

The “Hub and Spoke” Model

Key Differences from the U.S. Nuclear Regulatory Commission (NRC) Current Approach

- Different management model
- Scalability and flexibility for steering and funding partners (option 2: contractor operated hub)
- More centralized coordination and communication of research capabilities and products
- Workshop participant consensus
- Spokes can conduct multiple research projects under a common area of expertise instead of the current one-to-one relationship between the NRC and specific research projects
- Increased logistics support from Headquarters staff if RES is the “hub”

NRC Role

- Issue final regulatory guidance.
- Provide leadership and vision.
- Provide performance oversight and the necessary checks and balances to manage the model.
- Identify and approve research projects based on NRC and stakeholder needs.
- Partition resources and project allocations among the “spokes.”
- Promote stakeholder support for research initiatives.
- Seek partners for cooperative research.

“Hub” Role (NRC or contractor operated)

- Provide recommendations on the organizations most appropriate for addressing identified research topics.
- Coordinate and promote communication among “spoke” or stakeholder organizations.
- Provide centralized program management support (e.g., periodic workshops, website hosting, etc.).
- Promote digital instrumentation and control and human-machine interface (DI&C/HMI) educational programs and workforce development.

“Spoke” Roles

- Provide expert technical assistance to Headquarters staff on DI&C/HMI topics.
- Maintain experimental and computational capabilities.
- Execute agency research projects under a common area(s) of expertise on a timely basis and produce quality results (e.g., HMI spoke, Cyber Security Spoke).
- Educate, train, and maintain highly capable staff on DI&C/HMI topics.