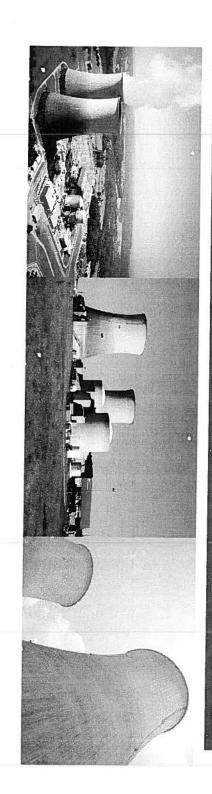


Reactivation Assessment Group (WRAG) Meeting April 9, 2014 Watts Bar Nuclear Plant





- Construction Completion Status
- Startup & Testing
- Licensing Path Forward
- Dual-Unit Operation
- Special Topics

 Hydrology
- Fukushima
- Outreach
- Closing Comments

Construction Completion Status Update





Watts Bar 2 Construction Reactivation

- Guiding Principles for Construction Completion
- Ensuring public health and safety
- Safe continued/uninterrupted operation of Watts Bar 1

Fidelity of the Unit 1 and Unit 2 Design Basis and physical operation

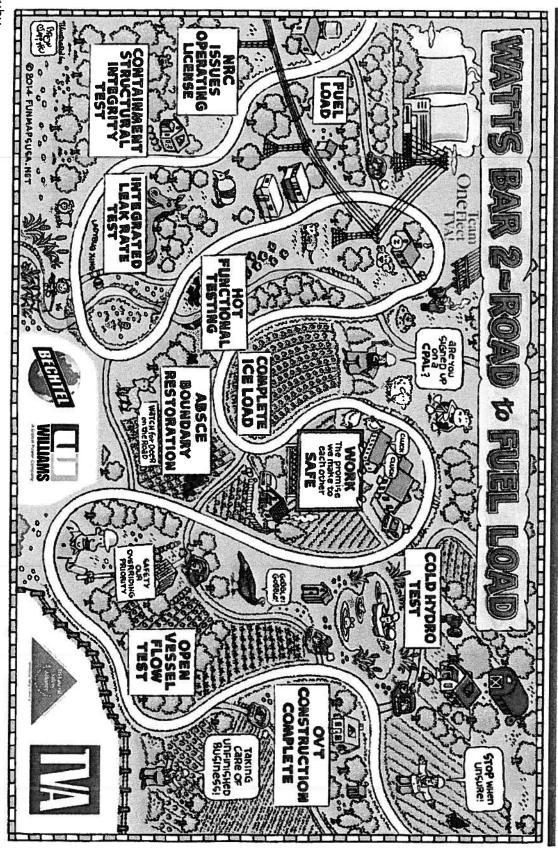
Maintaining a consistent, predictable, transparent process for completion and licensing



Watts Bar 2 Construction Summary

- Safety
- Over 26+ million hours without lost-time incident
- Fiscal year-to-date Recordable Injury Rate at 0.21
- Quality
- Project Quality Control Acceptance Rate >96%
- Cost & schedule
- Cost and schedule adherence meeting expectations

Watts Bar 2 Completion



Startup & Testing





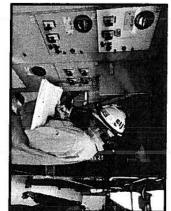
Watts Bar 2 Startup & Testing - Overview

- Activities in progress
- Component-level testing
- System flushes
- Pre-Op and acceptance testing
- System turnovers

Watts Bar 2 Startup & Testing - Overview

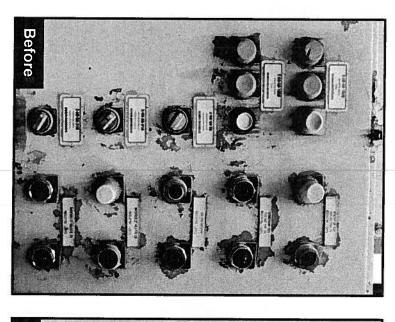
- Component-level testing
- Current count is 8,634 component tests, 48% complete
- System flushing
- Total number of clean plans 68
- Seven completed, six in progress
- Pre-operational and acceptance test performance
- Overall test instruction generation 81% complete
- 41 of 87 systems turned over for pre-operational testing
- Test instruction performance on schedule
- Startup testing Nuclear Regulatory Commission (NRC) Region II interface

