

Earthquake Summit Crisis Management Plan

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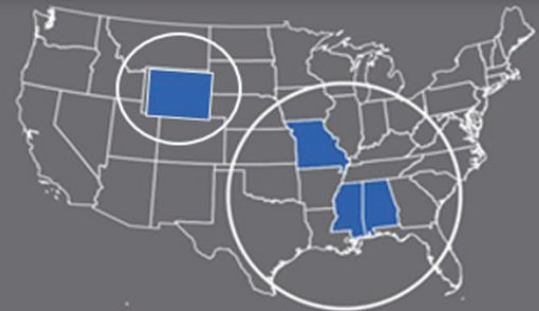
spire 

Objectives

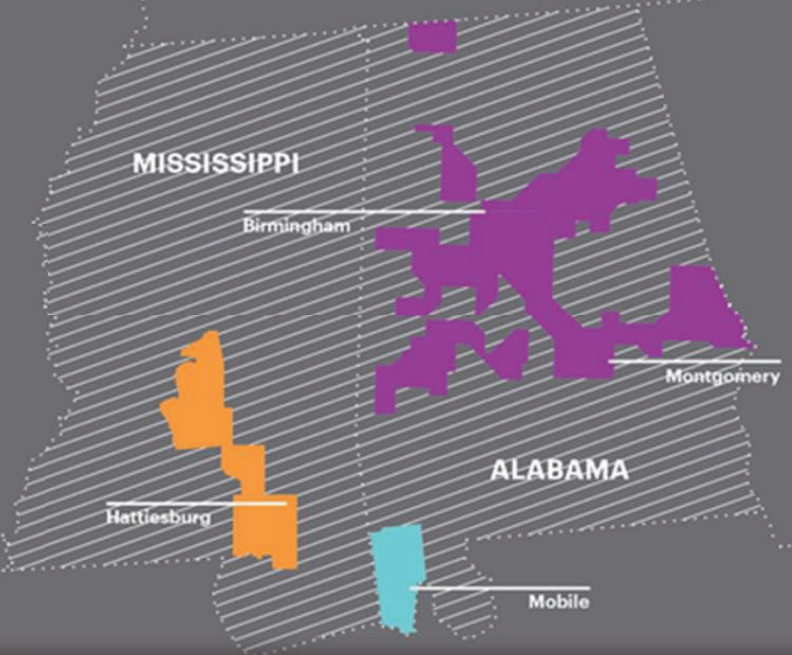
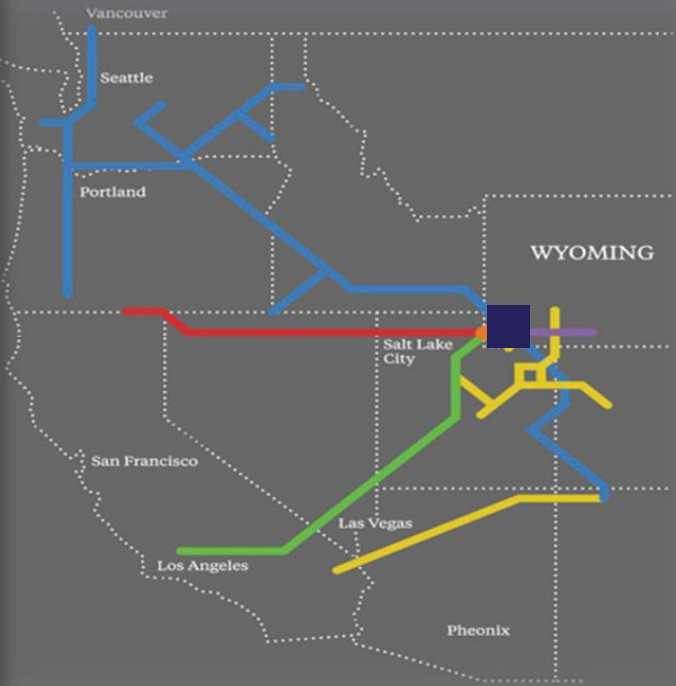
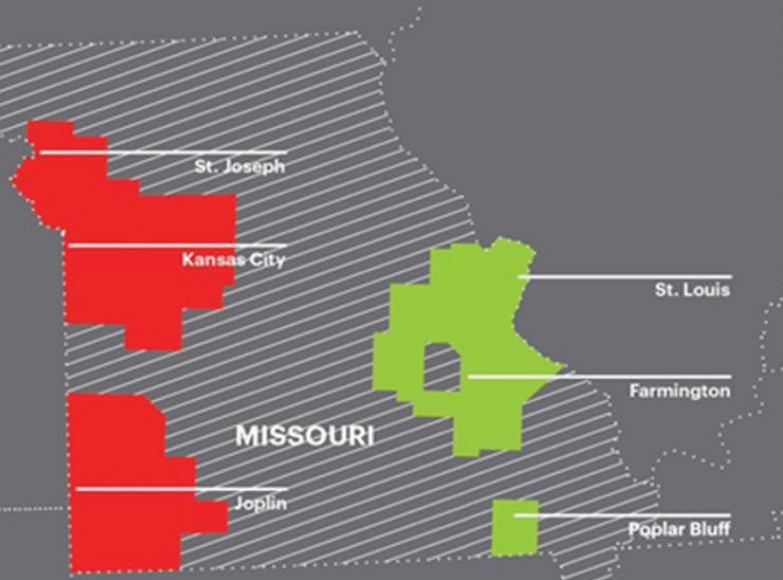
- Answer “Who is Spire”
- Describe where we are
- Understand how Design and Construction helps preparedness
- Know what Spire has in place for prevention and protection
- Obtain an overview of Spire’s Crisis Management Plan
- Understand the properties of natural gas



