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NOTES

THE LEGAL SETTING OF NUCLEAR POWERPLANT SITING DECISIONS: A NEW YORK STATE CONTROVERSY*

Throughout the country public groups have begun to reexamine the adequacy of institutions that allow private parties to act without due regard for possible environmental consequences of their actions. One example is the citizens’ group challenge to the New York State Electric and Gas Corporation’s decision in 1967 to build a nuclear powerplant on Cayuga Lake. The group was concerned with the effect of the powerplant’s heated effluent on the lake. What follows is an analysis of the institutional controls that existed in 1967 for coping with such private decisions and the subsequent changes in those controls brought about by public reaction to the system’s apparent inadequacies.

* This note was written with the support of the Cornell Program on Science, Technology, and Society, the National Science Foundation, and the Duke University School of Law, Committee on Legal Issues in Health Care.


2 This controversy has been recorded in detail in D. Nelkin, NUCLEAR POWER AND ITS CRITICS: THE CAYUGA LAKE CONTROVERSY (1971) [hereinafter cited as Nelkin].

Thermal pollution is an issue of increasing public concern:

Large power plants with enormous cooling water requirements are becoming commonplace. The Federal Power Commission reports that 59 new fossil-fueled plants . . . were scheduled to go into service in the period 1967 to 1973. An additional 41 nuclear plants . . . were also scheduled to go into service in the same period.

The cooling water discharges . . . will make a substantial addition to the waste heat discharged to our Nation’s streams. It warrants a prompt and concerted effort to establish effective means of control. By 1980 the electric power industry will require about one-sixth of the total available fresh water runoff in the entire Nation for cooling purposes.

OFFICE OF SCIENCE AND TECHNOLOGY, CONSIDERATIONS AFFECTING STEAM POWER PLANT SITE SELECTION 39 (1968) (footnote omitted) [hereinafter cited as OST REPORT].
POWERPLANT SITING DECISIONS

I

THE BELL STATION DECISION

New York State Electric and Gas Corporation (NYSE&G) was incorporated as the Ithaca Gas Company in 1852. Through mergers with approximately 200 other local utilities and annexation of new franchise areas, the company grew to its present size, servicing thirty-five percent of New York's land area. Operating within a system of state regulation requiring utilities to provide ample power at the lowest reasonable rates, NYSE&G, like any other private industry, makes decisions based primarily on economic factors.

A. The Decision To Expand

Electric power loads in the United States have increased at an average annual rate of seven percent over the last thirty years, with the consumption of power doubling each decade. Claiming that existing generating capacity would be insufficient by 1973, NYSE&G announced in March 1967 that it was considering development of new facilities; past experience had indicated that the construction of a modern powerplant required a lead time of up to six or seven years.

There are few remaining sources of hydroelectric power in the United States. The two methods of electrical generation available to utilities are fossil fueled and nuclear powered steam generators. Economies of scale are best achieved through nuclear power. As some

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3 See NELKIN 26 for the history and present structure of NYSE&G.
4 N.Y. PUB. SERV. LAW § 65(1) (McKinney 1955).
5 See, e.g., Statement by William A. Lyons, President, New York State Electric and Gas Corporation, Board of Directors Meeting, April 11, 1969 (on file at the Cornell Law Review). "The economic factor," Lyons said, "was the basis of the [Bell Station] decision as it must inevitably be in advance planning for meeting our legally-mandated responsibility to provide ample power at the lowest reasonable rates anticipated for the time the power will become available." Id. See also In re City Ice & Fuel Co., 260 App. Div. 537, 542, 23 N.Y.S.2d 376, 381 (3d Dep't 1940).
6 NELKIN 5.
7 NYSE&G officials had at another time also indicated a 1976 date. NELKIN 31.
9 Gehr, Public Utilities—Problems of Electric Power Generation; Coal Versus Oil; Local Regulation of the Sulphur Content of Fuels; Thermonuclear Power; The Problem of "Thermo" Pollution, 3 NATURAL RESOURCES LAW. 103, 106 (1970).
10 I.e., fueled by coal or natural gas.
11 For discussion of various methods of power generation, see A.B. CAMBEL, ENERGY R&D AND NATIONAL PROGRESS (1964).
12 OST REPORT 3.
experts have indicated, "nuclear reactors now appear to be the cheapest of all sources of energy. . . . Nuclear energy will become cheap enough to influence drastically the many industrial processes that use energy." This confidence in the potential of nuclear reactors, reinforced by concern about air pollution from fossil fueled plants, appears to be industry wide, for "in 1968 about 40 percent of all new steam power capacity ordered was for nuclear plants." NYSE&G, therefore, decided to construct a nuclear generator. All cost and environmental analyses leading to the decision to build a nuclear powerplant were made solely within the corporate structure of the utility. No societal controls came into play at this stage.

B. Selection of a Site

Nuclear power generation requires large quantities of water to dissipate the waste heat. Availability of a year-round cold water supply was a vital consideration in the selection of Cayuga Lake as the site for the proposed powerplant, which was to be known as Bell Station. This siting choice was based on the most economical way to dispose of waste heat. The company, however, was not completely unconcerned about the plant's effect on the lake. Knowing that a nuclear plant generates greater heat than a fossil fueled plant, the utility undertook its own preliminary analysis of the possible effects of heat discharge into Cayuga Lake. Its study indicated that a nuclear plant with a once-through cooling system would probably raise the average temperature of the lake only one degree Fahrenheit, which the company considered negligible in comparison to the damage caused each year by agricultural runoff and urban sewage. If further studies indicated adverse effects, the company anticipated that those effects could be neutralized by changes in plant design.

14 In one respect the electric utility industry was very fortunate. At about the time that the interest in clean air and clean water was getting started, along came nuclear power, which has been demonstrated to be a feasible and economic method of generating electricity. One of the principal advantages in a nuclear power plant is that it provides an economical means of generating electricity with practically no air pollution.

Gehr, supra note 9, at 109. See also Hearings 134 (statement of W.P. Allen, Jr.).
15 OST REPORT 4.
16 "Plant site] investigations are presently the initial responsibility of the individual utilities in the various segments of the electric power industry." OST REPORT vii.
17 Id. at 22. See Hearings 135 (statement of A.D. Tuttle).
18 Hearings 148 (statement of S.A. Lyon).
The peculiar size and temperature pattern of Cayuga Lake, permitting year-round access to water at a temperature of approximately forty-five degrees, made it ideal for the economical once-through cooling system. Canals connecting Cayuga Lake with major waterways would permit shipment of the reactor vessel by water, the most economical means of transportation. The plant was in the approximate center of NYSE&G's area of operations and precisely half way between the two major extra high voltage lines of the New York State Power Authority. Finally, Milliken Station, a fossil fueled plant located on an adjacent land tract, would be an ideal thermal backup for the nuclear plant.

C. Public Response

Responses of those affected by the decision varied. Most immediately affected were lakefront property owners, who were notified that their land was condemned. None chose to oppose the right of the company to condemn the land, however. The Tompkins County Board of Supervisors and the Chamber of Commerce applauded the siting decision, honoring the utility as "Company of the Year." The decision was also welcomed by the Ithaca Taxpayers Association as an economic boon to the area. Bell Station was to employ about 600 people during the construction phase and about sixty on a permanent basis. The local Building Trades Council was impressed with the estimated construction payroll of $25 million. Bell Station was also expected to contribute significantly to the tax base of the nearby town of Lansing.

19 For a discussion of the lake's physical characteristics see note 30 infra. See also E. Henson, A. Bradshaw & D. Chandler, THE PHYSICAL LIMNOLOGY OF CAYUGA LAKE, NEW YORK (1961).

20 Thus a plant on the lake could transmit power conveniently to either line and feed into the exchange system of the New York State Power Pool. Since the new plant would make available more capacity than needed by present NYSE&G customers, the plan was to tie in to the New York State transmission system and sell about 70 per cent of the new capacity the first year.

NELKIN 33-34 (footnote omitted).

21 Id. at 34.

22 Id. at 68.

23 Id. at 63.

24 [A]ccording to a recent Lansing Planning Board survey, the present full value tax base [of the town of Lansing] of about $65.5 million could increase to between $250 million and $280 million by 1974, if Bell Station were to be built. Although not all tax revenue would go to the town of Lansing, the increased tax base was expected to lower the tax rate.

Id. at 34-35 (footnote omitted).
Several Cornell University conservationists who learned that the heated effluent of the plant would be discharged directly into Cayuga Lake first raised the threat of thermal pollution. Their efforts led to the formation of a citizens' group, the Citizens Committee to Save Cayuga Lake (CSCL). Conservation groups, sporting clubs, and homeowner associations throughout the region associated themselves with CSCL, which became a center of environmental activity and the main focus of opposition to the NYSEG plans.

CSCL did not oppose nuclear power; rather its major criticism was directed towards Bell Station's planned design, which was felt to afford inadequate environmental protection. As it attempted to have its views considered, CSCL soon discovered the inadequacy of existing institutions to protect natural resources.

