

#### **Watts Bar Nuclear Plant**



# Watts Bar Unit 2 Safety Culture Efforts

August 18, 2014



### **Opening Remarks**



#### WBN2 SC Assessment Approach

- Variety of Safety Culture assessment tools used since 2009
- Multiple tools versus single tool transient versus stable workforce
- Defined assessments performed periodically to identify trends and corrective actions, as appropriate
- Periodic monthly surveys and "check-out" surveys



### **See Handout**

## TVA WATTS BAR UNIT 2 - NUCLEAR SAFETY CULTURE ACTIVITIES COMPONENTS, CONDUCT, & RESULTS COMPARISON MATRIX

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TVA WATTS BAR UNIT 2 NUCLEAR SAFETY CULTURE ASSESSMENTS/SURVEYS CONDUCTED	SCWE Assessment (Levanway)	Alignment & Engagement Improvement Initiative	NGDC OHI	Construction Excellence Gap Assessment	NGDC-CSRB	TVA WBN U2 ECP SCWE Assessment	Bechtel ECP Survey	Completion Root Cause Assessment	Trait Gap Assess.	Work Environment Risk Assessment	McKinsey Assessments	TVA ECP Survey	EXIT Surveys	Nuclear Safety Culture Monitoring Panel	Other WBN2 Assessments
WHAT WE LOOKED AT						24	,,								
1. Human Performance						22	40								000
a. Decision Making	Х	X	Χ		Χ		Χ	Х	Χ		Х				
b. Resources				Х				Х			Х				
c. Work Control	Х			Х	Χ			Х	Χ	Х	Х				
d. Work Practices				Х	Χ		4	Х	Χ	Х	Х	j			
2. Problem Identification & Resolution							114						0077		
a. CAP	Х	Х		X	Χ	X	Χ		Χ		X	X		Х	
b. Operating Experience	Х								Χ						
c. Self and Independent Assessments	Х			Х	Χ	Х		Х	Χ		Х				Х
3. Safety Conscious Work Environment						24	2/4			-					
a. Environment for Raising Concerns															
i. Non-ECP Related	Х	Х				X	Χ		Χ	Х			Х	Х	Х
ii. ECP Related	Х	Х			Χ	Х	Х		Χ		Х	Х	Х	Х	Х
b. Preventing, Detecting & Mitigating Perceptions of Retaliation	Х					Х	X						Х	Х	Х
4. Other Safety Culture Components															
a. Accountability			Χ	Х		Х			Χ	Х	Χ				
b. Continuous Learning Environment			Х				Χ		Χ		Х			Х	
c. Organizational Change Management															
d. Safety Policies	Х	Х		Х											
HOW WE CONDUCTED THE SURVEYS															
Conducted independent of the line organization	Х		Х		Χ	Х	Х	Х		Х	Х	Х	Х		

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Available to all target participants (not a sample)	Х	X See Const Excell Gap	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х		
3. Participation is voluntary	Х	Х	Χ	X	Χ	Х	Х	Х	X	Х	Х	X	Х		
4. Response is confidential/anonymous	Х	Х	Χ	Х	Χ	Χ	Χ	Х	Χ	Х		Х	Χ		
5. Demographic information on organization, position, and tenure to permit granularity	Х		Х				Х					Х	Х		
6. Administered by structured questionnaire	Х		Χ				Х					Х	X		
7. Validated method of assessing nuclear safety culture	See Levanway history					X NEI Driven	X NEI Driven					X NEI Driven	X NEI Driven		
8. Uses a numerical scale for responses			Χ				Х								
9. Provides for write-in comments		Done as face to face	Х	Done as face to face		Done as face to face	Х		Done as face to face	Done as face to face	Done as face to face	Х	Х		
WHAT WE DID WITH THE RESULTS															
Numerical results compared to industry benchmarks	No Industry Benchmark Data for Construction														
Numerical results compared to site benchmarks			Х				Х								
Results compared to previous results for trends	Х		Х		Х	Х	Х		Х		Х	Х		Х	
4. Strengths/strong performing organizations identified			Х		X						Х	Х		Х	
5. Weaknesses/organizations needing special attention identified	Х	Х	Х	Х	Х	х	Х	Х	Х	х	Х	Х		Х	
Conclusions/recommendations (based on analysis – numerical and comments)	Х	Х	Х	Х	Х	Х	Х	Х	X	Х	Х	Х		X	`

### TVA

### Summary

- Process
  - Multi-Tool Approach
  - Internal and External Assessments
  - Conducted on a routine basis
- Assessed all Areas of Safety Culture
  - Human Performance
  - Problem Identification and Resolution
  - Safety Conscious Work Environment
  - Other
- Appropriate due to the nature of the construction environment
- Effective in assessing the Safety Culture at WBN2



### **Closing Remarks**