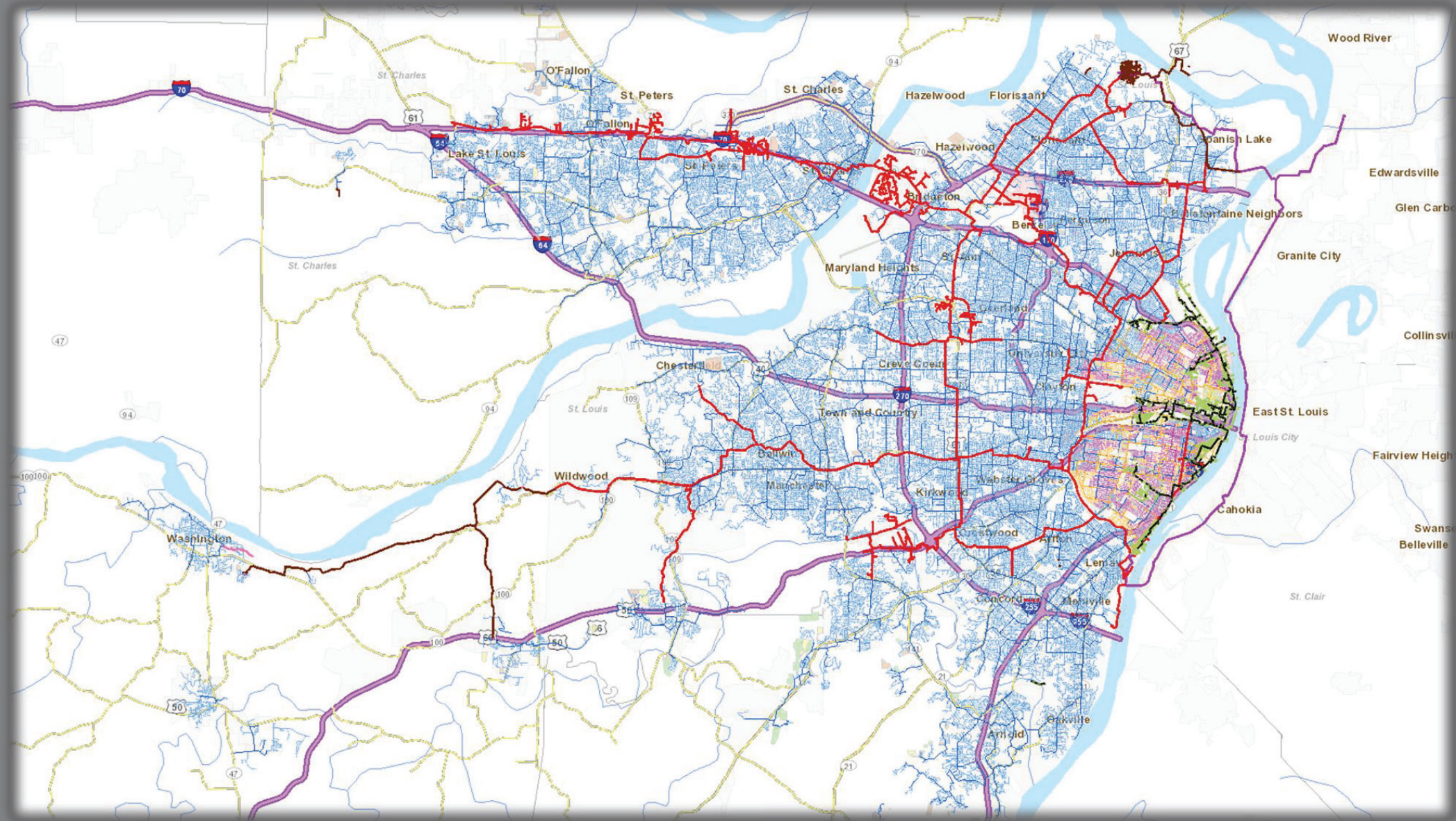
- LACLEDE GAS ■
- MISSOURI GAS ENERGY ■
- ALAGASCO ■
- WILLMUT GAS ■
- MOBILE GAS ■
- Ryckman Creek ■