II

THE PROBLEM OF UNCERTAINTY

Bell Station would circulate about 1225 cubic feet of cooling water per second, discharging heated water on the surface of the lake. The cooling water, pumped into the reactor from the lowest levels of the lake at a temperature of about forty-five degrees, would later be dis-


26 The details of the station were publicized early in 1968 at workshops sponsored by the Cayuga Lake Basin Regional Water Resources Planning Board (CLBB):

The CLBB consists of nonpaid members nominated by the Tompkins County Board of Supervisors and appointed by the State Water Resources Commission. The Board exists under state conservation law to develop a comprehensive water management plan for the region, which it submits to the Water Resources Commission. . . . It is the only mechanism for intergovernmental cooperation in the lake basin area, and its activities are limited to planning.

NELKIN 36. The CLBB has no legal authority over private decisions affecting the basin.

27 The organization's official purpose was "[t]o inform the citizens of the Cayuga Lake region about actual and potential sources of bacterial, chemical, thermal and radioactive pollution of the lake, and to coordinate efforts [of all concerned organizations and individuals] to prevent and eradicate any pollution endangering the foremost natural resource of the region." 1 THE CAYUGA LAKE HANDBOOK 102 (CSCL 1969) [hereinafter cited as HANDBOOK]. This handbook provides a complete background of CSCL's activities.

28 [We] contend that the existing political system of granting permits to a utility company to site a nuclear-fueled power plant on Lake Cayuga, allowing it to take the lake's cold water for use and to return it heated . . . , is not adequate.

Hearings 93 (statement of L. Hamilton).

29 See NELKIN 24 for further discussion of the reactor and its effects on the lake.
charged on the surface at about sixty-five degrees. CSCL feared that as the lake's normal stratification pattern\textsuperscript{30} was disrupted through this pumping activity the natural eutrophication process would be accelerated.\textsuperscript{31} Biological production, which may eventually cause a lake to choke with algae and weed growth, would be stimulated in two ways. The continual addition of heated water would delay the cooling and mixing of the lake in the winter, extending the biological growing season. Moreover, pumping would further increase the lake's fertility by drawing the available nutrients from the lowest level of the lake and discharging them into the warmer waters at the surface.

Several scientific and engineering studies were undertaken under NYSE\&G contract in an attempt to clarify the physical effects of the powerplant.\textsuperscript{32} One report concluded that the thermal discharge of the proposed station would cause an overall increase in lake surface temperature of less than ten percent of the normal fluctuation. The mechanical transfer of cooling water from the lake's lowest level would lengthen the stratification period by four to five days at each end, an extension not radically different from that caused by the natural fluctuation. A research group at Cornell estimated that at the time of the greatest thermal effect, algae might increase by five percent. Neither the increase in temperature, the decrease in oxygen in the hypolimnion,\textsuperscript{33} nor the longer stratification season, the researchers said, would have significant effect on the lake as a whole.\textsuperscript{34} But the group's report included the following caveat: "Limnologists know so little about the ecological significance of some of these environmental parameters that

\textsuperscript{30} Deep cold water lakes, such as Cayuga, tend to become stratified during the warmer months:

Cayuga Lake has an annual thermal cycle consisting essentially of two stratification periods. From about the first week in May to the first week in December ... the lake is stratified into three areas: the epilimnion or surface layer, the hypolimnion or deepest and coldest layer, and the metalimnion or intermediate layer. ... During the second period, from December to May, the lake is isothermal. As the lake loses heat in the winter and temperature differences between the levels decrease, mixing occurs and the lake reaches a uniform temperature of about \(35^\circ-40^\circ\) F. Again, in the spring, as heat is gained at the surface, it is vertically diffused; but temperature changes decrease with the depth of the water. The hypolimnion is never warmed above about \(45^\circ\) F.

\textsuperscript{31} Eutrophication is the process by which a lake ages owing to increasing biological activity. It normally occurs when nutrients such as nitrates and phosphates drain into lakes from the surrounding watershed and increase lake fertility. Id. at 41-42.

\textsuperscript{32} Id. at 38, 52.

\textsuperscript{33} Note 30 supra.

\textsuperscript{34} WATER RESOURCES \& MARINE SCIENCES CENTER, ECOLOGY OF CAYUGA LAKE AND THE PROPOSED BELL STATION 451 (R. Oglesby \& D. Allee eds. 1969).
predictions of biological effects would be highly conjectural even if exact descriptions of the physical changes were available.\textsuperscript{35}

In the case of Cayuga Lake there is little information by which to evaluate the effect of prolonged, if seemingly minor, disruptions of normal stratification and eutrophication. No adequate theory is available to explain the mechanisms that maintain the lake's stratification pattern and the system of nutrient and heat exchange. Nor are the stresses that would occur at the interface between the heated plume\textsuperscript{36} and the underlying body of water well understood. The effect of a pumping unit on the turbulence structure of the lake, therefore, must remain largely a matter of educated speculation. In addition, causes of alterations in the nutrient content of the lake are difficult to isolate in view of the total residential and agricultural situation in the lake drainage area.\textsuperscript{37}

Conservationists noted that the temperature changes caused by the powerplant, even if within the range of normal fluctuation, would nonetheless consistently increase the lake's biological productivity. There was considerable concern about whether the damage caused by this process could be reversed.\textsuperscript{38} CSCL took the position that the company should take maximum protective measures, including construction of alternative cooling systems. One of the methods proposed

\textsuperscript{35} Id. at 452. The report continued:

The importance of considering extremes as well as averages, the naturally great temporal and spatial variability of biological systems, the size of the lake being studied, the short duration of the present investigation, and the incompleteness and/or unreliability of those investigations conducted previously are all factors adding to the difficulty of drawing readily quantifiable conclusions.

\textsuperscript{36} I.e., the path of the effluent released into the lake.

\textsuperscript{37} [T]here are about 182 locations around Cayuga Lake that are classified as polluted for human bathing. Many lakeshore cottages dump wastes directly into the lake, and an estimated 2,500 people in the drainage basin live in non-sewered municipal areas. The agricultural and dairy industries bordering the lake release about 725,000 tons of animal waste and 83,000 tons of fertilizer to the soil annually.

\textsuperscript{38} The question of irreversibility is fundamental to [nuclear plant siting controversies] and one difficult to resolve. A member of the [Federal Water Pollution Control Administration] noted four ways to prevent eutrophication, the first being the most important: (1) limiting fertility of waters, (2) utilizing food chains to improve lakes, (3) stimulating parasites to kill off aquatic plants, and (4) using toxic chemicals to kill algae.

\textsuperscript{4} Environmental Sci. & Tech. 270 (1970).

Some experiments suggest that technically at least, eutrophication may be reversible. In one well known situation, "the diversion of sewage away from Lake Washington in Seattle effectively reduced algal growth." Nelkin 95-96. Tests recently conducted at Cornell on experimental ponds suggest that if fertilization of a lake were to cease, eutrophication could be reversed.
involved a natural draft cooling system in which discharged water would be pumped into large, hyperbolic towers, cooled by contact with air, and recirculated.\textsuperscript{39} The estimated cost would be $21.3 million in initial investment and an additional $2.4 million in annual operating cost.\textsuperscript{40} In the context of these costs and of inconclusive technical evidence as to the extent of possible damage, preconstruction regulation and control became increasingly important.

III

REGULATION OF PRIVATE WATER USE

A. Private Controls—New York 1967

1. Injunctive Actions

The doctrine of riparian rights,\textsuperscript{41} developed in part to curb water pollution, is illustrated by the New York case of \textit{Strobel v. Kerr Salt Co.},\textsuperscript{42} in which fourteen downstream mill owners sought to restrain a salt company from polluting Oatka Creek. Although salt was the leading industry of Oatka Valley and the method of salt mining used was the only profitable one, the court issued an injunction, stating:

\begin{quote}
When the ... pollution ... is caused by a new and extraordinary method of using the water, hitherto unknown in the state, and such method ... renders [it] so salt [sic], at times, that cattle will not drink it unless forced to by necessity, fish are destroyed in great numbers, vegetation is killed and machinery rusted, such use as a
\end{quote}

\textsuperscript{39} Cooling towers may be required if water quantities, flows, or temperature are not satisfactory for meeting approved thermal water quality standards for present or future generating units. They require considerably more space and capital cost than conventional once-through condenser cooling installations. Mechanical draft towers require somewhat more land area than do the natural draft type.

\textsuperscript{40} Nelkin 85. Cooling towers, however, may cause their own environmental problems, including aesthetic annoyance, local rain during otherwise dry periods, and occasional mist and fog. OST \textit{Report} 16.

\textsuperscript{41} A riparian owner is entitled to a reasonable use of the water flowing by his premises in a natural stream, as an incident to his ownership of the soil, and to have it transmitted to him without sensible alteration in quality or unreasonable diminution in quantity. While he does not own the running water, he has the right to a reasonable use of it as it passes by his land. As all other owners upon the same stream have the same right, the right of no one is absolute, but is qualified by the right of the others to have the stream substantially preserved in its natural size, flow and purity, and to protection against material diversion or pollution.


