

LNG Community Awareness Workshop Summary
Washington Marriott Hotel
February 2, 2005

8:30 – 8:45 am *Welcoming and Opening Remarks*

Samuel Bonasso, Deputy Administrator, RSPA

Today's workshop will seek guidance and solicit experiences from the audience. We hope to learn what more is needed to facilitate communication about LNG with communities.

Today's audience is diverse, with both public and private perspectives and experiences at the federal, state, and local level.

LNG has a proven record as a safe method of transporting natural gas. LNG is essential to continued economic growth. Interagency agreement among FERC, Coast Guard, and RSOP was established a year ago and is geared toward sharing information and coordinating safety.

The purpose of the workshop is three- fold: Hear, Ask, and Share

Hear – What do you need to make informed decisions about LNG safety?

Ask - What can we do to facilitate local discussion and decisions?

Share – Your role in determining the need for, and oversight of, LNG facilities. Your role in providing communities with information about LNG safety?

8:45 – 9:00 am *What Role Will LNG Play in the Future U.S. Natural Gas Supply Mix?*

Hal Chappelle, National Petroleum Council (NPC)

NPC is a statutory advisory committee to the Secretary of Energy. NPC study on natural gas was completed in late 2003 to determine the potential implications of new supplies, new technology and new perceptions of risk that may affect the natural gas market. Natural gas is an energy source to all sectors of our economy, whereas other fuels are largely committed to single sectors. Commercial customers, industries, power generators, and residential customers all benefit from using clean burning natural gas. Our society has embraced the benefits of natural gas as a clean fossil fuel, especially in the area of power generation. Domestic natural gas supply capacity is growing slower than our ability to consume, creating a tight supply/demand balance that has been reflected in higher prices. Higher prices put a strain on natural gas dependent industries, consumers, and threaten the attainment of environmental goals. Future demand must be tempered by increased efficiency in all consuming sectors, and higher natural gas prices will elicit a response from competing technologies such as renewables and coal. New natural gas supplies are needed. LNG is a logical, effective component in a balanced portfolio of solutions to our society's energy needs.

The vast majority of global natural gas reserves are located outside of North America. US and Canadian well productivity from traditional basins is declining. Canadian import levels are flat. Natural gas usage is growing in all parts of the world. NPC's study estimated that 7 to 9 new LNG import terminal are needed in the US, Canada and Mexico. If US prices rise above other parts of the world, natural gas dependent industries could move out of the US. Increased efficiency in use of natural gas is critical to maintaining a balance of supply and

demand. Artic gas, gas from currently restricted areas (OCS and inter-mountain west, primarily) and LNG also need to contribute to a balanced, competitive supply portfolio.

9:00 – 9:15 am *Update on Existing and Proposed LNG Facilities*

Rob Cupina, Deputy Director for Energy Projects, FERC

LNG is at center stage in the gas infrastructure program at FERC. We have jurisdiction over terminals located onshore and in state waters.

FERC has given approval for construction* for seven LNG facilities:

Sempra, Cameron LNG, Hackberry, LA, construction underway
AES, Ocean Express Pipeline, Bahamas, construction pending
Tractabel, Calypso Pipeline, Bahamas, construction pending
Freeport LNG, Freeport, TX, cleared for construction
Trunkline LNG, Lake Charles, LA, construction underway*
Cheniere LNG, Sabine, LA, construction pending
Southern LNG, Elba Island, GA, construction underway*

* expansion at existing LNG terminals

FERC uses the Pre-Filing process to engage stakeholders and try to avoid surprises later on.

There are 4 LNG projects in the Pre-Filing stage:

Sempra, Port Arthur, TX
Dominion, Cove Point, MD*
Broadwater, Long Island Sound, NY
Gulf Energy, Pascagoula, MS

Applications have been filed for 8 LNG projects:

Sound Energy Solutions, Long Beach, CA
Golden Pass ExxonMobil, Sabine, TX
Crown Landing LNG BP, Logan Township, NJ
Ingleside/Occidental, Corpus Cristi, TX
Weaver's Cove, Fall River, MA
Cheniere LNG, Corpus Cristi, TX
Vista Del Sol ExxonMobil, Corpus Cristi, TX
Keyspan, Providence, RI

