SNC Modern Control Room Strategic HFE Activities – Design for the SNC Legacy Fleet Main Control Room

Human and Technology Integration, Day 3 – Session #5

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SNC Modernization Objectives

Fleet Digital Modernization Goal is to support the SNC Fleet past 80 years through:

Operational Risk Reduction

Design Efficiency

Project Risk Reduction

O&M Cost Savings

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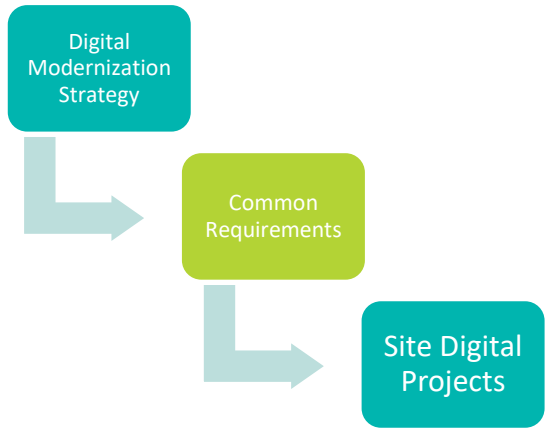
Modernization Planning

Filling the gap between strategy and implementation

- Plan for Standardization and Flexibility
  - Use Common Design Elements
  - Standard design requirements
  - Capture Stakeholder needs (including the business)
- Plan for Modern Main Control Room
- Design-in Lifecycle Support
- Inform Business and Organizational changes



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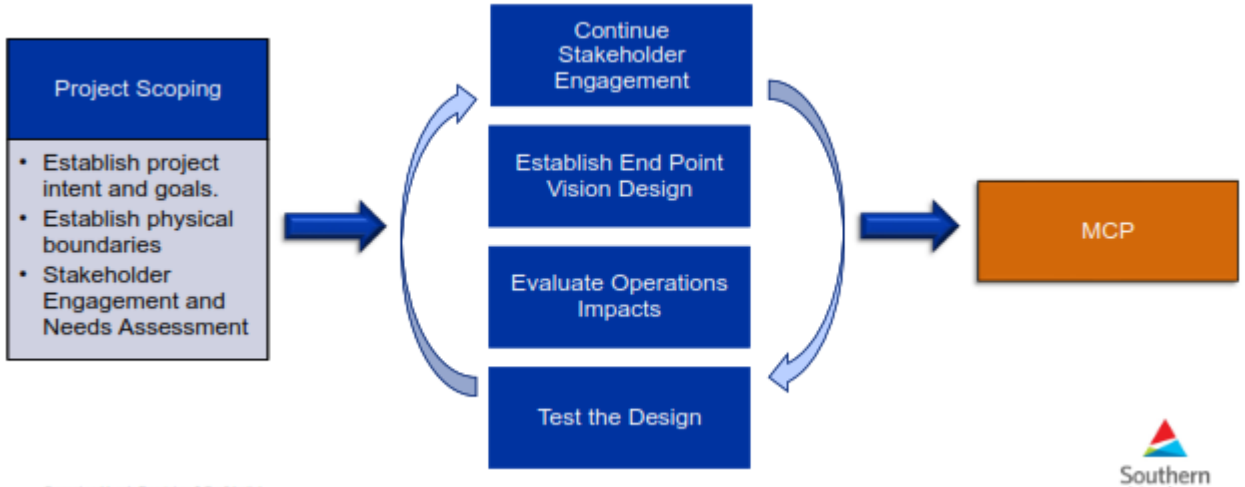
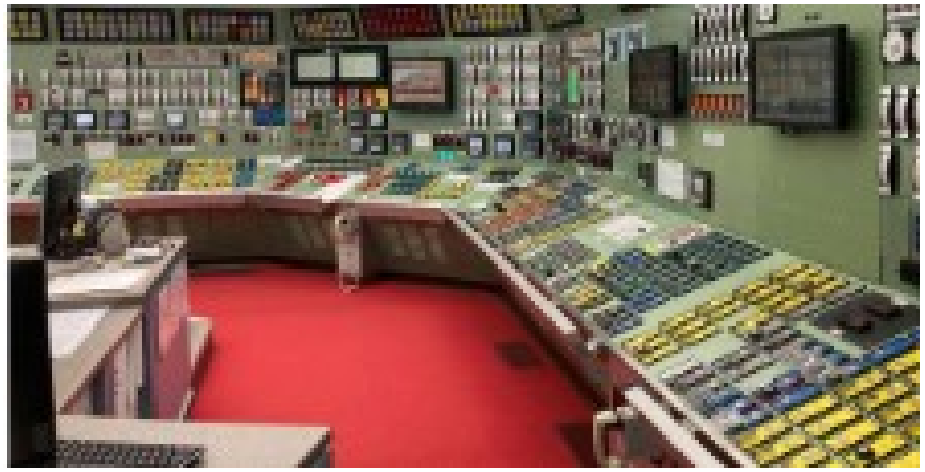
Modern Control Room Project