\textsuperscript{42} 164 N.Y. 303, 58 N.E. 142 (1900).
matter of law is unreasonable and entitles the lower riparian owner to relief.43

The *Strobel* injunction indicates that one method of controlling water use was for the court to enjoin any major violation of riparian rights. This right to an injunction, regardless of the disparity in injuries between plaintiff and defendant, was reiterated in *Whalen v. Union Bag & Paper Co.*44 In that case the court permitted a riparian landowner with damages amounting to $100 a year to obtain an injunction against a polluting paper mill despite the mill's total investment capital of one million dollars and payroll of 400 to 500 workers. To do otherwise, according to the court, would "deprive the poor litigant of his little property by giving it to those already rich. . . . [D]eny ing the injunction puts the hardship on the party in whose favor the legal right exists instead of on the wrongdoer."45

Today these decisions might be viewed as attempts by the court to protect the environment. But as water rights doctrines were closely related to agrarian economy, it is more likely that these decisions were designed to preserve agricultural industry.46

Had such an injunction been available to CSCL it would have been a useful bargaining tool in persuading NYSE&G either to consider more fully thermal pollution in its initial siting and design decisions or to accept the idea of cooling towers. By 1967, however, despite previously clear judicial power and generally strict legal controls on industry,47 New York was retreating from its once strong judicial position on private water pollution.

New York in 1966 enacted a statute changing common law riparian rules by redefining reasonable use of water in terms of harm or threat of harm.48 The new law permitted the courts to intervene only.

43 Id. at 321, 58 N.E. at 147.
44 208 N.Y. 1, 101 N.E. 805 (1913).
45 Id. at 5, 101 N.E. at 806.
48 N.Y. CONSERV. LAW § 429(j) (McKinney 1967). Pertinent portions of the law read as follows:
in those cases where the new use of water interfered with a prior land use or the current market value of property. Such restrictions obviously leave substantial areas of protection for industrial polluters, particularly in cases where the effects of pollution are not yet fully understood. Even when some form of damage becomes imminent the injured party—not the user of the water—must bear the burden of proof. The problem becomes more acute if the effects of thermal pollution are irreversible, in which case all legal remedies will be too late. In this legal context, there would be little threat of an injunction to influence the NYSE & G siting and design decisions.

Even if damages caused by thermal pollution become so highly predictable that a complaining party could bear his burden of proof under New York law, the courts might still refuse to grant an injunction in view of the necessity for an adequate electrical supply and, in some instances, the tremendous costs involved in closing down an operating plant. Such considerations might induce the courts to apply the doctrine of inverse condemnation, awarding compensation to the injured parties but permitting the plant to continue operation.

2. Condemnation Contests

Normally private industry does not have powers of condemnation. Utilities, however, commonly possess a statutory delegation of such power. Even were the courts to find that Bell Station's thermal

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(1) An alteration... in the natural flow, quantity, quality or condition of a... lake... effected by the use... of the water... or by the addition of water thereto, or by changes in... other physical characteristics... is reasonable and lawful... unless such alteration is causing harm... or would cause... immediate harm if and when begun....

(2) "[H]arm" shall mean (a) interference with a present use of the water... or an interference with the complaining party's present enjoyment of riparian land occurring prior to suit, or which will immediately occur when the alteration... is begun... or (b) a decrease in the market value....

49 Id. § 429(j)(2)(b).


effluent would destroy some water rights, NYSE&G's exercise of its condemnation power to acquire a site could not be attacked so long as it was legally authorized.\textsuperscript{53} Only if the condemnee could establish that the company was not so authorized could the company be prevented from taking such action.

Some New York cases, however, have taken a strict view of non-government entities exercising the power of eminent domain. For example, in \textit{Bradley v. Degnon Contracting Co.}\textsuperscript{54} the Court of Appeals struck down the use of the condemnation power by a private corporation acting "under and in accordance with the authority of a statute relating to the construction of [a] subway."\textsuperscript{55} The company had built a tramway on a public street to haul away construction debris. Adjacent landowners brought suit to restrain the operation of the tramway. The court refused to recognize the authority of the corporation to use the street even though it found that the operation of the tramway was reasonable and non-negligent. "[P]ublic highways and streets are . . . held by the state in trust for the use of all the people. . . . The legislature, as the representative of the state, has control and authority over them . . . ."\textsuperscript{56} The court stated that the construction of the tramway "was a specific appropriation and taking of private property, incident to but not consequent upon . . . the construction of the subway."\textsuperscript{57}

Bell Station's discharge of heated water on Cayuga Lake presents a parallel issue. In the same way a public street is held in trust, Cayuga Lake is held by the state for public use.\textsuperscript{58} And just as the use of a particular street may be unnecessary for removal of construction waste, the use of the water of the lake for waste heat removal is not essential to provide electrical energy. Alternative methods for waste disposal exist in each case. As long as alternatives exist, the case is one of unnecessary private use of a valuable public resource.

If the NYSE&G condemnation exercise had been challenged in 1967, however, the uncertainties would probably have weighed against the plaintiff,\textsuperscript{59} even though conservation groups had at that time begun

\textsuperscript{53} "The only theory upon which the Legislature can delegate to [a power company] the right to take private property is founded upon the right of the general public to use the heat, light or power generated by [it]." \textit{People ex rel. Horton v. Prendergast}, 248 N.Y. 215, 223, 162 N.E. 10, 12 (1928).
\textsuperscript{54} 224 N.Y. 60, 120 N.E. 89 (1918).
\textsuperscript{55} \textit{Id.} at 65, 120 N.E. at 90.
\textsuperscript{56} \textit{Id.} at 67, 120 N.E. at 91.
\textsuperscript{57} \textit{Id.} at 70, 120 N.E. at 92.
\textsuperscript{58} Title to and sovereign power over a large and important body of water is in the state. This power is held in trust for the people. For dictum on Cayuga Lake, see \textit{Stewart v. Turney}, 237 N.Y. 117, 142 N.E. 437 (1923).
\textsuperscript{59} Although legislative decisions granting the use of condemnation power are not
to argue that the user of a natural resource should bear the burden of proving that such use would not endanger the environment. If the courts permitted a shifting of the burden in every situation where there is substantial uncertainty, as in the case of Cayuga Lake, the effect might be to hamper severely programs of development. In addition, the 1966 law restricting the applicability of the old riparian rights doctrine seemed to indicate that the state's policy at that time was to strengthen the position of industry.

The foregoing analysis indicates why in 1967 parties wishing to contest the Bell Station decision could not rely on private remedies. Perhaps the most effective method of enforcing private rights, the injunction, was for the most part unavailable without protracted and expensive litigation. Even if it had been readily available the outcome would have been highly uncertain since the complaining party had the burden of proof. Consequently public rather than private remedies seemed the best recourse.

B. State Controls—1967

1. Electricity

Recognition of the special status of electric companies as public service corporations has a long history in New York. Today the semi-public status of NYSE&G brings with it several privileges unavailable to private business. One is the power of eminent domain which allows utilities to acquire real estate deemed necessary to maintain an adequate supply of electricity. Another is the right to acquire easements

a conclusive influence on the courts, "they are entitled at least to great respect, since they relate to public conditions concerning which the Legislature both by necessity and duty must have known." New York City Housing Authority v. Muller, 270 N.Y. 333, 339, 1 N.E.2d 153, 154 (1936). These legislative findings will be accepted by the court unless it is shown that the use is clearly private. Bronx Chamber of Commerce, Inc. v. Fullen, 174 Misc. 524, 529, 21 N.Y.S.2d 474, 481 (Sup. Ct. 1940). "The condemnor has the burden of demonstrating to the satisfaction of the court that the taking is arbitrary. A showing that there exists a viable alternative to the taking will not suffice." Note, supra note 51, at 654 (footnote omitted).

For an unsuccessful attempt to place the burden on a condemnor, see Texas E.


McKinney 1967).


Public service commissions which regulate such corporations were established in New York by the Act of June 6, 1907, ch. 429, [1907] N.Y. Laws 889.
and rights of way for transmission facilities. Moreover, only those business corporations organized under the specified sections of the transportation law are permitted to enter into contracts to supply electricity, thereby giving duly organized electric corporations a monopoly.

NYSE&G is under state regulation through the Public Service Commission (PSC). In 1967, however, the PSC had no direct control over the environmental effects of utility decisions. Its major influence came through its enforcement of the requirement that utilities continue to provide electricity at the lowest reasonable cost. This requirement may have discouraged environmental concern, since mandatory cost control may create a bias when a utility is faced with choosing between alternatives in plant design. For nuclear plants the most inexpensive method of disposing of waste heat is the once-through cooling system. This became the central dispute in the Cayuga Lake controversy.

2. Water

The New York legislature began to provide statutory controls on water use as early as 1880, when it empowered the governor to declare a public nuisance upon recommendation from the Board of Health. Legislation aimed specifically at water pollution was enacted as early as 1906. Comprehensive agency regulated programs were not instituted until 1949, however, with the establishment of the Water Pollution Control Board.

66 N.Y. PUB. SERV. LAW § 64 (McKinney 1955). Electric companies may not refuse service to any consumer within a reasonable distance of appropriate power lines, and service must be provided at a reasonable price. Id. Electric companies in New York have private management and compete for new franchise areas by negotiating with municipalities.

