



Major Projects Update

Oconee Nuclear Station

Seneca, SC

January 30, 2013



For Information Only

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| ❖ Welcome & Opening Remarks | Preston Gillespie |
| ❖ Digital RPS/ES | Jim Fuller |
| ❖ Protected Service Water (PSW) | Jim Fuller |
| ❖ Main Steam Isolation Valves | Jon Arterburn |
| ❖ NFPA 805 | Terry Patterson |
| ❖ Closing Remarks | Regis Repko |



Duke Participants

- ❖ Regis Repko, Senior VP, Nuclear Operations
- ❖ Preston Gillespie, Site VP, Oconee Nuclear Station
- ❖ Dave Baxter, VP, Regulatory Project Completion
- ❖ Jim Fuller, General Mgr, Oconee PSW Project
- ❖ Jon Arterburn, General Mgr, Fleet & Stand Alone Major Projects
- ❖ Terry Patterson, Oconee Safety Assurance Mgr



Opening Remarks

Preston Gillespie

Site Vice President, Oconee Nuclear Station



Projects Update

Jim Fuller

General Manager, Oconee PSW Project

Reactor Protective System / Engineered Safeguards (RPS/ES)

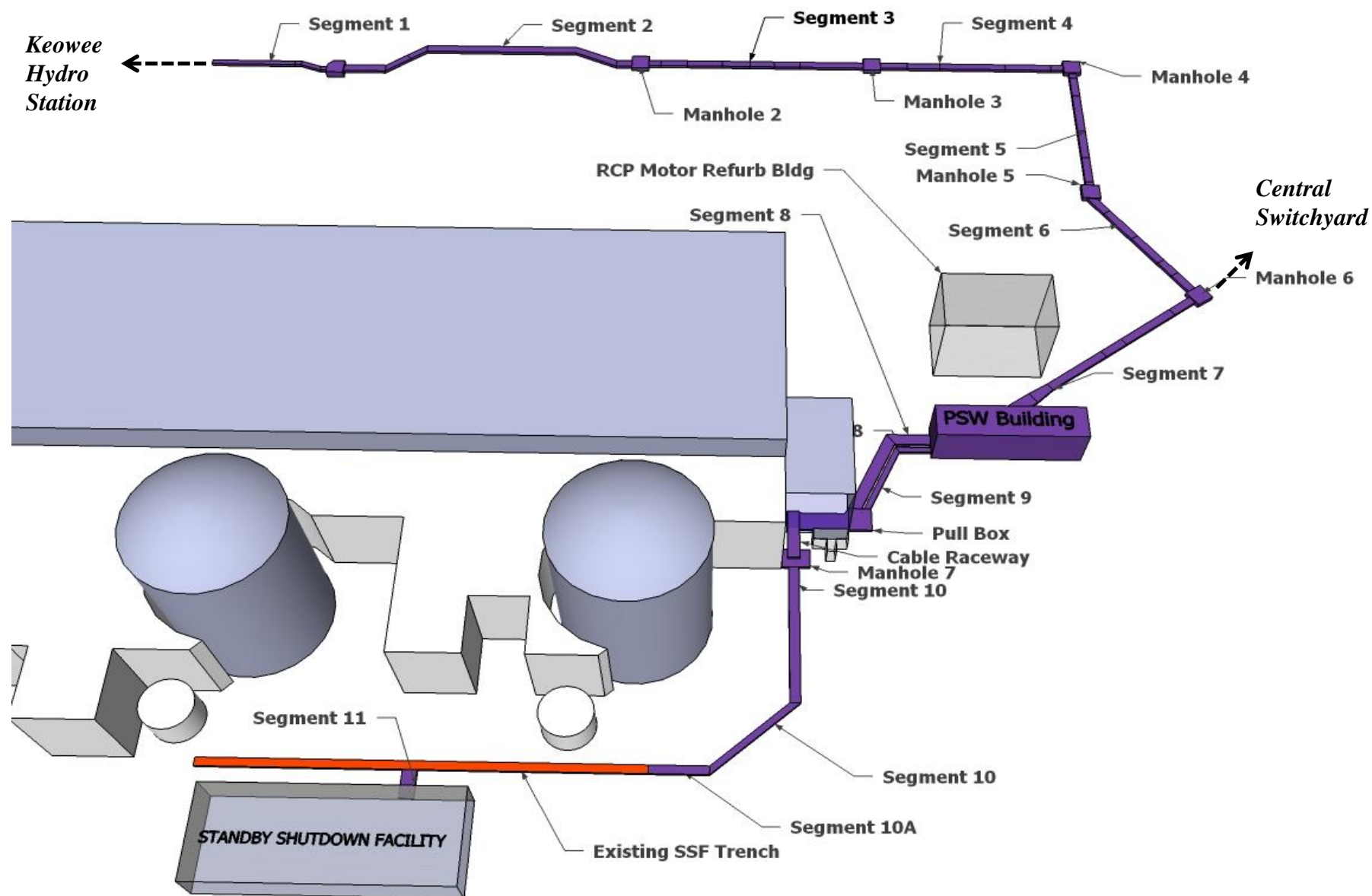
- ❖ Unit 1 RPS/ES Installation Complete (Spring 2011)
- ❖ Unit 2 RPS/ES Installation - Scheduled for Fall 2013
- ❖ Unit 3 RPS/ES Installation Complete (Spring 2012)

