

# 26<sup>th</sup> World Gas Conference

1–5 June 2015, Paris, France



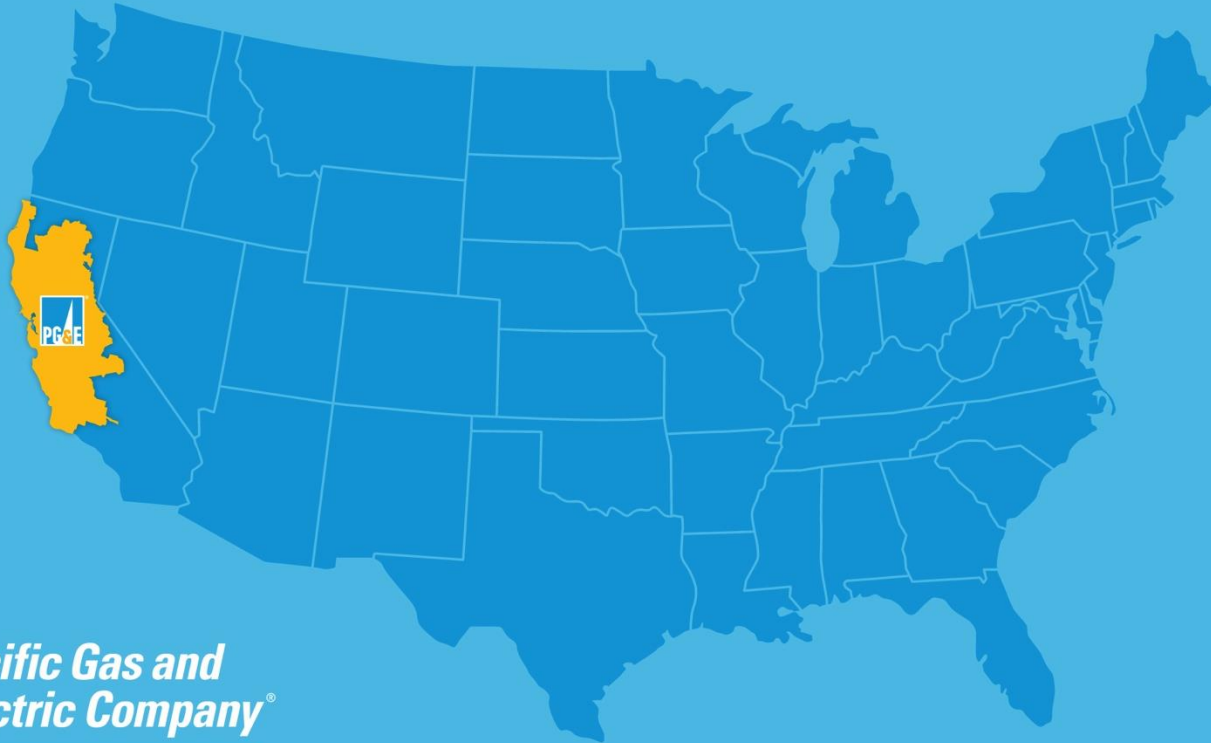
## REVOLUTIONISING LEAK MANAGEMENT

Leveraging State-of-the-Art Technology

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Pacific Gas and Electric Company (PG&E)



