Session 3: Breakout Session to Identify CUCs on SMRs for Designers and Users

Group 2: Nuclear Safety
Room M0E-75
11:00 – 12:30
Innovation vs. Proven Technologies

- In general, how does the use of innovative and untested features impact the safety case?
Inherent vs. Passive vs. Active safety systems

- What are advantages and disadvantages of each category?
- Limits on incorporating inherent safety features
- Decay heat removal
- Can passive safety systems fail?
- Even if passive safety systems do not fail, how to assure availability of ultimate heat sink?
- Active safety system has “minimum-line” to test the system in normal operation. Testability is challenging for passive plants.
Shutdown systems

- Reliability
- Fail-safe operation, etc.
Grace period

- before operator action is needed
- until power is restored for decay heat removal
- How is grace period determined?
Severe Accident

- Containment of damaged fuel
- What can be realistically be achieved? How much "residual risk" can be tolerated?
- Mitigation and evacuation measures
- Etc.