

# Decommissioning What's At Stake?

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# Safe, Timely, Efficient Decommissioning Essential for:

- Public Confidence
- Ratepayer and Shareholder Value

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# Safe, Timely, Efficient Decommissioning

- What's Needed?
  - Certified Spent Fuel Casks
  - Efficient License Termination Process
  - Risk Informed Regulations

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# Spent Fuel Management

- Historical Perspective
  - NRC rules of engagement
  - Cask certification time line reduced
    - ◆ 3-4 years down to about 20 months
  - Scope of certifications are limited!

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# Spent Fuel Management

- Impact of Limited Certification
  - Decommissioning plants can't decommission their pools
  - Operating plants can't unload fuel
  - Band-Aids proposed are:
    - ◆ Impractical
    - ◆ VERY costly, i.e., in excess of \$10 Billion

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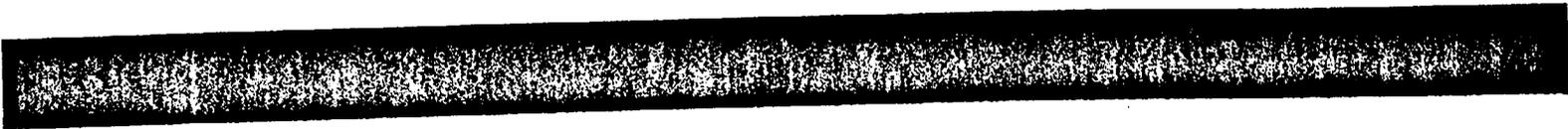


# Limited Scope of Certification

## ■ Recommendations

- PRA would demonstrate extremely low risk
- PRA results support more timely, realistic Internal Staff Guidance

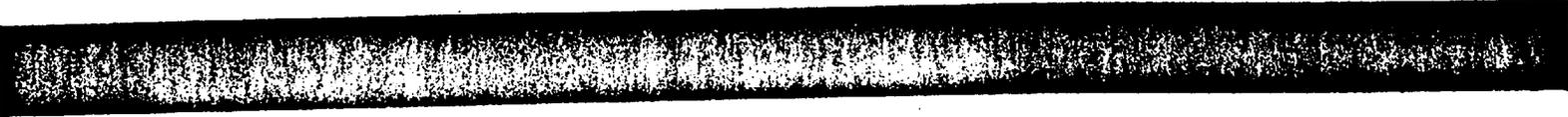
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# Spent Fuel Management

- Inefficient Cask Listing/Amendment Process
  - Rulemaking to list takes too long
  - Amendment by rulemaking is a resource nightmare

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# Inefficient Cask Listing/Amendments

## ■ Recommendations

- Cut time to process internally
  - ◆ NRC review indicates several months can be eliminated from schedules
  - ◆ NRC PRs for fabrication at risk, final rule withdraw 30-day fabrication hold



# Inefficient Cask Amendment Process

## ■ Recommendations

- Include process and criteria for amendments in initial listing rule
- Smarter Certificates
- Resolve generic issues!!

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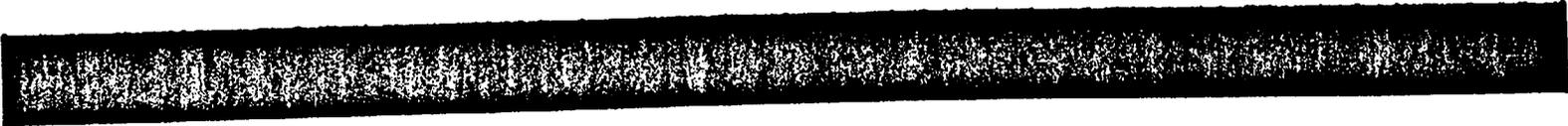


# Efficient License Termination

## ■ Recommendations

- Test needed for level of detail supporting LTP
- Dual regulation needs legislative fix
- Industry supports NRC initiative on material release
- Novel issues should go to Commission

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# **Risk Informing Decommissioning Regulations**

