RISK MANAGEMENT COMMITTEE UPDATE

PRESENTED BY:

Cory Kuchinsky
Interim VP, Strategic Pricing & Enterprise Risk Management & Solutions (ERMS)

Shane Bemis
Interim Sr. Manager, Power Generation (PG)

December 6, 2019

Informational Update
OBJECTIVES & TAKEAWAYS

- REVIEW ERMS RISK FRAMEWORK
- HIGHLIGHT RISK MITIGATION PLAN (RMP) ENHANCEMENTS
- REVIEW RMP EXAMPLE
  - COMBUSTIBLE DUST RISK
- LEVERAGE KEY PARTNERSHIPS
AGENDA

• ERMS RISK FRAMEWORK
• RMP ENHANCEMENTS
• RMP IN ACTION
  ◦ COMBUSTIBLE DUST RISK
• ERMS & PG PARTNERSHIP
• RECAP
Our program is designed to support multiple stakeholders across the enterprise.
We take a cohesive approach by incorporating excerpts from risk management frameworks & lessons learned from peers.
ERMS PROGRAM ALIGNMENT

<table>
<thead>
<tr>
<th>CPS Energy Risk Activities</th>
<th>ISO 31000 Framework Elements</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Risk Scan</strong></td>
<td><strong>Risk Identification, Analysis, Evaluation</strong></td>
</tr>
<tr>
<td>Each Business Unit develops / updates risks for their area that</td>
<td></td>
</tr>
<tr>
<td>are challenged by all the Chiefs.</td>
<td></td>
</tr>
<tr>
<td><strong>RMPs</strong></td>
<td><strong>Risk Treatment</strong></td>
</tr>
<tr>
<td>Detailed RMPs are developed for each High &amp; Swan Risk.</td>
<td></td>
</tr>
<tr>
<td><strong>Active Risk Management</strong></td>
<td><strong>Monitoring &amp; Review</strong></td>
</tr>
<tr>
<td>Risk Owners work on RMPs that address key risk drivers.</td>
<td></td>
</tr>
</tbody>
</table>
We have added new components to drive better quality & effectiveness for our risk owners.

• FY 2020 RMP Enhancements
  o Addresses key drivers (impact x probability) & status of funding
  o Defines success in a way that is measurable
  o Considers gaps in plan design
RMP EXECUTION
IMPACT ON INTERNAL CONTROL

Through RMP development & execution, we are identifying actions that could impact our system of internal control.
RISK MANAGEMENT FRAMEWORK BEST PRACTICE

Integrating risk into the business is a best practice & a key element of risk management frameworks.

- Integrating ERMS with PG enhances decision-making & performance through:
  - Anticipation of risks earlier, which provides more options in mitigation strategy
  - Enhanced analytics & improved responses to deviations in critical components
  - Improved collaboration, trust & information sharing
RMP OVERVIEW

COMBUSTIBLE DUST RISK

• History
  o Combustible dust risk is a major hazard that spans across multiple industries
    • OSHA National Emphasis Program (NEP) on Combustible Dust
  o PG identified risk on Enterprise Register in FY 2015

• Objective
  o Protect our employees and infrastructure
  o Reduce coal spillage & dust accumulation
  o Mitigate risk of fire or explosion

• RMP
  o Perform third-party engineering assessment to identify & prioritize dust mitigation projects
  o Multi-year phased approach for project implementation
Successful completion of RMP actions reduced the risk level from high to medium.
RMP IN ACTION
COMBUSTIBLE DUST RISK

RMP actions have resulted in a safer work environment.

Before Mitigation

After Mitigation

RMP brought to life

- Enclosed structures are washed down at least twice per week
- Open structures are washed down weekly
- Coal dust suppression systems have been installed
RISK LIFE CYCLE
COMBUSTIBLE DUST RISK

Risk Lifecycle Stages

<table>
<thead>
<tr>
<th>Risk Profile</th>
<th>Introduction</th>
<th>Growth</th>
<th>Maturity</th>
<th>Reduced</th>
<th>Mitigated</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>FY 2015</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Swan</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>FY 2019</td>
</tr>
<tr>
<td>Med</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>FY 2020</td>
</tr>
<tr>
<td>Low</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
ERMS & PG INTEGRATION IN ACTION

- Developed PG Risk Matrix
- Expanding PG Risk Matrix to include plant specific risk registers
- Developing RMPs for all plant-specific risks

Each plant now has its own specific risk register.
RISK ANALYTICS

ILLUSTRATIVE EXAMPLE

• Asset 360 is an equipment condition monitoring system used by PG.

We utilize risk analytics tools to mitigate risk for PG assets.
RISK ANALYTICS

• Partnering with ERMS & FM Global (Property Insurance Carrier) to reduce our potential risk exposure by:
  o Taking advantage of risk assessments & inspection programs
  o Utilizing engineering plan review services for power plant projects
  o Accessing loss prevention tools & resources to incorporate leading practices into the organization
RECAP

• Grow existing partnerships with business units
• Continue to develop & execute on RMPs
• Management is working & engaged in making improvements to their risk environment
# Glossary / Definitions

<table>
<thead>
<tr>
<th>Acronym or Word</th>
<th>Definition</th>
<th>Acronym or Word</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>APPA</td>
<td>American Public Power Association</td>
<td>MW</td>
<td>Megawatt</td>
</tr>
<tr>
<td>BOT</td>
<td>Represents Board of Trustee feedback that has been implemented into the Risk Program</td>
<td>NEP</td>
<td>National Emphasis Program</td>
</tr>
<tr>
<td>COSO</td>
<td>Committee of Sponsoring Organizations of the Treadway Commission</td>
<td>OSHA</td>
<td>Occupational Safety &amp; Health Administration</td>
</tr>
<tr>
<td>ERMS</td>
<td>Enterprise Risk Management &amp; Solutions</td>
<td>PG</td>
<td>Power Generation</td>
</tr>
<tr>
<td>GRC</td>
<td>Governance, Risk &amp; Compliance</td>
<td>PPA</td>
<td>Purchase Power Agreement</td>
</tr>
<tr>
<td>ISO</td>
<td>International Organization for Standardization</td>
<td>RMP</td>
<td>Risk Mitigation Plan</td>
</tr>
<tr>
<td>LPPC</td>
<td>Large Public Power Council</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>