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**Pre-submission Meeting, September 11, 2012  
NAC-LWT Amendment for HEUNL**

**Docket 71-9225**

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## Agenda

- Introductions
- HEUNL package overview
  - Structural
  - Thermal
  - Shielding
  - Criticality
- Licensing and schedule considerations
- Q&A session

Package Overview

# HEUNL CONTENTS

## HEUNL Package Configuration Overview

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Design considerations for transport of liquid material

- High Enriched Uranyl Nitrate Liquid (HEUNL) content

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## HEUNL Package Overview (Continued)

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Slide 5

## HEUNL Package Overview (Continued)

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## HEUNL Package Overview (Continued)

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## HEUNL Contents Structural Considerations

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## Structural Considerations (Continued)

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## Structural Considerations (Continued)

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## HEUNL Thermal Overview

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## Thermal Evaluation Considerations

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- For the fire accident condition, the 1475 ° F flame is applied directly to the cask body surface.

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## Thermal Evaluation Considerations (Continued)

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## HEUNL Shielding Overview

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- ORIGEN-S Depletion Calculation based on maximum source emitting nuclides.
- Typically, for cask shielding, beta emitters not of high priority.
- 3-D MCNP shielding model of liquid payload.

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## HEUNL Criticality Overview

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- Explicit MCNP model of cask and contents.

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Licensing and Schedule

## CONSIDERATIONS



## Licensing and Schedule Considerations

- Docket 71-9225
- Amendment Request to be based on Revision 41 of the NAC-LWT SAR
  - Proprietary submittal
  - Nonproprietary version
- Submission schedule to be determined upon development of final design
- Follow-up meeting if needed
- Submittal review to support shipping needs
- SAR consolidation after CoC revision

Thank you for your time.

**QUESTIONS?**