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*GE Nuclear Energy*

# ***Introduction and Schedule***

## ***– TRACG application for ESBWR***

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# Outline

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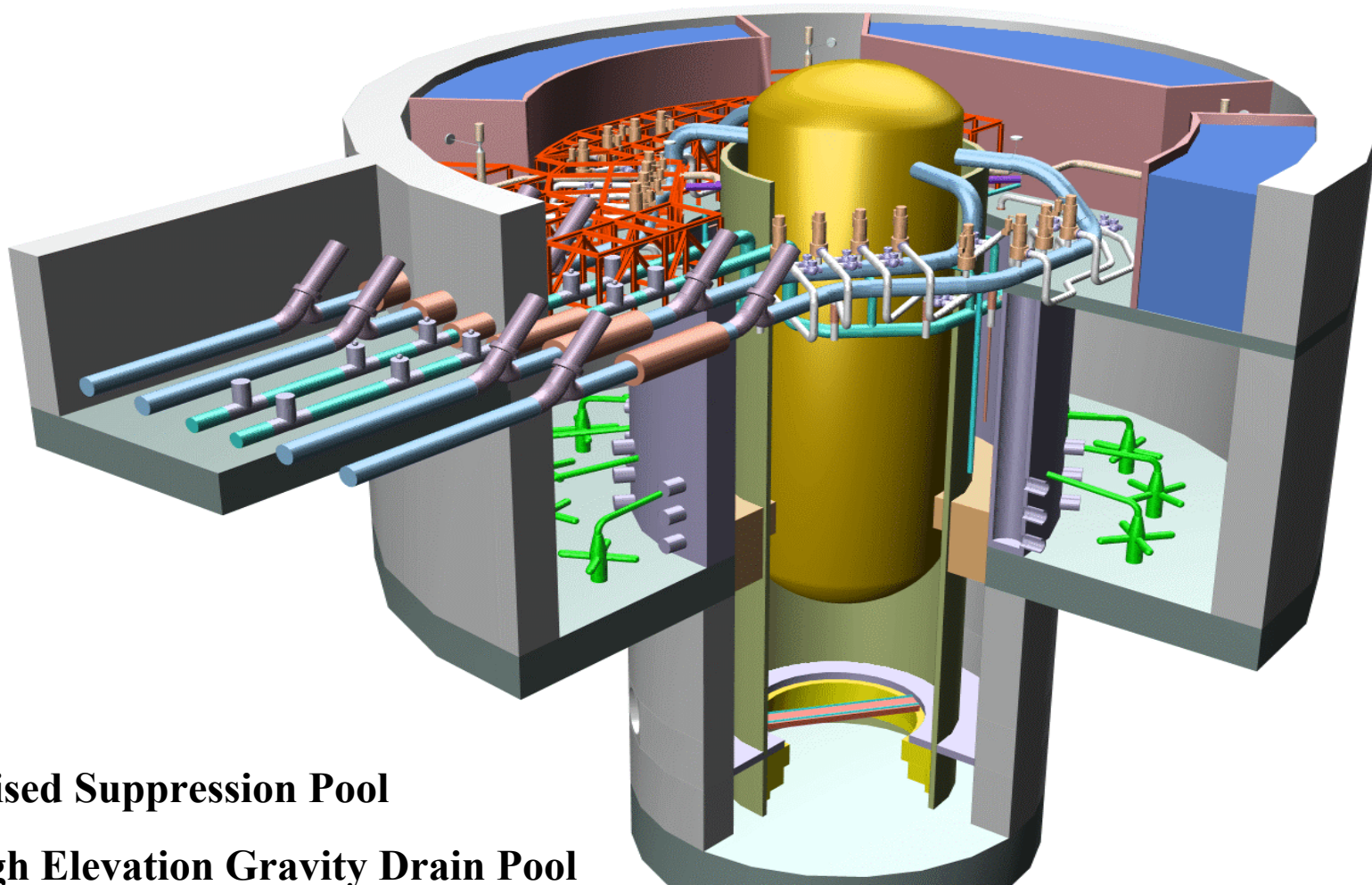
- Introduction and schedule
- Roadmap and TRACG qualification approach
- Testing overview and PCCS operation
- Responses to Questions on P series tests in PANDA
- Responses to Model Questions
- Transient application

# Technology closure plan for ESBWR

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- Approval of TRACG Application for LOCA
    - Based on the TAPD and its implementation
    - Based on the qualification studies
  - Approval of TRACG Application for containment
    - Based on the TAPD and its implementation
    - Based on the qualification studies
  - Approval of TRACG Application for AOO
    - Based on the TAPD and its implementation
    - Based on the qualification studies and operating plants
  - TRACG Application for ATWS
    - Based on the TAPD and its implementation
    - Based on the qualification studies
    - Contingent on application methodology\*
  - ESBWR stability evaluation
    - Based on the TAPD and its implementation
    - Based on the qualification studies
    - Contingent on ODYSY/TRACG application methodology\*
- \*Change

# Safety Systems Inside Containment Envelope



- **Raised Suppression Pool**
- **High Elevation Gravity Drain Pool**
- **All Pipes/Valves Inside Containment**
- **Decay Heat Condensers Above Drywell**

# ESBWR Program Summary and Conclusion

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- **15+ year technology and design program**
  - a BWR with less components
- **Simplification and margins by design**
  - large vessel results in benign response
  - analysis is simplified
- **Challenges for the coming months**
  - need closure and confirmation that regulatory risk is manageable