



UNITED STATES  
NUCLEAR REGULATORY COMMISSION

U.S. NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

**TRANSMITTAL OF MEETING HANDOUT MATERIALS FOR  
IMMEDIATE PLACEMENT IN THE PUBLIC DOMAIN**

*This form is to be filled out (typed or hand-printed) by the person who announced the meeting (i.e., the person who issued the meeting notice). The completed form, and the attached copy of meeting handout materials, will be sent to the Document Control Desk on the same day of the meeting; under no circumstances will this be done later than the working day after the meeting.  
**Do not include proprietary materials.***

DATE OF MEETING

01/25/2000

The attached document(s), which was/were handed out in this meeting, is/are to be placed in the public domain as soon as possible. The minutes of the meeting will be issued in the near future. Following are administrative details regarding this meeting:

Docket Number(s) 50-269, 50-270, 50-287, 50-413, 50-414, 50-369, 50-370

Plant/Facility Name OCONEE, CATAWBA, and MCGUIRE

TAC Number(s) (if available) MA6842

Reference Meeting Notice 01/05/2000

Purpose of Meeting  
(copy from meeting notice) The NRC and DEC jointly sponsored licensing workshop.  
to improve licensing interface between the licensee and NRC.

NAME OF PERSON WHO ISSUED MEETING NOTICE

Frank Rinaldi

TITLE

Duke Energy Corporation (DEC) Licensing Workshop

OFFICE

NRR

DIVISION

DLPM

BRANCH

PD II-1

Distribution of this form and attachments:

Docket File/Central File

PUBLIC

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## AGENDA

### NRC and Duke Energy Corporation (DEC) Licensing Workshop

January 25-26, 2000

DEC's HQ. @ 526 South Church St., Charlotte, NC

#### January 25

9:00 – 9:15	Introduction/Orientation	H. Berkow/M. Tuckman
9:15 – 9:45	Deregulation Impact on Duke	T. Dimmery
9:45 – 10:00	NOEDs : Weather Related	H. Berkow
10:00 – 10:30	ADAMS	D. LaBarge
10:30 – 10:45	Break	
10:45 – 12:00	Regulatory Issues	J. Thomas
12:00 – 1:00	Lunch	
1:00 – 1:30	Licensing Processes – NRC's Perspective	C. Patel
1:30 – 2:00	Licensing Processes – DEC's Perspective	J. Thomas
2:00 – 2:30	Attributes of a Good Relief Request	F. Rinaldi
2:30 – 2:45	Break	
2:45 – 4:15	Attributes of a Good TS Amend (Breakout)	All
4:15 – 4:30	Summary/Conclusions of Breakout Sessions	All

**AGENDA (Continued)**

**NRC and Duke Energy Corporation (DEC) Licensing Workshop**

**January 25-26, 2000**

**DEC's HQ. @ 526 South Church St., Charlotte, NC**

January 26

8:00 – 8:30	Risk Informed Applications - Plant PRA Models	D. Brewer
8:30 – 9:00	Redefinition of DLPM	R. Emch
9:00 – 10:15	Critique Licensing Submittals (Breakout)	All
10:15 – 10:30	Summary/Conclusions from Breakout	All
10:30 – 11:00	Workshop Conclusions and Closing Comments	H. Berkow/J. Fisicaro
11:00	End of Workshop	

**DUKE/NRC LICENSING WORKSHOP  
626 SOUTH CHURCH ST.  
CHARLOTTE, NC  
JANUARY 25-26, 2000**

On a scale of 1 to 10, please provide an *overall* rating for workshop effectiveness\_\_\_\_\_.

<b>Excellent</b>	<b>Very Good</b>	<b>Good</b>	<b>Fair</b>	<b>Unsatisfactory</b>
10-----9-	-8-----7-	-6-----5-	-4-----3-	---2-----1-

1. COMMENT ON FORMAT AND CONTEXT OF THE WORKSHOP.

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2. WHAT WERE THE WORKSHOP'S STRENGTHS?

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3. WHAT WERE THE WORKSHOP'S WEAKNESSES?

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**4. WHAT WOULD YOU CHANGE FOR FUTURE WORKSHOPS?**

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**5. HOW WILL YOU USE WHAT YOU'VE LEARNED AT THE WORKSHOP?**

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**6. SHOULD THESE WORKSHOPS BE HELD PERIODICALLY AND, IF SO, AT WHAT FREQUENCY?**

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**7. OTHER COMMENTS?**

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# Table of Contents

*NRC NRR / Duke*

*Licensing  
Workshop*

*January 25-26  
2000*

<b>1</b>	<i>Deregulation Impact on Duke</i>
<b>2</b>	<i>Notice of Enforcement Discretion</i>
<b>3</b>	<i>ADAMS</i>
<b>4</b>	<i>Regulatory Issues</i>
<b>5</b>	<i>Licensing Processes – NRC Perspective</i>
<b>6</b>	<i>Licensing Processes – Duke Perspective</i>
<b>7</b>	<i>Relief Requests</i>
<b>8</b>	<i>TS Submittals</i>
<b>9</b>	<i>Risk Informed Applications</i>
<b>10</b>	<i>Redefinition of DLPM</i>

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# **Deregulation and Duke Power**

**Terry Dimmery**  
**Nuclear Business Manager**  
**January 25, 2000**



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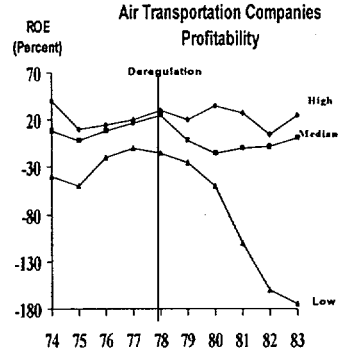
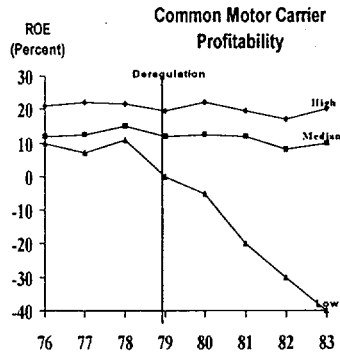
## **Overview**

- **Deregulation / Competition**
  - Restructuring activities across the United States
  - Restructuring initiatives underway in the Carolinas
- **Nuclear Power**



## In Other Industries The Effects of Competition Have Been Dramatic

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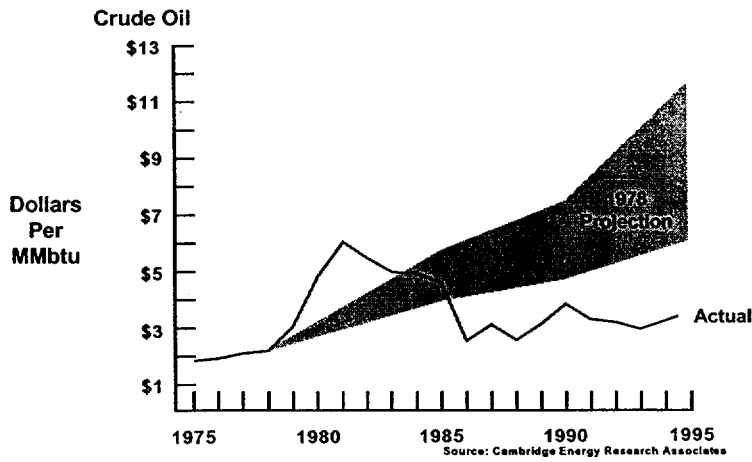
← Top Five Carriers → Next Five Carriers → Others

← Top Five Carriers → Next Five Carriers → Others



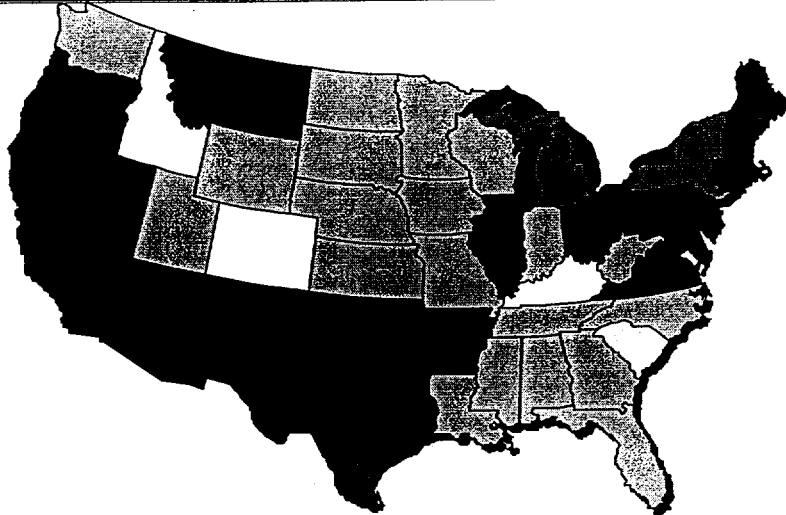
## A View of Projections....

