PARTNER UPDATE

SPRING 2010

Partner Profile: Southwest Gas and Natural Gas STAR

Based in Las Vegas, Nevada, Southwest Gas Corporation (Southwest) provides natural gas service to more than 1.8 million residential, commercial, and industrial customers in Arizona, California, and Nevada. A Natural Gas STAR Partner since 1997, Southwest continues to research, support, and implement new technologies that reduce methane emissions, energy usage, and other environmental impacts. Because the company's operations have historically grown at a rapid pace, new construction provided Southwest opportunities to avoid methane emissions, to seek out methane savings in existing infrastructure, and relate methane emission reductions to additional types of efficiency-improvement activities.

In addition to implementing technologies that reduce methane emissions from its gas distribution network, Southwest actively participates in Natural Gas STAR as part of its overall *Smarter Greener Better* resource conservation and energy-efficiency philosophy. As a result of its ongoing efforts, the company received Outstanding Partner and Continuing Excellence awards in 2005, 2007 and 2009. Recent Natural Gas STAR activities include greenhouse gas (GHG) inventory development and participation in Gas Technology Institute (GTI) studies to improve methane emission factors. In addition, the company has actively pursued pipe replacement, minimizing compressor blowdowns, and tying Program participation to additional GHG initiatives.

Developing a GHG Inventory

In 2004, Southwest was encouraged by the California Public Utilities Commission to inventory GHG emissions from its California facilities. Southwest has since voluntarily expanded this inventory corporate-wide to include emissions from all of its facilities including those in Arizona and Nevada. The inventory followed the Natural Gas Reporting Protocol proposed by the American Gas Association and adopted by the state of California.

The inventory has allowed Southwest to understand its carbon footprint and to develop strategies specific to GHG emissions management. The inventory also allowed Southwest to verify that many of its existing equipment and operating practices—such as newer polyethylene pipe, leak detection, and minimizing blowdown volumes—are state-of-the-art in terms of low methane emissions.

Participating in GTI Studies

To help improve the accuracy of emission factors, Southwest partnered with GTI to conduct direct measurement of natural gas emissions from regulator stations and meters in Las Vegas and Phoenix. Three other utilities have participated in the same study. Most recently,

As part of a GTI study, Southwest Gas conducted a surface measurement of methane flow-rates from an array of custom-built underground pipes.

Southwest installed a custom pipe array adjacent to the company's new Emergency Response Facility in Henderson, Nevada, to help GTI initiate a study to improve the accuracy of emission factors currently used for calculation of GHG emissions from buried pipes.

As a result of measuring actual leaks from its regulator stations, Southwest demonstrated that its current emission rates were lower than those measured during similar studies done by GTI in the early 1990s for older infrastructure located throughout the United States and Canada. As the number of customers doubled over the past decade due to new housing, Southwest's system has expanded and has used newer materials with lower average leak rates.

Methane Emissions Reductions

In addition to the benefits of using materials with lower average leak rates in new construction, Southwest has also been replacing pipe in older parts of its system. Over the past 13 years, Southwest has reduced emissions by replacing some of its older steel and vintage plastic pipe (early forms of plastic pipe) with newer polyethylene pipe. As a result, it has reduced emissions from leaks by approximately 50 percent.

For the pipe in its distribution system, Southwest also maintains leak detection and repair programs that require immediate repair of grade 1 leaks; repair of grade 2 leaks normally within 30 days of discovery; and repair or reevaluation of grade 3 leaks within 15 months of discovery. While hazardous grade 1 leaks are repaired immediately by all utility companies, Southwest has chosen to adopt time periods for the repair or reevaluation of non-hazardous grade 2 and non-hazardous grade 3 leaks that are more aggressive than the published industry guidelines. Southwest's leak detection methods include handheld walking and vehicle-mounted systems with verification of buried pipe leak locations using handheld devices. Southwest's existing leak detection and repair program to reduce methane emissions has also positioned the company for the recently implemented U.S. Pipeline and Hazardous Materials Safety Administration's (PHMSA) Integrity Management Programs, which require active repair of existing and potential leaks as well as active leak management and review.