Received NEI Top Industry Practice Award

Vision and Leadership Best of the Best

For Information Only

Protected Service Water (PSW)



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Protected Service Water (PSW)

- ❖ Items recently completed
 - ❖ Duct bank cable pulling
 - ❖ Batteries and battery chargers are in service
 - ❖ Underground grid connection installed
 - ❖ Major PSW Building electrical equipment installed
 - ❖ Major PSW Building HVAC equipment installed



**Fant Line (Commercial feed)
to PSW Building**



Switchgear at Keowee



PSW Battery Bank



PSW Battery Charger



PSW Building HVAC Ductwork



Protected Service Water (PSW)

- ❖ Near Term Activities for Physical Infrastructure
 - ❖ Complete PSW Building commissioning testing
 - ❖ Power up the PSW Building
 - ❖ Power up the SSF* from the PSW Building
 - ❖ Power up the PSW Building via Keowee
 - ❖ PSW pump & piping installation
 - ❖ PSW Auxiliary Building & Reactor Building cooling

*Standby Shutdown Facility



Protected Service Water (PSW)

- ❖ Enhanced Project Controls
 - ❖ Organizational shift to enhance alignment with the Site
 - ❖ The General Manager of the PSW Project reports to the same Senior VP as the Site VP does
 - ❖ PSW has an advocate for the routine strategic and tactical meetings held by the Senior VP
 - ❖ Dedicated General Manager to lead the Project
 - ❖ Sole focus is to complete the Protected Service Water (PSW) Project
 - ❖ Direct report to Senior VP to strengthen oversight and improved access to resources
 - ❖ Full time engineer dedicated to Nuclear Logistics, Inc (NLI)
 - ❖ Ensure Duke receives priority from the vendor
 - ❖ Direct interface between NLI and the Project Team

- ❖ Enhanced Project Controls (cont)
 - ❖ Implemented the Project Command Center
 - ❖ Dedicated facility, modeled after Outage Command Center
 - ❖ Focused on improving project execution and issues resolution
 - ❖ Staffed seven days per week with Site and Project personnel



- ❖ Licensing approach (in order of priority)
 - ❖ PSW UFSAR / Technical Specification changes
 - ❖ HELB
 - ❖ Tornado

- ❖ Separate NRC Safety Evaluations for HELB and Tornado

Jon Arterburn
General Manager,
Fleet & Stand Alone Major Projects

Main Steam Isolation Valves (MSIVs)

- ❖ Detailed engineering and procurement activities continue
- ❖ Incorporation of lessons learned from the PSW Project continue
 - ❖ Project execution plan and modification completion schedule under review
- ❖ MSIVs provide small risk improvement to the station
- ❖ Project costs have increased significantly
 - ❖ Scope and complexity of project has increased significantly since project was originally contemplated
- ❖ Other alternatives being considered as MSIV design work continues

Terry Patterson
Safety Assurance Manager

Project Status:

- ❖ Program Implemented 1/1/13
- ❖ All Items not related to PSW are complete or on schedule
- ❖ Selected Licensee Commitments (SLCs) issued
- ❖ New Fire Protection Design Bases Document issued
- ❖ UFSAR updated
- ❖ Administrative procedures issued. Examples:
 - ❖ Control of transient combustibles
 - ❖ Hot work
 - ❖ Fire impairments
 - ❖ Shutdown risk management

❖ Remaining items to Complete:

❖ PSW modifications

❖ Once the PSW modifications are complete:

- ❖ Incorporate the PSW modifications into site documents
- ❖ Confirm that the risk decrease from installation of PSW bounds the transition risk
- ❖ Complete the analysis of non-power operation (NPO) fire impacts

❖ Complete remaining modifications per commitment:

- ❖ Fire Detection modifications
- ❖ Turbine Building / Auxiliary Building wall modifications
- ❖ Purge Room wall modifications

- ❖ **On going actions until modifications are complete:**
 - ❖ Appendix R required fire watches continue to be performed
 - ❖ New NFPA-805 fire watch program has been established
 - ❖ Additional compensatory actions remain in place until PSW is completed
- ❖ **Oconee's fire safety has benefited from the implementation of NFPA-805, and will continue to improve upon PSW completion**

Regis Repko

Senior VP, Nuclear Operations

NRC Comments and discussion