



AEP Utilities' Safety Metrics

EEI Occupational Safety and Health Conference

Bob Carroll

Manager, Performance Management and Financial Planning

April 2010

- **AEP/AEP Utilities – Organizational Structure and Safety Reporting Framework**

- **Tier One Measures**
 - **Definition**
 - **Target Setting**
 - **Analysis**

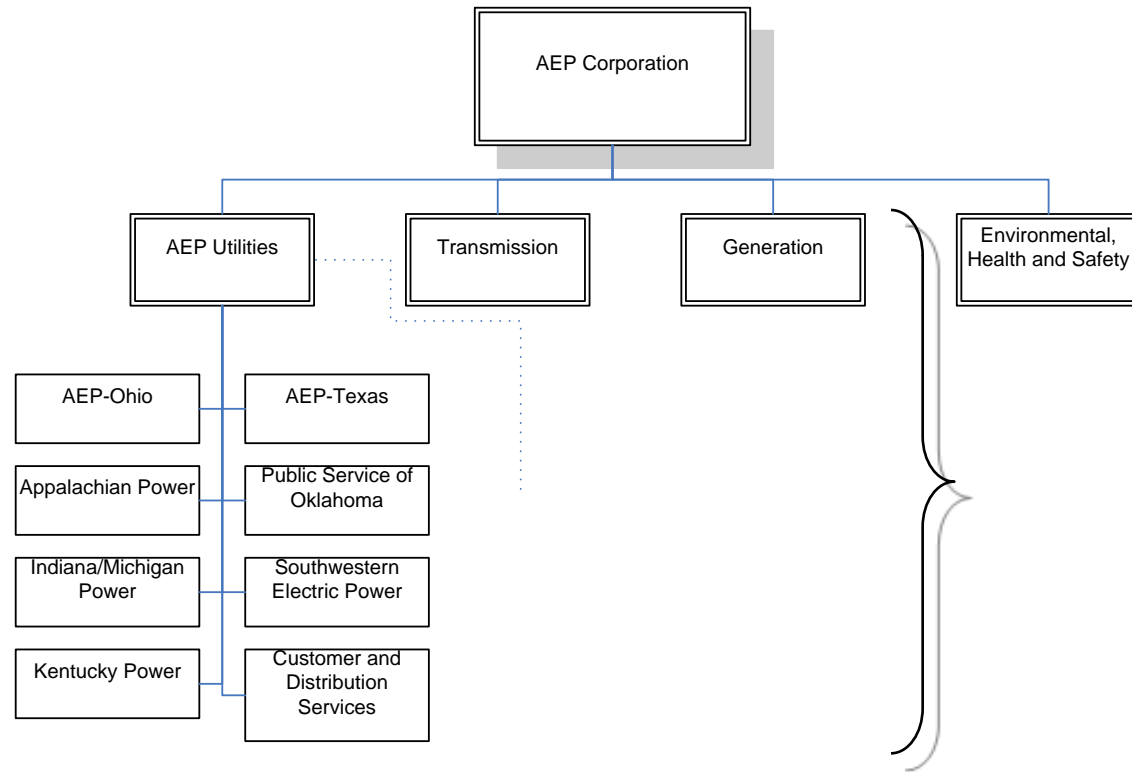
- **Tier Two Measures**
 - **Definition**
 - **Target Setting**
 - **Analysis**

- **Communication**
 - **Performance Reports**
 - **Communication Channels**

- **AEP is functionally broken out into three business units**
 - **Generation**
 - **Transmission**
 - **AEP Utilities (7 Operating Companies – Administration, Customer Service, Distribution)**

- **Environmental, Health, and Safety (EH&S)** is a shared service that provides guidance/support to all three business units

- **Customer & Distribution Services** provides shared services for AEP Utilities
 - **Performance Management** offers performance reporting and benchmarking services to AEP Utilities





AEP and Business Unit Corporate Safety Measures

- **AEP and its functional business units generally incorporate similar measures for high-level incentive compensation plan reporting**

<u>Business Unit</u>	<u>Fatalities</u>	<u>Recordable Incident Rate</u>	<u>Severity Rate</u>	<u>Preventable Vehicle Accident Rate</u>	<u>Contractor Incident Rate</u>
AEP Utilities (Distribution, Customer Services)	X	X	X	X	X
Transmission	X	X	X	X	X
Generation	X	X	X		X
AEP Total Company	X	X	X		X

