Introductions – 10 mins

Opening Remarks – 10 mins

Presentation – 60 mins

- Purpose of Public Meeting
- SRPMod Overview
- SRPMod Objectives
- Project Plan
- Measuring Success
- Example: Modernized SRP section

Discussion – 30 mins

- Questions

Closing Remarks – 10 mins

SRP Modernization (SRPMod) Effort

Public Meeting
March 31, 2021

SRPMod Team

Caroline Carusone, NRR/DORL Deputy Division Director
Phil McKenna, Acting NRR/DORL Deputy Division Director
Dennis Morey, NRR/DORL/LLPB Branch Chief
Jason Paige, SRP Modernization Task Lead
Mark Notich, Sr. Project Manager
Kate Lenning – Project Manager

SRPMod Public Meeting Purpose

- **Increase Understanding on the SRP Modernization Effort**
- **Present the Plan for Modernizing the SRP**
  - ➢ Plan includes staff feedback received to date!
- **Obtain Feedback on Plan**
  - ➢ Answer questions

Why Modernize the SRP?

Modern, Risk-Informed Regulator

7 OEDO Initiatives

Office Initiatives

- Streamlining SEs
  - ➢EMBARK SE Streamline Initiative
  - ➢SRP Modernization (SRPMod) Effort

SRPMod Effort……..A Piece of Becoming a Modern, Risk-Informed Regulator

What are we trying to fix?

- **Focus on What's Important to Safety**
  - Guidance focused on requirements
- **Clear, Concise Guidance for Completing Reviews**
  - Clarity on application details
- **Improve Quality of NRC Review Products**
  - RAIs
  - Safety Evaluations
- **Consistency on Using Risk-Insights and Engineering Judgement**
  - Capture Best Practices
- **SRP Issue vs. Training Issue**
  - Not every section will need extensive revising

SRPMod Objectives

Realign

Realign Expectations for Reasonable Assurance of Adequate Protection

- Rebranding “Introduction” to “General Review Principles”
- “General Review Principles” will provide guidance on completing reviews

Focus

Focus on Regulatory Requirements

- Reformatting sections
- Align specific acceptance criteria and findings to the applicable requirements
- Remove extraneous information
- Incorporate ISGs, BTPs information

Empower

Empower the Staff to Consistently Use Risk-Insights and Engineering Judgment

- Reference PRA Policy Statement and SRM-SECY-17-0112
- Integrate risk guidance: LIC-206 and Be riskSMART
- Reference AEA on the use of engineering judgement

Project Plan

implement a plan to complete the SRPMod effort by defining a process, coordinating with the staff to address their needs and to develop a schedule, and communicating with stakeholders.

Process

- ✓ Develop IAP
- ✓ Develop modernization plan template
- ✓ Develop modernized SRP template
- • Pilot modernized SRP sections*

Coordination

- ✓ Host technical staff working group meetings*
- ✓ Host DORL SME and initiative lead meeting*
- • Working with OGC & NMSS to streamline issuance of SRP sections
- • PNNL modernize sections to develop lessons-learned on process*
- • Develop a schedule for modernizing the SRP

Communication

- ✓ Develop comm plan and FAQs
- • Update ET/LT on progress (quarterly)
- • Develop SRPMod dashboard
- • NRR townhall meeting*
- • SRPMod public meeting*

*Feedback will be incorporated into the process documents

SRPMod Guidance Overview

PROCESS

- **NRR OI LIC-200, *Updating and Maintaining the Standard Review Plan* (ML 20042C827)**
  - Process for issuing revised SRP section
- **SRPMod Integrated Review Plan**
  - Background on SRPMod effort
  - Process for modernizing the SRP
- SRP Modernization SharePoint Site (linked on EMBARK SharePoint site)
  - Key Messages
  - SRPMod Integrated Review Plan
  - Modernization Plan template
  - Modernized SRP section template
  - Schedule
  - Qs and As
  - Technical staff's repository for working draft modernization plans and modernized sections