[T]he law leaves the utility [furnishing gas or electricity], as it was at common law, free to extend its facilities and to afford inducements to encourage its business and to foster its interests on the same principles which are followed in other pursuits and trades.

In re City Ice & Fuel Co., 260 App. Div. 537, 542, 23 N.Y.S.2d 376, 381 (3d Dep't 1940). A utility is usually awarded an exclusive franchise to supply a particular community's power. Its obligations are largely contractual, and if a company defaults it may lose the privilege of serving an area. Within a franchise area, the PSC may order the utility to service new electricity needs, but it cannot require a utility without compensation to make large expenditures for extensions into a new territory. New York ex rel. Woodhaven Gas & Light Co. v. PSC, 269 U.S. 244, 248 (1925).

69 The Board was established by the Act of April 20, 1949, ch. 666, § 105, [1949] N.Y. Laws 1512. Its purpose was to prevent and abate pollution of state waters. In 1961
By 1967, New York had developed various means of controlling private decisions affecting state waters. The Water Resources Commission (WRC) in the Department of Conservation supervised the law most directly relevant to the proposed Bell Station. Under this law the WRC classified state waters and developed standards of water quality and purity. Temperature standards prohibited heat additions which injured fish life or made the water unsuitable for its best usage. Contravention of these standards could subject the violator to both civil and criminal liability; the liability, however, was enforceable only by the state. Cayuga Lake was classified in part in the highest use category.

Most pertinent to Bell Station was the requirement that no new effluent outlets discharging industrial wastes could become operational without a permit from the Health Department. A permit requires departmental approval of the applicant's plans and assurance that the new discharge will be neither in contravention of the WRC standards nor "injurious to public health and public enjoyment [of the water], the propagation and protection of fish and wild life, and the industrial development of the state."

This would be the first point in the private decision-making process at which NYSE&G would actually have to make a public accounting of the potential environmental effects of its decision. Nevertheless this control would not be activated until a plant was already constructed and ready to become an operational discharger. Also, since the Health Department is charged with developing standards compatible with industrial development, it might be reluctant to refuse such a permit.


Each approach was contained in a separate article of the Public Health Law. N.Y. PUB. HEALTH LAW arts. 11, 12, 13 (McKinney 1954). All were derived from the Public Health Law of 1909 (Act of Feb. 17, 1909, ch. 49, [1909] N.Y. Laws 3013), which itself was derived in part from earlier enactments. See Murray, supra note 67, at xxvii-xxix.

N.Y. PUB. HEALTH LAW § 1205 (McKinney 1971). The WRC has since had its functions transferred to the Department of Environmental Conservation. N.Y. ENVIRONMENTAL CONSERV. LAW §§ 75-76 (McKinney 1970).

Id. §§ 1250-52.

 Portions of the lake are classified as a "[s]ource of water supply for drinking, culinary or food processing purposes and any other usages." 6(E) N.Y. CODES, RULES & REGULATIONS § 898.4 (items 226-28) (1967). But see id. (item 225).

N.Y. PUB. HEALTH LAW § 1230 (McKinney 1971).

Id. § 1230(4)(b).

The law requires the standards to be drawn "with a view to ... encouraging the most appropriate use of lands bordering said waters, for ... industrial [among other]...
Milliken Station's discharge had not violated state standards, and the Department of Health presumed that upon its completion Bell Station would also satisfy them. Moreover, the enforcement measures available to the state were strictly *post facto*, requiring first a public hearing and an agency finding that the standards or permits had been violated. Thus enforcement measures would be ineffective in the Cayuga Lake case, for by the time fish kills were evident, the lake could be irreversibly harmed.

Another public control is administered by the state Health Department. The department is authorized to promulgate and enforce rules and regulations for protection of potable water supplies. This control is available only after an investigation discloses a violation. Absent a definition of waste heat as "contamination" potentially injurious to the public health, however, this remedy would be of little utility in the Cayuga Lake case.

Despite the apparent variety of state remedies, legislative water pollution programs are rivaled in their ineffectiveness only by existing private remedies. Failure of various agencies with limited jurisdic-

pursposes . . . ." *Id.* § 1205(3)(b). This responsibility weighed heavily on the Department of Health:

The State Health Department looks on Cayuga Lake as a valuable asset to the state and, therefore, is interested in protecting it. On the other side of the coin, the State Health Department is involved with the industrial development of the state.


[Reasonable use of the waters of the State must be allowed in order to encourage industrial development. . . . The prohibition of any discharges . . . would be an unreasonable measure to protect the environment when weighed against the detrimental effect on industrial development.]

*Id.* at 127 (letter from R.S. Bratspis, N.Y. Environmental Health Services, to Mrs. J.H. Lehman, Oct. 17, 1968).

78 "If the company is proceeding to construct then they must be confident that they can meet any requirements we may impose with reference to protecting the environment." *Id.* at 126 (letter from D.F. Metzler, Deputy Commissioner, N.Y. Dep't of Health, to W.B. Ward, Aug. 28, 1968).


80 *See* note 38 and accompanying text *supra*.

81 N.Y. *PUB. HEALTH LAW* §§ 1100-08 (McKinney 1971).

82 *Id.* §§ 1100-03.

83 *Id.* §§ 1102, 1156, 1157(3)(a), 1163, 1165.

84 In Driscoll v. American Hide & Leather Co., 102 Misc. 612, 170 N.Y.S. 121 (Sup. Ct. 1918), landowners relying on this statutory protection sought to restrain a village disposal plant from polluting their stream. The court denied the injunction. There was a conflict between expert and lay opinions as to the extent of pollution, and the court assumed that the consequences of an injunction would amount to a public calamity. This case is strikingly similar to the Cayuga Lake case and indicates the limitations of this public remedy.

tion to cooperate in the administration of the programs contributes to this ineffectiveness. In this context, the initial Bell Station decision was largely as free of mandatory legislative constraint concerning disposal of thermal wastes as it had been free of the threat of private injunctive action.

C. Federal Controls—1967

The history of federal activity in utility and water pollution issues is marked chiefly by nonintervention. By 1967, however, the federal government was beginning to take notice of environmental problems. The Atomic Energy Commission had instituted a procedure for passing construction permit requests to other interested federal agencies for examination. Comments received were sent by the AEC to the permit seeker with a request that it work out a solution to the problems indicated. The commissioner of the Fish and Wildlife Service, for example, routinely assessed powerplant effects, including thermal pollution. Because some federal permits were issued only after public hearings, these comments were often open to public examination. Utilities, however, were not compelled to consider thermal pollution, since the regulatory authority of the AEC was confined to considerations of radiological health and safety.

Conservation groups have tried to add such phrases as “the public
interest” to many agency enabling acts, in order to force federal agencies to consider the environmental effects of their decisions. A precedent was established in 1965. The Federal Power Commission had refused to consider aesthetic and environmental effects in issuing a permit for a hydroelectric plant at Storm King Mountain on the Hudson River. But the Second Circuit Court of Appeals held that the Federal Power Act required consideration of such matters. This line of reasoning was available in 1967 to citizens’ groups who wanted the AEC to make its construction permits conditional on a demonstration of thermal compatibility with the environment.

Two steps in the federal control of water pollution were passage of the Water Quality Act in 1965 and the Clean Water Restoration Act in 1966. These acts called for establishment of national water quality standards and provided a means of enforcement. The Water Quality Act declared that the states were to have “primary responsibilities and rights . . . in preventing and controlling water pollution.” As if to reinforce this concept, Congress voted down several proposals to extend the Act’s coverage to all navigable waters, thus limiting its application solely to interstate waters. Federal standing to enjoin pollution of intrastate waters required consent of the governor and a showing of endangerment to health or welfare. The difficulty of showing clearcut damage caused by thermal pollution and of distinguishing it from that caused by agricultural runoff would tend to limit this form of federal control over utility decisions.

An additional instrument of federal control was the Rivers and Harbors Act of 1899, still on the books in 1967. This act prohibited

90 See notes 99-101 and accompanying text infra.
94 80 Stat. 1246 (codified in scattered sections of 33 U.S.C. §§ 1151-75 (1970)).
96 That is, “all rivers, lakes, and other waters that flow across or form a part of State boundaries . . . .” Id. § 1173(e). For a discussion of the unsuccessful attempts to extend the Act’s coverage to all navigable waters, see Dunkelberger, The Federal Government’s Role in Regulating Water Pollution Under the Federal Water Quality Act of 1965, 3 NATURAL RESOURCES LAW. 3, 12-15 (1970).
97 Cayuga Lake is intrastate and navigable. See, e.g., In re Wheeler, 51 F.2d 374 (E.D.N.Y. 1931).
99 33 U.S.C. §§ 401-13 (1970). Section 407 prohibits the discharge, without a permit, of “any refuse matter of any kind or description whatever other than that flowing from
the dumping of refuse into navigable waters without a permit from the Corps of Engineers certifying that such discharges would not impede or obstruct navigation. To use this act to stop thermal pollution would have required a definition of waste heat as refuse capable of hindering navigation. In all probability the statute was never intended for such use.\textsuperscript{100}

Existing federal protection in 1967 did not sufficiently require NYSE\&G to consider the factors of major concern to environmentalists. Consideration of environmental factors was not permitted by the AEC's regulatory structure, and congressional acts involved uncertainties of jurisdiction and enforcement. CSCL had found public remedies offered little more promise than private remedies.