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## Electric Industry Restructuring Activity in the United States



■ Legislation Passed (21) ■ PUC Endorsed (3) ■ Study or Inquiry (22) □ Legislation Pending (1) □ Rejected (3)

Source: Edison Electric Institute



## Initiatives Underway in the Carolinas

### North Carolina

- NC Study Commission met and held public hearings in 1998.
- NC Utilities Commission held informal information sessions.
- NC Study Commission to submit final recommendations to the General Assembly in early 2000.

### South Carolina

- South Carolina Public Service Commission submitted a report to General Assembly in February, 1998.
- House of Representatives LCI Committee held hearings.
- Senate set-up a task force to make a recommendation to the General Assembly.
- Three comprehensive restructuring bills were introduced in the House of Representatives in 1999.



## Restructuring Issues in North Carolina & South Carolina

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- Municipals
- Co-Ops



Mo Mo  
2/1 - 100

## Nuclear Power

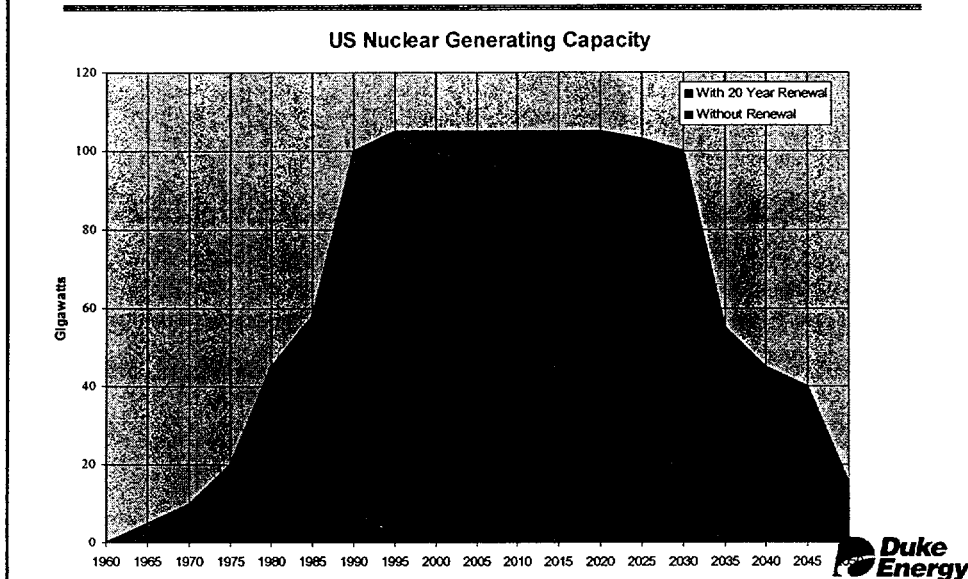
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- 437 Nuclear Generators Worldwide
  - 103 in the US
    - Approx 22% of the country's total electricity consumption
- Duke operates three nuclear stations that have a combined capacity of approximately 7,000 MW's
  - Catawba (12.5% Ownership) 2,258 MW's
  - McGuire 2,200 MW's
  - Oconee 2,538 MW's



1500 MW  
1999, 2000

## Capacity Expiration



## Focus of Nuclear Generation

- Continued to be focused on 3 Key Objectives
  - Nuclear safety
  - Production
  - Financial Performance
- Operating existing 7 units to achieve Key Operating Results
  - Cost per kWh
  - INPO ratings
  - NRC evaluations
  - Capacity factors

## Nuclear Outlook

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### *Nuclear Generation is seeing...*

- Environmental restrictions making nuclear more attractive
- Consolidation of nuclear generation in several companies (acquisition)
- Increasing number of plants to be re-licensed
- High stranded costs for some plants based on investment
- Transition period in a deregulated environment
- Early shutdown of some plants due to economics



## Potential Risks and Opportunities

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Nuclear is a mature industry with a low cost of production. Will be a strong player in deregulated markets if we continue to manage:

- Regulatory uncertainty
- Ability to contain costs
- Transition to competition
  - Ability to recover stranded costs
  - Decommissioning costs
- Nuclear incident at Duke Power, or in the industry
- Waste disposal
- Shrinking nuclear community
- Unforeseen technical problems
- Workforce
  - Technical expertise
  - Labor relations
  - Environment
- Importance of nuclear power in emissions avoidance



# **Summary**

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**Duke Energy Policy Committee**

**deliberating next steps on**

**Restructuring Plan**



# **NOTICES OF ENFORCEMENT DISCRETION**

**REVISED STAFF GUIDANCE - PART 9900**



**Herb Berkow  
Division of Licensing Project  
Management  
Office of Nuclear Reactor  
Regulation**

# **SIGNIFICANT CHANGES TO THE NOED GUIDANCE**

**PART 9900 GUIDANCE WAS REVISED  
ON JUNE 29, 1999**

- **PROCESS IMPROVEMENTS FOR NOEDs  
RELATING TO SEVERE WEATHER OR OTHER  
NATURAL EVENTS**
  - ▶ **Previously an enforcement discretion, now  
an NOED**
  - ▶ **Prior Commission approval not required**
  
- **STAFF DOCUMENTATION CHANGES**

# **PROCESSES FOR ADDRESSING NON-COMPLIANCE WITH REQUIREMENTS**

■ **NOEDS ARE APPROPRIATE ONLY FOR  
NON-COMPLIANCE WITH TS OR OTHER  
LICENSE CONDITIONS**

■ **NOEDS ARE NOT APPROPRIATE FOR  
NON-COMPLIANCE WITH:**

- **REGULATIONS -PROCESS EXEMPTIONS -10 CFR  
50.12**
- **CODES -PROCESS RELIEFS -10 CFR 50.55a**
- **UFSAR -CHANGE PER 10 CFR 50.59 OR  
OPERABILITY DETERMINATION GL 91-18 REV. 1  
AND PROCESS LICENSE AMENDMENT -10 CFR  
50.90**



# **TWO TYPES OF NOEDs**

- **(1) RADIOLOGICAL SAFETY CONSIDERATIONS (REGULAR NOED)**

FORCED COMPLIANCE WITH LICENSE WOULD INVOLVE PLANT-RELATED RISKS DUE TO UNNECESSARY TRANSIENT

- **(2) OVERALL PUBLIC HEALTH AND SAFETY CONSIDERATIONS (A SEVERE EXTERNAL CONDITION - RELATED NOED).**

FORCED COMPLIANCE WITH LICENSE MAY AFFECT GRID STABILITY, EXACERBATING IMPACTS OF SEVERE WEATHER OR OTHER NATURAL EVENTS ON OVERALL PUBLIC HEALTH AND SAFETY

# SEVERE WEATHER/NATURAL EVENT NOEDS

- **HISTORY & EVOLUTION**
- **CURRENT GUIDANCE & PRACTICE**
  - government or responsible independent entity makes assessment that need for power and overall public health & safety considerations constitute an emergency situation
  - staff must balance public health & safety implications with potential radiological risks
  - risks must be acceptably small
- **EXAMPLES**

4 granted *ppb* *Don't by color instead Hog sh...*
- **WEATHER-RELATED VS. "REGULAR" NOED**

compliance issue vs. degraded or inoperable component/system

*Requested vs. granted 2*

# OTHER PROCESS CHANGES

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- ALL NOED-RELATED TELECONFERENCES ARE MADE THROUGH THE NRC HEADQUARTERS EMERGENCY OPERATIONS CENTER RECORDED TELEPHONE LINE (301) 816-5100.
  
