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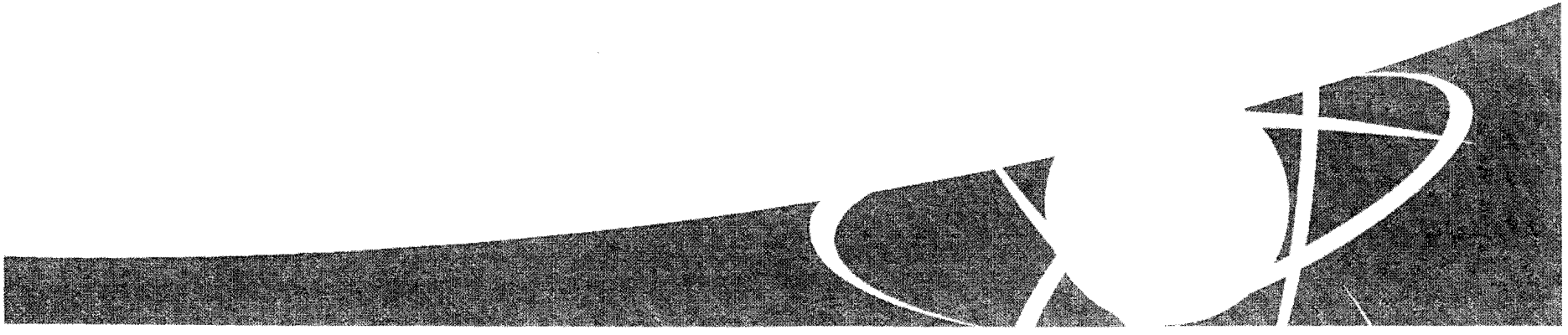
Protecting People and the Environment

R. E. Ginna Nuclear Power Plant

Supplemental Inspection Exit and Regulatory Performance Meeting

Meeting Slides

August 13, 2010



R.E. Ginna Nuclear Power Plant
Supplemental Inspection Exit
and
Regulatory Performance Meeting

Reactor Oversight Process

Nuclear Regulatory Commission

Region I

August 4, 2010

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Agenda

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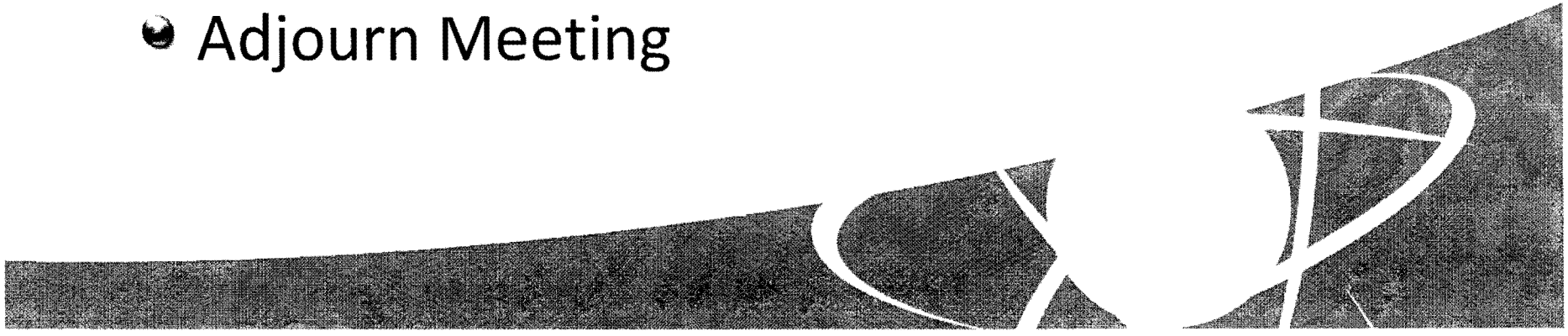
- Opening Remarks
- Supplemental Inspection 95002 Exit
- Constellation Response
- Regulatory Performance Meeting
- Closing Remarks
- Questions from the Public
- Adjourn Meeting



