NOTES

STATE REGULATION OF LIQUEFIED NATURAL GAS FACILITIES SITING: A CASE FOR FEDERAL PREEMPTION?

I
INTRODUCTION

A. Background

In recent years a number of states have enacted restrictions on the siting of facilities for the importation of liquefied natural gas (LNG) within their borders. These restrictions have been challenged by gas distribution companies and by agencies of the federal government on the grounds that they inhibit interstate commerce and are preempted by federal regulations covering natural gas facilities. The states insist that no such conflicts exist.

Natural gas supplies about one-third of the United States' energy needs.[1] Recurring shortages of domestically produced natural gas have prompted the gas industry to seek new sources of natural gas, including LNG imported from overseas.[2] LNG is natural gas chilled below its condensation point to form a compact and easily transportable liquid.[3] Imported LNG promises to offset the

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1. GENERAL ACCOUNTING OFFICE, UNITED STATES CONGRESS, REPORT TO THE CONGRESS BY THE COMPTROLLER GENERAL OF THE UNITED STATES, NATURAL GAS SHORTAGE: THE ROLE OF IMPORTED LIQUEFIED NATURAL GAS 1 (1975) [hereinafter cited as 1975 GAO REPORT].

2. *See* OFFICE OF TECHNOLOGY ASSESSMENT, UNITED STATES CONGRESS, TRANSPORTATION OF LIQUEFIED NATURAL GAS 3 (1977) [hereinafter cited as OTA REPORT]; 1975 GAO REPORT, *supra* note 1, at 2, 15-16, 22-23.

In addition to LNG, gas distributors presently utilize synthetic natural gas (SNG) and liquefied propane gas (LPG) as alternate sources of natural gas. There are also a number of fuel alternatives to both natural and synthetic gas: oil from shale; coal; and geothermal, nuclear, wind, and solar energy. *See* 1975 GAO REPORT, *supra* note 1, at 2. Secretary Schlesinger of the Department of Energy recently indicated that the Carter Administration regards imported LNG as a less preferable fuel alternative than Alaskan natural gas, Alaskan LNG, Canadian and Mexican natural gas, SNG, and LPG. Remarks by James R. Schlesinger, Secretary of the Department of Energy, before the National Association of Petroleum Analysts and the Oil Analysts Group of New York (Jan. 9, 1979).

3. When chilled to minus 259 degrees Fahrenheit, natural gas condenses to 1/600th its volume at atmospheric pressure. In liquefied form, natural gas can be stored in containers or transported by tanker, barge, or rail. *See* BUREAU OF NATURAL GAS, FEDERAL POWER COMMISSION, STAFF REPORT NO. 2, NATIONAL GAS SUPPLY AND DEMAND 1971-1990 at 64 (1972). Upon warming, LNG "boils," or "regasifies," and can be introduced directly into a pipeline system. For a more detailed description of the physical properties of LNG, see GENERAL ACCOUNTING OFFICE, UNITED STATES CONGRESS, REPORT TO THE CONGRESS BY THE COMPTROLLER GENERAL, LIQUEFIED ENERGY GASES SAFETY, ch. 2 (1978) [hereinafter cited as 1978 GAO REPORT].

decline in domestic natural gas reserves by supplying between ten and fifteen percent of the nation's gas consumption by the mid-1980's.[4]

Fulfillment of LNG's promise, however, entails a high cost. LNG is a hazardous, highly flammable fuel substance, requiring the most stringent safety measures.[5] When spilled on land or water, LNG expands as it warms to air temperature, forming a dense cloud that is heavier than air.[6] A low-lying flammable cloud of LNG from a large spill could spread for miles.[7] It would ignite instantly on contact with a flame or spark, causing a vast slow-burning fire.[8] If a vapor cloud ignited in an inhabited area, people and property would be incinerated, causing incalculable tragedy.[9]

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4. OTA REPORT, *supra* note 2, at 5. Officials of the Federal Energy Administration of the Department of Energy predict that LNG importation will increase from 19 million cubic meters in 1980 to a maximum of 142 million cubic meters in 1990. 1978 GAO REPORT, *supra* note 3, ch. 15, at 1.

5. Safety hazards, however, are not the only matters at controversy in regard to LNG importation. LNG projects are highly capital intensive; facilities costing billions of dollars must be constructed not only in the United States, but also abroad, often in politically unstable countries. Both the balance of payments and national security are therefore affected by major importations of LNG. For an extensive discussion of considerations affecting the reliability of Algerian supplies, see Distrigas Corp., 47 F.P.C. 752 (1972). *See also* 1975 GAO REPORT, *supra* note 1, at 29.

Imported LNG will be considerably more costly for consumers than domestic supplies. *See* Tenneco Atlantic Pipeline Co., No. CP77-100 at 5 (FPC, Nov. 2, 1977) (initial decision on importation of Algerian liquefied natural gas). In December 1978, the Department of Energy disapproved two major LNG projects partly on the grounds that the pricing scheme for the LNG was inappropriate and partly on grounds that the applicant failed to demonstrate the need for the LNG. Tenneco Atlantic Pipeline Corp., No. (DOE/ERA, Dec. 18, 1978) (Opinion No. 3); El Paso Eastern, No. (DOE/ERA, Dec. 21, 1978) (Opinion No. 4).

6. 1978 GAO REPORT, *supra* note 3, ch. 2, at 3.

7. It has been estimated that if even one-fifth the LNG contained in one tanker were to spill onto the water, the resulting vapor cloud could spread for up to 50 miles and remain flammable. *See Liquefied Energy Gases: Oversight Hearing Before the Senate Committee on Commerce, Science, and Transportation,* 95th Cong., 2d Sess. pt. I, at 2 (1978) [hereinafter cited as *Oversight Hearing*]. Estimates of flammable cloud dispersion distances vary, however, ranging from 0.75 miles to 50.3 miles. *See* 1978 GAO REPORT, *supra* note 3, ch. 12, at 11.

8. *See Oversight Hearing*, *supra* note 7, pt. 1, at 2.

9. *Id. See* Greenwald, *LNG Carrier Safety: A Guide to the System of Federal Regulation,* 9 J. MAR. L. & COM. 155, 160 (1978); Weinberg, *Cargo of Fire: A Call for Stricter Regulation of Liquefied Natural Gas Shipment and Storage*, 4 FORDHAM URB. L.J. 495, 495 (1976); Trunkline LNG Co., No. 74-138 at 102 (FPC, July 1975) (Draft Environmental Impact Statement). There are three ways in which LNG may harm human beings: (1) burning or exposure to heat radiated by a flaming gas-laden cloud; (2) freezing burns similar to frostbite suffered from direct contact with the extremely cold LNG; and (3) suffocation in an LNG cloud in which more than 50% of the oxygen normally present in the air was displaced. *See* P. SWAN, LEGAL ASPECTS OF THE OCEAN CARRIAGE AND RECEIPT OF LIQUEFIED NATURAL GAS 61 (1977) (Ocean Resources Law Program, Oregon State University; Publication no. ORESV-T-77-001). Experts disagree over the probabilities of projected disaster scenarios. A study done by the applicant for a proposed LNG terminal at Los Angeles concluded that persons within five-eighths of a mile of the terminal would have only 1/300ths the chance of being killed by an LNG fire as by an ordinary fire. N.Y. Times, Oct. 7, 1976, at 1, col. 5. On the other hand, Congressman John Murphy of Staten Island, New York, testified before the House Subcommittee on Energy and Power that Bureau of Mines calculations indicate that it is likely that persons one and one half miles from an ignited LNG spill on water would die from the radiant heat. N.Y. Times, Feb. 23, 1978, § 2, at 3, col. 1. General Accounting

Unlike LNG's benefits, which are shared by all, its public safety costs would be borne disproportionately by residents of the state in which LNG facilities are sited.[10] Coastal states are most affected by the siting of LNG importation-related facilities. Imported LNG must be transported by supertanker from producing countries.[11] LNG importers therefore typically locate LNG receiving terminals, regasification plants, and storage facilities at the harbors of coastal states, often near large cities.[12] When transported through crowded harbors and stored near densely populated urban areas, LNG exposes thousands of people to the threat of catastrophic fires.

The danger of importing LNG is exacerbated by the newness of the technology associated with the transportation and storage of large quantities of LNG and by the complexity of the process of importing it. LNG has been imported to the United States in large quantities only since the early 1970's,[13] but for forty years smaller quantities of domestically produced natural gas have been stored in liquefied form in "peak shaving plants," where excess pipeline gas is stored for peak-use periods.[14] Two disasters involving LNG storage tanks located near metropolitan areas have occurred since the natural gas industry began to utilize LNG. The first, in 1944, involved a peak shaving plant in Cleveland, Ohio. When the Cleveland facility exploded, 133 persons were killed, 225 were wounded, and property damages amounted to $7 million.[15] The Cleveland disaster virtually halted the use of LNG for almost twenty years.[16] More recently, in 1974, an empty LNG storage tank among the LNG facilities located on Staten Island erupted into fire when flammable methane that had seeped into the lining of the tank exploded, causing the roof of the tank to collapse. Forty workers who were repairing the tank died in the fire.[17]

Office officials assert that no existing firefighting equipment could extinguish a major LNG fire. 1978 GAO REPORT, *supra* note 3, ch. 20, at 20.

10. Siting facilities on the coastlines would bring LNG to areas where it is most needed and where ports are sufficiently deep to accommodate the massive LNG tankers. 1978 GAO REPORT, *supra* note 3, ch. 20, at 20. *See also* 1975 GAO REPORT, *supra* note 1, at 28.

11. The principal exporters of LNG include Algeria and Indonesia. OTA REPORT, *supra* note 2, at 5. Potential suppliers include Iran, Nigeria, and the Soviet Union. *Id.* at 6.

12. SPECIAL SUBCOMMITTEE ON INVESTIGATIONS OF THE HOUSE COMMITTEE ON INTERSTATE COMMERCE, 93d Cong., 2d Sess., LEGISLATIVE ISSUES RELATING TO THE SAFETY OF LNG STORAGE 2 (Comm. Print 1974) [hereinafter cited as LEGISLATIVE ISSUES].

13. The first major LNG project involving relatively large volumes of LNG and long term importation began operating in 1971. *See* Distrigas Corp. v. FPC, 495 F.2d 1057, 1060 (D.C. Cir. 1974). Earlier importations of smaller amounts of LNG for shorter periods began in the early 1960's when LNG was imported to the United States from Canada. *See* Dungan, *Jurisdiction of the Federal Power Commission Over Importation of Liquefied Natural Gas*, 4 NAT. RESOURCES L. 276, 286 (1971); Transcontinental Gas Pipeline Corp., 30 F.P.C. 38 (1963).

14. *See* OTA REPORT, *supra* note 2, at 8-9; *Oversight Hearing*, *supra* note 7, pt. 1, at 100 (statement of John T. McKenna). There are currently over 100 operational peak-shaving plants throughout the United States. 1978 GAO REPORT, *supra* note 3, ch. 2, at 3.

15. LEGISLATIVE ISSUES, *supra* note 12, at 2. At the time, cryogenic technology, *i.e.*, the science of extremely cold temperatures, had not been sufficiently perfected to prevent the LNG from cracking a steel storage tank. *See* P. SWAN, *supra* note 9, at 12.

16. 1978 GAO REPORT, *supra* note 3, ch. 2, at 9.

17. LEGISLATIVE ISSUES, *supra* note 12, at 2. *See also* P. SWAN, *supra* note 9, at 12 (detailed description of findings from Bureau of Mines investigation conducted after the accident).

These two incidents constitute the only major blots on LNG's forty year safety record.[18] There is reason to believe, however, that luck, and not any lack of danger in LNG operations, is responsible for the fact that a large-scale LNG disaster has not occurred. Little data has been collected on the safety hazards posed by LNG shipping, regasification, and storage operations because the history of large-scale LNG projects is very brief.[19] Although extensive theoretical risk analyses have been undertaken, the probability of LNG shipping accidents and the risks associated with land spills from ruptured storage tanks cannot be predicted with any accuracy.[20] The bulk of data on LNG risks collected from actual operations has been gleaned from small scale peak shaving plants like the Cleveland facility.[21]

By contrast, currently proposed and approved LNG importation projects involve larger volumes of LNG, requiring larger facilities and more sophisticated technology[22] than do peak shaving plants. For example, a project recently approved to serve California will import enough LNG in two decades to supply over ten percent of current annual California gas consumption and about one percent of annual nationwide consumption.[23] The gas will be liquefied in Indonesia and transported by nine cryogenic tankers to the west coast.[24] There the LNG will be regasified, stored, and ultimately piped to consumers.[25]

Although perhaps the most effective means of eliminating the hazards posed by LNG would be to ban its importation altogether, such an approach is unrealistic in light of the current energy picture.[26] It is generally agreed, because LNG facilities sited in populated areas expose surrounding populations to significant risks, that siting in remote areas is the key to preventing LNG disasters.[27] Non-urban LNG terminals could easily handle all of the LNG projected

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18. Natural gas industry spokepersons assert that aside from the Cleveland disaster in 1944 the industry's safety record has been excellent. *See* N.Y. Times, Apr. 16, 1978, at 1, col. 2. The House Report accompanying the Natural Gas Pipeline Safety Act of 1968, 49 U.S.C. §§ 1671-1686 (1976), however, found the industry's accident record "spotty." H. R. REP. No. 1390, 90th Cong., 2d Sess., *reprinted in* [1968] U.S. CODE CONG. & AD. NEWS 3223, 3232. A number of minor accidents of potentially great significance have occurred. For example, a railroad car carrying LNG derailed in Bronx, New York, in 1976, and another exploded in Waverly, Tennessee, in 1978. *See* N.Y. Times, Apr. 16, 1978, at 1, col. 2. Other accidents are described in *Oversight Hearing*, *supra* note 7, pt. 1, at 4 (statement of Sen. John A. Durkin).

19. *See* note 13 *supra*.

20. *See* OTA REPORT, *supra* note 2, at 60. Officials of the Office of Technology Assessment (OTA) have concluded that predictions of LNG safety cannot accurately be based on the conflicting results of research to date on LNG hazards. *Id.* at 62. OTA officials have recommended that "[f]or this reason, decisions about LNG systems should be made on the basis of nonquantitative approaches which result in prudent siting criteria and strict design, construction, and operation standards." *Id.*

21. *See* text accompanying note 14 *supra*.

22. OTA REPORT, *supra* note 2, at 9.

23. Pac Indonesia, No. 77-001-LNG at 1 (DOE/ERA, Dec. 30, 1977) (Opinion No. 1).

24. *Id.* at 15.

25. *See id.* at 15-16.

26. *See* text accompanying note 2 *supra*.

