

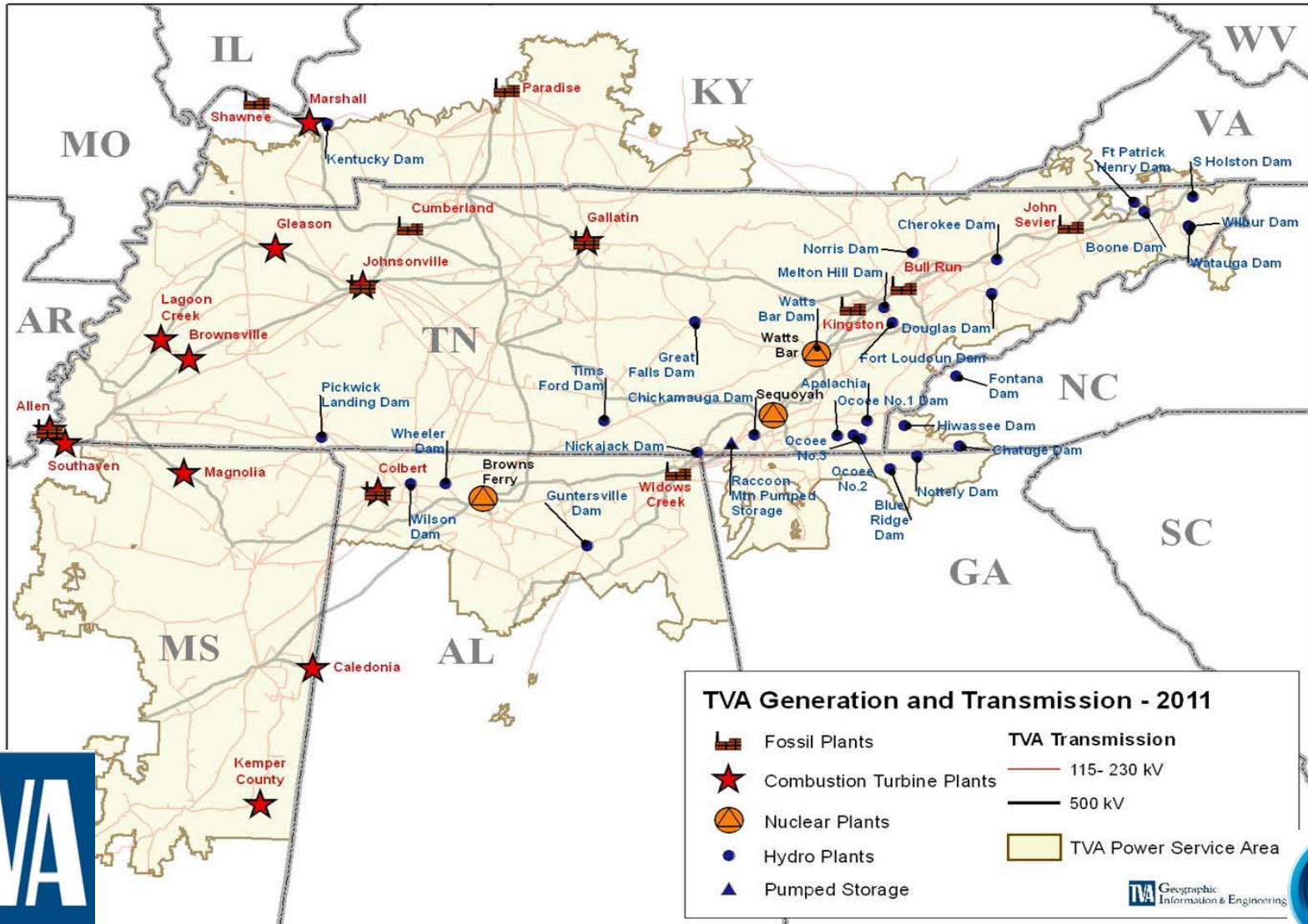


Human Performance Program Focus on Results

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Sr. Project Manager
Human Performance
and Corrective Action Program



TVA Overview



What is the Goal?

