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## LIQUEFIED NATURAL GAS: REGULATION IN A COMPETITIVE NATURAL GAS MARKET

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### I. INTRODUCTION

Over the past three years there has been increasing discussion of the role imported liquefied natural gas (LNG)<sup>1</sup> may play in the supply of natural gas for the U.S. market. This is a result of the projections of domestic production and importation of natural gas from Canada (compared with projections of the growing demand for natural gas), as well as the significantly higher prices in the domestic spot markets. Forecasts of LNG consumption by 2015 range from 4% to 10% of domestic natural gas consumption, with more aggressive projections reaching the 10% level by 2010. During 2002, LNG constituted approximately 1% of domestic natural gas consumption.<sup>2</sup>

LNG projects are large endeavors requiring investments in the hundreds of millions of dollars for a single LNG terminal. A full supply chain project can require investment in excess of \$2.5 billion.<sup>3</sup> The structure of future LNG projects and the regulatory environment must be capable of encouraging and facilitating the necessary investments. The recent focus on the need to construct the infrastructure to facilitate a sharp increase in the supply of LNG has resulted in significant policy changes by the Federal Energy Regulatory Commission (FERC or Commission).

LNG was viewed as a high-cost source of natural gas in the early years of its importation into the U.S. This view changed during the periods of natural gas

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1. LNG is natural gas which has been changed from a gaseous to a liquid state by being cooled to -260° Fahrenheit at atmospheric pressure. Liquefying natural gas reduces its volume to 1/600 of that occupied in a gaseous state. The advantage of liquefaction is that it makes long distance transportation of natural gas by ship practical. It also can be beneficial in the storage of natural gas. Federal Energy Regulatory Commission, *What is LNG and What are Some of its Properties?*, at <http://www.ferc.gov/industries/gas/indus-act/lng-what.asp> (last visited Oct. 14, 2003).

2. ENERGY INFORMATION ADMINISTRATION, U.S. DEP'T OF ENERGY, ANNUAL ENERGY OUTLOOK 2003 WITH PROJECTIONS TO 2025, NO. DOE/EIA 0383 (Jan. 9, 2003), *available at* [http://www.eia.doe.gov/oiaf/aeo/pdf/0383\(2003\).pdf](http://www.eia.doe.gov/oiaf/aeo/pdf/0383(2003).pdf) (last visited Oct. 12, 2003) [hereinafter ENERGY OUTLOOK].

3. The LNG supply chain includes upstream gas production, liquefaction, shipping, and regasification. Regasified LNG is then transported through interstate pipeline systems and distributed to end-users.

supply curtailment, when LNG was seen as necessary to augment an inadequate supply of domestic natural gas. Additionally, LNG was viewed as a largely seasonal source of natural gas to be utilized at times when users were willing to accommodate the higher prices. Recently, LNG has come to be viewed as more than just a peaking supply of natural gas. Proponents of new LNG projects assert that in the future LNG can be a competitively priced source of natural gas available to fill an increasing portion of the growing demand for natural gas in the U.S.

Whether the U.S. will have adequate supplies of natural gas to meet the expected growth in demand, at prices that will allow economic growth, has become a dominant energy issue, as well as a significant economic and political issue.<sup>4</sup> The supply and price of natural gas, as well as the growing importance of LNG as a component of the U.S. natural gas supply has gained the attention of both the FERC Chairman and the Federal Reserve Board Chairman.<sup>5</sup>

This article examines the growing importance of LNG in the U.S. natural gas supply. Recent legislation and changes in regulatory policies are intended to remove perceived impediments to the development of the infrastructure. This infrastructure is necessary to facilitate the importation of significantly increased quantities of LNG. The article is in the context of the growing global trade in LNG, in the light of its mixed history in the domestic natural gas market.

## II. LNG IN THE WORLD NATURAL GAS SUPPLY

The global consumption of natural gas has increased dramatically during the past thirty years and is projected to continue to grow at a high rate over the next twenty-five years. Natural gas is forecasted to be the fastest growing component of global energy consumption, with projected average annual increases of 2.8% between 2001 and 2025.<sup>6</sup> As shown in Figure 1, worldwide natural gas consumption is projected to increase from 90 trillion cubic feet (Tcf) in 2001 to 176 Tcf in 2025.

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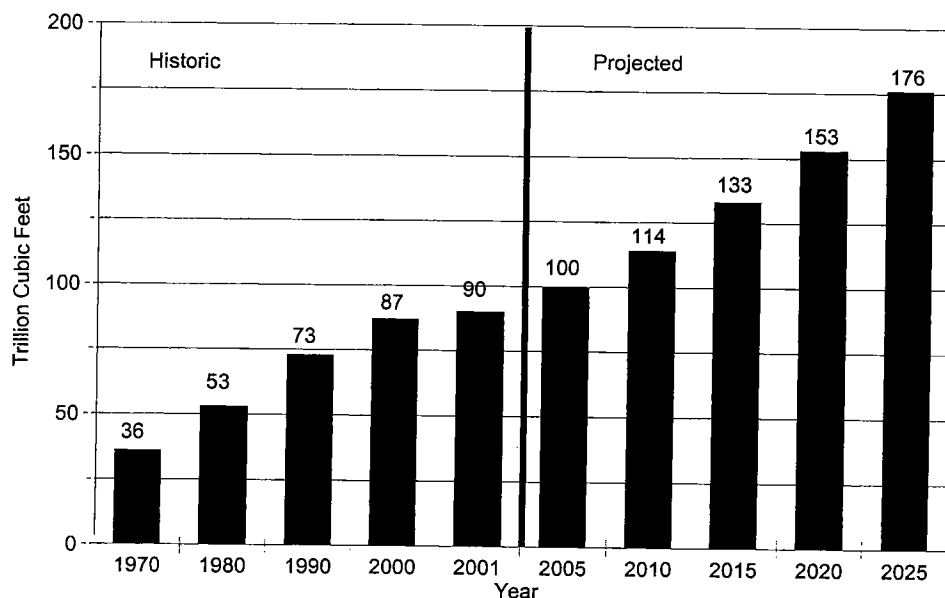
4. "A major consideration for energy markets through 2025 will be the availability of adequate natural gas supplies at competitive prices to meet growth in demand." ENERGY OUTLOOK, *supra* note 2, at 2.

5. "Access to world natural gas supplies will require a major expansion of LNG terminal import capacity.... Without the flexibility such facilities will impart, imbalances in supply and demand must inevitably engender price volatility." *Natural Gas: Hearings to Examine the Economic Effects and Potential Solutions to Problems Related to the High Price of Natural Gas Before the Senate Comm. on Energy and Natural Res.*, 108th Cong. 149 (2003) (testimony by Alan Greenspan, Chairman, Fed. Reserve Bd.), available at <http://www.federalreserve.gov/boarddocs/testimony/2003/20030710/default.htm> (last visited Oct. 12, 2003).

6. ENERGY INFORMATION ADMINISTRATION, U.S. DEP'T OF ENERGY, INTERNATIONAL ENERGY OUTLOOK 47, No. DOE/EIA 0484 (2003), available at [http://www.eia.doe.gov/oiaf/ieo/pdf/0484\(2003\).pdf](http://www.eia.doe.gov/oiaf/ieo/pdf/0484(2003).pdf) (last visited Oct. 12, 2003) [hereinafter INTERNATIONAL ENERGY].

FIGURE 1.<sup>7</sup>

**World Natural Gas Consumption**  
1970 - 2025



LNG will play a significant role in satisfying the growing demand for natural gas. The global demand for LNG has been consistently growing at a rate of 6% to 7% annually since 1970. In some countries, LNG has been a major component of the natural gas supply for several years, often serving as a primary source of natural gas for regions lacking natural gas supplies that can be delivered by pipeline. Historically, LNG has played a minor role in the U.S., providing only about 1% of the natural gas supply during 2002, while providing about 97% of the supply in Asia.<sup>8</sup>

The global importation of LNG increased by 65% between 1993 and 2000. The region with the largest increase in the quantity of LNG imports was Asia, with the largest quantity of that increase being the imports into Japan. This, of course, is due to the lack of natural gas resources in Japan and the inability to import natural gas into the country by pipeline.

7. *Id.*

8. Press Release, International Energy Agency, Liquefied Natural Gas Demand in Asia Could Double by 2010 (May 28, 1996), available at <http://www.iea.org/new/releases/nlgasia.htm> (last visited Oct. 12, 2003).

TABLE 1. GLOBAL LNG IMPORTS<sup>9</sup>

IMPORTERS	IMPORTS (billion cubic feet)	
	1993	2000
United States	81.69	226.04
Mexico		0.42
Puerto Rico		12.33
Western Europe	657.35	1150.07
Japan	1939.46	2656.99
South Korea	223.30	669.40
Taiwan	94.50	217.79
<b>Total Imports</b>	<b>2996.31</b>	<b>4933.03</b>

### III. LNG IN THE U.S. NATURAL GAS SUPPLY AND NATURAL GAS MARKET

At a time when there were serious concerns regarding the adequacy of domestic natural gas supplies, and the natural gas industry in the U.S. was experiencing curtailments of natural gas services, the Commission authorized the construction and operation of four LNG import terminals. The terminals were intended to provide supplemental gas supply to U.S. markets. These were the LNG terminals at Everett,<sup>10</sup> Lake Charles,<sup>11</sup> Cove Point,<sup>12</sup> and Elba Island.<sup>13</sup>

The Federal Power Commission (FPC), the predecessor to the FERC, acted on the first application by a company to import large quantities of LNG on a long-term basis in March 1972. The FPC granted Distrigas Corporation (Distrigas) authorization under section 3 of the Natural Gas Act (NGA)<sup>14</sup> to import LNG.<sup>15</sup> The FPC concluded that, "[t]he United States is running dangerously short of natural gas."<sup>16</sup> The FPC acted in the context of six major pipelines, curtailing services in February 1972. Those curtailments averaged approximately two billion cubic feet (Bcf) per day of natural gas.<sup>17</sup> Analyses

9. Energy Information Administration, U.S. Dep't of Energy, *World LNG Imports by Origin, 1993 (Billion Cubic Feet)*, at <http://www.eia.doe.gov/emew/international/LNGimp93.html> (last visited Oct. 19, 2003); Energy Information Administration, U.S. Dep't of Energy, *World LNG Imports by Origin, 2000 (Billion Cubic Feet)*, at <http://www.eia.doe.gov/emew/international/LNGimp2000.html> (last visited Oct. 19, 2003).