27. Officials of the General Accounting Office and the Office of Technology Assessment strongly recommend remote siting as a preventive measure. OTA REPORT, *supra* note 2, at 62;

to enter the United States through 1990.[28] The current state of LNG safety regulation, however, gives cause for alarm. Despite the known dangers of LNG, siting of LNG facilities has been permitted in urban areas. For example, the nation's largest LNG import terminal is located at Everett, Massachusetts, on Boston harbor.[29] Applications are pending to import LNG to other populated areas, including Providence, Rhode Island, West Deptford, New Jersey, and Staten Island, New York.[30]

B. Federal Regulation of LNG Siting

Adequate federal regulation of LNG facility siting would prevent siting in places where danger to populations exists.[31] The General Accounting Office (GAO) and the Office of Technology Assessment (OTA), both investigative arms of Congress, recently undertook comprehensive reviews of LNG safety regulation.[32] The reports from both studies concluded that federal regulation of LNG safety and facilities siting is inadequate.[33] In a recent congressional hearing on LNG safety, Senator John A. Durkin of New Hampshire described federal regulation as "a symphony of chaos."[34]

Decisions affecting LNG siting and safety are made in an ad hoc manner, and decision-making authority is fragmented among a number of agencies whose jurisdictions are ill-defined and frequently overlap.[35] The authority for most federal regulation is the Natural Gas Act of 1938[36] (NGA), which was administered by the Federal Power Commission (FPC) and was succeeded recently as the prime administrator of the act by the Federal Energy Regulatory

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1978 GAO REPORT, *supra* note 3, at 21. The Federal Power Commission, in its review of a recent import application, recognized that "[t]here is a clear trend today toward a philosophy that an LNG plant site in less populated areas is superior to one in a more populated area . . . however these terms are defined." Tenneco Atlantic Pipeline Co., No. CP77-100 at 41 (FPC, Nov. 2, 1977) (initial decision on importation and sale of Algerian liquefied natural gas). *See also* Weinberg, *supra* note 9, at 505-06.

28. 1978 GAO REPORT, *supra* note 3, at 21.

29. *Oversight Hearing*, *supra* note 7, pt. 1, at 35 (statement of Sen. Edward M. Kennedy); *id.* at 4 (statement of Sen. John A. Durkin). Two major non-urban import terminals are currently operating in the United States. One is at Cove Point, Maryland; the other at Elba Island, Georgia. Both began receiving LNG in the spring of 1978. *Id.* at 7 (statement of Monte Canfield, Jr.).

30. *See* Weinberg, *supra* note 9, at 504; 1978 GAO REPORT, *supra* note 3, ch. 15, at 3. Most LNG facilities are being proposed for remote areas, however. *Oversight Hearing*, *supra* note 7, pt. 1, at 20.

31. The lack of federal siting policy has been identified as the reason why LNG facilities are located in populated areas. *See, e.g.*, *Oversight Hearing*, *supra* note 7, pt. 1, at 4 (statement of Sen. John A. Durkin).

32. OTA REPORT, *supra* note 2; 1978 GAO REPORT, *supra* note 3.

33. *See* OTA REPORT, *supra* note 2, at vii, 50-57; 1978 GAO REPORT, *supra* note 3, at 35.

34. *Oversight Hearing*, *supra* note 7, pt. 1, at 5 (statement of Sen. John A. Durkin).

35. OTA REPORT, *supra* note 2, at 50-57; 1978 GAO REPORT, *supra* note 3, at 35. Senator John A. Durkin has remarked that regulation of LNG involves "half a dozen agencies all partially involved, all involved [in] a limited sense . . . [N]o one agency has the overall responsibility, and each looks to the other[s] . . . [to minimize the dangers inherent in the transportation and storage of LNG]." *Oversight Hearing*, *supra* note 7, pt. 1, at 5.

36. 15 U.S.C. §§ 717a-w (1976).

Commission (FERC).[37] The Department of Energy, of which the FERC is a part, is regarded as the lead agency in LNG regulation. In its review of applications to import LNG, the FERC passes on sites required in connection with proposed importation projects. Other statutes, however, confer overlapping and conflicting authority over various aspects of LNG regulation affecting siting and safety. There are no clear lines defining the jurisdictional boundaries of each statute. The Natural Gas Pipeline Safety Act of 1968[38] empowers the Office of Pipeline Safety of the Department of Transportation to regulate the safety aspects of construction and operation of all natural gas facilities.[39] The Coast Guard regulates LNG tanker safety under the Ports and Waterways Safety Act of 1972,[40] which potentially grants jurisdiction over LNG terminal safety as well.[41] The Coastal Zone Management Act of 1972[42] grants jurisdiction over LNG facilities siting to the states, with oversight by the Department of Interior.[43]

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37. Under the Department of Energy Reorganization Act of 1977, §§ 301, 402f, PUB. L. No. 95-91, 91 Stat. 565-613 (1977) (to be codified in 42 U.S.C. §§ 7101-7352), effective October 1, 1977, and pursuant to Executive Order No. 12009, 42 Fed. Reg. 46,267 (Sept. 15, 1977), approval by the Secretary of the Department of Energy is required for any importation of natural gas. The Secretary has delegated most of this authority to the Department's Energy Regulatory Administration. Residual authority not delegated to the Energy Regulatory Administration, including power over LNG siting, was delegated to the FPC's successor, the Federal Energy Regulatory Commission, an independent commission within the Department. *See* 42 Fed. Reg. 47,769 (1978).

38. 49 U.S.C. §§ 1671-1684 (1970 & Supp. V 1975).

39. Beginning with the passage of the Natural Gas Pipeline Safety Act in 1968, the FPC and the Office of Pipeline Safety engaged in a much criticized jurisdictional dispute over which agency had final authority on safety matters bearing on the siting of LNG facilities. The disagreement sprang from overlapping provisions of the Natural Gas Act and the Natural Gas Pipeline Safety Act. Under the latter statute, the Office of Pipeline Safety promulgates safety standards applicable to LNG facilities but has no authority over siting. *See* text accompanying notes 184-204 *infra*. Under the former statute, the FPC regulated the siting of LNG facilities. *See* text accompanying notes 95-115 *infra*. The two agencies could not agree on questions left unresolved by the two statutes, such as whether the FPC could deny certification for an LNG facility which it considered unsafe but which had already received safety certification from the Office of Pipeline Safety. *See* LEGISLATIVE ISSUES, *supra* note 12, at 15-16. Following the accident on Staten Island, *see* text accompanying note 17 *supra*, a congressional subcommittee investigating the incident found that although both the Office of Pipeline Safety and the FPC claimed jurisdiction over LNG facilities safety, neither was doing an adequate job, and both were "passing the buck." LEGISLATIVE ISSUES, *supra* note 12, at 17-19. The conflict persists between the Office of Pipeline Safety and the FERC, the successor to the FPC with regard to LNG matters. *See Oversight Hearing*, *supra* note 7, pt. 1, at 5.

40. 33 U.S.C. §§ 1221-1227 (1976).

41. The Ports and Waterways Safety Act empowers the Coast Guard to require safety equipment for "structures" located on land immediately adjacent to United States waters. 33 U.S.C. § 1221(7) (1976). An LNG terminal would probably qualify as such a structure. *See* P. SWAN, *supra* note 9, at 40. The Coast Guard recently circulated proposed regulations which would have covered LNG storage and vaporization facilities. U.S. DEP'T OF TRANSPORTATION, OFFICE OF PIPELINE SAFETY OPERATIONS, LNG FACILITIES, FEDERAL SAFETY STANDARDS, 42 Fed. Reg. 20,776, 20,776-800 (1977). *See also* note 191 *infra*. The Coast Guard indirectly influences site selection through its control of access by LNG tankers to a proposed site. OTA REPORT, *supra* note 2, at 64. Despite this overlapping with FERC regulation, the Coast Guard and the FERC appear to be working cooperatively. *Id.* The Coast Guard has a formal agreement with the Office of Pipeline Safety, which delineates the agencies' respective authority to regulate LNG terminal safety. LEGISLATIVE ISSUES, *supra* note 12, at 7.

42. 16 U.S.C. §§ 1451-64 (1976).

43. *See* text accompanying notes 247-254 *infra*.

As a result of this regulatory chaos, no unified federal policy presently exists with respect to LNG importation project approval or facilities siting. None of the federal agencies with jurisdiction over LNG facilities siting has developed a uniform policy mandating siting in remote areas. The Department of Energy stated its intention to formulate a comprehensive policy for LNG regulation,[44] to be released in July of 1978. No such policy has materialized. The Secretary of the Department recently announced the Department's intention to continue its practice of approving LNG projects on an ad hoc basis, without promulgating formal guidelines.[45] Congress has expressed concern over the situation, but has been slow to rectify it. During the past few years Congress has held hearings on LNG siting, rejecting several bills that would have established uniform siting criteria for LNG facilities.[46]

C. State Regulation of LNG Siting

Alarmed by the glaring gap in federal regulation, the states affected by LNG facilities siting have repeatedly urged the federal government to adopt uniform federal siting standards. In 1976, the attorneys general of New York, New Jersey, Pennsylvania, and Delaware petitioned the FPC to adopt uniform siting guidelines to insure public safety.[47] No action was taken by the FPC or by the Department of Energy, to which the petition was forwarded.[48]

Several state legislatures, including those in California, New York, and Massachusetts, have stepped into this regulatory wasteland by enacting LNG siting statutes of their own. New York's Liquefied Natural and Petroleum Gas Act,[49] for example, mandates siting of LNG facilities in areas remote from population centers.[50] The Massachusetts Energy Facilities Siting Council has promulgated standards governing LNG facilities siting pursuant to its enabling legislation.[51] The Council's siting standards are directed primarily to intrastate LNG storage tanks, over which the federal government has no jurisdiction. Various provisions of the regulations, however, might affect interstate LNG facilities which are regulated by federal agencies.[52] California's LNG Terminal

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44. *See* 42 Fed. Reg. 62,419 (1977).

45. Remarks by James R. Schlesinger, Secretary of the Department of Energy, before the National Association of Petroleum Investment Analysts and the Oil Analysts Group of New York (Jan. 9, 1979).

46. *See, e.g.*, H.R. 11622, 95th Cong., 2d Sess., 124 CONG. REC. H9568 (daily ed. Sept. 12, 1978); *Oversight Hearing*, *supra* note 7.

47. No. RM76-13 (FPC, 1976) (petition for rulemaking). In February 1978, officials from New York, New Jersey, California, and Massachusetts testified that the federal government had failed adequately to protect public safety against the dangers of LNG. N.Y. Times, Feb. 23, 1978, § 2, at 4, col. 3. *See also Oversight Hearing*, *supra* note 7, pt. 1, at 55-56, 58 (statement of Christine Sullivan, Secretary, Massachusetts Consumer Affairs).

48. Telephone conversation with Federal Energy Regulatory Commission Staff (Oct. 26, 1978).

49. Liquefied Natural and Petroleum Gas Act of 1976, N.Y. ENVIR. CONSERV. LAW §§ 23-1701 to 1727 (McKinney Supp. 1978).

50. The New York law allegedly would preclude, for example, the Energy Terminal Services Corporation from operating its storage facilities on Staten Island. *See* Complaint for Declaratory Judgment at 6, Energy Terminal Servs. Corp. v. New York State Dep't of Environmental Conservation, No. 77-C-1869 (E.D.N.Y., filed Sept. 20, 1977).

51. MASS. GEN. LAWS ANN. ch. 164, 69H-69R (West 1976 & Supp. 1979).

52. *See* text accompanying notes 174-180 *infra*.

Siting Act[53] is more stringent than either the New York or Massachusetts law. The California act authorizes only one LNG terminal in California and requires that it be located in a remote area.[54]

D. Challenges to State Siting Laws

Presently the states and the federal government regulate LNG siting concurrently. State entry into the regulatory arena has not gone unnoticed—or unchallenged. Attacks on state authority over LNG brought by LNG importers both in federal court and in proceedings before the FPC and its successor, the FERC, raise the spector of federal-state conflict. The issues presented in these challenges are whether state law is preempted by federal law or alternatively whether state restrictions impose undue burdens on interstate commerce. In a pending federal lawsuit,[55] for example, the corporate owner of LNG storage tanks in Staten Island, New York, alleges that the federal regulatory scheme is plenary and precludes dual regulation over LNG siting. The plaintiff challenges the New York siting statute as preempted by both the Natural Gas Act and the Natural Gas Pipeline Safety Act and as burdensome on interstate commerce.[56] Two similar suits pending in federal district and state courts in Massachusetts[57] involve the issue whether the Natural Gas Act takes precedence over regulations administered by the Massachusetts Energy Facilities Siting Council.

The FPC and the Department of Energy have raised preemption questions in administrative proceedings for approval of applications to import LNG. Faced with industry challenges to state siting laws, the federal agencies have indicated a willingness to exercise exclusive jurisdiction over LNG site selection where a state objects to the site selected by the federal government and where some mutually acceptable site cannot be found. In its initial decision on the *Pac Indonesia* application, for example, the Department of Energy suggested that it may rely on federal law to preempt California's LNG siting law if negotiations between the state and the Department fail to produce an LNG terminal site agreeable to both sides.[58] In another importation applica-

53. CAL. PUB. RES. CODE § 30261(b) (West Supp. 1978); CAL. PUB. UTIL. CODE §§ 5550-5650 (West Supp. 1978).

54. CAL. PUB. UTIL. CODE § 5551 (West Supp. 1978).

55. Energy Terminal Servs. Corp. v. New York State Dep't of Environmental Conservation, No. 77C-1869 (E.D.N.Y., filed Sept. 20, 1977).

56. Complaint for Declaratory Judgment at 1-2, Energy Terminal Servs. Corp. v. New York Dep't of Environmental Conservation, No. 77C-1869 (E.D.N.Y., filed Sept. 20, 1977).

57. Tenneco, Inc. v. Energy Facility Siting Council of Mass., No. 76-1662G (D. Mass. 1976); Algonquin Gas Transmission Co. v. Energy Facility Siting Council of Mass., Nos. 77-119, 77-139 (D. Mass. 1977).

58. Pac Indonesia LNG Co., No. 77-001-LNG (DOE/ERA, Dec. 30, 1977) (Opinion No. 1). In *Pac Indonesia*, the importer applied to build an LNG terminal and related facilities at Oxnard, California. *Id.* at 10, 36. Following passage of California's siting law, *see* text accompanying notes 53-54 *supra*, the company amended its application to specify a more remote site, Point Conception, California, to comply with the statute. Pac Indonesia LNG Company, No. 77-001-LNG at 37 (DOE/ERA, Dec. 30, 1977) (Opinion No. 1). The Department of Energy refused to grant the amendment, and approved the originally proposed Oxnard site. *Id.* at 40-41, 41 n.12. The Department indicated, however, that it might approve the Point Conception site pending completion of siting negotiations between the state and the Department. *Id.* at 40 & n.11.

tion[59] before the FPC, the FPC staff offered another, more indirect approach short of preemption, which if implemented would have accomplished the same result. The agency's staff attempted to impose an LNG terminal on an unwilling state by means of the agency's power of eminent domain.[60]

The legal bases for such challenges to state siting laws are the subject of this Note. The Note will examine the issue of preemption of state siting laws under current versions of the Natural Gas Act and the Natural Gas Pipeline Safety Act. In addition, the Note will explore the question whether particular state laws, even if not preempted, might impose undue burdens on interstate commerce. Finally, the Note will examine bills pending in Congress and suggest federal legislative responses to federal preemption of state siting laws.

II
PREEMPTION

A. The Preemption Doctrine

Under the doctrine of federal preemption a state may be entirely precluded from regulating the subject of a particular federal statute. The doctrine grants priority to federal legislation in certain instances where state and federal law conflict. When raised in the context of LNG siting regulation, the outcome of a preemption determination is particularly important to state governments. After repeated urging by the states to establish uniform siting guidelines to assure the safety of their residents, the federal government has failed to take appropriate action.[61] If states are preempted from legislating their own guidelines, the result might well be the absence of any effective regulation. Additionally, in the event that new federal legislation establishes federal guidelines which preempt the states,[62] the states will be disabled from performing their traditional function in land use and safety regulation.[63]

The doctrine of preemption is based upon the Supremacy Clause of the United States Constitution.[64] In *Hines v. Davidowitz*,[65] the Supreme Court stated its now classic formulation of the doctrine: Where a state law stands as "[a]n obstacle to the accomplishment and execution of the full purposes of an act of Congress," federal law will prevail over state law.[66] While federal preemption of state law is ultimately a constitutional question under the Su-

59. Tenneco Atlantic Pipeline Co., No. CP77-100 (FPC, Nov. 2, 1977) (initial decision on importation of Algerian liquefied natural gas).