NRC Strategic Plan Goals

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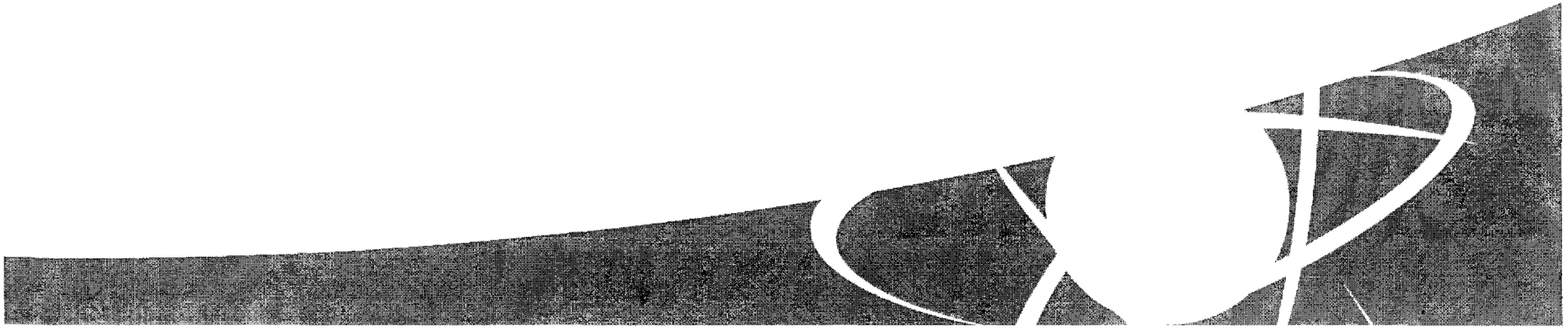
- Safety – Ensure adequate protection of public health and safety and the environment

- Security – Ensure adequate protection in the secure use and management of radioactive materials



NRC Annual Assessment Summary

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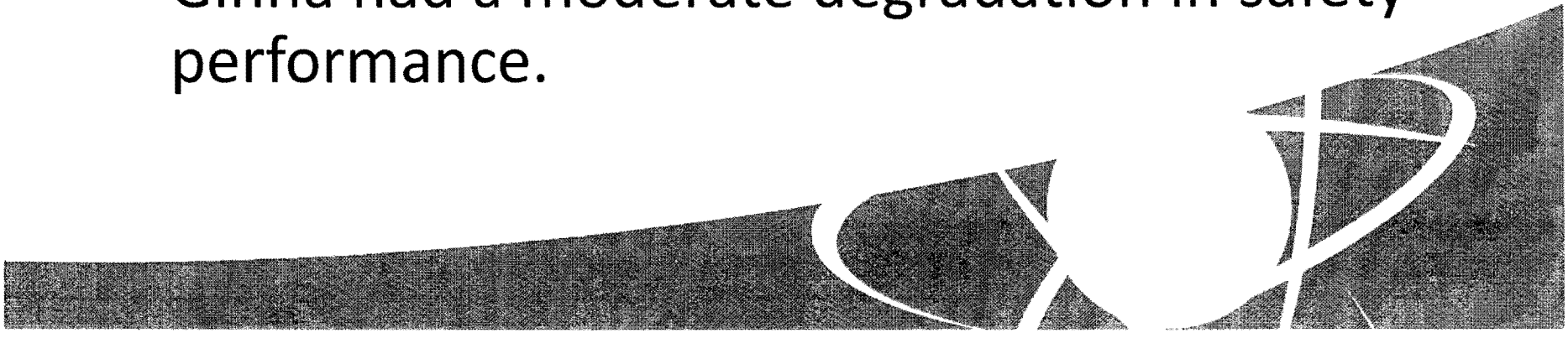
- Ginna operated the plant safely and in a manner that preserved the public health and safety and protected the environment during the assessment period (2009).
- Ginna was in the Degraded Cornerstone column of the NRCs Action Matrix.
- Ginna had a moderate degradation in safety performance.



