



Independent Review Panel

Discussion Topics with COO of PG&E

12 January 2011

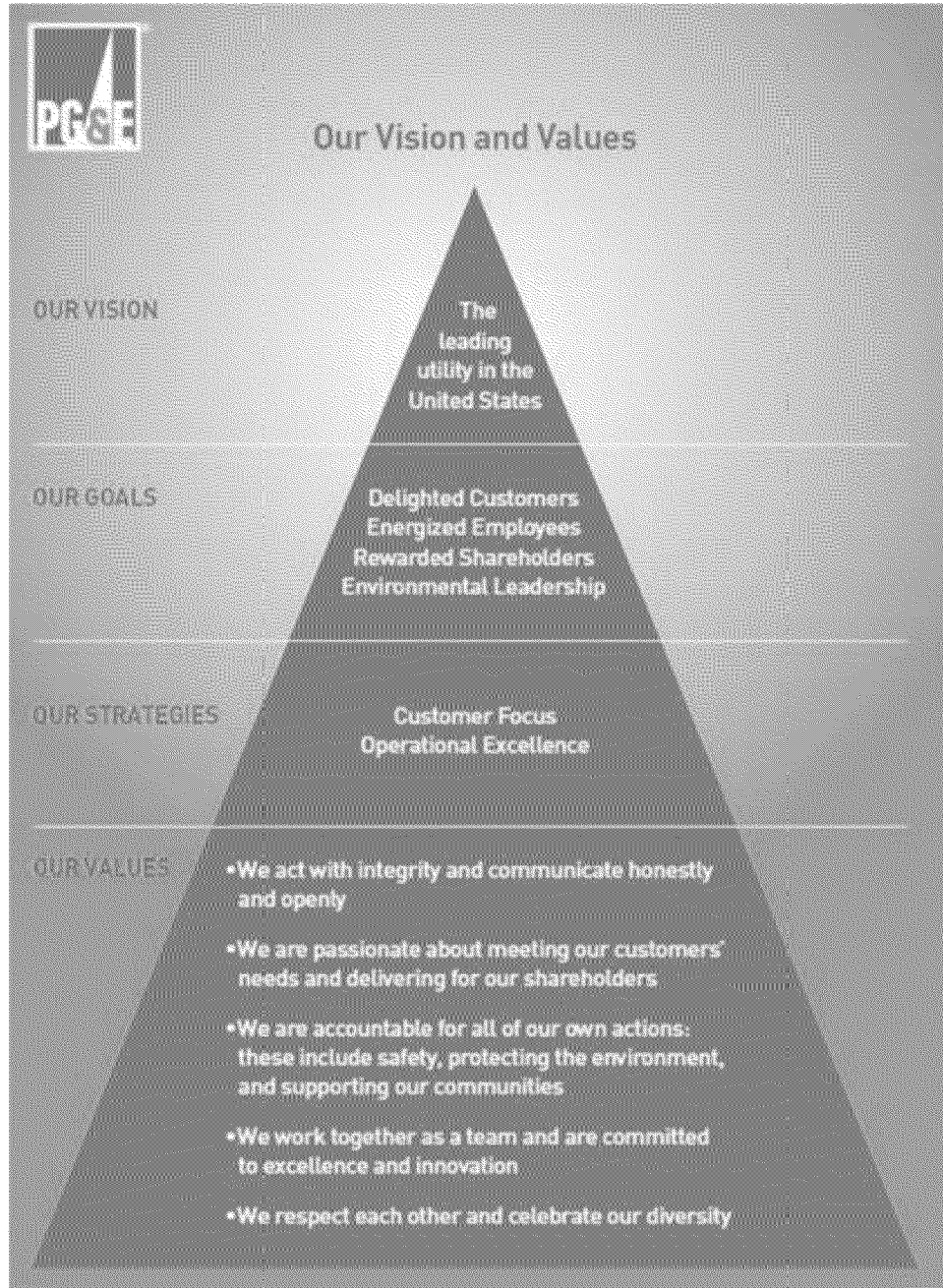


Introduction

- Background on President and tenure with Company
- Executive management perspectives on gas department (size, expertise, business protocols, safety focus, culture)
- Key initiatives undertaken regarding people, process, and technology in gas operations



PG&E Vision and Values





2014 Goals

- The first decile for customer satisfaction
- The first quartile for employee engagement
- The first decile for environmental leadership
- The first quartile for total shareholder return