60. *See* text accompanying notes 230-246 *infra*.

61. *See* text accompanying notes 31-46 *supra*.

62. Congress has considered and rejected a number of bills which would have established LNG siting criteria, some of which would have preempted state regulation. *See* text accompanying notes 259-271 *infra*.

63. *See* text accompanying notes 139-145 *infra*.

64. U.S. CONST., art. VI, cl. 2. The doctrine was first enunciated in the Supreme Court decision in Gibbons v. Ogden, 22 U.S. (9 Wheat.) 1 (1824).

65. 312 U.S. 52 (1941).

66. *Id.* at 67. *See also, e.g.*, Goldstein v. California, 412 U.S. 546 (1973); Perez v. Campbell, 402 U.S. 637 (1971).

premacy Clause, resolution of the issue turns most often on the courts' interpretations of relevant federal statutes.[67] In some instances, preemption may be "express," that is, explicitly stated in the federal statute or legislative history.[68] More often, Congress has been silent on the issue and the courts are forced to determine whether preemption is implied in the federal legislation.[69] The latter inquiry is divided into two parts. First, it must be determined whether the federal scheme "occupies the field," as indicated by congressional intent[70] and the pervasiveness of the scheme as evidenced by its administration.[71] Second, the court must decide whether the federal and state schemes are irreconcilably in conflict.[72] The courts must examine each federal statute individually, because the courts have been unable to define with precision the circumstances under which preemption may be inferred.[73]

From the 1940's through the 1960's, the federal courts routinely preferred federal interests to state interests.[74] Where Congress had been silent, preemption was often found from the facts that a nationwide regulatory scheme existed and a state scheme to any extent interfered.[75] Even today, the mere existence of a broad federal regulatory program has been found to be sufficient to trigger preemption.[76]

During the 1970's, however, the trend in federal court decisions has reversed in favor of upholding state regulation.[77] The threshold for a finding of preemption is now considerably higher than it was in previous decades. Unless

67. City of Philadelphia v. New Jersey, 430 U.S. 141, 141 (1977).

68. *See, e.g.*, Florida Lime & Avocado Growers, Inc. v. Paul, 373 U.S. 132, 147-50 (1963); Campbell v. Hussey, 368 U.S. 297, 301-02 (1961).

69. *See, e.g.*, Kargman v. Sullivan, 558 F.2d 612, 614 (1st Cir. 1977) (Campbell, J., concurring).

70. *See, e.g.*, Rice v. Santa Fe Elevator Corp., 331 U.S. 218 (1947).

71. *See, e.g., id.* at 230; Ray v. Atlantic Richfield Co., 435 U.S. 151, 168-73 (1977); Kargman v. Sullivan, 552 F.2d 2 (1st Cir. 1977).

72. *See, e.g.*, Kewanee Oil Co. v. Bicron Corp., 416 U.S. 470, 482-91 (1974); Florida Lime & Avocado Growers, Inc. v. Paul, 373 U.S. 132 (1963). In addition, the courts sometimes weigh the state interest in regulation against the national interest in achieving uniformity of regulation. *See, e.g.*, Jones v. Rath Packing Co., 430 U.S. 519, 542-43 (1977); San Diego Building Trades Council v. Garmon, 359 U.S. 236, 242-44 (1959).

73. Engdahl, *Preemptive Capability of Federal Power*, 45 U. COLO. L. REV. 51, 68-76 (1973); Note, *The Preemption Doctrine: Shifting Perspectives on Federalism and the Burger Court*, 75 COLUM. L. REV. 623, 624 (1975).

74. *See* Note, *supra* note 73, at 626; Kargman v. Sullivan, 558 F.2d 612, 613 (1st Cir. 1977) (denial of petition for rehearing).

75. Kargman v. Sullivan, 552 F.2d 2, 10 (1st Cir. 1977). *See, e.g.*, Rice v. Sante Fe Elevator Corp., 331 U.S. 218 (1947).

76. *See* Burbank v. Lockheed Air Terminal, Inc., 411 U.S. 624, 638 (1973); Perez v. Campbell, 402 U.S. 637, 649-52 (1971); Kargman v. Sullivan, 552 F.2d at 10. *See also* Northern States Power Co. v. Minnesota, 447 F.2d 1143, 1154 (8th Cir. 1971), *aff'd mem.*, 405 U.S. 1035 (1972). *Cf.* Northern Natural Gas. Co. v. State Corp. Comm'n, 372 U.S. 84, 92 (1963) (*quoted in* Natural Gas Pipeline Co. of America v. Illinois Commerce Comm'n, 33 Ill. 2d 214, 222, 210 N.E.2d 490, 494 (1965)) (although clash between state and federal regulation of sale of gas for resale was not inevitable, the imminent possibility of a clash required that state law fall). *But cf.* Huron Portland Cement Co. v. City of Detroit, 362 U.S. 440 (1960) (where federal and state regulations are directed at the same subject but have different purposes, state regulation may stand).

77. *See* Note, *supra* note 73, at 626, 641, 642. *See, e.g.*, Goldstein v. California, 412 U.S. 546, 554 (1973).

absolutely contradictory to federal regulation, state and local laws are typically permitted to coexist with even far-reaching federal regulation of a field.[78] As the Supreme Court expressed its new attitude, "the proper approach is to reconcile the operation of both statutory schemes with one another rather than holding one completely ousted."[79] The Supreme Court directed that only irreconcilable conflict between federal and state law necessitates a finding of preemption,[80] causing lower federal courts to become reluctant to reach such a finding.[81] Even where preemption has been found, the trend has been to set aside state regulation only to the extent that actual conflict threatens implementation of the federal regulation.[82] Under current doctrine, therefore, a preemption decision might not entirely exclude the state from the regulatory field.

State environmental safety laws in particular have fared well against preemption challenges. Even in the environmental area, however, the fate of state laws depends largely on the comprehensiveness and intent of the complementary federal statute. In *Askew v. American Waterways Operators, Inc.*,[83] for example, the Supreme Court upheld a Florida law imposing strict liability on terminal and ship operators for oil spill cleanup costs, although state legislation had entered the field of maritime law, where federal control traditionally has been exclusive.[84] In *American Waterways*, the federal regulation was a provision of the Federal Water Quality Act,[85] which set an upper limit on costs incurred by the federal government as a result of oil spills. In finding against preemption, the Court stressed the states' historical power to protect their coastal resources and populations.[86] Two other factors, however, were perhaps even more important to the Court: (1) the federal statute expressly contemplated federal-state cooperation in administering the water quality program;[87] and (2) the federal and state schemes were aimed at different goals.[88]

The importance of the goals of the state and federal regulation involved is demonstrated by the Supreme Court's preemption ruling in *Ray v. Atlantic Richfield Co.*[89] In *Atlantic Richfield*, the Court found certain provisions of the

78. The United States Court of Appeals for the First Circuit stated in *Kargman* that "[s]tate or local legislation, to be preempted, must be 'absolutely and totally contradictory and repugnant.' " 552 F.2d at 10, *quoting* Goldstein v. California, 412 U.S. 546, 553 (1973).

79. 414 U.S. 117, 127 (1973), *quoting* Silver v. New York Stock Exch., 373 U.S. 341, 357 (1963).

80. *See* Goldstein v. California, 412 U.S. 546, 553 (1973).

81. *See, e.g.*, Kargman v. Sullivan, 552 F.2d 2 (1st Cir. 1977); Bucyrus-Erie Co. v. Department of Industry, Labor and Human Rel., 453 F. Supp. 75 (E.D. Wisc. 1978).

82. *See, e.g.*, Ray v. Atlantic Richfield Co., 435 U.S. 151 (1977); DeCanas v. Bica, 424 U.S. 351 (1976).

83. 411 U.S. 325 (1973).

84. *See* Comment, *Federal Maritime Jurisdiction and State Marine Pollution Legislation: The Florida Act Not Preempted Per Se*, 28 U. MIAMI L. REV. 209, 216 (1973).

85. 411 U.S. at 328 (construing Federal Water Quality Act, ch. 758, §§ 11-15, 84 Stat. 91, 93, 100, 103, 104 (1970) (current version at 33 U.S.C. §§ 1251-1376 (1976)).

86. 411 U.S. at 343. The Court stated that oil spills are "an insidious form of pollution of vast concern to every coastal city or port and to all the estuaries on which the life of the ocean and the lives of the coastal people are greatly dependent." *Id.* at 328-29.

87. *See id.* at 329, 332-36.

88. *Id.* at 331, 332-33.

89. 435 U.S. 151 (1978).

State of Washington's Tanker Law,[90] which regulates the design, size, and movements of oil tankers entering the state's coastal waters, preempted by the federal Ports and Waterways Safety Act of 1972.[91] The Court reasoned that the act was not intended to enlist the states in a joint effort on the pattern of other federal environmental laws, but to prevent a proliferation of varying state safety regulations by establishing uniform national standards for design and construction of tankers.[92] Moreover, the state and federal laws were directed at the same subject of regulation and directly conflicted with one another.[93] In sum, although state environmental and safety laws have been favorably treated in the courts, the likelihood that a state law will be upheld still depends largely on the specifications of the federal statute at issue.

B. The Natural Gas Act and Federal Preemption

Preemption challenges to state LNG siting laws have relied in particular on the federal Natural Gas Act (NGA).[94] The NGA regulates the transportation and sale of natural gas in interstate commerce. The Act does not expressly preempt state LNG siting laws because the statute is silent on the siting and safety of LNG facilities. The NGA is a threat to state regulation, therefore, only to the extent that preemption can be inferred. A detailed examination of the NGA reveals that preemption should not be inferred under the NGA both because the Act contemplates a dual and complementary federal-state system for regulating natural gas and because the divergence of the purposes of federal and state regulation eliminates the inevitability of conflict.

The federal government unquestionably has some jurisdiction over LNG facilities siting. There is, however, nothing to indicate that its authority is exclusive. Sections 3[95] and 7[96] of the NGA, combined with the duties imposed on federal agencies by the National Environmental Policy Act (NEPA),[97] have provided the primary bases for federal regulation of LNG facilities.[98] Section 3 of the NGA requires FPC approval for all importations and exportations of natural gas.[99] The FPC may deny approval only if it finds that the proposed importation or exportation will not be consistent with the public interest.[100] Section 7 of the NGA requires FPC certification for all facilities used or built by

90. WASH. REV. CODE §§ 88.16.170 (Supp. 1975).

91. 46 U.S.C. §§ 215, 364 (1970 & Supp. V 1975). The Court struck down provisions banning tankers larger than a specified tonnage and setting certain design and safety standards. The Court upheld a provision requiring tug boat escorts. 435 U.S. at 168-69, 178, 179-80.

92. 435 U.S. at 163-68.

93. *Id.* at 165.

94. 15 U.S.C. § 717 (1976). *See, e.g.*, Energy Terminal Servs. Corp. v. New York State Dep't of Environmental Conservation, No. 77C-1869 (E.D.N.Y., filed Sept. 20, 1977); Pac Indonesia LNG Co., No. 77-001-LNG at 38 (DOE/ERA, Dec. 30, 1977) (Opinion No. 1).

95. 15 U.S.C. § 717b (1976).

96. 15 U.S.C. § 717f(c) (1976).

97. 42 U.S.C. §§ 4321-4347 (1976).

98. *See* Greenwald, *supra* note 9, at 160-63. *See also* Wilson, *Perspectives on LNG Terminal Siting*, 9 NAT. RESOURCES LAW. 535, 535-36 (1976) .

99. *See* text accompanying note 37 *supra*.

100. 15 U.S.C. § 717b (1976).

companies engaged in the interstate transportation of natural gas. Certification requires a finding by the FPC that the facility will serve the "public convenience and necessity."[101]

Neither section 3 nor section 7 of the NGA expressly confers jurisdiction on the FPC to approve the siting of LNG facilities or requires the FPC to take the safety of a given site into account in its certification of facilities. NEPA, however, requires all federal agencies, including the FPC, to prepare an environmental impact statement before taking any "major federal action significantly affecting the quality of the human environment."[102] It has been largely through preparation of environmental impact statements that the FPC has considered the safety of LNG facilities sites.[103] Following the Second Circuit's decision in 1972 in *Greene County Planning Board v. FPC*, requiring the FPC to implement NEPA,[104] the FPC promulgated regulations governing the preparation and review of environmental impact statements.[105] Under these regulations, the FPC established procedures for evaluating the safety aspects of proposed LNG projects, including the siting of facilities.[106] The FPC, however, does not consider itself bound under NEPA to reject or accept a particular site

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101. 15 U.S.C. § 717f(c) (1976). Section 7 provides in pertinent part that no natural gas company shall

> engage in the transportation or sale of natural gas subject to the jurisdiction of the [FPC], or undertake the construction or extension of any facilities therefore, or acquire or operate such facilities . . . unless there is in force with respect to such natural gas company a certificate of public convenience and necessity issued by the [FPC] authorizing such acts or operations.

Id.

102. 42 U.S.C. § 4332(C) (1976). *See generally* Calvert Cliffs Coordinating Comm. v. AEC, 449 F.2d 1109 (D.C. Cir. 1971). Certification of LNG facilities is regarded as a "major action" under NEPA. *See* Wilson, *supra* note 98, at 535-36.

103. *See generally* Greenwald, *supra* note 9, at 162-64. The FPC began extensively to consider safety when certifying LNG facilities in response to the enactment of NEPA. *Id.* at 162-63; Wilson, *supra* note 98, at 536.

Section 4332, the so-called "action enforcing mechanism" of NEPA, enumerates the factors federal agencies must consider in the environmental impact statement: the environmental impact of the proposed agency action, its adverse effects, and alternatives to the proposed action. 42 U.S.C. §§ 4332(2)(C)(i)-(iii) (1976).

104. 455 F.2d 412 (2d Cir.), *cert. denied*, 409 U.S. 849 (1972). The circuit court held that NEPA requires the federal agency, and not the applicant, to prepare the environmental impact statement. *Id.* at 420.

105. 18 C.F.R. § 2.82 (1978). *See* Wilson, *supra* note 98, at 536.

106. Under FPC Order No. 485, promulgated June 7, 1973, an environmental impact statement is required for all importation proceedings held under section 3 of the NGA. With regard to LNG facilities safety and siting, the FPC prepares a quantitative risk analysis and an alternate site study as part of each environmental impact statement. *See, e.g.*, Tenneco Atlantic Pipeline Co. No. CP77-100 (FPC, July 1977) (Alternate Site Study); Tenneco Atlantic Pipeline Co., No. CP77-100 (FPC, Sept., 1977) (Final Environmental Impact Statement). The risk analysis considers the safety of LNG facilities in light of statistical probabilities that certain kinds of LNG accidents will occur. *See* Greenwald, *supra* note 9, at 163-64. The alternate site study evaluates various alternatives to the facilities site proposed by the applicant, implementing NEPA's requirement that "no action," "perfect alternative," and intermediate alternatives be considered by the federal agency approving a major project. *See* Natural Resources Defense Council, Inc. v. Morton, 337 F. Supp. 165 (D.D.C. 1971); 42 U.S.C. § 4332(2)(C) & (D) (1976).

on the basis of findings in its environmental impact statement.[107]

NEPA imposes on the FPC a duty only to review the environmental safety of LNG facilities, but the FPC's authority to site LNG facilities derives from the NGA. Although the NGA makes no mention of LNG facilities siting, it does contain language which allows the FPC to condition import approval and facilities certification as it sees fit.[108] The FPC and the courts have interpreted the NGA to grant the FPC broad permissive, though not exclusive, jurisdiction over all aspects of an LNG importation project, including the siting and safety of LNG facilities.

