trends

Increase Public Confidence - FOIAs

Freedom of Information Act Requests in FY99

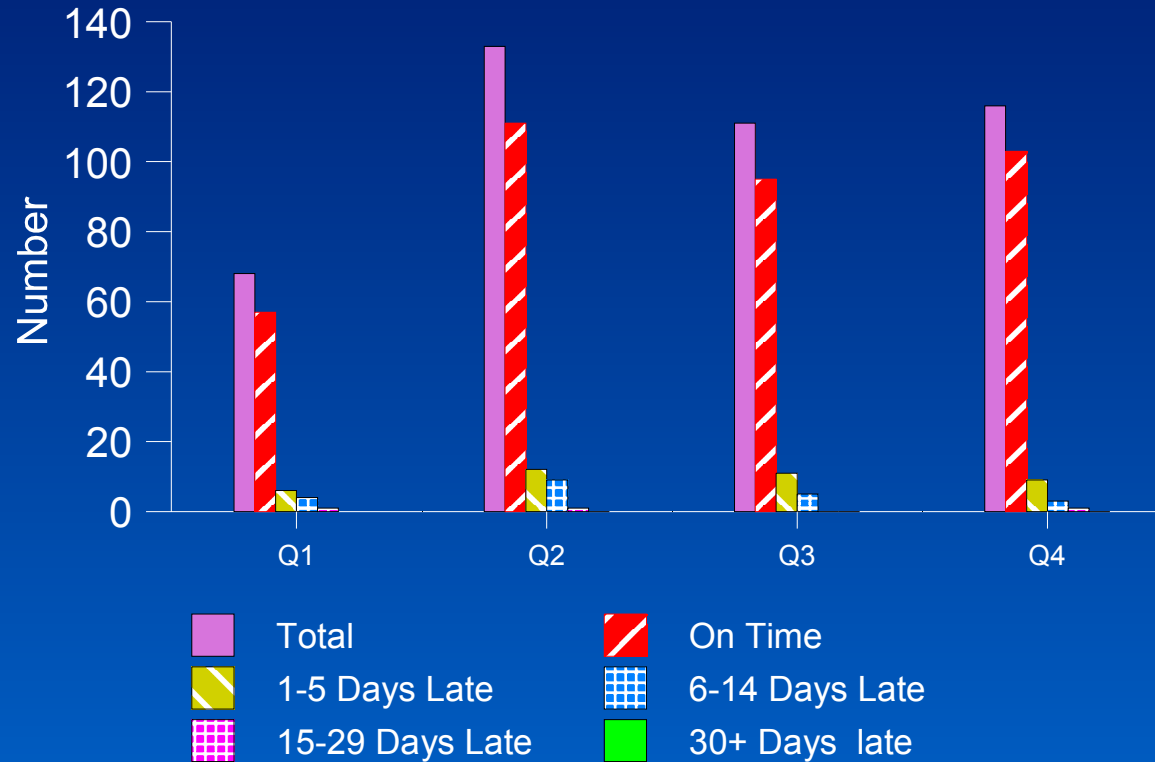




Trends

Increase Public Confidence - Controlled Correspondence

Processing Time

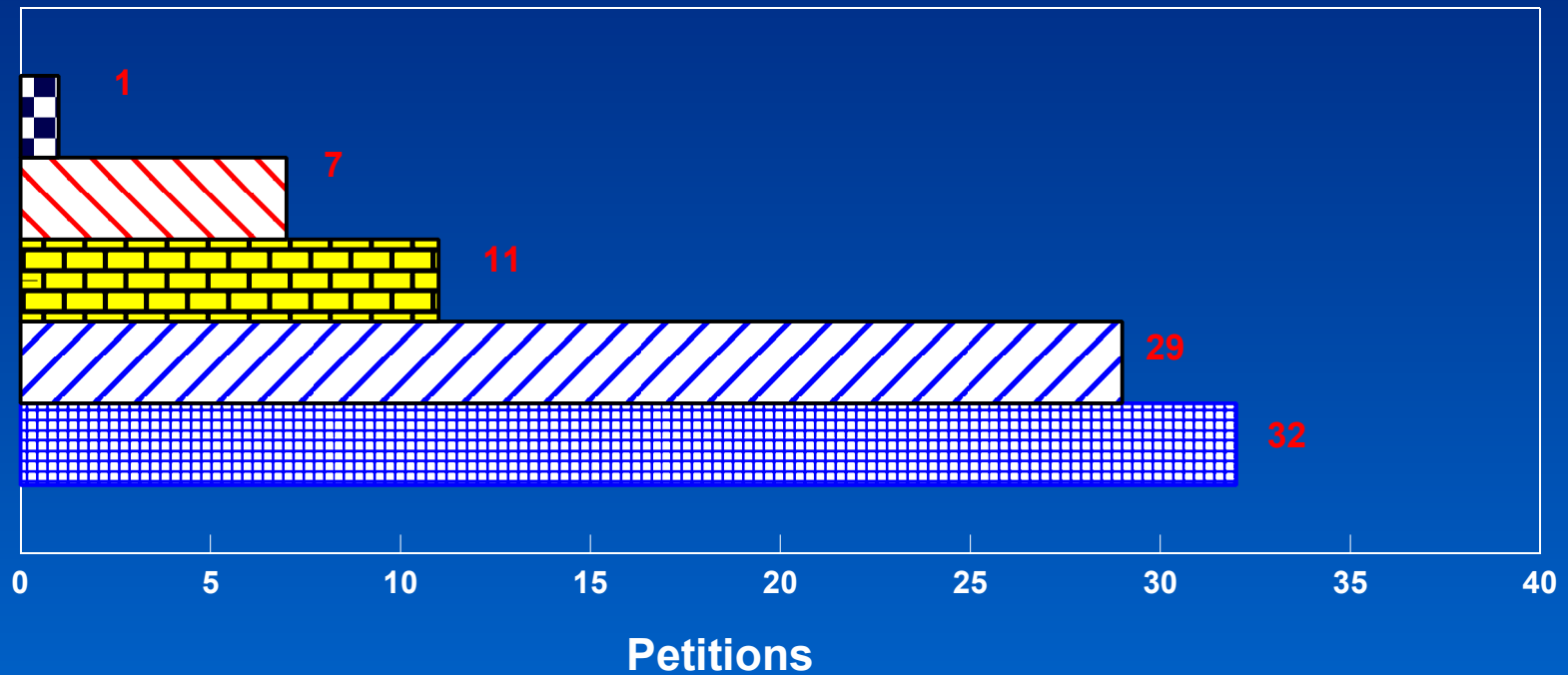




Trends

Increase Public Confidence - 2.206 Petitions

Statistics of Petitions Processed under 10CFR2.206 For the Period 1/98 thru 12/99





Performance Goal Measures

Reducing Unnecessary Regulatory Burden

Measures

- Complete on time at least 95 percent of the reactor milestones identified in a forthcoming plan to reduce unnecessary regulatory burden
 - ▶ Utilize risk information and performance-based approaches
 - ▶ Improve and execute our programs and processes
 - ▶ Improve reactor oversight program
 - ▶ Actively seek stakeholder input



