

Overview of Generic Industry Activities on New Plants

NEI/NRC Meeting

April 5, 2001



Agenda

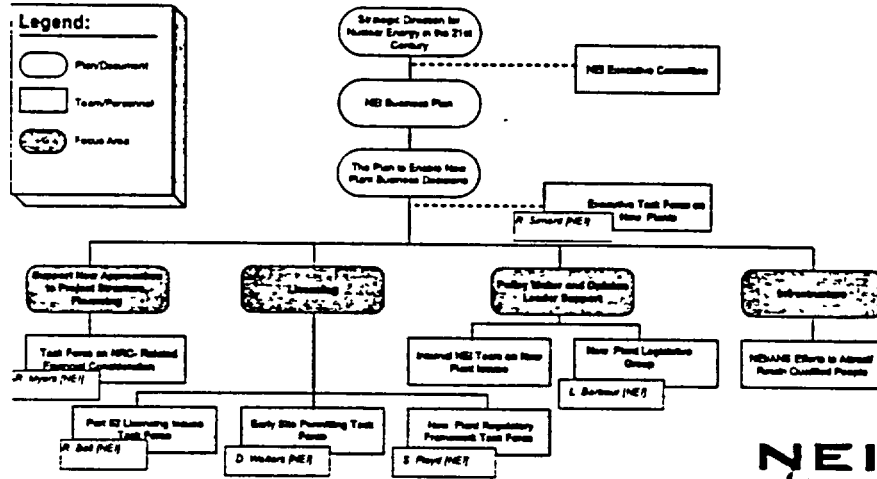
- Overview
- Early Site Permits
- Part 52 and COL process
- Financial-related rulemakings
- New plant regulatory framework
- Discussion of integrated plans
- Future interactions



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E/4

Activities in support of the plan to enable new plant business decisions



Early Site Permit Activities - Discussion Topics

- NEI Issue Task Force
- Guidance Document
- Rulemaking

Early Site Permit Activities - NEI Issue Task Force

- First meeting February 1
- Four electric companies
- NEI chairmanship and legal support
- EPRI provides technical support



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Early Site Permit Activities - NEI Issue Task Force

- Deliverables
 - Updating site selection criteria document
 - Guidance for preparing an early site permit application
 - Input on rule changes



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Early Site Permit Activities - *NEI Issue Task Force*

- Deliverables (cont'd)
 - Gap analysis on existing early site permit documents
 - Resource estimates of application preparation - including NRC review

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Early Site Permit Activities - *Guidance Document*

- Incorporate existing guidance when valid and workable
- Encompass various types of sites
- Seek appropriate NRC endorsement

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Early Site Permit Activities - *Guidance Document*

■ Schedule

- August 2001 - Draft early site permit application preparation guidance to NRC staff for review
- December 2001 - Issue early site permit application preparation guidance for trial use
- Mid-2002 - Expected initial ESP application



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Early Site Permit Activities - *Rulemaking*

- Part 52 rule change
- NEPA issues
 - White paper to NRC staff this month



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Part 52 Licensing Issues Task Force Activities

- Scope of required COL ITAAC
- Part 52 update rulemaking
- Construction inspection and ITAAC verification
- Part 52 implementation guidance
- COL application guidance



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Scope of COL ITAAC

- Draft industry white paper discusses:
 - Two possible interpretations of ITAAC requirements
 - Strong industry preference for hardware focus, i.e. no "programmatic ITAAC"
 - Need for early Commission policy decision
- Issue is critical to:
 - Perceived certainty/workability of Part 52
 - Efficient use of industry resources, both now and later
 - Ability to focus this year on other important process-readiness issues



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Part 52 Update Rulemaking

- Several productive meetings w/NRC; written input provided this week
- Emphasis on clarity and completeness of NOPR over schedule
- Three categories of proposed changes:
 - Housekeeping, e.g., relocation of provisions
 - DCR “lessons learned,” e.g., change process and ITAAC verification provisions
 - Important enhancements/clarifications, e.g., to allow for completion of DAC at COL



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Part 52 Update Rulemaking (cont.)

- Key issues for NOPR
 - Credit for licensing bases of existing sites and facilities
 - Subpart A provisions allowing transfer of ESPs and bounding description of possible future facility types
 - Clarification of §52.103 process for modular plants
 - Requirement to provide updated PRA at COL
 - §52.99 and §52.103 processes (discussion and stakeholder input needed)
- At least one more public interaction planned to support NOPR preparation



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Construction Inspection and ITAAC Verification

- Important ITAAC verification provisions included in DCRs
- Implementation was discussed in public meetings on March 15 & 29, 1995
- Draft NRC Construction Inspection Program issued in 1996
- Need to resume interactions on CIP/IV to establish common understandings and guidance



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Part 52 Implementation Guidance

- Guidance is ideally developed in conjunction with associated regulations
- Industry guideline will provide effective vehicle for identifying and resolving issues
- Task force plans to:
 - Supplement current draft with guidance on key sub-processes, including ESP, COL, CIP/IV and start-up authorization
 - Discuss guidance in stages with NRC
 - Seek NRC endorsement at an appropriate time



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Vehicles for Resolving Part 52 and COL Process Issues

- Part 52 update and SOC
- Part 52 implementation guidance
- NRC Construction Inspection Program
- COL application guidance