NRC Significance Threshold Summary

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Performance Indicators (PI)

- Baseline Inspection
- White — Requires additional NRC oversight
- Requires more NRC oversight
- Red — Requires most NRC oversight

Inspection Findings

- Very low safety issue
- White — Low to moderate safety issue
- Substantial safety issue
- Red — High safety issue

Ginna PIs and Findings

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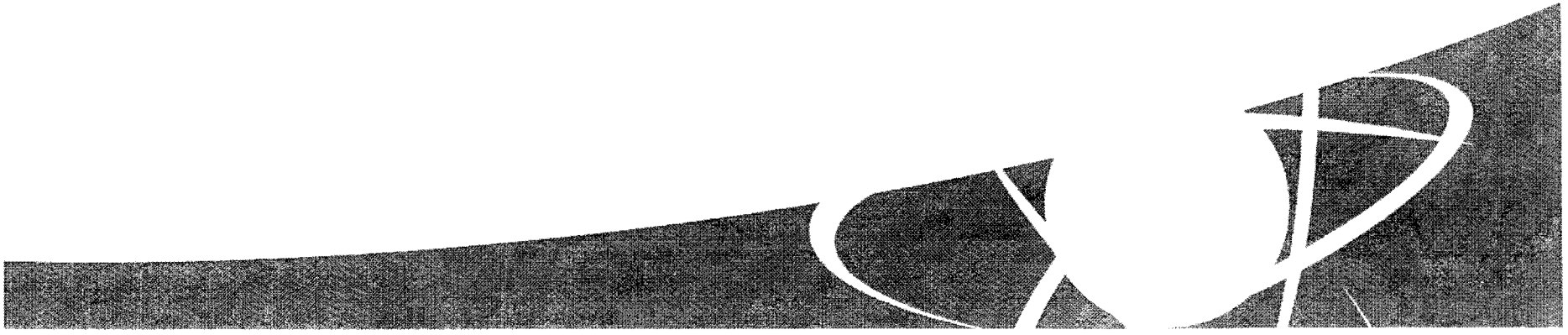
January 1 through December 31, 2009

- 1 White PI
- 2 White inspection findings
- 12 Green / Severity Level IV inspection findings



Summary of Safety Significant Inspection Findings and PIs at Ginna

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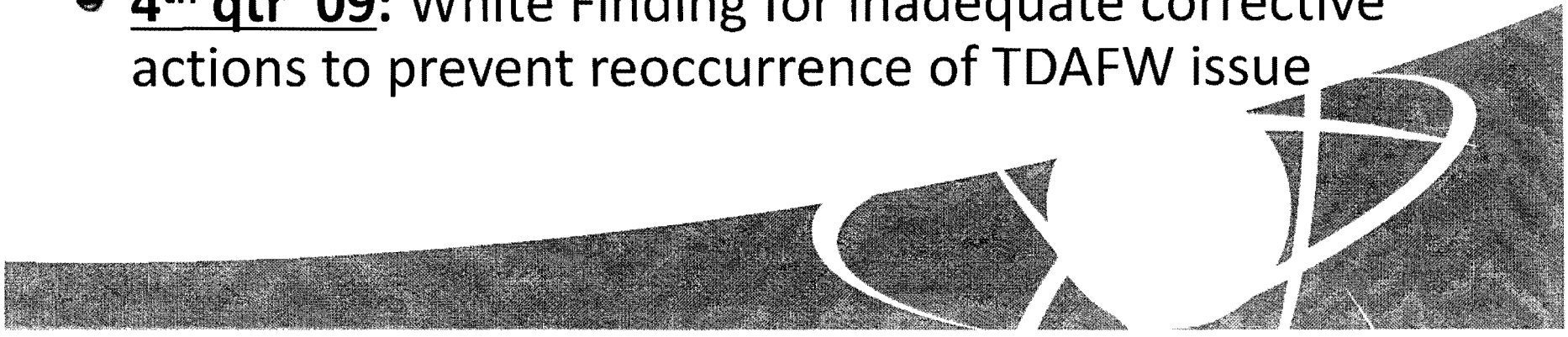
- **1st qtr '09:** White Finding for inadequate implementation of the Preventative Maintenance program for the TDAFW pump

- **3rd qtr '09:** White PI due to system reliability issues associated with TDAFW failures

- **4th qtr '09:** White Finding for inadequate corrective actions to prevent reoccurrence of TDAFW issue



NRC Action Matrix

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Licensee Response	Regulatory Response	Degraded Cornerstone	Multiple Repetitive Degraded Cornerstone	Unacceptable Performance
All Inputs are Green; Cornerstone Objectives Fully Met	1 or 2 White Inputs; Cornerstone Objectives Fully Met	2 White or 1 Yellow Input; Cornerstone Objectives Met w/ Moderate Degradation in Safety Performance	Multiple Yellow Inputs or 1 Red Input; Cornerstone Objectives Met w/ Significant Degradation in Safety Performance	Overall Unacceptable Performance; Plants not permitted to Operate w/in this Column; Unacceptable Margin to Safety

