

ANSI Z-10 Implementation: *A Case Study*

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ANSI Z-10 Case Study **Calpine Corporation, 2005**



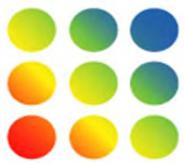
A major power company. 90 power plants in 21 U.S. states and 3 provinces in Canada.

2004 - Named one of *America's Safest Companies* by *Occupational Hazards* magazine.

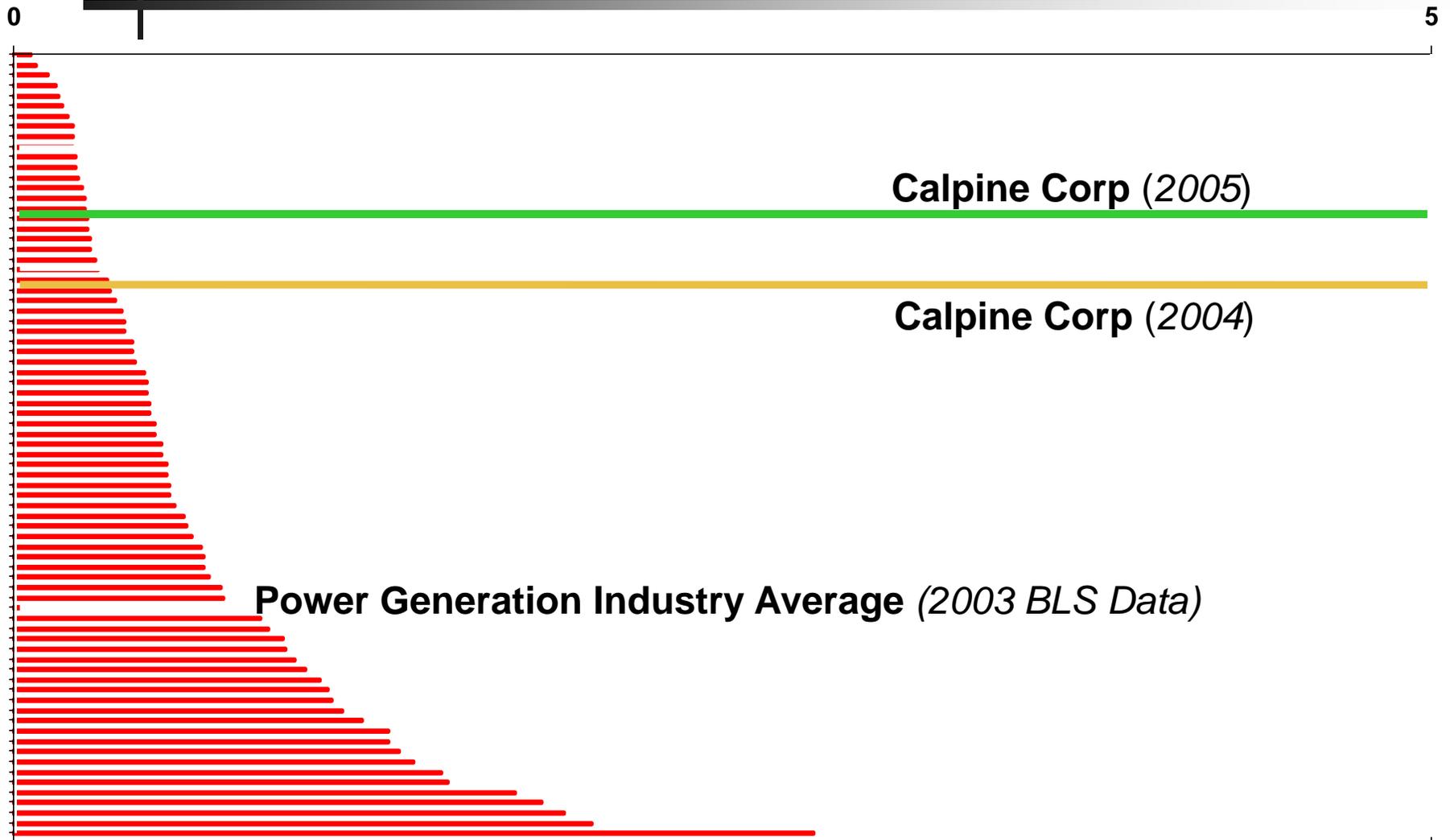
2005 – **Implemented ANSI-Z10 “safety upgrade”.**