IV
LEGAL RESPONSE TO THE ENVIRONMENTAL CRISIS

A. The National Response

Shortly after the success of citizens' groups in \textit{Scenic Hudson Preservation Conference v. FPC},\textsuperscript{101} parties concerned with thermal pollution attempted to use the same strategy against the AEC. Suit was brought by the state of New Hampshire and others to force the AEC to consider the effects of thermal pollution on the Connecticut River before issuing a powerplant construction permit. In \textit{New Hampshire v. AEC},\textsuperscript{102} however, the First Circuit Court of Appeals avoided the opportunity to enter the field of environmental preservation. Applying a strict interpretation of the AEC's jurisdictional statute, Judge Coffin appealed to Congress for a proper solution.\textsuperscript{103} This decision perpetuates streets and sewers and passing therefrom in a liquid state, into any navigable water . . . whereby navigation shall or may be impeded or obstructed . . . .” For administrative implementation of this Act see 33 C.F.R. §§ 209.110-335 (1971).

\textsuperscript{100} For a history of the Act see United States v. Republic Steel Corp., 362 U.S. 482, 485-86 (1960). However, in 1956 the Supreme Court rejected the traditional concept that an obstruction had to be a solid. In United States v. Standard Oil Co., 384 U.S. 224 (1966), it held that oil was not only "a menace to navigation" but also "a pollutant." \textit{Id.} at 226. The Court held that "[t]he word 'refuse' includes all foreign substances and pollutants" apart from those exempted by the Act. \textit{Id.} at 230. The minority, however, thought that this had stretched the Act too far. Whether waste heat constitutes a prohibited foreign substance or pollutant remains uncertain.

\textsuperscript{101} 354 F.2d 608 (2d Cir. 1965), \textit{cert. denied}, 384 U.S. 941 (1965).


\textsuperscript{103} We conclude that the licensing board and the Commission properly refused to consider the proffered evidence of thermal effects. We do so with regret that the Congress has not yet established procedures requiring timely and comprehensive consideration of non-radiological pollution effects in the planning of installations to be privately owned and operated.

\textit{Id.} at 176.
ated the limited approach of the AEC and the continued construction of powerplants without direct AEC regulation of their thermal effects.

Prompted by the growing public concern with "the environmental crisis," Congress also began to seek ways to establish responsibility for the risks attendant on technological advance. The first legislative changes appeared in part to be in direct response to Judge Coffin's New Hampshire dictum asking Congress to solve jurisdictional problems of thermal pollution. Congress developed two tools. One is the National Environmental Policy Act of 1969 requiring, inter alia, federal agencies to prepare environmental impact statements for projects in their domain. The other is the Water Quality Improvement Act of 1970. Both acts affect the procedures of the AEC, as well as all other federal agencies. The Water Quality Improvement Act requires agency certification that new developments meet state water quality standards. The AEC and other federal agencies can no longer ignore water quality standards.

Confirming the demise of the AEC's limited approach, the District of Columbia Circuit recently found that the AEC violated the National Environmental Policy Act by refusing to examine environmental issues, including those relating to water quality, in its hearings and permit granting procedures. The court remanded the case to the AEC for further rule making. Speaking for the court, Judge Wright stated, "[A court's] duty, in short, is to see that important legislative purposes, heralded in the halls of Congress, are not lost or misdirected in the vast halls of the federal bureaucracy." Environmentalism was thus advanced in two ways: specifically, the court forced the AEC to make regulations dealing with environmental issues, and more broadly, the court assumed a creative and liberal role in implementing the National Environmental Policy Act.

These recent federal changes force the utilities to consider the environmental consequences of their plans. In New York the Department of Environmental Conservation is charged with developing thermal

105 Id. § 4332(C).
110 Subsequently the AEC enacted new rules and regulations dealing with environmental matters. 2 BNA ENVIRONMENT REP.—CURRENT DEVELOPMENTS 523 (Sept. 3, 1971).
111 I ELI ENVIRONMENTAL L. REP. at 20347.
impact standards required under the federal acts and granting certificates of reasonable assessment.\textsuperscript{112} NYSE\&G will not be able to begin construction of Bell Station until it obtains New York certification.

B. The State Response

1. Retreat

While Congress was beginning to respond to environmental problems posed by private technological decisions, some state courts were retreating from the field of pollution control. The \textit{New Hampshire} court had merely refused to take a courageous step forward; New York courts, however, actually restricted existing private remedies in hopes that the legislature would act to fill the gap.

This happened in \textit{Boomer v. Atlantic Cement Co.}\textsuperscript{113} in which the court refused to issue an injunction against an admitted polluter, thereby questioning if not overruling \textit{Strobel} and \textit{Whalen}. In \textit{Whalen} the court had ignored potentially substantial damage to the paper mill, and had granted relief to a plaintiff suffering only $100 damage. In \textit{Boomer}, however, the defendant cement plant employed over 300 people and represented an investment in excess of $45 million. The damages to plaintiff were $185,000.\textsuperscript{114} Economic disparity, the court said, was a vital factor in the issuance of an injunction.

The court considered briefly the possibility of granting an injunction to take effect at some future date, giving the defendant an opportunity to develop abatement techniques. It found, however, that no assurance could be obtained that significant technical improvement would occur in the near future and that continued applications for a delay of the injunction would put an undue burden on the court.\textsuperscript{115} Thus the court refused to impose the burden of providing a solution upon the defendant, stating that the problem did not lie with the individual company, but with the industry as a whole. As such, "the rate of the research [was] beyond [the] control of defendant."\textsuperscript{116}

The \textit{Boomer} court relied on an Indiana decision, \textit{Northern Indiana Public Service Co. v. Vesey},\textsuperscript{117} and awarded permanent damages in lieu of the requested injunction. \textit{Northern Indiana} involved a Fort Wayne gas plant which emitted vast quantities of smoke, steam, ammonia, poisonous gases, soot, dirt, grease, and vile odors. The court

\begin{footnotesize}
\begin{itemize}
\item\textsuperscript{112} N.Y. ENVIRONMENTAL CONSERV. L\textsc{aw} §§ 14(9), 15(1), (13) (McKinney 1970).
\item\textsuperscript{113} 26 N.Y.2d 219, 257 N.E.2d 870, 309 N.Y.S.2d 312 (1969).
\item\textsuperscript{114} Id. at 225, 257 N.E.2d at 873, 309 N.Y.S.2d at 316.
\item\textsuperscript{115} Id. at 225-26, 257 N.E.2d at 873, 309 N.Y.S.2d at 316-17.
\item\textsuperscript{116} Id. at 226, 257 N.E.2d at 873, 309 N.Y.S.2d at 317.
\item\textsuperscript{117} 210 Ind. 338, 200 N.E. 620 (1966).
\end{itemize}
\end{footnotesize}
found that although the plant could not be operated without destroying the plaintiff's greenhouse business, the emissions could not be enjoined because "public convenience require[d] that the defendant continue its operations." Instead, the court said permanent damages could be awarded. This case also involved a large disparity of economic injury. The gas plant was valued at $3 million; damages awarded totaled $82,570.

Bell Station differs from Boomer in that the plant has not yet been constructed. Furthermore, in light of the uncertainty as to the environmental effects of the plant's operation, economic disparity is difficult to evaluate. On the utility's side is the cost of the land and initial site grading, but on the environmentalists' side is the threat of irreparable damage to the lake's ecosystems. Moreover, alternative methods of cooling were available to NYSE&G, albeit at additional cost. Despite the similar question of public convenience in both the Cayuga Lake case and Northern Indiana, the availability of alternatives presents a strong argument for distinguishing the cases. The distinction between cases of necessity and convenience adopted in 1918 by the New York courts in Bradley v. Degnon Construction Co. supports the idea that the Boomer holding may not be applicable to the Cayuga Lake case.

On the other hand, the language of Boomer indicates that its doctrine was meant to travel beyond the facts of that case. In what appears to be "a washing of hands," the court placed great emphasis on the recent public outcry on matters of pollution. A court is designed, it said, only to "resolve the litigation between the parties now before it" rather than to seek "promotion of the general public welfare." Air pollution alone, the court noted, "is a problem presently far from solution even with the full public and financial powers of government." Any solution "is likely to require massive public expenditure and to demand more than any local community can accomplish and to depend more on regional and interstate controls."

Thus the court indicated that only the legislature can solve pollution problems. A court entertaining an injunction suit against Bell Station might interpret this language by the Court of Appeals to mean that no common law injunctions are to be issued against polluters, especially if the polluter provides a vital public service, such as electrical power.