PROCESS

SRPMod: Two-Step Process

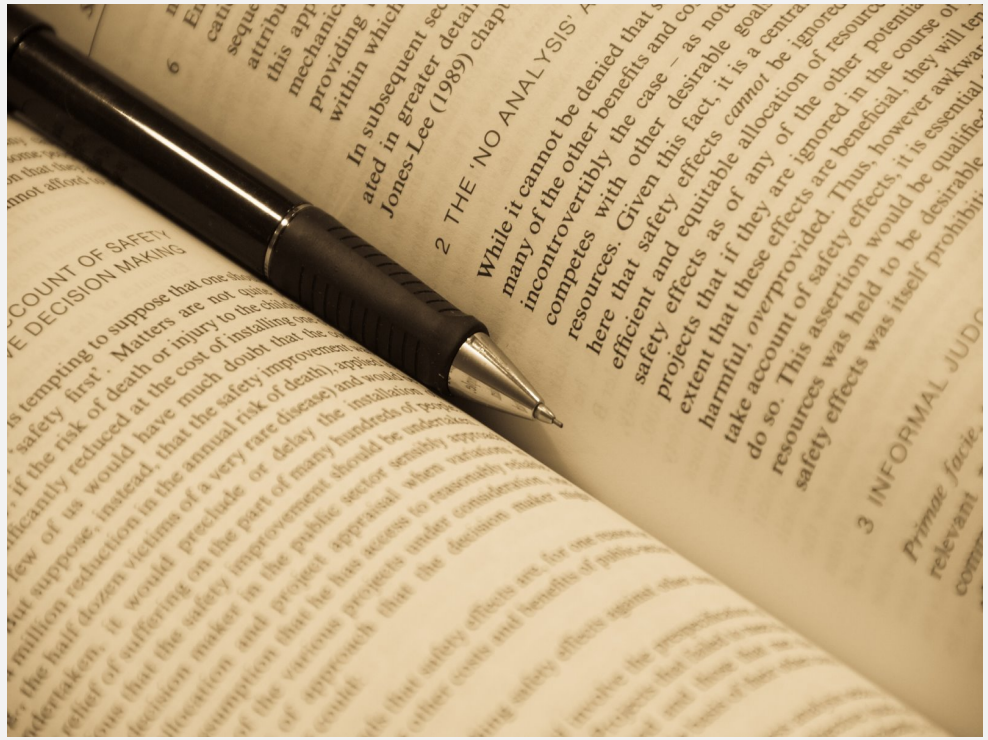
1. Develop Modernization Plan
   - Brief division management on draft plan
   - Receive approval of plan
2. Draft Modernized SRP Section
   - Using approved plan

- Modernization Plans Developed for Each SRP Section
- Plans Provide Justification for Retaining/Removing Information from the Modernized SRP
- Plans Used to Align on Path Forward for Modernized SRP Section

PROCESS

Process for SRP Modernization

- Modernized SRPs focus on the regulations or requirements that licensing applications must meet.
- Regulations or requirements include 10 CFR Part 50 and 52 requirements (i.e. Appendix A of Part 50), other 10 CFR Chapters, Federal and state regulations, NRC policy statements, and NRC-accepted professional society standards.
- Each modernized SRP will clearly state each regulatory requirement along with the finding the staff will make, as well as the acceptance criteria the staff will use to make their finding.



PROCESS

Efficacy of Modernized SRPs

- **Measuring Effectiveness of Modernized SRP Sections**
  - Quantitative and Qualitative
- **Pilot Several Modernized Sections**
  - Identify diverse SRP sections
  - Pilot sections after public comment period
- **Project Management Team Refining Pilot Program**
  - More details to follow!
  - Please send us suggestions

Coordination

This is a Group Effort!

- **Working Group Meetings with Tech Staff to Meet SRPMod Objectives**
  - Maintain effectiveness, efficiency of SRP
  - Incorporate feedback (insights)
  - Address the needs of the staff
  - Develop a community of practice
- **Coordinating with DORL SMEs and Initiative Leads**
  - Understand interdependencies between SRPMod and DORL initiatives/current processes
  - Identify SRPMod actions to ensure consistency between final products
- **Working with OGC and NMSS on OMB Activities**
  - Streamline issuance of final SRP sections
  - Planning ahead to assist OGC's "rule" determination under Congressional Review Act (CRA)

Feedback from Coordination Meetings

Coordination

- **Working Group Meetings with Technical Staff**
  - Not one-size fits all: the SRPMod process may not meet the needs for all SRP sections
  - Prescriptive guidance: concerns that this effort is developing new step-by-step guidance on how to use risk-insights and engineering judgement
  - SRP Issue vs Training vs Supplemental Guidance
  - Clarity between the acceptance criteria/finding and requirement
  - How will the staff measure the effectiveness of the modernized SRP
  - Integration of ISGs and BTPs into the SRP
  - Words Matter…Messaging, Messaging, Messaging

- **DORL SMEs and Initiative Leads Meeting**
  - Verify consistency between Modernized SRP sections “findings” and SE streamline guidance “findings” statements
  - Incorporate office instructions content, as opposed to referencing office instructions
  - Potentially consolidate specific branch guidance that is used to review an application into the SRP
  - Concerns with removing knowledge management type information from the SRP

- **OMB Clearance Activities Meeting**
  - Package “like” SRP sections

PNNL….Here to Support!