10. *Distrigas Corp.*, 58 F.P.C. 2589 (1977) (approving a settlement authorizing operation of LNG import terminal at Everett, Massachusetts).

11. *Trunkline LNG Co.*, 58 F.P.C. 726 (1977), *order on reh'g*, 58 F.P.C. 2931 (1977) (approving the construction and operation of a Lake Charles LNG import terminal).

12. The original certificate for the construction of Cove Point was granted jointly to two entities, Columbia LNG Corporation and Consolidated System LNG Company. Opinion No. 622, *Columbia LNG Corp.*, 47 F.P.C. 1624 (1972), *aff'd and modified*, Opinion No. 622-A, 48 F.P.C. 723 (1972).

13. *Columbia LNG Corp.*, 47 F.P.C. 1624 (1972), *reh'g granted in part*, 48 F.P.C. 723 (1972), *remanded*, *Columbia LNG Corp. v. FPC*, 491 F.2d 651 (5th Cir. 1974), *on remand*, *Columbia LNG Corp.*, 57 F.P.C. 354 (1977). On May 15, 1996, Southern Energy Company changed its name to Southern LNG Inc.

14. 15 U.S.C. § 717b(a) (2003).

15. *Distrigas Corp.*, 47 F.P.C. 752 (1972).

16. *Id.* at 761.

17. 47 F.P.C. at 761.

provided to the Commission in 1972 showed that domestic gas reserves had been declining since 1968, and were projected to continue declining, and that demand would exceed supply even with pipeline imports, LNG imports, Alaskan gas, and gas from coal.<sup>18</sup>

The attitude of regulators and the natural gas industry changed significantly as the natural gas shortage dissipated in the late 1970s, and the price of imported LNG became significantly higher compared with the price of domestic natural gas. The Economic Regulatory Administration (ERA), which at that time was the body within the U.S. Department of Energy (DOE) and responsible for regulating the importation of natural gas, was of the view that the need for imported LNG to serve high priority requirements had been alleviated by the increased availability of domestic supplies of natural gas.<sup>19</sup>

The prospect of "high cost" LNG being included in the price of the natural gas from interstate pipeline suppliers, at a time when lower cost domestic natural gas was available, provoked strong reactions.<sup>20</sup> For example, complaints were filed (by local distribution companies and industrial customers) with the FERC and the ERA, seeking various remedies including modification or termination of the certificate authorization for the Lake Charles LNG Terminal and termination of the import authorization.<sup>21</sup> The political reactions in the case of the Lake Charles LNG Terminal included comments and protests from state public utility commissions and comments in opposition to the continued importation of LNG by Trunkline LNG Company, signed by thirty members of the United States Congress.<sup>22</sup> In a related action, the Illinois Commerce Commission issued a show-cause order requiring all local distribution companies in the state to explain why the pass through of high-cost LNG to consumers should not be blocked.<sup>23</sup> LNG terminals in the U.S. entered a difficult period. During that time there were contractual disputes with foreign suppliers of LNG, some terminals were mothballed and out of operation for long periods of time, ownership of LNG terminals changed, and some were in bankruptcy proceedings.

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18. The FPC noted in *Columbia LNG Corp.*, 47 F.P.C. 1624 (1972), that [a]s set out in National Gas Supply and Demand 1971-1990, Staff Report No. 2, February 1972, the gas reserves of the lower 48 states have been declining each year beginning with 1968 and are expected to decline in the future. Staff projects that annual demand will move increasingly ahead of the supply even after allowance is made for pipeline imports, LNG imports, gas from Alaska and gas from coal.

*Id.* at 1636.

19. *El Paso E. Co.*, 1 E.R.A. ¶ 70,104, 70,589-91 (1978).

20. At this time interstate natural gas pipelines sold "bundled" service, comprised of interstate transportation service and natural gas. Pipelines treated the LNG in the same manner as other sources of its gas supply, and the cost of LNG was included in the cost of the pipeline's system gas supply. In addition, under the Commission's regulations at that time, pipelines were permitted to pass through, without filing a rate case under section 4 of the NGA, changes in the cost of their system gas supply by means of purchased gas adjustment clauses.

21. *Trunkline LNG Co.*, 22 F.E.R.C. ¶ 63,028 (1983).

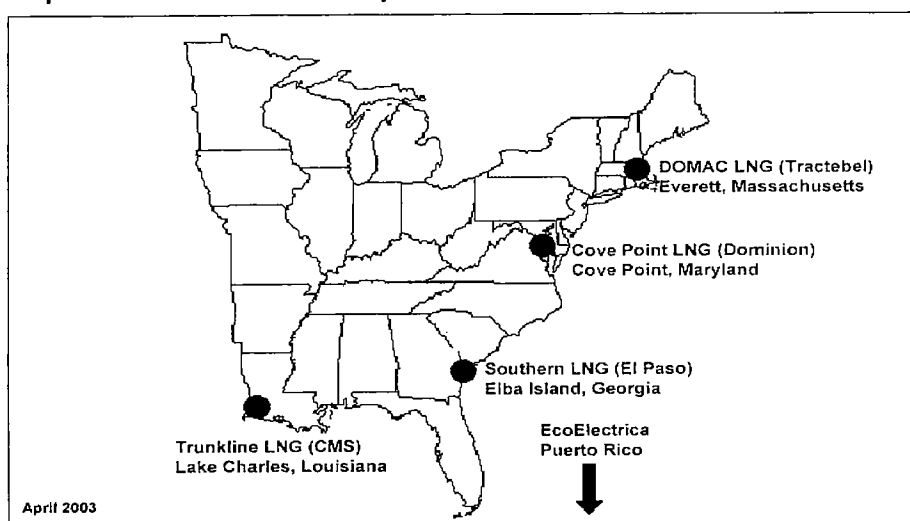
22. Comments of Congressional Intervenors and Interested Members in Opposition to Recommended Decision of Chief Administrative Law Judge Curtis L. Wagner, No. CP74-138-003 (Feb. 7, 1983).

23. *Iowa-Illinois Gas & Elec. Co.*, No. 82-0747, 1982 Ill. PUC Lexis 16 (Aug. 25, 1982).

More recently, the Commission has approved the reactivation of LNG import projects and the expansion of existing LNG terminals in response to the increases in demand for natural gas.<sup>24</sup> At present, there are five LNG terminals subject to the jurisdiction of the FERC, four in the continental U.S. and one in Puerto Rico.<sup>25</sup> These LNG terminals are shown in Figure 2. All five of the LNG import terminals are presently in operation. The most recent authorized to resume operation is the Cove Point Terminal.<sup>26</sup> Three days after receiving authorization to resume commercial operations, the Cove Point Terminal received its first commercial LNG cargo in twenty-three years.<sup>27</sup>

FIGURE 2.<sup>28</sup>

### Liquefied Natural Gas Import Facilities in the United States



The quantity of LNG imported into the U.S. has increased dramatically in recent years. The 235 Bcf of LNG imported in 2001 was more than double the 85 Bcf imported in 1998.<sup>29</sup> This level of importation was reached with only the Everett and Lake Charles facilities in commercial operation during 2001.<sup>30</sup> At

24. See generally *Southern LNG Inc.*, 89 F.E.R.C. ¶ 61,314 (1999), *order on reh'g*, 90 F.E.R.C. ¶ 61,257 (2000); *Cove Point LNG L.P.*, 97 F.E.R.C. ¶ 61,043, *order on reh'g*, 97 F.E.R.C. ¶ 61,276 (2001), *order denying clarification and reh'g*, 98 F.E.R.C. ¶ 61,270 (2002); *Distrigas of Mass.*, 94 F.E.R.C. ¶ 61,008 (2001).

25. In 1996, the FERC granted EcoEléctrica, L.P., authorization for LNG facilities in Puerto Rico. *EcoEléctrica, L.P.*, 75 F.E.R.C. ¶ 61,157 (1996).

26. F.E.R.C. Letter Order, Dominion Cove Point LNG, L.P., No. CP-01-76-000 (Aug. 18, 2003).

27. *First LNG Cargo Lands at New Cove Point Terminal*, GAS DAILY, Aug. 25, 2003, at 1.

28. FEDERAL ENERGY REGULATORY COMMISSION, LIQUEFIED NATURAL GAS STAFF PRESENTATION (Apr. 9, 2003), at <http://www.ferc.gov/EventCalendar/Files/20030814145642-c-1-2-3.pdf> (last visited Oct. 1, 2003) [hereinafter LIQUEFIED NATURAL GAS].

29. See generally U.S. Dep't of Energy, *Gas Storage and Liquefied Natural Gas*, at <http://www3.fossil.energy.gov/programs/oilgas/storage> (last visited Oct. 12, 2003).

30. During 2001, the Elba Island Terminal received only one cargo of LNG as part of the reactivation

present, the four LNG terminals located in the continental U.S. have an aggregate LNG vaporization capacity of 2.4 Bcf per day.

The price of imported LNG relative to that of natural gas imported by pipeline from Canada has changed. In 2000, the average annual price of imported LNG was lower than the price of natural gas imported by pipeline for the first time since 1980.<sup>31</sup>

In North America, natural gas consumption is forecasted to increase from the 27 Tcf consumed in 2001 to 46 Tcf in 2025 (see Figure 3 below). By 2025, natural gas consumption is projected to be 26% of delivered energy consumption in the U.S.<sup>32</sup> To a large extent the projected growth in demand is a result of the increasing use of natural gas to generate electric power. Natural gas consumption for electric generation is expected to increase from 5.3 Tcf in 2001 to 10.6 Tcf in 2025.<sup>33</sup> Nearly all new generation plants are fueled by natural gas. The other two fuel options for electric generation, coal and nuclear, remain relatively unattractive. Coal continues to be burdened with environmental concerns. Nuclear power, which some in the electric power industry thought to be on the verge of a comeback, has become more controversial because of the possibility of a terrorist attack.

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process.