- LICENSEES ARE NO LONGER REQUIRED TO STATE WHETHER:
  - ▶ prior adoption of TS enhancement initiatives (GL 87-09, Line Item Improvements or the Improved Standard TS) would have obviated the need for the NOED
  
  - ▶ the noncompliance involves a USQ
  
  - ▶ FOR ALL NOEDs (REGIONAL OR NRR) REGION TO OPEN AN UNRESOLVED ITEM (URI).  
*D. LTR unless other requirement would warrant it.*
  
  - ▶ This will facilitate:
    - tracking
    - verification of resolution activities
    - documentation and closure of inspection
    - enforcement action determination

## A BRIEF OVERVIEW OF ADAMS

by David LaBarge

- 1 What It Is
  - a ADAMS - Agencywide Documents Access and Management System
  - b Ensures long-term viability of electronic records in conformance with National Archives and Records Administration standards and guidelines
  - c Provides ability to send and receive documents in electronic form to and from NRC stakeholders using a process called Electronic Information Exchange (EIE)

- d Maintains non-revisable, read-only records (Official Agency Records) that can be read from multiple locations**
  
- e Full-text search capability to locate an electronic copy of the original document by the NRC and public**

- f** Allows conversion from paper-based to electronic-based document management system. The electronic documents become the official record.
  
- g** Replaces the Nuclear Documents System (NUDOCS), the Public Document Room's Bibliographic Retrieval System (BRS), and the Regulatory Information Distribution System (RIDS).

## **2 Status**

- a Public meeting held at headquarters on 12/10/99.**
- b Implemented on a limited scale**
- c Incoming paper documents are scanned in, converted to Tagged Image File Format (TIFF) for record purposes and ASCII using Optical Character Recognition for text search capability. Paper copies saved for 60 days then destroyed.**

- d Paper copies of internally-generated documents continue to be dispatched. Plans are to stop sending paper copies when ADAMS is implemented.**
  
- e Living Documents - documents that are kept up to date today by replacing segments at a time or by replacing pages (Technical Specifications, UFSARs) - will continue to be distributed in paper form.**



- f** Goal is to have documents that are submitted processed into ADAMS within 8 hours of receipt.
  
- g** Incoming and outgoing documents are being added to ADAMS. Per the General Release Policy, incoming documents are made available to the general public 3 working days after they are added to ADAMS by the Document Control personnel. Outgoing documents are released 3 working days after the date of the document, which is usually the same day it is added to ADAMS.

### **3 Electronic Information Exchange (EIE)**

- a Participation is voluntary**
- b Open to any person or organization doing business with the NRC such that a submittal or receipt of documents is required that must have a signature.**
- c To participate in EIE, must have (1) access to Internet via Internet Explorer or Netscape, and (2) apply for and be granted a "digital certificate" thru NRC.**

- d 3 plants (Fermi, Grand Gulf, Calvert Cliffs) have volunteered to participate in pilot program to begin in February/March assuming the pilot program is approved by NRR.
- e 5 meg limit (approx. 1000 pages). Larger documents can be submitted with notice.
- f Documents can be submitted in PDF Normal, PDF, WORD, WordPerfect formats. To be expanded later to include other formats such as ASCII.

- g Process: NRC will sign a document, place it on the NRC EIE external server, send an email message to intended recipient alerting them to availability of the document on the server. Recipient will use NRC external server to transfer document over the Internet to their computer system.**
  
- h Public will not have access to EIE. Can use ADAMS to get such documents.**

#### **4 Sensitive Information**

- a Special handling to protect security, proprietary, sensitive information protected by ADAMS procedures and software.**
- b Safeguards information will not be included in ADAMS.**

## **5 NUDOCS**

- a Contains microfiche addresses of documents processed by NRC and submitted by licensees and others. Documents are stored on microfiche.**
- b Documents dated prior to November 1, 1999, will continue to be stored in the microfiche library. Will not be converted to ADAMS environment. Paper copies will be retained.**
- c Once ADAMS is in place, NUDOCS will no longer be available.**
- d ADAMS Legacy Library to be used to conduct document searches to find the microfiche addresses.**

## **6 Unresolved Items**

- a How living documents will be handled.**
- b How to implement Electronic Information Exchange. Policies and procedures need to be proposed, rulemaking initiated and issued for public comment.**
- c Rulemaking to specify formats that will be acceptable for submittals.**

- d Issues related to EIE signature authority and its delegation
- e When electronic submittals should start.
- f Quality of OCR documents is very poor, making searches unreliable.



## **7 Accessing ADAMS**

- a Internet address: NRC.gov**
- b At bottom of page, click on “Public Electronic Reading Room” (PERR)**
- c Click on “How Do I Install ADAMS.” Follow instructions on web page.**

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↑ ↑ ↑

Entry click

- d Return to PERR and select one of the ADAMS launch options.
  - e Help is available on web page or by phone (800-397-4209 or 202-634-3273).
- 8 We request that complementary copies of submittals continue to be sent to the respective PM until we have confidence in ADAMS.



# ***Regulatory Issues***

## ***An Industry Perspective***

### ***Discussion Topics***

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- Performance Indicator Issues
- Performance Indicator Status
- Updated Final Safety Analysis Report (UFSAR) Issues
- 10CFR50.59 Rulemaking
- Licensing Action Issues
- Planned Tech Spec Submittals

## ***Performance Indicator Issues***

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- No Formal Process to Modify/Add PIs
- Inadequate Definitions and Thresholds
  - Security Equipment Compensatory Actions
  - Safety System Unavailability
- PI Reporting Period Too Short
  - 14 day reporting period imposes a hardship on utility resources and impacts accuracy
  - Need for 14 day period not established
  - Industry recommends that PI reporting period be extended from 14 days to 30 days

*21 day  
reasonable  
from 14 days*

3

## ***Performance Indicator Issues***

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### **INADEQUATE DEFINITIONS AND THRESHOLDS**

- Protected Area Security Equipment Performance Index: Amount of time CCTVs and IDS are unavailable, as measured by compensatory hours, to the total hours in the period

**≤ 0.050**

GREEN

**> 0.050**

WHITE

**> 0.150**

YELLOW

- Pilot/Shadow Plant data suggest that Green/White threshold is too high
- Yellow band inappropriately labels conditions allowed by the Physical Security Plan as representing a significant reduction in the margin of safety
- Penalizes plants for past business decisions
- Compensatory actions versus out of service hours

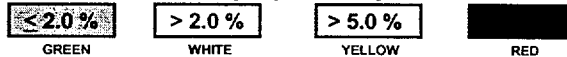
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## ***Performance Indicators***

### **INADEQUATE DEFINITIONS AND THRESHOLDS**

- **Safety System Unavailability:** The ratio of the hours the train is unavailable to the number of hours the train is required to be able to perform its intended safety function. The PI is calculated separately for each of the following four systems:

- **High Pressure Safety Injection System**



- **Auxiliary Feedwater System**



- **Emergency AC Power System**



- **Residual Heat Removal System**



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## ***Performance Indicators***

### **INADEQUATE DEFINITIONS AND THRESHOLDS**

- Inconsistency between NRC, INPO, WANO, EPIX
- Need alignment between PI Reporting and Maintenance Rule
- Inadequate definition for safety system unavailability
- Current list of systems only account for about one-third of the contribution for core damage frequency

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# Performance Indicator Status

