AEP Utilities Presentation to Edison Electric Institute Conference

AEP Utilities
Human Performance Improvement

October 4, 2009
Background - Why HPI in AEP Utilities?

- In 2008, AEP Utilities was top quartile in safety performance – BUT:
  - Three significant injuries mid-year 2008
    - The last being a line mechanic that lost both arms while working on a capacitor bank
  - AEP is a safe place to work, but employees are still getting hurt

- Human Performance Improvement will provide the tools we can use to reduce errors and avoid injuries at work and at home
The AEP Utilities effort is focused on safety

Two areas of focus (phased/sequenced approach):
- Distribution
- Customer Services/MRO
Bob Powers brought in Dr. Chong Chiu from PII to evaluate our safety culture and make recommendations on how HPI could be utilized to improve our safety performance.
PII Assessment Method

- Review of past injury events to find key areas to focus
- Cultural survey for readiness and sustainability
- Field assessment to observe non-compliance and (N-1) activities
Organizational Structure for HPI in AEP Utilities
Purpose:

☐ Set the strategic direction for the associated group’s HPI plan and legitimize the need among the top key stakeholders
Distribution and MRO Core Teams

Purpose:
- Create and execute a plan for the implementation of HPI for the utility group
- Provide cross-section of knowledge and expertise to project
- Create and execute a plan for the implementation of HPI for the utility group
- Lead cross-opco subteams
- Lead opco implementation
- Communicate team’s work and messages to their respective operating companies and leadership
Decision Making and Module Development

DSC/MSC
• Review recommendations from core team and sub-teams
• Resolve issues core team and sub-teams cannot bring to consensus

Distribution/MRO Core Teams
• Lead champion from each operating unit
• Members represent operating unit
• Lead sub-teams/workstreams
• Insure sub-team plans integrate
• Interface with operating unit leadership
• Consensus decision making approach

Sub-Teams
• Cross operating unit teams
• Members represent operating unit
• Interface with operating unit
• Assigned to individual work streams
• Consensus decision making approach
Champion Duties

“Bringing It All Together”

Human Performance
- Tools
- Tasks

Change Management & Relationships

Project Management
- Tasks
- Work plan
- Scorecard
- Communications

Education
- Plan
- Develop
- Teach
The 7 Work Streams for Distribution

1. Peer Coaching
2. Pre-Job Brief
3. N-1 Activities
4. Life Saving Rules
5. Skill/Behavior Training
6. Technical Training
7. Updating Safety Materials and Procedures
Skills Behavior Training – 7 HPI Tools

- Change Awareness & Tracking (CAT)
- STAR – Stop, Think, Act & Review
- Procedures/Standards Compliance
- Peer Coaching
- Questioning Attitude
- Stop when Unsure or Unsafe
- Clear Communication
### Building Block Approach and Current Status

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**HPI Foundation - Individual Components Reviewed, as needed to support each Technical Training Module**

- Pre-Job Brief and STAR
- Peer Coaching Review
- HPI Overview Review

- 2Q 2009
- 3Q 2009
- 4Q 2009
- 1Q 2010
- 2Q 2010
- 3Q 2010

May-09, Jun-09, Jul-09, Aug-09, Sep-09, Oct-09, Nov-09, Dec-09, Jan-10, Feb-10, Mar-10, Apr-10, May-10, Jun-10, Jul-10, Aug-10
HPI Areas of Focus for MRO

Based on PII’s analysis and recommendations AEP should focus MRO HPI efforts on the following areas:

- **HPI Overview**
- **Peer Coaching Culture and Practices**
- **Communications Improvements**
  - Pre-job Briefing, STAR and Stop when unsure…
  - Clear Communications
  - Project team internal and external communications support
- **Elimination or Mitigation of N-1 Situations**
  - Analysis
  - N-1 Theory Training
  - HPI Tools - Procedure Compliance and Questioning Attitude
- **Slips/Trips/Falls Injury Reduction Policies**
  - Applicable Zero Harm Rules and N-1
  - HPI Tools – Three U’s (Unproven, Unqualified, Unseen) and CAT (Change Awareness and Tracking)
- **Dog Bite Injury Reduction Policies**
  - Applicable Zero Harm Rules and N-1
  - HPI Tools – HOP (History, Observe, Prepare)
- **Vehicle Accident Injury Reduction Policies**
  - Applicable Zero Harm Rules and N-1
  - HPI Tools – Distractions/Awareness Training
MRO Timeline and Next Steps

- Forming Stage
  - MSC Kick-off – week of September 28
  - Kick-off meeting for core team, MSC and PMO – November 4th and 5th
  - Subteams lead by Core Team Champions Kick-Off week of November 9th

- HPI Overview Training to front line employees – January 2010

- New modules throughout 2010
Magnitude of Training Effort

- **Distribution**
  - 54 people developing and training
    - 120,000 hours in 2009 & 2010
  - 2,500 employees trained each month
    - 90,000 hours of training in 2009 & 2010

- **MRO**
  - 54 people developing and training
  - 1,400 employees trained each month starting in 2010
AEP Service Territory

5M Electric Customers in 11 States
Corporate Headquarters in Columbus, Ohio

172,500 Sq. Miles Of Service Territory

21,000 Total Employees
2,500 Distribution Line Workforce
1,500 Meter Revenue Operations Workforce
Change Management
Key Questions…..