FPC jurisdiction was judicially extended to the LNG facility arena by the decision of the United States Court of Appeals for the District of Columbia Circuit in *Distrigas Corp. v. FPC.*[109] Distrigas, the owner of LNG storage facilities on Staten Island, applied to the FPC under section 3 for approval to import a large quantity of LNG. In *Distrigas*, the question first arose whether the FPC may exercise its section 7 authority to certify LNG facilities in the context of a section 3 importation proceeding. The *Distrigas* application was the first major LNG project that the FPC had been asked to approve,[110] and the FPC had not developed a regularized procedure by which to handle complex applications requiring determinations as to price, need for foreign supply, distribution to consumers, and construction of sophisticated facilities. In its initial order, the FPC abstained from asserting section 7 facilities certification jurisdiction over the proposed Staten Island facilities.[111] After a change in FPC membership, however, the FPC reversed its earlier order and asserted jurisdiction over the facilities.[112] Distrigas appealed the FPC's order asserting section 7 jurisdiction over the facilities to the court of appeals. The court upheld the FPC's assertion of section 7 jurisdiction over LNG facilities in a section 3 importation approval proceeding. The court held that the FPC's power under section 3 was "plenary and elastic,"[113] and hence that the FPC could control all aspects of the impor-

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107. There is no requirement under NEPA that an agency adopt an alternate in place of the proposed site, provided alternatives are weighed in the decisionmaking process. The FPC makes its decisions regarding siting without formal guidelines as to how the safety findings in the environmental impact statement should bear on the agency's final decision. Judge Litt noted in the *Tenneco Atlantic Pipeline Co.* decision that

> [t]here has been no judicial requirement that this balancing analysis should proceed in any fixed manner. It appears that a common sense notion of weighing public interest "costs" and "benefits" is implied . . . . Site selection is not mechanical and by its nature includes subjective determinations in almost each situation . . . . NEPA requires no more than a reasonable, good faith effort to apprise the decision maker of reasonable alternatives.

Tenneco Atlantic Pipeline Co., No. CP77-100 at 25, 35 (FPC, Nov. 2, 1977) (initial decision on importation of Algerian liquefied natural gas). *See also* Calvert Cliffs Coordinating Comm. v. AEC, 449 F.2d 1109, 1115 (D.C. Cir. 1971).

108. 15 U.S.C. §§ 717c, 717f (1976).

109. 495 F.2d 1057 (D.C. Cir. 1974).

110. *Id.* at 1060.

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

112. 495 F.2d at 1061.

113. *Id.* at 1064.

tation approval process, including facility certification, in a section 3 proceeding.

The court expressly did not rule, however, that the FPC's jurisdiction over LNG facilities was mandatory, or that it excluded state regulation.[114] The *Distrigas* decision thus indicates that section 7 of the NGA confers permissive, but not necessarily preemptive, authority over LNG facilities.[115] No court has found state regulation of LNG facilities preempted by the NGA.[116]

1. Occupying the Field

One of the key questions the courts ask with regard to preemption is whether Congress has intended to "occupy the field" by enacting the federal statute. Prior to the recent preemption decisions of the Burger Court, the main indicator of federal "occupation" was the pervasiveness of the federal scheme.[117] The Burger Court, however, has focused less on the comprehensiveness of federal regulation and more on a characteristically narrow reading of congressional intent to preempt.[118] Nonetheless, the combination of a clearly indicated congressional intent to preempt and a comprehensive federal scheme has been sufficient for a finding of preemption by the current Supreme Court.[119] The less comprehensive a federal scheme is, the less likely is state law to be preempted, for to exclude state law where comprehensive federal coverage is lacking would create a regulatory vacuum.[120] The Supreme Court

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114. *Id.* at 1066. The *Distrigas* court acknowledged that in Border Pipeline Co. v. FPC, 171 F.2d 149 (D.C. Cir. 1948), the same court 25 years earlier had decided that the FPC did not have exclusive jurisdiction over facilities for exporting natural gas from the United States to Mexico. 495 F.2d at 1063. To have ruled that the FPC had exclusive jurisdiction over importation facilities would have required the court in *Distrigas* to overrule *Border. Id.* Noting Congress' repeated confirmation of *Border,* reflected in fourteen congressional refusals of the FPC's requests to overrule *Border,* the *Distrigas* court was hesitant to overturn the *Border* decision, which had governed FPC policy for 25 years. *Id.*

115. 495 F.2d at 1064. The court stated in dicta that the FPC could decide to "comprehensive[ly]" regulate LNG imports if it found this to be "in the public interest." One of the primary factors the FPC must consider is whether "such regulation cannot or will not, as a practical matter, be imposed by the states." *Id.*

116. In cases where state regulation of LNG facilities has been struck down, the courts have relied on a burden on interstate commerce rationale. *See* text accompanying notes 211-220 *infra.*

117. *See* Note *supra* note 73, at 632-33. *See, e.g.,* Rice v. Santa Fe Elevator Corp., 331 U.S. 218, 230 (1947). The degree to which the federal statute required uniform nation-wide regulation of a particular subject was pertinent to this inquiry. To discover whether a subject required exclusively federal control, the courts peremptorily employed the test provided by the Supreme Court in Cooley v. Board of Wardens, 53 U.S. (12 How.) 299 (1851). If a subject appeared to the Court to require "national" as opposed to "local" regulation, federal regulation under the commerce clause excluded state intervention. *See, e.g.,* California v. Thompson, 313 U.S. 109, 113 (1941). The modern formulation of the *Cooley* test more subtly balances federal and state interests. *See* Pike v. Bruce Church, 397 U.S. 137 (1970); Note, *State Environmental Protection Legislation and the Commerce Clause,* 87 HARV. L. REV. 1762 (1974) [hereinafter cited as Note, *State Environmental Protection Legislation*].

118. *See* Note, *supra* note 73, at 645-46, 650-51.

119. *See, e.g.,* Ray v. Atlantic Richfield Co., 435 U.S. 151 (1978); Jones v. Rath Packing Co., 430 U.S. 519 (1977); City of Burbank v. Lockheed Air Terminal, Inc., 411 U.S. 624 (1973).

120. *See, e.g.,* Askew v. American Waterways Operators, Inc., 411 U.S. 325, 336-37 (1973).

has thus concluded that "where coordinate state and federal efforts exist within a complementary administrative frame work," the case for preemption diminishes.[121]

In enacting the NGA, Congress envisioned a regulatory scheme in which federal and state governments would work cooperatively to regulate the natural gas industry. The legislative history indicates, and case law confirms, that the NGA did not create a comprehensive[122] or exclusive[123] federal scheme. The Supreme Court repeatedly has held that "the Natural Gas Act did not envisage federal regulation of the entire natural-gas field to the limit of constitutional power."[124] Congress intended that federal regulation would supplement existing state regulation without removing authority from state regulatory agencies.[125] As summarized in the House Report, "[t]he basic purpose of the Act is to occupy this field in which the Supreme Court has held that the states *may not act*."[126]

Congress narrowly defined the field in which federal regulation under the NGA was to be exclusive. The NGA was passed to fill a regulatory gap created by judicially imposed restrictions on the states' power to regulate interstate sales and transportation of natural gas. Prior to enactment of the NGA, whatever regulation existed was carried on by the states. In decisions[127] culminating in *Public Utility Comm'n of Rhode Island v. Attleboro Steam and Electric Co.*,[128] however, the Supreme Court forbade the states from regulating primarily interstate transactions involving natural gas. The "Attleboro gap" was thus created because interstate transactions were regulated neither by the states nor by the federal government.[129] Congress rectified the problem by injecting federal regulation under the NGA into the Attleboro gap.[130] Congress defined the coverage of the NGA as only that portion of the field which the states are prohibited from regulating under the commerce clause.[131]

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121. New York Dep't of Social Serv. v. Dublino, 413 U.S. 405, 421 (1973).

122. FPC v. Transcontinental Gas Pipe Line Corp., 365 U.S. 1, 8 (1961); FPC v. Panhandle E. Pipe Line Co., 337 U.S. 498, 502-03 (1949).

123. FPC v. Louisiana Power & Light Co., 406 U.S. 621, 631 (1972). *See also* FPC v. Panhandle E. Pipe Line Co., 337 U.S. 498, 503 (1949).

124. 337 U.S. at 502.

125. Panhandle E. Pipe Line Co. v. Public Serv. Comm'n of Ind., 332 U.S. 507, 517 (1947); 332 Texas E. Transmission Corp. v. FPC, 470 F.2d 757, 760 (5th Cir. 1972).

126. H.R. REP. No. 709, 75th Cong., 1st Sess. 2 (1937) (emphasis added).

127. *See, e.g.*, Missouri v. Kansas Gas Co., 265 U.S. 298 (1924).

128. 273 U.S. 83 (1927).

129. *See* 332 U.S. at 517; Dungan, *Jurisdiction of the Federal Power Commission Over Importation of Liquefied Natural Gas*, 4 NAT. RESOURCES LAW. 276, 284 (1971).

130. *See* Amerada Petroleum Corp. v. FPC, 334 F.2d 404, 408 (8th Cir. 1964), *rev'd per curiam on other grounds*, 379 U.S. 687 (1965).

131. *See* FPC v. Louisiana Power & Light Co., 406 U.S. 621, 631 (1972). In *Panhandle Eastern*, the Supreme Court remarked: "Congress, it is true, occupied a field. But it was meticulous to take in only territory which this Court had held the states could not reach." 332 U.S. at 519. For example, a 1924 Supreme Court decision prohibits the states from regulating sales of interstate natural gas to distribution companies for resale. Missouri *ex rel.* Barrett v. Kansas Natural Gas Co., 265 U.S. 298 (1924). *See also* Public Util. Comm'n of R.I. v. Attleboro Steam & Elec. Co., 273 U.S. 83 (1927); H.R. REP. No. 709, 75th Cong., 1st Sess. 1-3 (1937). The federal government took exclusive jurisdiction of this aspect of regulation by means of the NGA. 332 U.S. at 514-16.

Congress was careful to leave intact existing state jurisdiction over the natural gas industry. As the House Report accompanying the NGA explains, there was no intention to oust the states or diminish their historic authority to regulate the natural gas industry.[132] The Supreme Court confirmed this limitation in *Panhandle Eastern Pipe Line Co. v. Public Serv. Comm'n of Indiana:* "[W]e have emphasized repeatedly that Congress meant to create a comprehensive and effective regulatory scheme, complementary in its operation to those of the states and in no manner usurping their authority."[133] Moreover, the Act specifically prohibited federal intervention into areas of traditional state jurisdiction.[134] Accordingly, direct sales to consumers, which had been regulated by the states prior to the NGA's passage, were within the states' exclusive jurisdiction after passage of the NGA, even though such sales were within interstate commerce.[135]

Because Congress carefully confined federal jurisdiction to the areas specified in the NGA, preemption of areas not expressly included within the Act's coverage is difficult to infer. The siting and safety of natural gas facilities are issues on which the Act is silent.[136] Under the NGA, the states are permitted to regulate those subjects which they historically have regulated, and practically can regulate under the commerce clause.[137] Especially where federal law enters a field traditionally occupied by the states, the courts will assume that the federal law does not oust state law unless Congress clearly has manifested its intent to do so.[138] It thus seems unlikely that Congress intended to exclude the states from siting LNG facilities.

The states can and appropriately have regulated siting because state siting laws touch two areas validly governed by the states' police power: public safety and land use regulation. The police power is derived from the tenth amendment to the United States Constitution, which authorizes the states to

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Only three areas were encompassed by the exclusively federal field of the NGA: (1) the transportation of natural gas in interstate commerce; (2) its sale in interstate commerce for resale; and (3) natural gas companies engaged in such transportation or sale. 337 U.S. at 503-04; 332 U.S. at 516.

132. H.R. REP. No. 709, 75th Cong., 1st Sess. 1-4 (1937). *See also* 332 U.S. at 517-18; S. REP. No. 1162, 75th Cong., 1st Sess. 1-3 (1937); H.R. REP. No. 2651, 74th Cong., 2d Sess. 1-3 (1936).

133. 332 U.S. at 520. As the Court explained in *Panhandle Eastern*:

> The Act, though extending federal regulation, had no purpose or effect to cut down state power. On the contrary, perhaps its primary purpose was to aid in making state regulation effective . . . . The Act was drawn with meticulous regard for the continued exercise of state power, not to handicap or dilute it in any way.

332 U.S. at 517-18. *See also* FPC v. Louisiana Power & Light Co., 406 U.S. 621, 631 (1972).

134. Section 1(b) of the NGA expressly exempts from its coverage certain "local" matters including facilities used for local distribution and the production and gathering of natural gas. 15 U.S.C. §§ 717b, 717c (1976). *See* 337 U.S. at 504; H.R. REP. No. 709, 75th Cong., 1st Sess. 3 (1937).

135. Panhandle E. Pipe Line Co. v. Public Serv. Comm'n of Ind., 332 U.S. at 519; H.R. REP. No. 709, 75th Cong., 1st Sess. 1 (1937). *See also* Pennsylvania Gas Co. v. Public Serv. Comm'n, 252 U.S. 23 (1920).

136. *See* text accompanying notes 95-107 *supra*.

137. *See* Distrigas Corp. v. FPC, 495 F.2d 1057, 1064 (D.C. Cir.), *cert. denied*, 419 U.S. 834 (1974).

138. Rice v. Santa Fe Elevator Corp., 331 U.S. 218, 230 (1947).

take reasonable measures to protect public health, safety, and welfare.[139] Historically the states, acting under the police power, have almost exclusively controlled land use in the interest of public safety.[140] State and local zoning ordinances and building codes, for example, are legitimate exercises of the police power if they bear a reasonable relationship to public safety.[141]

The Supreme Court has validated state laws protecting populations and preserving vital natural resources. In *Askew v. American Waterways Operators, Inc.*, the Court held that a state could control offshore oil spills under the police power.[142] In its opinion, the Court stressed the appropriateness of states taking a strong role in facilities siting.[143] Similarly, the federal courts have recognized that the states have a strong, legitimate interest in regulating natural gas pipeline siting. In *New York State Natural Gas Corp. v. Elma*,[144] a case involving pipeline siting under the Natural Gas Act, a federal district court endorsed the validity of reasonable local regulation of gas pipeline sites, cautioning that unless a federally chosen site were "reasonably necessary," local ordinances prohibiting such a site should not be struck down.[145] In sum, judicial recognition of the states' traditional authority over facilities siting and Congress' intention under the NGA expressly not to exclude the states from regulating their customary sphere make a strong case against preemption on grounds that the federal government intended to occupy the field.

2. Irreconcilable Federal-State Conflict

The second prong of the test that courts use in determining whether a state enactment is preempted is the extent to which the state and federal laws are irreconcilably in conflict with one another, and conflict thwarts implementation of the federal scheme.[146] Whereas in previous decades any interference with the federal scheme might have been grounds for invalidating state law, recent decisions have set a high threshold for a finding of irreconcilable conflict.[147] The Burger Court has required for a ruling of preemption that a state statute must be "absolutely and totally contradictory and repugnant" to the federal scheme.[148] Only actual conflict, and not potential conflict, satisfies this strict standard.[149] To be preempted, therefore, a state statute must either by its own

139. U.S. CONST., amend. X. *See, e.g.*, California v. Zook, 336 U.S. 725, 734-35 (1949); Jacobson v. Massachusetts, 197 U.S. 11, 25 (1905).