Oconee 1 Oconee 2 Oconee 3 McGuire 1 McGuire 2 Catawba 1 Catawba 2

INITIATING EVENTS CORNERSTONE							
Unplanned Scram Rate		W					
Scrams - Loss of Normal Heat Sink							
Rate of Unplanned Power Changes							
MITIGATING SYSTEMS CORNERSTONE							
Emergency AC Power System							
High Pressure Safety Injection System		W					
Auxiliary Feedwater System							
Residual Heat Removal System						W	
Safety System Functional Failures							
BARRIER INTEGRITY CORNERSTONE							
RCS Specific Activity							
RCS Leakage							
Containment Leakage							
EMERGENCY PREPAREDNESS CORNERSTONE							
Drill/Exercise Performance							
ERO Drill Participation							
Alert Notification System Reliability							
OCCUPATIONAL RADIATION SAFETY CORNERSTONE							
Exposure Control Effectiveness							
PUBLIC RADIATION SAFETY							
Radiological Effluent Occurrence							
PHYSICAL PROTECTION CORNERSTONE							
Security Equipment Performance Index							
Screening Program Performance							
FFD Program Performance							

7

per 700000

## UFSAR ISSUES

- Operations Inconsistent With The Licensing Basis
- Design Basis Interpretation
- Content
- Updates

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## ***UFSAR ISSUES***

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### **OPERATIONS INCONSISTENT WITH UFSAR**

#### ■ Important Milestones

- December 1995 -- OIG Event Inquiry Concludes NRC Failed to Adequately Regulate Millstone Unit 1
- March 1996 -- IN 96-17 Alerts Licensees to Instances of Reactor Operations Inconsistent With The Licensing Basis
- June 1996 -- NEI Issues NEI 96-05, "Guidelines For Assessing Program for Monitoring the Licensing Basis"

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## ***UFSAR ISSUES***

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### **OPERATIONS INCONSISTENT WITH UFSAR**

#### ■ Important Milestones

- August 1997 -- Duke Initiates UFSAR Accuracy Project to Confirm Accuracy and Completeness
- March 2000 -- End of NRC Discretion Period for UFSAR Inconsistencies Involving Risk Significant Items
- March 2001 -- End of NRC Discretion Period for Other UFSAR Inconsistencies

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## ***UFSAR ISSUES***

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### **DESIGN BASIS INTREPRETATION**

- Focus Is on Putting Proper Bounds Around 10CFR50.2 Design Bases
- Common Understanding Important to
  - UFSAR Updates
  - Inspection & Enforcement
  - 10CFR50.59

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## ***UFSAR ISSUES***

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### **CONTENT**

- Level of Detail
- Removal of Information
- Format
- Historical Information
- Temporary Modifications
- Addressing Generic Letters and Bulletins
- Incorporation By Reference
- Updates

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## **10CFR50.59 Rulemaking**

### ■ Milestones (10/99 and Forward)

- 10/4/99 Final Rule published In Federal Register
- 12/20/99 NEI submits revised NEI 96-07 to NRC *Industry*
- 1/18/00 NEI submits final draft of NEI 96-07 to NRC *Revised Submittal to Commission*
- 4/10/00 NEI Industry Workshop
- 4/30/00 NEI submits final version of NEI 96-07
- 5/30/00 Final Regulatory Guide to Commission for Approval
- 6/30/00 Commission Approves Final Regulatory Guide (est.)
- 9/30/00 Licensee Implementation (est.)

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## **10CFR50.59 Rulemaking**

### ■ Major Changes

- Allows changes that have minimal safety impact to be made without prior NRC approval
- Clarified criteria for determining when changes, tests and experiments require full evaluation under 10CFR50.59
- "Malfunction of a different type" is being replaced with "malfunction with a different result"
- Margin of safety Criteria is being replaced with two new criteria:
  - Criterion (vii) - Evaluation of fission product barrier integrity
  - Criterion (viii) - Changes to approved evaluation methods

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## ***10CFR50.59 Rulemaking***

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- Impacts
  - Revision to NSD 209, 10CFR50.59 Evaluations
  - Revision to Training Documents
  - Retraining of all 10CFR50.59 qualified personnel
- Benefits
  - Overall improvement over previous rule language
  - Removes “safety” terminology from rule
  - Agreed upon Industry/NRC Guidance/Definitions
  - Promotes stability in rule application

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## ***Licensing Actions***

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- Minor TS Discrepancies
- TS Line Item Improvements
- Task Interface Agreements
- Planned Submittals

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## ***Licensing Actions***

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### **MINOR TS DISCREPANCIES**

- No Simplified Process to Address Minor TS Discrepancies
  - Unnecessary plant evolution or other action that results from an erroneous TS requirement
  - May arise from an editorial error, an administrative error or a technical inconsistency between a TS requirement and the underlying intent of the requirement
  - The underlying intent is defined in documents submitted to or received from the NRC and is not contradicted by other documentation of which the licensee is aware

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## ***Licensing Actions***

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### **MINOR TS DISCREPANCIES**

- When Minor TS Discrepancies Are Identified
  - Continued operations should be permissible if
    - ⇒ Interim TS requirement complies with the technical intent and underlying purposes of the affected TS
    - ⇒ Corrected TS requirement is defined and implemented
    - ⇒ Application to amend the TS to correct the discrepancy will be submitted within 60 days
    - ⇒ All applicable TS requirements will continue to be satisfied

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## ***Licensing Actions***

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### **TASK INTERFACE AGREEMENTS**

- Current Process
  - Usually caused by a request from inspector
  - NRR performs reviews
  - Occasionally has generic implications
  - Can take months or years for completed reviews
  - Typically, utility has no knowledge or input
  - Inspectors may be reluctant to disagree with NRR

?

*New Approach*

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## ***Licensing Actions***

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### **TASK INTERFACE AGREEMENTS**

- Suggested Improvements
  - Inform Utility when TIA is submitted to NRR
  - Allow utility and NRR proper dialogue to ensure correct information
  - Allow utility to provide input via written documentation as appropriate
  - Once NRR prepares draft, provide dialogue with utility (information only)
  - Send to utility when TIA is finalized

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## ***Licensing Actions***

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### **LINE ITEM IMPROVEMENTS**

- Regulations 50.90 & 50.91 Require:
  - Description of desired change (50.90)
  - No Significant Hazards Consideration Analysis (50.91)
- Regulations Apply Even if Proposed Change:
  - Is fully consistent with NRC-accepted GL line items improvement
  - Involves only admin or simple TS changes
  - Has a licensee finding of NSHC

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## ***Licensing Actions***

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### **LINE ITEM IMPROVEMENTS**

- Current Process -- Generic Letter Line Items
  - NRC Evaluates Generic TS Line Item Improvement and Prepares Draft GL
  - NRC Notices Draft GL in Federal Register
  - NRC Issues GL With Evaluation Results and Recommendations for TS Change
  - Licensee Submits LAR Application With Description/NSHC
  - NRC Notices Proposed Amendment in Federal Register
  - NRC Publishes Notice of Approved Amendment in Federal Register
  - NRC Issues License Amendment

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## ***Licensing Actions***

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### **LINE ITEM IMPROVEMENTS**

- Proposed Consolidated Process
  - Allow licensees to be designated as applicants for specific NRC-accepted GL Line Item TS improvements in a consolidated Federal Register Notice for multiple licensees
  - Key to this method is the NRC would up-front prepare:
    - ⇒ Generic description of change
    - ⇒ Generic safety evaluation
    - ⇒ Generic No Significant Hazards Consideration

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## ***Planned Submittals***

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- Oconee
  - Revised Source Term
  - Control Room Habitability
  - Hydrogen Recombiners
  - Post Accident Sampling System

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*Handwritten notes at top right of page 25.*

## **Planned Submittals**

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### ■ McGuire

- MOX Fuel
- Vital Inverter AOT
- Rod Group Alignment Limits
- RTS Instrumentation on OP ΔTemp and OT ΔTemp
- RTS and ESFAS Instrumentation -- Response Time Testing
- Longer EDG AOT
- AC Vital Bus AOT

*☒ Instrumentation TS @ McGuire*

## **Planned Submittals**

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### ■ Catawba

- LTOP System
- CRAVS/ABFVES to allow doors to be open using Compensatory Actions *similar to McGuire for Catawba Run at the site*
- ESFAS to Require P-14 in Mode 3
- Adopt Appendix J Option for Type B and C Testing
- Longer EDG AOT
- <sup>exclusion</sup> ABFVES/AVS in response to operable but degraded issues
- SG Overfill/Dose Equivalent Iodine

