

**U.S.NRC**

United States Nuclear Regulatory Commission

*Protecting People and the Environment*

**Zion Public Meeting  
June 18, 2008**

Proposed Zion License Transfer  
And Draft Post-Shutdown  
Decommissioning Activities Report

## **Purpose:**

- Discuss the NRC Decommissioning Process
- Discuss the proposed license transfer
- Discuss the Post Shutdown Decommissioning Activities Report (PSDAR)
- Solicit public comments

# **NRC Decommissioning Process**

- Permanently cease operations
- Certify permanent cessation of operations
- Certify fuel removed from reactor
- Submit PSDAR (within 2 years)
- Public meeting on PSDAR
- SAFSTOR and/or plant decommissioning
- License Termination Plan

# License Transfer Application

- Transfer licensed ownership, management authorities and decommissioning trust fund from Exelon to Zion Solutions (ZS), a subsidiary of Energy Solutions
- ZS was formed for the purpose of decommissioning Zion
- Title to the site real estate and the spent nuclear fuel will remain with Exelon (10 CFR 70.20)

# License Transfer Application

- ZS will construct and transfer the spent fuel to an ISFSI
- Following the decommissioning, planned for 10 years, the license will be transferred back to Exelon
- Application states that the transfer will accelerate site decommissioning

# License Transfers

- License transfers are relatively common
- License for Zion has been transferred previously (Com Ed to Exelon in 2000)
- This transfer is unique in that ZS is not an electric utility

## **License Amendment Review Process**

- Acceptance review
- Notice of Consideration published in Federal Register May 21, 2008
- Technical review
- If found acceptable an order and amendment will be issued

# Technical Review

- **Technical Qualifications**
  - Plant is permanently shutdown so operations criteria are not applicable
  - Qualifications focused on maintenance, fuel handling, ISFSI & decommissioning
- **Financial Qualifications**
  - Adequate funding based on methodology
  - Contingent funding

# **Draft Post-Shutdown Decommissioning Activities Report (PSDAR)**

- Draft report submitted by ZS is contingent on approval of license transfer
- PSDAR describes planned decommissioning activities, including a schedule and a cost estimate for the decommissioning, and assesses the environmental impacts
- ZS will further describe the content

## **Draft PSDAR**

- Submittal required by NRC regulations at 10 CFR 50.82(4)
- Original Zion PSDAR submitted February 14, 2000
- Public meeting for original PSDAR held on April 26, 2000
- PSDAR does not require NRC approval

## **Decommissioning Activities**

- Decommissioning work is limited by NRC regulations at 10 CFR 50.82(6)
- Cannot preclude unrestricted release of site
- Cannot result in significant environmental impacts not previously evaluated
- Cannot result in sufficient funds not being available for decommissioning

# NRC Licensing Contacts

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# Reactor Decommissioning Inspection Program

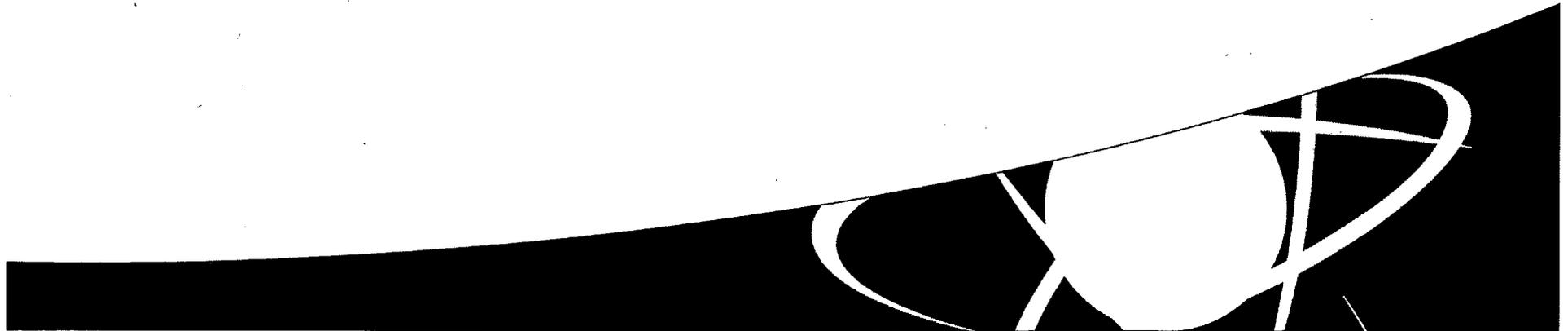
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# OBJECTIVES OF NRC INSPECTION PROGRAM