Coordination

- **PNNL Piloting SRPMod Process**
  - Modernizing Sections 13.3, 16.0, and 16.1
  - Identified sections based on PNNL's familiarity with the sections
- **Technical Branches Maintain Ownership of Sections**
  - Developed process to maintain engagement between technical staff and PNNL
  - Stop points to discuss draft products with the staff
- **Piloting the SRPMod Process Will Identify Lessons-Learned**
  - Incorporate lessons-learned into the SRPMod process documents

Performance Goals: Developing the Schedule

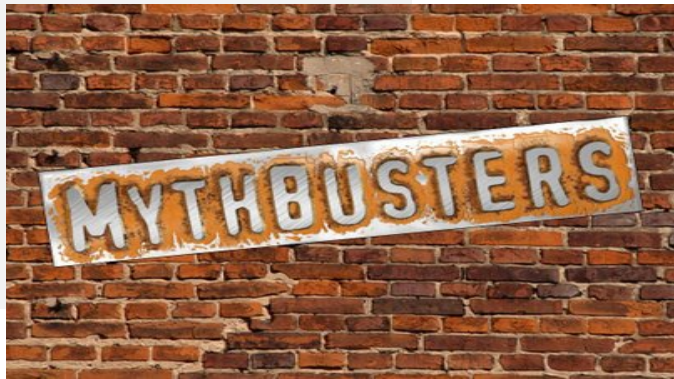
Coordination

- **Approximately 313 SRP sections**
  - Coordinated with divisions/branches to understand needs and resources
- **Developed Performance Goals for Modernizing the SRP**
  - Performance Goals Track Number of Sections Modernized within Next 2-years
  - SRPMod Performance Goals are Division-Driven!
  - Divisions Select Sections to Modernize to Meet Performance Goals
- **NRR Goal: 163 Modernized Sections in 2-years! (52% of 313 Sections)**
  - ~20 modernized sections per quarter

FAQs: Messaging, Messaging, Messaging

Communication

- **This is a New and Operating Reactor Business Line Effort**
- **Focusing Our Reviews to What is Important to Safety**
  - Not to prevent staff from asking RAIs
- **Modernizing to Improve the Quality of the SRP**
  - Not reducing the SRP by a certain %
- **Enhancing Linkage Between Acceptance Criteria/Finding and Requirement**
  - Not removing information that is needed to complete a review
- **Modernizing SRP to Provide Flexibility (Scope, Engineering Judgement, Risk-Insights)**
  - Not developing prescriptive, "checklist" guidance
- **All SRP Sections are Not the Same…Training May Be the Solution!**
  - Not every section will need extensive modernization/revising



Example: Modernized SRP Section

- **Focus**
  - Concept for the content of the modernized SRP section
- **Format**
  - Current SRP section vs Modernized SRP section
- **Benefit**
  - Specific benefits of the modernized SRP section
- **Example Modernized SRP Section**
  - Modernized SRP Section 3.3.1

Focus

Requirement Driven Guidance

Risk Informed Application of Guidance

Engineering Judgement in Choosing the Appropriate Industry Codes and Standards

Reasonable Assurance Based on:

--Staff review

--QA program utilization and reliability of consensus industry codes and standards.

Format

Current SRP Section

- Areas of Review
- Review Interfaces
- Acceptance Criteria
  - Requirements
  - SRP Acceptance Criteria
  - Technical Rationale
- Review Procedures
- Evaluation Findings
- Implementation
- References

Modernized SRP Section

- Purpose
- Scoping the Review
- Areas of Review
  - Requirement
  - Acceptance Criteria
  - Specific Review Areas
  - Finding
- Additional Information
- Resources

Benefits

- **Relates Requirements with Compliance Criterion**
  - Focus on regulatory requirement
  - Streamlines OGC review
- **“Specific Review Areas” Provides elements of Analytical Process reviewed**
  - Assist staff with the Acceptance Review
  - Provides reasonable assurance of safety
  - Review concepts from ISGs and BTPs incorporated in this section
- **Increased Clarity on Application Elements**
  - Focus and reduce RAIs