31. The average annual price of imported LNG was \$3.20 per million Btu (British thermal unit) compared to \$3.90 per million Btu for natural gas imported by pipeline. James Todaro, *U.S. Natural Gas Imports and Exports – 2000*, NATURAL GAS MONTHLY, Aug. 2001, available at [www.eia.doe.gov/pub/oil\\_gas/natural\\_gas/feature\\_articles/2000/natgas\\_imports\\_exports\\_2000/fa082001.pdf](http://www.eia.doe.gov/pub/oil_gas/natural_gas/feature_articles/2000/natgas_imports_exports_2000/fa082001.pdf) (last visited Oct. 2, 2003).

32. ENERGY OUTLOOK, *supra* note 2, at 77.

33. *Id.*

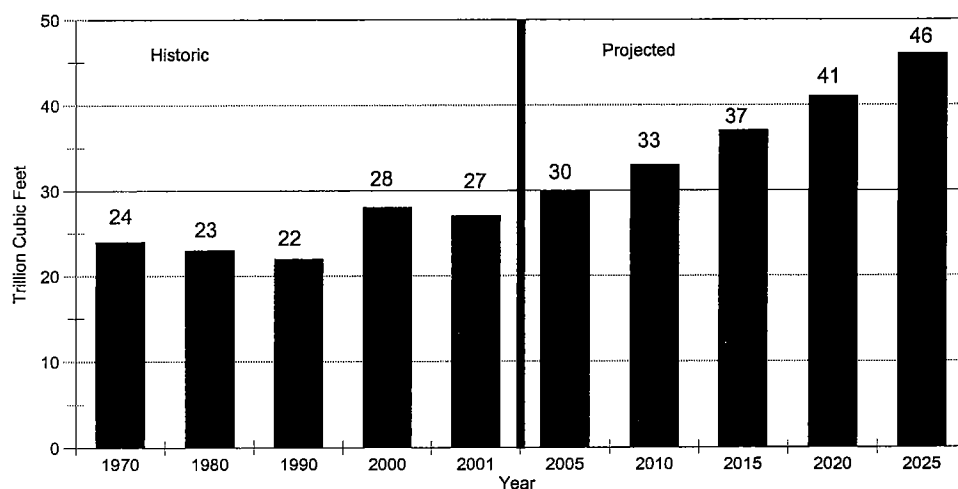
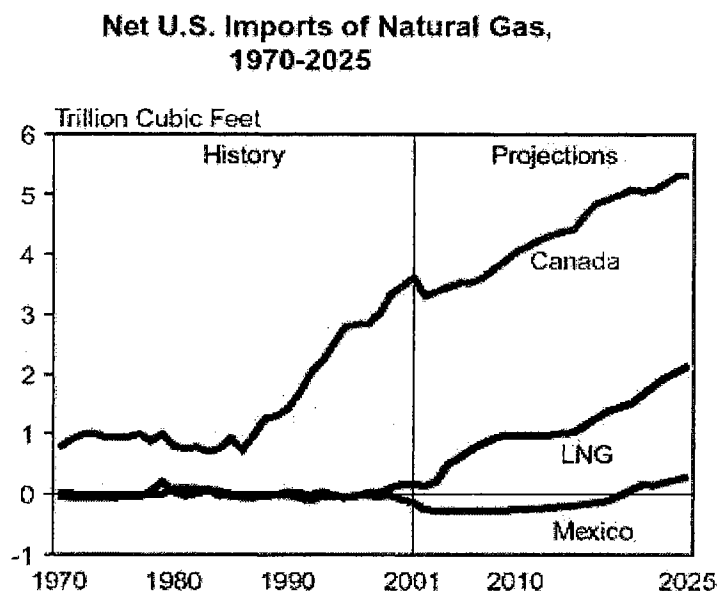
FIGURE 3.<sup>34</sup>**Natural Gas Consumption in N. America**  
1970 - 2025

Figure 4 shows the projected importation of natural gas, including LNG, to satisfy the growing demand for natural gas. The forecasts prepared by Energy Information Administration (EIA) show a decreasing share of the U.S. natural gas supply from domestic production.<sup>35</sup>

34. INTERNATIONAL ENERGY, *supra* note 6, at 50.

35. ENERGY OUTLOOK, *supra* note 2, at 6.

FIGURE 4.<sup>36</sup>

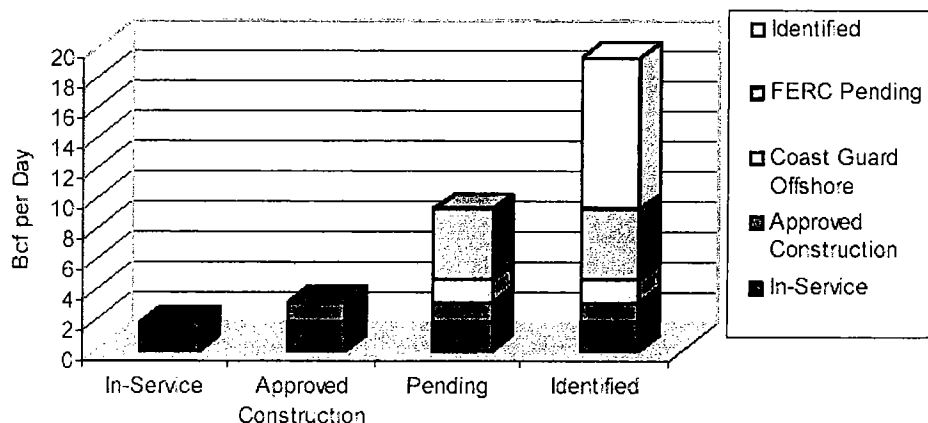
The bar chart shown in Figure 5 was part of a presentation by the Commission staff at the Commission's open meeting on April 9, 2003.<sup>37</sup> The staff reported that expansion at the Cove Point, Elba Island, and Lake Charles LNG facilities, which has been approved by the Commission, will add 1.3 Bcf per day of vaporization capacity. The offshore projects pending with the Coast Guard, if approved and constructed, will add 1.5 Bcf per day of vaporization capacity. The staff stated that there could be as much as 9.2 Bcf per day of LNG vaporization when Bahamian projects and other pending projects are taken into account. The staff reported that over ten potential sponsors of LNG project have contacted the staff regarding about twenty different site locations in North America. If constructed, these projects could increase capacity by approximately 9 Bcf per day to a total of 18 Bcf per day of LNG vaporization capacity. The staff reported that this could provide 10% to 15% of the U.S. natural gas supply.

36. INTERNATIONAL ENERGY, *supra* note 6, at 51.

37. LIQUEFIED NATURAL GAS, *supra* note 28. At its open meeting, the Commission approved issuance of orders in two pending LNG matters and letters to the Secretary of State and Secretary of Defense in connection with a third LNG project. See also *Southern LNG Inc.*, 103 F.E.R.C. ¶ 61,029 (2003); *AES Ocean Express, L.L.C.*, 103 F.E.R.C. ¶ 61,030 (2003); *Tractebel Calypso Pipeline, L.L.C.*, 103 F.E.R.C. ¶ 61,106 (2003).

FIGURE 5.<sup>38</sup>

## LNG Capacity Growth

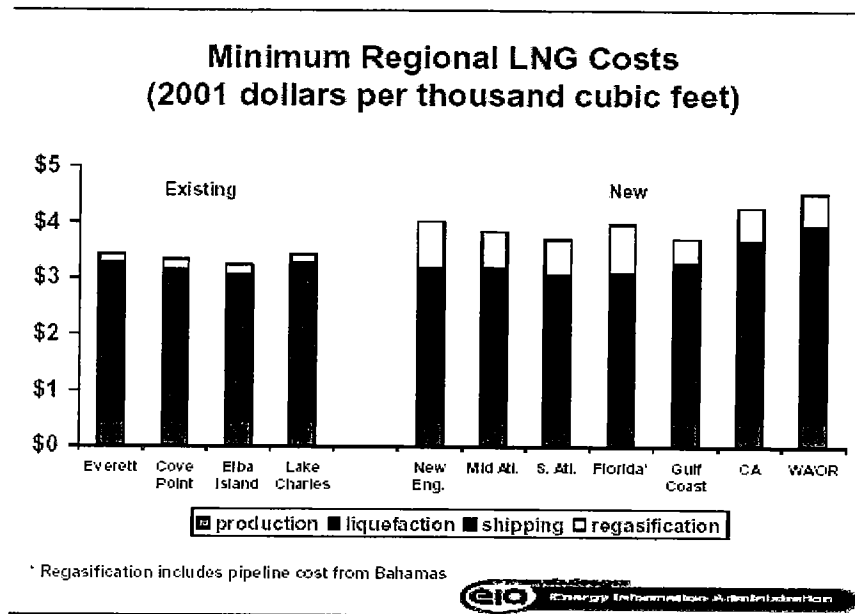


LNG will be one of the supply options competing to satisfy the growing domestic demand for natural gas. The price at which LNG will be financially viable will depend on numerous factors, including where the demand is located. Figure 6 shows the cost of regasified LNG as determined by the EIA. It provides an indication of the price range within which LNG may be a competitive natural gas supply. A key matter to be determined in structuring new or expansion LNG projects is the question of who will bear the risk of any decline in the market price of natural gas during the life of the project. The manner in which this risk is allocated among the participants will be a key factor in obtaining financing for LNG projects. Obviously, a critical uncertainty is whether the current high natural gas prices, or at least prices in the range of \$3.50 to \$4.00 per million Btu, will continue.<sup>39</sup> Another uncertainty is the extent to which reductions in the cost of regasified LNG can keep its price competitive with pipeline natural gas. Cost decreases throughout the LNG supply chain have made LNG an increasingly competitive energy source.<sup>40</sup>

38. LIQUEFIED NATURAL GAS, *supra* note 28.

39. High natural gas prices can create risks for the LNG segment of the industry. At some level, higher natural gas prices will erode demand. Also, significantly higher natural gas prices could stimulate political reactions resulting in some form of price regulation, or even in direct challenges to the LNG industry, as occurred in the early 1980s.

40. INTERNATIONAL ENERGY, *supra* note 6, at 48.

FIGURE 6.<sup>41</sup>

New processing methods hold out the possibility of lowering terminal service costs and providing other benefits, such as the ability to locate the facilities at more advantageous sites. The DOE, in cooperation with private entities, has been studying a method that permits the unloading and regasifying of LNG directly from LNG tankers for storage offshore in underground salt caverns.<sup>42</sup> The technique is called the “Bishop Process.” The DOE has reported that preliminary results of the study indicate that such terminal facilities can be constructed much faster and at significantly less cost than traditional LNG facilities.<sup>43</sup> The study identified more than twenty-four potential sites with salt cavern formations near existing offshore pipeline facilities. In addition to lowering the cost of terminal services, the offshore location would avoid the difficulties associated with siting onshore facilities.