2005 - Four sites designated as OSHA VPP Stars.

Important Note: I served as VP, SHE until July 2006 but no longer represent Calpine. Bankruptcy filed Dec 2005, Now restructured out of Chapter 11, Relocated from San Jose, CA to Houston, TX.



Safety Performance "Excellent" *Before* ANSI Z-10 Implementation



*Standard OSHA Lost Time Injury Rates per 200,000 Work Hours



Safety Programs were “Good” Before ANSI-Z10 Implementation

Policy

New Calpine Safety and Health Policy based on solid safety management theory (culture, systems, behavior, risk).

Culture

Top Down “Personal” video with CEO, Plant & Sr. Mgrs.
Employee Perception Survey providing “bottom up” feedback.
Bottom Up employee pride from OSHA VPP “Stars”.

System

40 Safety Guidelines. (One page each; 20 page Model Procedures).
Modeled on OSHA VPP, now moving to ANSI Z10.
Site staff safety mgmt education. CSP/CIH qualified Regionalized staff.

Audits

Annual External Corporate Strategy and Regulatory Review.
Internal Audits. Self-Assessment by Sites of conformance to Guidelines.

Metrics

External Benchmark of LTA Rates (Site Goal=0, Corp Goal=Improve).
Leading Indicator: Web track “% Improvement in Conformance with 40 Guidelines”