- Increasing safety significance
- Increasing NRC inspection efforts
- Increasing NRC/Licensee management involvement
- Increasing regulatory actions

Supplemental Inspection

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- Inspection Procedure 95002 (objectives):
  - To provide assurance that the root and contributing causes of individual and collective (multiple white inputs) risk-significant performance issues are understood.
  - To independently assess the extent of condition and extent of cause of individual and collective (multiple white inputs) risk-significant performance issues.
  - To independently determine if safety culture components caused or significantly contributed to the individual and collective (multiple white inputs) risk-significant performance issues.
  - To provide assurance that the licensee's corrective actions for risk-significant performance issues are sufficient to address the root and contributing causes and prevent recurrence.

Supplemental Inspection

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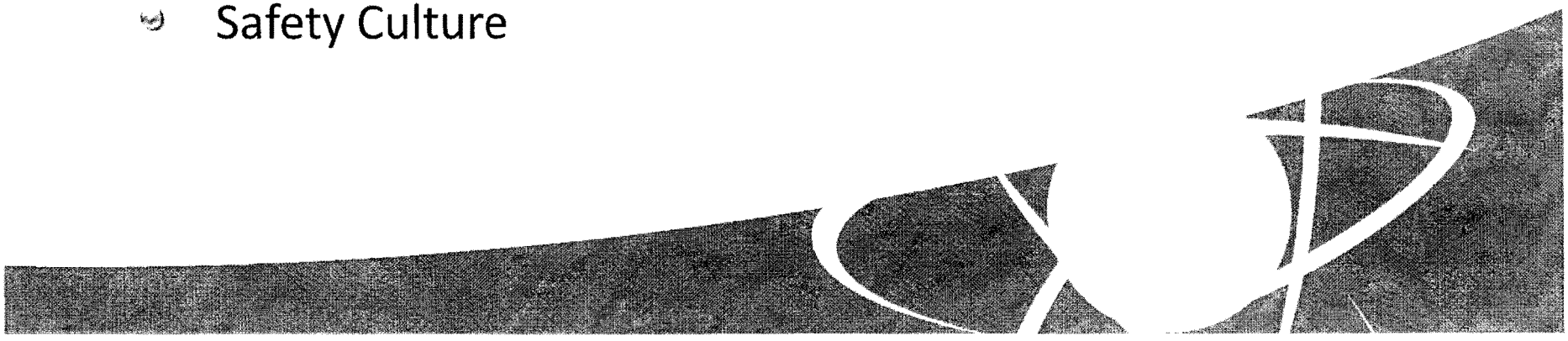
- Inspection Procedure 95002 (requirements)
- Covers Five Areas:
  - Problem Identification
  - Root Cause,
    Extent of Condition and Extent of Cause Evaluation
  - Corrective Actions
  - Independently Assess of Extent of Condition and Cause
  - Safety Culture



Supplemental Inspection

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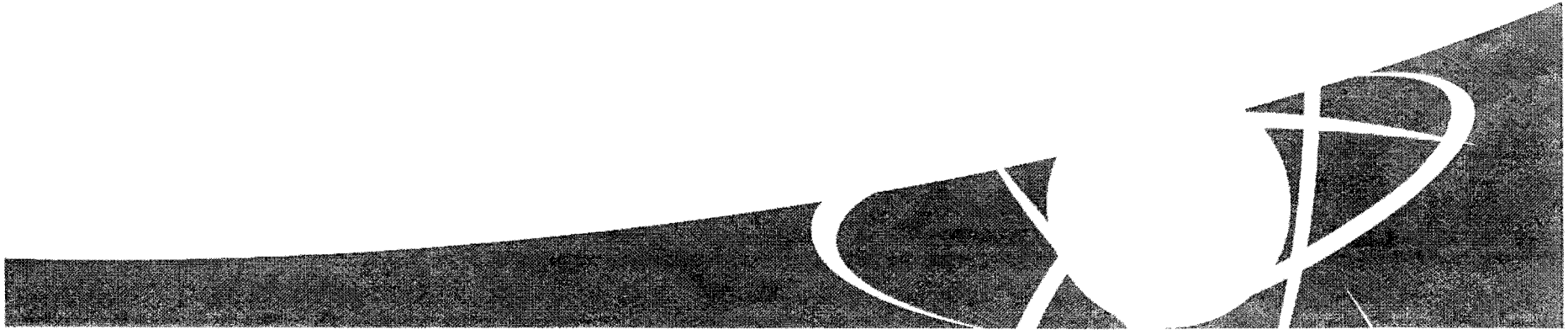
- IP 95002 (June 28 – July 23, 2010):
  - 4 Inspectors: 1 Senior Resident Inspector, 2 Project Engineers, and 1 Reactor Engineer
  - Document Review
  - Turbine-Driven Auxiliary Feedwater Pump walkdown
  - Interviews, observations, and verification
  - Related equipment walkdown
  - Related issue review