Performance Trends

Nuclear Reactor Safety - Reactor Licensing

Performance Plan Target: Licensing Action Inventory ≤ 750

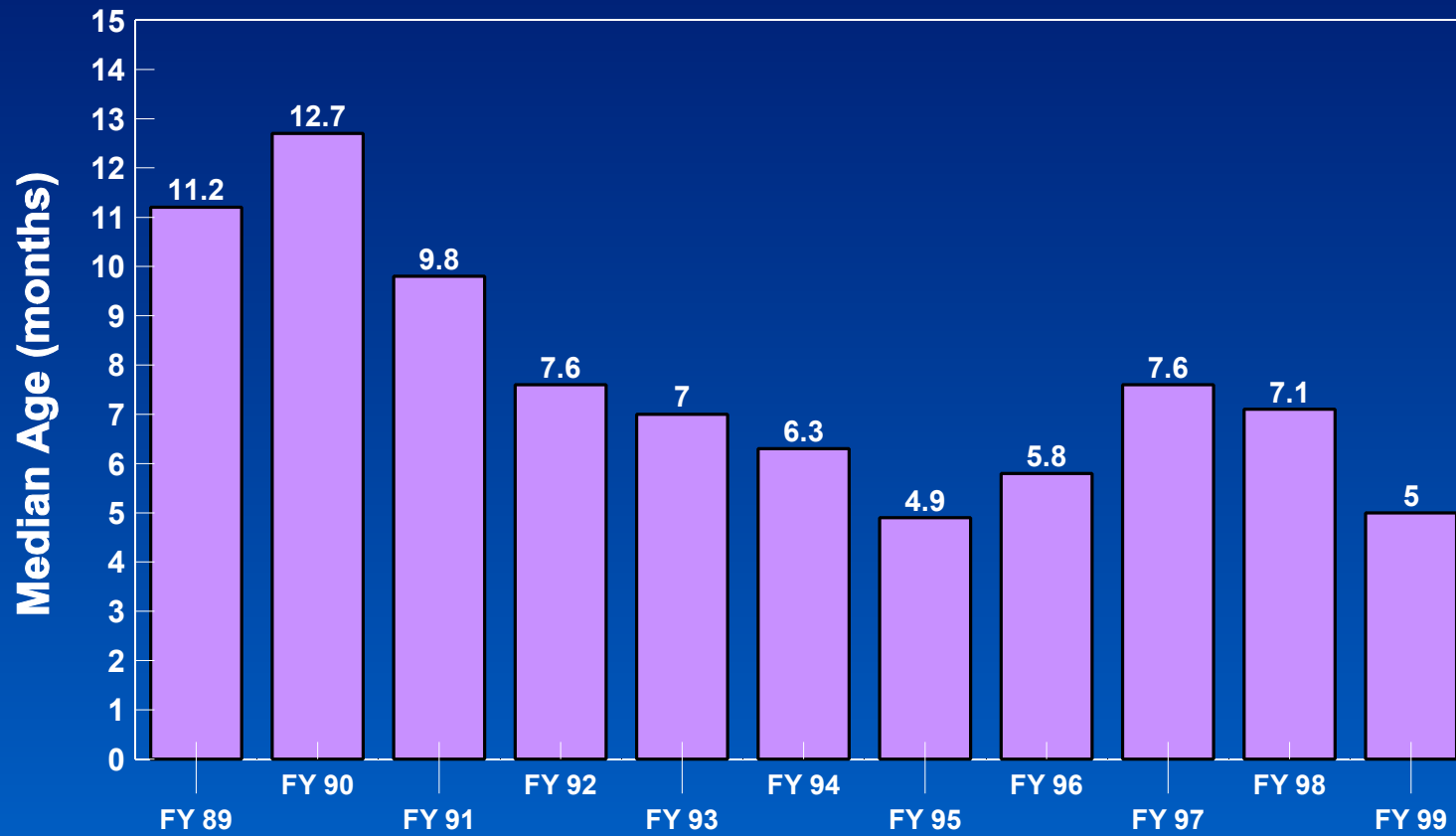




Performance Trends

Licensing Action Inventory

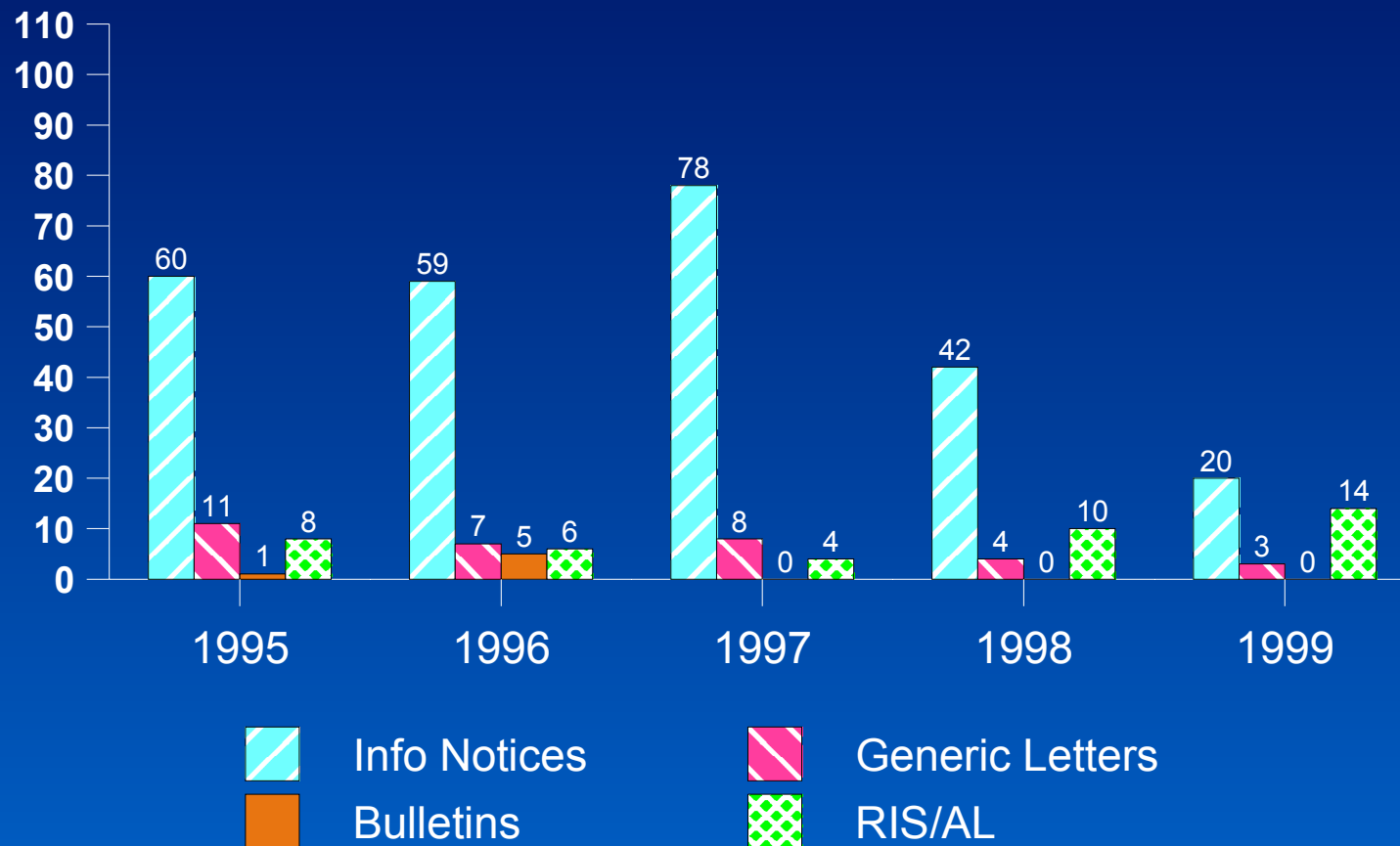
Median Age of Inventory





Regulatory Trends

GENERIC COMMUNICATIONS ISSUED BY NRR





