

***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.
- First Report Filed in March 2000 (covered 1993 through 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

- **Challenges:**

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

Pipeline Group – Natural Gas Star 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.

Pipeline Group – Natural Gas Star 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**