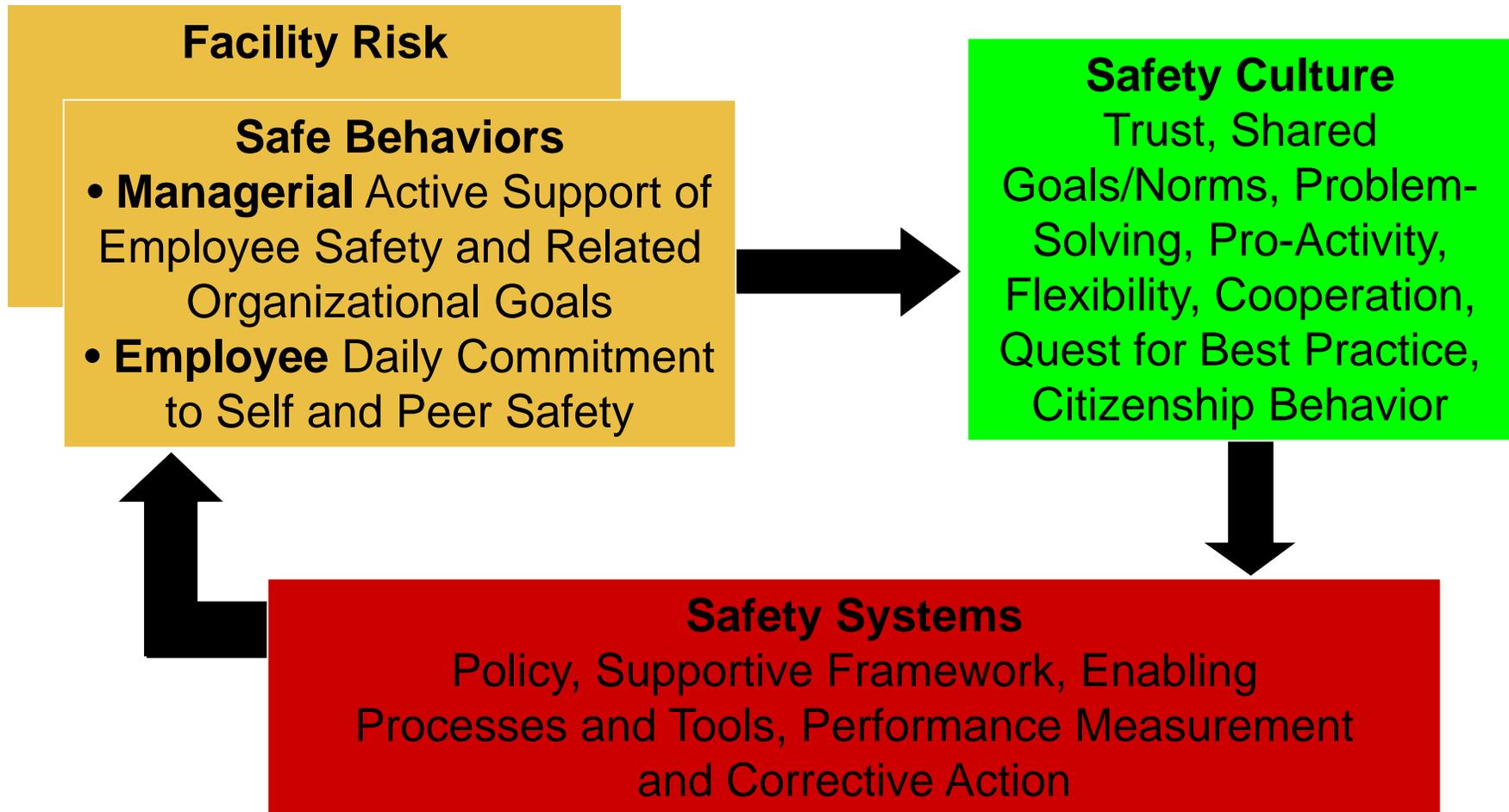
Z-10 Project Utilized a “Best Practice Management Model” for Process Change in Large Organizations

From the book *Leading Change*
by John Kotter, Harvard Business Press

- 1) Establishing a Sense of Urgency
- 2) Creating the Guiding Coalition
- 3) Developing a Vision and Strategy
- 4) Communicating a Shared Vision