Performance Goal Measures

Make NRC Activities and Decisions more Effective, Efficient, and Realistic

- Complete 95% of milestones in Risk Informed Regulation Implementation Plan
- Reviews of key processes
- Complete license renewal application reviews within 30 months



Specific Challenges

License Renewal

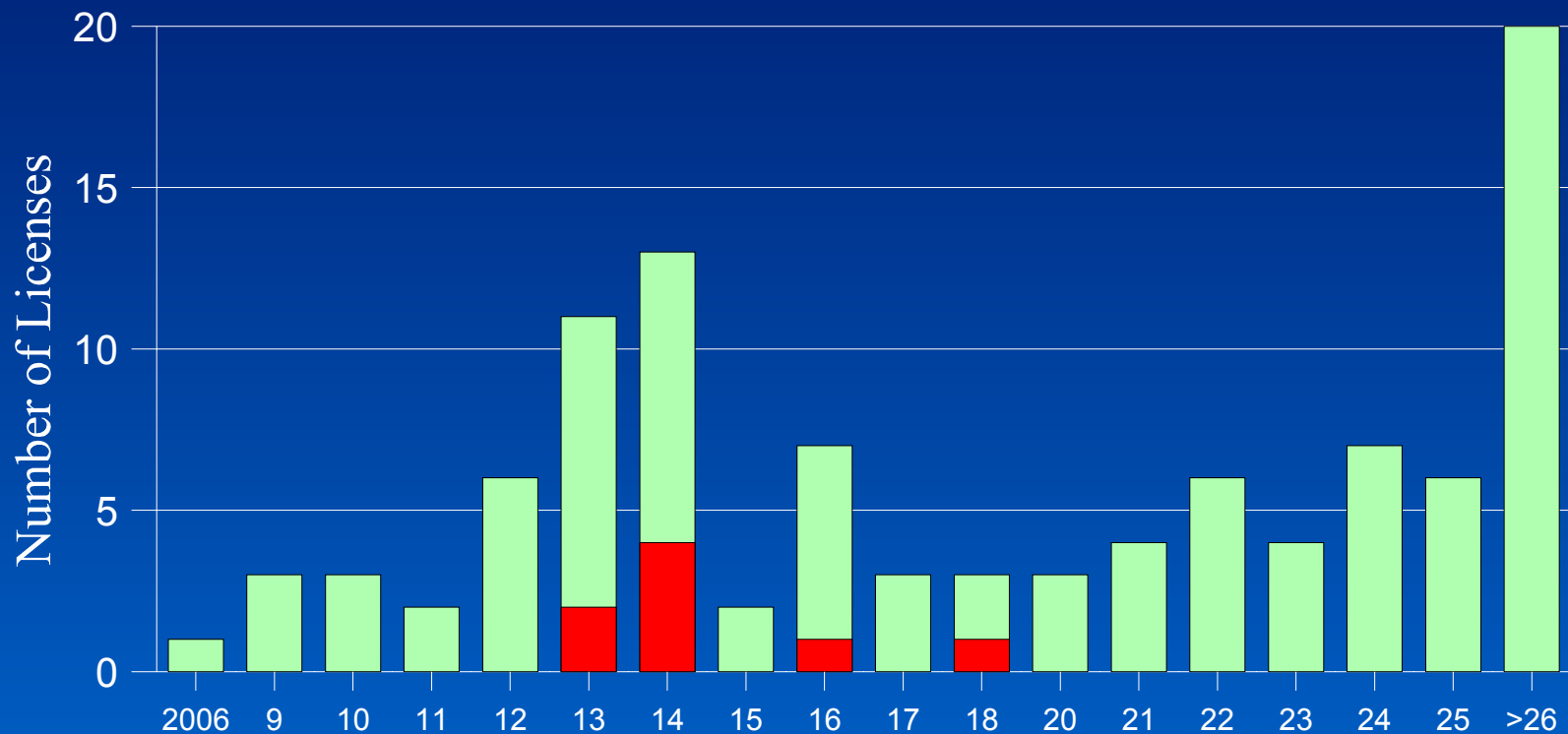
- Met FY 99 measure for renewal application review milestones for Calvert Cliffs and Oconee
 - ▶ Two applications received in FY 00 (ANO-1 and Hatch)
- Increasing interest in license renewal
- High level waste transportation addressed generically in FY 99
- Expect continued resolution of generic renewal issues in support of implementation guidance development