140. The Federal Council on Environmental Quality has stated: "[I]n practical application . . . [land use policy] . . . is a state and local issue. Land use controls have traditionally been exercised by local governments as subdivisions of the states." U.S. COUNCIL ON ENVIRONMENTAL QUALITY, FOURTH ANNUAL REPORT 122 (1973).

141. *See, e.g.*, Village of Euclid v. Ambler Realty Co., 272 U.S. 365 (1926).

142. 411 U.S. 325, 328 (1973).

143. *Id.* at 332-33, 333 n.5.

144. 182 F. Supp. 1 (W.D.N.Y. 1960).

145. *Id.* at 6.

146. Florida Lime & Avocado Growers v. Paul, 373 U.S. 132, 141-43 (1963).

147. Note, *supra* note 73, at 647; Kargman v. Sullivan, 552 F.2d 2, 10-11 (1st Cir. 1977). *See also* text accompanying notes 74-88 *supra*.

148. Goldstein v. California, 412 U.S. 546, 553 (1973).

149. *See id.* at 554-55; 373 U.S. at 141-42.

terms irreconcilably conflict with the federal statute, or by its actual operation render impossible the effectuation of some critical aim of the federal statute. Central to the inquiry into the conflict is an examination of the goals the state and the federal legislation are designed to achieve. Where state and federal legislative goals are identical, and the federal scheme is pervasive, the likelihood of conflict increases.[150] On the other hand, where the purposes of the state and the federal statutes diverge preemptive conflict is not likely to occur.[151]

a. Purposes of the Natural Gas Act

Conflict between the NGA and state siting laws is not inevitable because the principal purposes of state and federal regulations diverge. The primary goal of the NGA is consumer protection through economic regulation of the natural gas industry.[152] The purpose of most state regulation of LNG facilities is to assure the physical safety of state residents. The NGA's economic focus is confirmed by legislative history[153] and reinforced by case law. The statute was passed to protect consumers from price gouging by the natural gas industry. Accordingly, the House Report accompanying the NGA detailed the intended regulatory functions of the FPC as ratemaking, licensing of interstate pipeline companies, and insuring adequate supply to consumers.[154] As the Supreme Court has repeatedly declared, the NGA's purpose was "to protect consumers against exploitation at the hands of natural gas companies."[155]

Section 7 of the NGA,[156] under which the FPC certifies natural gas facilities, is directed principally to regulating entry into the natural gas market. The section provides that only certificate bearers may sell gas in interstate commerce.[157] In addition, it empowers the FPC to compel gas companies to expand old facilities or construct new ones in order to assure supply to consumers.[158]

On its face, section 7 grants no regulatory authority over facilities safety. Public safety, however, is a secondary aspect of regulation. It has been inferred as one of the goals of regulation from provisions of section 7 granting the FPC flexibility to condition certification of facilities as it sees fit.[159] In *At-*

150. *See, e.g.*, Ray v. Atlantic Richfield Co., 435 U.S. 151, 157 (1978).

151. *See, e.g.*, Kewanee Oil Co. v. Bicron Corp., 416 U.S. 470, 479-80 (1974); Huron Portland Cement Co. v. City of Detroit, 362 U.S. 440 (1960); Kargman v. Sullivan, 552 F.2d 2, 12-13 (1st Cir. 1977).

152. Dungan, *supra* note 129, at 285.

153. H.R. REP. No. 709, 75th Cong., 1st Sess. 1-3 (1937).

154. *See id. See also* OTA REPORT, *supra* note 2, at 10.

155. FPC v. Louisiana Power & Light Co., 406 U.S. 621, 631 (1972); FPC v. Hope Natural Gas Co., 320 U.S. 591, 610 (1944); Distrigas Corp. v. FPC, 495 F.2d 1057, 1064 (D.C. Cir. 1974).

156. 15 U.S.C. § 717f (1976). *See also* FPC v. Panhandle E. Pipe Line Co., 337 U.S. 498 (1949), in which the Supreme Court declared: "The primary duty of the [FPC] is to fix just and reasonable rates for the transportation and sale of natural gas in interstate commerce for resale." *Id.* at 506.

157. *Id.* § 717f (1976). The regulations implementing section 7 do not require a specific safety determination as a condition of site certification. 18 C.F.R. §§ 153, 156, 157 (1978).

158. 15 U.S.C. § 717f(a) (1976).

159. *See* text accompanying notes 108-113 *supra*. Congress did not contemplate the range of

lantic Refining Co. v. New York Public Service Comm'n,[160] the Supreme Court interpreted the "public convenience and necessity" standard of section 7 to permit the FPC to consider non-economic factors, including safety, environmental impact, and scenic beauty, in certification decisions.[161] The Court stressed, however, that the FPC's primary responsibility is economic regulation.[162]

b. Purposes of State LNG Siting Laws

(i) Potential Conflict with the Natural Gas Act

In contrast to the economic goals of federal regulation under the Natural Gas Act, much state legislation governing siting of LNG facilities is intended specifically to protect public safety. The discussion which follows will focus on three states' enactments: New York's Liquefied Natural and Petroleum Gas Act;[163] California's LNG Terminal Act;[164] and the enabling statute of the Massachusetts Energy Facilities Siting Council.[165] With the exception of Massachusetts' law, these statutes assure public safety by mandating siting in remote areas.

The statutes considered here are not facially repugnant to the NGA because they do not confer authority over areas of exclusive federal jurisdiction such as price and supply regulation, but focus almost exclusively on siting and public safety. The legislative findings contained in the New York law state that "it is necessary for the protection of the public health, the environment and the economic welfare of the people of this state to regulate and control *the siting* of liquefied natural . . . gas facilities in this state . . . ."[166] The findings conclude that "the storage, transportation, and conversion" of LNG should be "carried out other than in residential areas or in dangerous proximity to contiguous population . . . ."[167]

The New York statute requires the State Department of Conservation (De-

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safety problems that now attend LNG handling when it passed the NGA, in part because LNG was non-existent for practical use at the time. Large-scale liquefaction technology for natural gas was unknown in 1938, and transportation of natural gas in liquefied form was not technologically feasible at the time. *See* Dungan, *supra* note 129, at 277. Domestic natural gas supplies were plentiful, accessible, and cheap in 1938, and there was no need comprehensively to utilize and regulate foreign sources. Moreover, at the time of the Act's passage the gas industry's safety record was considered excellent. It was not until 1968 that Congress perceived the need for more stringent safety regulation of construction and operation of natural gas facilities, and passed the Natural Gas Pipeline Safety Act. *See generally* note 195 and text accompanying notes 184-204 *infra*.

160. 360 U.S. 378 (1959).

161. *Id.* at 391.

162. *Id.* at 388. Similarly, in extending to the FPC jurisdiction to certify LNG facilities in a section 3 importation proceeding, the circuit court in *Distrigas* reiterated the economic purpose of the statute. Distrigas Corp. v. FPC, 495 F.2d at 1064.

163. N.Y. ENVIR. CONSERV. LAW §§ 23-1701 to 1727 (McKinney 1978-1979).

164. CAL. PUB. UTIL. CODE ch. 10, §§ 5550-5650 (West Supp. 1979).

165. MASS. GEN. LAWS ANN. ch. 164, §§ 69H-69R (West 1976 & Supp. 1979).

166. N.Y. ENVIR. CONSERV. LAW § 23-1703 (McKinney 1978-1979) (emphasis added).

167. *Id.*

partment) to adopt regulations "establishing criteria for the siting of liquefied natural . . . gas facilities."[168] The Act requires the Department to promulgate regulations setting the distance which must separate LNG facilities from populated areas.[169] The Department is directed to deny any application to site a facility if it would endanger residential areas or contiguous populations.[170]

Like the New York statute, California's LNG Terminal Act mandates remote siting on the basis of legislative findings that "[u]ncertainties about the safety of liquefied natural gas require that the single terminal authorized by this chapter be located at a site remote from human population in order to provide the maximum possible protection to the public against the possibility of accident."[171] The siting criteria which implement the policy of the Act are drawn in terms of the distances which must lie between the terminal and areas with specified population densities.[172] Neither the California nor the New York statute significantly overlaps with the NGA's concern for consumer protection in matters of price and supply. It is not inevitable, therefore, that a siting decision rendered pursuant to either state statute would sufficiently conflict with the NGA to trigger preemption.[173]

In contrast to the New York and California siting laws, the enabling legislation creating the Massachusetts Energy Facilities Siting Council (Council)[174] more broadly defines the Council's LNG facilities siting role to encompass environmental and consumer protection, and not merely public safety. It is the Council's responsibility "to provide a necessary energy supply for the Commonwealth with a minimum impact on the environment at the lowest possible cost."[175] The Council has adopted specific siting guidelines applicable to intrastate LNG facilities, which do not fall within federal jurisdiction and which therefore cannot be preempted.[176] The Council is authorized, however, to determine whether there is need for proposed facilities, interstate or intrastate. Under regulations promulgated by the Council, interstate natural gas companies must submit five-year long-range forecasts detailing their gas needs, customer demands, and planned energy facilities siting.[177] The Council must approve, disapprove, or conditionally approve long-range forecasts depending on whether "plans for . . . the applicant's new facilities are consistent with cur-

168. *Id.* § 23-1709.
169. *Id.* § 23-1709(2)(3).
170. *Id.* § 23-1711(4).
171. CAL. PUB. UTIL. CODE ch. 10, § 5552 (West Supp. 1979).
172. *Id.* § 5582(a).
173. In Kargman v. Sullivan, 552 F.2d 2 (1st Cir. 1977), for example, the United States Court of Appeals for the Second Circuit declined to oust Boston's rent control law because the concurrent federal program was concerned primarily with a different goal: increasing the supply of low income housing. In *Kargman*, as in the case of LNG siting laws, the state law overlapped with a secondary aspect of federal regulation. *See also* Huron Portland Cement Co. v. Detroit, 362 U.S. 440 (1960).
174. MASS. GEN. LAWS ANN. ch. 164, §§ 69H-69R (West 1976 & Supp. 1979).
175. *Id.* § 69H (West 1976).
176. *See Oversight Hearing*, *supra* note 7, pt. 1, at 54-55, 59-79 (reprint of Chapter K, Rules 85.1-88.6, Regulations for the Siting of Intrastate Liquefied Natural Gas Storage Facilities).
177. MASS. GEN. LAWS ANN. ch. 164, § 69L (West 1976 & Supp. 1979).

rent health, environmental protection, and resource use and development policies as adopted by the Commonwealth" and with the statute's mandate to provide sufficient power with minimum environmental impact at the lowest possible cost.[178] By disapproving the applicant's forecast, the Council can prohibit the applicant from siting its proposed facilities.[179] Because the statute's mandate requires the Council to consider a wide range of economic issues, including adequacy of supply and price, the Massachusetts law potentially overlaps with federal regulation under section 7 of the NGA. The overlap increases the probability of irreconcilable conflict.[180]

(ii) Actual Conflict with the Natural Gas Act

Even where a state statute on its face potentially conflicts with federal law, current preemption doctrine requires that actual conflict arise before preemption will be invoked. At present, no actual conflict exists with regard to the New York, California, or Massachusetts rules.

In New York, the only controversial LNG facilities over which the federal government has jurisdiction, those at Staten Island, are still awaiting certification by the FERC.[181] At least until such time as the FERC certifies the facilities and the state challenges the certification, no actual conflict will have arisen. Nor does California's Terminal Act currently conflict with the NGA. The Department of Energy has not decided whether California's favored site for its single terminal, Point Conception, should be disapproved and the federally approved Oxnard site utilized instead.[182] A similar situation exists

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178. *Id.* § 69J.

179. *Id.* § 69I.

180. Fearful of dual regulation, natural gas companies operating in Massachusetts petitioned the Council to amend its regulations by deleting the forecasting requirement as to interstate facilities. The companies alleged that implementation of the Council's regulation in effect duplicates the section 7 facilities certification proceedings conducted by the FPC under the NGA. The Council rejected the proposed amendment, concluding:

> In making this ruling, the Council reaffirms its original determination that it is foreclosed by federal preemption from review of the *need* for interstate gas facilities. At the same time, the Council finds continuing jurisdiction to require interstate natural gas companies to file information forecasts of demand, resources, and requirements, as set forth in its regulations. And the Council finds continuing jurisdiction to review environmental impact, land use, and public safety issues as these apply to siting of interstate gas facilities certificated or to be certificated by the FPC.

In the Matter of Algonquin Gas Transmission Co., 1 DOMSC 108 (1977) (emphasis added). *See also* text accompanying notes 51-52 *supra*.

181. The owner of the facilities advised the FERC that it intends to apply for permission to store LNG at the site. Letter to the FERC from Public Service Electric & Gas Co. (December 27, 1978). The company's earlier application to import the LNG to Staten Island is still pending. Eascogas LNG, Inc., No. CP73-47 (FPC, 1973). In connection with its proposal to store the LNG, the company has challenged the constitutionality of New York's siting law. *See* text accompanying notes 55-56 *supra*.

182. The Oxnard site was approved in an initial decision in *Pac Indonesia*, No. 77-001-LNG, at 53 (DOE /ERA Dec. 30, 1977) (Opinion No. 1). Pac Indonesia's application was subsequently consolidated with the application by Pac Alaska to transport Alaskan LNG. Both of these projects will utilize the same terminal site. *See also* text accompanying note 58 *supra*.

with regard to Massachusetts' law. Because the state's Energy Facilities Siting Council has not attempted to bar use of a site approved by the federal government, such as the existing Distrigas facilities near Boston, which the Council is unlikely to challenge, Massachusetts' law is not presently in actual conflict with federal law.

Even if a state were to prohibit use of a federally approved site, however, it is far from clear that the resulting conflict would justify preemption. If viable alternative facilities sites existed elsewhere in the state, and the state's ban were confined to a specific site, a case could be made against a charge of irreconcilable conflict. In such a situation, under the current Supreme Court's rule that preemption must be restricted to the area of actual conflict,[183] a state siting law would not be invalid. Instead, a court would find the particular application of state law to be preempted, without invalidating all future instances of state regulation. Unless a state were to bar siting altogether, thereby provoking direct conflict with the NGA's mandate to insure adequate gas supply to consumers, it is not inevitable that a conflict sufficient to trigger preemption of an entire state regulatory scheme would arise. The fundamental divergence of the aims of the federal and state laws militates against such a harsh result.

C. *The Natural Gas Pipeline Safety Act*

State siting statutes have been challenged as preempted by the Natural Gas Pipeline Safety Act (NGPSA).[184] In practice, LNG is regulated primarily under the Natural Gas Act,[185] which confers broad authority on the FERC to regulate the natural gas industry. The NGPSA confers narrower jurisdiction over natural gas facilities upon the Department of Transportation (DOT), which jurisdiction is limited to establishing standards for the safety of natural gas facilities.[186] The Act expressly preempts the states from establishing safety standards of the type authorized by the statute. The NGPSA explicitly prohibits the DOT from siting natural gas facilities, however.[187] The states are thus not preempted from regulating LNG facility siting.[188]

On the federal level, the NGPSA authorizes the Department of Transportation to establish safety standards pertinent to the design, inspection, testing, operation, and maintenance of interstate natural gas pipelines.[189] It is unclear

183. *See* Merrill Lynch, Pierce, Fenner & Smith v. Ware, 414 U.S. 117, 137 (1973).

