

# **PUBLIC MEETING WITH POINT BEACH NUCLEAR PLANT**



**Nuclear Regulatory Commission  
Region III**



# Meeting Purpose

- **Inform Public of the results of the NRC Inspection Procedure (IP) 95003 Inspection at Point Beach**
- **NRC staff available to answer questions from the Public**



# **Meeting Agenda**

- **Introductions**
- **Regulatory Oversight Process**
- **Results of IP 95003 Inspection at Point Beach**
- **Point Beach/NMC Presentation**
- **Questions and Answers**



# **NRC Personnel**

<b>Geoffrey Grant</b>	<b>Deputy Regional Administrator, Region III</b>
<b>Steven Reynolds</b>	<b>Acting Director, Division of Reactor Projects, Region III</b>
<b>Eric Leeds</b>	<b>Deputy Director, Division of Licensing Project Management, Office of Nuclear Reactor Regulation</b>
<b>Tony Vogel</b>	<b>Chief, Branch 7, Division of Reactor Projects, Inspection Team Leader</b>



# **NRC Personnel (con't)**

<b>Mike Kunowski</b>	<b>Project Engineer - Assistant Team Leader</b>
<b>Ken Riemer</b>	<b>Chief, Plant Support Branch, Division of Reactor Safety, Region III</b>
<b>Deirdre Spaulding</b>	<b>Project Manager, Office of Nuclear Reactor Regulation</b>
<b>Paul Krohn</b>	<b>Point Beach Senior Resident Inspector</b>
<b>Mike Morris</b>	<b>Point Beach Resident Inspector</b>



# **Point Beach/NMC Introduction**



# NRC Mission

**Regulate the Nation's  
civilian use of Nuclear  
Material to ensure adequate  
protection of Public Health  
and Safety.**



# **NRC Performance Goals**

- **Maintain safety and protect environment**
- **Enhance public confidence**
- **Improve:**
  - **effectiveness**
  - **efficiency**
  - **realism of processes and decision-making**
- **Reduce unnecessary regulatory burden**



# **NRC Oversight Activities**

- **Provide assurance plants are:**
  - **Operating safely**
  - **Complying with regulations**
- **Inspections focused on key safety areas**
- **Objective indicators of performance**
- **Assessment program triggers regulatory actions**



# Reactor Oversight Process

## SAFETY SIGNIFICANCE

---

**GREEN**

- very low

**WHITE**

- low to moderate

**YELLOW**

- substantial

**RED**

- high

<http://www.nrc.gov/NRR/OVERSIGHT/ASSESS/index.html>



# **Point Beach** **Auxiliary Feedwater/Instrument** **Air Red Inspection Finding**

- **Identified by Point Beach staff in November 2001**
- **NRC Special Inspection (Event Follow-Up Inspection) Dec. 2001 - Feb. 2002**
- **Red Finding - July 12, 2002 - but possible Old Design Issue**
- **Second Special Inspection - Sept. 2002 - March 2003**



# **Auxiliary Feedwater/Instrument Air Red Inspection Finding (Con't)**

- **Determined to not be an Old Design Issue**
- **April 2, 2003 - Final Determination: Red Issue**
- **April 2003 Agency Action Review Meeting - Decision to perform IP 95003 inspection at Point Beach**



# **Point Beach**

## **Auxiliary Feedwater/Recirculation**

### **Line Orifice Plugging Issue**

- **October 29, 2002 - Second Potential Common Mode Failure of Auxiliary Feedwater Pumps identified during routine system test**
- **Failure Mechanism - Plugging of the recirculation line flow orifices**
- **Inadequate Corrective Actions for first Auxiliary Feedwater issue contributed to the significance of the second issue**



# **Auxiliary Feedwater/Recirculation Line Orifice Plugging Issue (Con't)**

- **IP 95003 Inspection reviewed Point Beach corrective actions for Auxiliary Feedwater orifice plugging issue**
- **December 11, 2003 - Final Significance Determination: Unit 1 - Yellow Issue; Unit 2 - Red Issue**