- The Process is not the Goal
- Creating Perfect People is not the Goal
- The Goal is **Preventing Significant Human Performance Events**
- What is a Significant Human Performance Event?



Defining Significance

- Standardized Across all Business Units As Much as Possible
 - Loss of customer Load > 2 MW
 - Unplanned Loss of Generating Unit
 - Property Damage > \$100,000
 - Fire Resulting in Property Damage or Injury
 - Unplanned transmission line trip resulting in rescheduling of interchange



HU Vision

- Prevent HU Events by Proactively Using Tools to Eliminate Errors
- Ensure Consistent Application of HU Program Throughout the Fleet
- Drive HU to Improve Fleet as Much as Reasonable
- Promote Continuous Improvement Through Use of Tools, Effective Field Observations & Feedback



HU Vision

- Improved Human Performance Will Result in:
 - Fewer Injuries
 - Better Discretionary Effort
 - Higher Morale and Productivity
 - Fewer Environmental Events
 - Higher Availability and Lower Costs



HU Effort Part of Overall Performance Improvement Strategy

- Executive Support
- Management Review
- Assessment Process
- Observation Process
- CAP and Root Cause Program
- Phased HU Program Implementation





HUMAN PERFORMANCE TOOLS

- Pre-Job Briefing
- Two-Minute Rule
- First Check
- Self Check (Touch STAR)
- Post-Job Briefing
- Procedure Use & Adherence
- Place Keeping
- Three-way Communication
- Phonetic Alphabet
- Peer Checking
- Independent Verification
- Concurrent Verification
- Flagging (Operational Barriers)
- STOP When Unsure