To meet the challenges of all this LNG activity, we have taken a number of initiatives. In addition to the pre-filing process, we established the LNG Engineering Branch, we commissioned a pool fire consequences study, and we have a consultant evaluating our cryogenic review and inspection requirements and procedures. There are many other LNG proposals in the potential stage. LNG will both offset declining production and meet incremental demand. Many proposed and potential projects are in the Gulf of Mexico, where there is an existing petrochemical industry and greater public acceptance. However, LNG facilities are also needed in other parts of the country. At some point there will not be enough pipeline capacity out of the Gulf Coast states to deliver the gas to markets for the incremental load. Locating plants near the market areas minimizes the need for additional pipeline capacity and also provides a source of storage. In terms of our coordination with other

agencies, a seamless safety and security review is the goal of the Interagency Memorandum with the Coast Guard and RSPA. As a regulatory agency, FERC has a responsibility to act on the proposals before it. FERC is obligated to conduct an environmental and technological review of all proposed projects, but the market and stakeholders will ultimately determine which terminals get built.

9:15 – 9:30 am *LNG's Role in Meeting America's Growing Demand for Natural Gas*

Mark Maddox, Principal Deputy Assistant Secretary for Fossil Energy, DOE

Growing LNG capability is important to US energy security. In 2003, LNG, as a percent of imports, increased more than twice from the 2002 level. LNG as a percent of imported natural gas in 2004 is expected to be more than 2.5 times the 2002 level. Domestic supplies of natural gas are flat and Canadian imports are declining. Higher gas costs to industry results in higher commodity prices and loss of competitiveness for US companies. Chemical companies, especially ammonia and nitrogen fertilizer industries, have been severely impacted by higher gas costs. LNG has helped keeping prices down and maintain adequate gas in storage for the current heating season.

The Energy Information Administration forecasts that natural gas demand could grow by 35% in the next two decades and LNG is forecast to meet 21% of that demand. This represents a ten fold increase in LNG imports over the 2004 level.

How can we transport and handle LNG safely at an increased number of terminals? In December 2004, a Sandia National Laboratory LNG safety study made a pivotal contribution to discussions about the siting, safety, and security of LNG terminals. The study provides a valuable tool for decision makers to use in evaluating and reducing the risks of an accident or terrorist attack. The study filled a knowledge gap for maritime transportation of LNG. The study:

- Evaluates credible threats to tankers
- Assesses the possible hazards and consequences from an LNG spill, and
- Identifies possible prevention and mitigation strategies that could be implemented to reduce the risk of a large LNG spill over water.

The study concludes that LNG can be transported safely. The study directly addresses the possible impact of terrorist action and the consequence findings are consistent with previous LNG maritime studies. The study goes beyond consequences and provides guidance on the use of risk-based management to minimize threats to public safety. Risks from an accidental spill are small and manageable. Risks from terrorists acts can be significantly reduced with appropriate security, planning, prevention, and mitigation. The Sandia study does not endorse the concept of exclusion zones.

The Coast Guard has already implemented measures to improve port security. The study recognizes the proven safety record of the LNG shipping industry. The study will provide a consistent, reliable and uniform approach to identifying and mitigating threats.

9:30 - 10:20 am *Information for Community Decisions from Sandia's New LNG Study*

Mike Hightower, Sandia Laboratories

Guidance on Risk Analysis and safety Implications of a Large Liquefied Natural Gas Spill Over Water is available at www.fossil.energy.gov/news/techlines/2004/tl_sandia_lng.html.

The study suggests a risk-based assessment that includes consideration of threats, consequences, and safeguards. The study considers both property and personal thermal hazard evaluation criteria. The property criteria would result in major structural damage in 10 minutes. The personal criteria would cause 2nd degree burns in 30 second. The study evaluated the outcome of an intentional breach and thermal hazards based on credible threats and the best available experimental data. The nominal case resulted in property hazard distance of 391 meters and a personal hazard distance of 1,305 meters.

Approaches available to responsibly manage risk include:

- Improve risk prevention measures through improved port security
- Locate LNG terminal where risks to public safety, infrastructure, and energy security are minimized.
- Improve LNG safety and security systems
- Improve emergency response, evacuation, and mitigation strategies.