Mike Meisner, President of  
MYAPC

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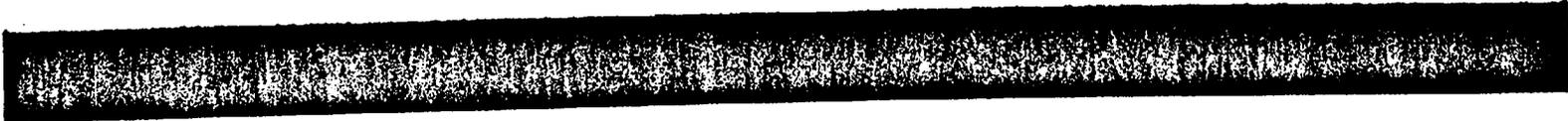


# Risk Informed Regulations

## ■ Overview

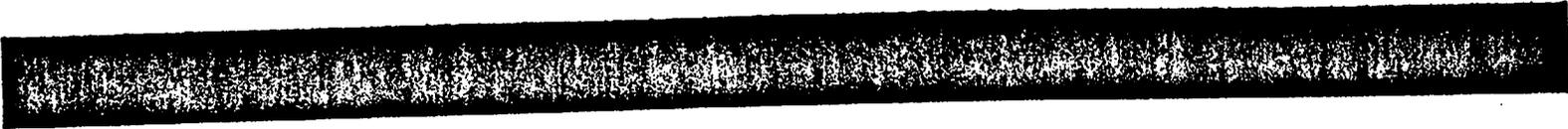
- Commission directed staff to integrate and risk inform certain regulations
- Staff produced good model in short time frame
- Conservatism and worst case estimates skewed risk profile and risk insights

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# Risk Informing D&D Regs

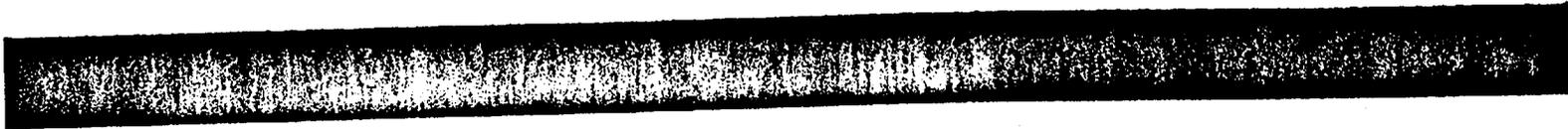
- Conservatism Added:
  - Human reliability
  - Heavy loads (used upper bound from previous analysis)
  - Consistent bias toward upper bound (Diesel pump reliability used .18 vs. .044 ALWR)



# Fuel Uncovery Endpoint

- Not related to public risk
- Postulated runaway oxidation correlates with risk to public
- Realistic heatup and endpoint adds 3 days to recovery time! (8 days Vs. 5)

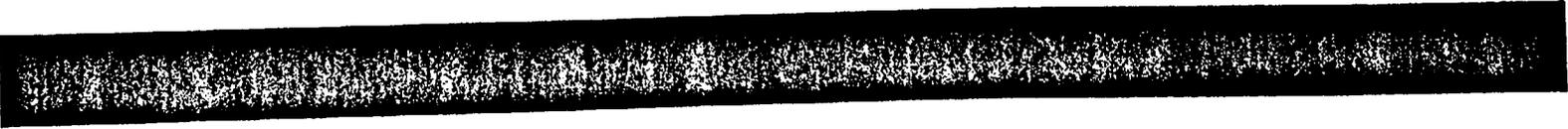
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# Implications for Operating Plants

- Inconsistent with Commission Policy  
and IPEs

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# Recommendations

- Credit industry commitments
- Revise study to:
  - Use best estimates
  - Remove conservatisms
- Truncate sequences beyond 2 days
- Requantify Model

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# Benefits of Corrected Study

- Valuable risk insights
- Tool to focuses resources on risk
- Demonstration of margin and defense in depth
- Basis to avoid unnecessary resources for EP, insurance and security
- Avoids Carryover of erroneous risk insights to operating plants IPEs

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