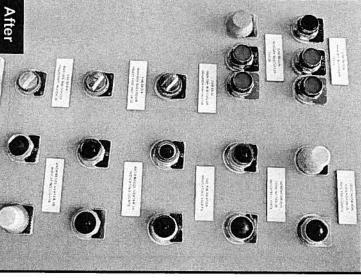


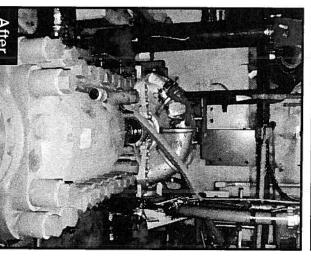


Watts Bar 2 Components Before and After

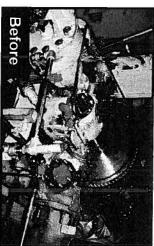
Local Control Panel



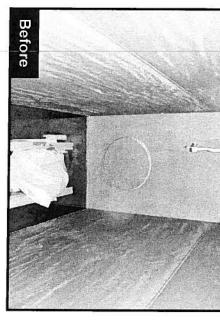




Turbine-Driven
Auxiliary Feedwater Pump

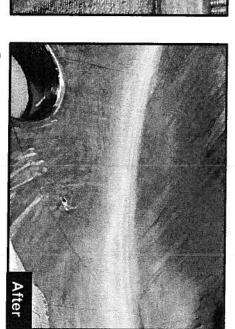


Matts Bar 2 Components Before and After



Fuel Transfer Tube

After



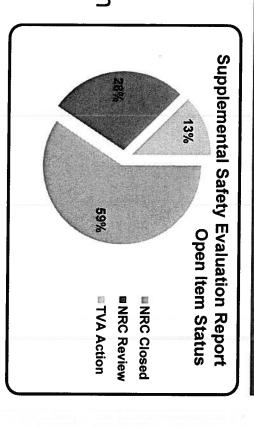
Steam Generator Channel Head

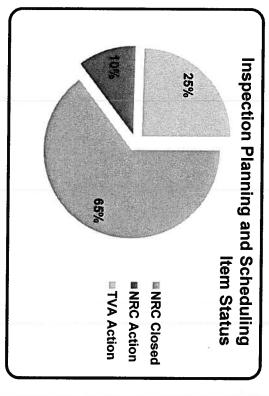
Licensing Path Forward



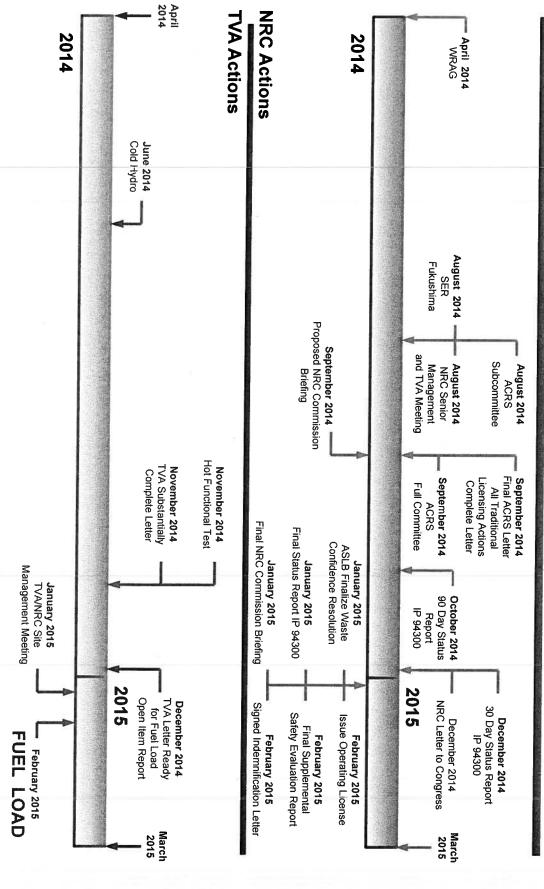
Watts Bar 2 Licensing Path Forward

- Final environmental statement is complete
- complete
 Safety evaluation nearing completion
- Closure of regulatory commitments accelerating
- No Watts Bar 2 specific contentions remain open





Watts Bar 2 Licensing Fuel Load Schedule



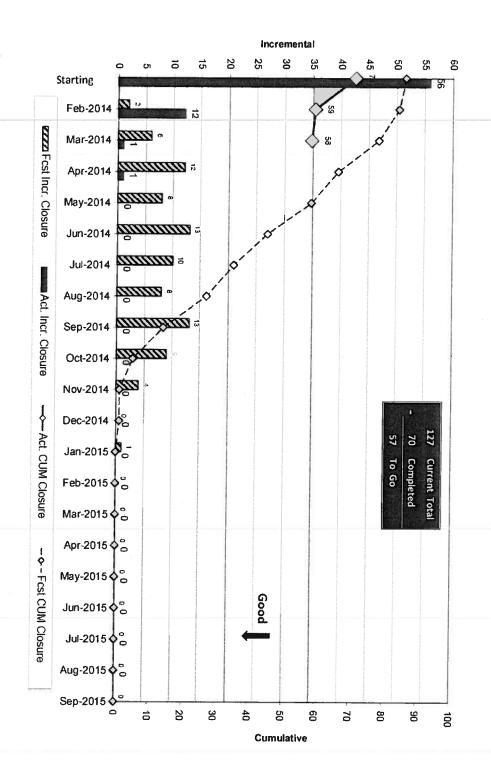
Arent

Watts Bar 2 Inspection Planning & Scheduling

Critical NRC Inspections - NRC Notifed IPS Item Is Ready for Inspection

Actual vs. Forecast

Watts Bar Nuclear Unit 2 Completion Project



Dual-Unit Operation





Watts Bar Dual-Unit Operation - Readiness Team

- Governance and coordination role
- Prepare organizational transition plans
- Provide operational readiness self-assessment oversight