In addition to the focus on its buried pipe network, Southwest is also identifying and reporting methane emissions reduction projects in other areas. Southwest and its subsidiaries operate one natural gas liquefaction facility and seven compressor stations. At one compressor station, Southwest is in the process of reconfiguring unit valve placement. By moving the valves closer to the compressor suction and discharge, Southwest will be able to reduce the volume of natural gas emissions from 21,500 cubic feet to 1,400 cubic feet during compressor blowdowns prior to each routine maintenance activity. Southwest is reporting this as a voluntary Natural Gas STAR activity and has considered deriving additional value from the avoided emissions through the carbon market.

Natural Gas STAR as Part of Broader Climate Protection Strategy
These Natural Gas STAR projects are one aspect of Southwest's *Smarter Greener Better* attitude in day-to-day operations and in forward planning. In addition to methane emissions reductions in its system, Southwest also emphasizes efficiency measures, some of which are highlighted below.

- Southwest's Energy Efficient Technology Department (EETD) researches and develops commercially viable products that reduce overall greenhouse gas emissions, which has included natural gas air conditioning/heating. Two such gas heat pump products developed by Southwest are now commercially available.
- Southwest maintains a fleet of 303 bi-fuel compressed natural gas vehicles.
- Southwest attached encoder receiver transmitters to customer meters to automate meter reading and reduce miles driven.

A newly developed high efficiency natural gas heat pump, shown here at Davis Monthan Air Force Base, is now available for commercial applications.

Southwest Gas has used Natural Gas STAR as a means to avoid or reduce methane emissions while expanding its operations, and to complement its ongoing efforts to improve environmental performance and increase efficiency.

Technology Spotlight Scroll Compressors

Until recently, scroll compressors were considered only for special cases of vapor recovery because of their low discharge pressure and limited capacity. Now designs with higher discharge pressures are finding applications in the vapor recovery industry.

Since 1990, vapor recovery units (VRUs) have saved Natural Gas STAR Partners nearly 97 billion cubic feet (Bcf) of natural gas, worth $679 million when valued at $7 per thousand cubic feet (Mcf) and millions more in natural gas liquids. Typical compressor types for VRU implementations have been rotary vane, rotary screw, or, less frequently, reciprocating.

Exhibit 1. Scroll Diagram

Rotary vane compressors have relatively small capital costs and low energy consumption, but their limited discharge pressures and frequent maintenance limits their scope to high recovery and low pressure differential vapor recovery projects. Rotary screw compressors are selected for VRU

applications because of their moderate capital costs, lower maintenance costs, ability to handle wet gas, and higher discharge pressures, but they still require frequent maintenance and have higher energy consumption. Large recovery projects of dry gas requiring high discharge pressures lend themselves to reciprocating compressors; however, these have poor performance handling wet gas and require frequent maintenance.

One company, Emerson, has taken steps to improve on scroll compressors' shortcomings for this application. It has expanded flow capacity by 30 percent flow increase and raised discharge pressure by up to 350 pounds per square inch gauge in their Copeland Scroll™ compressor series. Natural Gas STAR Partners have reported using these compressors in their vapor recovery applications.

The Copeland Scroll™ compressor has one scroll, or spiral, orbiting in a path defined by a matching fixed scroll, as shown in Exhibit 1. The fixed scroll is attached to the compressor body. The orbiting scroll is coupled to the crankshaft and orbits, rather than rotates. The orbiting motion creates a progressively shrinking cavity between the two scrolls. On the outer portion of the scrolls, the cavity draws in gas, and then pushes it to the center of the scroll, where the gas is discharged. As the gas moves into the increasingly smaller inner cavities, the temperature and pressure increase to the desired discharge pressure.

Exhibit 2. Skid-mounted scroll VRU

Their operating characteristics put scroll compressors in competition with rotary vane and rotary screw compressors, while reciprocating compressors are used for larger projects on dry gas with high discharge pressure. Scroll compressors are more expensive to purchase than similarly sized rotary vane and rotary screw compressors and are limited in application to areas that have electrical power. However, their unique design offers several benefits over conventional vapor recovery compressors:

- Variable frequency drive
  - Allows for easier adjustment to fluctuating vapor volumes
  - Allows for compressor to run 99% of the time, providing greater recovery volumes.
- Low maintenance
  - Estimated one hour annually
  - Requires only oil change and replacement of two filters, but does not require alignment or valve replacement
- Very low noise levels make it an option for heavily populated areas
- Compressor is hermetically sealed, eliminating gas loss from compressor seals
- Reduced downtime and elimination of seal leakage mitigates methane, VOC, and HAP emissions as compared to other compressor types.