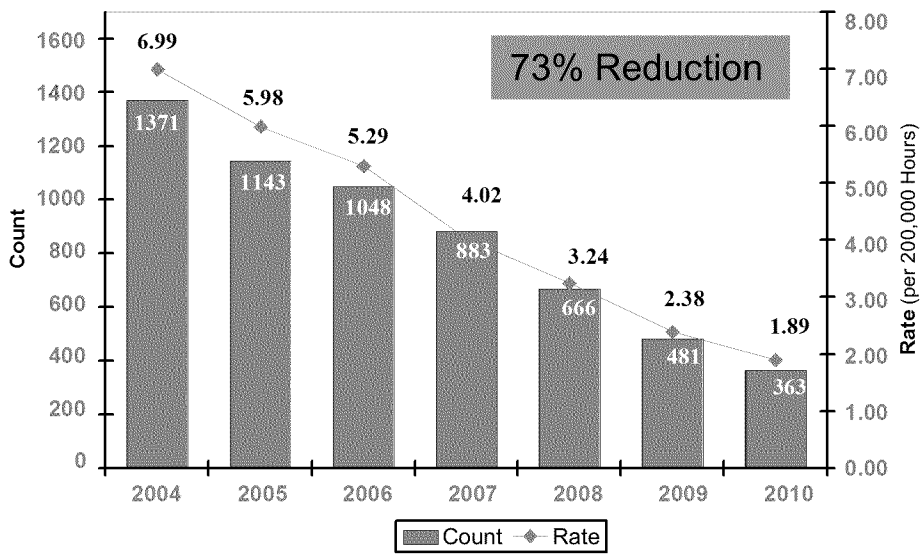
Business Priorities

- Improve safety and human performance
- Drive customer satisfaction
- Improve reliability
- Deliver on budget, on plan, and on purpose
- Champion effective regulatory and legislative policies

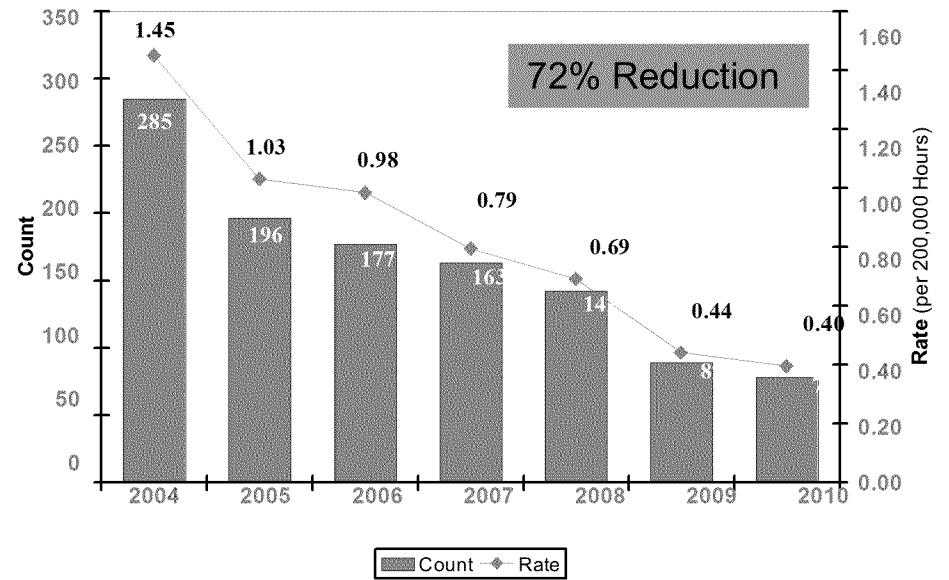


Business Priority – Safety

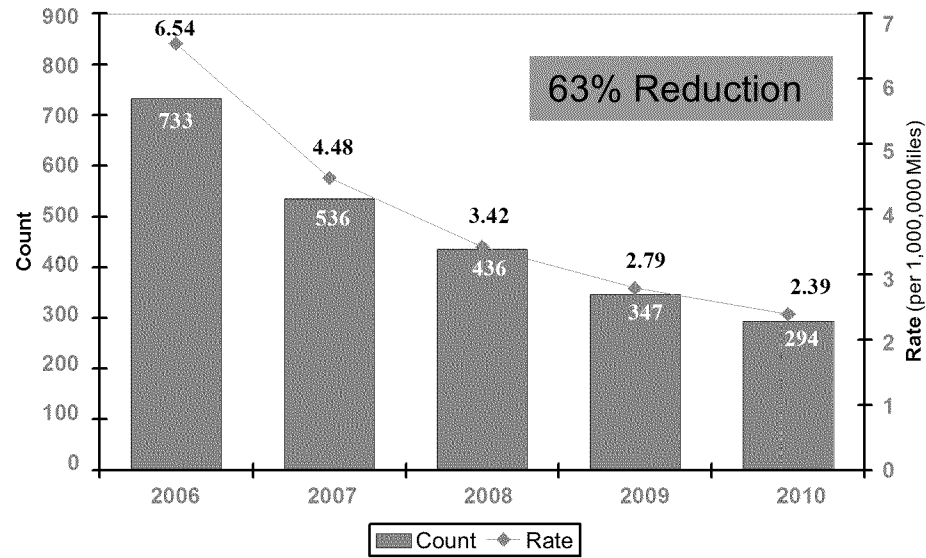
OSHA Recordables and OSHA Recordable Rates