Obtain information through direct observation and verification of licensee activities

Ensure decommissioning activities are adequate and in accordance with regulatory requirements

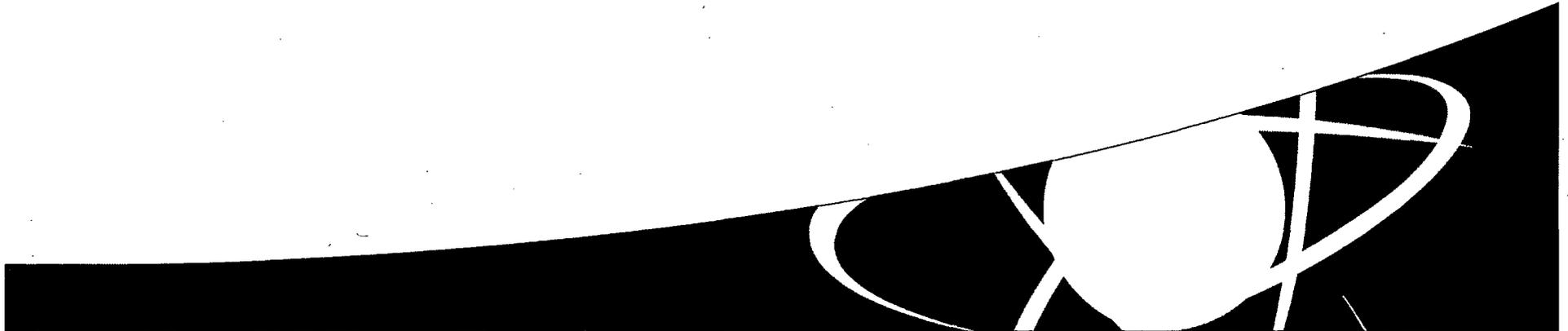


# OBJECTIVES OF NRC INSPECTION PROGRAM (CONTINUED)



Verify residual radioactivity reduced to a level that permits unrestricted release of property and termination of the license

Ensure safety of decommissioning workers, members of the public, and the environment

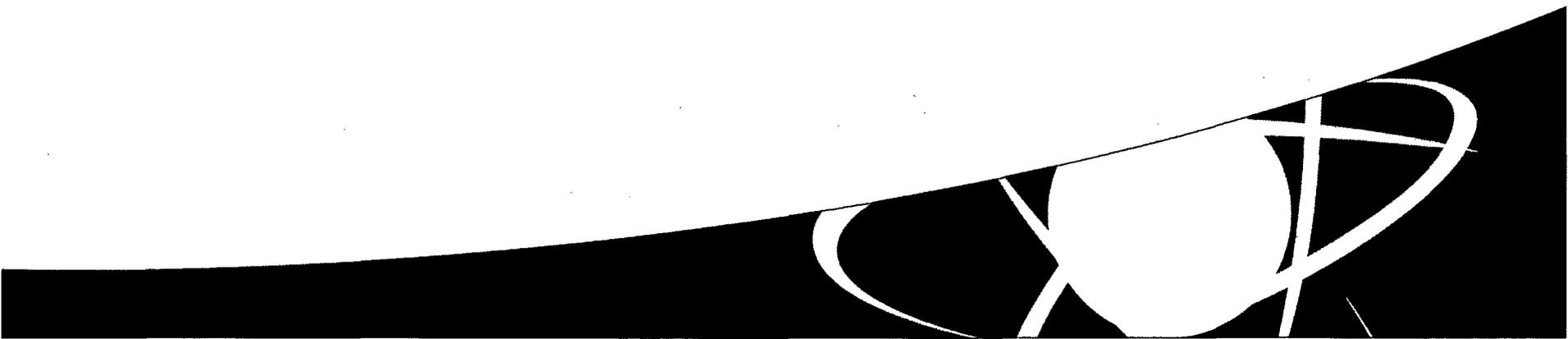


# FOCUS OF INSPECTION PROGRAM



Ensure NRC project oversight and inspection resources are effective, consistent, and appropriately focused

Verify that licensee documents are adequately implemented, maintained, and reflect status of decommissioning