118 Id. at 347, 200 N.E. at 624.
119 224 N.Y. 60, 120 N.E. 89 (1918). See notes 54-57 and accompanying text supra.
120 26 N.Y.2d at 222, 257 N.E.2d at 871, 309 N.Y.S.2d at 314.
121 Id.
122 Id. at 228, 257 N.E.2d at 871, 309 N.Y.S.2d at 314.
2. Recent Advances

In early 1969, CSCL scientists presented their concerns to the New York Water Resources Commission. But the standards proposed by the WRC, permitting discharge which would raise surface temperature up to three degrees Fahrenheit beyond a radius of 300 feet, were considered a defeat by conservationists. Another defeat came with the death of three bills of direct relevance to the Cayuga Lake case. The first would have given the WRC greater power to subclassify state waters using different standards for lakes than for streams; the second would have prevented site excavation and other expenditures prior to the issuance of a permit; the third would have limited radioactive discharges.

Meantime public activity and impending changes in legislation created a great deal of uncertainty for NYSE&G. Expensive delays and design changes appeared likely. In April 1969 the president of NYSE&G announced the indefinite postponement of plans to develop Bell Station. The uncertain water use cases and the regulatory structure by which CSCL had initially despaired of remedy had in fact worked to its advantage.

New York further responded to increasing environmental concern by amending the state constitution, declaring it state policy “to conserve and protect [the state’s] natural resources and scenic beauty,” and by forming yet another governmental agency, the Department of Environmental Conservation (DEC). This agency was established in part to coordinate diversified agency jurisdictions towards a uniform state environmental policy. DEC was authorized to formulate a “state wide environmental plan for the management and protection of the

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123 _Lakes_. The water temperature at the surface of a lake shall not be raised more than 3°F over the temperature that existed before the addition of heat of artificial origin, except that within a radius of 300 feet or equivalent area from the point of discharge, this temperature may be exceeded. In lakes subject to stratification, the thermal discharges shall be confined to the epilimnetic area.

6(B) N.Y. CODES, RULES & REGULATIONS § 704.1 (1970) (footnote omitted).

The subsequent section permits additional limitations or modifications of the standard where necessary and places the burden of showing that the standards are unreasonable on the applicant for a discharge permit. _Id._ § 704.2.

127 Statement by William A. Lyons, _supra_ note 5.
128 N.Y. CONSTR. ART. XIV, § 4. No real enforcement rights are contained in section 4. Section 4 only establishes a state policy, possibly helpful in the interpretation of other statutes, and directs the legislature to enact “adequate” pollution laws and to acquire wilderness areas.
quality of the environment and the natural resources of the state." Environmental guidelines are to be set by public agencies prior to damage, so that preventative rather than remedial action will become possible for the first time.

In keeping with the state's express desire to deal adequately with environmental matters, specific legislation was devoted to the problem of thermal pollution by nuclear plants. As part of an agency reorganization, the WRC was transferred to the new DEC, and the Public Health Law, which had required permits for new discharge outlets, was amended to require anyone "intending to construct a nuclear steam-electric generating facility [to] file an environmental feasibility report" before a construction permit could be granted. Moreover, no one could "construct or operate any new steam-electric generating facility . . . without a permit issued in accordance with the provisions . . . allowing thermal discharge from such facility to the waters of the state. A public hearing may be conducted by the department prior to the issuance of any such permit."

No investment beyond site acquisition therefore is possible today until the utility has proven to the state that the proposed plant is compatible with the standards set to protect the environment. Setting of state standards may be the critical act balancing the need to meet electrical demands with effective environmental controls.

Despite New York's expressed interest in centralized environmental policy decisions, recent legislation has tended to provide alternate controls on utility siting decisions. Legislation now prohibits any entity from beginning electrical transmission line site preparation without first obtaining a certificate of environmental compatibility and public need. Contrary to the policies behind the formation of DEC, how-

130 Id. § 30.
131 But the statutory guidelines given to DEC are vague. For example, two purposes of DEC are to "[p]romote restoration and reclamation of degraded or despoiled areas and natural resources" (id. § 14(14)) and to "[e]ncourage industrial, commercial, residential and community development which provides the best usage of land areas, maximizes environmental benefits and minimizes the effects of less desirable environmental conditions." Id. § 14(7).
132 Note 71 supra.
134 Id. § (9)(a).
135 Id. § (9)(b).
136 With the WRC's current 8°F standard, the once-through cooling system planned by NYSE&G would be sufficient to comply; stricter standards would require NYSE&G to construct cooling towers.
138 Id. §§ 121, 126.
ever, the PSC is responsible for administering this requirement, once again fragmenting state environmental decision making. Now NYSE&G must receive approval from both DEC for its plant’s discharge and the PSC for its transmission lines.

Conceivably the PSC might consider the whole environmental impact of a power station, including thermal pollution, in granting certification for transmission lines, and thus have ultimate control over siting decisions. By doing so, however, it might be subject to severe judicial reprimand for exceeding its delegated responsibilities. The legislation itself is directed specifically towards transmission lines, and environmental considerations such as powerline cuts through forests, soil erosion, and visual aesthetic pollution seem more directly within the legislation’s purview than thermal pollution.

Under the same law providing for the PSC transmission line controls, New York established a temporary commission on the environmental impact of major public utility facilities. This commission was charged with the responsibility of drawing up “appropriate state procedures which should be established to regulate and determine the siting of such facilities.” The Commission was to propose legislation by December 1970, but at this writing no such proposals have been made public.

Two major proposals are before the state legislature, each requiring permits before a utility can even acquire a site. Both are aimed at requiring private parties to justify the environmental costs of their plans prior to taking irreversible and possibly damaging action. Within this system, NYSE&G would still make the initial decision, but before taking action it would have to justify its decision. Although the scientific problems remain unsolved, the burden of proof in New York seems to be shifting from the public at large to the user and potential injurer of environmental resources.

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140 Id. § 6(a)(A)(iii).
141 TEMPORARY STATE COMM’N ON THE ENVIRONMENTAL IMPACT OF MAJOR PUB. UTILITY FACILITIES, INTERIM REPORT, exhibits V, VI. 1970 N.Y. LEG. DOC. No. 75.

In April 1971 Governor Rockefeller introduced a bill recommending that only one permit be required for the siting of a powerplant and that that permit issue from the PSC. (1971) Sen. Int. No. 6385 (Rules Comm.), (1971) Assy. Int. No. 7006 (Mr. Kelly). See also N.Y. Times, April 12, 1971, at 44, col. 1.

142 For an example of how another state has attempted to cope with technological advances which have outdated existing legal institutions, see Mich. STAT. ANN. § 14.528 (262)(I) (Supp. 1971). Michigan has created a new private remedy, making it possible for any affected person to enforce the state antipollution laws. New York has denied private parties this right. N.Y. PUB. HEALTH LAW § 126I (McKinney 1971).
CONCLUSION

We have used the Cayuga Lake nuclear powerplant siting controversy to indicate both institutional inadequacies with respect to utility development and the judicial and legislative response to those inadequacies. Realization that environmental resources are finite has brought about a fundamental change in legal orientation. Visible environmental degradation and the prospect of continuing technological development have forced implementation of preventative rather than remedial measures. And the burden of proof appears to be shifting from the public to the individual developer whose actions pose threats to environmental quality.

National energy needs, according to the Federal Power Commission, will require 255 new nuclear powerplants by 1990.\(^{143}\) Public protests, however, continue to hold up construction. The tension between the demand for electrical energy and the concern for natural resources is exacerbated by uncertainty; technological solutions to the problems caused by waste heat, and indeed, the scope and nature of the problems themselves remain largely a matter of educated speculation. It is also uncertain what effect the shifting of the burden of proof will have on future patterns of economic growth. Legislative controls which would restrict economic growth in order to conserve the environment may have profound social consequences.

Developing New York controls and the National Environmental Policy Act provide the legislative potential for preventative constraints on private decisions. The crucial question is whether or not political issues can be resolved in order to implement this recent legislation.

\footnote{\(^{143}\) N.Y. Times, July 6, 1971, at 1, col. 7.}

\footnote{† Cornell Program on Science, Technology, and Society. A.B. 1954, Cornell University.}

\footnote{†† Member of the Hawaii Bar. A.B. 1964, J.D. 1971, Cornell University; B.S. 1965, Pennsylvania State University.}
ENFORCEMENT OF SECTION 2 FIRST OF THE RAILWAY LABOR ACT

The Railway Labor Act (RLA) provides elaborate procedures to facilitate the voluntary settlement of major disputes between carriers and their employees. It requires the parties both to make “every reasonable effort” to negotiate a settlement and to refrain from altering the status quo while the RLA procedures are in operation. However,

2 Major disputes involve the formation of collective agreements or efforts to change them. Elgin, J. & E. Ry. v. Burley, 325 U.S. 711, 722-26 (1945). The fourth purpose of the RLA, as set forth in § 2, 45 U.S.C. § 151a (1964)—“to provide for the prompt and orderly settlement of all disputes concerning rates of pay, rules, or working conditions”—describes the general subject matter of major disputes. See id. § 183 (describing the similar subject matter for major disputes involving air carriers).