- 5) Empowering Broad-Based Action
- 6) Generating Short-Term Wins
- 7) Consolidating Gains, Producing More
- 8) Anchoring New Practices in Culture



Establishing a Sense of Urgency "System" called "key weakness" in *2004 Strategic Safety Review*

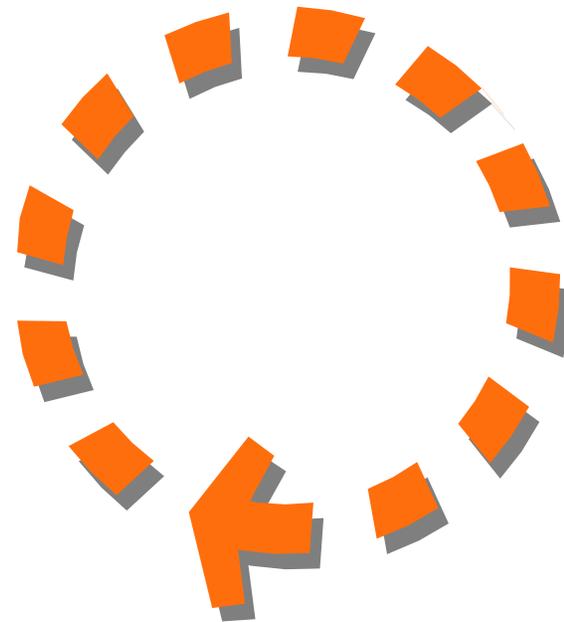
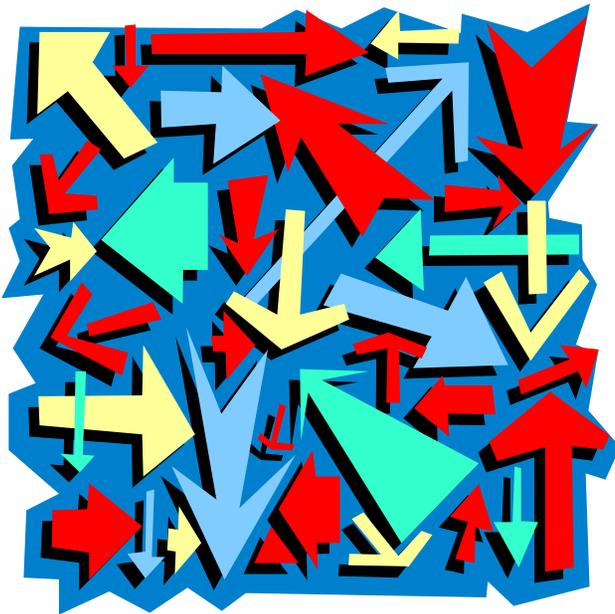