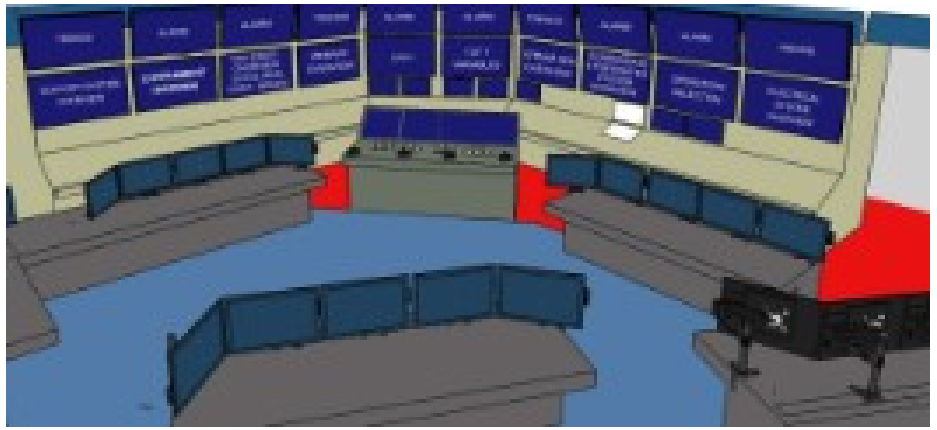
- The SNC Modern Control Room starts with establishing the End Vision
- The MCR End Vision supports the overall goals of Modernization
- The End Vision is accomplished through Phases
- Each Phase is based on sound HFE principles
- Each Phase was tested to confirm assumptions



Developing Endpoint Vision

- Stakeholder Input
  - Operations
  - Maintenance
  - Engineering
- Bring information and automation to the Operator
- Sensible phased approach, based on plant and operational needs
- Each phase must stand alone
- Iterative process based on testing and review
- Be flexible, expect change





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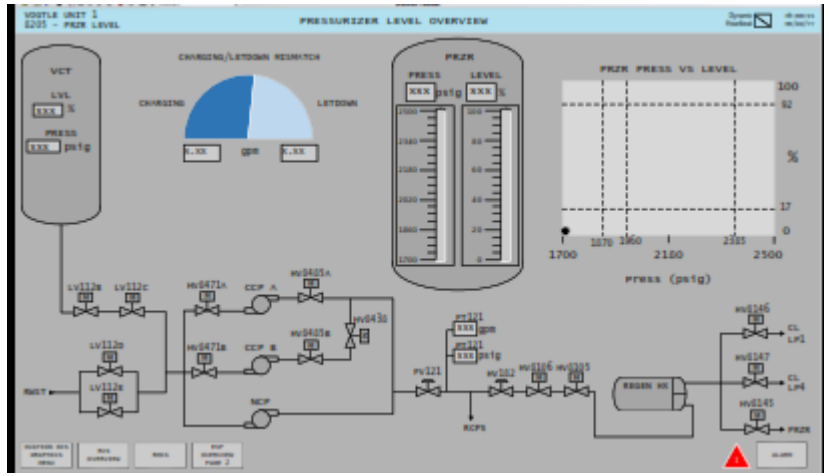
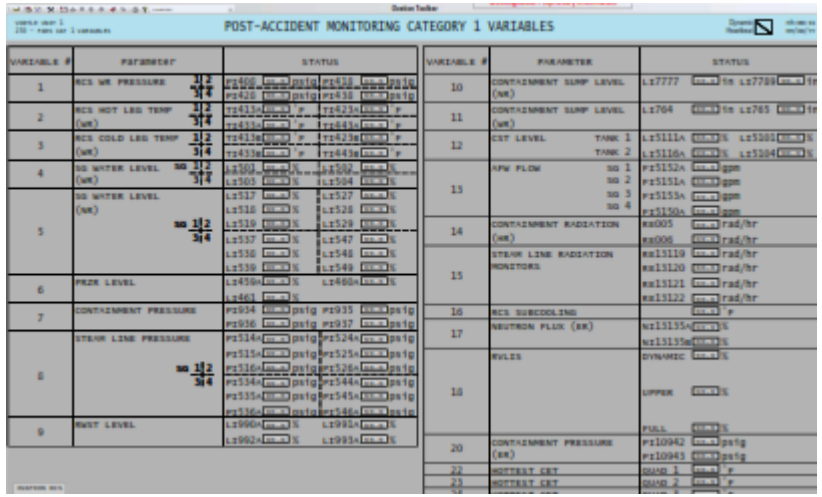
New Concepts of Operations