In addition to risks relating to the marketability of regasified LNG, proposals to construction of new LNG facilities confront a number of challenges. As is the case with proposals to construct other types of energy infrastructure facilities, proposals for new LNG terminals can encounter significant local opposition. The safety of those living near the proposed site can be a major

41. James M. Kendell, Presentation before the Nat'l Ass'n of Regulatory Util. Comm'rs on Current Natural Gas and LNG Projections (July 29, 2003), available at [http://www.eia.doe.gov/oiaf/presentation/lng/pdf/natgas\\_lng.pdf](http://www.eia.doe.gov/oiaf/presentation/lng/pdf/natgas_lng.pdf) (last visited Oct. 6, 2003).

42. See generally Office of Fossil Energy, U.S. Dep't of Energy, *Storing Liquefied Natural Gas in Underground Salt Caverns Could Boost Global LNG Trade*, at [http://www.fe.doe.gov/news/techlines/03/tl\\_lng\\_saltstorage.html](http://www.fe.doe.gov/news/techlines/03/tl_lng_saltstorage.html) (last visited Oct. 3, 2003).

43. *Id.*

factor. As an example, it was recently reported that the mayor of Fall River, Massachusetts had expressed adamant opposition to a proposed LNG terminal near Fall River.<sup>44</sup> The mayor asserted that the proposed site was dangerously close to residential areas. The mayor was reported to have stated that "no one, anywhere, at any level, has the ability to guarantee the safety of the 9,000 people who live within a one-mile radius of this site . . . ."<sup>45</sup> This opposition comes in the face of the apparent need for additional natural gas in New England.<sup>46</sup> Even in smaller communities there can be opposition to new LNG projects. A group of homeowners from among the sixty inhabitants of Quintana Island, a small Texas gulf coast island, are organizing to oppose the Freeport LNG facility proposed to be constructed on the island.<sup>47</sup>

Following the terrorist attacks on September 11, 2001, security and public safety became major concerns regarding LNG facilities. Security concerns caused Boston Harbor to be temporarily closed to LNG deliveries. The Coast Guard's Captain of the Port, who had jurisdiction over Boston Harbor, issued an order barring the entry into Boston Harbor of any LNG tanker pending satisfaction of certain conditions, including the preparation and approval of comprehensive safety and security plans and analyses.<sup>48</sup> The Coast Guard issued regulations establishing safety and security zones for LNG tankers for the period that they remained in Boston Harbor.<sup>49</sup>

As a result of the deregulation of the wellhead price of natural gas and the Commission's policies, specifically the unbundling of pipeline services and open access transportation requirement, a competitive commodity market for natural gas has developed. The long-term effect, if any, on the operation of the natural gas market in light of the disappearance of many energy traders has yet to be determined following the collapse of Enron. The FERC is presently addressing problems regarding the accuracy and adequacy of market information on natural gas transactions.<sup>50</sup> Despite these difficulties, the FERC remains confident that the commodity market for natural gas is viable and competitive. With the increase in international LNG trade and increases in sources of LNG, the commodity market for natural gas could, over the next several years, develop into a global commodity market.

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44. *Town Mayor Wants Proposed LNG Terminal Scrapped*, GAS DAILY, Aug. 19, 2003, at 4.

45. *Id.*

46. Pipelines serving New England have filed a number of applications with the FERC in recent years seeking authorization under section 7 of the NGA to construct additional pipeline facilities on the grounds that the existing pipeline infrastructure is inadequate to meet the growing demand for natural gas in New England.

47. *Island Residents Worry About Planned LNG Terminal*, GAS DAILY, June 27, 2003, at 3.

48. This action by the Coast Guard temporarily prevented LNG from being delivered to the Everett Terminal for more than a month only a few weeks before the beginning of the winter heating season in New England.

49. Safety and Security Zone; Liquefied Natural Gas Carrier Transits and Anchorage Operations, Boston, Marine Inspection Zone and Captain of the Port Zone, 67 Fed. Reg. 63,261 (codified at 33 C.F.R. pt. 165) (2002); 33 C.F.R. § 165.110 (2002).

50. Notice of Staff Technical Conference, *Natural Gas Price Formation*, Docket No. AD03-7-000 (March 14, 2003); *Policy Statement on Natural Gas & Elec. Price Indices*, 104 F.E.R.C. ¶ 61,121 (2003).

## IV. FERC JURISDICTION AND PAST REGULATORY POLICIES

The FERC plays a key role in the expansion of LNG import terminals. Section 3(a) of the NGA<sup>51</sup> grants the FERC jurisdiction over the siting, construction, and operation of LNG terminals for purposes of importing LNG.<sup>52</sup> NGA section 3 provides:

[N]o person shall export any natural gas from the United States to a foreign country or import any natural gas from a foreign country without first having secured an order of the Commission authorizing it to do so. The Commission shall issue such order upon application, unless, after opportunity for hearing, it finds that the proposed exportation or importation will not be consistent with the public interest. The Commission may by its order grant such application, in whole or in part, with such modification and upon such terms and conditions as the Commission may find necessary or appropriate, and may from time to time, after opportunity for hearing, and for good cause shown, make such supplemental order in the premises as it may find necessary or appropriate.<sup>53</sup>

In 1977, this authority, under section 3 of the NGA, was transferred to the Secretary of Energy under section 301(b) of the Department of Energy Organization Act.<sup>54</sup> The Secretary of Energy, however, delegated to the FERC the authority to approve or disapprove the siting, construction, and operation of such facilities. FERC additionally oversees the construction of new domestic facilities related to the import and export of natural gas.<sup>55</sup>

In 1973, the FPC issued an order asserting jurisdiction under section 7 of the NGA over the existing LNG import facilities located at Everett, Massachusetts (Distrigas Terminal) and operated by Distrigas.<sup>56</sup> Distrigas had filed an application under section 3 of the NGA seeking authorization to increase the volumes of LNG being imported at the Distrigas Terminal and to make significantly more jurisdictional sales. When the FPC originally granted

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51. 15 U.S.C. § 717b(a) (2003). The applicable regulations can be found at 18 C.F.R. pt. 153.

52. LNG is natural gas within the meaning of section 2(5) of the NGA. 15 U.S.C. § 717a(5) (2003). *See also* Columbia LNG Corp., 47 F.P.C. 1642, 1630 (1972).

53. 15 U.S.C. § 717b(a).

54. Natural Gas Act, Pub. L. No. 95-91, 91 Stat. 565 (1977) (codified as amended in scattered sections of title 42 of the U.S.C.).

55. Notice of Department of Energy Delegation Order, Delegation Order No. 00-004.00, 67 Fed. Reg. 8,946 (Feb. 27, 2002). Section 3 of the NGA requires anyone who wants to import natural gas, including LNG, into the U.S. to obtain authorization. The DOE retained the authority with regard to the importation of natural gas. This authority is delegated to the Assistant Secretary for Fossil Energy pursuant to Department of Energy, Redefinition Order No. 00-002.4 (Jan. 8, 2002). The Natural Gas and Petroleum Import and Export Office of DOE is responsible for regulating natural gas imports and exports, and, among other things, for maintaining statistical data relating to natural gas trade. The DOE's applicable regulations are found at 10 C.F.R. pt. 590. Applications for authorization to import natural gas are evaluated to determine if the proposed import arrangement meets the public interest requirement of section 3, as amended by section 201 of the Energy Policy Act of 1992. Energy Policy Act of 1992, Pub. L. 102-486, 106 Stat. 2776 (1992) (codified as amended in scattered sections of title 42 of the U.S.C.) [hereinafter Energy Policy Act].

56. *Distrigas Corp.*, 49 F.P.C. 1145 (1973), *reh'g denied*, 49 F.P.C. 1400 (1973). After not having asserted jurisdiction over facilities used to import or export natural gas, under section 7, from the enactment of the NGA in 1938 until 1947, the FPC did so in a case involving a non-jurisdictional pipeline company in Texas exporting natural gas. On appeal the court concluded that because the facilities were not used in interstate commerce, the FPC had no jurisdiction under section 7. *Border Pipe Line Co. v. FPC*, 171 F.2d 149 (D.C. Cir. 1948).

authorization for the Distrigas Terminal in 1972, it did so under section 3 of the NGA and did not require the filing of a certificate application under section 7 of the NGA.<sup>57</sup> In the 1973 order, the FPC reversed its position and held that section 7 authorization was required for Distrigas's LNG import facilities.<sup>58</sup>

On review of the FPC's order denying a rehearing, the D.C. Circuit held that while section 7 applies to interstate commerce and does not explicitly include foreign commerce, section 3 of the NGA grants the FPC broad authority with respect to the importation of natural gas.<sup>59</sup>

Under [s]ection 3, the Commission's authority over imports of natural gas is at once plenary and elastic. It may authorize imports, as it did in Opinion 613, subject to no conditions whatever as to facilities and subsequent use; it may deny import authorization altogether. So long as its conclusion is reasonable and reasonably supported by substantial record evidence, the Commission may also and quite properly adopt a position somewhere between these two poles, granting import authority but subjecting it to 'terms and conditions' that it finds 'necessary or appropriate' to the public interest.

\* \* \*

In short, we find it fully within the Commission's power, so long as that power is responsibly exercised, to impose on imports of natural gas the equivalent of [s]ection 7 certification requirements both as to facilities and— what we suspect is of more vital concern to the Commission and to petitioners— as to sales within and without the state of importation. Indeed, we think that [s]ection 3 supplies the Commission not only with the power necessary to prevent gaps in regulation, but also with flexibility in exercising that power— flexibility far greater than would be the case were we to hold that imports are interstate commerce, automatically and compulsorily subject to the entire panoply of [s]ection 7's requirements.<sup>60</sup>

The court held that the FPC could use its section 3 authority to require Distrigas to file an application under section 7.<sup>61</sup>

"[T]he Commission *may* impose, under [s]ection 3, the equivalent of [s]ection 7 requirements, it may do so only if it affirmatively finds that applying such requirements to imports is 'necessary or appropriate' to the public interest."<sup>62</sup>

The project sponsors filed applications for certificates under section 7 for the Elba Island Terminal, Cove Point Terminal, and Lake Charles Terminal. For each of these LNG terminals, the Commission granted section 7 certificates.<sup>63</sup> The need to request and obtain a section 7 certificate for the LNG terminal facilities was not questioned by the project sponsors and was not disputed in the proceedings before the Commission.