# **Inspection Procedure (IP)**

## **95003**

**“Supplemental Inspection for Repetitive Degraded Cornerstones, Multiple Degraded Cornerstones, Multiple Yellows, or One Red Finding Input.”**

**Intent: Provide the NRC with supplemental information regarding licensee performance, as necessary to determine the breadth and depth of safety, organizational, and programmatic issues.**



# **IP 95003 Inspection Objectives**

- 1) Provide insights into overall causes of Performance Deficiencies**
- 2) Evaluate Programs and Processes**
- 3) Evaluate licensee ability to identify, evaluate, and correct problems**
- 4) Extent of Risk Significant Issues**
- 5) Provide NRC recommendation for further Regulatory Action**



# IP 95003

- **More diagnostic than baseline procedures**
- **Includes reviews of programs and processes not reviewed during baseline**
- **Reviews aspects of strategic performance areas that are known to be a problem as well as those aspects that are not known to be problems**
- **Results of the 95003 used in deciding what additional actions should be taken**



# **The Point Beach 95003**

- **Three Phases**
  - 1) **Corrective Action Team (CAT)**
  - 2) **Emergency Preparedness Team (EPT)**
  - 3) **Engineering, Operations, and Maintenance Team (EOMT)**



# **Corrective Actions** **Team (CAT)**

- **Review the Process, Programs, and Procedures for Identifying Problems**
- **Five Inspectors**
- **Two Weeks Onsite**  
**(July 28, 2003 - August 8, 2003)**



# **Corrective Action Team**

- **Reviewed several hundred Corrective Action documents**
- **Interviewed plant staff**
- **Reviewed Excellence Plan**



# **Corrective Action Team**

## **Summary of Results**

- **Adequate Corrective Action Program**
- **Inconsistent Implementation of Corrective Action Program:**
  - **Actions not completed**
  - **Actions not timely**
- **Excellence Plan - Encompasses major areas requiring performance improvement**



# **Corrective Action Team**

## **Summary of Results (Con't)**

### **First and Second Auxiliary Feedwater Red Issues**

- **Adequate investigation of events**
- **Root cause evaluation for second finding was thorough**
- **Appropriate corrective actions identified**
- **Inconsistent implementation of corrective actions**



# **Emergency Preparedness** **Team (EPT)**

- **Ensure the Emergency Preparedness Program Complies with Regulations and Follows Commitments**
- **Four Inspectors**
- **Two Weeks (August 4-15, 2003)**



# **Emergency Preparedness Team (EPT)**

## **Reviewed**

- **Facilities and Equipment**
- **Emergency Preparedness Procedures**
- **Emergency Preparedness Exercise**



# EPT

## Summary of Results

- **Adequate Implementation of Emergency Preparedness (EP) Program**
- **Successful EP Exercise Observed**
- **Some Challenge Areas:**
  - **EP Staff Experience and Training**
  - **Maintenance of EP Licensing Basis**
  - **Understanding EP Regulatory Requirements**



# EPT

## Summary of Results (Con't)

### Findings:

- **Apparent Violation - Failure to Maintain a Standard Emergency Action Level Scheme**
- **Three Preliminary Green Findings**
- **One Potential Severity Level IV Violation regarding performance indicators**
- **One Unresolved Item regarding Protective Action Recommendations**



# **Engineering, Operations, and Maintenance Team Inspection (EOMT)**

- **Review the Processes, Programs, and Procedures for Engineering - Particularly, Design Engineering**
- **Eight Inspectors**
- **Three Weeks of Inspection (September 2003)**



# **Engineering, Operations, and Maintenance Team Inspection (EOMT) (cont'd)**

- **Corrective Action Implementation**
  - **Auxiliary Feedwater System**
  
- **Design**
  - **Component Cooling Water System**
  - **125-Volt Direct Current System**



# Engineering, Operations, and Maintenance Team Inspection (EOMT) (cont'd)

- **Human Performance**
- **Procedure Quality**
- **Equipment Performance**
- **Configuration Control**



# **Engineering, Operations, and Maintenance Team Inspection**

## **Summary of Results**

- **Component Cooling Water System:  
Design and licensing basis understood  
and controlled**
- **125-Volt DC System:  
- Design calculations control  
deficiencies**