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Schedule of Part 52/COL Activities

- Scope of required COL ITAAC
 - White paper to Commission this month, SRM this Summer
- Part 52 update rulemaking
 - NOPR in September
 - Comments due in December
 - Final Rule in Summer of 2002
- Construction inspection and ITAAC verification
 - Draft guidance on ITAAC verification process and initial meeting next month
 - Integrate into Part 52 implementation guidance
 - Follow-on interactions on NRC Construction Inspection Program
- Part 52 implementation guidance
 - Discuss pieces (e.g., CIP/IV) with NRC beginning next month
 - Provide complete draft to NRC with comments on NOPR (4Q01)
 - Refine guidance and issue for trial use in 3Q02
- COL application guidance
 - Initial interactions later this year

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New Nuclear Power Plants: NRC Financial Issues and Requirements

Recent History ...

1997

- NRC Policy Statement on Restructuring and Economic Deregulation of the Electric Utility Industry

1998

- New Standard Review Plan on Financial Qualification and Decommissioning Funding Assurance
- New rule on decommissioning funding assurance
- New, more business-like process for license transfers
- Guidance to Licensing Boards



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Going Forward ...

- Merchant project issues
 - Antitrust review
 - Decommissioning funding assurance
 - Financial qualification
- Modular plant issues
 - Price-Anderson secondary protection
 - NRC rules governing annual fees, operator staffing, etc.



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Antitrust Review

- Required by Section 105.c of Atomic Energy Act
- No longer required for license transfers; required for new plants
- Two remedies:
 - *Statutory change*
 - *Exception per Section 105.c.2(7) for merchant plants*
- Industry formulating position ... discussions with NRC, DoJ ongoing ... resolution by end 2001

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Decommissioning Funding Assurance

- Requirements in 10 CFR 50.75
- Licensees permitted to use external sinking fund if ...
 - subject to cost of service regulation
 - able to collect decommissioning costs through non-bypassable charge

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Decommissioning Funding Assurance

(continued)

If no cost-of-service or wires charge ...

- prepayment
- surety bond
- letter or line of credit
- insurance
- self-guarantee or parent company guarantee subject to requirements in Part 30, Appendix A and C
- specific contractual obligation
- other option(s) yet to be defined

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Financial Qualification

- For construction: demonstrate source of funds for construction, fuel
- For operation:
 - *pro forma* showing annual operating costs, sources of funds for first 5 years of operation (supply/demand test)
 - investment-grade rating from at least two rating agencies
- If applicant does not have investment-grade bond rating, or cannot meet supply/demand test, then must demonstrate sufficient financial resources to cover fixed operating costs for 6 months

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Modular Plant Issues

- Secondary protection under Price-Anderson
 - *NRC rules = \$88.1-million liability for "each nuclear reactor"*
 - *Atomic Energy Act = \$88.1-million liability for "each nuclear facility"*
- Other issues, including:
 - User fees (§171.15)
 - Operator staffing [§50.54(m)]
 - Number of licenses (§50.10)
 - Definition of utilization facility (§50.2)
- Industry developing position(s) ... discussions with NRC ongoing



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Possible Statutory Changes

- Remove antitrust requirement in Section 105(c)
- Remove prohibition on foreign ownership in Section 103(d)
- Revise definition of "utilization facility" in Section 11(cc)



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New Plant Regulatory Framework Objectives

- Replace deterministic regulations with risk-informed, performance based regulations where appropriate
 - Incorporates 30+ years operating experience
 - Incorporates risk insights from PSA
- Align regulations with Reactor Oversight Process
 - Minimize differences between compliance and safety

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New Plant Regulatory Framework

- Tops-down approach based on NRC mission
- Reinforce NRC Safety Cornerstones
- Develop set of General Design Criteria and General Operating Criteria
- Develop an improved set of generic, risk-informed, performance-based regulations
- Develop design-specific regulatory guides to meet regulations

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**NRC's Mission to Provide Adequate
Protection of Public Health & Safety**

Strategic Performance Areas

Safety Objectives of Seven Cornerstones

Key Attributes of Importance

General Design and Operating Criteria

Risk-Informed, Performance-Based Regulations

Design-Specific Regulatory Guides

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Benefits of Establishing New Regulatory Framework

- Used successfully for Reactor Oversight Process
- Provides platform for agreement on principles and objectives
 - Using ROP framework avoids “re-invention” of framework already accepted by NRC
- Ensures issues are focused on safety and are tied to defined safety objectives

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Benefits of Establishing New Regulatory Framework

- Helps establish a new paradigm of thinking not burdened by current requirements
- Provides a standard against which to set requirements or process exemptions
- Helps to de-emotionalize “pet issues”
- Creates a design independent framework
- Aligns regulations with oversight process



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NEI Task Force

- Kick-off April 2001
- Deliverables (December 2001)
 - Proposed General Design Criteria
 - Proposed General Operating Criteria
 - Proposed risk-informed, performance-based set of regulations
- Meet periodically with NRC staff in public meetings during 2001 as drafts are developed



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Schedule

- Petition NRC for ANPR -- 12/01
- ANPR in FRN -- 4/02
- NOPR in FRN -- 4/03
- Final Rule -- 4/04