Q. Greg Hopper, Lukens Energy Group

Why did Sandia study not use exclusion zones?

A. Mike Hightower, Sandia

The term exclusion zone has a distinct regulatory and legal term that was not appropriate for the context of the study. Sandia used the term hazard area instead.

A. Rob Cupina, FERC

The Sandia study dealt with ships in transit, but exclusion zones apply to fixed facilities.

Q. Clifford Goudey, Massachusetts Institute of Technology

Did the Sandia study consider cascading failures and how were the zone radii affected?

A. Mike Hightower, Sandia

Yes. Multiple breaches were considered in the study, but was not considered the most likely scenario.

Q. Bry Myown, Long Beach Citizens For Utility Reform

How will the costs of security measures be considered?

A. Rob Cupina, FERC

The developer includes security costs in its filing with FERC.

10:40 – 11:15 am *What are RSPA/NASFM Doing to Create Credible LNG Information?*

Bill Kramer, Deputy Director of the NJ Division of Fire Safety

The New Jersey Fire Service is currently evaluating the proposed Crown Point LNG project. Risk management requires that three questions be answered:

1. What does the law require? Legal requirements often represent a bare minimum and in some cases have been diluted, such as the requirements for reporting LNG spills.

2. What is needed and what is possible?

Diversity of research provides a more valuable product. Need both scientific evaluation and real world observations.

3. How much risk is the community willing to accept?

The Crown Point LNG project would result in tankers navigating 70 miles of the Delaware River. Community resistance can slow and kill a project. Public safety officials need straight facts.

RSPA's Partnership with the National Association of State Fire Marshals (NASFM) includes producing an LNG Community Awareness training program. The project is developing a fact based approach to managing LNG safety. The training will help emergency responders identify and manage risks. Once a local fire service has completed the training, the fire service can take the lead on educating communities about LNG safety. The training will provide guidance to local emergency responders as they develop response plans. NASFM may provide the training program to industry for use in communities near LNG facilities.

The steps involved in the LNG Community Awareness training program are:

1. Create an education document and video outlining LNG safety issues and development of a comprehensive curriculum for use at the state and local level. Hildebrand and Noll Associates created a document that is under review by a variety of experts.
2. Four communities will be selected to pilot test the curriculum.
3. Identify and prepare the right local public safety official to take the lead on the community projects. This leader must be respected within community and will be supported by NASFM during the testing of the curriculum.
4. Establish a local steering committee to organize and begin implementing the community project.
5. Brief state and local opinion leaders and decision makers.

The training program will ignore political rhetoric and focus on risk management by providing facts and preparing emergency responders to identify what are or are not manageable risks. NASFM is only seeking funding from RSPA for the pilot stage of the training program.

Q. Phani Raj, Technology & Management Systems, Inc.

As NASFM has compiled a list of critical information, have the risks to which society is exposed been included?

A. Bill Kramer, NJ Division of Fire Safety
Yes.

Q. Phani Raj, Technology & Management Systems, Inc.

Is the acceptability of a project determined by the marginal risk to the community?

A. Bill Kramer, NJ Division of Fire Safety
NASFM is not making a determination about whether the risks associated with an LNG project are acceptable. NASFM intends to provide information to local officials so they can make this determination.

Q. Clifford Goudey, Massachusetts Institute of Technology

Where have the LNG fire fighting experts reviewing the curriculum gained experience fighting LNG fires?

A. Bill Kramer, NJ Division of Fire Safety

A training facility at Texas A&M provides LNG fire fighting training using actual LNG. There are several other similar training facilities in the US.

Q. Carl Weimer, Pipeline Safety Trust

Allowing industry to provide the training program to communities may cause communities to question the validity of the training. Will NASFM have access to all information needed for community officials to make decisions?

A. Bill Kramer, NJ Division of Fire Safety

Yes. The program will give local officials and emergency responders the information needed to determine if they can manage the risks.

Q. Carl Weimer, Pipeline Safety Trust

Will withholding of Critical Infrastructure Information (CII) degrade the NASFM effort?