*Penick  
9 days  
10  
14*



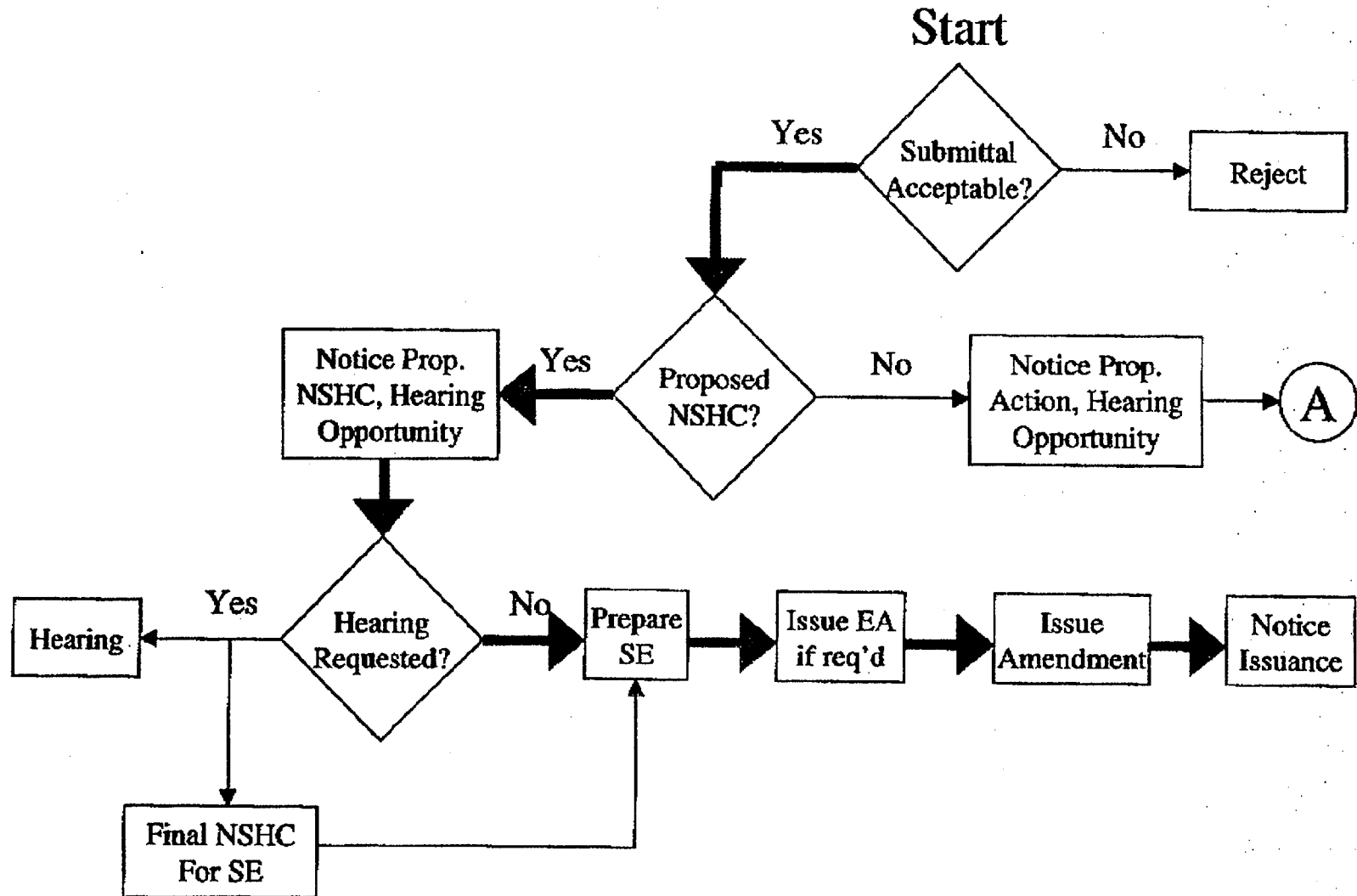
# Office Letter 803

Chandu Patel

NRC/Duke Licensing  
Workshop

January 25, 2000

# Amendment Process





# Initial Processing

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- Amendments
  - Acceptance review
  - Work planning
  - Prioritization

# Acceptance Review

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- Oath & affirmation, State copy
- Clear description of change
- Safety analysis and justification
- NSHC and EA (or exclusion)
- Approval and implementation schedules
- Is it risk-informed?

# Work Planning

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- PM (and technical staff)
  - Search for precedents
  - Review method (PM, tech staff, etc.)
  - Scope & depth of review
  - Resource planning and schedule
  - Priority

# Priority

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- **Priority 1**
  - Highly risk-significant safety concern
  - Issue involving plant shutdown, derate, or restart
- **Priority 2**
  - Significant safety issue
  - Support continued safe plant operations
  - Risk-informed licensing action
  - Topical report with near-term or significant safety benefit

# Priority (continued)

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- Priority 3
  - Moderate to low safety significance
  - Cost beneficial licensing actions
  - Generic issue or multi-plant action
  - Topical report with limited benefit



# Reviewer Assignments

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- Reviews can be performed by PM or technical staff, considerations include:
  - Technical complexity & risk significance
  - PM technical expertise
  - Conformance to improved Standard Technical Specifications (iSTS) guidance
  - Conformance to precedents
  - Resource availability & schedule needs





# Review Process And Documents Preparation

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- Review process
  - Precedents
  - Requests for additional information (RAIs)
  - Regulatory commitments
- Document preparation
  - Safety evaluation
  - Concurrence review
  - Amendment issuance

# Review Process And Documents Preparation

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- Precedents
  - Ensure request meets current expectations
    - Format
    - Guidance to industry
    - Technical content

# Review Process And Documents Preparation

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- Requests for additional information
  - Staff goal: 1 RAI per reviewing technical branch
  - Notify the licensee
    - Discuss questions
    - Resolve minor issues
    - Establish reasonable response date
    - Document conversation on cover letter
  - Questions should state Regulatory Basis



# Commitments

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- Regulatory commitments are information relied on by the staff in making its conclusion but are not included in the technical specifications.
- Current staff practice outlined in SECY-98-224, NRC guidance on commitment management



# Commitments

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- **Hierarchy of licensing-basis information**
  - ✓ Obligations - license, TS, rules, orders
  - ✓ Mandated Licensing-Basis Information - UFSAR, QA/security/emergency plans
  - ✓ Regulatory Commitments - docketed statements agreeing or volunteering to take specific actions
  - ✓ Non-Licensing-Basis Information

# Commitments

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- Commitments stated in the safety evaluation are considered part of the licensing basis but not are legally binding requirements
- Safety evaluation should clearly state what actions are considered regulatory commitments
- Control of commitments is in accordance with licensees' programs



# Commitments

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- Escalation to license conditions reserved for safety-significant matters (e.g., those that meet 10 CFR 50.36 criteria for inclusion)
- Staff is continuing to include license conditions for relocation of information to UFSAR or other controlled documents in amendment implementation condition

# Commitments

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- Office Letter <sup>NEI 90-034</sup>900 to be issued spring 2000
  - will address NEI's revised guidance
  - will include "audits" of licensee's Commitment Management Program
    - ✓ performed by PMs
    - ✓ 1/3 of plants per year





# Safety Evaluation

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- Routinely included
  - Staff evaluation - why the request satisfies regulatory requirements
  - State consultation
  - Environmental considerations
- As needed
  - Regulatory commitments
  - Emergency/exigent provisions
  - Final NSHC determination

# Concurrence

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- Licensing Assistant
  - format and revised TS pages
- Technical Branch
  - technical adequacy
- Technical Specifications Branch
  - Significant deviations from iSTS guidance or changes consistent with iSTS
  - Use of 10 CFR 50.36 criteria
- Office of the General Counsel
  - Legal defensibility and completeness

O&C

Both, N/A

# Amendment Issuance

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- Ensure that we've addressed all comments from public and state
- Transmitted to licensee via letter
  - Issued after associated EA
- Standard distribution (cc) list
  - Notify NRC staff of licensee's organization changes to list via docketed letter
- *Federal Register* notice of issuance



