Introduction of Draft Report Shells

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Rockville, MD

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Power Uprate & Fuel Transitioning

Agenda

- Review Issue
- Identify present processes
- Introduce individual report "Shells"
- NRC initial feedback
- Schedule for NRC feedback

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Issue: Provide resolution for Marsh to White letter

Re: EPU & legacy fuel (mixed cores)

(Reach agreement on path & content of submittals)

- GE & NRC met August 2003
  - Draft response reviewed - w/o resolution
  - GE to provide NRC review of report shells
- GE approach before next "draft" of response
  - Update RXSB on GESTAR II
  - **Prepare report shells & get NRC feedback**

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- Current processes
  - Fuel changes without Power Uprate
    - **GESTAR II Reload process followed**
      - No NRC review
      - COLR – for information
      - SLMCPR submittal, as necessary
    - **New Fuel Introduction (NFI)**
      - NFI report to utility
    - **GEXL correlation submittal, if required**
      - First application of new GE fuel product
      - Legacy fuel

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- Power Uprate without Fuel changes
  - ELTR with an increase in RX Pressure
  - CLTR with no increase in RX Pressure

  ELTR and CLTR defer to reload processes for specific fuel related analyses & use GE14 equilibrium cores in the PUSAR
    - **SLMCPR**
    - **OLMCPR**
    - **Hot Excess Reactivity**
    - **Shutdown Margin**
    - **Stability**
    - **Anticipated Operational Occurrences**

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Proposed process

- Three Reports to be submitted "for information"
  - Mixed Core Analysis Report
  - LOCA Report
  - Fuel Transition Report
- Report Shells –expanded report outlines used as starting points for generating reports. Shells provide consistent content and format, are unverified, and are continually updated from lessons learned.

Mixed Core Analysis Report (MCAR)

Prepared for:

- GE Fuel introduced into Legacy Core
  - Non-uprated Plants – MCAR at time of GE fuel introduction and an update at the time of uprate if an uprate occurs with a mixed core
  - Uprated Plants – one MCAR for the first uprated cycle

MCAR Topical Areas/Sections

- Qualification of methods and models for non-GE fuel
- Comparative results GE14 to non-GE
- Fuel exposure accounting
- Process Computer - TIP Comparisons
- Fuel Thermal/Mechanical Analysis
- GE14/Non-GE Demonstration Cycle Analysis
- Safety Limit MCPR
- Supplemental Reload Licensing Report (SRLR)

LOCA Report

- SAFER/GESTR based analysis report comparing the different fuels analysis results

OR

- Separate LOCA analyses by each fuel vendor for their own fuels using their methods

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- NRC initial feedback

- Schedule for NRC feedback