Minor disputes, on the other hand, involve grievances and the interpretation or application of a collective agreement. Id. § 151a; see Elgin, J. & E. Ry. v. Burley, supra at 723-24. Minor disputes are processed through the grievance procedures of the collective bargaining agreement in conferences between the carrier and employees’ representatives, and are resolved finally either by the National Railroad Adjustment Board (NRAB) or by a system board of adjustment established by the employees’ representatives and the carrier. 45 U.S.C. §§ 153 First (i), Second (Supp. V, 1970). See Brotherhood of R.R. Trainmen v. Chicago River & I.R.R., 353 U.S. 30 (1957). See also 45 U.S.C. §§ 184-85 (1964) (minor dispute settlement provisions for the airline industry).

A third category of disputes involves the designation and authorization of representatives of the employees covered by the RLA. Id. § 152 Ninth. The National Mediation Board (NMB) has exclusive authority in representational disputes. See General Comm. v. Missouri-K. T.R.R., 320 U.S. 323 (1943); Switchmen’s Union v. NMB, 320 U.S. 297 (1943); note 37 infra. Sections 2 Third and Fourth make it unlawful for a carrier to interfere with, influence, or coerce employees in organizing. Enforcement of these sections must be had through either criminal proceedings (see note 6 infra) or petition to the courts for injunctive relief. See Virginian Ry. v. System Fed’n No. 40, 500 U.S. 515 (1997); Texas & N.O.R.R. v. Brotherhood of Ry. Clerks, 281 U.S. 548 (1930). The RLA does not provide an administrative procedure to remedy such practices.

3 For a summary of the statutory procedures, see note 5 infra.
4 45 U.S.C. § 152 First (1964); note 13 infra.
5 The major dispute procedures and status quo requirements were described succinctly by Mr. Justice Harlan in Brotherhood of R.R. Trainmen v. Jacksonville Terminal Co., 394 U.S. 369 (1969):

A party desiring to effect a change of rates of pay, rules, or working conditions must give advance written notice. § 6. The parties must confer, § 2 Second, and if conference fails to resolve the dispute, either or both may invoke the services of the National Mediation Board, which may also proffer its services sua sponte if it finds a labor emergency to exist. § 5 First. If mediation fails, the Board must endeavor to induce the parties to submit the controversy to binding arbitration, which can take place, however, only if both consent. §§ 5 First, 7. If arbitration is rejected and the dispute threatens “substantially to interrupt interstate commerce to a degree such as to deprive any section of the country of essential transportation service, the Mediation Board shall notify the President,” who may create an emergency board to investigate and report on the dispute. § 10. While the
the Act fails to specify means to ensure compliance with these substantive and procedural obligations, and as a result, the task of enforcing compliance has fallen upon the federal courts.

It is now clear that the federal courts do have the power to enforce the procedural obligations of the RLA. Accommodation of the status quo requirements of the major dispute procedures of the Act and the anti-injunction policy of the Norris-LaGuardia Act received scant attention during legislative consideration of the Norris-LaGuardia Act and the 1934 amendments to the RLA. In light of the Supreme Court's

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Note 5 supra.

Note 7 supra.

Note 8 29 U.S.C. §§ 101-15 (1970). The Norris-LaGuardia Act prohibits the federal courts from issuing injunctions in most labor disputes (id. §§ 101, 104-05) and provides strict procedural safeguards in the remaining cases (id. §§ 107-10).

Congressman LaGuardia did indicate that the bill he sponsored in the House was not designed to prevent injunctive relief in a case where the RLA dispute settlement procedures had not been exhausted:

We then passed the railroad labor act, and that takes care of the whole labor situation pertaining to the railroads. They could not possibly come under [the Norris-LaGuardia Act] for the reason that we provided the machinery [in the RLA] for settling labor disputes.

75 Cong. Rec. 5499 (1932); see also id. at 4937-38 (remarks of Senator Blaine).


A basis for accommodation was suggested by the Supreme Court as early as 1945 (see Elgin, J. & E. Ry. v. Burley, 325 U.S. 711, 725 (1945) (dictum)) although later the Court seemingly rejected the accommodation principle with regard to major disputes. In a footnote to its decision in Brotherhood of R.R. Trainmen v. Chicago River & I.R.R., 353 U.S.
recent interpretation of the RLA requirements, however, it is quite apparent that the Norris-LaGuardia Act does not deprive federal courts of the power to enjoin a strike or a unilateral change by the carrier in the rates of pay, rules, or working conditions if the conduct against which the injunction is sought violates the status quo requirements.

In the Chicago River case, the union had called a strike to support its position in a series of grievance claims pending before the NRAB. The Court unanimously held that the procedures provided by the RLA for the settlement of such minor disputes were compulsory and concluded that the Norris-LaGuardia Act did not deprive the federal courts of power to issue an injunction "to vindicate the processes of the Railway Labor Act." Id. at 41. In a later case, the Supreme Court interpreted Chicago River as holding that a strike over a minor dispute may be enjoined to prevent a plain violation of a basic command of the RLA and to enforce compliance with the requirement that minor disputes be heard by the NRAB. Order of R.R. Telegraphers v. Chicago & N.W. Ry., 362 U.S. 330, 338-39, 341 (1960).

The unfortunate dictum in footnote 24 of the Chicago River case has been severely discounted. See Chicago, R.I & P.R.R. v. Switchmen's Union, 292 F.2d 61, 66 (2d Cir. 1961), cert. denied, 370 U.S. 956 (1962); American Airlines v. Air Line Pilots Ass'n, Int'l, 169 F. Supp. 777, 787-89 (S.D.N.Y. 1958); Aaron, supra at 307-09; Harper, Major Disputes Under the Railway Labor Act, 35 J. Air. L. & Cos. 3, 9-10 (1969); McGuinn, Injunctive Powers of the Federal Courts in Cases Involving Disputes Under the Railway Labor Act, 50 Geo. L.J. 46, 48-51 (1961). Each of these authorities limited the doctrine enunciated in the Chicago River footnote to the factual context of the Toledo case cited by the Chicago River Court in footnote 24. First, there was no claim by the carrier that the RLA had been violated in the Toledo case; second, the processes of the RLA had been exhausted when injunctive relief was sought. See notes 12 & 15 and accompanying text infra, concerning the effect of exhausting the statutory procedures for major dispute settlement. Although the Supreme Court has not elaborated further on footnote 24 of the Chicago River case, the Court recently cited statements from that case in support of the principle of injunctive relief for breaches of duty under the RLA. Chicago & N.W. Ry. v. United Transp. Union, 402 U.S. 570, 582 n.16 (1971).

The Supreme Court has held, however, that once the statutory procedures are ex-
Given that the federal courts can enforce the procedural requirements of the RLA, it does not necessarily follow that the judiciary has power to enforce the substantive obligation of section 2 First that the parties make “every reasonable effort” to settle major disputes. Only recently has the Supreme Court ruled affirmatively on this question. In Chicago & North Western Railway v. United Transportation Union, the Supreme Court held that compliance with the Act’s “reasonable effort” requirement is enforceable in the courts.


The Supreme Court’s attitude in the Detroit case towards enforcement of the procedural requirements of the RLA should be reviewed with regard to the recent decision in Boys Markets, Inc. v. Retail Clerks Union, 398 U.S. 235 (1970). There, the Court reversed its earlier decision in Sinclair Ref. Co. v. Atkinson, 370 U.S. 195 (1962), and held that in an action under section 301 of the Labor Management Relations Act (LMRA), 29 U.S.C. § 185 (1970), where the employer has agreed contractually to arbitrate a dispute, the federal courts may enjoin strikes in violation of a contractual no-strike clause. The Court, by extending the accommodation rationale to injunction suits under section 301 of the LMRA, reaffirmed the view that the union’s right to strike, although protected by the Norris-LaGuardia Act, nevertheless must be tempered by congressionally imposed conciliation obligations on both management and labor. 398 U.S. at 249-53.

The purposes of contractually imposed obligations to arbitrate and of the statutorily prescribed procedures for noncompulsory settlement of major railroad disputes are similar: the “settlement of . . . disputes without resort to strikes, lockouts, or other self-help measures.” Id. at 249. It is true that the arbitration route ends in a binding determination for the parties whereas the RLA major dispute procedures, once exhausted, permit self help; but this is of little consequence. The basic purposes of the arbitration and RLA procedures respectively, are “obviously . . . undercut if there is no immediate, effective remedy for those very tactics that arbitration [or the RLA dispute settlement procedures are] designed to obviate.” Id. The rationale supporting enforcement of the compulsory arbitration provisions for minor disputes in the RLA, such as that in the Boys Market case regarding contractual arbitration, is also applicable in compelling compliance with the major dispute settlement procedures. See Brotherhood of R.R. Trainmen v. Chicago River & I.R.R., 353 U.S. 30 (1957).

It shall be the duty of all carriers, their officers, agents, and employees to exert every reasonable effort to make and maintain agreements concerning rates of pay, rules, and working conditions, and to settle all disputes, whether arising out of the application of such agreements or otherwise, in order to avoid any interruption to commerce or to the operation of any carrier growing out of any dispute between the carrier and the employees thereof.