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✓Constellation Evaluations Determined Root and Contributing Causes:

- Root Cause Analysis (RCAR) performed for each TDAFW failure and overspeed. Full Apparent Cause Evaluation for White PI
- RCAR & Common Cause Analysis (CCA) performed for collective issues
- Causes not fully identified at first opportunity but understood by second failure. First root cause analysis was narrowly focused. Addressed in 2nd and 3rd RCAR.
  - Equipment issues (control linkage / valve leakage / FME)
  - Organizational issues (critical investigation teams / processes)

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✓Constellation Evaluated the Generic Implications of the failures:

- RCARs included extent of condition and extent of cause reviews
- RCARs & CCA of failures and collective assessment developed CAs to repair and upgrade the TDAFW and make changes to the investigation process and OE review.
- Site-wide initiatives in implementing process changes and enforcing in-place processes
- Observable results in migration of investigation process

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✓Corrective Actions (CAs) Taken or Planned to Address Causes to Prevent Recurrence

- Corrective Actions to address the root causes
  - Replacement of governor control linkage components
  - Material changes to control valve stem
  - Increased frequency of testing, stem inspections, and weekly exercise of the control valve
  - Replacement of steam admission valves to upgraded design (future)
  - Changed problem investigation process / operations focused / inter-departmental control and checks
  - Changes to OE review process and applicability to process
  - Changes to work management to require consistent application of the process to delete or 'N/A' step(s)

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✓Observations:

No findings of significance, however:

- 1St RCAR narrowly focused. Improvements seen in follow-on RCARs
- OE Process changes still work in progress
  Expectations, work-flow, and documentation issues
- Issues regarding oversight group preparation to support effectiveness reviews
- Identified possibility of leakage past steam admission bypass valves
- Identified process weakness in OE input for medium and high risk work
- The challenge that remains is how effective the station is at implementing the corrective actions to ensure improved and sustainable performance

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- Summary:
  - No findings
  - Causes understood; Extent of Condition and Cause Evaluated
  - Correction Actions taken and planned are sufficient to address causes
  - Safety Culture components were appropriately considered and addressed in the evaluations
  - Independently assessed by team and generally agree with Constellation's assessment
  - Will be documented in 05-244 / 2010007 report

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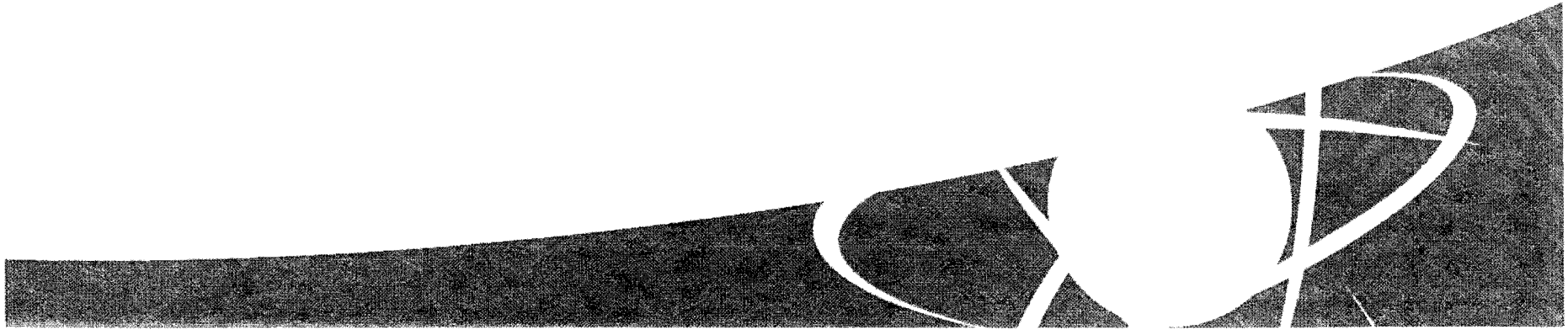
R. E. Ginna Nuclear Power Plant Response and Remarks