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57. *Distrigas Corp.*, 47 F.P.C. 752 (1972).

58. 49 F.P.C. 1145, at 1146.

59. *Distrigas Corp. v. FPC*, 495 F.2d 1057, 1062 (D.C. Cir. 1974).

60. *Id.* at 1065.

61. *Distrigas Corp.*, 495 F.2d at 1064. The court also noted that the "public interest" standard under section 3 and the "public convenience and necessity" standard under section 7 of the NGA have been long regarded by the Commission as being substantially equivalent. See also *El Paso Natural Gas Co.*, 38 F.P.C. 311, 319 (1967); *Montana Power Co.*, 11 F.P.C. 1, 7 (1952).

62. *Distrigas Corp.*, 495 F.2d at 1066 (emphasis added).

63. *Columbia LNG Corp.*, 47 F.P.C. 1624, 1630 (1972); *Trunkline LNG Co.*, 58 F.P.C. 726 (1977).

In June 1972, when granting authorizations under section 7 for the facilities at the Elba Island Terminal and Cove Point Terminal, the FPC noted that its authority under section 7 was not a disputed issue in the case.<sup>64</sup> Commissioners Brooke and Walker in separate concurring opinions stated that they would have preferred not to take section 7 jurisdiction over the terminal facilities.<sup>65</sup> Commissioner Brooke stated, "[f]rom a regulatory point of view, I would prefer to exert Commission jurisdiction when the gas commences its interstate movement at the tailgate of the gasification plant. I would not, in general, prescribe a [s]ection 7 certificate for the LNG terminal facilities . . . ."<sup>66</sup>

With regard to its jurisdiction under section 7, neither the Commission nor the FPC has made a distinction between the LNG terminal facilities and the interstate pipeline facilities connecting at the tailgate of the LNG facilities.<sup>67</sup> The LNG terminal services have been provided pursuant to tariffs on file with the Commission. The LNG terminal and the terminal services have been regulated in the same manner as interstate natural gas pipeline facilities and services. Because of this regulatory treatment by the Commission, as the Commission's open access policy developed, it was applied to LNG terminal facilities.<sup>68</sup>

For example, an order issued in November 1989 by the Commission required that the Lake Charles Terminal offer its terminal service on a non-discriminatory basis.<sup>69</sup> Applications filed with the Commission for capacity expansions or to offer additional service at the existing LNG terminals have requested authorization under section 7. When Southern LNG, for example, requested authorization to construct additional facilities and recommission its

64. 47 F.P.C. at 1630.

65. *Id.* at 1650-53.

66. 47 F.P.C. at 1650.

67. The project sponsors of the Elba Island, Cove Point, and Lake Charles LNG facilities were all affiliates of interstate natural gas pipelines.

68. The Commission's open access policies developed through Order No. 436, 500, and 636. Order No. 436, *Regulation of Natural Gas Pipelines After Partial Wellhead Decontrol*, [Regs. Preambles 1982-1985] F.E.R.C. STATS. & REGS. ¶ 30,665, 50 Fed. Reg. 42,408 (1985) (to be codified at 18 C.F.R. pts. 2, 157, 250, 284, 375, 381), *modified*, 50 Fed. Reg. 52,217 (1985), *modified*, 51 Fed. Reg. 6398 (1986) (to be codified at 18 C.F.R. pt. 284), *reh'g denied*, 34 F.E.R.C. ¶ 61,404 (1986), *reh'g denied*, 34 F.E.R.C. ¶ 61,405 (1986), *reh'g denied*, 34 F.E.R.C. ¶ 61,403 (1986), *vacated*, *Associated Gas Distribs. v. FERC*, 824 F.2d 981 (D.C. Cir. 1987), *cert. denied sub nom.*, *Southern Cal. Gas Co. v. FERC*, 485 U.S. 1006, 108 S.Ct. 1468 (1986), *readopted on an interim basis*, 52 Fed. Reg. 30,334 (1987) (to be codified at 18 C.F.R. pts. 2, 284), *extension granted*, 52 Fed. Reg. 39,507, *modified*, 52 Fed. Reg. 39,630 (1987), *modified*, 52 Fed. Reg. 48,986 (1987), *modified*, 53 Fed. Reg. 8,439 (1986) (to be codified at 18 C.F.R. pt. 284), *reh'g denied*, 43 F.E.R.C. ¶ 61,234 (1988), *modified*, 53 Fed. Reg. 50,924 (1988), *reh'g denied*, 46 F.E.R.C. ¶ 61,148 (1989), *remanded*, *American Gas Ass'n v. FERC*, 888 F.2d 136 (D.C. Cir. 1989), *readopted*, 54 Fed. Reg. 52,334 (1989), *reh'g granted in part and denied in part*, 50 F.E.R.C. ¶ 61,172 (1990); *Pipeline Service Obligations and Revisions to Regulations Governing Self-Implementing Transp.*; and *Regulation of Natural Gas Pipelines After Wellhead Decontrol*, 57 Fed. Reg. 13,267 (1992), *on reh'g*, 57 Fed. Reg. 36,128 (1992), *on reh'g*, 57 Fed. Reg. 57,911 (1992), 61 F.E.R.C. ¶ 61,272 (1992), *reh'g denied*, 62 F.E.R.C. ¶ 61,007 (1993), *aff'd in part and remanded in part sub nom. United Distrib. Co. v. FERC*, 88 F.3d 1105 (D.C. Cir. 1996), *cert. denied sub nom.*, *Associated Gas Distribs. v. FERC*, 520 U.S. 1224 (1997).

69. *Trunkline LNG Co.*, 49 F.E.R.C. ¶ 61,199, 61,715 (1989). Commissioner Moler dissented from imposing this requirement, stating: "To my knowledge, this is the first time that the Commission has conditioned the grant of a certificate upon acceptance of open-access." *Id.* (emphasis added).

Elba Island Terminal in 1999, it conducted an open season with respect to the capacity. This was consistent with the Commission's open access policy. Southern LNG also requested a blanket certificate pursuant to Subpart G of Part 284 of the Commission's regulations to provide open access terminal service.<sup>70</sup>

The issue of whether the Commission continued to have jurisdiction under section 3 of the NGA over the siting, construction, and operation of LNG importation facilities after enactment of the Energy Policy Act (EPA)<sup>71</sup> was presented to the Commission in 2001 by a petition for a declaratory order filed by Dynegy LNG Production Terminal, LP (Dynegy).<sup>72</sup> Dynegy requested the Commission to find that it had no jurisdiction under section 3 over the siting, construction, and operation of the LNG facilities that Dynegy contemplated constructing at Hackberry, Louisiana. In the alternative, Dynegy requested that the Commission issue an order granting authority for importation of the LNG without imposing conditions.<sup>73</sup>

Dynegy argued that LNG should be treated the same as any other gas supply and not be subject to any unique regulatory burden.<sup>74</sup> Dynegy asserted that the EPA required that the importation of LNG be treated as a "first sale" over which the Commission has no jurisdiction, and, as a result, the Commission lacked jurisdiction under section 3 over the siting, construction, and operation of the LNG facility. In addition to its legal argument regarding the EPA, Dynegy presented data and arguments regarding the growing demand for natural gas and the need for additional LNG infrastructure, in support of its alternative request.<sup>75</sup>

The Commission disagreed with Dynegy's interpretation of the EPA and found that "the Energy Policy Act specifically left [s]ection 3 of the NGA in place . . ."<sup>76</sup> The Commission found its jurisdiction under section 3 unchanged. The Commission also rejected the alternative request of Dynegy LNG on the grounds that any request for authority to import natural gas must be submitted to the DOE and that the filing failed to include the information required by the Commission's regulations under section 3.<sup>77</sup> The Commission did not directly respond to the arguments regarding the inadequacy of the existing LNG infrastructure.

## V. THE FERC'S NEW POLICIES FOR LNG TERMINALS

The Commission took its first significant step toward a new policy with respect to LNG terminal facilities when it issued an order in November 2002 granting preliminary authorization under section 3, rather than under section 7, for Southern LNG Inc. (Southern LNG) to expand its existing LNG facility

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70. *Southern LNG, Inc.* 89 F.E.R.C. ¶ 61,314 (1999).

71. Energy Policy Act, *supra* note 55.

72. Petition for Declaratory Order of Dynegy LNG Prod. Terminal, L.P., and Requests for Expedited Consideration, *Dynegy LNG Prod. Terminal, L.P.*, No. CP01-423-000 (Aug. 3, 2001) [hereinafter *Petition for Declaratory Order*].

73. *Id.* at 19.

74. Petition for Declaratory Order, *supra* note 72, at 3.

75. *Dynegy LNG Prod. Terminal, L.P.*, 97 F.E.R.C. ¶ 61,231, 62,050 (2001).

76. *Id.* at 62,053.

77. 97 F.E.R.C. ¶ 61,231, at 62,055.

located on Elba Island, Georgia (Elba Island Terminal).<sup>78</sup> Southern LNG had filed an application requesting authorization under sections 3 and 7 of the NGA to expand its Elba Island Terminal.<sup>79</sup> The Commission found there was no need to consider the request for authorization under section 7 of the NGA and authorized the expansion of the Elba Island Terminal under section 3.<sup>80</sup> The Commission stated that its assessment of a proposal under the public interest standard of section 3 is substantially equivalent to the section 7 public convenience and necessity standard.<sup>81</sup> This was a reversal of the Commission's policy of granting authorizations for LNG terminal facilities and services under section 7.<sup>82</sup>

The Southern LNG Order also addressed the issue of whether the costs associated with the expansion of the facilities should be accorded roll-in or incremental rate treatment. Southern LNG stated that it had conducted an open season and, as a result, had entered into a precedent agreement with Shell NA LNG for the full expansion capacity of 3.3 Bcf for a thirty year term. The application also stated that revenues from the expansion services would exceed the expansion expenses in each of the thirty years. Pursuant to the Commission's 1999 Statement of Policy on the Certification of New Interstate Natural Gas Pipeline Facilities (Policy Statement on New Facilities), Southern LNG requested a predetermination for rolled-in rate treatment for the expansion costs in a future NGA section 4 rate case.<sup>83</sup>

The Commission rejected the protests of certain parties and agreed with Southern LNG's arguments supporting a predetermination for rolled-in rate treatment under the Commission's Policy Statement on New Facilities.<sup>84</sup>

In an order issued in April 2003, the Commission, inter alia, denied rehearing of the Southern LNG Order and granted authorization for the proposed expansion. The Commission also granted the request for preapproval of rolled-in rate treatment of the costs associated with the expansion of the LNG terminal in Southern LNG's next section 4 rate filing, absent a material change in

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78. *Southern LNG Inc.*, 101 F.E.R.C. ¶ 61,187 (2002).