- Given that change is often on a sliding scale, what is the depth of this initiative?
  - Shallow - use of tools to compliment existing policies and practices
  - Deep - paradigm shifting changes in the culture and expectations
- What are the ramifications of this initiative?
- Who has ultimate ownership and accountability for implementation and execution?
- Where is there a need for standardization and where should there be customization?

- Bottom line, what is going to change day-to-day for our employees?
- What behavioral changes are expected to occur?
- What is the timeframe between implementation and expected outcomes?
Key Questions…..

- What resources will be required and who provides those resources?
- What rewards and reinforcement are needed?
- What is the key message behind the implementation and how will we get that message across?
- How will progress and the degree of change be monitored?
- What resistance is expected?

- What is the role of the safety organization?
- How does this combine with / replace / coordinate with existing safety and performance initiatives?
- What is the role of field leadership (MDS and SDS) and higher level leadership (field VP & corporate)?
- Who will be responsible for providing long term support to the initiative?
What Are We After?

Maximizing the Acceptance & Internalization of HPI
- Shift *from* primarily corporate driven program, *to* locally led and operated approach to “the way we do things”
- Op Co leaders personalize their own acceptance & “maintenance” strategies for HPI
- Op Co leaders carry the “lead voice” for HPI
- Champions & front-line leaders see the strong support of their leadership

Boosting Our Own Leadership Effectiveness
- Operationalize the leader’s role with HPI
- Clear expectations – leadership observation checklists – specifying the highest impact leader actions that will be key to advancing HPI
- Define and support roles/expectations for leaders at each level, President to LCS

Providing Ways to Monitor and Adapt the HPI Roll-out
- Periodic critiques - “reality checks” to test for effectiveness of HPI acceptance, as well as the operational quality
- Position for eventual phase out of champions as HPI becomes a way of life
- Alignment of other commitments to safety
First Steps to Get There

Stage 1: Create Framework for Op Co Acceptance Strategy
- Developed by small crew drawn from HPI PMO, HR, DSC, etc., that includes:
  - A general path for follow
  - Some “non-negotiable’s” for what needs to be in an acceptance strategy, e.g., stakeholder analysis, performance expectations, infrastructure alignment tools, etc.

Stage 2: Facilitate Op Co Acceptance Strategy Sessions
- Op Co President and his/her leadership team, plus
  - Lead HPI champions, Safety, Corp Comm & HR Field leads
  - Facilitated by OD Consultant
- Purpose – build Op Co-specific acceptance strategies and communication plans that you own and deliver

Stage 3: Implement “The Leaders Role in HPI”
- For front-line leaders, a consistent learning experience across all Op Co’s, providing substantial:
  - Depth in HPI concepts and tools
  - Clarity regarding their roles/expectations
  - Line leadership would have an active, visible role in the implementation
What Will Success Look Like?

(From Distribution Phase I)

- Before we begin a task we will consider what could go wrong.
- Work gets stopped because people are using the tools they are taught.
- Open and active peer coaching culture where every individual gives and receives coaching.
- HPI is common discussion item and is actively on people’s minds.
Sustaining HPI
Sustaining HPI

- Distribution Line Training
  - Incorporate into current training program
    - New hire training
    - Refresher training
- Change Management
- Leadership/Ownership
Importance of Communications
Key Messages

- Even when the job at hand is something you’ve done safely day after day, year after year – there are no guarantees.
- People are fallible and even the best make mistakes.
- Striving for Zero Harm is the goal. Zero Harm does not suggest that employees can be or are expected to be perfect. Instead, it reinforces that we can prevent life-altering injuries and fatalities.
- We can predict, manage and prevent harm for ourselves and our peers with an increased knowledge of HPI principles and the use of HPI tools.
- HPI provides tools you can use to reduce errors at work and at home.
- We should ask ourselves everyday: “What am I going to do today to achieve Zero Harm?”
Strategies

☐ Consistent branding and messaging across operating companies
☐ Provide the tools and resources to speak with one voice
☐ Champions/peers deliver the message
☐ Focus on communication mediums that the audience is comfortable with and can access
☐ Share materials with front line leaders in advance
☐ Use employee stories and past safety data to build the case
☐ Demonstrate that Zero Harm is possible
☐ Find opportunities to bring HPI out of “training” and into everyday discussions and work habits
Status Updates

- Sent weekly
- Champions
- Project management partners
- Leadership
Newsletter

Monthly
Corresponds with monthly training topic
Highlights corresponding tools
Preview of what’s coming next month

Clear, Concise & Complete:
Are you communicating effectively?