A. Bill Kramer, NJ Division of Fire Safety

NASFM will provide the information needed by the emergency response community to determine the potential impact of an LNG facility.

Q. Richard Kuprewicz, Accufacts Inc.

The CEII process is broken and needs to be fixed. Some examples of information that should be in the public domain are general layout information (detailed equipment labels or similar specific information is not needed in such layouts). Also, the public needs to know general largest inventory levels. Too much detailed information can be overwhelming and just become noise, and not help the public in decision making.

A. Rob Cupina, FERC

The CEII program was initiated by security concerns after September 11, 2001. The intent of the CEII program is to make information available on a need to know basis and prevent easy access to those who would do harm. FERC will reevaluate the CEII program in 2005.

11:15 – 12:00 pm *What are DOE/NARUC Doing to Create Credible LNG Information?*

Robert Keating, Commissioner, Massachusetts Public Service Commission/NARUC

Massachusetts has used LNG for over 34 years and has several proposed LNG projects. The DOE's Partnership with the National Association of Regulatory Utility Commissioners (NARUC) began when the DOE Secretary met with NARUC in the winter of 2003. The meeting was an outgrowth of the 2002 NPC natural gas study, which shows that a significant increase in LNG will be needed to meet natural gas demand. NARUC began educating state commissioners about LNG to enable communication on the topic. The partnership was formally established in September 2003 to educate commissioners about opportunities for, and impediments to, LNG development. Commissioners need to understand the technical and policy issues relevant to LNG.

The partnership has sponsored state regulatory dialogs at three existing LNG facilities to increase understanding of LNG operations. The dialogs have included participants from LNG companies and local governments. The media coverage of the Sandia report focused on consequences, but ignored risk. The coverage alarmed the public and created adverse perceptions about LNG. We now need to give the public accurate information.

The partnership is creating a white paper for state regulatory commissioners. A draft of the white paper is currently under review. The paper provides an overview of policy issues for optimizing LNG use and emphasizes that LNG is necessary to meet natural gas demand.

The partnership is also creating a communication plan for LNG. The plan encourages better stakeholder involvement and resolution of issues in a timely manner. The communication plan is based on case studies of proposed LNG plants. The plan will provide guidance on how to effectively engage stakeholders and avoid political havoc by disseminating information to stakeholders so they can understand the real story. Nothing is obvious to the uninformed.

Stakeholders need to understand LNG policy issues and recognize the viability of LNG as a source of cost effective energy. Our society needs more energy and all sources of energy have risks and drawbacks. A greater understanding of LNG will assist in determining its role in meeting our nation's energy needs.

Q. Rich Hoffmann, FERC

Is NARUC addressing who pays cost of safety, security, etc?

A. Robert Keating, NARUC

No. Everett, MA has agreement with Distrigas regarding costs incurred by the city.

Q. John Hritcko, Broadwater Energy

Have state vs. federal oversight and jurisdictional been addressed?

A. Robert Keating, NARUC

California is a hot spot right now. NARUC is aware of the controversy, but has not taken a position.

Q. Phani Raj, Technology & Management Systems, Inc.

Regarding public acceptance of what the media presents, how will you educate the press about reality?

A. Robert Keating, NARUC

Work with the press to educate them about technical issues for emergency responders and pipeline safety and supply issues in the NPC study.

1:00pm – 3:00 pm *Public Officials Perspectives on LNG and Community Needs*

Bill Kramer, Deputy Director of the NJ Division of Fire Safety (Moderator)

Capt. Mary Landry, Captain of the Port Providence, U.S. Coast Guard/

Capt. David Scott, Chief – Environmental and Operating Standards, U.S. Coast Guard

Richard Hoffmann, Director of Gas-Environment and Engineer, FERC

Robert Keating, Commissioner, Massachusetts Public Service Commission, NARUC
Linda Kelly, Commissioner, Connecticut Public Utilities Commission, NARUC
Don Mason, Commissioner, Ohio Public Utilities Commission, NARUC
Wilfred Pierre, Louisiana Legislature, Southern States Energy Board

Capt. David Scott, Chief – Environmental and Operating Standards, U.S. Coast Guard
Coast Guard (CG) is involved in licensing of LNG deep water ports. MARAD has issued licenses for two deep water ports in the Gulf of Mexico and is considering several others. The Coast Guard also establishes technical design standards for LNG tankers. There are currently no LNG tankers under the US flag. The Coast Guard inspects tankers for compliance with safety standards. Based on the 2004 Interagency Agreement, CG is working with FERC by conducting security assessments as part of FERC's environmental review. CG also establishes standards for mariner training and qualification. There are about 170 tankers in service and 100 more on order. There is a shortage of qualified mariners to work on these tankers.