79. Southern LNG operates the Elba Island Terminal. Authorization for the Elba Island LNG facility was initially granted in *Southern Energy Co.*, 47 F.P.C. 1624 (1972), *modified*, 48 F.P.C. 723 (1972). Southern LNG is a wholly owned subsidiary of Southern Natural Gas Company, which, in turn, is a subsidiary of El Paso Energy Corporation. In 2000, Southern LNG was granted authorization to recommission and renovate the Elba Island Terminal, which had not been in service since the 1980s. *Southern LNG Inc.*, 90 F.E.R.C. ¶ 61,257 (2000). Southern LNG was subsequently authorized to upgrade certain facilities at the Elba Island terminal. *Southern LNG Inc.*, 94 F.E.R.C. ¶ 61,188 (2001); *Southern LNG Inc.*, 96 F.E.R.C. ¶ 61,083 (2001).

80. 94 F.E.R.C. ¶ 61,188, at 61,667.

81. *Id.* at 61,663. See also *Atlanta Gas Light Co.*, 47 F.P.C. 1145; *Dynegy LNG Prod. Terminal, L.P.*, 97 F.E.R.C. ¶ 61,231 (2001).

82. At the time authorization for the Elba Island Terminal was originally requested from the Commission, an application was filed seeking a certificate under section 7. *Southern Energy Co.*, 47 F.P.C. 1624, 1627 (1972).

83. *Certification of New Interstate Natural Gas Pipeline Facilities*, 88 F.E.R.C. ¶ 61,227 (1999); Orders Clarifying Statement of Policy, *Certification of New Interstate Natural Gas Pipeline Facilities*, 90 F.E.R.C. ¶ 61,128 (2000); Order Further Clarifying Statement of Policy, *Certification of New Interstate Natural Gas Pipeline Facilities*, 92 F.E.R.C. ¶ 61,094 (2000).

84. 101 F.E.R.C. ¶ 61,187, at 61,739.

circumstances.<sup>85</sup>

As a result of Southern LNG having requested a predetermination on rolled-in rate treatment, without requesting authority to charge market-based rates, the following issue was not presented to the FERC: whether the Commission would apply the new policy regarding market-based rates and not require the filing of a tariff or rate schedule for the terminal service in a case involving the expansion of an existing LNG facility. The Commission, however, did make some statements in addressing the rolled-in rate treatment issue that may give an indication of the Commission's approach to such a case. The statements are not encouraging to entities interested in market-based rates for expansion of an existing LNG terminal in which the existing service is provided under cost-of-service based rates.

The Commission made the following statement in connection with its finding that incremental rates were not appropriate for the Southern LNG expansion:

[I]ncremental rates are not appropriate when inexpensive expansibility is made possible because of earlier, costly construction, since 'the existing customers bear the cost of the earlier, more costly construction in their rates, [and] incremental pricing could result in the new customers receiving a subsidy from the existing customers because the new customers would not face the full cost of the construction that makes their new service possible.' In such cases, rolled-in rates are indicated.<sup>86</sup>

The Commission continued its analysis with reference to the facts of this case.

In this case, the fact that the expected revenues of the proposed expansion will exceed its costs reflects the expansion's reliance on earlier, costly construction undertaken in the 1970s to establish the Elba Island terminal and since July 2001 to refurbish facilities and reestablish service at the dormant terminal. Consequently, employing an incremental rate for expansion service in this case would effectively oblige the existing customer to subsidize the expansion customer, a result that would conflict with our Policy Statement on New Facilities.<sup>87</sup>

This approach to determining whether the existing customers (paying cost-of-service based rates) of an LNG terminal would effectively be subsidizing the expansion customer, makes it very difficult for the Commission to grant authority to charge market-based rates for only the expansion capacity of a project. It appears that this approach would always require a comparison of the rates to be charged the expansion customers and the resulting projected revenues with the cost-of-service associated with the expansion project. Even if the revenues projected to be produced by the market-based rate could be compared with the expansion cost-of-service, the question remains of what conclusion should be drawn from that comparison. If the market-based rate produces revenues in excess of the cost-of-service, it would appear that the expansion project should be rolled-in to prevent the customers of the existing project from being required to subsidize the expansion customer.

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85. *Southern LNG, Inc.*, 103 F.E.R.C. ¶ 61,029 (2003).

86. *Id.* (footnotes omitted).

87. 103 F.E.R.C. ¶ 61,029, at 61,164 (footnotes omitted).

Obviously, if the Commission takes this approach to analyzing the potential impact of a proposed expansion on the existing customers of an LNG terminal, who are paying cost based rates, it could not grant, as it did to Hackberry, waiver of its regulations requiring the filing of cost-of-service and estimated revenue information.

The Elba Island Terminal was already operated as an open access facility. As noted above, Southern LNG conducted an open season for the expansion capacity prior to filing the application with the FERC. The Commission, therefore, was not required to address the open access issue.<sup>88</sup>

In December 2002, the Commission announced major policy changes with regard to LNG terminals in an order making a preliminary determination on the non-environmental issues in the *Hackberry LNG* proceeding.<sup>89</sup> The Commission announced its preliminary determination that Hackberry LNG Terminal, LLC, (Hackberry) would be authorized under section 3 of the NGA to provide terminal services without being required to offer open access service or maintain a tariff or rate schedule.<sup>90</sup> The Commission determined that under the circumstances of this project, the LNG terminal should be treated as any other source of natural gas supply.<sup>91</sup> In effect, the Commission decided to apply its full regulatory requirements and policies only when the re-vaporized natural gas leaves the LNG terminal and enters the interstate pipeline facilities.<sup>92</sup> Under the Commission's prior policy, its regulation would have applied at the point where the LNG leaves the tankers and enters the LNG terminal facilities.<sup>93</sup>

The Commission views its new policy as encouraging more development of LNG facilities by removing requirements that the industry had identified as regulatory impediments. The Commission will treat the proposed LNG terminals as being similar to natural gas production facilities and will rely on the sales of natural gas from them as being made in a deregulated, competitive commodity market in competition with other sales of natural gas.<sup>94</sup>

Hackberry filed an application seeking authorization to site, construct, and operate an LNG terminal at Hackberry, Louisiana, for the purpose of providing open access LNG terminal services to shippers importing LNG.<sup>95</sup> Hackberry

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88. *Id.* at 61,739.

89. *Hackberry LNG Terminal, L.L.C.*, 101 F.E.R.C. ¶ 61,294 (2002). The Commission built on the policy change adopted in the *Southern LNG Order*.

90. *Id.* at 62,176.

91. 101 F.E.R.C. ¶ 61,294, at 62,186.

92. This is the regulatory policy advocated by Commissioner Brooke in 1972. *Columbia LNG Corp.*, 47 F.P.C. 1024, 1650 (1972).

93. *Id.*

94. 101 F.E.R.C. ¶ 61,294, at 62,176.

95. Notice of Application, *Hackberry LNG Terminal, L.L.C.*, Nos. CP02-374-000, CP02-376-000, CP02-377-000, CP02-378-000 (June 26, 2002) [hereinafter *Hackberry Application*]. Hackberry LNG sought authorization to construct and operate:

- An LNG unloading slip with two berths, each equipped with three liquid unloading arms and one vapor return/delivery arm;
- Three LNG storage tanks each with a usable volume of 1,006,000 barrels;
- Nine in-tank pumps, each sized for 250 MMcf/d;
- Ten second stage pumps, each sized for 188 MMcf/d;
- Twelve submerged combustion vaporizers, each sized for 150 MMcf/d;
- A boil-off gas compressor and condensing system;
- An LNG circulation system to maintain the facility at the

sought authorization to provide the LNG terminal services on a firm and interruptible basis under Part 284 of the Commission's regulation.<sup>96</sup> Authorization was requested to offer the terminal services at market-based rates under the Commission's Alternative Rate Policy Statement.<sup>97</sup> A market power analysis was submitted in support of the request for market-based rates. Hackberry also stated that it would assume the economic risk associated with the LNG terminal.

In *Hackberry LNG*, the Commission explicitly stated that it was changing its existing policy and adopting "a new policy for LNG import facilities . . ."<sup>98</sup>

"[W]e believe that a change in policy is warranted and that a different form of regulation will better serve the public interest than the traditional open-access approach that we have applied previously to LNG import facilities."<sup>99</sup>

In addition to adopting the policy that an LNG terminal would not be required to offer open access service, the Commission also granted the requested authority to sell terminal services at market-based rates, and not require Hackberry to maintain a tariff or rate schedule for the terminal services.<sup>100</sup>

Hackberry was requesting authority to offer the terminal service at market-based rates and sought waiver of the requirement in section 157.6(b)(8) of the Commission's regulations<sup>101</sup> to provide detailed cost-of-service information and the requirement to file related exhibits regarding cost-of-service and estimated revenues.<sup>102</sup> The Commission granted the waivers on the grounds that the LNG terminal service would be provided under market-based rates.<sup>103</sup> Since the services were to be provided under section 3, at rates and under terms and conditions agreed upon by Hackberry and the customer, the Commission concluded that cost-of-service and estimated revenue information were not needed.<sup>104</sup>

At the same time the Commission made clear that it was not relinquishing any of its jurisdiction:

Our decision to adopt a less intrusive degree of regulation here does not affect our

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appropriate temperature when LNG tankers are not being unloaded; - An [sic] natural gas liquid recovery unit; - Utilities, buildings, and service facilities; and - A 35.4-mile, 36-inch diameter natural gas send-out pipeline to provide open-access transportation services.