Creating the Guiding Coalition “Systems”

support, praised by internal “Maint Best Practice” group

Programs (reactive, lacks integrated process, usually doesn't get fixed or improved until its broken)



Systems (proactive, standard process for continuously assuring and improving Element effectiveness)



Developing a Vision and Strategy

“We will revise **TWO** of our **40** Safety Elements”

“Some organizations already have developed an effective OHSMS appropriate to their needs but that may not conform precisely to this standard. *In those instances, the standard may serve as a voluntary tool to identify possible opportunities to improve their systems.*”¹

¹ Reference: ASC Z10 200X (draft) Occupational Health and Safety Management Systems

SAFETY MANAGEMENT ELEMENTS –

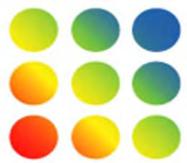
The 40 Calpine Safety and Health Management Guidelines (SHGs) will continue to define the *elements* of safety that we manage at Calpine.

Calpine SHG 01 that defines Roles and Responsibilities for Safety will be revised significantly. (We will ADD “management review”)

SAFETY MANAGEMENT SYSTEM –

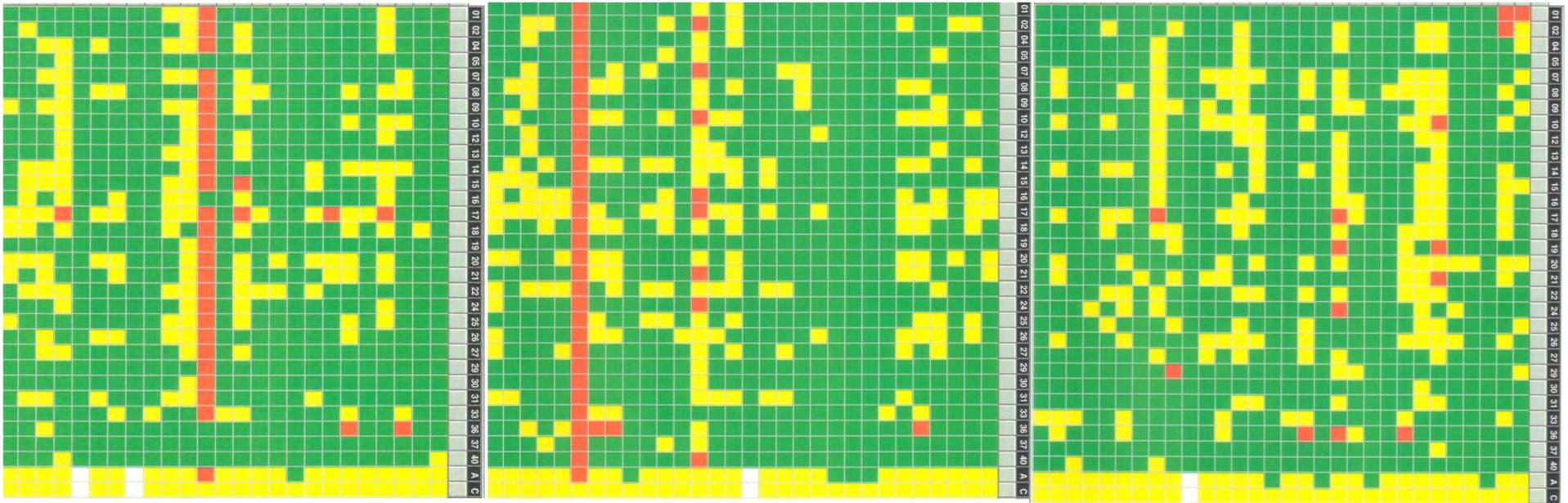
The ANSI-Z10 process will be used to define the system processes that will be used to “plan, do, check, act” aspects of assuring that we “continuously improve” all elements of safety management at Calpine in the future.

