



# **Small Modular Reactor Activities**

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# SMR DC Applications Expected

| Vendor        | Expected DC Submittal Date |
|---------------|----------------------------|
| B&W mPower    | CY 2014 Q3                 |
| Westinghouse  | CY 2014 Q2                 |
| NuScale Power | CY 2015 Q3                 |
| Holtec        | CY 2016 Q4                 |

# I&C Overall Review Perspectives

- SMR designs have the potential to depart from traditional LWR (i.e., PWR & BWR) design
- Secy-11-0024: Use of risk insights to enhance safety focus
- Licensing review efficiency and effectiveness

# Design Specific Review Standard

- mPower SMR Design Specific Review Standard (DSRS) developed
  - Chapter 7 completely revised and restructured;
  - Intended to promote efficient, effective risk-informed reviews
  - Top-down approach where greater emphasis is placed on design principles – redundancy, independence, diversity and defense-in-depth, predictability and repeatability

## **DSRS - Continued**

- mPower DSRS public comments due in August
- Safety evaluation report template under development to reflect the DSRS
- Staff engaged in other design centers (e.g., NuScale) on DSRS

# Importance of Communication

- Early communications and interactions with NRC staff are of great value
  - Pre-application meetings
  - Technical Reports
  - Sharing of lessons learned
  - Innovative approaches