Lost Workday Cases and Lost Workday Case Rates



Motor Vehicle Incidents (MVIs) and MVI Rates





Organizational Considerations

- Organizational design and reporting relationships of gas department functions
 - Separation between transmission and distribution functions
 - Separation between engineering and operating functions
 - Separation between operations and field functions
 - Accountability and responsibility
 - Staffing levels; manpower trends
- Goal-setting process; rewards and incentives



PG&E Transmission & Distribution System Overview

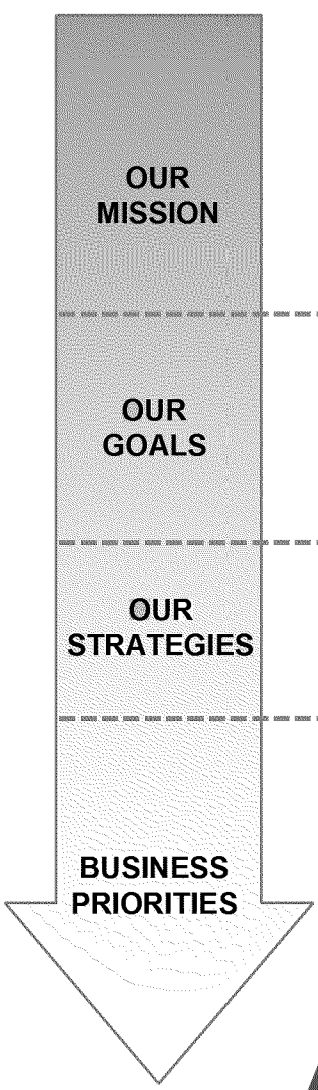
- PG&E owns and operates one of the largest natural gas pipeline system in the United States
 - 48,000 miles of transmission & distribution gas mains ranging from 42” – 1” in diameter
 - 3.3 million service lines serving 4.3 million gas customers
 - 3 natural gas storage fields with 97 billion cubic feet of working inventory
 - 8 compressor stations with a combined 197,000 horsepower of installed compression to maintain flow
- PG&E employs ~8,700 employees in its Engineering & Operations and Energy Delivery Organizations
 - ~5,500 IBEW-unionized field forces & clerks
 - ~1,600 are ESC-unionized estimators, mappers, engineers, etc.
 - Remaining ~1,600 Management employees are primarily supervision



Transmission & Distribution: Mission and Vision

PG&E

T&D



To safely keep the lights on and the gas flowing and achieve operational excellence through process improvement, enhanced controls and workforce enablement

Identify and safely perform approved work on budget and on schedule to deliver a high level of service

Operational Excellence
Human Performance Improvement
Continuous Improvement

Safety

Reliability

Execution



Transmission and Distribution Strategies to Achieve Vision

Mission: To safely keep the lights on and the gas flowing and achieve operational excellence through process improvement, enhanced controls and workforce enablement

Business Priorities	Strategies to Achieve Vision
Safety	<ul style="list-style-type: none">• Safety culture founded on premise of “zero incidents” and full accountability, where employees feel empowered to speak up and take action to ensure both employee safety and public safety• Ensure personal accountability for adherence to safety rules and procedures – Seven Rules To Live By• Supervisory and management effectiveness• Skills training / internal controls
Reliability	<ul style="list-style-type: none">• Customer-experience focused reliability strategy• Restoration process improvements, enhanced tools, automation• Storm prediction models• Gas – verify and maintain ongoing system integrity• Gas & Electric maintenance – on fixed / condition based schedules• Increased use of technology and automation
Execution	<ul style="list-style-type: none">• Operational & Human Performance Improvement initiatives – technical methods / training, standards, process & procedure improvement• Business Results Team – end-to-end process improvement• Project Management Improvement Team• Integrated financial / resource planning



How does T&D perform work?