184. 49 U.S.C. §§ 1671-1686 (1976).

185. 15 U.S.C. § 717 (1976).

186. 49 U.S.C. § 1672 (1976).

187. *See* note 194 *infra*.

188. Although none of the case law is exactly on point, the statute and legislative history provide some clarification. *See generally* S. REP. No. 94-852, 94th Cong., 2d Sess., *reprinted in* [1976] U.S. CODE CONG. & AD. NEWS 4673, 4673-4703; H.R. REP. No. 1390, 90th Cong., 2d Sess., *reprinted in* [1968] U.S. CODE CONG. & AD. NEWS 3223, 3223-74; Armstrong, *The Natural Gas Pipe Line Safety Act of 1968*, 2 NAT. RESOURCES LAW. 142, 150 (1969).

189. United Gas Pipeline Co. v. Terrebonne Parish Police Jury, 319 F. Supp. 1138, 1139 (E.D. La. 1970), *aff'd*, 445 F.2d 301 (5th Cir. 1971). *See also* Tenneco, Inc. v. Public Serv. Comm'n, 489 F.2d 334, 336 (4th Cir. 1973); H.R. CONF. REP. No. 94-1660, 94th Cong., 2d Sess., *reprinted in* [1976] U.S. CODE CONG. & AD. NEWS 4703.

whether Congress intended the Act to cover LNG facilities.[190]

Nevertheless, the Office of Pipeline Safety of the DOT has asserted jurisdiction over the safety of LNG facilities under the Act.[191] The legislative history accompanying the 1976 amendments to the NGPSA suggests that Congress simply presumes that the DOT has such jurisdiction.[192] There is no clarifying case law, but the statute can be interpreted to cover most LNG facilities.[193]

The NGPSA, however, expressly preempts the states from establishing safety standards governing interstate natural gas facilities.[194] Congress contemplated a unified federal scheme of safety regulation, at least for interstate facilities. In order to promote uniformity of regulation in a field which had previously been characterized by sporadic regulation and conflicting state

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190. *See* P. SWAN, *supra* note 9, at 37-38.

191. In 1977, the Office of Pipeline Safety proposed safety regulations for LNG facilities. LNG Facilities, Federal Safety Standards, 42 Fed. Reg. 20,776, 20,776-800 (1977) (proposed for codification in 49 C.F.R. § 193). The proposed regulations require a buffer zone of up to seven miles between LNG terminal sites and populated areas and thus, if adopted, would significantly affect LNG site selection. *See* OTA REPORT, *supra* note 2, at 26, 54; Tenneco Atlantic Pipeline Co., No. CP77-100, at 43 (FPC, Nov. 2, 1977) (initial decision on importation of Algerian liquefied natural gas).

192. *See* S. REP. NO. 94-852, 94th Cong., 2d Sess., *reprinted in* [1976] U.S. CODE CONG. & AD. NEWS, 4673, 4676-77. *See also* LEGISLATIVE ISSUES, *supra* note 12, at 5, 16-17. Congress has been critical of the performance of the Office of Pipeline Safety in implementing safety regulation with regard to LNG facilities. *See id.* at 13, 17-19; S. REP. NO. 94-852, 94th Cong., 2d Sess., *reprinted in* [1976] U.S. CODE CONG. & AD. NEWS 4673, 4676.

193. Section 3a of the NGPSA, 49 U.S.C. § 1672 (1976), empowers the DOT to establish safety standards for "pipeline facilities" and "the transportation of gas." Section 2(4) further defines "pipeline facilities" to include "without limitation . . . any equipment facility, or building used in the transportation of gas." 49 U.S.C. § 1671(4) (1976). In section 2(3), "transportation of gas" is defined as "the gathering, transmission or distribution of gas by pipeline or its storage in or affecting interstate or foreign commerce." 49 U.S.C. § 1671(3) (1976). The broad language of section 2(4) encompassing "any" facility, could be interpreted to include LNG facilities. The provision in section 2(3) referring to storage "in or affecting foreign or interstate commerce" could cover LNG, which may affect either or both forms of commerce. Facilities used in the importation or storage of LNG surely would be included. However, the statute does not cover facilities which are other than interstate in nature. *See* note 194 *infra*.

194. The Act precludes state agencies from "adopt[ing] or continu[ing] in force any such standards applicable to interstate [natural gas pipeline] facilities, after the Federal standards become effective." 49 U.S.C.A. § 1672(b) (West Supp. 1978). "Interstate facilities" are defined by the Act as those falling within the FPC's jurisdiction under the Natural Gas Act. 49 U.S.C. § 1671(8) (1976). As defined in the 1968 version of the NGPSA, certain intrastate facilities were also removed from state jurisdiction, which otherwise would have fallen under state authority under the NGA. The 1976 amendments to the NGPSA revised the definition of "intrastate" facilities to restore state jurisdiction over certain of these facilities. Natural Gas Pipeline Safety Act Amendments of 1976, PUB. L. NO. 94-477, § 2, 90 Stat. 2073 (1976). *See* S. REP. NO. 94-852, 94th Cong., 2d Sess., *reprinted in* [1976] U.S. CODE CONG. & AD. NEWS 4673, 4673-74, 4678, 4681.

The 1968 House Report explains the statutory distinction:

> The relationship of Federal-State regulatory authority created by this bill differs as between local pipelines and interstate transmission lines. In the latter area, the lines of a single transmission company may traverse a number of States and uniformity of regulation is a desirable objective. *For this reason, section 3 provides for a Federal preemption in the case of interstate transmission lines.*

standards,[195] Congress expressly preempted concurrent state regulation and confined the states to a limited role in enforcing federally-promulgated standards.[196] The courts have read the NGPSA to preempt state adoption of safety standards for the design, inspection, testing, operation, and maintenance of interstate pipelines.[197]

Although the states are expressly preempted from promulgating the safety standards included in the NGPSA, the question remains whether preemption extends by implication to the siting of LNG facilities. In order for preemption to be inferred, a court must find that Congress has made manifest its intent to occupy the field and that the federal and state statutory schemes conflict to such a degree as to thwart implementation of the goals of the federal scheme.

1. *Occupying the Field*

Although Congress, through the NGPSA, has occupied a significant part of the field of interstate pipeline safety regulation, federal preemption of all aspects of natural gas facilities safety does not inevitably follow. In *Tenneco, Inc. v. Public Serv. Comm'n*, for example, the United States Court of Appeals for the Fourth Circuit found that Congress' intent that the NGPSA preempt state regulation was confined to regulation of construction, design, operation, and maintenance of interstate pipelines, and did not extend to state taxation of interstate pipelines.[198]

The NGPSA explicitly precludes the DOT from regulating the siting of nat-

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H.R. REP. No. 1390, 90th Cong., 2d Sess., *reprinted in* [1968] U.S. CODE CONG. & AD. NEWS, 3223, 3241 (emphasis added).

195. Between the end of World War II and enactment of the NGPSA, the natural gas industry had experienced tremendous growth and had expanded its pipeline system nationwide. H.R. REP. No. 1390, 90th Cong., 2d Sess., *reprinted in* [1968] U.S. CODE CONG. & AD. NEWS 3223, 3225. By 1968, however, the previously good safety record of the industry had become "spotty." *Id.* at 3232 (appendix to statement of Hon. Alan S. Boyd, Secretary, Department of Transportation). Although the states regulated pipeline safety, the stringency of regulation varied from state to state. *Id.* at 3228-30. Recognizing the need for uniform pipeline safety standards, the FPC lobbied for bills to amend the Natural Gas Act to confer authority on the FPC to regulate pipeline safety. Under the Department of Transportation Act of 1966, PUB. L. No. 89-670, 80 Stat. 931 (1966) (codified at 49 U.S.C. §§ 1651-1659 (1976)), the DOT was given authority to regulate all modes of transportation except natural gas transportation by pipeline. Passage of the NGPSA in 1968 completed the DOT's jurisdiction over interstate transportation safety matters by granting the DOT authority to impose uniform pipeline safety regulations. H.R. REP. No. 1390, 90th Cong., 2d Sess., *reprinted in* [1968] U.S. CODE CONG. & AD. NEWS 3223, 3224. *See also* Doak v. City of Claxton, 390 F. Supp. 753, 755 (S.D. Ga. 1975); Armstrong, *supra* note 188, at 142-45.

196. H.R. REP. No. 1390, 90th Cong., 2d Sess., *reprinted in* [1968] U.S. CODE CONG. & AD. NEWS 3223, 3241.

197. Tenneco, Inc. v. Public Serv. Comm'n, 489 F.2d 334, 336 & n.6 (4th Cir. 1973); United Gas Pipeline Co. v. Terrebonne Parish Police Jury, 319 F. Supp. 1138, 1139 (E.D. La. 1970), *aff'd*, 445 F.2d 301, 301 (5th Cir. 1971). The DOT's regulations implementing the Act provide that the state, as an agent of the Secretary of the DOT, may neither create new standards nor alter existing federal standards for interstate pipeline safety. *See* Fed. Reg. 13,248, 13,249-50 (1970) (giving notice of a new Part 192 in Title 49, Code of Federal Regulations, containing the minimum federal safety standards for transportation of natural gas and facilities used in transportation).

198. 489 F.2d 334, 338 (4th Cir. 1973).

ural gas facilities.[199] Far from intending the DOT to occupy the field of facilities siting, Congress barred the DOT from entering it. The reason for the exclusion was Congress' intent that federal regulation of facilities siting be conducted under the NGA, and not under the NGPSA. The legislative history of the Act indicates that Congress denied the DOT authority to site natural gas facilities in order to preserve the FPC's traditional authority to route natural gas pipelines.[200] Congress intended the FPC to continue to consider safety in connection with certifying facilities.[201] In 1976, Congress rejected amendments to the NGPSA that would have given siting jurisdiction to the DOT, reaffirming Congress' desire to leave the FPC's routing safety role under the NGA intact.[202]

2. Irreconcilable Conflict

The purpose of the NGPSA is broad: to ensure the safety of interstate transmission of natural gas.[203] It might appear, therefore, that the federal statute overlaps state siting laws, since their purpose is also to protect public safety by locating LNG facilities in areas remote from population. Although safety and siting issues intersect insofar as safety is a major consideration in LNG facilities siting, Congress wished to preserve the FPC's jurisdiction over siting and narrowed its broad purpose to promote safety under the NGPSA by specifically excluding siting. By excluding siting from the Act's coverage, Congress shielded from irreconcilable conflict state siting laws that prescribe only siting standards. However, a state statute that oversteps this boundary by prescribing, for example, construction and operation standards for LNG facilities, or that rules out sites in certain locations because they do not meet state-

199. 49 U.S.C. § 1671(4) (1976). *See also* H.R. REP. No. 1390, 90th Cong., 2d Sess. 19, 20, *reprinted in* [1968] U.S. CODE CONG. & AD. NEWS 3223, 3235.

200. H.R. REP. No. 1390, 90th Cong., 2d Sess., *reprinted in* [1968] U.S. CODE CONG. & AD. NEWS 3223, 3251-52.

201. *Id.* at 3251-53. The House Report states:

> [T]he Federal Power Commission has authority over the routing of interstate transmission lines, and through the exercise of its conditioning authority in the granting of a certificate [under section 7 of the NGA] . . . can delimit the route with particularity. The reported bill does not impinge upon this jurisdiction of the Commission. Indeed section 2(4) states that the Secretary is not authorized to prescribe the location of routing of any pipeline facility.

Id. at 3251.

202. The Senate bill, which would have ousted the FPC from regulating the safety of natural gas facilities, including those used for LNG, was rejected by the Conference Committee that prepared the final bill. H.R. CONF. REP. No. 94-1660, 94th Cong., 2d Sess., *reprinted in* [1976] U.S. CODE CONG. & AD. NEWS 4673, 4703. The Committee adopted the House version, which made no reference to the FPC's role and retained the exclusion of siting from the NGPSA. *See id.* The House of Representatives also recently attempted unsuccessfully to amend the NGPSA to bring LNG facilities, wherever located, within the preemptive purview of the statute. Fuels Transportation Safety Amendments Act of 1978, H.R. 11622, 95th Cong., 2d Sess. 20, 24 (1978). *See* H.R. REP. No. 95-1167, 95th Cong., 2d Sess. 24-25 (1978); 124 CONG. REC. H9564 (daily ed. Sept. 12, 1978) (remarks of Rep. Dingell). *See also* text accompanying notes 259-71 *infra*. The Senate rejected the bill. *See* 124 CONG. REC. S16649-52 (daily ed. Sept. 29, 1978) (remarks of Sens. Ford, Cannon, Long, Durkin, Pearson, and Stevens).

203. *See* Doak v. City of Claxton, 390 F. Supp. 753, 755 (S.D. Ga. 1975).

promulgated design or maintenance standards, might create a conflict sufficient to trigger preemption. However, in light of the congressional intent not to include siting within the preemptive scope of the NGPSA, and the clear legislative design to keep siting within the purview of the NGA, preemption should not be implied under the NGPSA. The preemption issue can more appropriately be resolved under the NGA.[204]

III
BURDEN ON INTERSTATE COMMERCE

If state LNG siting laws survive the test of preemption, another judicial doctrine threatens state regulations: They may be invalidated as unduly burdensome on interstate commerce.[205] It may be crucial to a state which of the two doctrines is invoked. A finding of preemption can mean that state regulation of a given subject is per se invalid. By contrast, a judicial declaration that state law imposes an undue burden on interstate commerce may operate to nullify only the particular instance of state regulation in question. Current doctrine, however, considerably narrows the scope of preemption,[206] somewhat blurring the distinction between the consequences of declarations of preemption and burden on interstate commerce.

Unlike the tests used for determining preemption, which focus primarily on the operative federal statute, judicial analysis under the Commerce Clause looks more generally to the state's interest in regulating a given subject.[207] Only where state law imposes an undue burden on interstate commerce will the law be struck down. Where state regulation is rationally related to legitimate state interests under the police power, and where these interests outweigh the burden imposed on interstate commerce, the state law will be upheld.[208] State safety regulations, such as siting laws for LNG facilities, are authorized under the police power.[209] They are therefore not likely to be deemed burdensome on interstate commerce unless they discriminate against interstate commerce.[210]

State siting laws have been found to discriminate unreasonably against interstate commerce where state regulation has made siting of LNG facilities effectively impossible. Courts have struck down state natural gas pipeline siting

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204. *See* text accompanying notes 94-183 *supra*.

205. The Commerce Clause of the United States Constitution provides, "The Congress shall have the Power . . . to regulate Commerce with foreign Nations, and among the several States, and with the Indian Tribes." U.S. CONST. art. I, § 8, cl. 3. Both preemption and obstruction of commerce challenges arise under the Commerce Clause, but preemption derives also from the Supremacy Clause, U.S. CONST. art. VI, cl. 2. *See* Note, *State Environmental Protection Legislation*, *supra* note 117, at 1769 (1974). Both doctrines have been employed in an ad hoc, result-oriented manner. *See id.* at 1780-81. *See also* Note, *supra* note 73, at 624.

206. *See* text accompanying notes 77-82 *supra*.

207. *See* note 117 *supra*.

208. Pike v. Bruce Church, Inc., 397 U.S. 137, 142 (1970). *See, e.g.*, Bibb v. Navajo Freight Lines, Inc. 359 U.S. 520 (1959); Southern Pac. Co. v. Arizona, 325 U.S. 761 (1945). *See* Note, *State Environmental Protection Legislation*, *supra* note 117, at 1764.

209. *See* text accompanying notes 139-145 *supra*.

