

NEI Position Paper Development Update

NRC SMR Licensing Public Meeting
November 4, 2010



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Annual Fees Position Paper



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Annual Fees Paper Developments

- Discussed in detail at September 22 public meeting
- Evaluated by
 - NEI SMR Licensing TF
 - NSIAC
 - NPOC
- Submitted to NRC for review and consideration on November 2
- Look forward to future interactions

Decommissioning Funding Position Paper



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Decommissioning Funding Paper Developments

- Discussed in detail at September 22 public meeting
- Submitted to NRC for review and consideration on November 2
- Look forward to future interactions

Price-Anderson Position Paper Update



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Overview

- Liabilities associated with SMRs different than those associated with large LWRs
 - Current regulatory framework may not fully reflect this
 - NEI legal evaluating current statutory and regulatory provisions
 - Seeking input from all vendors and interested utilities
 - Evaluating means of achieving changes, if necessary

Evaluation of Current Statutory and Regulatory Framework

- Summary of current requirements
 - Liability insurance protection
 - Property insurance
 - Provisions for modular reactors
- Basis for current requirements
 - Large LWRs
 - Small reactors
 - Research/test reactors

Industry Involvement in Evaluation

- Vendors
 - B&W
 - GE-Hitachi
 - Hyperion
 - NuScale
 - Westinghouse
- Utilities
 - Duke
 - Southern
 - SCE
 - TVA
- Insurer representatives
- Ensures that diverse needs in this area will be addressed by paper

Open Questions to be Addressed by Position Paper

- Changes needed to support SMR deployment, if any
 - Statutory (if applicable)
 - Regulatory (if applicable)
 - Potential use of exemption process
- Treatment of non-electric applications

Application Format and Content Position Paper Update



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Issue Description

- Goal is to assure efficient application and review process for SMR designs
- Need well-defined expectations for all applications
 - Application completeness
 - Level of detail
 - Content and format
- Emergence of SMR designs will result in a need for different/additional elements
- Pre-application process will be near-term focus

Draft Paper

- Pre-application engagement importance
 - Role of white papers, topical and technical reports
 - Public meetings
 - Technology familiarization
 - Process to identify applicable regulatory requirements and guidance and define new or modified information needs
- Application content changes
 - Including small LWR and non-LWR technologies
 - Adaptive to single and/or multi-module approach
 - Mechanism to document pre-application agreements

Draft Paper

– Format considerations

- Retain chapter numbering consistent with Standard Review Plan
- Confirm design specific or generic SMR-unique information in an agreed upon section, i.e., multi-module configurations, integrated design features, departure from existing design features, concurrent operations and construction
- Acknowledgement of non-standard Technical Specifications

Draft Paper

- Potential level of detail and acceptable standards for:
 - FSAR content changes/additions
 - Agreement on items “not applicable” vs. exemptions, departures, and/or exceptions
 - Identification of DAC issues in DCD (e.g., control room design)
 - Establishing ITAAC
 - Reference documents (topical reports, technical reports, etc.)

Application Format and Content-Schedule

- Industry group actively drafting detailed white paper
- Expected to be submitted to NRC in December
- Discuss at December public meeting

Manufacturing License Process

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Overview

- Potential Benefits of Manufacturing License
 - Permits early review of design
 - Permits advance fabrication of reactor components
 - Potential advantages for international uses
- Interest from industry is broad
 - Several vendors interested
 - Potential supplier interest

Terminology

- What a ML is
 - 10 CFR 52.1 definition: *Manufacturing license* means a license, issued under subpart F of this part, authorizing the manufacture of nuclear power reactors but not their construction, installation, or operation at the sites on which the reactors are to be operated.
 - 10 CFR 52.153: A manufactured reactor may only be transported to and installed at a site having a construction permit
- What a ML is not
 - The equivalent of today's construction modules (e.g. large components and systems) that are being manufactured in factories, then shipped to a site and installed.

Issues Associated with Manufacturing Licenses

- Legal/Financial
- Regulatory
- Technical
- Legislative

Current Status

- Need detailed discussions in several areas
 - Scope-of ML
 - Relationship of a ML with a SDA/DC/CP/COL
 - ITAAC closure process
 - Export considerations
- Look forward to engaging with NRC