# ***Licensing Processes***

## ***Duke Power Perspective***

### ***Discussion Topics***

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- Licensing Basis
- Regulatory Processes
- Duke Power Processes
  - Administrative Controls For Technical Specifications
  - Administrative Controls for Commitment Management
- Summary

## ***Licensing Basis***

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- Licensing Basis: Documents, commitments, and obligations relied on to grant, amend, or modify the operating license and technical specifications and to ensure continued compliance and operation within applicable NRC requirements.
- Reactor operations must be consistent with the licensing basis
- Licensee programs must preserve the underlying safety interest

3

## ***Licensing Basis***

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- Benefits From Efficient and Effective Management of the Licensing Basis:
  - Promotes plant safety by enhancing ability to resolve operability issues and concerns and to prepare corrective actions
  - Ensures maintenance and modification activities are within the bounds of the licensing basis
  - Establishes a common framework for Duke/NRC interaction on safety issues
  - Conserves Duke and NRC resources

4

## Regulatory Processes

- Regulatory Processes For Changing and Reporting Various Elements of the Licensing Basis

Regulatory Processes	50.90, 50.92 2.202	50.71(e) 50.59	50.54 50.12	SECY 95-300
CLB Elements:	Tech Specs License Conditions Orders	UFSAR TS Bases Selected Licensee Commitments	QA Security EP Exemptions	Licensee Commitments: • GLs • Bulletins • LERs • Others

Source: Adapted from SECY-92-314

5

*Current Licensing Basis*

## Duke Power Processes

- Various Duke programs and processes for managing and controlling changes to the licensing basis

Regulatory Processes	50.90, 50.92 2.202	50.71(e) 50.59	50.54 50.12	SECY 95-300
CLB Elements:	Tech Specs License Conditions Orders	UFSAR TS Bases Selected Licensee Commitments	QA Security EP Exemptions	Licensee Commitments in: • GLs • Bulletins • LERs • Others
Duke Processes	NSD 221	NSD 209 NSD 220	NSM-5259 EP 3.10, etc	NSD 214

Source: Adapted from SECY-92-314

*Host Department to manage the licensing basis*

*NSM-5259  
EP 3.10, etc*

## ***Duke Power Processes***

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- NSD 102, Consistency
- Working Groups and Business Excellence Steering Teams
- Tools
  - Electronic Licensing Library
  - Problem Investigation Process
  - Commitment Tracking Database
  - BookManager
  - UFSAR Tracking Database
  - Operational Experience Database
  - Nuclear Electronic Document Management

7

## ***Duke Processes***

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### ***Admin Controls for Technical Specifications***

- NSD 221, "FOL and TS Amendments/Selected Licensee Commitments/TS Bases Changes"
- Applies To All Four Nuclear Locations
- Developed by a Standing Working Group with Representatives From Each Location
- Site Specific LARs are Usually Processed by the Applicable Site
- Generic LARs are Usually Processed by the General Office

8

## ***Duke Processes***

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### ***Administrative Controls for Technical Specifications***

- NSD 221 Was Revised October 1999 to Incorporate Guidance From Office Letter 803, Revision 2.
- OL 803 Revision 2 Enhancements included:
  - Requirements That LAR Submittal Packages Include a Discussion of Applicable Risk-Informed Insights/Techniques
  - Requirements That LAR Submittal Packages Discuss How the Proposed Changes Deviate or Agree With Corresponding Standard Technical Specifications
  - Requirements That LAR Submittal Packages Discuss Identified Applicable Precedent Licensing Actions
  - Guidelines for Determining LAR Priority

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## ***Duke Processes***

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### ***Admin Controls for Commitments Management***

- NSD 214, Commitment Management Program
- Problem Investigation Process (PIP)
- Commitment Management Database
  - Planned Initiative Based on Industry Benchmarking
  - Will Load Commitments From 1990 to Present by October 2000
  - Implementation at sites by December 2000
  - NSD 214 and Interfacing Directives to be Revised

10



## ***Summary***

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- Duke Power Processes Ensure Efficient and Effective Management of the Licensing Basis
- Duke Processes Strive to Preserve the Underlying Safety Interest of the Licensing Basis
- Working Group and BEST Approach Promote Continuous Improvement, Consistency and Synergy
- Tools are Available to Retrieve Licensing Basis Information

# Submitting Relief Requests to the NRC

Frank Rinaldi, NRC McGuire Project Manager

## 10 CFR 50.55a Subjects

Subjects	10 CFR 50.55a Paragraph
Reactor Coolant Pressure <sup>1</sup> Boundary <i>Sect. III - Class 1 Components</i>	50.55a(c)
Quality Group B Components <sup>1,2</sup> <i>Sect. III - Class 2 Components</i>	50.55a(d)
Quality Group C Components <sup>1,2</sup> <i>Sect. III - Class 3 Components</i>	50.55a(e)
Inservice Testing Items <i>Sect. XI - Class 1,2,3</i>	50.55a(f)
Inservice Inspection (examination) Items <i>Sect. XI - Class 1,2,3,MC,CC</i>	50.55a(g)
Protection Systems <i>IEEE-279</i>	50.55a(h)

**Notes:** 1. Apply to Design.

2. Apply to CP after 1984 - Not applicable to USA plants.

## Methods to Use to Ask for Relief

- I. Propose an alternative to the code requirement and show that:
  - the alternative provides an acceptable level of quality and safety pursuant to **10 CFR 50.55a(a)(3)(i)**, or
  - complying with the code requirement would result in hardship or unusual difficulty (excessive cost and time) without a compensating increase in quality or safety pursuant to **10 CFR 50.55a(a)(3)(ii)**.
- II. Show that the code requirement is impractical (impossible - not just inconvenient) pursuant to **10 CFR 50.55a(f)(6)(i)** for inservice testing items or **50.55a(g)(6)(i)** for Inservice inspection (examination) items.
- III. Use of a later ASME Code Edition pursuant to **10 CFR 50.55a(f)(4)(iv)** for inservice testing items or **50.55a(g)(4)(iv)** for inservice inspection (examination) items.

***Note:*** Applies for Code Edition endorsed by staff. Current approved Code - 1995 Edition. Staff has not yet approved the 1998 Edition.

## Methods the NRC Can Use to Authorize an Alternative or Grant Relief

- Authorize a licensee-proposed alternative in accordance with **10 CFR 50.55a(a)(3)(i)** if NRC determines that the alternative provides an acceptable level of quality and safety, or
- Authorize a licensee-proposed alternative (if any) in accordance with **10 CFR 50.55a(a)(3)(ii)** if NRC determines that complying with the specified requirement would result in hardship or unusual difficulty without a compensating increase in the level of quality and safety, or
- Grant relief and impose alternative requirements in accordance with **10 CFR 50.55a(f)(6)(I)** for inservice testing items if NRC determines that the code requirement is impractical, or
- Grant relief and impose alternative requirements in accordance with **10 CFR 50.55a(g)(6)(i)** for inservice inspection (examination) items if NRC determines that the code requirement is impractical.
- Approve request for use staff endorsed Later ASME Code Edition (currently 1995 Edition) in accordance with **10 CFR 50.55a(f)(4)(iv)** for inservice testing items or **50.55a(g)(4)(iv)** for inservice inspection (examination) items.

**Table 1 — Relief Requests Detailed Guidance**

<b>10 CFR 50.55a Section</b>	<b>Applicable Table</b>
10 CFR 50.55a(a)(3)(i)	see Table 2
10 CFR 50.55a(a)(3)(ii)	see Table 3
10 CFR 50.55a(f)(6)(i)	see Table 4
10 CFR 50.55a(g)(6)(i)	see Table 5
10 CFR 50.55a(g)(6)(ii)(A)(5)	see Table 6
10 CFR 50.55a(f)(4)(iv) 10 CFR 50.55a(g)(4)(iv)	see Table 7

**Note:** Pick the single, most applicable 10 CFR 50.55a section to address.

**Note:** The NRC can only authorize an alternative that the utility proposes in their written submittal. The utility must prepare another written submittal proposing (other) alternatives if they decide or agree with the NRC to use (other) alternatives.