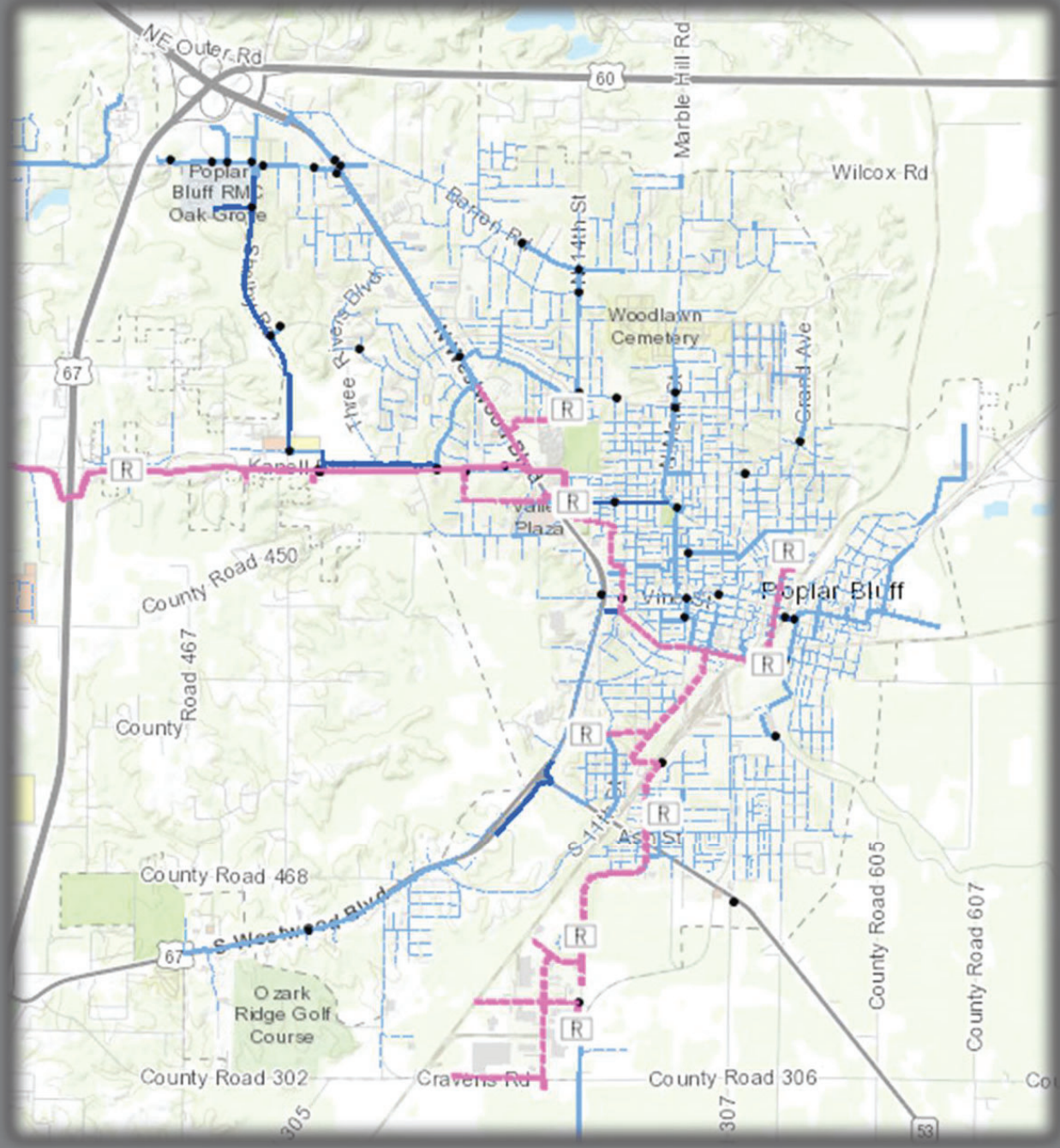
1.7M
Customers Served



Spire Missouri – St. Louis



Spire Missouri – Poplar Bluff



Design and Construction

Designed and Installed in accordance to Federal Standards

Critical Valves

Depth

Bed around pipe

Cathodic Protection

Plastic Pipe Slack

Cast Iron Replacement



Earthquakes are the result of a release of seismic energy, causing a shift in the layers of rock beneath the surface of the Earth, generally resulting in a shaking motion