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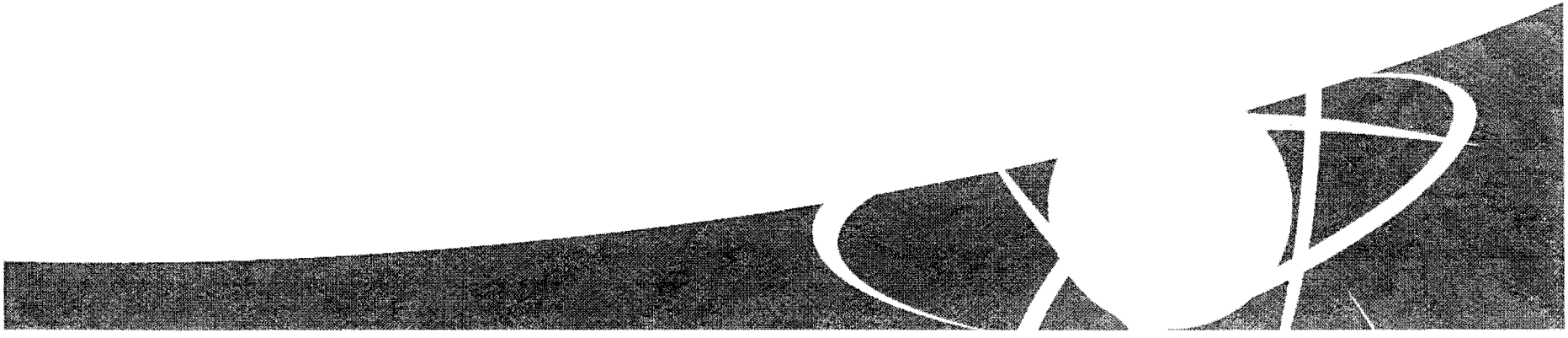
Regulatory Performance Meeting