**Note:** 64FR51370 addresses Code Cases N513 & N-523-1 Flaws Repair of Class 2 and Class 3 piping.

**Table 2 — Authorizing a Proposed Alternative In Accordance with  
10 CFR 50.55a(a)(3)(i)**

<b>Purpose</b>	<p><u>Authorize</u> a utility-proposed alternative in accordance with 10 CFR 50.55a(a)(3)(i).</p>
<b>Necessary Determination</b>	<p>Determine if the utility-proposed alternative provides an <u>acceptable level of quality and safety</u>.</p>
<b>Guidance</b>	<p>➤ Indicate the applicable Code edition and addenda, and describe the Code requirement.</p>
	<p>➤ Describe the proposed alternative.</p>
	<p>➤ Discuss why the proposed alternative provides an acceptable level of quality and safety.</p>
	<p>➤ Specify the duration of the proposed alternative.</p>
	<p>➤ Do not mention impracticality, burden, unusual difficulty or hardship.</p>

**Table 3 Authorizing a Proposed Alternative in Accordance with  
10 CFR 50.55a(a)(3)(ii)**

<b>Purpose</b>	<p>Authorize a utility's proposed alternative in accordance with 10 CFR 50.55a(a)(3)(ii).</p>
<b>Necessary Determinations</b>	<p>Determine if complying with the specified requirement would result in <u>hardship or unusual difficulty</u> (rather than being impractical) without a compensating increase in the level of quality and safety.</p>
	<p>For <u>ISI items</u> — Determine if the proposed alternative provides <u>reasonable assurance of pressure boundary integrity</u>.</p>
	<p>For <u>IST items</u> — Determine if the proposed alternative provides reasonable assurance that the <u>component or system is operationally ready</u> (capable of performing its intended function).</p>
<b>Guidance</b>	<p>➤ Indicate the applicable Code edition and addenda, and describe the Code requirement.</p>
	<p>➤ Describe the utility-proposed alternative.</p>
	<p>➤ Discuss why complying with the specified requirement would result in <u>hardship or unusual difficulty</u> without a compensating increase in the level of quality and safety.</p>
	<p>➤ For <u>IST items</u>: Discuss why the proposed alternative provides reasonable assurance that the component or system is operationally ready.</p>
	<p>➤ For <u>ISI items</u>: Discuss why the proposed alternative provides reasonable assurance of pressure boundary integrity.</p>
	<p>➤ Specify the duration of the proposed alternative.</p> <p>➤ <u>Do not mention impracticality.</u></p>

**Table 4 Inservice Testing — Granting Relief in Accordance with  
10 CFR 50.55a(f)(6)(i)**

<b>Purpose</b>	Grant relief and impose alternative requirements in accordance with 10 CFR 50.55a(f)(6)(i) for <u>inservice testing</u> items.
<b>Necessary Determinations</b>	Determine if the code requirement is <u>impractical</u> .
	Determine if the proposed testing provides reasonable assurance that the <u>component is operationally ready</u> (capable of performing its intended function).
<b>Guidance</b>	➤ Indicate the applicable Code edition and addenda.
	➤ Describe the utility's proposed alternative.
	➤ Describe why it is <u>impractical</u> for the utility to comply with the specified requirement.
	➤ Describe the <u>burden</u> on the utility created by imposing the requirement (e.g., having to replace a component, redesign the system or shutdown the plant).
	➤ Discuss why the proposed testing provides reasonable assurance that the component is operationally ready.
	⚠ Note: 10 CFR 50.55a(f)(6)(i) allows the NRC to <u>impose</u> additional requirements without having the utility first commit to them. 10 CFR 50.55a(a)(3) does not allow this.
	➤ Duration of the alternative is for 10-yr interval..
	➤ <u>Do not mention hardship or unusual difficulty.</u>



**Table 5 Inservice Inspection — Granting Relief in Accordance with  
10 CFR 50.55a(g)(6)(i)**

<b>Purpose</b>	Grant relief and impose alternative requirements in accordance with 10 CFR 50.55a(g)(6)(i) for <u>inservice inspection (examination)</u> .
<b>Necessary Determinations</b>	Determine if the code requirement is <u>impractical</u> .
	Determine if the proposed <u>inservice inspection (examination)</u> provides reasonable assurance of <u>component or structure pressure boundary integrity</u> .
<b>Guidance</b>	<p>➤ Additional Guidance:</p> <ol style="list-style-type: none"> <li>1. Generic Letter 90-05 "Guidance for Performing Temporary Non-code Repair of ASME Code Class 1, 2, and 3 Piping."</li> <li>2. 64FR51370 Code Cases N-513 &amp; N523-1 on Repairs of Flaws on Class 2 and Class 3 piping.</li> </ol>
	➤ Indicate the applicable Code edition and addenda, and describe the Code requirement.
	➤ Describe the proposed alternative.
	➤ Describe why it is <u>impractical</u> to comply with the specified requirement.
	➤ Describe the <u>burden</u> created by imposing the requirement (e.g., having to replace a component, redesign the system or shutdown the plant).
	➤ Describe why the proposed inspection (examination) provides reasonable assurance of component or structure pressure boundary integrity.
	<p>➤ Note: 10 CFR 50.55a(f)(6)(i) allows the NRC to <u>impose</u> additional requirements without having the utility first commit to them. 10 CFR 50.55a(a)(3) does not allow this.</p>
	➤ Duration of the alternative is for 10-yr interval.
➤ <u>Do not mention hardship or unusual difficulty</u> .	

**Table 6 — Authorizing a Proposed Alternative in Accordance with  
10 CFR 50.55a(g)(6)(ii)(A)(5)**

<b>Purpose</b>	Authorize a utility-proposed alternative in accordance with <b>10 CFR 50.55a(g)(6)(ii)(A)(5)</b> for an augmented inservice inspection (examination).
<b>Necessary Determination</b>	Determine that utility cannot completely satisfy the requirements of the augmented inspection and that the utility-proposed alternative provides an <u>acceptable level of quality and safety</u> .
<b>Guidance</b>	» Indicate the applicable Code edition and addenda, and describe the Code requirement.
	» Describe the proposed alternative.
	» Discuss why the proposed alternative provides an acceptable level of quality and safety.
	» Duration of the proposed alternative: One time only .
	» Do not mention impracticality, burden, unusual difficulty or hardship.

**Table 7— Approving Use of Later ASME Code Edition and Addenda  
10 CFR 50.55a(f)(4)(iv) and 10CFR 50.55a(g)(4)(iv)**

<p><b>Purpose</b></p>	<p><u>Approve</u> utility proposed request to use later ASME Code/Addenda in accordance with 10 CFR 50.55a(f)(4)(iv) for <u>inservice testing</u> items or 50.55a(g)(4)(iv) for <u>inservice inspection (examination)</u> items.</p>
<p><b>Necessary Determination</b></p>	<p>Determine if the utility-proposed alternative addresses all related requirements of portions of the later Code Edition/Addenda incorporated by reference in 10 CFR 50.55a(b).</p>
<p><b>Guidance</b></p>	<p>➤ Indicate the applicable Code edition and addenda, and describe the Code requirement.</p>
	<p>➤ Describe the proposed alternative.</p>
	<p>➤ Discuss the adoption of any limitations and modifications addressed in 10 CFR 50.55a(b).</p>
	<p>➤ Specify the duration of the proposed alternative.</p>
	<p>➤ Do not mention impracticality, burden, unusual difficulty or hardship.</p>

## Notes

## Notes

## Notes

# PRA Analysis Overview

NRC/DEC Licensing Workshop

Duncan Brewer

January 26, 2000

## Outline

- Duke PRA Organization
- History of PRA at Duke
- Duke PRA Methods and Tools
- PRA Results
- PRA Applications at Duke
- Future Applications

## Organization

- PRA Group is called the “Severe Accident Analysis Section”
- Located in Charlotte General Office
- Supports All Three Stations
- Supervisor, 10 Engineers, 2 Technicians
- Duke Seldom Uses Contractors for PRA

## PRA History at Duke

- NSAC-60 PRA Study of Oconee - 1980-85
  - Joint Study with EPRI to Spread PRA Knowledge to Utilities
- PRAs for McGuire & Catawba 1984-85
  - Conducted by Design Engineering
- Used by Duke to Understand Severe Accident Risk and Enhance Safety Until GL 88-20



