

Laclede Energy Efficiency Programs
Energy Efficiency for Business



February 11, 2013



**Commercial & Industrial Conservation and
Energy Efficiency Programs**

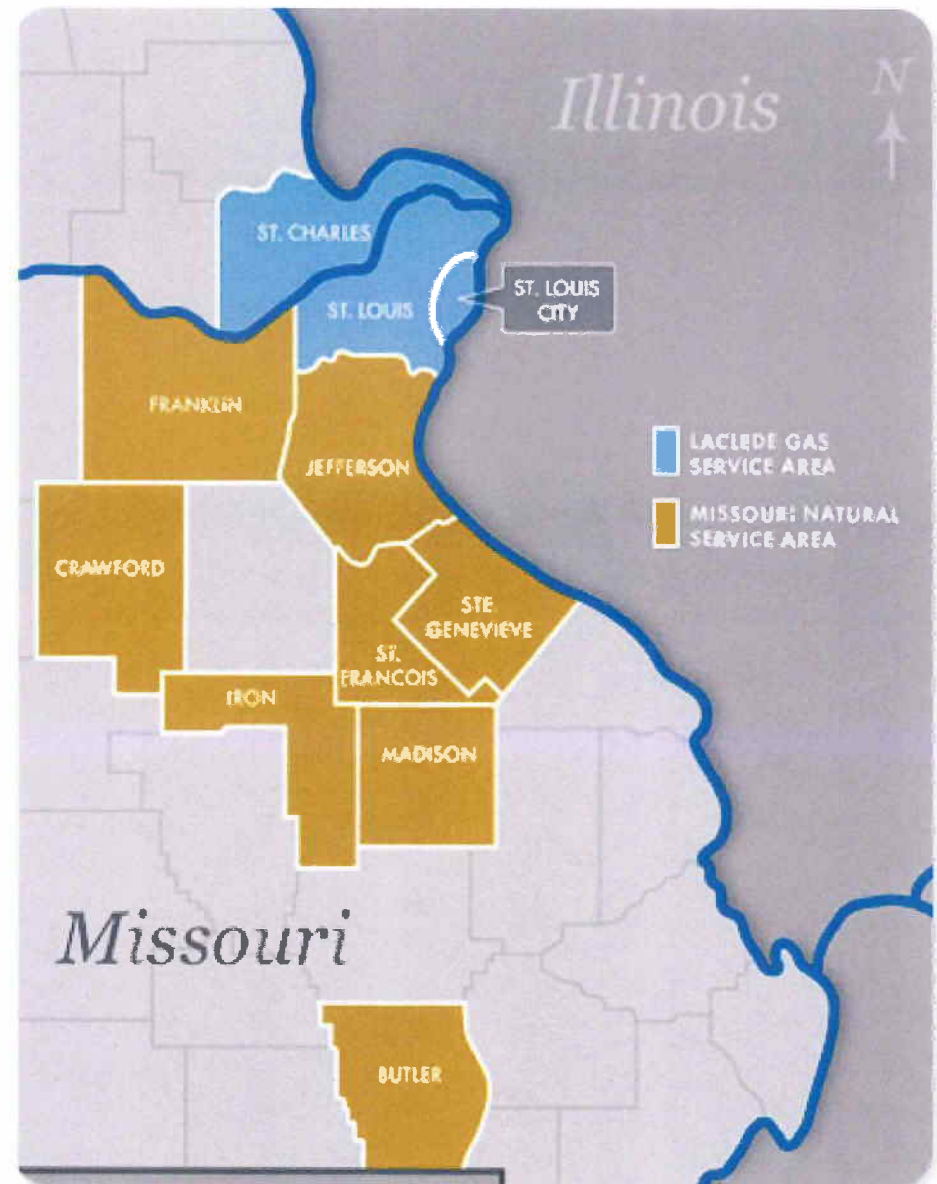
Jim Travis
Laclede Gas Company

About Laclede Gas

Company at a Glance - 2012:

- A Subsidiary of The Laclede Group
- Serve 10 counties in eastern Missouri.
- Total Customers 628,000 customers:
- 588,000 Residential Customers
- 40,000 Commercial / Industrial

(2012 Laclede Group Annual Report)



Laclede Energy Efficiency Collaborative

- Established as part of Laclede's August 2007 revised Tariffs
- The charter EEC members:
 - Laclede Gas Company
 - Missouri Public Service Commission
 - Office of the Public Counsel
 - Missouri Department of Natural Resources
- Assemble a cost-effective portfolio of energy efficiency programs that provide Laclede residential, commercial, and industrial customers with direct benefits.
- Programs launched November 2008

Why Encourage Energy Efficiency?

– Revenue Impact

- Partially Decoupled Rates

Laclede's support for energy efficiency is made possible by the introduction of rate structures that break the link between the amount of gas sold and revenue collected necessary to recover fixed costs.

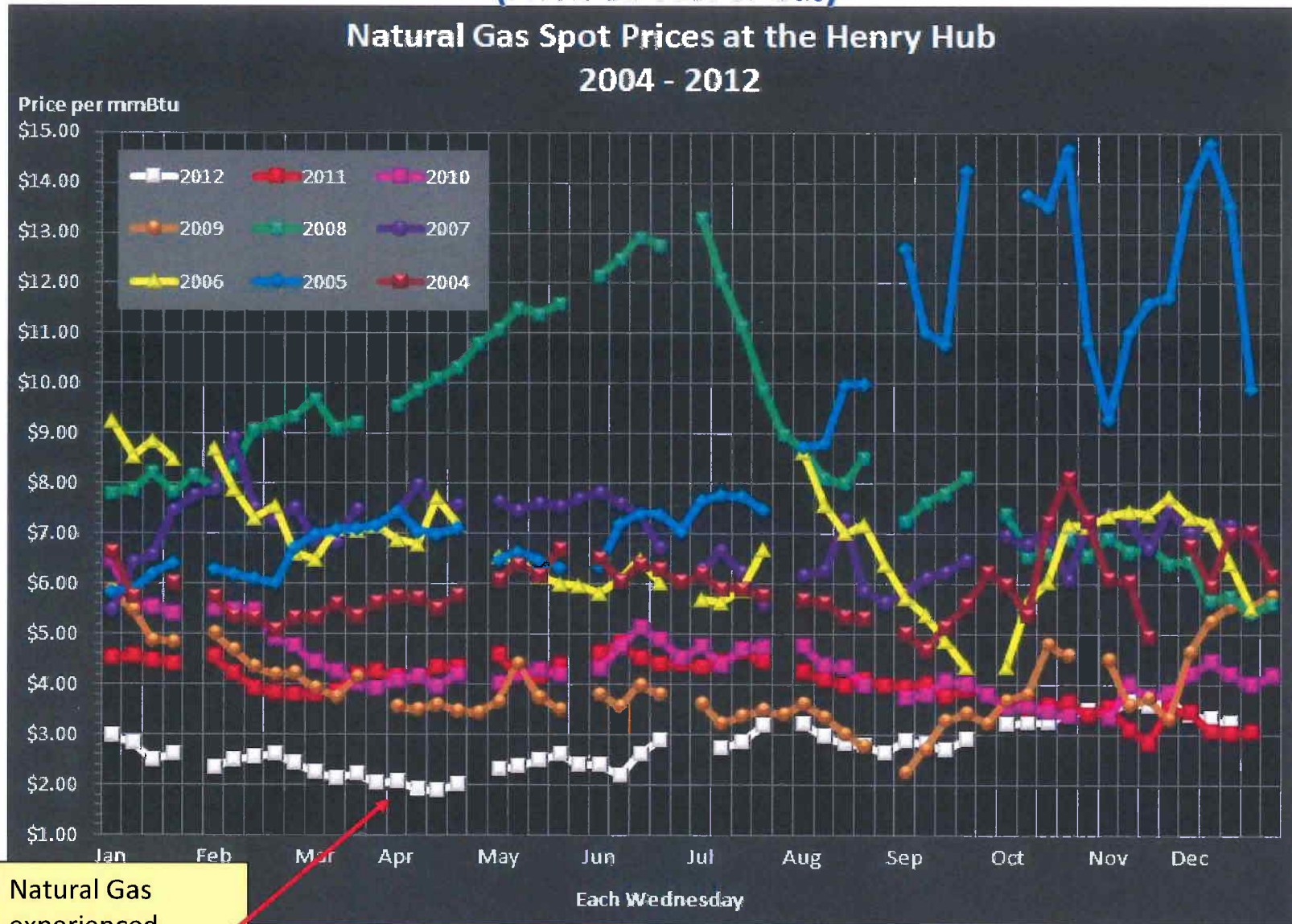
– Environment

- The efficient use of energy by our customers contribute to the total reduction of greenhouse gas emissions.

Laclede Conservation and Energy Efficiency Programs

- Overview – Cost Effectiveness
- Commercial and Industrial Energy Efficiency Rebate Program
- Building Operator Certification (BOC) Program

Challenges to Natural Gas Utility Funded Direct Incentive Energy Efficiency Programs (Avoided Cost of Gas)



Natural Gas experienced historically low prices in 2012

Cost Effectiveness Overview

- In its simplest form, energy efficiency cost-effectiveness is measured by comparing the benefits of an investment with the costs.
- Based on California Standard Practice Manual of Demand-Side Programs and Projects
 1. Participant Cost Test (PCT)
 2. Utility/Program Administrator Cost Test (PACT)
 3. Ratepayer Impact Measure (RIM)
 4. Total Resource Cost Test (TRC)
 5. Societal Cost Test (SCT)
- Measures the relative performance or economic attractiveness of an energy efficiency investment compared to a baseline.
- Compares the present value of costs & benefits of high efficiency equipment with those of the baseline (non-high efficiency) option.

$$\text{Benefit-Cost Ratio} = \frac{\text{NPV } \Sigma \text{ Benefits (dollars)}}{\text{NPV } \Sigma \text{ Costs (dollars)}}$$