The Maritime Transportation Security Act of 2002 (MTSA) dramatically changed CG scope of work when evaluating security for LNG tankers. Nationwide, there are 47 Captains of the Port (COP) who are responsible for all aspects of maritime activities within their sphere of influence. As required by the MTSA, the COP is now also the Federal maritime security coordinator. The CG needs partnerships and stakeholder support to accomplish this security mission. The MTSA also requires an area maritime security committee, including representation by all marine community stakeholders, to develop a port security plan. LNG security analysis falls within the purview of a port security plan. Regulations regarding LNG operations are outdated. The CG must be provided with information on proposed LNG shore side facilities 60 days before construction or expansion begins. The Interagency Agreement with FERC and RSPA aligns the security assessment timeline with the FERC environmental review process.

Capt. Mary Landry, Captain of the Port Providence, U.S. Coast Guard

September 11, 2001 created a rash of studies about LNG tanker safety and security. Capt. Landry is piloting a process to have LNG facility applicants work to outline a port security plan as part of their application process. The Sandia report provides a definitive framework for scoping the security and consequence management issues associated with LNG facilities. It is extremely useful to have a government sponsored study to support development of both a port security plan and an emergency response plan. The CG is pleased about the Interagency Agreement to align the CG security assessment with the FERC environmental review process. Industry has been very supportive of multiple, non-required workshops to assist the CG and other agencies in the development of the port security and consequence management plans as part of the application process rather than waiting till facilities are permitted and closer to operation. The CG holds workshops with police chiefs and other law enforcement agencies for security planning, and with fire chiefs, and other emergency response planners to outline consequence management issues. This ongoing work for the two applications in Captain Landry's area of responsibility will provide valuable information to FERC to assist in their permitting decision.

Richard Hoffmann, Director of Gas-Environment and Engineer, FERC

The government meets the public in FERC's Division of Gas-Environment and Engineering. There is a serious lack of LNG knowledge in the public. FERC's strategic plan includes expeditiously approving energy projects, but FERC must also reach out to the public to ensure a complete record.

FERC is developing a brochure to educate landowners near LNG terminals about the regulatory process, facility design, and operational methodologies to ensure safety. FERC reviews facility safety systems, exclusion zones, and emergency planning. It is important for the public to understand that these are very technical, sophisticated facilities. FERC strives to provide the public with improved knowledge about LNG and a reasonable expectation of risk.

Robert Keating, Commissioner, Massachusetts Public Service Commission, NARUC

The New England (NE) Governors' Conference Power Planning Committee is working on a report on energy issues. In October 2004, the governors requested a comprehensive assessment of current and forecasted use of natural gas and LNG. The governors wanted evaluate an array of proposed LNG terminals in NE. The report is still in draft form. Natural gas is a major, and growing, source of energy. Forty percent of the power generated in NE is fueled by natural gas. For winter space heating, LNG is a major source of natural gas. LNG supplied from 20% to 44% of the peak day demand for several NE natural gas distribution companies. LNG is vital to NE now and natural gas consumption is expected to increase 23% from 2003 to 2008. The largest contributor to this growth is power generation.

Linda Kelly, Commissioner, Connecticut Public Utilities Commission, NARUC

Connecticut's concerns include rising and volatile gas prices and reliability of supply. LNG is not new to New England and is an important part of the gas supply mix. A gas distribution company in Connecticut broke ground for a new LNG peak shaving facility this week, having previously gone through the regulatory process with no opposition. This company undertook the necessary education and communication with the affected community, so that the project was accepted by local officials and residents. Education and communication are vital, and with any major project an objective opinion is needed to address legitimate stakeholder concerns. Interested stakeholders generally include the State Attorney General, commercial and business associations, environmental agencies, community groups, economic and safety regulators, homeland security and first responders. Questions have been raised concerning who pays for security. Generally, prudently incurred costs for security-related construction will be included in ratebase and recovered from ratepayers. Stakeholders voicing concerns should not be marginalized; educate them and communicate with them.

