

Testimony of

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PRESIDENT AND CHIEF EXECUTIVE OFFICER
TRACTEBEL LNG NORTH AMERICA LLC AND
DISTRIGAS OF MASSACHUSETTS LLC

Before the

Subcommittee on Energy
Committee on Energy & Natural Resources
United States Senate

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Thank you Mr. Chairman and members of the Committee for inviting me to present testimony regarding the role of liquefied natural gas (LNG) in the energy marketplace.

Before discussing LNG's place in the market today – and I'd like to emphasize that I view LNG as an important energy source in addition to other North American natural gas supplies, not a substitute for them – I think it might be helpful to put into the record important facts about the technology and fuel itself. These include:

- Liquefaction of natural gas provides us with enormous flexibility because it allows us to store and transport the resource – the energy residing in the natural gas – to places that are not or cannot be fully served by natural gas pipelines.
- Liquefaction allows natural gas to be transported and stored efficiently and economically. It can be re-vaporized and sent to customers via pipeline or remain in liquid form for transport by truck to customers with their own storage tanks.
- Currently there are 113 active LNG facilities in the U.S., including marine terminals, storage facilities, and operations involved in niche markets. Worldwide there are approximately 20 LNG export terminals, 45 LNG import terminals and 175 specially designed LNG ships.

Safety

Let me address – and hopefully put to rest – the very important issues of safety and security.

I want to note that LNG is as safe, if not safer, to transport and store than most other fuels. It is not explosive, corrosive, carcinogenic, or toxic. It does not pollute land or water resources. It is not transported or stored under pressure. The Government Accountability Office (GAO) study being conducted at the request of Members of the other body needs to set its foundation on those facts.

Like other fuels, LNG has risks associated with its improper handling; however, LNG has certain characteristics that minimize some of the dangers that may result from mishandling. For example, compared to other fuels, LNG is less likely to ignite in a well-ventilated area.

LNG ships, with their double-hull construction, are among the best built, most sophisticated, and most robust in the world. According to shipping expert *Lloyd's Register*, there has never been a recorded incident of collision, grounding, fire, explosion, or hull failure that has caused a breach to a cargo tank of an LNG ship. In fact, over the last 40 years there have been approximately 33,000 LNG carrier voyages, covering more than 60 million miles without a single major accident or safety problem either in port or on the high seas.

It is also important to note that in the extremely unlikely event that an LNG vessel were involved in an incident that ruptured a cargo tank, and the LNG vapor released met with an ignition source, the likely consequence would be a localized fire, and not an explosion as is often feared.

With respect to the storage of LNG, there has never been a report of any off-site injury to persons or damage to property resulting from an incident at any of the LNG import terminals currently in operation worldwide, including our Distrigas terminal in Everett, Massachusetts. This is due to excellent equipment and facility design, excellent safety procedures employed in the industry, stringent design and safety codes governing design, construction, and operation of storage facilities, and a well trained, highly experienced workforce.

Our company has always had a deep commitment to safety and security, but after September 11th, we developed an even greater commitment, increasing our already substantial investments in personnel, equipment, and varied services. These investments include:

- Private security personnel
- Enhancements to the perimeter of the Everett Terminal
- Municipal police and fire details
- State Police details
- Investment in two high-powered tugboats. These tugs include state-of-the-art fire control equipment to offer unprecedented marine towing and firefighting capabilities to the Port of Boston.
- Development of detailed security plans with deployment based on Homeland Security and USCG threat levels

In short, Tractebel is a pacesetter in public-private partnerships. The LNG carrier *Berge Boston*, which is under a long-term charter to us, is the first vessel in the world to meet the new International Code for the Security of Ships and of Port Facilities certification. Other ships in the company's portfolio have since received that certification. In addition, our work with the U.S. Coast Guard to bring LNG ships into the Port of Boston became the model for the Coast Guard's Operation Safe Commerce Project, a nationwide effort initiated after September 11th to enhance transportation safety and security while facilitating commerce.

