NiSource
Pipeline Group
Natural Gas Star Experience

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NiSource Pipeline Group - Topics For Discussion

- NiSource Overview
- Pipeline Group Star Program Experience - Background
- Program Value
- Program Implementation
- Program Challenges
- Additional Benefits
- Where Do We Go From Here
NiSource – Natural Gas Star Overview

- **NiSource**
  - *Integrated Electric and Natural Gas Company*
    - *Electrical Generation*
    - *Natural Gas Distribution*
    - *Natural Gas Transmission/Exploration & Production*
  - *Many Subsidiaries Part of Natural Gas Star Program*
**Pipeline Group - Natural Gas Star Overview**

- **NiSource’s Gas Transmission Segment**
  - Four Companies (CrossRoads, Columbia Gas, Columbia Gulf, Granite)
  - Operations from the Gulf of Mexico to the Northeast and Midwest
  - Combined Assets
    - About 17,000 miles of Transmission Pipeline
    - 130 Compressor Stations
      - Over 330 Reciprocating Engines & >80 Turbines
    - 3,500 natural gas storage wells
Pipeline Group - Natural Gas Star

Background

- Columbia Gas and Columbia Gulf joined Natural Gas Star in 1999.
- Estimate Methane Emissions Reduction of 3.9 Bcf since beginning program
- Partner of the Year – 2000 and 2001
Pipeline Group – Natural Gas Star Program Value

- Program Values
  - Recognized Value of Reducing Methane Loss
    - Good Business
    - Environmental Benefit
    - Good Corporate Citizenship
    - Possible Accounting/Procedural Benefits in the Future
Pipeline Group – Natural Gas Star Implementation

- Upfront Management Support for Program
- Initial Implementation Team Formed
- Support of Operations Personnel (tools to gain involvement and acceptance):
  - Advertise/Publicize Participation in Program Internally
    - Feature Articles in internal publications & Other Measures
  - Include as Part of Internal Continuous Improvement Programs
    - Example - EH&S Recognition Program
Pipeline Group – Natural Gas Star Implementation

• Initial Implementation – Phased Approach
  – Assessed current practices in comparison to existing Partner Reported Opportunities (PRO’s) & Best Management Practices (BMP’s)
  – What Else is Done – Identified practices not identified in existing PRO’s & BMP’s
  – Other PRO’s/ BMP’s or Practices available to reduce Gas loss (Continuous Improvement)
Pipeline Group – Natural Gas Star Implementation

• Assessed Current Practices
  – Surveyed Field Personnel
  – Met with field personnel to flush out measures and determine possible measurement methods.
  – Identified measurement or means of estimation.
  – Developed means to track the raw data, the calculations used and the sources of information for each reduction reported.
  – Developed internal procedures and calculation tools.
Pipeline Group – Natural Gas Star Implementation

• Available Tools
  – Operations Personnel
  – EPA’s Star Web Page
    • Partner Reported Opportunities
    • Best Management Practices
    • Electronic Web Based Reporting Tools (new)
    • Lessons Learned Documents
  – Annual and Periodic Natural Gas Star Meetings
    • Specific Issues and Opportunities Often Discussed
  – Other Companies
    • Internal and External
Pipeline Group – Natural Gas Star Challenges

- Many Reduction Activities Were Not Initially Tracked
- Identification of Additional Reduction Measures - Continuous
- Time & Logistics
- Tracking Reduction Activities
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Additional Benefits

• Additional Benefits:
  – Potential future regulatory actions for regulation of methane and greenhouse gas (GHG) emissions
  – Future possibility of GHG credits/trading
  – Identification of best practices from other companies can result in:
    • Cost Reductions
    • Increased Efficiencies
    • Improved Public Relations
      – Dehydration Unit Flaring – Reduced Odor, reduce complaints, MACT Avoidance, Waste Minimization+methane release reduced.
      – Clock Spring Repair – Reduced cost of repair, line continues to operate + methane emissions reduction.
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Where Do We Go From Here

- Continuous Improvement Process

- Review & sharing of practices and reported opportunities with/from internal & external sources

- Continue identification of new best practices for possible use where practical & cost effective