Exhibit 3 shows the typical operating characteristics for single stage scroll, rotary vane, and rotary screw vapor recovery compressors.

Exhibit 3. Comparison of Single Stage Vapor Recovery Compressors

Criteria	Scroll	Rotary Vane	Rotary Screw
Discharge pressure	≤ 350 psig	≤ 70 psig	≤ 350 psig
Throughput	15 to 200 Mcfd*	2.5 to 2,500 Mcfd	15 to 2,000 Mcfd
Noise level	Very low	Low to medium	Low to medium
Power source	Electrical	Electrical or engine	Electrical or engine
* It is common to install up to 3 compressors in parallel to increase recovery to as much as 600 Mcfd			

The performance of the machines will depend on the specific volume and pressure of the gas. For an example project recovering 80 Mcfd of 2,000+ Btu vapor at 0.25 psig suction, Exhibit 4 draws a direct comparison of the most applicable compressors.

Exhibit 4. Comparison of VRU Compressors for Example Case

Criteria	Scroll compressor	Rotary Vane	Rotary Screw
Discharge pressure	≤ 345 psig	≤ 70 psig	≤ 150 psig
Ability to handle wet gas	Good	Moderate	Good
Packaged cost	$40,000 to $50,000	$30,000 to $40,000	$35,000 to $45,000
Annual maintenance	$1,500 Oil change, filters – 2 times/year	$4,400/year Oil change, filters, alignment, valves – 6 times/year	$3,000 Oil change, filters, alignment, valves – 4 times/year
Energy Consumption	18 Hp	16 Hp	18 Hp
Run time	99%	95%	98%
Payback (at $7/Mcf)*	3 to 4 months	3 months	3 months
5-year net savings*	$915,030 to $925,030	$872,000 to $882,400	$902,310 to $912,310
* Electricity cost assumed $0.10/kW, installation costs assumed $10,000, capital and maintenance costs provided in table			

Different compressor types present different limitations and advantages, allowing an operator to fill specific niches in vapor recovery operations. Other niche application options include ejector or eductor vapor recovery processes. Choosing the proper vapor recovery compressor depends on the required emissions reductions (whether due to permitting or company policy), availability of power, required discharge pressure, vapor volumes, vapor composition, expected lifetime of the project, and desired maintenance program. Scroll compressors are successfully carving their own niche in this important industrial application.

Annual Reporting Season Underway

The Natural Gas STAR 2010 reporting season is underway. With 2009 annual reports due on **April 30th, 2010**, Natural Gas STAR Partners should have received annual reporting packets in the mail, and a STAR Service representative or an EPA Program Manager should have contacted you to answer any questions regarding the reporting process. Please contact your STAR Service representative with any reporting questions.

Partners can submit reports in hard copy, email, fax, or electronically through a secure, password-protected reporting form (refer to box below for submittal options).

SUBMITTAL OPTIONS

★ **Online**	http://app6.erg.com/gasstar/
★ **Email or Hard Copy**	Find your designated EPA Program Manger and click their name for contact info at epa.gov/gasstar/partners/index.html

Below is a suggested procedure for identifying new projects to report to Natural Gas STAR.

1. Review operations. Engage in discussions with operators who can identify recent improvements or current challenges. Other information sources useful for identifying opportunities include facility emission inventories, copies of process and instrumentation diagrams, and repair/maintenance logs.

2. Identify differences between your operations and current PROs. Compare the technologies and practices used in your operations to the PROs available on the Gas STAR website. Determine whether certain activities are unique or are improvements on current PROs. Highlight these findings in your annual report to notify Natural Gas STAR of a new innovative activity. Partner Reported Opportunities (PROs) are any practice or technology included in Partner's annual report that reduce methane emissions. In 2008, PROs identified through the annual reporting process reduced methane emissions by approximately 113 billion cubic feet (Bcf) which equates to almost $800 million in added revenue when valuing gas at $7 per thousand cubic feet. As their name suggests, PROs have all been used, reported and identified by Natural Gas STAR Partners making them tried and tested activities. PROs are a valuable resource to Partners who wish to expand their emission reduction activities. As a result, continuously evaluating operations for new project ideas to report is vital.

