

# *NRC Collaboration with DOE on Light Water Reactor Sustainability (LWRS) Program*

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# NRC-DOE Memorandum of Understanding (MOU)

## NRC Roles and Responsibilities

### To provide current information on:

- Aging management research activities
- Risk analysis research activities
- Licensing and regulatory reviews of emerging technologies
- Technical information on safety and security analysis

### The coordination includes:

- Information exchange meetings
- Support for expert panels
- Demonstrations and pilots
- Jointly sponsored projects

# Pathways Collaborations

## ***Recurrent Meetings:***

### ***Materials***

***Frequency: Monthly***

***Participants: NRC, DOE Nat Labs, EPRI***

***Focus: Exchange of research results, new projects, and status updates***

### ***RISA***

***Frequency: Monthly***

***Participants: NRC & DOE Nat Labs***

***Focus: Discussion of projects related to the Pathway***

### ***Physical Security***

***Frequency: Quarterly***

***Participants: NRC & DOE Nat Labs***

***Focus: Discussion of ongoing projects in alliance with the Advanced Reactor Safeguards and Security (ARSS) program***

# Pathways Collaborations

## ***Technical Letter Reports:***

**FPOG**

***Safety and Regulatory Considerations for On-Site Hydrogen Production Facilities  
Co-located with Nuclear Power Plants***

**[ML24207A174](#)**

**Plant  
Modernization**

***Assessment of Condition Monitoring Methods and Technologies for Inservice  
Inspection and Testing on Nuclear Power Plant Components***

**[ML24305A162](#)**

**Physical  
Security**

***Assessment of Physical Security Modeling and Simulation in the Vulnerability  
Assessment Process***

**[ML25090A245](#)**

# Pathways Collaborations

## ***NUREGs & NUREG/CRs:***

***RISA***

***NUREG/CR -7309- Validation Studies for High Burnup and Extended Enrichment Fuels in Burnup Credit Criticality Safety Analyses***

***RISA***

***NUREG/CR- 7308- Sensitivity/Uncertainty Methods for Nuclear Criticality Safety Validation***

***RISA***

***NUREG-2266- Environmental Evaluation of Accident Tolerant Fuels with Increased Enrichment and Higher Burnup Levels***

# Pathways Collaborations

## Upcoming Reports

***Materials***

***NUREG - Irradiation Effects on Reinforced Concrete Structures***

## Perspective on ongoing projects

***Plant  
Modernization***

***Advanced Remote Monitoring(ARM) -Fire Watch Carts Effort***

# Rules of Interaction Document

- Aims to provide clarification to NRC staff on guidelines for technical and knowledge exchanges with DOE and national laboratories staff
- Make clear for staff when public meeting should be considered
- Interaction document publicly available



[ML23135A227](#)



# Contact Information

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# Thank You for Your Attention