*Id.* at 2-3. Hackberry also requested authorization to engage in certain activities and transactions under Subpart F of Part 157 of the Commission's regulations.

96. 18 C.F.R. pt. 284 (2002).

97. *Alternatives to Traditional Cost-of-Service Ratemaking for Natural Gas Pipelines and Regulation of Negotiated Transp. Servs. of Natural Gas Pipelines*, 74 F.E.R.C. ¶ 61,076 (1996), *reh'g and clarification denied*, 75 F.E.R.C. ¶ 61,024 (1996), *reh'g denied*, 75 F.E.R.C. ¶ 61,066 (1996), *petition for review denied*, Burlington Res. Oil & Gas Co. v. FERC 172 F.3d 918 (D.C. Cir. 1998).

98. *Hackberry LNG Terminal, L.L.C.*, 101 F.E.R.C. ¶ 61,294, 62,179 (2002).

99. *Id.*

100. 101 F.E.R.C. ¶ 61,294, at 62,179. This authorization was conditioned on Hackberry filing with the Commission the contract with its affiliated terminalling service customer prior to the commencement of construction of the LNG terminal facility.

101. 18 C.F.R. § 157.6(b)(8) (2003).

102. 18 C.F.R. § 157.14 (2003).

103. 101 F.E.R.C. ¶ 61,294, at 62,181.

104. *Hackberry LNG Terminal, L.L.C.*, 101 F.E.R.C. ¶ 61,294, 62,181 (2002).

jurisdiction in this case. Section 3 of the Natural Gas Act reserves for the Commission the ability to 'make such supplemental order in the premises as it may find necessary or appropriate.' We will use such authority in the future if we receive complaints of undue discrimination or other anti-competitive behavior.<sup>105</sup>

The Commission identified several factors as the basis for its decision to adopt a new policy with regard to LNG terminals:

First, we note that the prices, terms, and conditions of service for *first sales of natural gas*, including sales of imported LNG, *have been deregulated by statute*. The sale of natural gas from these facilities would occur at, or downstream of, the tailgate of the LNG plant, where re-vaporized LNG would be delivered to Hackberry's pipeline. *These sales of natural gas would be made in competition with other sales of natural gas produced in the Gulf Coast region in a deregulated competitive commodity market*. The *terminal's costs* would be part of the costs of producing and delivering LNG to the Gulf Coast natural gas marketplace, and *would be recovered only through the sales of natural gas* in these or downstream markets. This approach may *provide incentives to develop additional energy infrastructure to increase much-needed supply* into the United States, while at the same time ensuring competitive commodity prices and an open-access interstate pipeline grid. Given these facts, and because the *entire risk of the project will be borne by Hackberry*, there is no regulatory need to require a tariff and rate schedule as a condition of approving the LNG terminal under [s]ection 3.<sup>106</sup>

Abiding by a fundamental guidepost of economic regulation, the Commission considered whether the protection of customers required regulation of the rates, terms, and conditions of the LNG terminal service, and concluded that it did not.<sup>107</sup> There were no factors present requiring that the re-vaporized LNG from the Hackberry facility be treated differently than natural gas from any other source being sold in a deregulated competitive commodity market.

The Commission was concerned that its policy regarding LNG terminals facilitate, not impede, the development of additional energy infrastructure to provide the increase in natural gas supply needed by the U.S. market.<sup>108</sup> Implicit in this policy is the recognition that, absent an adequate supply of natural gas, a deregulated competitive commodity market would not produce politically acceptable natural gas prices.

In reaching its conclusions the Commission relied on the comments of industry representatives made at a public conference on policy issues facing the natural gas industry. The Commission held the conference less than two months prior to issuance of *Hackberry LNG*.<sup>109</sup> The major focus of the LNG industry representatives at the conference was to urge the Commission not to impose its open access requirements on LNG terminals.<sup>110</sup>

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105. *Id.* at 62,179.

106. 101 F.E.R.C. ¶ 61,294, at 62,179-80 (footnotes omitted) (emphasis added).

107. *Id.* at 62,179-80.

108. 101 F.E.R.C. ¶ 61,294, at 62,179-80.

109. *Id.* at 62,180.

110. The stated purpose of the conference, which was held on October 25, 2002, was to engage in a dialogue with industry participants regarding policy issues facing the natural gas industry and the Commission's regulation of the industry. Notice of Public Conference, *Natural Gas Marketers Conference*, No. PL02-9-000 (Sept. 26, 2002). In the public notice of the conference, the Commission identified four categories of issues it anticipated exploring during the conference. One of the issues was the application of the

In *Hackberry LNG*, the Commission exercised its discretionary authority under section 3 of the NGA and refrained from imposing its open access requirement on onshore LNG facilities. In making this significant change in policy, the Commission noted the recent amendment to the Deepwater Port Act (DWPA)<sup>111</sup> that transferred regulatory authority over LNG facilities constructed offshore in federal waters to the U.S. Department of Transportation (DOT). The DWPA prohibited the DOT from imposing an open access requirement on deepwater port natural gas facilities.<sup>112</sup> The Commission concluded that onshore LNG facilities and offshore facilities should be at "competitive parity."<sup>113</sup> The Commission determined that this would be appropriate because Hackberry would solely bear the financial risk of a project that would introduce new natural gas supplies into the market, and no costs or risks would be imposed on captive customers.<sup>114</sup>

The Commission concluded that the new policy was consistent with its fundamental mission. "[W]e retain our primary regulatory focus on the protection of customers of the wholesale natural gas market within the United States. The public interest is served through encouraging gas-on-gas competition by introducing new imported supplies of natural gas which will be accessible to all willing purchasers."<sup>115</sup>

Sempra Energy LNG Corp. (Sempra Energy), in May, 2003, informed the Commission that it had acquired Hackberry from Dynegy Midstream Services,

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Commission's open access policies to LNG import facilities. *Id.*

At the conference, representatives of companies involved in the development of LNG terminals generally urged the Commission to update its regulatory policies applicable to LNG terminal, which were established more than thirty years ago. The Commission was urged to view an LNG terminal as another source of natural gas supply to a competitive market. It was argued that application of the Commission's open access requirement would significantly discourage investment in LNG terminals with the result that less LNG would be available in the U.S. natural gas market. The large investments and long period of time required to develop LNG projects was highlighted. The Commission was told that financing an integrated LNG project requires assured access to the natural gas market, and that this requires assured access to LNG terminal capacity. According to the representatives, access to LNG terminal capacity cannot be assured if the terminal is subject to an open access requirement, including the requirement to conduct an open season. Industry representatives argued that the uncertainties resulting from an open season requirement would impede rational project planning and could undermine the economies of scale, which are so important to the viability of an LNG project. In summary, it was argued that an open access requirement is not needed to achieve the Commission's policy objectives, and that it would seriously discourage investment in LNG projects. Participants in the conference argued that investors in a "full-supply-chain" LNG project needed assured access to terminal capacity, which is not present under open-season bidding. The Commission pointed to this need for assured access to terminal capacity when adopting its new policy in *Hackberry LNG*. *Hackberry LNG Terminal, L.L.C.*, 101 F.E.R.C. ¶ 61, 294, 62,180 (2002).

111. 33 U.S.C. §§ 1501-24 (2003).

112. *Id.*

113. 101 F.E.R.C. ¶ 61, 294, at 62,180.

114. *Id.*

115. 101 F.E.R.C. ¶ 61,294, at 62,180. This Hackberry order also (i) made a preliminary determination that a certificate of public convenience and necessity under section 7(c) of the NGA should be issued to Hackberry authorizing construction and operation of the proposed pipeline; (ii) made a preliminary determination that a blanket transportation certificate for the transportation of natural gas on the proposed pipeline should be issued to Hackberry under Subpart G of Part 284 of the Commission's regulations; and (iii) made a preliminary determination to issue a blanket construction certificate to Hackberry for the proposed pipeline under Subpart F of Part 157 of the Commission's regulations. *Id.*

LP, and had changed the name of the project to Cameron LNG, LLC, (Cameron).<sup>116</sup> As a result, the order issued by the Commission granting authorizations and certificates, and granting rehearing on two issues, refers to the project as Cameron.<sup>117</sup>

Cameron sought rehearing of the requirement that the contract for terminal service be filed with the Commission prior to the commencement of construction of the LNG terminal.<sup>118</sup> Cameron argued that such a requirement should only apply to affiliate transactions.<sup>119</sup> The Commission granted rehearing and eliminated the contract-filing requirement.<sup>120</sup> The Commission, however, did not focus on the absence of an affiliate relationship. Instead, the Commission eliminated the requirement that the contract be filed on the ground the siting, construction, and operation of the project was being authorized under section 3 of the NGA, rather than under section 7.<sup>121</sup> The Commission reasoned that the standard under section 3 required only a showing that the project is “not inconsistent” with the public interest, while section 7 required a finding that a proposed project is “required by the . . . public convenience and necessity.”<sup>122</sup> The Commission found that the requirement to file executed contracts, as evidence of the need for a project, while appropriate under section 7, should not be a requirement for authorization under section 3.<sup>123</sup> The Commission also noted that an authorization under section 3 does not include the power of eminent domain, unlike an authorization under section 7.<sup>124</sup>

The reasoning adopted by the Commission in eliminating the contract filing requirement for Cameron indicated that, in future LNG terminal projects authorized under section 3, it will not be necessary for terminal service contracts to be filed with the Commission even when the contract is with an affiliate.

The Commission also granted rehearing and extended the deadline from three to five years for completing construction and having the facilities available for service.<sup>125</sup> This accepted the view that construction of an LNG terminal will take, at a minimum, thirty-seven months.<sup>126</sup>

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116. DONALD E. FELSINGER, SEMpra ENERGY, SEMpra ENERGY WILL BECOME A MAJOR IMPORTER OF LNG, at [http://www.sempra.com/perspective\\_1Q2003\\_felsinger.htm](http://www.sempra.com/perspective_1Q2003_felsinger.htm) (last visited Oct. 13, 2003).

117. *Cameron LNG, L.L.C.*, 104 F.E.R.C. ¶ 61,269 (2003).

118. *Id.* at 61,887.

119. 104 F.E.R.C. ¶ 61,269, at 61,887. Hackberry had executed a contract with an affiliate, Dynege Marketing & Trade, for 100% of the project's terminalling capacity. After the sale of the project to Cameron, Dynege Marketing withdrew from the project. *Id.* at 61,896.