3. Report emission reduction activities for 2010. Review current PROs and report to Natural Gas STAR all existing voluntary methane emissions reduction activities. A complete listing of all reported PROs can be found on the Program's Web site at epa.gov/gasstar/tools/recommended.html.

Prospective Projects Spotlight Ideal Transmission Facility

One new approach to identifying and implementing methane emissions reduction projects is to compare a facility against a conceptual ideal Natural Gas STAR facility. For a compressor station, the ideal low methane emitting facility assembles the many existing Natural Gas STAR project types into a comprehensive approach to capture and generate value from all methane emissions sources.

Since the inception of the Natural Gas STAR Program, transmission Partners have reported many voluntary cost-effective technologies and techniques to reduce methane emissions, with projects applicable to virtually every aspect of a compressor station. Typically, transmission facilities implement these technologies as individual projects. Combining these projects into a single effort to reduce emissions makes sense as a strategy for operators that are considering major facility overhauls, new construction, or efficiency improvements. Considering all applicable types of methane emissions reduction projects can provide an up-front focus on the value of reduced methane emissions and incorporate it into facility design.

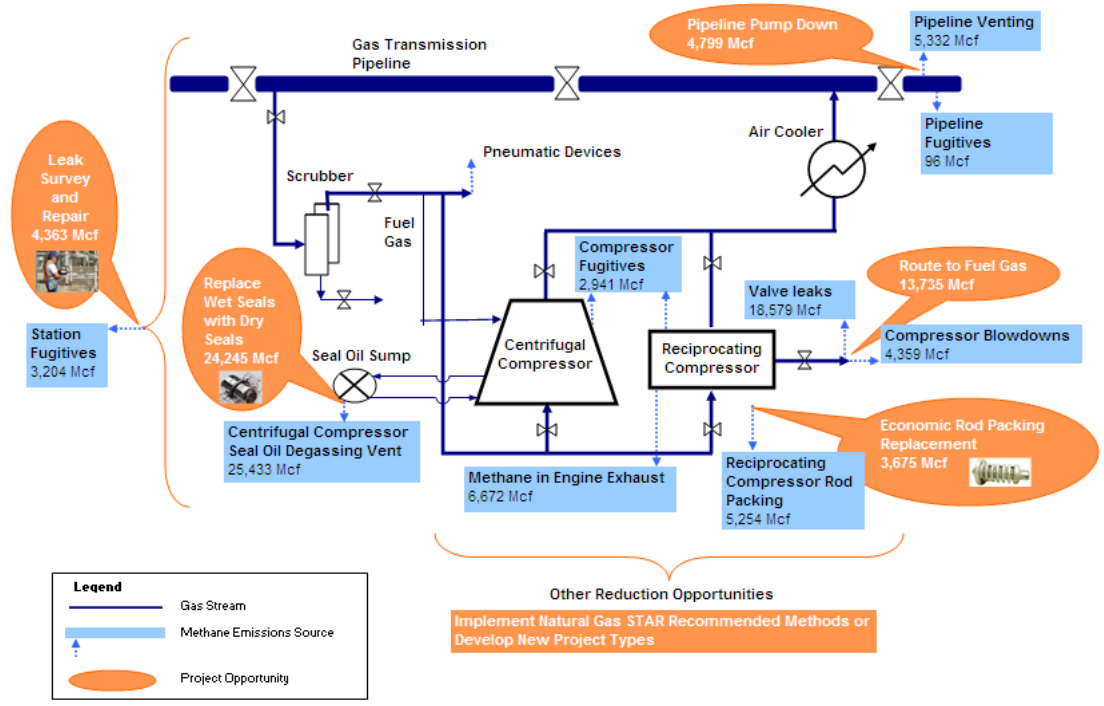
The ideal facility approach also treats methane capture-and-use projects as a facility-wide investment which can financially compete with other projects. The approach is implemented below using a model transmission system. The ideal facility approach is to define the process flow, identify paths to the atmosphere, consider mitigation projects for each source, and evaluate financial performance of the projects.