## PRA History at Duke

- Responded to GL 88-20 by Updating and Submitting the Full PRAs w/ Summary Report
- All GL 88-20 SERs Received Except Oconee IPEEE
- Currently Working on Rev. 3 for Oconee, Rev. 3 for McGuire and Rev. 2b for Catawba

## PRA Methods

- Small Event Tree / Large Fault Tree Models for Base PRA
- CAFTA Code is Used for Fault Tree Analysis
- Recently Purchased Forte as Solving Engine
- ORAM/Sentinel for Configuration Risk Management

## PRA Methods

- Includes Internal and External Initiated Events
- Full Level 2 and Level 3 Analysis
- MAAP Used for Level 2
- CRAC2 has Been Used for Level 3 but MACCs Will be Used for Next Revisions

## PRA Results

- Oconee
  - Internal CDF =  $2.6E-5$ /yr
  - External CDF =  $6.3E-5$ /yr
- McGuire
  - Internal CDF =  $2.8E-5$ /yr
  - External CDF =  $2.1E-5$ /yr
- Catawba U1
  - Internal CDF =  $2.5E-5$ /yr
  - External CDF =  $1.5E-5$ /yr
- Catawba U2
  - Internal CDF =  $5.9E-5$ /yr
  - External CDF =  $1.5E-5$ /yr

## Catawba PRA Results

- Catawba Unit 1 PRA Includes the YD/NV Backup Cooling Modification.
- This Modification Significantly Reduces RCP Seal LOCA Risk
- Unit 2 YD/NV Backup Cooling Modification is Planned for this Year

## How is Risk And Reliability Information Used?

- The initial PRA studies and the IPE studies were conducted to identify severe accident vulnerabilities.
- However, it is recognized that PRA results and methods can be applied to other aspects of plant design and operation to improve plant safety in a cost-effective manner.

## Regulatory Applications

- Precursor Evaluations/LER Safety Significance
  - Provides an objective, quantitative assessment of the safety significance of an event or equipment failure. (Important Input for Significant LERs)
- Justification for Continued Operation
  - Acceptable risks operating with a specified problem? (NOED process)
- Technical Specification Optimization
  - ONS HPI Tech Spec Submittal, CNS EDG Testing
- License Renewal - Severe Accident Mitigation Alternatives Cost Benefit Analysis
- NRC's New Significance Determination Process

## Engineering Applications

- Maintenance Rule
- Oconee QA-5 Scoping
- Evaluating Modifications
  - Examples: CNS Instrument Air Comp., NV Backup Cooling
- Reliability Evaluation
  - e.g., Oconee HPI Study, Keowee PRA, Catawba Switchyard Study
- Testing and Maintaining Equipment
  - What's important to test and how often?
  - How often should preventive maintenance be performed?
  - Example: 89-10 Valve Testing Program

## Operations

- Improving Emergency Procedures and Training
- On-line Risk Configuration Control
- Shutdown Risk Evaluations
- Evaluating On-line Maintenance

## Plant Management

- Plant Risk Measures for NSRB/Managers
- Nuclear Property Insurance Studies
- Backfit Analysis (Cost/Benefit Analyses)
- Decision Analysis (business/financial focus)
  - MNS Feedwater Tank Modification
  - Spare NC Pump Motor Study
  - Oconee Feedwater Riser Leak Repair Outage

## Planned Applications

- Risk-Based In-Service Inspection (ISI)
- NRC Significance Determination Process
- Maintenance Rule A(4)
- Removal of Hydrogen Recombiners
- CNS/MNS License Renewal
- Special Reliability Studies *MNS scoping study*
- CNS SGTR Overfill License Amendment Request

## Conclusion

- Duke Has Seen the Importance of PRA for Many Years
- We Plan to Continue to Use PRA to Help Operate Our Plants Safely and Cost-Effectively
- We Plan to Pursue Risk-Informed Applications in Areas Where There is a Clear Payback

**DIVISION OF LICENSING PROJECT**  
**MANAGEMENT**

**REDEFINITION PROJECT**



**RICHARD EMCH**

## **BACKGROUND**

- **EMPHASIS ON LICENSING ACTIONS**
- **NRR REORGANIZATION OF 3/99**
- **OIG AUDIT, JOB TASK ANALYSIS,  
ARTHUR ANDERSEN ASSESSMENT**
- **NEED FOR CLEAR MANAGEMENT  
EXPECTATIONS RE: PM FUNCTIONS/  
RESPONSIBILITIES**
  - **strategic plans**
  - **operating plans**
  - **declining resources**
- **DLPM IS PILOT FOR OTHER NRR DIVISIONS  
AND NRC OFFICES**



## **DLPM FUNCTIONS**

- **LICENSING AUTHORITY**
  - **Licensing Actions**
  - **Mandated Controls**
  - **Other Licensing Tasks**
  
- **INTERFACES**
  - **Licensees/Owners Groups**
  - **Regions**
  - **Headquarters**
  - **Public**
  
- **REGULATORY IMPROVEMENTS**
  
- **TOTAL OF 74 SPECIFIC TASKS**

## EXAMPLES OF LICENSING AUTHORITY TASKS

### LICENSING ACTIONS

- Amendments  
(TS & USQ)
- Exemptions
- Reliefs
- License Transfers
- NOEDs
- Lead Plant Reviews

### MANDATED CONTROLS

- Bases Changes
- UFSAR Reviews
- 50.59 Reviews
- QA, Security,  
EP Reviews

### OTHER

- TIAs
- 2.206s *Per 4.206*
- Backfits
- Plant-Specific MPAs
- Commitment Management
- Hearing Support

## EXAMPLES OF INTERFACE TASKS

### LICENSEES/ OWNERS GROUPS

- ROUTINE COMMUNICATIONS
- SITE VISITS/DROP-INS
- LEAD ON TECH ISSUES  
(MPAs, GSIs, USIs)

### NRC HQ

- MGT. INFO. & STATUS REPORTS
- MISC. LICENSEE REPORTS
- INCIDENT RESPONSE
- LIC. RENEWAL SUPPORT
- GENERAL SUPPORT TO OTHER  
OFFICES
- SURVEYS

### NRC REGIONS

- MORNING CALLS
- MGMT. OVERSIGHT PANELS
- ROUTINE COMMUNICATIONS
- TS INTERPRETATIONS
- ENFORCEMENT SUPPORT
- EVENT FOLLOWUP

### PUBLIC

- CONTROLLED CORRESPONDENCE
- ALLEGATIONS
- FOIAs
- PLANT INFO WEB PAGE SUPPORT

## **EXAMPLES OF REGULATORY IMPROVEMENTS** **TASKS**

- **LATF**
- **OWNERS GROUP INTERACTIONS**
- **NRR OFFICE LETTERS**
- **REDEFINITION EFFORT**
- **DLPM HANDBOOK**
- **RULEMAKING**
- **RISK INFORMED EFFORTS**
- **LICENSING WORKSHOPS**

## **TASK EVALUATION**

- **PERFORMANCE MEASURES INCLUDE:**
  - **Timeliness**
  - **Effectiveness**
  - **Efficiency**
  - **Quality**
  - **Quantity**
  
- **TASKS PRIORITIZED WITH RESPECT TO STRATEGIC OUTCOME GOALS**
  - **Maintain Safety**
  - **Reduce Unnecessary Regulatory Burden**
  - **Increase Public Confidence**
  - **Increase Internal Efficiency & Effectiveness**
  
- **RESOURCE ESTIMATES**

## **STAKEHOLDER INPUT**

- **PUBLIC MEETING - 7/99**  
***Industry & Interested Members of Public***
- **REGIONS**  
***Meetings With Each Region***
- **NRR**  
***Other 4 NRR Divisions &  
NRR Senior Management***
- **NRC**  
***Cognizant Offices & NRC Senior  
Management***

## **USES**

- **LIVING PROCESS**
- **SERVES AS:**
  - ***DLPM Operating Plan***
  - ***Budget Justification***
  - ***Basis For Resource Allocation***

## Notes



## Notes