at the surface. These events are largely unpredictable, providing little to no warning, and vary in terms of intensity and duration.

unpredictable,

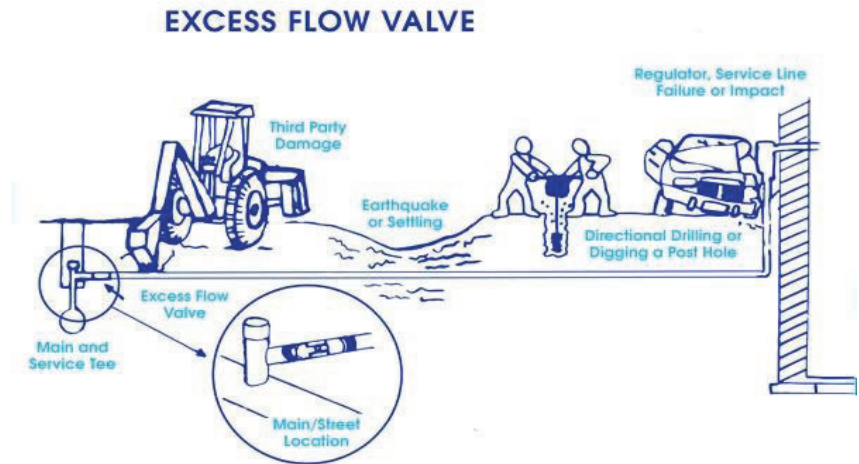
no warning

vary in intensity and duration.



Protection and Prevention

- Corrosion Technicians
- Damage Prevention
- Gas Control
 - Shut-offs
 - EFV
- Partnerships
- Integrity Management
- High Consequence Areas
- Education and Training
 - Internal
 - Emergencies Responders
 - Public Awareness