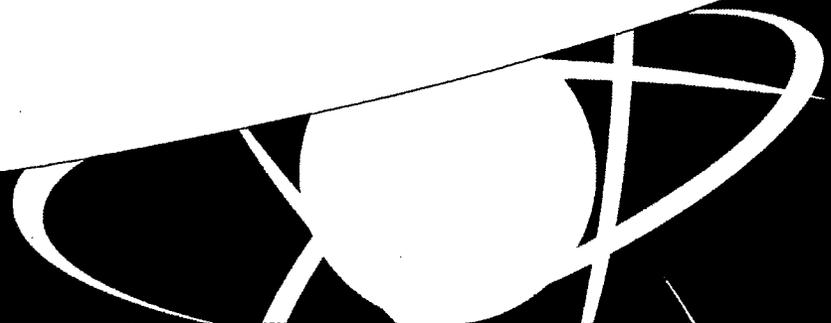


## **FOCUS OF INSPECTION PROGRAM (Continued)**



Verify that licensee activities, organization, and controls are effective to provide reasonable assurance that decommissioning can be conducted safely and in accordance with regulatory requirements

Ensure licensee radiation and radioactivity measurement programs provide accurate quantification and classification of radioactivity



# INSPECTIONS



Balanced look at a cross section of licensee activities important to the conduct of safe decommissioning.

Schedule based upon decommissioning activities being planned or performed

Provide flexibility in the application of inspection resources to promptly address any unexpected issues and problems

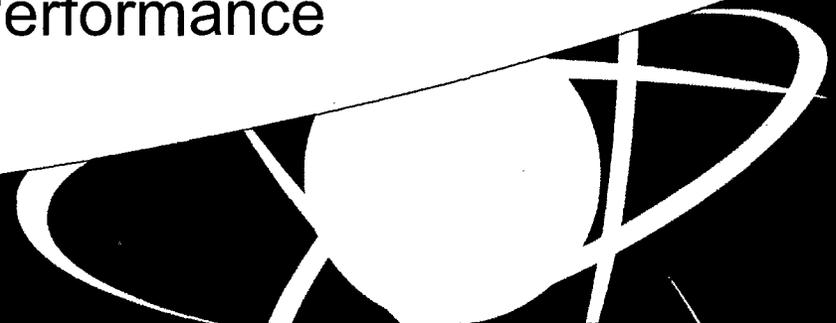


## **Core Inspections:**

- Organization and Management Controls
- Quality Assurance
- Spent Fuel Storage and Handling
- Maintenance and Surveillance
- Radiation Protection
- Security
- Safety Evaluations

## **Discretionary Inspections:**

- Augment Core Inspections
- Evaluate a Particular Safety Concern, or Aspect of Licensee Performance

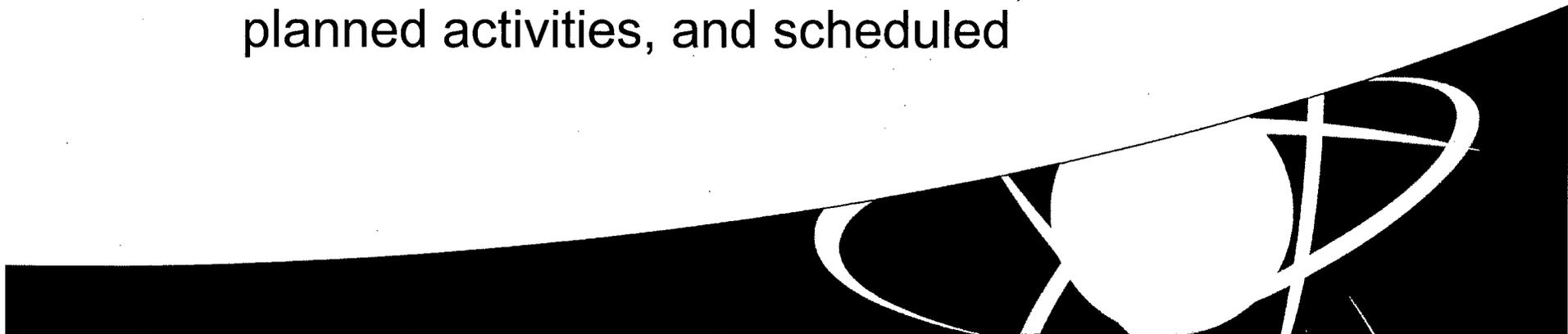


# MASTER INSPECTION PLANS



Region annually develops a site-specific Master Inspection Plan, based on:

- Plant status/phase of decommissioning
- Licensee performance, staffing plans, effectiveness of management oversight, timing and scheduling of significant activities
- Level of inspection is pre-planned, tailored to planned activities, and scheduled



## REGION III INSPECTORS



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