Utility Officer Committee

Asset Owner

E&O

System Operations

Operate the network safely & efficiently

Operational Performance,
Smart Automation Requirements,
Asset Information & Policies

Work Schedule,
Clearance Request,
Work Request,
Clearance Approval

*Delighted Customers
Energized Employees
Rewarded Shareholders
Environmental Leadership*

E&O

Asset Strategy
And Planning

ED

Work &
Resource
Management

ED

Field
Execution

Asset Feedback

Status and
As Builts

Work Volumes

Schedule

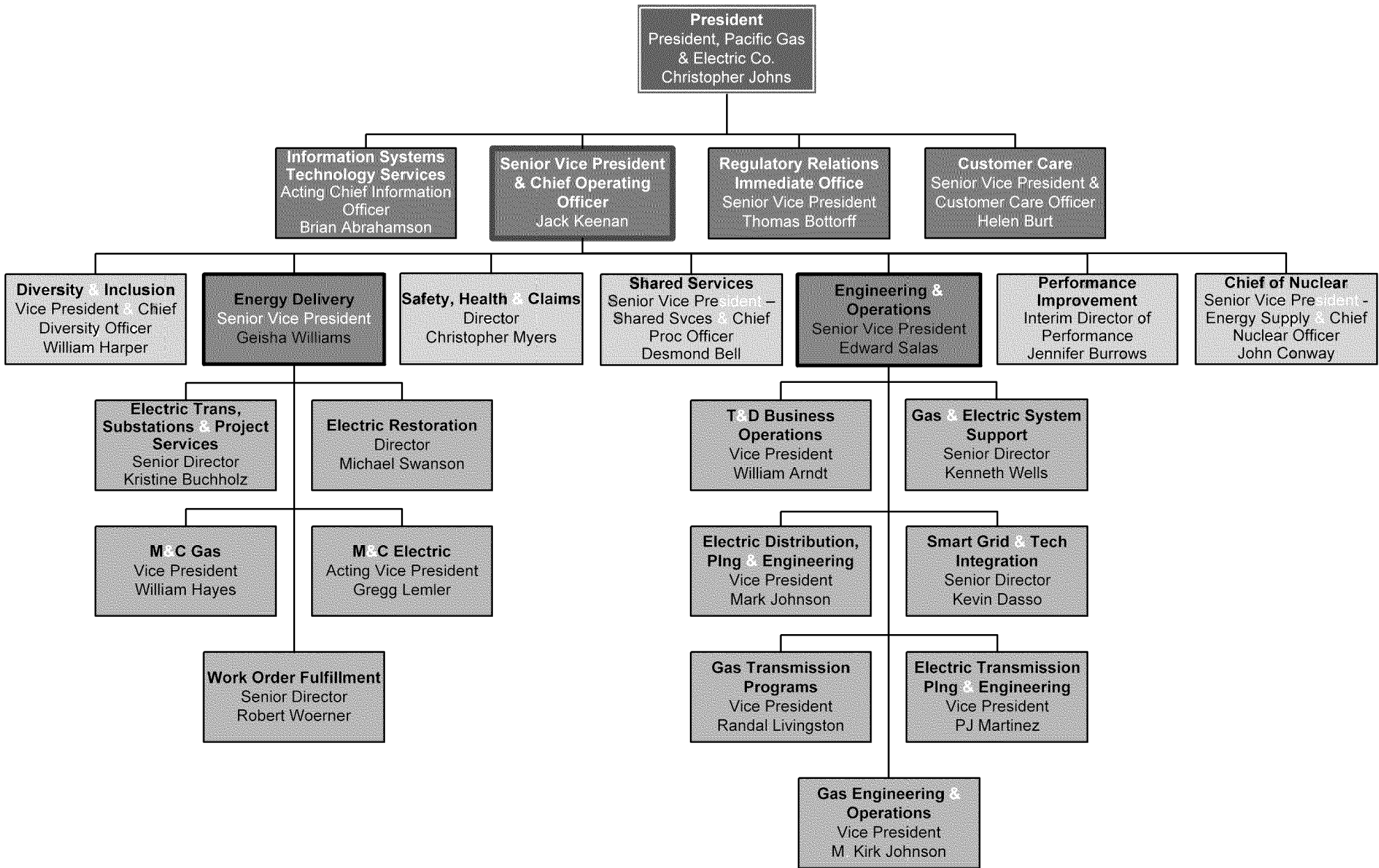
Define the
Right Work on
the Right Asset