Background: Gas Transmission Station Methane Emissions

Below in Exhibit 1 is a process flow diagram for a natural gas transmission compressor station. Compressor stations pressurize pipeline quality natural gas for transport to distribution networks. Transmission stations typically consist of scrubbers to knock out liquids, reciprocating compressors and/or centrifugal compressors, and air coolers to reduce gas temperature after compression.

This process flow depiction of methane emissions identifies key paths to the atmosphere and the affected parts of the system. Diagramming transmission compressor stations allows all identified emissions sources to be paired with cost-effective project options.

Exhibit 1: Transmission process flow, typical annual methane emissions, and potential savings



A review of the station's process flow identifies several significant methane emissions sources. Annual methane emissions are shown in blue, based on national average emission factors and equipment counts per station. Since this diagram represents a typical facility based on national average, both centrifugal and reciprocating compressors are shown to illustrate emissions sources from each. For each significant methane emission source, a corresponding reduction project is shown in orange along with typical annual reductions achieved.

Emission Reduction Opportunities: Achieving the Ideal Natural Gas STAR Facility
Below is a list of key Partner-reported projects that can form the basis of an ideal Natural Gas STAR transmission facility.

Directed Inspection and Maintenance (DI&M) has proven to be a cost-effective way to detect, measure, prioritize, and repair equipment leaks to reduce methane emissions. A DI&M program begins with a baseline survey to identify and quantify leaks. Repairs that are cost-effective are then made to the leaking components. Subsequent surveys are based on data from previous surveys, allowing operators to concentrate on the components that are most likely to leak and are profitable to repair.

Using Pipeline Pump-Down Techniques to Lower Gas Line Pressure Before Maintenance reduces pipeline blowdown emissions by pumping pipeline gas, which would otherwise be vented for maintenance, further down the pipeline. The cost of running station compressors and/or employing portable compressors is offset by saving the large amount of gas typically vented from pipelines undergoing maintenance.

Replacing Wet Seals with Dry Seals in Centrifugal Compressors greatly reduces the most significant methane emissions source from centrifugal compressors. Alternative projects to address the same emission source include routing seal oil degassing emissions to low pressure systems such as fuel gas.

Reducing Methane Emissions From Compressor Rod Packing has economically reduced methane emissions for many Natural Gas STAR Partners. Gas value lost from worn rod packing can justify its screening, emissions measurement, and replacement at economic intervals.

Reducing Emission When Taking Compressors Off-line can essentially eliminate emissions from compressor blowdowns. Instead of releasing compressor case gas to the atmosphere during standbys or shutdowns, Partners have kept compressors pressurized when possible. Blowdown gas can also be routed to fuel gas systems to minimize or eliminate product loss to the atmosphere.

Management practices and design aspects to monitor and reduce methane emissions such as developing greenhouse gas inventories to track methane emissions, encouraging all levels of personnel to develop new project ideas, monitoring ongoing projects, and viewing such projects as business opportunities can help create a corporate culture to further optimize operations and maximize environmental performance. Ideal compressor stations can also incorporate design features to promote regular methane emissions monitoring and control. For example, one existing Natural Gas STAR project is to locate unit valves to minimize blowdown volumes. Other design features include incorporating easily accessible compressor vent stacks so that a minimal amount of staff time is involved when monitoring valve leak or seal vent rates. Some examples of convenient accessibility include:

- a flat rather than slanted roof,
- dedicated, rather than manifolded, vent stacks for major vent sources for easy identification of leaking components, and

- for pipelines, locating connection points for portable compressors to facilitate pumpdowns.

A key driver of the financial performance of the ideal facility project concept is valuation of avoided methane emissions. Investigating the potential methods of gas value has been particularly important in transmission projects where gas custody may be transferred but gas ownership is not. Financially attractive projects have resulted when valuing the gas in several ways, including

- at market price,
- as fuel gas value,
- as a means to reduce the lost and unaccounted for volume in a specific transmission system,
- as a means to demonstrate a company's commitment to the environment, and
- as a carbon value.