# Engineering, Operations, and Maintenance Team Inspection

## Summary of Results (Con't)

- **125-Volt DC System: (Con't)**
  - **Control of Design Basis is a challenge**
  - **Design is Robust**
  - **System is operable**



# Engineering, Operations, and Maintenance Team Inspection

## Summary of Results (Con't)

### Corrective Actions

**Multiple Examples of untimely or inadequate implementation of corrective actions**



# **Engineering, Operations, and Maintenance Team Inspection**

## **Summary of Results (Con't)**

### **Preliminary Inspection Findings:**

#### **Seven Green Findings**

**(Very Low Safety Significance) -**

**2 Design Control**

**1 Fire Protection**

**1 Test Control**

**1 Procedures**

**1 Corrective Actions**

**1 Environmental Qualification**



# **Inspection Procedure (IP)** **95003 Inspection**

## **Overview of Results**

**Objective #1 - Provide insights into overall causes of Performance Deficiencies**

- **Causes for Red Findings**

- **Lack of understanding of design**
- **Corrective Action Program weaknesses**
- **Weak Operations/Engineering interface**



# IP95003 Inspection

## Overview of Results (Con't)

- **Causes for Emergency Preparedness Performance Problems**
  - **Lack of Understanding of Requirements**
  - **Management Oversight**



# **IP95003 Inspection**

## **Overview of Results (Con't)**

### **Objective #2 - Evaluate Programs and Processes**

- **Operations and Maintenance Programs were Adequate**
- **Operations/Engineering Interface remains a challenge**



# **IP95003 Inspection**

## **Overview of Results (Con't)**

- **Engineering**

- **Operability Determinations (long standing)**
- **Modification Process Rigor**
- **Electrical Design Control Weaknesses**
- **Quality and Understanding of Electrical Design Calculations**



# **IP95003 Inspection**

## **Overview of Results (Con't)**

### **Objective #3 - Evaluate Corrective Action Process**

- **Corrective Action Program is sound**
- **Implementation of Program is a challenge**
  - **Identification - Good**
  - **Assessing Problems - Adequate**
  - **Fixing Problems - Inconsistent**



# IP95003 Inspection

## Overview of Results (Con't)

### **Objective #4 - Extent of Risk Significant Issues**

**The Team did not identify any systems that could not perform safety function**



# **IP95003 Inspection**

## **Overview of Results (Con't)**

- **Verified Auxiliary Feedwater System - Operable**
- **Component Cooling Water System - Good control of design and licensing basis**
- **125-Volt DC system**
  - **Operable**
  - **Design control a challenge**



# **IP95003 Inspection**

## **Overview of Results (Con't)**

### **Objective #5 - Recommendation for further Regulatory Action by NRC**

- **Plan to Conduct Additional Inspections Above Baseline**
- **Plan to Confirm that Corrective Actions are being taken and that performance improves**



# **IP95003 Inspection**

## **Overall Conclusion**

**Point Beach is being operated Safely**

### **Challenge Areas -**

- Corrective Action Implementation**
- Emergency Preparedness**
- Engineering Design Control**

**Continued Supplemental Regulatory Oversight is Warranted**



# Inspection Report

- **Expected issuance -  
early January 2004**
- **Publicly Available -  
Through NRC Web Site**



# Afterward

- **Verification of Excellence  
Plan Implementation**
- **Follow-Up Inspections**



# **POINT BEACH PRESENTATION**



# **NRC CLOSING REMARKS**



**QUESTIONS ?**



## **Contacts for Additional Information**

- **Regional Public Affairs Officer**
  - **Jan Strasma or Viktoria Mitlyng**
  - **Phone: (630) 829-9663 or 829-9662**
  - **E-mail: opa3@nrc.gov**
  
- **Website: <http://www.nrc.gov>**



# **Contacts for Additional Information** **(con't)**

- **Point Beach Resident Inspector Office**
  - **Paul Krohn, Senior Resident Inspector**
  - **Mike Morris, Resident Inspector**
  - **Phone: (920) 755-2309**