Crisis Management Plan

Purpose & Scope

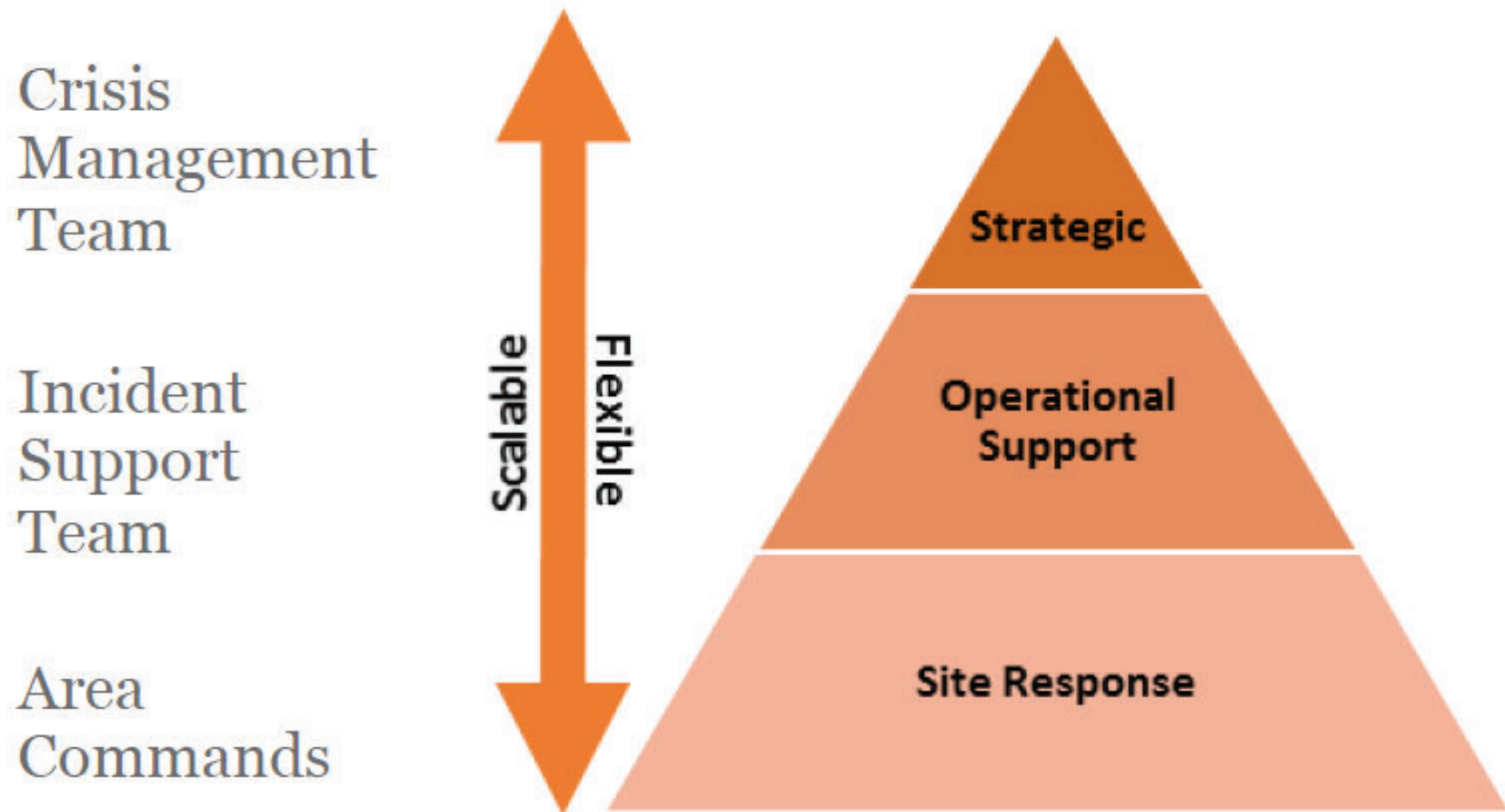
- The purpose of the Spire Inc. CMP is to respond to any major emergency, accident or incident that has or may threaten the security, confidentiality, integrity or general operations of the company.
- The structure described in this plan is meant to complement, not supersede, any type of emergency response plans that exist at various company sites/departments and/or other site procedures, documentation, and plans. When an incident occurs, it is expected that established regional and/or local response plans and procedures will be followed quickly and effectively by each emergency response team.

Phases of Crisis Management

- Prevention & Mitigation
 - Preparedness
 - Response
 - Recovery




Crisis Management Plan Structure



Crisis Management Plan Structure

Area Command Teams

Area Commands (i.e. local site response organizations) are made up of all the teams at a site that may be called upon to respond to alarms, emergencies, service issues and potential crises. The incident response organization is led by a local manager who has oversight of all response actions taken locally and which employs an Incident Command System (ICS) methodology.



Site Response



Crisis Management Plan Structure

Incident Support Team (IST)

The IST is responsible for ensuring that the best available resources necessary to manage an incident effectively are accessible.

The IST is charged with keeping executive management and leadership informed about the incident and progress to resolve it, when the CMT may or may not be activated.