Don Mason, Commissioner, Ohio Public Utilities Commission, NARUC

We must embrace natural gas supply source diversity, including Alaska, the Rockies, offshore, and LNG. All types of development have risk; the challenge is to use technology to mitigate hazards. Education within NARUC is an on-going process due to commissioner turn-over. Federal/state partnerships are needed to address LNG safety. As an economic regulator, there is recognition that a project must be profitable before funds will be raised to build it. A challenge for regulators is to encourage long-term investments in LNG

infrastructure. Local governments must be involved since emergency responders are a local government resource.

Wilfred Pierre, Louisiana Legislature, Southern States Energy Board

The Louisiana legislature is concerned about the effect of off-shore facilities on the fishing industry. The legislature will peruse environmental studies on LNG as they are completed.

Q. Cliff Goudey, Massachusetts institute of Technology

Is the Coast Guard allowed to answer “no” during the LNG siting process?

A. Capt. Mary Landry, CG

The CG role is not to give a yes or no answer. The CG identifies the resources needed to integrate a proposed LNG facility into the port security plan. FERC has the responsibility for balancing the need for energy with the resources needed to mitigate risks and manage consequences.

Q. Cliff Goudey, Massachusetts institute of Technology

Risks you mention that are taken by the public often have immediate benefits to them personally. The public has difficulty perceiving the benefit of being put at risk for the sake of LNG. Just telling people to accept the risk without explaining the benefit brings a predictable reaction.

A. Rich Hoffman, FERC

People often request tests, such as airplane impacts, that no infrastructure could withstand. FERC looks at each facility and creates a record of the need for the facility and whether it can be operated safely.

Q. Cliff Goudey, Massachusetts institute of Technology

Given the shortage can be fully attributed to the increased number of gas-fired plants, was the decision to convert to natural gas fired power generation a mistake in retrospect?

A. Don Mason, NARUC

There is no point in second guessing decisions made for power plant emissions reduction. Conservation and new sources are both vital to balancing natural gas supply and demand.

Q. John Hritcko, Broadwater Energy

How can the public be convinced that a specific LNG project should be included in the supply side of natural gas? How do state commissions guide energy policy?

A. Robert Keating, NARUC

The nation has no energy policy, although the President has tried. Environmental concerns are partially driving energy policy. However, people are more concerned about local projects than broad policy. State commissions try to provide education and gauge the desires of the public.

A. Don Mason, NARUC

We must use technology to build safe, secure facilities.

Q. Brian Ferguson, Concerns About Pipeline Expansion (C.A.P.E.)

Workshop presenters need to figure out a way to communicate with, and gain the acceptance of, the public. Confiscation of property by governmental action has not been taken into consideration in any presentations. Information must be delivered to the public.

A. Rich Hoffman, FERC

FERC's Pre-Filing process has resulted in public knowledge of proposed pipeline routes prior to final route selection so that the public can participate in the siting process. FERC is very interested in improving communication methods to ensure that the message gets through.

Q. Bry Myown, Long Beach Citizens for Utility Reform

Some big issues not addressed include de-regulation and war. The public is accustomed to land use decisions being made at a local level. Would it be easier to model the local zoning process and determine areas where LNG facilities would be considered?

A. Rich Hoffman, FERC

The FERC Chairman declined a request for a regional study in NE. FERC is required to consider all applications that are filed. For each filing, a public record is established that FERC considers when making a public interest determination.

Q. Written on 3x5 Card

Is there a quantitative way to price security for platforms, terminals, and pipelines? What are the quantitative costs?

A. Capt. David Scott, CG

CG looks at optimal resource allocation and evaluates the resources needed for a specific project.