- Transition from traditional stand-up control room to sit down operators
- Information brought to the Operator
- Automation of routine tasks
- Task based displays
- Automation to support normal operations and safe shutdown scenarios
- Validate the design with HFE principles





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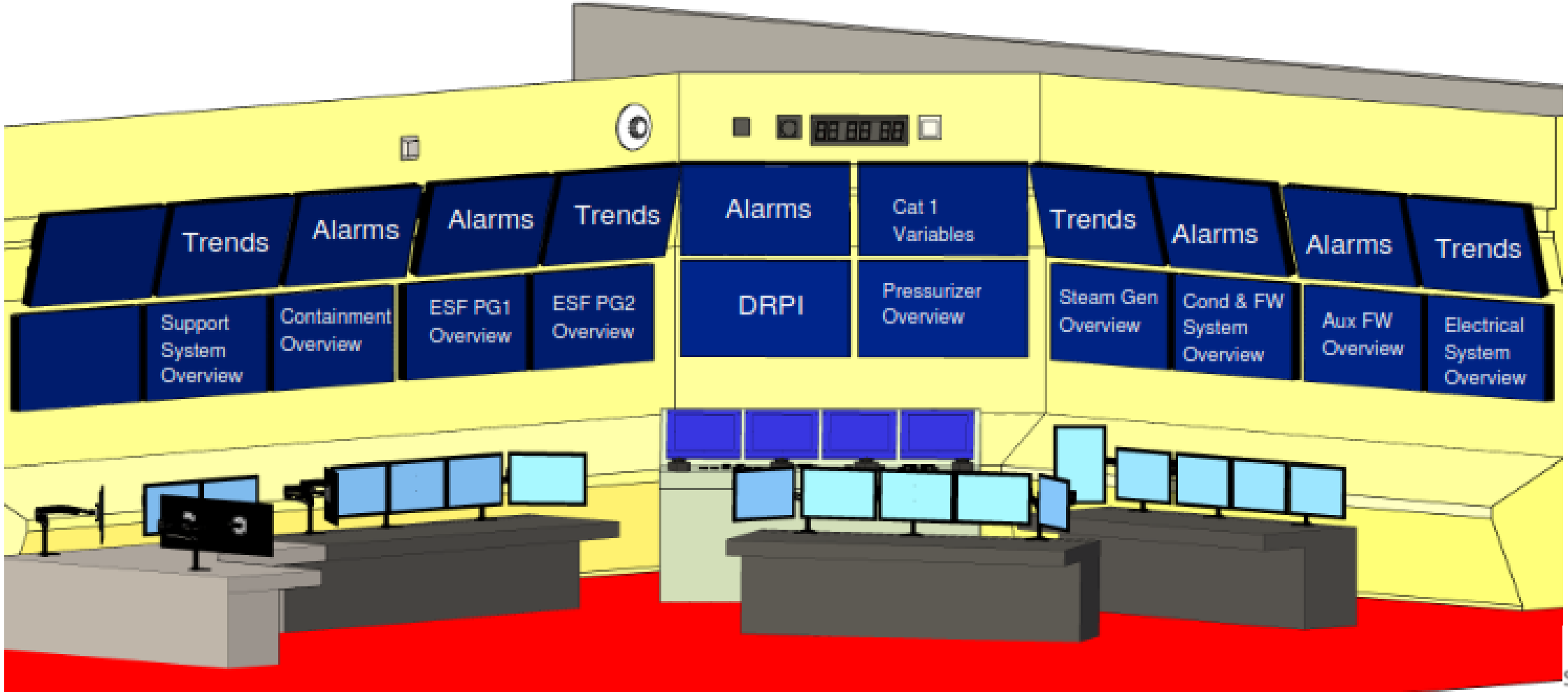
Vogtle End State