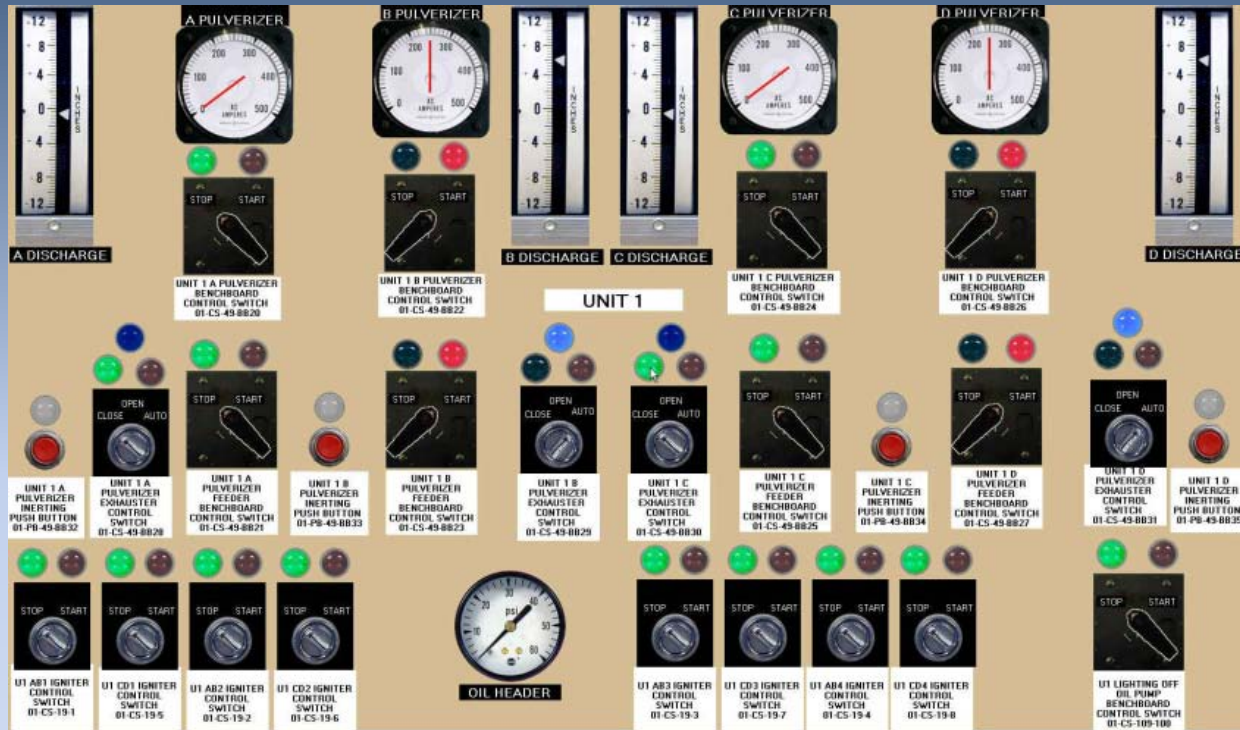
HUMAN PERFORMANCE TOOLS

Implementation Plan

- Develop HU Aids
 - Lanyard Cards
 - Tools Flipchart
 - Posters
 - Targeted Videos
- Conduct Classroom Training on HU Fundamentals
 - Includes TVA & Contractor Employees



Practical/Hands-On Training



Mockups Requiring Demonstration of HU Tools Such as: Procedure Use, Peer Checking, Phonetic Alphabet, & Flagging.



