ZION SOLUTIONS LLC

An Energy*Solutions* Company

Zion Restoration Project

LCO 3.1.1 Exemption Request Meeting

September 9, 2013

Agenda

ZION SOLUTIONS LLC
An EnergySolutions Company

- Introductions
- ZS exemption request
  - Motivation
  - Relationship to NAC Amendment 4 Request
- NAC Inc. MAGNASTOR Amd. 4 request
- Meeting summary

ZS Exemption Request – Regulatory Process

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- ZS Basis for Exemption Request
  - Low Cask Heat
  - Restrictive Requirement
  - ALARA and Operator Attentiveness
  - Large Number of Casks
- ZS Request in Relation to NAC Amendment Request
  - Allow Amendment Request to Proceed through NRC Technical Review
  - At time of technical acceptance, proceed with ZS exemption Request

- Initial submittal to modify LCO 3.1.1 was submitted on June 18, 2013

PWR TSC Transfer with Reduced Helium Backfill Time

Heat Load (kW)	Vacuum Time Limit (hours)	Helium Backfill Time (hours)	TSC Transfer Time (hours)
≤20	No limit	0	No limit
≤25	50	7	70.5
≤30	19	7	8
≤35.5	15	7	8

NAC International Amendment Request

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- Request for supplemental information was received on August 8, 2013 with responses sent September 6, 2013
  - Request for Fluent thermal model, estimation of spatial discretization errors and solution sensitivity to grid density
  - Request for thermal model assumptions
  - Request for updated shielding analysis
    - MTC dose rates for low heat load
    - Revised operating procedures
    - Revised occupational dose estimates
    - Revised site-boundary dose estimate
    - Provide an ALARA assessment
  - Revise title of Technical Specification (TS) table as necessary and/or clarify

Meeting Summary

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- ZS is requesting an exemption request to the current TSC transfer time limits in the TS)
  - The technical basis for the request is located in MAGNASTOR Amd. 4
- NAC has submitted an Amendment request to revise the current TS time limits for heat loads ≤ 25 kW to provide the technical basis for ZS's exemption request
  - The technical basis for the Amendment request utilizes existing thermal models and methodologies where credit is being taken for activities during helium backfill to justify the increased time limits