We can all think of a time when something we said was misunderstood.

Clear communication is probably the most important defense you can use in preventing safety incidents and errors. The goal of clear communication is to create a mutual understanding between two or more people.

Verbal communication is the most frequent form of communication, but it is also the most misunderstood. We tend to speak informally. We might use slang terms, talk faster before we understand the message, or we might be talking to someone who is already engaged in a conversation or in another task. All of these factors can lead to significant errors or mishaps.

To be effective, communication must be clear, concise and complete. There are tools we can use and behaviors we can practice to make sure clear communication is a part of every job.

PREVIEW OF WHAT’S COMING NEXT MONTH

Coming in October...

Next month we will learn more about 360° feedback—a common use tool that has significant layers of protection to keep workers from getting injured. We'll also take a look at the number of layers of protection needed to protect against injury. If one or more of these layers of protection are not in place, injury can occur.

Ask Two Clarifying Questions

Even when the content communicated is received correctly, the content may not be understood. Ask two clarifying questions to help eliminate any confusion and ensure that everyone is on the same page.

HPI Tip

The Clear Communication tools don't have to stay at work. Taking them home with you can ensure safety at the job, too.
Introducing in October

- Bring HPI out of the “classroom” and onto the dock and out to the field
- Put training materials in supervisor’s hands
- Can be used in safety meetings, safety huddles or any other opportunity
N-1 Bulletins

- Cover tasks with too few layers of protection
- Description of task
- Layers of protection available
- Key HPI concepts
- Action required
- Topics for further discussion
Provide tools for supervisors and champions to answer questions about controversial issues

More consistent message
Two videos complete

Additional videos in the works:

- Pre-job brief and SAFER model
- Line of Fire/Stored Energy
- HPI Overview for MRO
- HPI Tools
Clear Communication

Clear communication is probably the most important defense you can use in preventing safety incidents and errors. The goal of clear communication is to create a mutual understanding between two or more people.

We can all think of a time that something we communicated was misunderstood. There are tools we can use and behaviors we can practice to make sure clear communication is a part of every job.

Communication Pitfalls

Even when you think you are communicating clearly, there are times when the message is not heard and misunderstood by the receiver.

Verbal communication is the most frequent form of communication, but is also the most misunderstood. We tend to speak informally. We might use slang terms, take action before we understand the message, or we might be talking to someone who is already engaged in a conversation or in another task. All of these factors can lead to significant errors and events.

It’s important to verify that the message is heard and understood before starting a job. Using clear communication tools during the job briefing, when communicating with Distribution Dispatch during field work, and anytime the exchange of information is critical to safety of your peers can help us move toward Zero Harm.

Clear, Concise & Complete: Use Commu

Are you communicating effectively? There are tools you can use in a clear, concise and complete manner. These messages were heard and understood by the receiver.

HPI Tip: Take the Clear Communication tools home with you to ensure safety at home, too.

To ensure:
- Three-Prong
- Two-Prong

Tool: Three-Way Communication

Three-way communication is a technique designed to ensure the message sent by the sender is the same message understood by the receiver.

When using three-way communication be sure to:
- Use the receiver’s name to get their attention
- Slow down and speak clearly
- Repeat the message back to the sender in your own words
- Acknowledge the message was received correctly

Tool: Phonetic Alphabet and Numerals

Many letters and numbers sound the same even in non-destructive environments. Use the phonetic alphabet and phonetic numerals to avoid misheard letters and numbers. Here’s an example:

Pole number 38E2-1014-A2-1234

Spoken as:
“Three-eight-eight-two-dash-one-zero-one-four-dash-alpha-two-dash-one-two-three-four”
Participant Guides

☐ Different formats for different training topics
☐ Includes exercises, fill-in-the-blank questions
Posters

- 1-2 posters per month

Clear, Concise & Complete: Are you communicating effectively?

- Use the three-way communication tool to ensure your message is heard and understood
- Use the phonetic alphabet and numerals to avoid misheard letters and numbers
- Ask two-clarifying questions to make sure everyone is on the same page
Wallet/ID badge cards

- Two wallet cards
- Peer coaching
- Phonetic alphabet/top 10 error traps
Intranet site

- Launching soon
- Includes training materials
- Distribution
- Customer Services & Marketing
Lessons Learned and Next Steps
Lessons Learned (to date)

- Communicate, Communicate, Communicate
- Involve the people doing the work
- Address change management issues
- Seek feedback and adjust as needed
- Don’t make the training sessions too long
- **Keep It Simple!**
Keep It Simple

- Humans are fallible and make mistakes
- Peer Coaching – framework for HPI
- Effective Pre-Job Brief will insure everyone knows the tasks to be performed, identifies potential hazards and ways to mitigate the hazards
- HPI Tools:
  - STAR - Stop, Think, Act and Review
  - STOP when uncertain
  - Clear Communications

Every day, every time, every job
Feedback and Questions