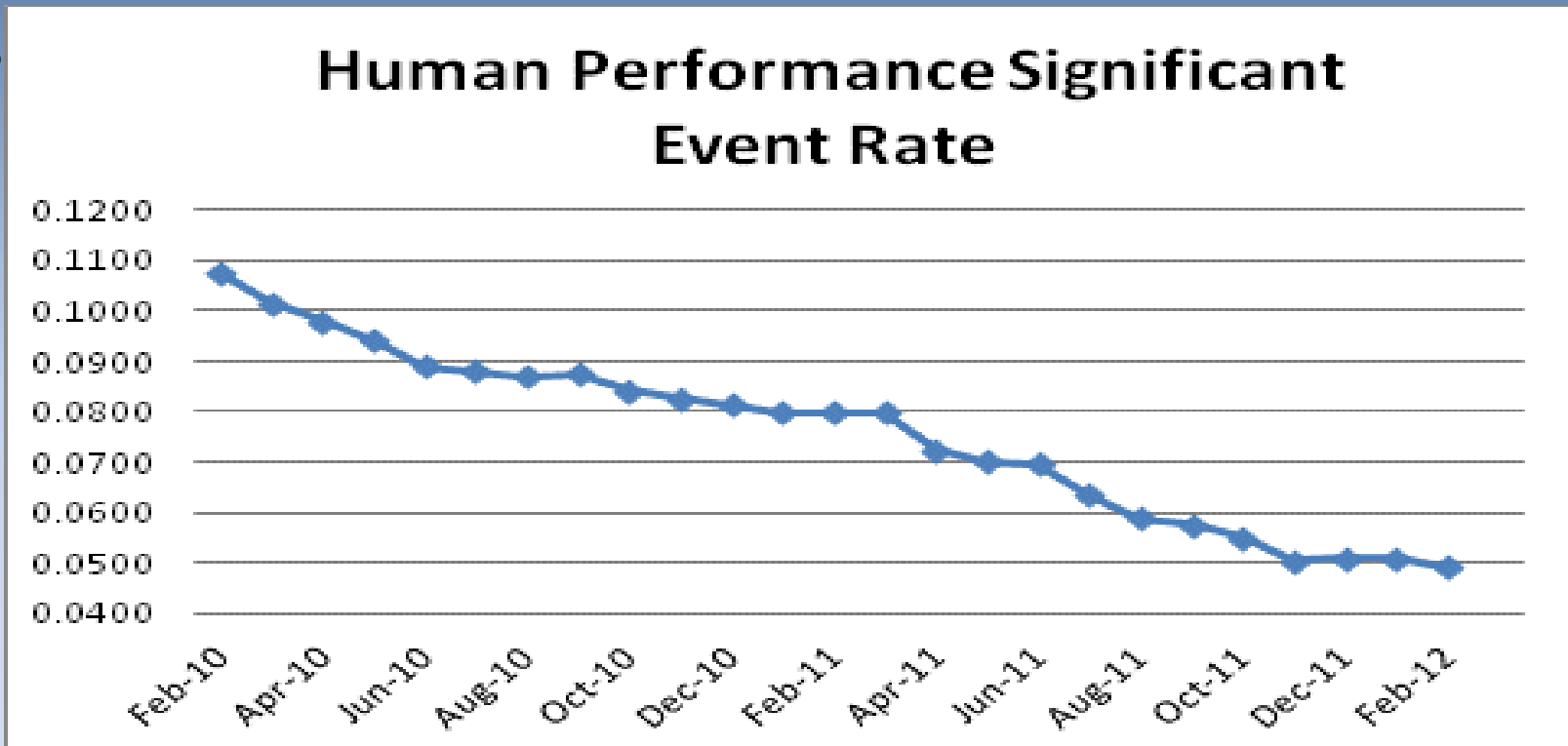
HU Metric

- Define Significant HU Event
- Measure Improvement and Success by a Decline in the Significant HU Events and Rate

Significant HU Event Rate = Number of Significant HU Events Over 18 Months per 10,000 Hours Worked (TVA & Contractor)



Results to Date (Fossil Fleet)



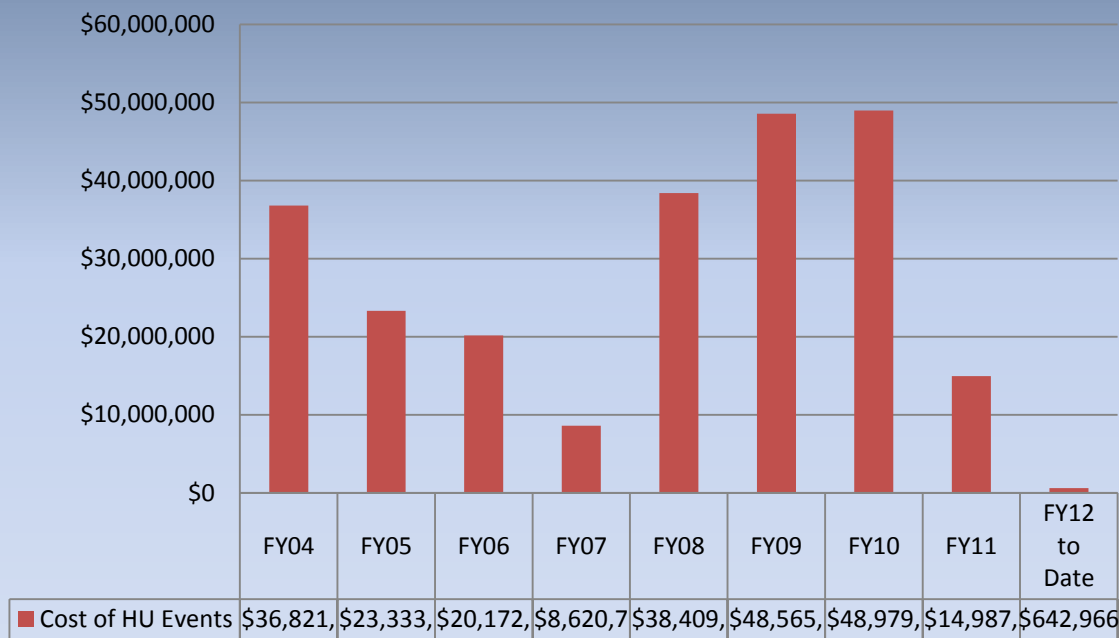
Data displayed is 18 month rolling average HU Rate