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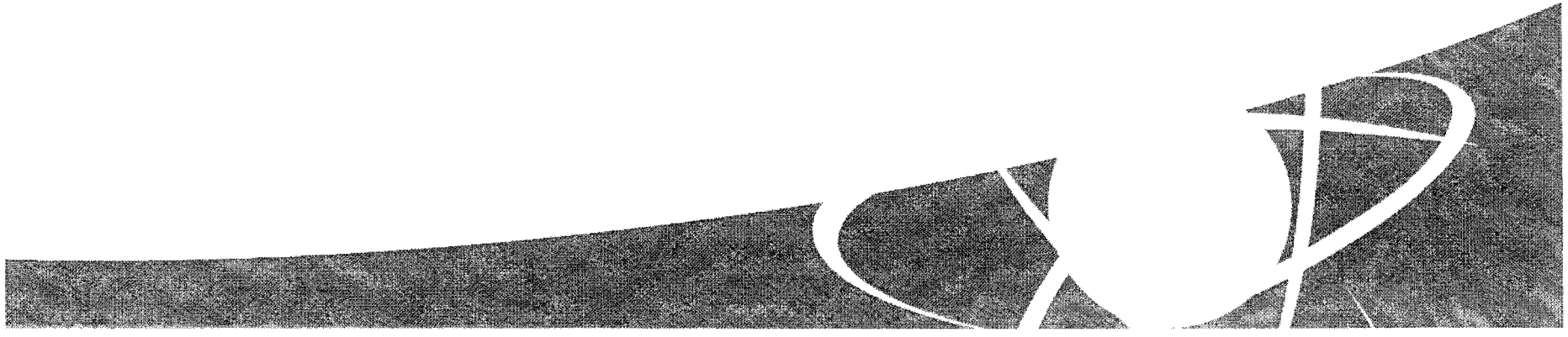
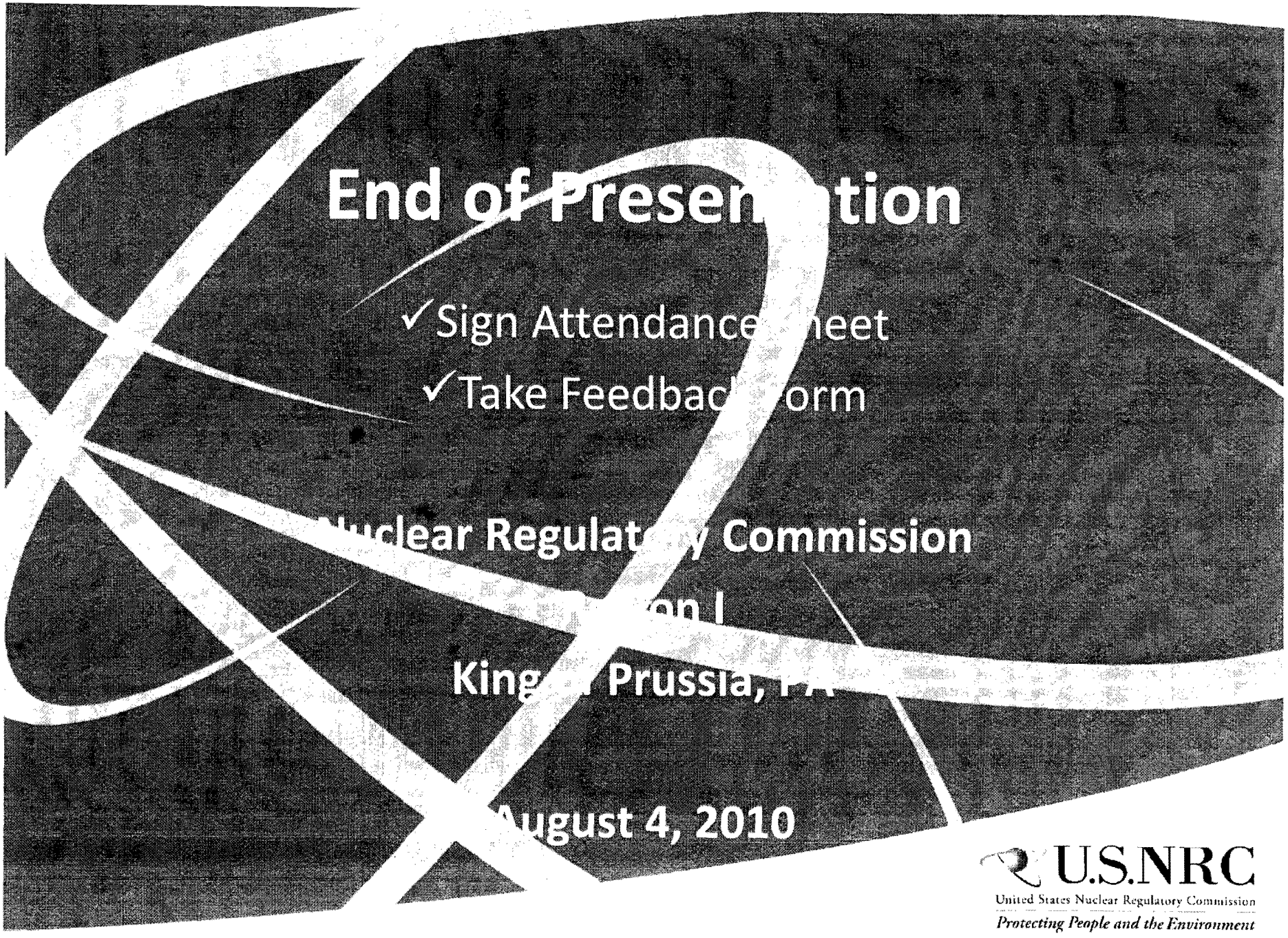
Questions?




End of Presentation
✓Sign Attendance Sheet
✓Take Feedback Form
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