Crisis Management Plan Structure

Crisis Management Team (CMT)

The CMT is the corporate-level decision-making body for the response to all incidents and/or emergencies that threaten to become a crisis to Spire.

The CMT chooses the appropriate strategy to deal with the various corporate consequences of the incident and develops an overall strategy for the event.



Crisis Management Plan

Phases of Crisis Management

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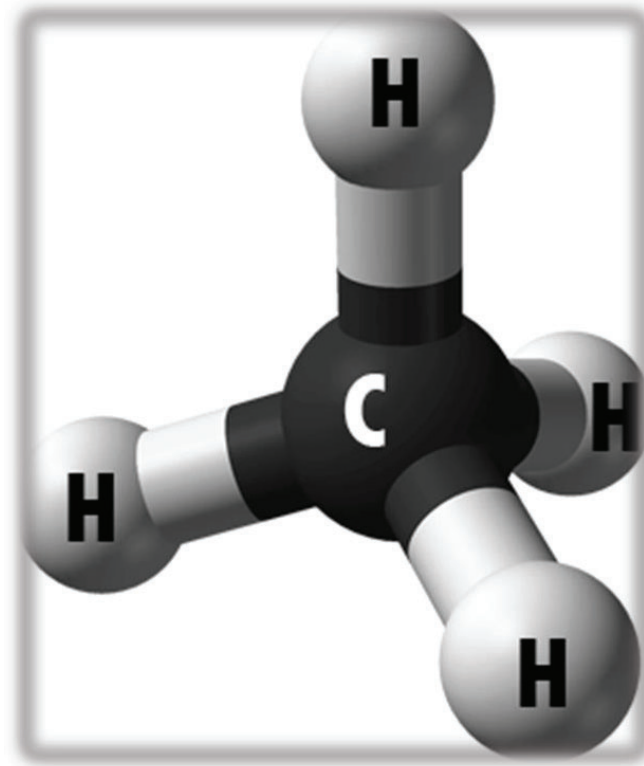
We are fuel for good



Learning the Basics

Understanding the Properties of Natural Gas

- Properties of Natural Gas
 - Colorless
 - Tasteless
 - Odorless



- CH₄-Methane 85% - 95%
- C₂H₆-Ethane 2% - 3%
- C₃H₈-Propane 1% - 2%



Flammable Range for Natural Gas

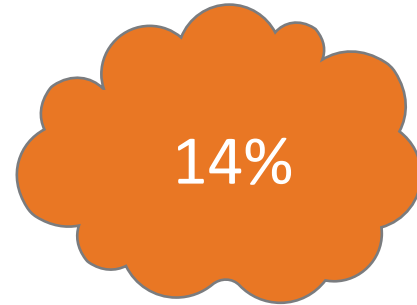
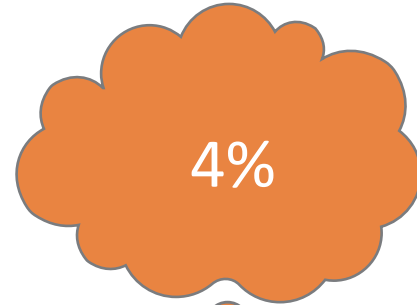
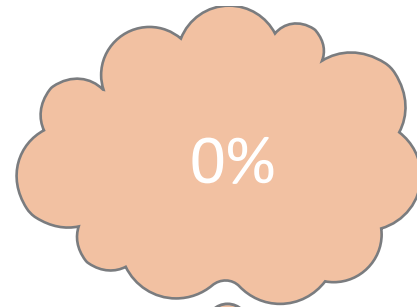
- 4-14% Flammability Range
- Above 14 too rich, won't burn
- Below 4 too lean, won't burn



4.0% Gas (L.E.L.)

10% Gas (Optimum)

14% Gas (U.E.L.)



Flammable Range
4%-14%



Understanding the properties of Natural Gas



What's safer?



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St. Louis

Security Operations Center

314-575-0060

Spire's Commitment to Emergency Responders:

“Protecting our communities together”

- The emergency responders job is to make sure everyone is safe.
- At Spire, we have the utmost respect for what they do.
- So we help them stay safe by sharing facts about our product and the best practices for responding to natural gas incidents.