HU Event Costs

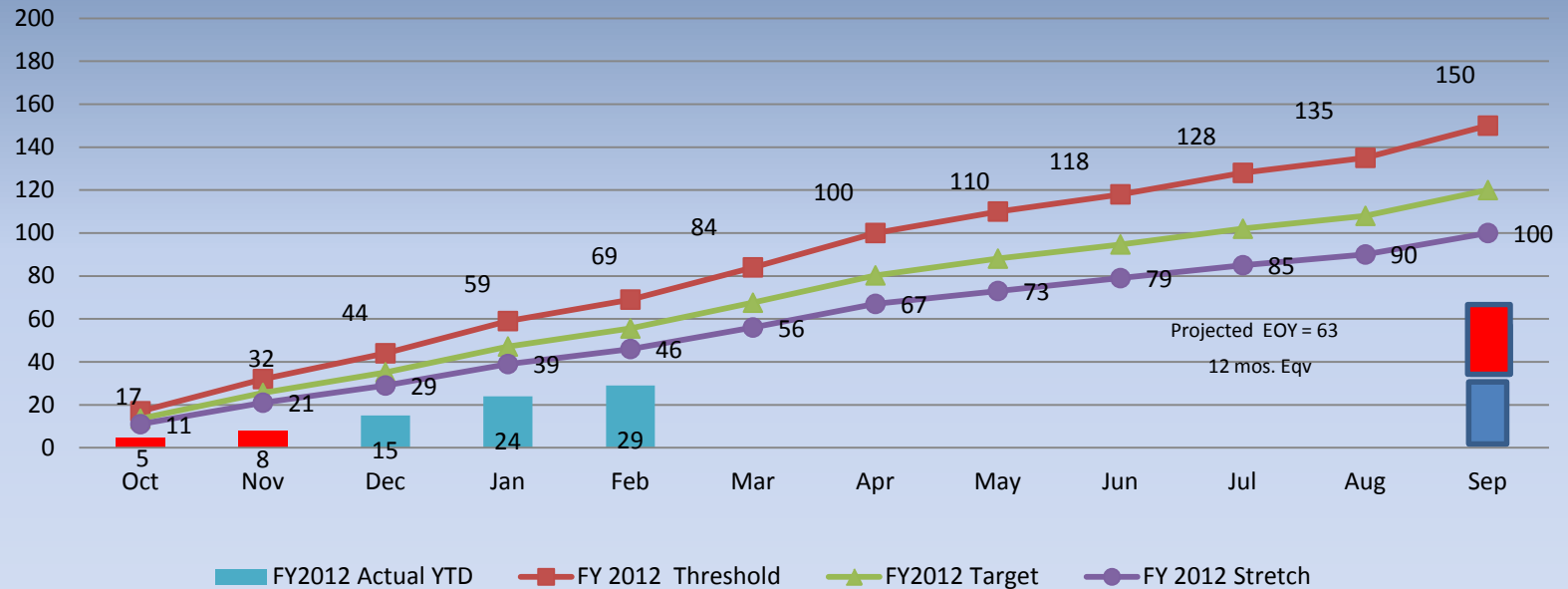
- The Challenge:**
 Reduce TVA's Significant HU Event Rate to meet Safety, Performance, and Cost Goals

**Cost of HU Events
Coal, Gas, PSS, and ESS
FY2004 to Date**



FY 2012 Goals and Performance

TVA Sig HU Events FY 2012



Challenges



Our HU Tools Were Designed to Work Here



Challenges



How do HU Tools Need to Change to Work Here?



Where We Are Now

- Positive Results have Continued
 - Fewer Events this Fiscal Year v. Last
- Methods and Results Shared with Industry via EPRI, INPO/WANO, NERC, HPRCT, and Other Industry Meetings
- Gathering Industry Contacts and Benchmarking – Please stop by and let me know where you are in the process, and what you are doing.
- Videos and Other Materials are Available
- Continuing to Pursue Standardized Approach



Comments/Questions?

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