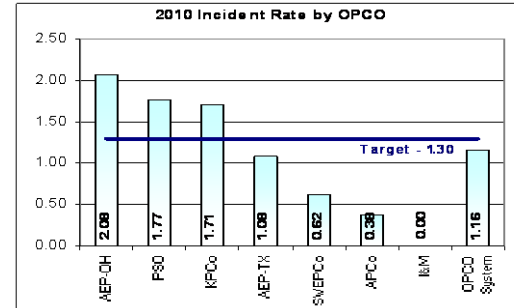
- **AEP Utilities (AEP’s Operating Companies) has its own tiered approach for establishing and maintaining focus on key performance areas**
 - **Tier 1 Measures – “lagging” measures of performance that we hope to impact through out actions**
 - **Tier 2 Measures – actionable, detailed measures that support Tier 1 performance and/or “leading” measures**

Measures:

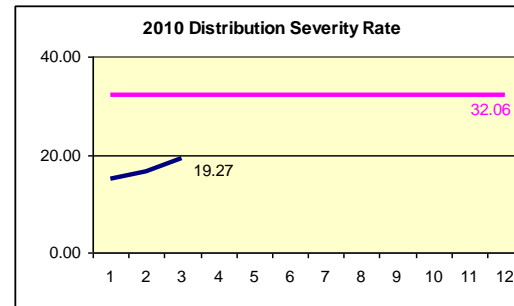
- Employee Recordable Incident Rate
- Employee Severity Rate
- Employee Preventable Accident (PVA) Rate
- Contractor Recordable Incident Rate
- Human Performance Improvement (Subjective “leading” measure)

Comparison Points:

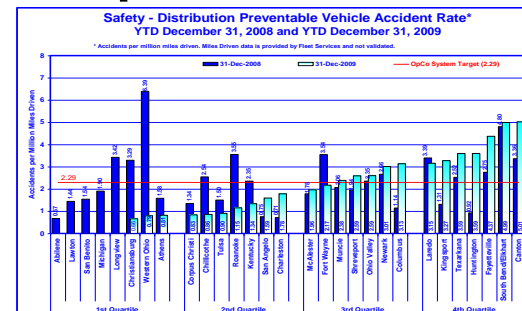
- Operating Company



- Functional Unit

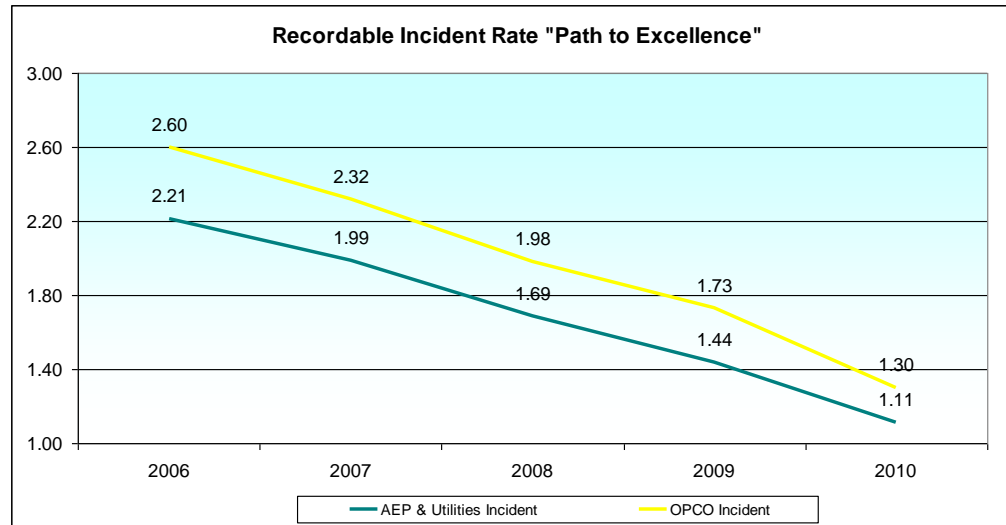


- Local Operations



AEP Utilities Tier 1 Target Setting

- **AEP Utilities established a “Path to Excellence” to achieve EEI first quartile in Employee Incident and Severity Rates beginning in 2006**



- **Glide paths for PVA Rate and Contractor Incident Rates similarly exist based on available internal benchmarking**
- **Though measured subjectively, HPI target includes training and leadership engagement expectations**

As AEP Utilities consistently achieves first quartile performance in the industry, the question moving forward is where do we go from here?