Specific Challenges

License Renewal

Operating Licenses Expiration Date





Specific Challenges

Risk Informing NRC Activities

- Significant progress made in risk-informing NRC activities with stakeholder involvement (i.e., staff training, improving guidance and developing improved PRA methods and tools)
- Regulatory Guides, Topical Reports and/or pilot plant applications approved in the following areas
 - ▶ Inservice Inspection (WOG topical, Vermont Yankee, Surry, ANO)
 - ▶ Inservice Testing (Comanche Peak, staff evaluating lessons learned)
 - ▶ Graded Quality Assurance (South Texas, staff addressing barriers to full implementation)
 - ▶ Technical Specifications (Allowed Outage Time Extensions)
 - ▶ Other Licensing Initiatives (BWR Vessel Shell Weld Inspections, ANO hydrogen monitoring order, San Onofre hydrogen recombiner exemption/amendment)



Specific Challenges

Risk Informing NRC Activities

- Rulemaking Initiatives
 - ▶ Maintenance Rule
 - ▶ Alternate Source Term
 - ▶ Risk Informing Regulations
 - SECY 99-256, Rulemaking Plan for Risk-Informing Special Treatment Requirements
 - SECY 99-264, Proposed Staff Plan for Risk-Informing Technical Requirements in 10 CFR Part 50
 - ▶ Decommissioning



Specific Challenges

Inspection and Performance Assessment

- Risk Insights Used to Define Scope and Depth of Inspection Program
- Cornerstones of Assessment Program Derived From Contributors to Plant Risk (i.e., initiating events, mitigation, barriers, emergency planning)
- Specific Inspection Findings evaluated for safety significance using risk insights



Specific Challenges

Inspection and Performance Assessment

- FY 99 performance plan measures met for key inspection and reactor performance assessment areas
- Revised oversight process
 - ▶ Pilot program completed
 - ▶ Program monitoring to ensure consistency
 - ▶ Ongoing outreach involvement of NRC staff
 - ▶ Significant and frequent stakeholder interactions
 - ▶ Initial implementation at all sites in April 2000
 - ▶ Complete assessments of first year of initial implementation



Specific Challenges

Decommissioning Activities

- Risk-informed, integrated rulemaking effort to specify proper requirements for decommissioning plants in areas of emergency preparedness, security, insurance, operator staffing/training, and backfit rule
- Regulatory improvement initiative to include comprehensive review of all NRC regulations for applicability to decommissioning power reactors
 - ▶ Rules to be clarified or modified to address decommissioning
 - ▶ Relocation of most decommissioning rules to a dedicated part of 10 CFR



Specific Challenges

Other Initiatives

- Resource Allocations
- Safeguards Regulations
- Fire Protection
- Radiation Protection
 - ▶ (KI, Alternate Source Term, Control Room Habitability)
- License Transfers, Financial Reviews
- Routine Licensing Actions and Associated Processes



Regulatory Trends

Conclusions

- Generally Improving or Stable Trends
 - ▶ Industry and NRC
- Many Challenges Ahead
- Measure success in terms of:
 - ▶ 1) **Maintaining Safety**
 - ▶ 2) Increasing Public Confidence
 - ▶ 3) Reducing Unnecessary Regulatory Burden
 - ▶ 4) Increasing effectiveness, efficiency, and realism in NRC activities

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March 28, 2000