I want to offer two final notes about safety. First, the two recent studies conducted by the federal government have been deficient in important ways. Both studies have simply assumed that in the event of an incident a hole of a certain size will appear in one of our ships, without discussing the mechanisms that would be needed to produce such holes or the likelihood of the presence of such mechanisms. While we all have theories about what might happen in the event of a breach, we need to understand the probability of such breaches. I personally believe it to be quite low, and our impressive safety record, as well as the rigor of our engineering, shipbuilding, and security processes all tend to confirm that. In short, I think we need to examine the probability of an incident more thoroughly.

Second, we live in a world of comparative risk. At Everett, we take about 60 shipments of LNG a year. Next door to us is a gasoline terminal that probably takes at least as many. Across the Nation there are thousands of such terminals and storage tank farms next to houses, schools, and businesses. I am not saying that because of this we need to pay less attention to the safety and security of LNG shipments. What I am saying is that we need to make sure that we are addressing real world risks in an appropriate and measured way.

LNG Development

Let me switch topics for a moment and address questions about the development of LNG as an important source of energy for the United States. As you know, the Energy Information Administration has indicated that LNG might supply as much as 20% of the natural gas consumed in the United States in the future. Additionally, there are dozens of proposed LNG terminals on the drawing board right now. While I think we can all agree that not all of those facilities will be built, and it is unlikely that LNG will supply 20% of this Nation's natural gas anytime in the near future, it is safe to say that LNG can provide a growing fraction of the energy needed to power the world's largest economy.

We at Tractebel are confident in the future of LNG in this country. We own and operate the terminal at Everett, and have interests in the LNG flowing through both Cove Point and Lake Charles. A Tractebel LNG North America subsidiary sells LNG delivered into Cove Point and Lake Charles. We are leaders in the worldwide LNG industry and are involved in the process from liquefaction through transportation right up to the moment the gas is sent into the pipeline.

Improvements to the Process

Let me turn for a moment to the regulatory process. I think there are several improvements to the process which are reasonable and on which we all should be able to agree.

First, I think there needs to be one agency designated as the lead agency for permitting and environmental reviews of natural gas projects.

For decades, it has been accepted that FERC is generally the "lead agency" for purposes of environmental reviews required under the National Environmental Policy Act (NEPA) for an interstate pipeline proposed under section 7 of the Natural Gas Act. Under FERC procedures, other federal and state agencies with relevant permitting responsibilities are solicited to review the proposed pipeline, make suggestions for mitigating environmental impacts, and reach agreement on permitting decisions. The process is inclusive, and under a recent Memorandum of Understanding, relevant federal agencies are encouraged to work together, concurrently and cooperatively, to reach decisions in a timely manner.

Unfortunately, some permitting agencies have chosen not to participate in the FERC NEPA review process, and instead to wait until after FERC makes a decision regarding approval of a project before weighing in on the permitting questions subject to their authority. Since these permits are a necessary requirement for pipeline construction, even projects that have been approved by the FERC can be thwarted by such "last-

minute" objections. This allows a single state agency (or the regional office of a federal agency) to block the construction of a federally approved, multi-state pipeline.

Let me offer our experience in Florida as an example. There, we have been working diligently to gain the appropriate regulatory authority to construct a pipeline between the Bahamas and Florida. Last April, FERC approved our EIS, the State gave its determination of consistency with respect to the coastal zone, and the local governments all approved the project. Unfortunately, the Corps of Engineers decided after all that to raise questions. The Corps representatives had participated in all the interagency meetings and discussions, but they waited until FERC had acted to raise their concerns, some of which included very fundamental elements of the process including potential pathways, tunneling, etc. Now, we find ourselves caught between a dramatic design change requested by the Corps of Engineers and the design that was approved by more than ten federal, state, and local agencies through the FERC multi-agency permitting process.