- A test is positive if the benefit-to-cost ratio is greater than one, and negative if the benefit-to-cost ratio is less than one.

Cost Effectiveness Overview (Continued)

- ***Participate Cost Test*** - Impact on utility customer participant
- ***Ratepayer Impact Measure*** - Impact on non-participating utility ratepayers.
- ***Program Admin. Cost Test*** – Impact on utility who provides the incentives.
- ***Total Resource Cost Test*** - Impact on the participant, non-participant, and utility. A summation of Ben. and Costs to the participants and non-participants (*most recognized of all tests*).
- ***Societal Cost Test*** - Impact to all in the utility service area, state, or nation as a whole.

Energy related avoided costs impact the benefits of programs in cost-effectiveness calculations

Test	Benefits	Costs
PCT	<i>Benefits and costs from the perspective if the customer installing the measure</i>	
	— Incentive payments	— Incremental equipment costs
	— Bill savings	— Incremental installation costs
PACT	<i>Perspective of the utility, government agency, or third party implementing the program</i>	
	— Energy-related costs avoided by the utility	— Program overhead costs
	— Capacity-related costs avoided by the utility, including generation, transmission and distribution	— Utility/program administrator incentive costs
RIM	<i>Impact of efficiency measure on non-participating ratepayers overall</i>	
	— Energy-related costs avoided by the utility	— Program overhead costs
	— Capacity-related costs avoided by the utility, including generation, transmission and distribution	— Utility/program administrator incentive costs
TRC	<i>Benefits and costs from the perspective of all utility customers (participants and non-participants) in the utility service territory</i>	
	— Energy-related costs avoided by the utility	— Program overhead costs
	— Capacity-related costs avoided by the utility, including generation, transmission and distribution	— Program installation costs
SCT	<i>Benefits and costs to all in the utility service territory, state, or nation as a whole</i>	
	— Energy-related costs avoided by the utility	— Program overhead costs
	— Capacity-related costs avoided by the utility, including generation, transmission and distribution	— Program installation costs