210. *See* City of Philadelphia v. New Jersey, 437 U.S. 617, 624 (1978).

regulations only in this most egregious circumstance, reasoning that the state law was arbitrarily designed to bar all viable siting, and hence constituted an abuse of the police power.[211] Typically in such cases state regulation would have precluded entirely the construction of a pipeline certified by the FPC as "in the public convenience and necessity."[212] For example, in *Transcontinental Gas Pipe Line Corp. v. Hackensack Meadowlands Dev. Comm'n*,[213] local zoning ordinances outlawing construction of LNG storage tanks were invalidated as an unreasonable restriction of interstate commerce.[214] The ordinances notably prohibited all construction of any kind at or near an existing LNG facility.[215] Although it struck down the local law, the court reaffirmed the state's authority to control land use under the police power and implicitly confined its decision to the facts of the case.[216]

In *New York v. Elma*,[217] the state failed to show a reasonable relationship between its zoning ordinance prohibiting natural gas regulators and metering equipment, and the protection of public health, safety, or welfare.[218] Similarly, in *Gulf Interstate Gas Co. v. Rapides Parrish Police Jury*,[219] ordinances requiring pipeline siting at depths that were technologically unfeasible were struck down because they in effect prohibited the transportation of natural gas through the locality, thus imposing an undue burden on interstate commerce.[220]

The important distinction drawn by the courts in all of these cases is that between regulation and prohibition; the latter is more likely to impose a burden that the courts will consider undue. The Supreme Court has stated that where "legislative objectives are credibly advanced and there is no patent discrimination against interstate trade," the Court will apply the flexible approach articulated in *Pike v. Bruce Church*, requiring a subtle balancing of federal and state interests.[221]

> Where the statute regulates even-handedly to effectuate a legitimate local public interest, and its effects on interstate commerce are only incidental, *it will be upheld unless the burden imposed on such commerce is clearly excessive in relation to the putative local benefits.* If a legitimate local purpose is found, then the question becomes one of degree. And the extent of the burden that will be tolerated will of course depend on the nature of the

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211. *See* Hershman & Fontenot, *Local Regulation of Pipeline Sitings and the Doctrines of Federal Preemption and Supremacy*, 36 LA. L. REV. 929, 938-39 (1976).

212. *See, e.g.*, Gulf Interstate Gas Co. v. Rapides Parish Police Jury, 115 F. Supp. 746, 751 (W.D. La. 1953); Transcontinental Gas Pipe Line Corp. v. Borough of Milltown, 93 F. Supp. 287, 294-95 (D.N.J. 1950).

213. 464 F.2d 1358 (3d Cir. 1972), *cert. denied*, 409 U.S. 1118 (1973).

214. *Id.* at 1363-64.

215. *See id.* at 1362 n.14.

216. *Id.* at 1362.

217. 182 F. Supp. 1 (W.D.N.Y. 1960).

218. *Id.* at 6-7.

219. 115 F. Supp. 746 (W.D. La. 1953).

220. *Id.* at 751.

221. Pike v. Bruce Church, 397 U.S. 137 (1970). *See* City of Philadelphia v. New Jersey, 437 U.S. 617, 624 (1978).

local interest involved, and on whether it could be promoted as well with a lesser impact on interstate activities.[222]

Moreover, one circuit has held that, where the local interest is strong, even prohibitions upon segments of interstate commerce may be upheld.[223]

The safety hazards posed by LNG when facilities are sited in populated regions create a strong state interest in confining LNG facilities to remote areas. Hence, state siting laws that mandate remote siting but fall short of banning all siting within the state should not be deemed unduly burdensome on interstate commerce. New York's and Massachusetts' siting laws,[224] for example, do not by their terms prohibit LNG siting. They merely authorize the Department of Environmental Conservation and the Energy Facilities Siting Council, respectively, to establish criteria for siting LNG facilities.[225] If, however, these regulatory bodies were to establish unduly restrictive criteria, in effect precluding siting altogether, the pertinent statutory provisions would be condemned for discriminating against interstate commerce. California's siting law[226] could face a more serious Commerce Clause challenge. The statute authorizes only one LNG terminal within the state.[227] Although the California provision does not impose an absolute moratorium on siting, additional terminal sites must receive approval from the state legislature.[228] There is reason to believe that additional terminals may be required in the future to service incoming LNG supplies.[229] Should the state refuse to authorize such terminal sites, the Commerce Clause might operate to invalidate California's siting law.

IV
THE FEDERAL POWER OF EMINENT DOMAIN

Although persuasive arguments can be marshalled against preemption and Commerce Clause objections to state LNG siting laws, the judicial and administrative resolution of these issues cannot be predicted. Moreover, even if state legislation passes constitutional tests in the courts, the possibility remains that the states will be precluded from regulating LNG site selection either by new federal legislation or by federal agency exercise of the power of eminent domain.

As a practical matter there is some likelihood that the Department of En-

222. 397 U.S. 137, 142 (1970). The *Pike* test was recently reaffirmed by the Supreme Court in Great Atlantic & Pacific Tea Co., Inc. v. Cottrell, 424 U.S. 366, 371-72 (1976).

223. *See, e.g.*, Procter & Gamble v. City of Chicago, 509 F.2d 69, 79-80 (7th Cir.), *cert. denied*, 421 U.S. 978 (1975) (city prohibition on detergents containing phosphates upheld).

224. N.Y. ENVIR. CONSERV. LAW §§ 23-1701 to 1727 (McKinney Supp. 1978-1979); MASS. GEN. LAWS ANN. ch. 164, §§ 69H-69R (West 1976 & Supp. 1979).

225. *See* text accompanying notes 166-70, 174-79 *supra*.

226. CAL. PUB. RES. CODE ch. 3, § 30261(b) (West Supp. 1979); CAL. PUB. UTIL. CODE ch. 10, §§ 5550-5650 (West Supp. 1979).

227. *See* CAL. PUB. UTIL. CODE ch. 10, §§ 5551(d), 5580 (West Supp. 1979).

228. *See* CAL. PUB. UTIL. CODE ch. 10, § 5650 (West Supp. 1979).

229. *See* Arnold, *Liquefied Natural Gas Terminal Siting in the California Coastal Zone: The Scope of Permissible State Authority*, 9 PAC. L.J. 1069, 1070, 1112 (1978).

ergy (DOE), which now approves LNG projects, will attempt to enforce federal siting decisions through the power of eminent domain, in effect preempting the states from influencing siting decisions. The Natural Gas Act endows the FPC with the power to force a state or locality to turn over publicly owned land to a company to which the FPC has granted a certificate of public convenience and necessity under section 7 of the Act.[230] Section 7(h) of the NGA grants eminent domain authority to certificate holders for the purpose of acquiring "the necessary right-of-way to construct, operate, and maintain . . . pipe lines for the transportation of natural gas and the necessary land . . . for the location of . . . equipment necessary to the proper operation of such . . . pipe lines."[231] Were the DOE to certify an LNG site disapproved of by the state, the DOE could use the power of eminent domain to override state opposition.[232]

The eminent domain issue has never been litigated,[233] but it has been raised in several administrative proceedings by federal agencies urging preemption of state siting authority.[234] In *Tenneco Atlantic Pipeline Corp. (TAPCO)*,[235] an importation proceeding brought before the FPC, the agency staff attempted to impose an LNG terminal on an unwilling state by means of the agency's power of eminent domain. In connection with its importation application, the importer requested permission to build an LNG receiving terminal, a regasification plant, and storage facilities in New Brunswick, Canada.[236] After conducting an extensive alternate site study, the FPC staff determined that a superior site existed at Prudence Island, Rhode Island.[237] Rhode Island authorities protested that the proposed facilities would undermine development of a state park system in which Prudence Island formed the keystone, and would adversely affect the tourist industry on Narragansett Bay.[238] Emphasizing that the Prudence Island site consisted of federally owned land

230. 15 U.S.C. § 717f(h) (1976). Under the Department of Energy Organization Act, all powers vested in the FPC were transferred to the DOE. *See* note 37 *supra*.

231. *Id.*

232. Cong. Research Serv., American Law Div., Lib. of Cong., QUESTIONS RAISED BY A SITUATION IN WHICH A STATE AND A LICENSEE UNDER THE NATURAL GAS ACT ARE COMPETING FOR APPROVAL TO PURCHASE A PARCEL OF SURPLUS FEDERAL LAND (Memorandum to Sen. Claiborne Pell, Sept. 22, 1977) [hereinafter cited as Cong. Research Serv. Memorandum].

233. *Id.* at 7.

234. *See* Tenneco Atlantic Pipeline Co., No. CP77-100, at 52-55 (FPC, Nov. 2, 1977) (initial decision on importation of Algerian liquefied natural gas); Memorandum of the Commission Staff on the Constitutional Questions Presented by the California Liquefied Natural Gas Terminal Act of 1977, Pacific Alaska LNG/Western LNG Terminal Co., Nos. CP75-140, CP75-83-2, at 31-32 (FERC, 1978).

235. Tenneco Atlantic Pipeline Co., No. CP77-100 (FPC, Nov. 2, 1977) (initial decision on importation of Algerian liquefied natural gas).

236. *Id.* at 3.

237. Tenneco Atlantic Pipeline Co., No. CP77-100 (FPC, Sept. 1977) (Final Environmental Impact Statement). The FPC considered various alternatives to the proposed site. A Maine site was deemed "acceptable," whereas the Prudence Island, Rhode Island site was considered "superior" to the also "acceptable" New Brunswick, Canada site. *Id.*

238. *See* Tenneco Atlantic Pipeline Co., No. CP77-100, at 27, 33 (FPC, Nov. 2, 1977). Referring to the state's interest in developing the park system, the administrative law judge stated in his decision: "[E]ach of these concerns is legitimate but none of them warrants eliminating Prudence Island as an alternative LNG terminal site." *Id.* at 52. *See also id.* at 37.

which the state had been attempting to obtain for several years, the state threatened to litigate its alleged "right of first refusal" to purchase the land from the federal government.[239] The FPC argued that even if the state were to prevail in the courts and obtain the right to purchase the contested property, the federal government could, under section 7 of the NGA, take the land by eminent domain and turn it over to the applicant.[240] The administrative law judge indicated in his initial decision that a state's ownership interest in a site certified by the FPC for natural gas facilities cannot prevail against the federal power of eminent domain.[241]

Rhode Island was "saved" from becoming the site of LNG importation activity by considerations of expedience. Fearing that a lengthy court battle over ownership rights to Prudence Island land would threaten the importer's contract with the Algerian supplier,[242] the administrative law judge pragmatically dropped Prudence Island from consideration, stressing that "the element of timing alone precludes the choice of Prudence Island."[243]

The administrative law judge's interpretation of section 7(h) as a federal override provision was dictum in an administrative decision and might not prevail in court. In the first place, it is not clear that the section was intended to apply to LNG terminal facilities.[244] Second, the legislative history of the section indicates that its primary purpose was to provide a mechanism for implementing and enforcing FPC certificates of public convenience and necessity.[245] There is no evidence that section 7(h) was intended to be a preemptive provision. Given the NGA's generally non-preemptive character,[246] it is more reasonable to presume that section 7(h) was not intended as a vehicle for imposition of federal siting decisions on unwilling states.

V
ALTERNATIVES TO PREEMPTION

Given the possibility that states may be prevented from exercising concurrent jurisdiction over LNG siting under current law, there are at least two means by which the whole preemption issue could be circumvented. First, rather than enact siting statutes, states could utilize a mechanism provided by the federal Coastal Zone Management Act to achieve the same result. Second, Congress could amend existing legislation expressly to authorize state participation in the LNG siting process.

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239. *Id.* at 26-27.
240. *See id.* at 52-53.
241. *Id.* at 54.
242. *See id.* at 57.
243. *Id.* at 39.
244. Cong. Research Serv. Memorandum, *supra* note 232, at 7, 9.
245. *See Hearings on H.R. 2956 Before the House Comm. on Interstate and Foreign Commerce*, 80th Cong., 1st Sess. 377-79 (1947); Natural Gas Pipe Line Co. of America v. Iowa State Commerce Comm'n, 369 F. Supp. 156 (S.D. Iowa 1974).
246. *See* text accompanying notes 94-183 *supra* .

A. *The Coastal Zone Management Act of 1972*

The Coastal Zone Management Act[247] is an important but underutilized source of state authority over LNG facilities siting. The Act's goal is to achieve a unified national policy for protection of coastal resources and for efficient coastal zone management[248] by encouraging the states to develop comprehensive land and water use plans for their coastal areas.[249] Under the Act, a state may determine whether energy facilities may be sited along its coast, and if so, where they may be located. State plans are subject to approval by the Secretary of Interior.[250] The Act does require that to receive federal approval for a management plan, a state must have considered the "national interest involved in the siting of facilities necessary to meet requirements which are other than local in nature."[251]

Congress did not intend to preempt state authority;[252] rather it delegated the task of developing coastal zone management plans to the states. Moreover, under the Act's "federal consistency" provisions, when a state plan has been approved, applicants for federal licenses or permits for activities within the state's coastal zone are required to certify that the proposed project conforms with the state's plan. Following approval of a state plan, no federal agency may issue licenses or permits unless the state concurs or fails to object to a proposal within sixty days or unless the Secretary of Interior finds the proposed project consistent with the overall objectives of the Act.[253] Certificates of public convenience and necessity issued under section 7 of the Natural Gas Act should fall within the category of licenses and permits for which proposals must be made consistent with the siting provisions of a state's plan. If a state's approved coastal plan contains provisions specifying where LNG facilities may and may not be located, the Department of Energy must make siting decisions consistent with the state's plan.[254]

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247. 16 U.S.C. §§ 1451-1464 (1976).

248. *See id.* § 1452(b).

249. The Act was designed to encourage voluntary participation in coastal zone management by the states. Financial grants to states that prepare management plans are incentives for state participation in the program. *See* 16 U.S.C. §§ 1454-1455 (1976). "Federal consistency," deference to the states' plans, is another incentive. *See* text accompanying notes 253-55 *infra*.

250. *See* 16 U.S.C. § 1455 (1976).

251. *Id.* § 1455(c)(8). *See also* note 254 *infra*.

252. *See* 16 U.S.C. § 1456(e) (1976); Gendler, *Towards Better Use of Coastal Resources: Coordinated State and Federal Planning Under the Coastal Zone Management Act*, 65 GEO. L.J., 1057, 1068 (1977); Wrede, *Preemption and the Role of State Legislation in the Coastal Zone*, 10 NAT. RESOURCES LAW. 237, 247 (1977).

253. 16 U.S.C. § 1456 (1976).

254. Only a state plan that has received federal approval can take advantage of "federal consistency." A state plan effectively prohibiting LNG facilities siting would not be likely to receive federal approval, and therefore would not prevent issuance of a section 7 certificate by the FERC. *See* Arnold, *supra* note 229, at 1093. A state plan that inadequately considered the national interests in its siting provisions would presumably not receive federal approval. It is not yet clear, however, what a state's "consideration" must entail in the context of LNG facilities siting. The consideration requirement could be interpreted as a procedural formality. *See* Whitney, *Siting of Energy Facilities in the Coastal Zone—A Critical Regulatory Hiatus*, 16 WM. & MARY L. REV. 805, 814-15 (1975).