Example: Draft Modernized SRP Section 3.3.1

U.S. NUCLEAR REGULATORY COMMISSION

STANDARD REVIEW PLAN

3.3.1 WIND LOADING

REVIEW RESPONSIBILITIES

Primary Reviewer	**Structural Engineering Branch**
Secondary Reviewer	**External Hazards Branch**
Other Interface(s)	**None**

I. PURPOSE

Licensing of nuclear power plants under 10CFR Part 50 and Part 52 require loads generated as a result of impedance to the flow of wind by structures, systems and components (SSCs), of a nuclear power plant, be considered in their design. The wind, characterized by its straight-line speed, and gust in conjunction with local topological effects, exert pressure on SSCs as it flows across the facility. This wind pressure aggregated ove
Review Plan (SR

This SRP section
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To appropriately align the scope and depth of the review, as defined in the General Review Principles of the SRP, use the below table to identify the SRP **3.3.1** interfaces to reflect the specifics of the application.

SRP Section 2.3.1, Regional Climatology	SRP section 2.3.2, Local Meteorology

III. AREAS OF REVIEW

In this SRP section, staff review ensures that an established methodology is used is quantifying the wind load, which considers the different parameters influencing the resistance to the passage of wind across the terrain. The resistance or the load on the SSC as a result of the passage of wind is included in the design of the SSC to meet the regulatory requirement of General Design Criteria(GDC) 2.

General Design Criteria (GDC) 2	
Regulatory Requirement	*Design bases for protection against natural phenomena.* Structures, systems, and components important to safety shall be designed to withstand the effects of natural phenomena such as earthquakes, tornadoes, hurricanes, floods, tsunami, and seiches without loss of capability to perform their safety functions. The design bases for these structures, systems, and components shall reflect: (1) Appropriate consideration of the most severe of the natural phenomena that have been historically reported for the site and surrounding area, with sufficient margin for the limited accuracy, quantity, and period of time in which the historical data have been accumulated, (2) appropriate combinations of the effects of normal and accident conditions with the effects of the natural phenomena and (3) the importance of the safety functions to be performed.
Acceptance Criteria	A methodology for including wind loads in the design of SSCs such that the SSC is capable to withstand the effects of the most severe wind at a site. In the methodology, the identification and quantification of the parameters used to convert wind speed to wind loading shall be based on establish industry practice using published wind data for different terrains, along with due consideration of the geometrical, and physical configuration of the SSC.
Specific Review Areas	The staff ensures that the information on severe wind recurrence interval, straight-line wind speed, and 3-minute gust, used in the selection and computation of other parameters for wind design, are consistent with the information provided under SRP section 3.2.1 The staff reviews the factors for the wind load parameters: directionality, exposure, topography, ground elevation, gust effect, enclosure classification and internal pressure are appropriate for the structure and site conditions. The staff reviews the basis for the selection of the velocity pressure coefficients and the relation used in computing the velocity pressure. The staff reviews the identification of the external pressure coefficients and the relation used to compute the wind pressure on the different surfaces of the SSCs.

Finding	The staff finds that the applicant has followed a well-established and practiced methodology in converting the effect of the site-specific severe wind into a loading that is included in the design of SSCs. The staff finds that this complies with regulatory requirement 10CFR Part50, Appendix A, General Design Criteria 2, " Design Basis for Protection Against Natural Phenomena."

Other regulatory requirements that apply but are not addressed in this SRP are **[[list other requirements and the SRP section that the requirement is addressed]]**

IV. ADDITIONAL INFORMATION

N/A

Resources

The staff may use the following list of references and others to assist with their review.

1. 10 CFR Part 50, Appendix A, General Design Criterion 2, "Design Bases for Protection Against Natural Phenomena."
2. American Society of Civil Engineers/Structural Engineering Institute. Minimum Design Loads for Buildings and Other Structures. ASCE/SEI 7-16, American Society of Civil Engineers, Reston, Virginia, 2016.

Description of Changes

This updated SRP section provides guidance to the NRC staff in performing design reviews of the wind loading to be used in the design of SSCs. This revision updates the SRP format to reflect the modernized SRP format described in LIC-200. In addition, changes were made to the SRP based on the lessons learned and insights gained from the reviews of DC and COL applications and use of design specific review standards.

Next Steps

- **Incorporate Feedback from Today's Meeting**
  - ➢Revise SRPMod documents (as needed)
- **SRPMod Officially Begins on April 1st!**
  - ➢Divisions Select SRP Sections to Modernize
- **Draft SRP Sections Issued for Public Comment**
  - Public comment requested via FRN

Questions?

Closing Remarks

Thank You for Your Contributions!