120. 104 F.E.R.C. ¶ 61,269, at 61,888.

121. *Id.* at 61,887.

122. 104 F.E.R.C. ¶ 61,269, at 61,887-88.

123. *Cameron LNG, L.L.C.*, 104 F.E.R.C. ¶ 61,269 (2003). This difference in the required showing under section 3 was not noted by the Commission when it made the preliminary determination to grant authorization under section 3 to Southern LNG Inc. In that order, the Commission stated: “Our assessment of the proposal under the public interest standard of section 3 replicates the criteria we would apply under the substantially equivalent public convenience and necessity standard of section 7 . . . .” *Southern LNG, Inc.* 101 F.E.R.C. ¶ 61,187, 61,738 (2002).

124. 104 F.E.R.C. ¶ 61,269, at 61,888.

125. *Id.*

126. 104 F.E.R.C. ¶ 61,269, at 61,887.

In connection with the AES Ocean Express project, the Commission issued an order addressing proposed pipeline facilities that are to be part of an LNG project in which the LNG terminal will not be subject to the Commission's jurisdiction.<sup>127</sup> The order made a preliminary determination, on non-environmental issues, that it would be in the public interest to grant a certificate of public convenience and necessity to AES Ocean Express, LLC, (Ocean Express) authorizing construction and operation of approximately fifty-four miles of pipeline. The order determined the purpose of the pipeline would be to bring natural gas from an offshore receipt point at the boundary between the Exclusive Economic Zone (EEZ) of the United States and the Commonwealth of the Bahamas to onshore delivery points in Florida.<sup>128</sup> Ocean Express stated that as a result of an open season, it had entered into a precedent agreement for firm transportation service for approximately 95% of the new pipeline's capacity for a twenty-five year term. Ocean Express proposed to provide the transportation services under rate schedules filed with the FERC under traditional cost-of-service rates.<sup>129</sup>

The portion of the proposed project subject to the Bahamian jurisdiction includes a new LNG terminal and a pipeline from the tailgate of the terminal to an underwater interconnection with the proposed Ocean Express Pipeline. AES Ocean LNG, Ltd., a Bahamian affiliate of Ocean Express, would be responsible for the LNG terminal and the pipeline to the edge of the Bahamian EEZ.

The Commission analyzed Ocean Express's proposed jurisdictional pipeline facilities under the criteria established in the Commission's Policy Statement on New Facilities. The Commission concluded that the public benefits to be achieved should outweigh any residual adverse effects of the project.<sup>130</sup> The Commission also reached a preliminary determination that the pipeline project proposed by Ocean Express promotes the objectives of the EPA<sup>131</sup> and is consistent with the public interest.<sup>132</sup> Based on this finding, the Commission conditionally granted Ocean Express's request for authorization under sections 3 and 7 of the NGA and a Presidential Permit to site, construct, connect, operate, and maintain facilities to import natural gas.<sup>133</sup>

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127. *AES Ocean Express, L.L.C.*, 103 F.E.R.C. ¶ 61,030 (2003).

128. *Id.* The certificate application filed by Ocean Express also requested: (i) a blanket construction and abandonment certificate pursuant to section 7(c) of the NGA and Subpart F of Part 157 of the Commission's regulations; (ii) a blanket transportation certificate authorization under section 7 of the NGA and Subpart G of Part 284 of the Commission's regulations; and (iii) authorization under section 3 of the NGA and a Presidential Permit to site, construct, connect, operate, and maintain its proposed offshore pipeline facilities and import natural gas. The Commission made a preliminary determination subject to certain conditions that the requested authorizations should be granted. 103 F.E.R.C. ¶ 61,030, at 61,139.

129. *Id.* at 61,140.

130. 103 F.E.R.C. ¶ 61,030, at 64,142.

131. 15 U.S.C. § 717b (2003).

132. *AES Ocean Express, L.L.C.*, 103 F.E.R.C. ¶ 61,030, 61,142 (2003).

133. *Id.*

## VI. NATURAL GAS DEEPWATER PORTS

The Maritime Transportation Security Act of 2002 (MTSA),<sup>134</sup> among other things, amended the DWPA<sup>135</sup> to make it applicable, for the first time, to natural gas deepwater ports. This was done by expanding the definition of “deepwater port” to include terminals and certain other facilities for handling natural gas.<sup>136</sup> The amendments to the DWPA also transferred to the DOT jurisdiction over LNG facilities within the definition of deepwater ports, to the exclusion of the FERC.<sup>137</sup>

Since a deepwater port is required to be licensed, an entity proposing to construct and operate a natural gas deepwater port must submit an application requesting the authorization. The Secretary of Transportation has delegated the processing of deepwater port applications to the United States Coast Guard (Coast Guard) and the Maritime Administration (MARAD).

Unlike an application filed with the FERC under section 3 or 7 of the NGA, requesting authority to construct an LNG terminal, the DWPA specifies a timeline for the processing of an application to construct a deepwater port. The DWPA allows the Coast Guard and the MARAD twenty-one days to determine whether it contains all required information.<sup>138</sup> If the application is found to be complete, the Coast Guard and the MARAD must publish a notice of the application in the Federal Register within five days.<sup>139</sup> At least one public hearing must be held within 240 days of the date the notice is published.<sup>140</sup> Approval or denial of the application must occur within ninety days following the last public hearing.<sup>141</sup> Thus, absent requests for additional information to complete the application or extensive public hearings, an application should be

134. Pub. L. No. 107-295, 116 Stat. 2064 (2002) (codified as amended at 33 U.S.C. §§ 1501-1524 (2003)).

135. 33 U.S.C. §§ 1501-1524 (2003).

136. As amended the definition of deepwater port states:

[D]eepwater port' . . . means any fixed or floating manmade structure other than a vessel, or any group of such structures, that are located beyond State seaward boundaries and that are used or intended for use as a port or terminal for the transportation, storage, or further handling of oil or natural gas for transportation to any State, except as otherwise provided in section 23, and for other uses not inconsistent with the purposes of this Act, including transportation of oil or natural gas from the United States outer continental shelf . . . .”

33 U.S.C. § 1502(9)(A) (2003). In addition, a new definition of natural gas was added to the DWPA, which states that “‘natural gas’ means either natural gas unmixed, or any mixture of natural or artificial gas, including compressed or liquefied natural gas . . . .” 33 U.S.C. § 1502(13) (2003).

137. Section 8 of the DWPA was amended by adding a new subsection (e) that provides:

Jurisdiction. Notwithstanding any provision of the Natural Gas Act (15 U.S.C. 717[ ]), any regulation or rule issued thereunder, or section 19 as it pertains to such Act, this Act shall apply with respect to the licensing, siting, construction, or operation of a deepwater natural gas port or the acceptance, transport, storage, regasification, or conveyance of natural gas at or through a deepwater port, to the exclusion of the Natural Gas Act or any regulation or rule issued thereunder.

33 U.S.C. § 1507(e) (2003).

138. 33 U.S.C. § 1504(c) (2003).

139. *Id.*

140. At least one public hearing must be held in each adjacent coastal state. 33 U.S.C. § 1508 (2003).

141. 33 U.S.C. § 1504(i) (2003).

approved or denied within approximately one year of the date filed.<sup>142</sup>

The MTSA also amended the DWPA to explicitly provide that deepwater ports for natural gas may not be subject to an open access requirement.<sup>143</sup> At that time the policy decision reflected in this amendment stood in sharp contrast with the policy of the FERC to apply its open access requirement to LNG terminals. Prior to the *Hackberry Order*,<sup>144</sup> it appeared that this difference in policies would significantly favor deepwater port LNG facilities over onshore LNG facilities, which are subject to FERC jurisdiction and its open access requirement.

## VII. CONCLUSIONS

One of the focal points of public policy discussion is the adequacy of the energy infrastructure and energy supply to satisfy the growing demand for energy in the U.S. Economic growth depends on an adequate energy supply at reasonable prices. In recent years natural gas has become identified as the fuel of choice primarily because it is more environmentally friendly than other available fuel options.

Present projections of domestic and Canadian natural gas production, when compared to demand projections, indicate the need for additional natural gas supplies. As a result, imported LNG could quickly become a more significant component of the U.S. natural gas supply.

In other regions of the world, particularly in Asia, LNG has been and is expected to continue to be the primary source of natural gas. The future of LNG as part of the U.S. natural gas supply must be viewed in the context of the global market for LNG.

Existing LNG facilities in the U.S. will not be adequate to provide the quantities of LNG projected to be needed to satisfy future demand. Expanding existing LNG terminals, or constructing new terminals, will involve investments of hundreds of millions of dollars for each facility.

The prospect of purchasing the LNG in a global LNG market and selling the regasified natural gas into a competitive market in the U.S. raises a number of business issues and risks. Among these is the uncertainty of whether the future price of natural gas in a competitive market will be high enough to

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142. Procedures applicable to an application are found at 33 U.S.C. § 1504, and the applicable regulations are at 33 C.F.R. pt. 148 (2003).

143. Section 1507 of the DWPA was amended by adding a new subsection (d), which states:

Managed access. Subsections (a) and (b) shall not apply to deepwater ports for natural gas. A licensee of a deepwater port for natural gas, or an affiliate thereof, may exclusively utilize the entire capacity of the deepwater port and storage facilities for the acceptance, transport, storage, regasification, or conveyance of natural gas produced, processed, marketed, or otherwise obtained by agreement by such licensee or its affiliates. The licensee may make unused capacity of the deepwater port and storage facilities available to other persons, pursuant to reasonable terms and conditions imposed by the licensee, if such use does not otherwise interfere in any way with the acceptance, transport, storage, regasification, or conveyance of natural gas produced, processed, marketed, or otherwise obtained by agreement by such licensee or its affiliates.

33 U.S.C. § 1507(d) (2003).

144. *Hackberry LNG Terminal, L.L.C.*, 101 F.E.R.C. ¶ 61,294 (2002).

support the financial viability of new LNG capacity.

In the regulatory area, policies are required that will attract and facilitate the needed investment in additional LNG facilities. The new policies adopted by the FERC, with regard to LNG terminals, are intended to remove certain impediments to attracting the needed investment. The question remains whether the current regulatory environment can attract the large investments needed.

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