By clarifying what, until recently, was the accepted practice – that FERC is the lead agency for NEPA reviews relating to projects seeking authority pursuant to sections 3 and 7 of the NGA -- Congress could send a powerful signal that citizens deserve to have coherent and coordinated environmental decisions.

As part of this, FERC should be given clear authority to establish an administrative schedule for the NEPA review and associated permitting decisions by all of the relevant federal and state authorities. This would ensure a coordinated and comprehensive approach for reviewing proposed projects. It would also avoid the current duplicative reviews, reduce the unnecessary delays that sometimes accompany getting all necessary authorizations to construct such projects, and improve the chances that the government will speak with one voice on important permitting decisions.

I don't think anyone wants to change federal or state agencies' existing authority over the substantive issues now entrusted to them. I know I don't. I want federal and state agencies charged with protecting the environment to be aggressive and firm. At the same time, I am pretty sure that most Americans believe that decisions – one way or the other – need to be made in a timely manner.

Current Problems

In addition to the very significant issues related to siting new facilities, there are also challenges associated with the regulatory programs of existing facilities. Let me give a few examples that I know about.

FERC has asked the Everett terminal to consider meeting current siting requirements, which cannot be done short of buying much of the land in Island End at a

cost of hundreds of millions of dollars, or building some kind of high wall dike around the tanks at a similar cost. Unfortunately, even if done, neither of these would meet current siting regulations. This request is an especially bad idea, one that clearly constitutes regulatory overreach and is viewed by the operating community, investors, and other stakeholders as precisely the sort of agency action that may compromise our ability to meet the Nation's growing need for energy.

There is a mismatch between the incident reporting guidelines originating from DOT and those included in DOT's requirements. That means that we currently have to perform dual analysis of everything that might happen. Unfortunately, FERC has taken it to an extreme, asking to be notified of events that are essentially routine maintenance, including breakdown of equipment valued at \$10,000. The dollar threshold on these reports is about the same as our daily maintenance budget.

One final note related to these improvements. Both the good and the bad thing about LNG is that it is a global business. That means that the product can be (and will be) transported to places where facilities can be located, permitted, and operated in a sensible way.

The Marketplace

Before I close I want to address the marketplace dynamics very briefly.

During the oil embargoes of the 1970s, entire countries (including the United States), as well as regions within the United States (including New England), discovered the wisdom of diversifying fuel sources. At the same time, gas-rich countries without the need for additional energy resources began thinking about ways to leverage stranded gas reserves. For example, today LNG development is especially important for countries like Trinidad, Angola, and Nigeria. In some of these countries, most of the natural gas that is produced with crude oil is flared because there are few alternatives for usage or disposal of the excess gas.

Our situation now, in which natural gas is priced at \$6.00 in the United States, and at less than \$1.00 in many exporting countries, is similar. Just as the global trade in oil means that price differences are smaller across regions and nations, and therefore prices of oil are less important to a nation's competitiveness, so too will a global trade in natural gas ensure that price differences are minimized. As we continue to use more natural gas, whether from Canada or elsewhere, that should be a benefit to the United States. For example, some of our chemical manufacturers have shifted production to areas with lower natural gas prices, costing perhaps as much as 80,000 jobs in that sector in the last four years. In a world in which natural gas is transported more frequently across national borders, that would not be necessary.

On a related note, some have suggested concern about replaying our experience with OPEC. The advantage of LNG is that much of accessible supply is here in this hemisphere. Rather than worrying, we should be developing that supply. LNG's exceptional and exclusive ability to transport what was once stranded natural gas from places like Trinidad and Venezuela can only help. In short, increased access to global reserves of energy helps us reduce our dependence on any one source.

Thank you again, Mr. Chairman and Members of the Committee for inviting me to present our thoughts on the role of liquefied natural gas in the larger marketplace. I look forward to answering any questions you might have and working with the Committee on these very important issues.