3:30 – 4:30 pm *Business Perspectives on LNG and Community Needs*

Dick Sharples, Executive Director, Center for LNG (moderator)

Mark Boudreaux, Public Affairs Manager, ExxonMobil Development Company

John Hritcko, Broadwater Energy

Michael D. Frederick, Director LNG Operations, Dominion Cove Point LNG

Greg W. Hopper, Vice President & Principle, Lukens Energy Group

Nicholas Stravopoulos, President, Keyspan Energy Delivery

Nicholas Stravopoulos, Keyspan Energy Delivery

Mr. Stravopoulos discussed Keyspan's past experience with its LNG facilities and the forces driving Keyspan's decision to add additional facilities. Since the late 1960s and early 1970s, Keyspan has had 13 LNG plants in operation. On Boston's coldest day in decades (January 15, 2004, when temperature dropped to -8 degrees with 50 mph wind gusts), 40% of peak demand was met by Keyspan's existing LNG facilities. Despite strides made in conservation (Keyspan customers use 30% less gas than they did 25 years ago) and the construction in the 1990s of additional pipelines supplying natural gas to New England, Keyspan believes it will be unable to satisfy New England's growing energy demands without new LNG facilities. Stravopoulos noted good relationships between Keyspan and the communities where the existing LNG facilities are located. He hopes the lessons learned in nurturing those relationships can be extended to the proposed facilities.

Michael D. Frederick, Dominion Cove Point LNG

Mr. Frederick discussed public communication experiences associated with the reactivation of the Cove Point LNG facility. He emphasized the importance of communicating early and often with the affected community, which includes everyone living around the plant, law enforcement personnel (interested in security issues), emergency responders, business owners, media, government agencies (federal, state, local), environmental representatives, and students. Dominion carefully addresses concerns of any of its 76 full time employees at Cove Point to ensure that the employees are comfortable being open with their neighbors. Mr. Frederick observed that pre-filing with FERC, while planning is in the early stages, can create uncertainty with stakeholders since open questions give the appearance that “you don’t know what you’re doing”. He noted success with open houses where one-on-one dialogue is possible.

Greg W. Hopper, Lukens Energy Group

Mr. Hopper discussed the unique aspects of Freedom Energy Center, an existing city-owned facility near Philadelphia, 80 miles up the Delaware River. The city proposes converting this 27-acre property, which already includes 2 bcf tanks, into an LNG facility. The city is proposing this facility because natural gas storage is not feasible in the northeast, and such a facility is useful for power generation and peak shaving. This facility is unique because it would be the largest facility in the country and it is proposed by a public-private partnership. The city owns the existing site and is seeking proposals for a developer partner. Since a developer has yet to be chosen and many questions have yet to be answered (regarding, for example, FERC approval and site security), the public must place more trust in the regulators. This will be the most populated LNG center, since the LNG shipments up the Delaware River must pass refineries, go under bridges, and pass the city itself.

John Hritcko, Broadwater Energy

Mr. Hritcko commented on Shell’s experiences engaging with the community regarding a floating LNG terminal in Long Island Sound. Community respect can be earned only with continued engagement over a long period of time with a lot of people. The company must engage on issues at all levels, from elementary questions to global issues beyond the scope of the immediate project. Third parties, such as Coast Guard and emergency responders, are effective communicators who are trusted by the community.

Mark Boudreaux, Exxon Mobil Development Company

Mr. Boudreaux described the 3 projects his company is investigating in TX and LA. The company plans to eventually develop two LNG terminals on the Gulf coast by 2008/9 to accommodate 2 bcf/d of LNG from Qatar. He described the various communication mechanisms Exxon Mobil is using, and audiences they are engaging in the process.

Comment by David Griesing, Philadelphia Gas Works

Mr. Griesing is a public servant working on the potential LNG project in Philadelphia. He expressed an interest in having unbiased agencies, such as FERC and the Coast Guard, assist him in educating the people of Philadelphia about the LNG project under consideration.

4:30 – 5:00 pm *Closing Comments from Invited Public Panelists*

Carl Weimer, Executive Director, Pipeline Safety Trust

Richard Kuprewicz, Accufacts, Inc.