Do the Work Right
at the Right Cost

Execute Safely
with Productivity
and Quality

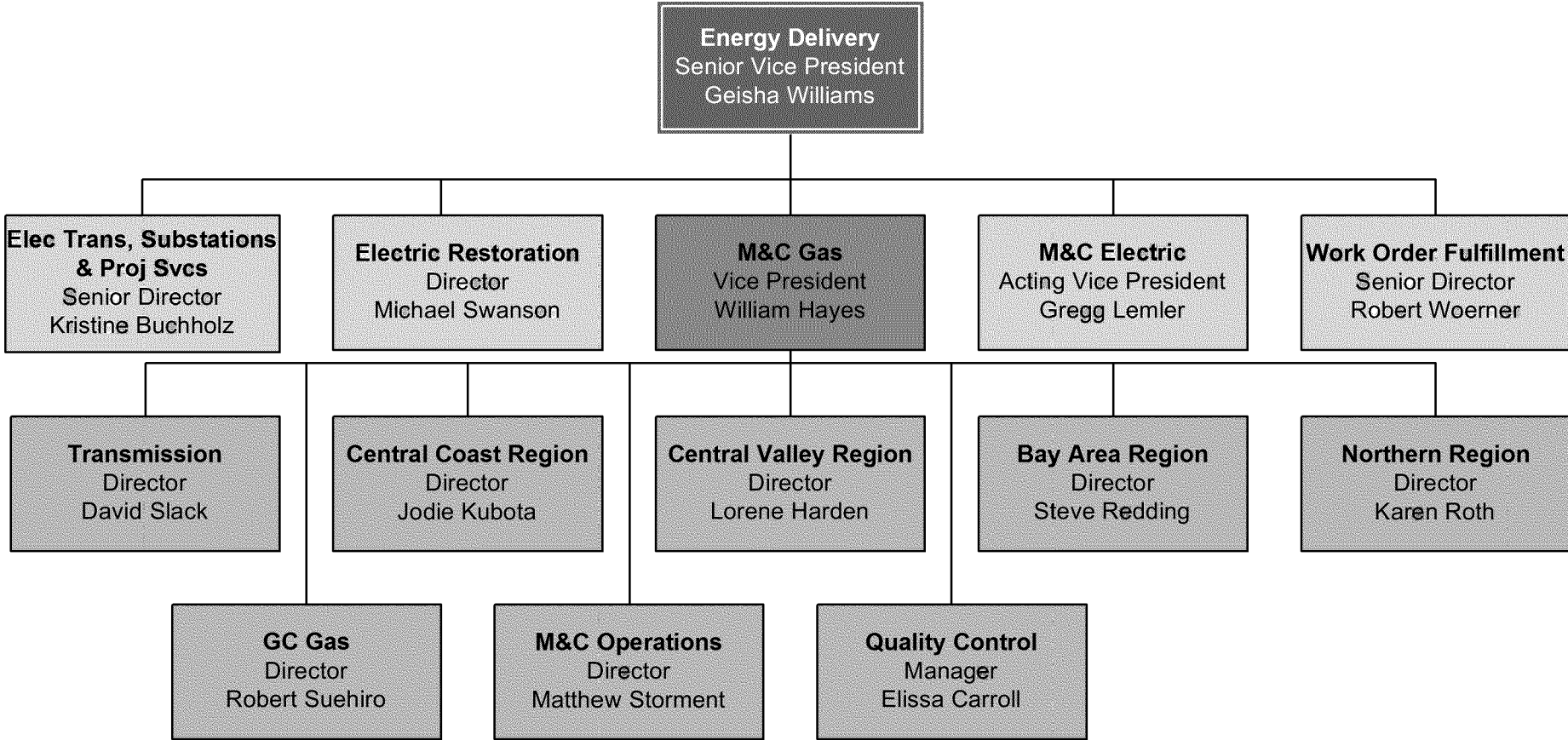


President and COO, PG&E



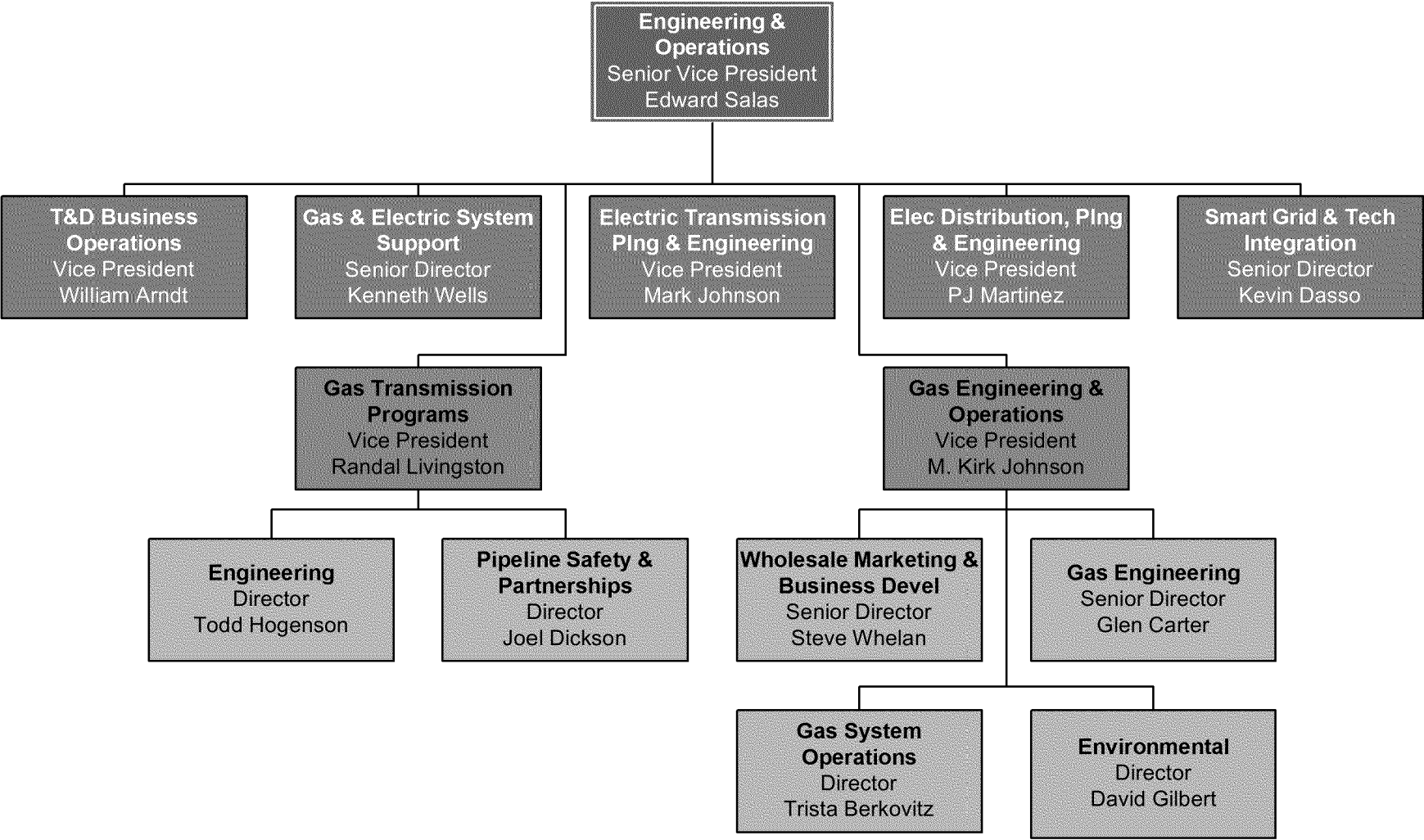


Energy Delivery





Engineering & Operations



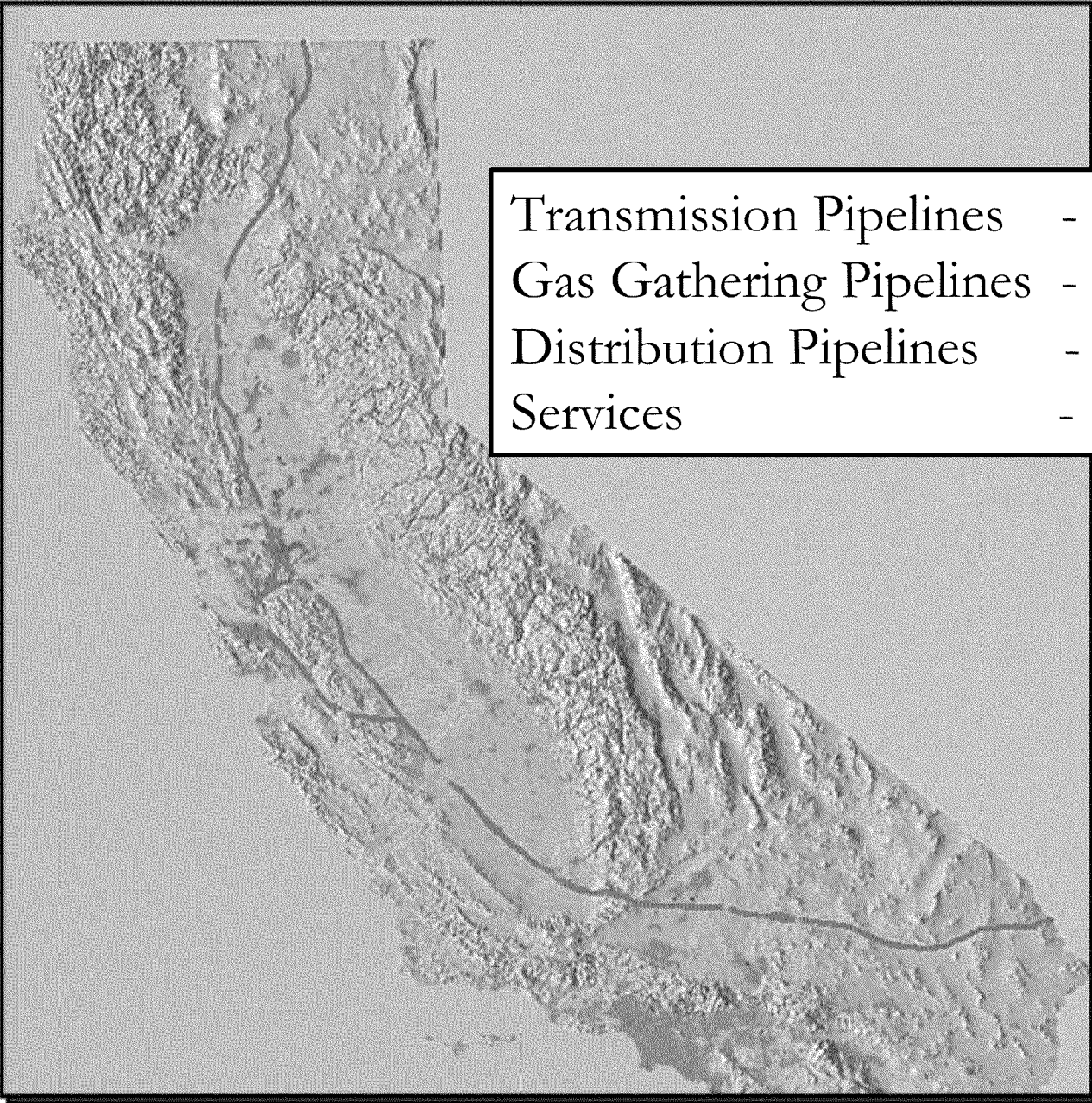


Pipeline Integrity Management Program

- Corporate risk management framework
- Governance of pipeline integrity management program
- Focus on High Consequence Areas
- Visibility of pipeline integrity efforts within organization; process for disseminating information among various leaders, and within engineering, operations, and field organizations



PG&E's Gas System



Transmission Pipelines	- 5,777 miles*
Gas Gathering Pipelines	- 42 miles
Distribution Pipelines	- 42,203 miles
Services	- 3,331,464

*Per FERC gas transmission definition. PG&E gas transmission mileage reported via CPUC statistical report (>60 psig) is 6,736 miles. 15