The federal consistency mechanism is thus a powerful tool for state regulation of LNG facilities siting. Few states have used it to full advantage, however. Although several states have included provisions expressing the state's general policies for LNG facilities siting,[255] only California has attempted to utilize the Act's consistency mechanism to its fullest potential by incorporating the state's siting law into a management plan. The California Coastal Act, a part of the California Management Program, provides that only one LNG terminal shall be permitted in the coastal zone and that the terminal shall be sited in an area "remote from human population concentrations."[256] No further specification of siting criteria is developed in the Management Program. The Management Program was approved in 1978 and withstood a federal court challenge.[257] It is California's LNG Terminal Act of 1977, however, that implements the siting provisions of the Coastal Act. The Terminal Act was not incorporated into the plan that was approved, and an attempt to amend the approved program to include the Terminal Act failed.[258] The federal consistency provisions of the Coastal Zone Management Act therefore do not apply to state siting determinations made pursuant to California's Terminal Act. Other states should learn from California's error that either a detailed siting plan or existing state siting legislation should be incorporated directly into the management plan prior to approval in order to receive the benefit of federal consistency.

B. Recent Congressional Legislation

Congress has been cognizant of the need for legislative reform of LNG safety regulation, and has begun to formulate uniform federal standards both to assure safety and to cure the deficiencies presently caused by ad hoc and inept regulation. As a result, the question of preemption of state regulation is being considered in the legislative context. Congress has the power to amend existing legislation or to create new law that expressly preempts state siting statutes.

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255. For example, New Jersey's proposed coastal zone management program contains the following provision:

> [T]he location of terminals for transferring Liquefied Natural Gas (LNG) is discouraged in the Bay and Ocean Shore Segment until: (a) rigorous and consistent siting criteria are established, . . . and (c) the Federal Energy Regulatory Commission responds affirmatively to the May 1976 petition by New Jersey for the issuance of siting criteria that adequately consider the safety hazards associated with this energy technology. Even if such criteria were established LNG terminals are nevertheless acceptable only at sites remote from population centers.

STATE OF NEW JERSEY COASTAL MANAGEMENT PROGRAM BAY AND SHORE SEGMENT, DRAFT ENVIRONMENTAL IMPACT STATEMENT 146 (May 1978). *See also*, STATE OF RHODE ISLAND COASTAL MANAGEMENT PROGRAM AND FINAL ENVIRONMENTAL IMPACT STATEMENT 323 (1978).

256. California Coastal Act of 1976, CAL. PUB. RES. CODE § 30261(b) (1976). *See also* STATE OF CALIFORNIA, COASTAL MANAGEMENT PROGRAM AND FINAL ENVIRONMENTAL IMPACT STATEMENT (1977).

257. American Petroleum Institute v. Knecht, 456 F. Supp. 889 (C.D. Cal. 1978).

258. The state's attempt to amend the plan was initially approved by the Department of Commerce. *See* Arnold, *supra* note 229, at 1095 & n.204. The FERC staff and intervenors in proceedings regarding an LNG terminal site for California, *see* note 58 *supra*, opposed the amendment, however, causing the Department of Commerce to reconsider its approval.

For example, amending the NGPSA expressly to permit the Department of Transportation to regulate siting would achieve this result.[259] A bill recently passed by the House and subsequently rejected by the Senate might have preempted state regulation of LNG facilities siting.[260] The bill, H.R. 11622, would have amended the NGPSA to authorize the Secretary of the Department of Transportation to establish "standards for determining the location of any new LNG facility."[261] A similar bill has been introduced to the current Congress.[262] Both bills direct the Secretary to take into consideration alternative sites, population density, and the need to encourage remote siting.[263] Because they propose language similar to that of the current version of the NGPSA, the bills would prohibit the states from promulgating siting standards for interstate LNG facilities.[264] The House Report accompanying H.R. 11622, however, described the limits of the bill's preemptive capacity:

> No state laws other than those relating to pipeline safety are to be affected. State and local zoning laws, safety laws other than pipeline safety, *energy facility siting laws*, and plans developed pursuant to the Coastal Zone Management Act would continue without change. This bill provides no Federal authority to abrogate state coastal zone management plans developed pursuant to the Coastal Zone Management Act. Furthermore, this legislation gives the Secretary *no authority to select specific LNG sites*.[265]

The drafters' commentary in the House Report was not in accord with the text of the bill. On the one hand, the bill would have directed the Secretary of the Department of Transportation to establish siting standards and would have prohibited the states from so doing. On the other hand, the House Report would have prevented the Secretary from actually selecting a particular LNG site, presumably leaving this task to the FERC,[266] and would have left unaffected state LNG facilities siting laws. The only interpretation capable of

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259. *See* text accompanying notes 199-202 *supra*.

260. Fuels Transportation Safety Amendments Act of 1978, H.R. 11622, 95th Cong., 2d Sess. (1978), *reprinted in* H.R. REP. No. 95-1167, 95th Cong., 2d Sess. (1978). The Senate's reasons for rejecting the bill are set out in 124 CONG. REC. S16649-63 (daily ed. Sept. 29, 1978).

261. Fuels Transportation Safety Amendments Act of 1978, H.R. 11622, 95th Cong., 2d Sess. § 6(b)(1) (1978), *reprinted in* H.R. REP. No. 95-1167, 95th Cong., 2d Sess. 12 (1978).

262. Fuels Transportation Safety Amendments Act of 1979, H.R. 51, 96th Cong., 1st Sess., 125 CONG. REC. H127-28 (daily ed. Jan. 15, 1979).

263. Fuels Transportation Safety Amendments Act of 1979, H.R. 51, 96th Cong., 1st Sess., § 6(d)(1)(B)-(H), 125 CONG. REC. H127-28 (daily ed. Jan. 15, 1979); Fuels Transportation Safety Amendments Act of 1978, H.R. 11622, 95th Cong., 2d Sess., §§ 6(d)(1)(B)-(H), *reprinted in* H.R. REP. No. 95-1167, 95th Cong., 2d Sess. 12-13 (1978).

264. The language adopted in H.R. 11622 and carried over from the existing NGPSA is: "No state agency may adopt or continue in force any such standards applicable to interstate LNG facilities after the Federal minimum standards become effective." Fuels Transportation Safety Amendments Act of 1978, H.R. 11622, 95th Cong., 2d Sess. § 6(h) (1978), *reprinted in* H.R. REP. No. 95-1167, 95th Cong., 2d Sess. 14 (1978). *See* note 194 *supra*. The language of H.R. 51 parallels that of H.R. 11622. Fuels Transportation Safety Act of 1979, H.R. 51, 96th Cong., 1st Sess., § 104(f)(2), 125 CONG. REC. H127-28 (daily ed. Jan. 15, 1979).

265. H.R. REP. No. 95-1167, 95th Cong., 2d Sess. 27, 43 (1978) (emphasis added).

266. *See id.* at 32; text accompanying notes 200-02 *supra*.

reconciling these conflicting legislative expressions is one which draws a distinction between the making of safety standards and site selection, leaving the states free to do the latter but not the former. Because state LNG siting laws such as the California and New York statutes tend to involve both standards for siting safety and site selection itself, this distinction may not be a viable one.[267] The bill, if it had been enacted, would thus have left unsettled the question whether state siting laws are preempted.

Another bill, S. 411, which is currently pending before Congress, also would amend the NGPSA.[268] The Senate amendments, however, would accomplish little more than an expansion of the Secretary's power to establish transportation safety standards for LNG facilities.[269] Unlike H.R. 11622, S. 411 would not extend federal jurisdiction to set safety standards to LNG facilities siting. Like the current version of the NGPSA, the proposed amendment explicitly prohibits the Secretary from routing or locating LNG facilities.[270] Because the amendment would leave jurisdiction over LNG siting outside the purview of the NGPSA, resolution of the preemption issue again would lie under the NGA, which is non-preemptive.[271]

Neither of the above bills would satisfactorily resolve either the preemption problem or the current absence of meaningful federal regulation of LNG facilities siting. Although commendable for its attempt to mandate the establishment of federal LNG siting criteria, H.R. 11622 nonetheless muddles the issue whether state siting laws are preempted. The more recent bill, S. 411, while not preemptive of state law, fails to set uniform federal siting criteria. Both problems must be addressed forthrightly by Congress if the dangers posed by LNG are to be minimized.

C. Proposed Legislative Approaches

Both the federal government and the states have legitimate interests in controlling LNG facilities siting. It is the federal government's responsibility to protect the national security and the economic interests involved in natural gas production by assuring that an adequate supply of natural gas flows uninterruptedly to consumers. Without LNG terminals, storage tanks, and regasification plants, LNG could not be utilized as an energy supply. It is also in the national interest that these facilities, along with the entire process of supplying imported LNG, pose as little public danger as possible. Because the federal government approves LNG importation projects and is primarily responsible for numerous facets of their operation, it is essential that uniform federal siting safety standards be established to guide federal agencies in approving LNG facilities sites.

It does not follow, however, that location of such facilities must be an

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267. *See* text accompanying notes 166-72 *supra*.

268. Natural Gas Pipeline Safety Act Amendments of 1979, S. 411, 96th Cong., 1st Sess., 125 CONG. REC. S1430 (daily ed. Feb. 9, 1979).

269. *Id.* §§ 102, 105(a).

270. *Id.* § 104(b)(4).

271. *See generally* text accompanying notes 94-183 *supra*.

exclusively federal decision. The states, which have traditionally made and influenced such decisions, have a valid and strong interest in protecting their residents from LNG's dangers. Many have satisfied this interest by enacting siting laws. Moreover, states generally have a substantial economic interest in securing energy development within their borders. The needs to assure safety and to establish LNG sites can be fulfilled if the states are permitted to participate in the LNG siting process. The states' strong interest in imposing strict regulation of siting as a safety measure should therefore be accommodated where state law does not unreasonably impede site selection.

The discussion that follows proposes general statutory approaches that would achieve both state and federal goals without resorting to federal preemption of state law. Congress should enact legislation (1) establishing uniform minimum federal siting guidelines, which the states are left free to exceed; or (2) mandating a formal cooperative or joint federal-state proceeding for selecting LNG sites, in which perhaps the states are given a limited veto; or (3) requiring the states to establish siting plans based on federal guidelines, and subject to federal approval. It also might be desirable to combine certain features of several approaches into one.

The attractiveness to the states of the minimum standards approach rests on the fact that safety-conscious and environmentally conscious states may regulate siting more stringently than the federal government's minimum standards require. Yet this approach insures consistency in regulation because it authorizes the federal government to establish uniform guidelines. The minimum standards approach has been employed in numerous federal environmental and safety statutes, including the Ports and Waterways Safety Act[272] and the Clean Air Act.[273]

The joint federal/state proceeding approach is, from the states' viewpoint, potentially the weakest scheme. As with NEPA, the requirement of "consideration" of state interests by the federal government does not mandate any particular substantive result.[274] It is left entirely to the reviewing courts to determine whether a particular agency siting decision was based on substantial evidence or was arbitrary and capricious. This approach, however, does assure that there will be a forum for state claims and that states are necessary parties in siting proceedings and not merely intervenors.

The joint federal/state proceeding approach is exemplified by the federal Alaska Natural Gas Transportation Act of 1976, which mandates consultation with Alaska officials and federal government consideration of state input in siting decisions.[275] Senator Durkin has promised to introduce a bill in 1979 which will permit states through their governors to participate in LNG siting decisions.[276] A recent bill, introduced in the ninety-fifth Congress as S. 2273,

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272. *See* 33 U.S.C. § 1222(b) (1976).

273. *See* 42 U.S.C.A. § 7416 (1977) (amending 42 U.S.C. § 1857d-1 (1976)).

274. *See generally* Calvert Cliffs Coordinating Comm. v. AEC, 449 F.2d 1109 (D.C. Cir. 1971); note 107 *supra*.

275. 15 U.S.C. § 719 (1976).

276. *See* 124 CONG. REC. S16650 (daily ed. Sept. 29, 1978).

would have modified this approach by combining the procedural requirement of consideration of state interests with a substantive feature, state power to veto an LNG site which does not meet state standards.[277] The bill would have required that hearings conducted by the federal government on LNG facilities applications be held in the locality in which facilities were to be sited.[278] Other provisions would have prohibited federal site approval unless the state had "approved the specific location of the proposed facility,"[279] but would have permitted federal override of the state veto where necessary in the interests of national security.[280] The combination of these two features would have considerably strengthened the joint proceedings approach, making it a viable mechanism for achieving both site safety and federal/state consensus on siting determinations.

The last approach, which might appropriately be called the "Coastal Zone Management Act approach," places the onus of siting decisionmaking upon the states, with oversight and approval by the federal government. Under the current Coastal Zone Management Act, states can establish their own energy facilities siting plans, which are binding upon the federal government.[281] However, the Coastal Zone Management Act itself provides no substantive guidelines against which the adequacy of state plans can be tested.[282] This flaw, coupled with inadequate agency regulations implementing the Act, undercuts the effectiveness of the Act in meeting its stated goals of coastal resource preservation and utilization, and might therefore undermine the goal of effective siting standards. In order to assure safe LNG siting under this approach, substantive guidelines would have to be established. The appeal of this approach, if accompanied by substantive standards, is that it would entrust the major responsibility for making siting determinations to the states, which have been the traditional source of such safety and land use responsibility, and it would establish uniform federal siting criteria.

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277. Liquefied Natural Gas Siting and Safety Act, S. 2273, 95th Cong., 1st Sess., 123 CONG. REC. S18347 (daily ed. Nov. 1, 1977). Congressman Dingell also introduced a bill providing for a limited state veto over LNG project approval where an onshore LNG facility would be located in an area with a prescribed population density. A Bill to Regulate the Siting, Design, Construction, and Operation of Facilities to be used for the Transportation, Storage, and Conversion of Natural Gas, H.R. 6844, 95th Cong., 1st Sess. §§ 7(a)(1), 5(f), 123 CONG. REC. H3978 (daily ed. May 3, 1977). The bill provides that if a site meets the criteria stated in section 5(f)(2) of the bill, a state's governor may still veto the site, provided the state has adopted more stringent siting criteria than those provided in the federal legislation. The state could not veto a site on any grounds but incompatibility with the rather limited siting criteria provided in the federal law. *See* Arnold, *supra* note 229, at 1105 & n.279. A working paper prepared by the Senate Commerce Committee staff in 1976 advocated a more absolute state veto. Staff Working Paper No. 1, Nov. 12, 1976, cited in OTA REPORT, *supra* note 2, at 101 (Appendix E).

278. *See* Liquefied Natural Gas Siting and Safety Act, S. 2273, 95th Cong., 1st Sess. §§ 5(c), 6, 123 CONG. REC. S18347 (daily ed. Nov. 1, 1977).

279. *Id.* § 5(e).

280. *Id.* § 5(f).

281. *See* note 254 *supra*.

282. Whitney, *supra* note 254, at 814-15.

CONCLUSION

In addition to raising interesting legal issues, the preemption challenges facing state LNG siting laws highlight and exacerbate the ongoing confusion characteristic of LNG safety regulation. Absent uniform, coordinated, and stringent federal regulation of LNG site selection, public safety is greatly endangered. State laws regulating LNG siting are a ready, if not perfect, interim solution. On the other hand, federal preemption of state law, if not accompanied by the creation of effective federal siting standards, solves nothing. Preemption neither erases regulatory chaos nor assures public safety; rather, it creates a dangerous regulatory hiatus. Neither the NGA nor NGPSA mandates preemption of reasonable state siting laws. However, the other extreme, a voluntary system of state regulation alone, cannot assure that LNG may be safely stored and received in all states. Only a cooperative federal/state scheme can provide the proper balance between federal and state interests. Such a scheme would best be implemented by federal legislation establishing minimum federal standards, which the states would be free to exceed. The time has come for Congress, rather than the courts, to develop a meaningful legislative resolution to the LNG safety problems underlying the preemption issue.

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