Ensure every process, program, and procedure has owner and schedule for

Coordinate and oversee system and area turnover

completion that supports the project schedule

- Coordinate resolution of issues/items between Watts Bar 1 operations and Watts Bar 2 completions
- Power ascension testing

Watts Bar Dual-Unit Operation - Readiness Team

Ensure Watts Bar's transition from safe, reliable single-unit operation to safe, reliable dual-unit operation

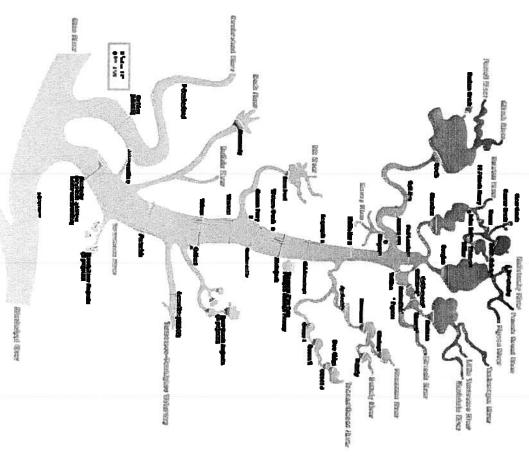


Special Topics



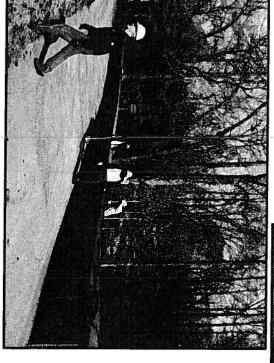
Hydrology

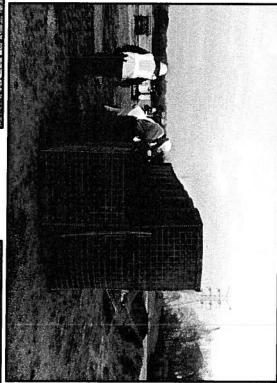
- complete Design Basis Hydrology Analysis
- Report submitted Bar Unit 2 Final Safety Analysis Analysis Report and the Watts Bar Unit 1 Updated Final Safety License amendments to the Watts
- Internal plant modifications to address hydrology issues will be fuel load installed on Watts Bar 2 prior to
- barriers (HESCO) October 2015 modification in place of the flood TVA will install permanent

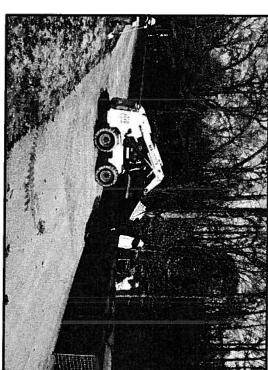




Flood Barrier (HESCO) Basket

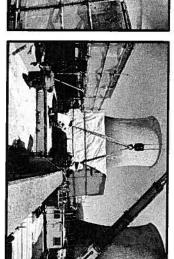




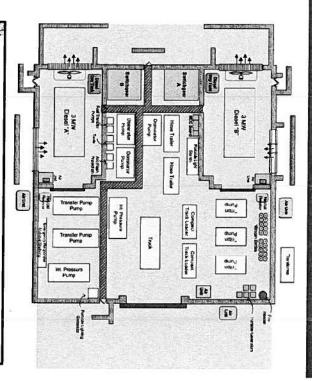


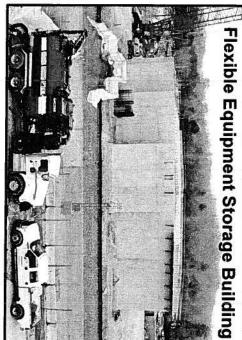
Watts Bar Fukushima Response

- Designs for Fukushima modifications complete
- Construction of Flexible Equipment
 Storage Building underway
- Support equipment delivered
- NRC review in progress
- Procedures and training in development



Diesel Generators Being Placed on Auxiliary Building Roof





Outreach Key Objectives

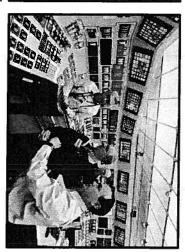
- Visits/tours by key stakeholders
- Commissioners with the NRC
- Clean and Safe Energy Coalition
- Nuclear Energy Institute's Washington International Representative Committee
- Customers
- Speeches
- Community panel
- Public meetings
- Proactive media strategy
- Family & Friends, TVA, and Community Days

Hruby





Commissioner Magwood







Ambassador Kirk

Closing Remarks





Conclusion

- Workers continue to deliver good safety performance
- Quality work remains high as measured by the Quality Control Acceptance Rate.
- Cost and schedule performance are slightly ahead of the Watts Bar 2 Estimate to Complete values
- Startup testing and system turnovers are in progress
- Project challenges are being identified and addressed to ensure project impacts are minimized
- Fukushima response and hydrology actions continue to progress in support of the operating license schedule
- A comprehensive outreach plan is being implemented

Questions