Calpine SHG 02 that defines our Corporate Safety Programs and Processes for Safety will be revised significantly. (We will ADD “management review”)

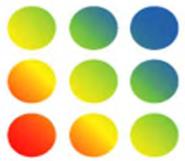


Generating Short-Term Wins

Plants Can Implement “Easiest First”



- Red indicates Process is <70% Complete
- Yellow indicates Process is >69% but less than 99% Complete
 - At 100% Implementation, Chart will be solid Green
 - Next to bottom row is Plant Average
- Bottom Row is Business Unit Avg or Total Corporate Avg
 - Rolling Cursor over squares gives numerical score

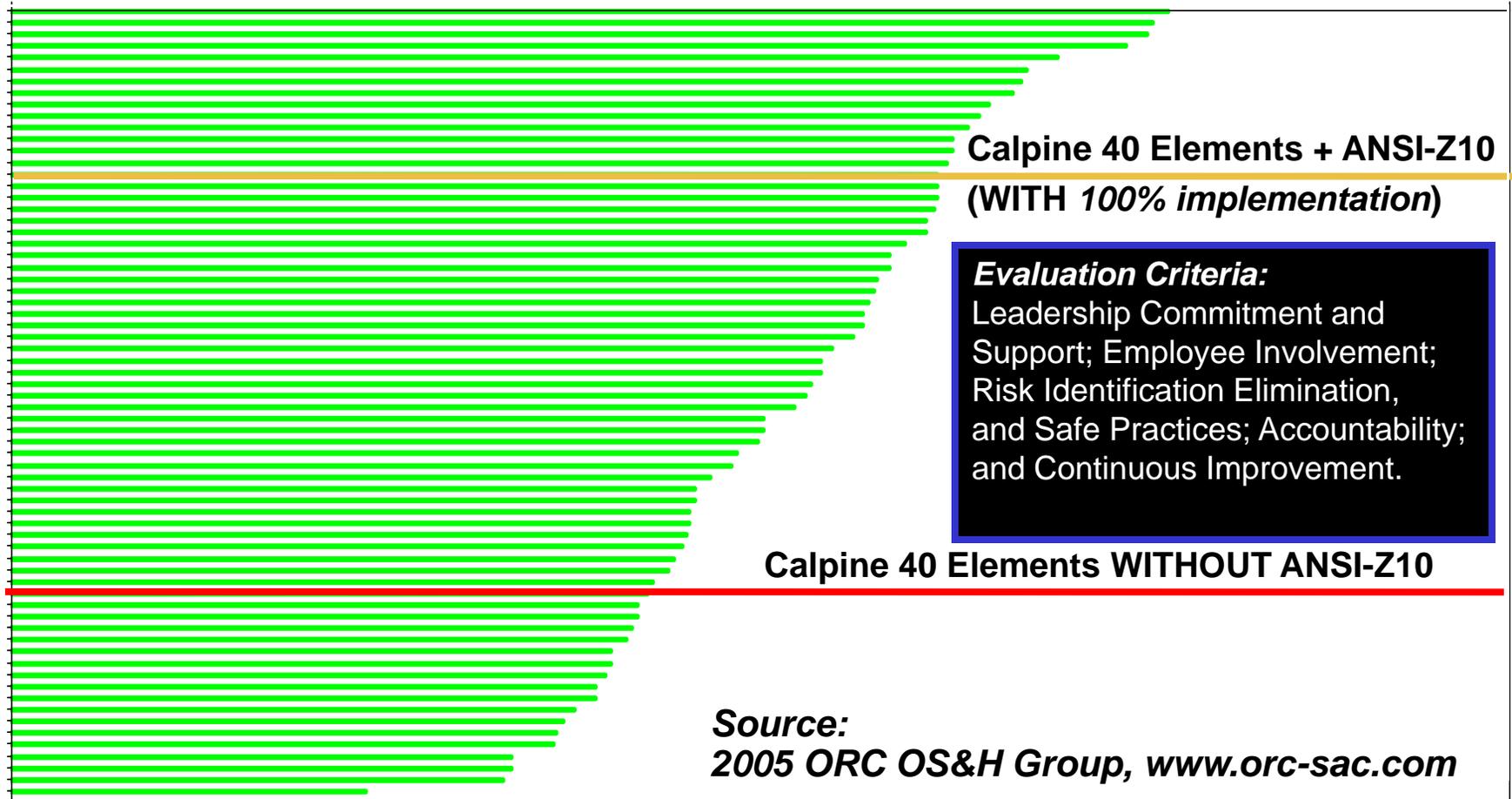


Consolidating Gains, Producing More - Best Practice

Team praised / shared best plant practices as examples. *External ORC benchmark used to provide Corp with Positive Feedback*