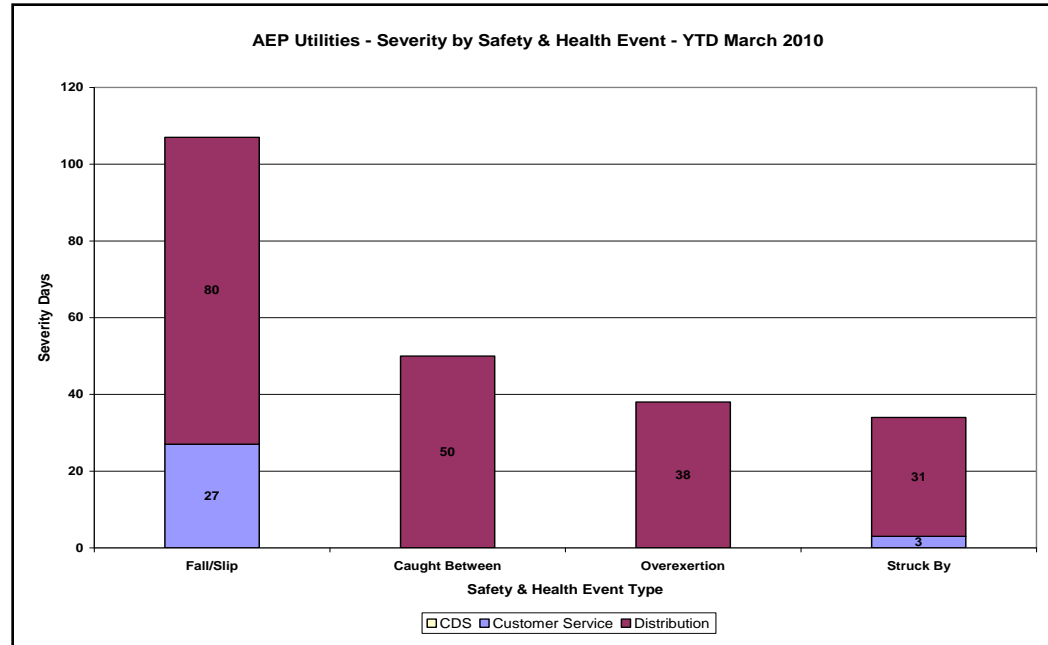


AEP Utilities Tier 1 Causal Analysis

Analysis Parameters:

- Organizational Characteristics (OpCo, Function, District)
- Event Type
- Activity Type
- Time of Day
- Time of Week
- Time of Year/Season
- Employee Experience Level
- Overtime Worked
- Leadership Presence

Event Type



Incidents by Experience Level

Incident Count by Experience Level - YE 2009 (Customer Services)			
Relevant Experience Level	Incident Count	% of Total Incidents	% of Utilities Demographic
less than 2 years	19	54%	8%
2 - 5 years	5	14%	15%
6 - 10 years	5	14%	9%
11 - 15 years	0	0%	8%
16 - 20 years	1	3%	14%
21 - 25 years	1	3%	14%
25+ years	4	11%	31%
Total	35	100%	100%



AEP Utilities Tier 2 Measures and Targets

Measures:

- Energy Control Errors
- Jobsite Observations
- Distribution Contractor Incident Rates
- Forestry Contractor Incident Rate
- Near Misses
- Flashes

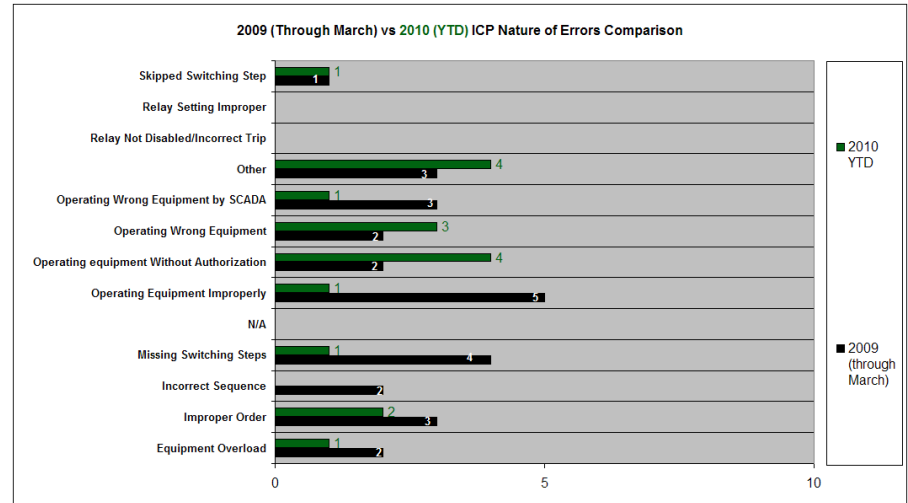
Targets:

- 2-Year Glide Path to 25% Improvement
- Set by OpCo Leadership
- Based on 2-Year Path to Excellence
- Based on 2-Year Path to Excellence
- No target – monitored only
- No target – monitored only

Analysis Parameters:

- Organizational Characteristics (OpCo, Function, District)
- Contractor Breakdown
- Event/Cause
- Activity Type
- Contributing Factors (Energy Control Errors)

Energy Control Error Causes



Contractor Scorecard

I&M Distribution Line & Forestry Contractors - Safety Performance Year Ending March 2010									
Functional Views	Actual Hours Worked	Actual Recordable Cases	Actual Incident Rate	Actual Lost Time & Restricted Cases	Actual Lost Time & Restricted Days	Actual Severity Rate	Actual First Aid	Actual Outages	Actual Preventable Vehicle Accidents
ACC Asplundh Construction Corp.	21,056	0	0.00	0	0	0.00	0	3	0
Midwest Electric	8,084	1	24.74	1	1	24.74	0	0	0
Robert Henry	3,625	0	0.00	0	0	0.00	0	0	0
I&M Distribution Contractors	32,765	1	6.10	1	1	6.10	0	3	0
Arbormetrics	30	0	0.00	0	0	0.00	0	0	0
AWP	5,087	1	39.32	1	53	2,083.74	0	0	0
Utility Locators	5,364	0	0.00	0	0	0.00	0	0	0
I&M Specialty Contractors	10,481	1	19.08	1	53	1,011.35	0	0	0
I&M Distribution Line Contractors Total	43,246	2	9.25	2	54	249.73	0	3	0
I&M - Asplundh	147,864	3	4.06	1	53	71.89	0	1	0
I&M - Asplundh Brush Control	110	0	0.00	0	0	0.00	0	0	0
I&M - ACRT	1,090	0	0.00	0	0	0.00	0	0	0
I&M Distribution Forestry Contractors Total	149,064	3	4.03	1	53	71.11	0	1	0
I&M Distribution Line & Forestry Contractors	192,310	5	5.20	3	107	111.28	0	4	0

We continue to seek out opportunities to better leverage our “leading” measures – Jobsite Observations, Flashes, Near Misses – to avoid future harm

- **Weekly Safety Statistics Estimate Report**
 - Estimate of rates vs. target
 - Description of new incidents from previous week

- **Monthly Safety Scorecard**
 - Performance metrics vs. target
 - Organizational comparisons
 - Causal analysis

- **Quarterly District / Meter Revenue Operations Scorecards**
 - Performance comparisons across individually managed locations (Distribution Districts, MRO Workgroups)

- **Semi-Annual Safety Report**
 - Comprehensive view of overall AEP safety performance
 - Deep-dive causal analysis vs. previous years

Communication of Safety Performance Measures

- Reporting is aligned with communication that is both “top down” and “bottoms up”

- Reports are available and communicated to management employees throughout the organization via performance website
 - Executives
 - Safety Leadership
 - Middle Management
 - Front Line Supervisors

- Weekly and monthly reporting provides front line leaders with ability to provide timely updates / learnings to workforce

Through our reports, our constant challenge is to provide data/information that is meaningful and actionable, yet not overly burdensome in detail

Questions / Considerations Moving Forward

- **The “Paths to Excellence” for employee and contractor safety measures end at the conclusion of 2010**
- **New paths will be developed - we are looking at how to measure ourselves moving forward to achieve zero harm**
 - **Should we consider T&D and/or other benchmarking in AEPU / OpCo target setting?**
 - **Are there other considerations?**
- **Other safety measures will be evaluated for consideration to support long-term focus on our goal?**
 - **Proactive Measures – Winter Safety Performance, Seasonal Preparation/Planning, Other**
 - **Human Performance Improvement measures (e.g., Behavior-Based Observations)**
 - **Contractor Severity Rate**
 - **Preventable Vehicle Accident Rate**
 - **Existing Tier 2 Measures – Energy Control Errors, Jobsite Observations, D Line/Forestry Contractor Incident Rate**