

# Review of Regulations and Guidance for Design Certification Environmental Reports

Donald Palmrose, PhD  
NRO/DSEA/RPAC  
January 29, 2014

## **NRC Regulations Regarding SAMDAs**

- 10 CFR 52.47(b)(2) and 10 CFR 51.55

“The environmental report must address the costs and benefits of severe accident mitigation design alternatives, and the bases for not incorporating severe accident mitigation design alternatives in the design to be certified”

- 10 CFR 51.40(a)

“A prospective applicant or petitioner for rulemaking is encouraged to confer with NRC staff as early as possible in its planning process before submitting environmental information or filing an environmental report.”

## **Staff Guidance**

- NUREG-1555 ESRP [Draft Rev 1, July 2007]
  - Section 7.2 – Severe Accidents
  - Section 7.3 – Severe Accident Mitigation Alternatives
  - Acceptance review checklist (ML072250354)
    - See Appendix A for accidents
- MACCS2 calculates offsite consequences
  - Users Guide NUREG/CR-6613
  - WinMACCS Version 3.7
  - SecPop Version 4.2

## **Staff Guidance (cont.)**

- Cost benefit analysis guidance
  - NUREG/BR-0058
  - NUREG/BR-0184
- Other guidance documents can inform the analysis when appropriately applied
- Linked to the Level 2 PRA of the DC
- DCs and COLs apply the same methodology
  - DCs: generic site conditions
  - COLs: site-specific conditions

# **Discussion or Questions**