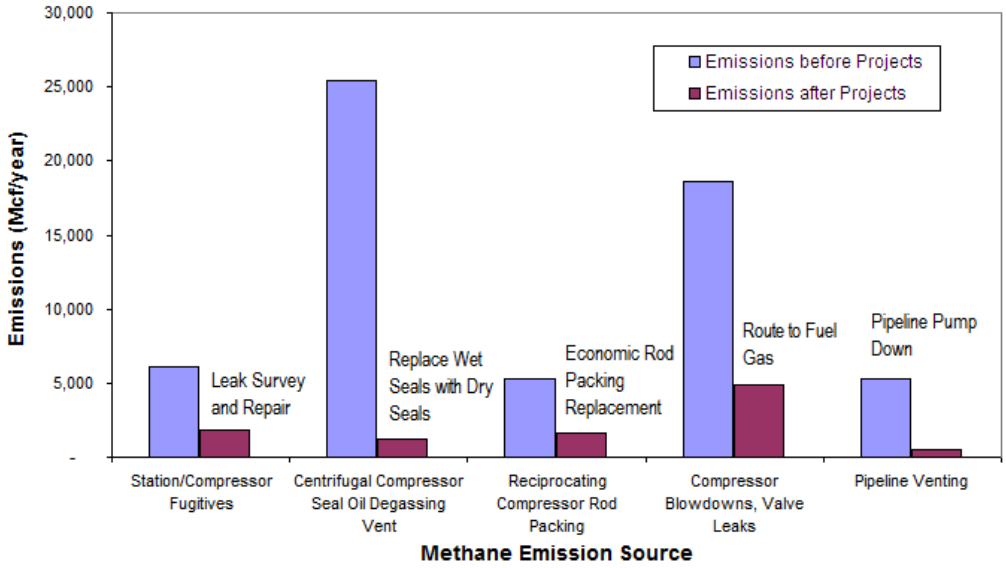
Many other project types are available when considering facility-wide methane emissions reductions. Other Partner reported emissions reduction technologies include automated air/fuel ratio controls, *using Yale® closures* for emergency shutdown testing, automate systems operation to reduce venting, converting high-bleed pneumatic devices to low-bleed pneumatic devices, and convert engine starting to nitrogen.

Transmission station owners typically own the transmission pipelines as well. Pipeline leaks and blowdowns account for a significant portion of transmission sector emissions. Partner reported opportunities for reducing transmission pipeline emissions include using composite wrap repair for non-leaking pipeline defects, using pipeline pump-down techniques to lower gas line pressure before maintenance, using hot taps for in-service pipeline connections, using inert gases and pigs to perform pipeline purges, and inspecting flowlines annually.

Implementation and Economics: Ideal Compressor Station Example

Exhibit 2 illustrates potential emissions reductions from implementing the combined projects shown in Exhibit 1. The total methane emission from the transmission station before project implementation is estimated to be 78,350 Mcf/year. The potential emissions savings from those projects shown in Exhibit 2 is $50,817 Mcf per year, resulting in gas savings of $355,717 at a gas value $7 per Mcf.

Exhibit 2: Emissions Before and After Implementing Reduction Projects



The investment to cover project implementation illustrated by Exhibit 2 includes the capital cost of the DI&M leak detection and measurement equipment, centrifugal compressor dry seal retrofit cost, new reciprocating rod packing and installation, and the portable compressor for pipeline pump downs cost. The total capital cost required for a compressor station with centrifugal and reciprocating compressors is $386,094 or $7.60 per Mcf gas saved in the first year. Annual operating and maintenance costs include labor costs for conducting surveys and repairs and leasing a portable compressor are estimated to be $57,525 per year or $0.35 per Mcf gas saved per year. Positive cash flow in the form of reduced emissions and increased throughput depend on gas valuation. The example project economics discussed above are shown in Exhibits 3 and 4. Exhibit 3 represents all projects discussed in the article. Exhibit 4 represents an analysis without the centrifugal compressor dry seal project since it requires significant capital investment. This presentation allows the other projects to be examined independent of the more costly dry seal replacement project.

Exhibit 3: Transmission Stations with Centrifugal and Reciprocating Compressors			
Capital and Installation Costs	$386,094		
Annual Labor, Leasing, & Maintenance Costs	$55,197		
Gas Price ($/Mcf)	$3	$7	$10
Annual Value of Gas Saved	$152,450	$355,717	$508,168
Payback Period in Years	1.9	1.0	0.7

Exhibit 4: Transmission Stations with Only Reciprocating Compressors			
Capital and Installation Costs	$62,094		
Annual Labor, Leasing, & Maintenance Costs	$41,197		
Gas Price ($/Mcf)	$3	$7	$10
Annual Value of Gas Saved	$79,714	$185,999	$265,713
Payback Period in Years	1.6	0.4	0.3

Conclusion
The ideal transmission facility concept illustrates a strategy offering potential positive cash flow along with climate and air quality benefits. Coordinated implementations of multiple projects may improve system-wide efficiencies via replicating implementation successes at other locations and/or identifying additional methane emissions reduction projects.