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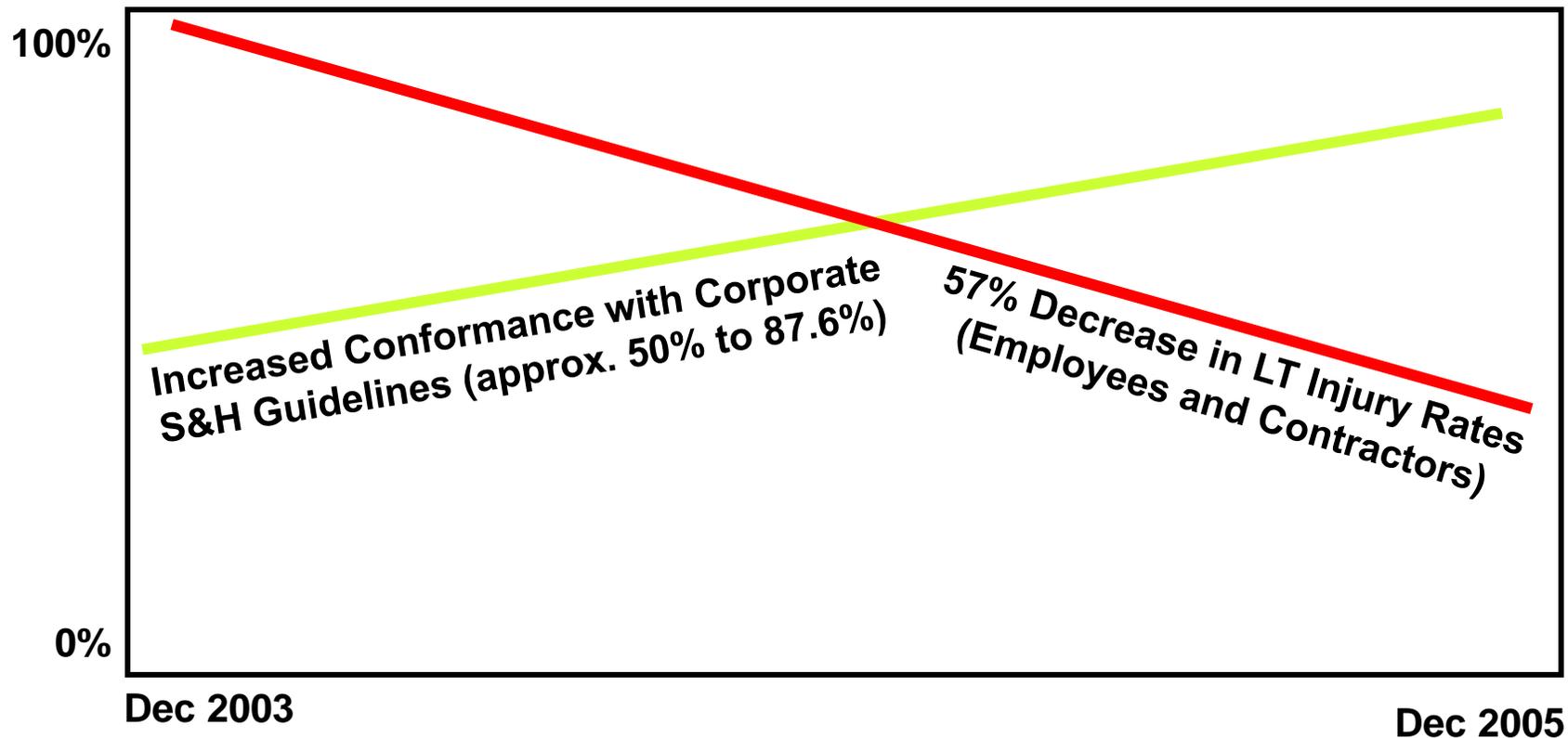
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“Leading indicators are the performance drivers that communicate how outcome measures are to be achieved.”
Robert S. Kaplan and David P. Norton, *The Balanced Scorecard*



Anchoring New Practices in Culture – Internal S&H Management Guidelines + ANSI Z-10 are Integrated with Environmental Criteria for Annual External Audit





Summary - *John Kotter's "Leading Change" Model as Applied to Calpine's ANSI-Z10 Implementation*

1) Establishing a Sense of Urgency

External safety expert identified "System" as our "key weakness". ANSI Z-10 discussed with Management as wave of future. Implementation put in 2005 Corp Goals for Plant Mgrs.

2) Creating the Guiding Coalition

Got Regional Safety Pro's on board, Legal on board, used Maintenance Best Practice group to support move to safety "System".

3) Developing a Vision and Strategy

Gap Analysis served as key strategy document. Goal set to "revise two of 40 corporate guidelines and implement to meet new voluntary standard".

4) Communicating a Shared Vision

Online real-time tracking tool was key. So was verbal reports to SVP in weekly operations call.



Summary - *John Kotter's "Leading Change" Model as Applied to Calpine's ANSI-Z10 Implementation*

5) Empowering Broad-Based Action

Putting it in the annual performance goals of plant managers and having it driven weekly by Ops Mgmt assured it was done.

6) Generating Short-Term Wins

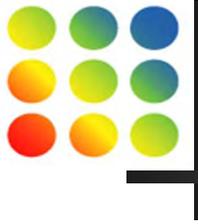
Allowing Plants to Choose to Implement easiest first built buy-in.

7) Consolidating Gains, Producing More

Praise by Best Practice Team of leading plants in mgmt call helped a lot. Others were quick to copy.

8) Anchoring New Practices in Culture

Integrated pre-existing safety guidelines and ANSI Z-10 and existing environmental requirements into external audit criteria. Definition of roles and responsibilities for everyone especially for the new management review process was a significant upgrade.



Questions and Comments?

Thanks!

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