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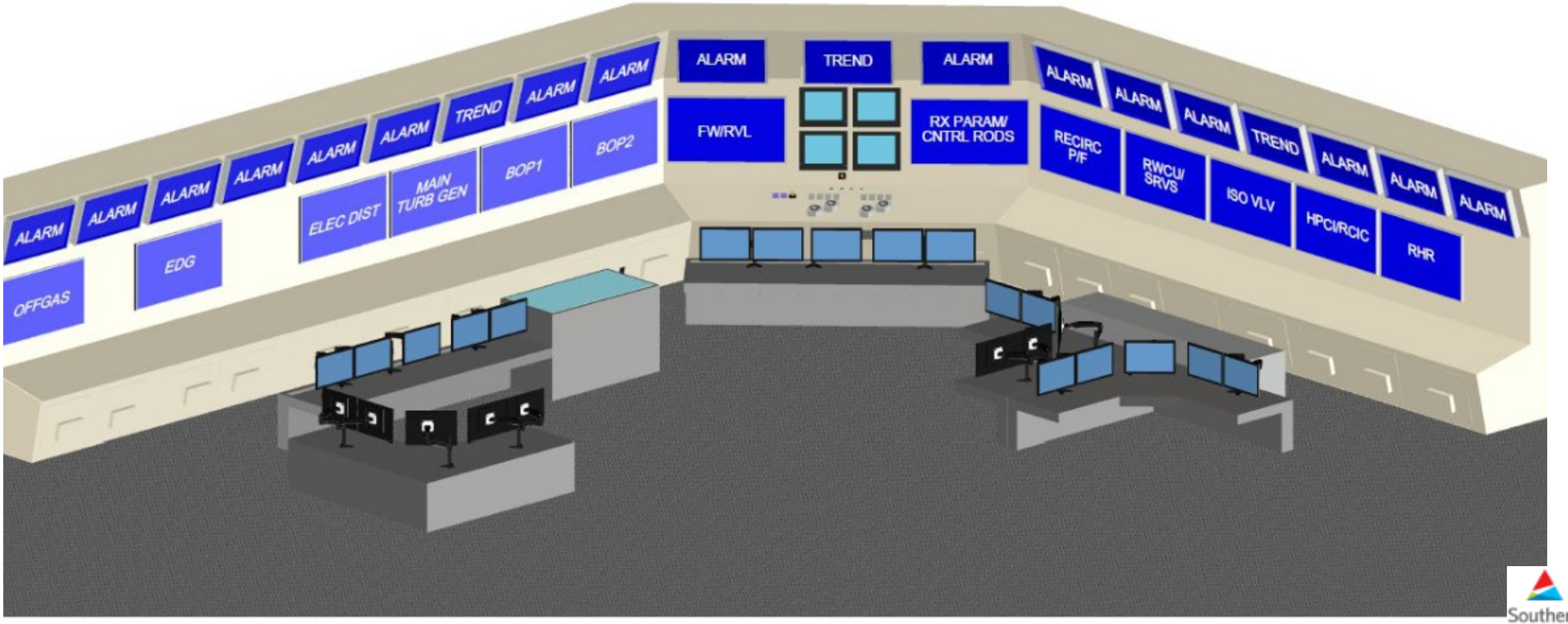
Hatch End State Vision



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Farley End State Vision

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