Bry Myown, Long Beach Citizens for Utility Reform

Cliff Goudey, Massachusetts Institute of Technology Sea Grant Program

Carl Weimer, Pipeline Safety Trust

Give people information, but you don't tell them what to think. Since no one trusts the industry or the government (FERC), it's important for the Fire Marshals and the Coast Guard to stay honest brokers. People base opinions on "common sense", but many of the arguments in favor of LNG facilities in populated areas fly in the face of common sense. The case is being made that we are in an energy crisis, making LNG a necessity. If that's true why isn't the government pushing other options besides just more drilling, pumping, and piping? Why is the government not pressing for a sustainable energy policy? If there is a crisis, what about automobile fuel efficiency? Why is consumption never legislated, yet extractive industries are aided at every turn? Consider a vision of the future based on energy sustainability rather than the continued search for new energy sources. Casting LNG as a bridge to that future will only be taken seriously if the government is also investing seriously in that sustainable future. Currently 52 LNG facilities are proposed, but according to energy experts here today the US needs only about 7. If that is true, why do we continue to waste taxpayer money and put communities in conflict considering LNG facilities in or near cities. FERC is even withholding environmental impact information, citing security concerns. How can you expect communities to accept that these facilities are so safe, if there is so much information that needs to be kept from terrorists? This is not good. Industry panelists praised the open house format for reaching communities, but that format is unpopular with many people because it doesn't allow them to hear the questions of others. Don't pretend remote peak shaving LNG plants and LNG ships passing through cities present similar risks. FERC should consider putting LNG plant applications on hold until the pilots we heard about today from NAFSM and the Coast Guard are complete.

Bry Myown, Long Beach Citizens for Utility Reform

A proposed Long Beach terminal would occupy 27 acres and also strip and pipeline ethane and propane from high-Btu LNG. Ms. Myown described seismic and subsidence hazards and security risks stemming from the Los Angeles-Long Beach ports having rail rates, container facilities and megatanker berths other ports lack. The bridge, rail and freeway infrastructure that moves almost half the nation's container cargo with a \$1 trillion annual GDP terminate near the site and are surrounded by bulk petroleum. Ms. Myown believes communities should have been invited to give presentations at this meeting. She described unique aspects of California's energy choices (for example, an enacted mandate that 20% of the state's portfolio must come from renewables and the efficiency of and funding for solar technology in CA). She believes CA's approach in the 1970s for siting LNG facilities was more rational than the country's present approach that leaves the entire coastline eligible; that approach assessed need, proscribed population limits, and investigated more than 80 sites. She supports rational, democratically determined decisions for LNG facilities akin to zoning, which would declare an emergency moratorium on this new use until siting standards and conditions are

enacted. Also, public representatives must deliver unbiased information and maintain budgets independent from commercial interests.

Cliff Goudey, Massachusetts Institute of Technology

The public expects meaningful input on projects sited in the coastal zone. An independent source needs to present a convincing argument about how many new LNG facilities are needed. If only 7 or 8 new facilities are needed, and we already have 13 sited, then 40 communities are unnecessarily losing sleep. Is it time to call an end to the land-based LNG terminal gold rush and declare the winners? Don't portray the public's concern as "neurosis". In Maine, where very few people would benefit from imported LNG, coastal residents were asked to bear the burden of other states' energy needs. Although some press unfairly emphasizes high consequence/low probability events, the media has captured and focused attention on LNG. LNG proponents can therefore take the time to state their cases. Complete accurate information must be shared in the Internet age when "snow jobs" will be revealed. Divulge how long the worldwide gas supply will last, how long a proposed facility will last, and that this is a transition fuel.

Rick Kuprewicz, Accufacts, Inc.

Don't present half-truths as facts, or share misleading information with the Fire Marshals or Coast Guard who will lose major credibility if they pass misinformation on. Acknowledge that the public will have problems with the lack of a "safety zone" concept. Whether the industry accepts it or not, the public readily accepts the fact the LNG needs zones. LNG can be made to explode. This point is illustrated by the Algerian event, which has yet to be adequately addressed in the public's mind. Professionals must agree on fundamental issues and communicate what they agree on. The LNG siting process must acknowledge that the Coast Guard and the first responders are not the local risk management deciders.

Comment by Lori Traweek, American Gas Association

The terms "common sense" and "rational" can mean different things to those on either side of an argument. Each side may believe its arguments are "rational, common sense" arguments.

5: 00 pm *Adjournment*