Climate Policy Update: Mandatory Reporting of Greenhouse Gases Rule, Subpart W Re-Proposed

On March 22, 2010, EPA signed the proposed rule for the mandatory reporting of vented and fugitive methane (CH_4) and carbon dioxide (CO_2) emissions from petroleum and natural gas industry facilities emitting 25,000 metric tons or more of carbon dioxide equivalent per year. This proposal would amend the Mandatory Reporting of GHGs Rule that was promulgated on October 30, 2009 (74 FR 56260) by adding reporting requirements for this source category. Under these proposals, newly covered sources would begin collecting emissions data on January 1, 2011 with the first annual reports submitted to EPA on March 31, 2012.

The public comment period for this proposed rulemaking will be open for 60 days after publication in the Federal Register. In addition, a public hearing on this proposal will be held on April 19, 2010, in Arlington, VA. Register for the public hearing

To review the proposed rule text to comment or for further information, we have provided the following links for quick reference:

Proposed Rule (Subpart W, 40 CFR Part 98.230)
- Pre–Publication Preamble (PDF)
- Pre–Publication Rule (PDF)

Technical Information
- Press Release
- Factsheet (PDF)
- Frequently Asked Questions (PDF)

Implementation Information
- Subpart W–Petroleum and Natural Gas Systems Information Sheet (PDF)

Methane to Markets India Expo Summary

The Government of India hosted the 2nd Methane to Markets Expo in New Delhi between March 2nd and 5th, 2010. EPA, the Federation of Indian Chambers of Commerce and Industry (FICCI) and industry representatives participated in the event. Over a 150 opportunities to reduce methane emissions in the agricultural, coal mining, landfill and oil and gas sector where on display.

Private sector representatives and member nations discussed economic and policy issues that promote methane emission reductions. Technology service providers showcased products and services available to capture and use methane. Attendees were able to interact and network with government agencies, financiers, policymakers and technology manufacturers.

The expo created awareness about the magnitude of lost methane and facilitated discussions among stakeholders in the natural gas industry.

Natural Gas STAR Participation in SMi Associated Gas Flaring Conference

Roger Fernandez, the team leader for the Natural Gas STAR Program, presented methane emissions reductions best practices for the oil and gas industry at the SMi Associated Gas Flaring Conference in February. Attendees learned about market conditions and regulations that affect decisions in the industry, current and emerging technologies and the benefits of flaring and venting reductions. In line with these issues, Roger presented methane emission statistics, industry experience and services available through the Methane to Markets Partnership.

Natural Gas STAR Technology Transfer Workshop Summary

Producers Technology Transfer Workshop, March 23-24, 2010 – Vernal, UT

Sponsored by:

- Anadarko Petroleum Corporation
- Newfield Exploration Company
- Interstate Oil and Gas Compact Commission (IOGCC)
- Independent Producers Association of Mountain States (IPAMS)
- Utah Petroleum Association

The recent Producers Technology Transfer Workshop was held in the Weston Plaza Hotel in Vernal, Utah and hosted an audience of 86 from local operators, vendors and service providers, state and local government as well as other stakeholders in the Uinta Basin. The workshop covered several topics for reducing methane emissions from common operations in the Uinta Basin including natural gas dehydration, gas pneumatic devices, vapor recovery and directed inspection and maintenance. Jeff Samuels of Anadarko and Mike Pontiff of Newfield also shared their experiences and insights into cost-effectively reducing methane emissions from their own operations in the area.