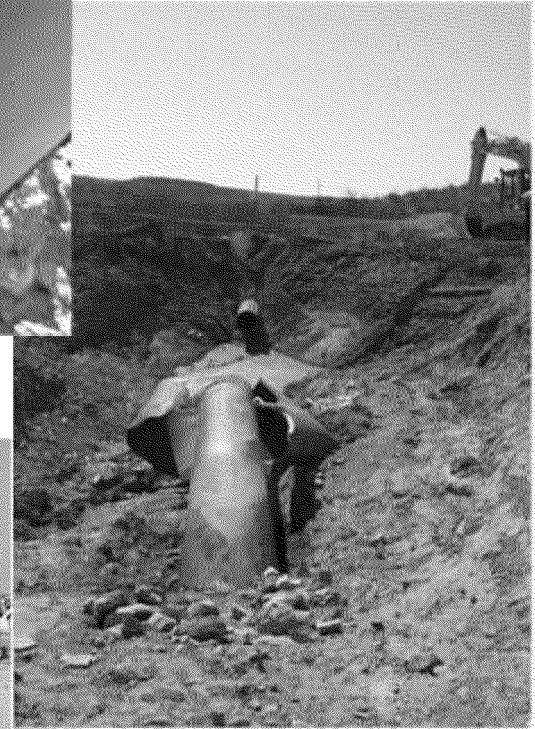
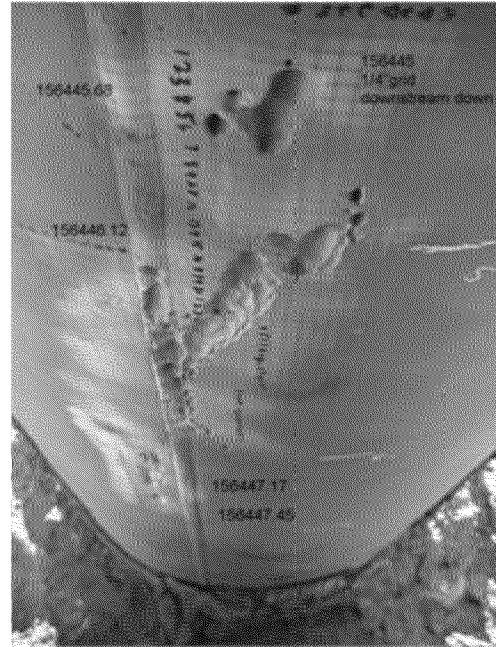


Transmission Pipeline Integrity Management (TIMP) Rule

- President Bush signed Pipeline Safety Law – 12/17/02
- PHMSA published 49 CFR Part 192, Subpart O - Transmission Pipeline Integrity Management
- Identification of High Consequence Areas (HCA's)
- Identification of Threats for each HCA pipe segment, B31.8S
- Threat assessment technologies:
 - In-Line Inspection (Smart Pigging)
 - Direct Assessment
 - Pressure Test
 - New Technology approved by Pipeline & Hazardous Materials Safety Administration (PHMSA)
- 10 years to complete baseline assessments
- 5 years to complete 50% of the highest risk segments
- Must re-assess HCA pipelines every 7 years

ASME B31.8S Threats

- Third Party/Mechanical Damage
- External Corrosion
- Weather Related and Outside Force
- Welding/Fabrication Related
- Internal Corrosion
- Equipment
- Incorrect Operations
- Stress Corrosion Cracking
- Manufacturing Related Defects





Integrity Management Program

- Within 10 years (2002-2012) approximately 1000 miles of HCA segments must be assessed
- In order to meet the 10-year baseline assessment requirements of Sub-Part 0, PG&E will have assessed a total of 1,521 miles pipelines to assess 1,021 HCA miles of pipeline
- Met 50 percent milestone as of December 17, 2007
- On track to complete 10-year baseline assessment by December 17, 2012
- Ongoing monthly performance tracking



Regulatory Framework

- Perspectives on CPUC “black box” settlement process
- Perspectives on CPUC Graduated Enforcement program



PG&E Regulatory Framework Overview

- Gas Transmission operations, maintenance and capital expenditures are authorized by the CPUC through a rate case, which generally approves expenditures for a 3-4 year period.
- PG&E's Gas Transmission rate cases in the last several years have been adopted as settlements by the CPUC.
- Settlements must be:
 1. Reasonable in light of record,
 2. Consistent with law, and
 3. In the public interest
- Settlements allow parties to ensure their needs are met while allowing PG&E the flexibility to manage the work.
- While the settlement generally provides a dollar amount, it does not mean that PG&E will not have to spend more to address system needs during that year. Utility is still responsible to build, maintain and operate the system in a safe reliable manner.
- Graduated Enforcement provides an incentive for PG&E to constantly review its system to identify issues early. PG&E believes the overall approach to be effective.



San Bruno Event

- Integrity management efforts pertaining to affected infrastructure
- Response efforts at time of event
- Actions taken in aftermath
- Effectiveness of current state and federal regulations regarding pipeline integrity



Pipeline 2020 Program



Pipeline 2020 is a new PG&E program to guide the utility's efforts to strengthen the natural gas transmission system and advance industry best practices over the coming decade.

- **Objectives**

- Expediently ensure the integrity and quality of our gas transmission pipelines
- Our focus on quality and pipeline integrity will ensure the safety of the system, but we are at all times prepared for unplanned events

- **Five Key Focus Areas**

- Modernize Critical Pipeline Infrastructure
- Expand the Use of Automatic or Remotely Operated Shut-off Valves
- Spur Development of Next-Generation Inspection Technologies
- Develop Industry-Leading Best Practices
- Enhance Public Safety Partnerships