GAS DELIVERY UPDATE: STRATEGY TO EXECUTION – ENHANCED INSPECTION STRATEGY

INTRODUCTION BY:
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PRESENTED BY
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AGENDA

• COMMITMENT AS FULL SERVICE PROVIDER
• GROWTH IN ACTION
• STRONG MAINTENANCE PROGRAM - INSPECTION STRATEGY
• ADVANCED TECHNOLOGY
• BENEFITS
• ADDITIONAL EMERGING TECHNOLOGIES
The Gas business is a strategic asset of our community. We are pleased to serve almost 350k customers who enjoy the benefits of natural gas in their homes and businesses.

*Q1 2018 MSI Residential Customer Survey

COMMITMENT AS FULL SERVICE PROVIDER

Gas Delivery Stats:

• Top decile Customer Satisfaction with price & value
• $180m Revenues
• 238 Gas Employees
• Owns and Operates:
  – 5,415 Distribution miles
  – 89 Transmission miles
We are pleased that our competitive efforts to bring gas to more customers in our community has resulted in partnerships with these new customers.
In addition to pursuing the growth of our gas system, we maintain a continuous focus on cost effective and proactive maintenance for the benefit for our community.
INSPECTION STRATEGY

- System inspections are proactive surveys to detect potential leaks in the gas system that are required by Federal Regulation.
- Traditional system inspection equipment is handheld and requires employees to inspect on foot.

Infrared technology

Flame Ionization Unit

Inspection Documentation

Field Inspector
Our new Smart Sniffer vehicle:

• Is 1,000 times more sensitive than traditional technology, and
• Combines state of the art sensors and advanced analytics to produce actionable results in real-time
BENEFITS:
SUPPORTS OUR COMMITMENT TO SAFETY

- **Customer** – increased safety through faster identification and repair of gas leaks; ideally before a customer even notices.

- **Employee** – Vehicle-based inspection provides a safer environment by reducing dangerous field situations and hard to reach inspection areas.
BENEFITS:
OPERATIONAL EFFICIENCY

• **Inspection** - Average 8x faster than traditional walking method
• **Investigation** - Source discrimination feature to avoid investigation of non-natural gas indications
• **Targeting** – Increased accuracy to better direct field crews
BENEFITS: SPECIAL USES – NOW & FUTURE

• Final Four preparation (Alamodome, Hemisfair)

• Fiesta Preparation (Parade Route, Market Square, La Villita)

• JBSA System Assessment (Lackland, Lackland Annex and Randolph)
BENEFITS:

IMPROVED ASSET MANAGEMENT PROGRAM

Illustrative example:
- Traditional way $1.00M
- SSV results $0.25M
- Savings $0.75M

More precise infrastructure replacement reduces disruption to the community and eliminates more risk per dollar spent
“CPS Energy’s early adoption of mobile methane leak detection technology allows them to go beyond current regulations to get the biggest environmental benefits sooner. EDF has advised CPS Energy on best practices in using this technology and we look forward to working with CPS Energy to find more ways to move forward on methane solutions across their system.”

- Mario Bravo
  Environmental Defense Fund
BENEFITS:
COMMUNITY & EDUCATION

Electric car race (May 2018)
Maverick Elementary (May 2018)

Fun & engaging way to talk to our community about the benefits of natural gas & tips for using it safely
We continue to look for emerging technologies to continuously improve our service. This includes items such as:

- Gas sensor technology using existing communication network
- Drone technology for hard-to-reach inspection areas
- Use of advanced analytics (machine learning)
Thank You
GLOSSARY
## GLOSSARY

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
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<tbody>
<tr>
<td>Flame Ionization Unit</td>
<td>Portable gas leak detector that burns a controlled amount of fuel mixed with the sample. If a hydrocarbon gas is present in the sample, ionization occurs and is electronically measured and converted to a visual indication via the instrument’s meter.</td>
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<tr>
<td>Infrared technology</td>
<td>Optical gas detection system that uses a simple light beam and is selective to detecting methane only, eliminating false alarm on other hydrocarbon gases.</td>
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<tr>
<td>Anemometer</td>
<td>Instrument for measuring wind speed.</td>
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