The next day featured a site visit to Newfield's Pleasant Valley compressor station to perform a leak detection and quantification study. The Pleasant Valley compressor station is a brand new facility that is an example of Newfield's Process Optimization (PRO-OP) approach to reducing methane emissions. The compressor station gathers gas produced from nearby wells and removes hydrogen sulfide, water, and natural gas liquids before

delivering pipeline quality natural gas to a transmission pipeline. The leak detection and quantification study revealed that the Pleasant Valley compressor station had very few leaks, but participants were able to view and measure small natural gas losses through the use of an infrared leak detection camera and a high volume sampler. The site tour was concluded with a video wrap up of the natural gas losses that were detected as well and a discussion of the leak rates.

Deadline Extended to July 29, 2010 for Methane Projects Funding

Continuing its commitment to support projects that reduce methane emissions, the U.S. EPA announced a new round of grant funding for Methane to Markets projects for 2010. To enable time for additional submission from applicants, the **EPA has extended the deadline to 1 p.m. eastern daylight time on July 29, 2010.**

Since the conception of the Methane to Markets Partnership, the EPA has awarded $13 million in grants to fund over 70 projects. In 2009, $3.9 million was granted to fund emission reduction projects. This year, up to 35 projects are anticipated to receive grants ranging from $100,000 to $750,000, with an estimated total award of $5 million.

Successful proposals will support the Partnership's goals of reducing methane emissions and advancing project development in the following Methane to Markets Partner countries: Argentina, Brazil, Chile, China, Colombia, Dominican Republic, Ecuador, Georgia, India, Kazakhstan, Republic of Korea, Mexico, Mongolia, Nigeria, Pakistan, Philippines, Poland, Russia, Thailand, Ukraine, and Vietnam. Additionally, the U.S. EPA is accepting proposals from developing countries or countries with economies in transition that are in the process of **applying to join the Partnership,** as long as the ASG receives an acceptable letter of intent before the proposal deadline. Funded projects are scheduled to begin in October 2010 and extend for up to three years. Visit the U.S. EPA's Methane to Markets Web site for more information (epa.gov/methanetomarkets/grants.htm).

New Methane to Markets Website Design

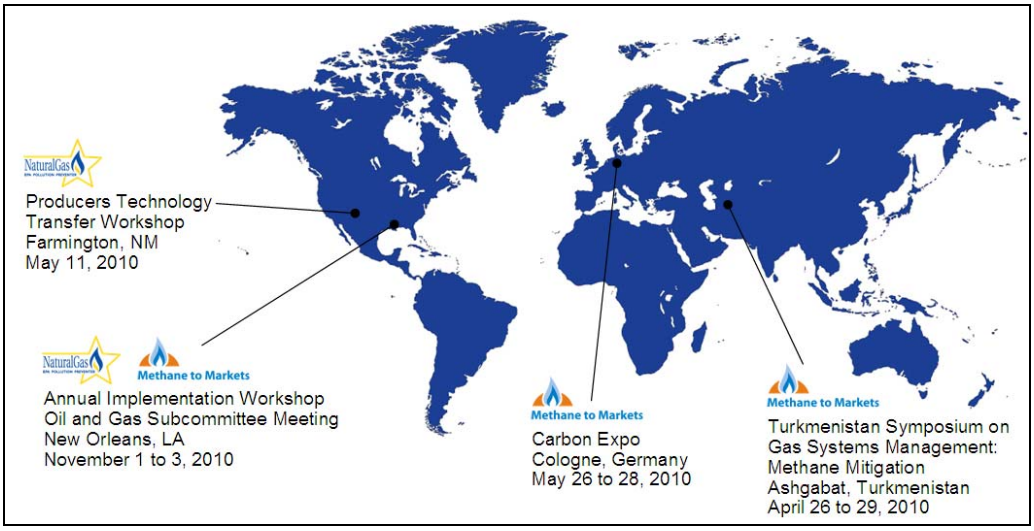
A new website has been launched by the Methane to Markets Partnership (methanetomarkets.org). It features a new interactive map on the home page and a re-organized News & Events and Projects site. The map highlights the partner countries and, when clicked, leads to country-specific websites that outline projects and resources associated with that nation. The News & Events page includes an events posting feature that displays activities for the month in a visually appealing calendar format or as a list. Ongoing projects can now be filtered according to sector, geographic focus and project stage on the Project site. In essence, the new website is more interactive and organized making key information easily accessible.

Upcoming Events

SAVE THE DATE

16th Annual Implementation Workshop

November 1 to 3, 2010 ◆ Ritz Carlton ◆ New Orleans, Louisiana



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