# Background—Company Overview



*Pacific Gas and  
Electric Company®*

# Background—Company Overview



**6,750 miles**  
transmission  
pipeline

**970 BCF**  
delivered/year

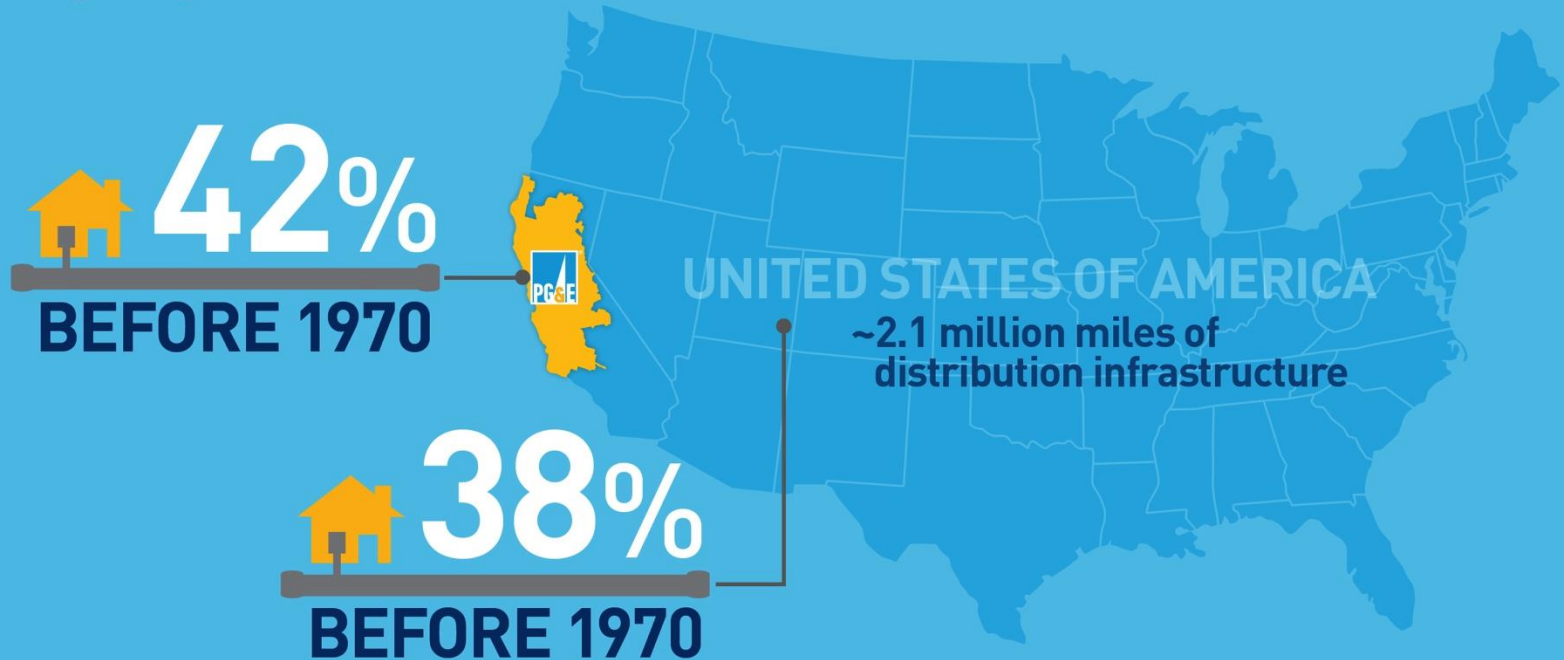
APPROXIMATELY

**84,000 miles**  
distribution main  
and service pipe

**4.3 million**  
natural gas  
customer accounts

# Background—Situation

## Aging distribution infrastructure



# Background—Picarro Surveyor

## Revolutionary Leak Management Solution

**PPB** vs **PPM**

**1,000x** more sensitive

Clearly and accurately identifies  
**leak locations**

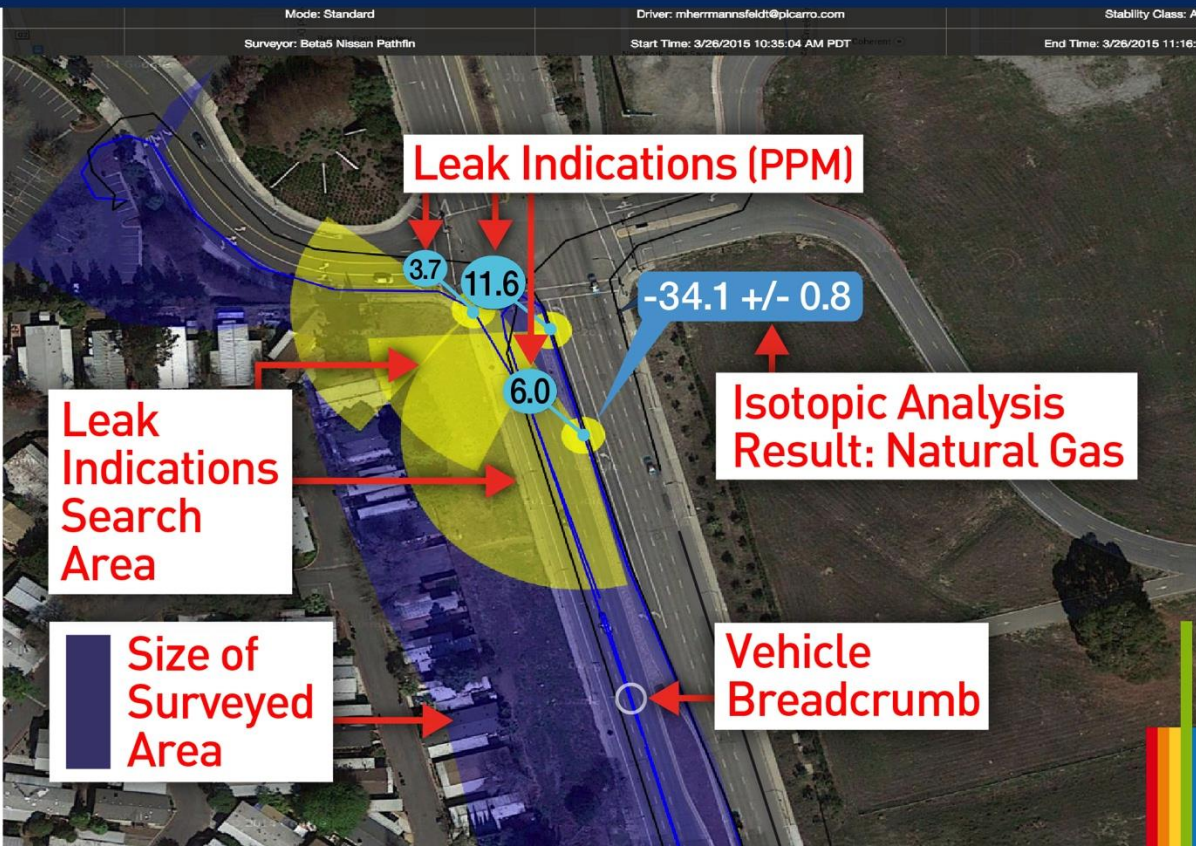
**2.5x** faster survey

Distinguishes **natural gas** from **biogenic methane**





# Background—Picarro Surveyor



# Aim

Develop a new, dynamic, end-to-end leak management process that:

**finds and fixes**  
more leaks



**increases**  
operational  
efficiencies

## How did we get there?

- 1 Leak Survey Technology: 2012–13**  
Field Tests + Studies + Pilots  
.....
- 2 Leak Repair Process: 2013–14**  
Develop SUPER CREW  
.....



# Enhanced Leak Management Process Effectiveness

**12 months**  
PREVIOUS MODEL

**VS**

**1 month**  
SUPER CREW

**80%** MORE  
LEAKS FOUND

MORE THAN  
**40%** FEWER HOURS  
PER UNIT

**3**

**Initiate SUPER CREW Model  
deployment system-wide**

**2015**

# The Enhanced Leak Management Operating Model

DAY 2—REPAIRS BEGIN

CLOSEOUT

DAY 1—SURVEY END



GRADE 1 RESPONSE



# Summary

Integrated technology into the revolutionised leak management process (**SUPER CREW**):

enhances  
safety



reduces  
environmental  
impact



strengthens  
public  
confidence

# Thank you

Stephen M. Redding, Sr.



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