The Court’s decision of necessity limits its prior holding that once the procedures established for the settlement of major disputes are formally exhausted, the RLA permits
The basis of the major dispute in the *Chicago & North Western Railway* case concerned the number of brakemen to be employed on the railway's trains. The dispute was initiated, negotiated, and mediated in accordance with the technical provisions of the RLA. When arbitration was rejected by the United Transportation Union (UTU), the National Mediation Board (NMB) terminated its services; an emergency board was not appointed.

Shortly after the expiration of the terminal status quo period, the railway filed suit in the district court alleging that the union had violated section 2 First by not exerting "every reasonable effort" towards agreement during the statutory period for major dispute settlement. The railway argued that in violating section 2 First the union had not discharged all of its obligations under the RLA. The railway asked the court to declare that the RLA procedures had not been exhausted and to enjoin the UTU from exercising self help in the form of a strike.

The district court dismissed the complaint, stating that section 2 First was exclusively a matter for administrative determination by the NMB and was not justiciable. The Seventh Circuit Court of Appeals affirmed for similar reasons, despite contrary authority in the Fourth Circuit. Although other circuits had considered controversies arising

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17 422 F.2d 979, 985-89 (7th Cir. 1970). The court of appeals ruled that section 2 First of the RLA may not be enforced by a court order enjoining a union's strike against a carrier since that provision was intended to play an integral part in facilitating other more specific provisions of the RLA, compliance with which is enforced by the NMB.

18 *Piedmont Aviation, Inc. v. Air Line Pilots Ass'n, Int'l, 416 F.2d 633, 636 & n.6 (4th Cir. 1969), cert. denied, 397 U.S. 926 (1970)* (citing cases in accord with its determination that section 2 First is justiciable).
under section 2 First, the Seventh Circuit was the first expressly to consider the issue of justiciability. The Supreme Court granted certiorari and reversed the Seventh Circuit.

In deciding that section 2 First imposes a legal obligation enforceable by the judiciary rather than by the NMB, the Supreme Court stated that it would not determine the means by which the federal courts should approach and enforce the section 2 First obligation or the standard by which the duty "to exert every reasonable effort" should be assessed. The Court thus left the task of enforcing the reasonable effort obligation to the lower courts.

I

THE PRIMARY ROLE OF THE NMB

An accommodation between the respective roles of the courts and the NMB is needed in order to promote compliance with section 2 First. In the Chicago & North Western Railway case the Supreme Court cited considerable authority in support of its decision that section 2 First imposes an obligation enforceable by the judiciary. The Court emphasized the nonadjudicatory role of the NMB and concluded


22 Id. at 583, 584.
23 Id. at 578-81.
that therefore judicial supervision of the "reasonable effort" obligation was required. It is apparent from the Court's opinion that the NMB cannot exercise the exclusive power to enforce section 2 First, despite contrary holdings in the Seventh Circuit and the Northern District of Illinois.

Although compliance with section 2 First is justiciable, nothing in the statutory language, history, or judicial interpretations indicates that the federal courts must play the exclusive role in enforcing the "reasonable effort" obligation. The National Mediation Board may not have exclusive power to promote compliance with section 2 First, but it should not be entirely precluded from preventing or remedying violations of section 2 First during the mediation stage of the major dispute settlement procedures.

A procedure by which the NMB in the first instance attempts to enforce compliance with the section 2 First obligation seems desirable as a matter of policy. Such a procedure is not compelled by statute, but neither is it prevented by the Chicago & North Western Railway decision. The NMB plays a dominant role in the procedures for non-compulsory settlement of major disputes. Because of its proximity to the parties during mediation, the NMB is better qualified in the first instance to determine if the parties are exerting reasonable efforts towards a resolution of their dispute. Although there is no official indication that the NMB has attempted to promote compliance with section 2 First, the NMB is well aware of the essential nature of the duties the Act imposes on each party. It is, therefore, consistent with the mediatory role of the NMB for it to exact compliance with the "reasonable effort" requirement.

The NMB acts only as a "catalyst for settlement" and not as an adjudicator of conduct; to alter the role in which its expertise and authority lie would compromise the mediatory function. Thus, the performance of any enforcement function must not interfere with NMB effectiveness in mediation.

Initial recognition by the NMB mediator that a party is acting contrary to the mandate of section 2 First need only be informal.

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25 Id. at 580-81 & n.14.
26 See notes 16-19 and accompanying text supra.
30 Id. at 539 & nn.10-11; see D. Richberg, Labor Union Monopoly 30 (1957).
31 In the context of a procedure in which mediation is so essential, the reasonable efforts needed to reach agreement might be better promoted informally by the Mediation
exhortations prove ineffective, the NMB can attempt to ensure compliance with the obligation through its statutory power to maintain the status quo.\textsuperscript{52}

Considered to be within the Board's duty to use its "best efforts" to promote agreement, is its retention of jurisdiction until it is satisfied that the parties are exerting the reasonable efforts necessary for bargaining under the RLA.\textsuperscript{33} The NMB would be acting in accordance with the purposes of the Act by refusing to terminate its jurisdiction over the dispute when retention of jurisdiction might assure the "reasonable effort" necessary to reach agreement.\textsuperscript{34} Of course if the parties do bargain in good faith and are still unable to reach agreement through mediation, mediation has proved unsuccessful. The Board should then proffer arbitration and ultimately release the parties to self help.

\section{The Scope of Judicial Review}

Although the Railway Labor Act contemplates judicial enforcement of the section 2 First obligation,\textsuperscript{35} judicial scrutiny should be restricted when the NMB already has acted in a major dispute.\textsuperscript{36} The NMB, in acting to promote compliance with the "reasonable effort" obligation, should not be expected to follow the outlines of the conventional administrative process. For example, the NMB cannot and should not make findings of fact and conclusions of law with respect

\begin{footnotesize}
\begin{itemize}
\item \textsuperscript{32} The RLA sets few standards with respect to the conduct of the NMB during the mediation stage. The only direct limitation on the NMB's authority over the dispute settlement procedures is contained in section 5 First, which requires that if the offer of arbitration is refused, "the Board shall at once notify both parties in writing that its mediat-
\end{footnotesize}

\item \textsuperscript{33} Chicago & N.W. Ry. v. United Transp. Union, 402 U.S. 570, 581 (1971); cf. id., 422 F.2d 979, 987 (7th Cir. 1970).

\item \textsuperscript{34} See Detroit & T.S.L.R.R. v. United Transp. Union, 396 U.S. 142, 149 (1969); Brotherhood of Ry. Clerks v. Florida & E.C.R.R., 384 U.S. 238, 246 (1966): "[T]he procedures of the Act are purposely long and drawn out, based on the hope that reason and practical considerations will provide in time an agreement that resolves the dispute."

\item \textsuperscript{35} Chicago & N.W. Ry. v. United Transp. Union, 402 U.S. 570, 580 (1971).

\item \textsuperscript{36} See text accompanying notes 27-28 supra.
\end{itemize}
to the parties' compliance with section 2 First. Moreover, the process of mediation is essentially private and informal, and the mediation agency must remain mutually acceptable if it is to function efficiently as a catalyst for settlement. Thus no policy of reviewability as found in the National Labor Relations Act or in the Administrative Pro-

37 Because the authors of the Railway Labor Act of 1926 "desired to keep the mediation board in the condition where it is persona grata to both parties," a proposal to give the mediation board the power to report facts was rejected. Hearings on S. 2306 Before the Senate Comm. on Interstate Commerce, 69th Cong., 1st Sess. 13 (1926) (statement of A. P. Thom, railroad spokesman) [hereinafter cited as 1926 Senate Hearings]. The authors of the Act stated during the Senate and House hearings that the function of the NMB would be restricted to conciliation and persuasion. The principal spokesman for the unions and the railroads not only endorsed the judicial enforceability of section 2 First, but he also stated that the NMB was not to "render any decision," "make findings," or become a "sort of super-labor board" while functioning in its mediatory capacity during the dispute settlement procedures. Hearings on H.R. 7180 Before the House Comm. on Interstate and Foreign Commerce, 69th Cong., 1st Sess. 18, 89 (1926) (statement of Donald R. Richberg, union spokesman) [hereinafter cited as 1926 House Hearings]; id. at 131, 136 (statement of A. P. Thom); see 1926 Senate Hearings 11, 13 (statement of A. P. Thom).

The legislative history of the 1934 amendments does not reflect an intent to alter the exclusively mediatory, nonadjudicatory role of the NMB with respect to major disputes. An exception to the general principle—that the NMB acts solely in a mediatory and nonadjudicatory capacity—was the specific amendment in 1934 authorizing the NMB to decide representation disputes. Railway Labor Act of 1934, ch. 691, § 2 Ninth, 45 U.S.C. § 152 Ninth (1964). Although amending the RLA in this regard, Congress indicated that no change regarding major disputes was intended. See H.R. Rep. No. 1944, 73d Cong., 2d Sess. 2 (1934) (the amendments do "not change the methods [regarding] . . . major disputes"); S. Rep. No. 1064, 73d Cong., 2d Sess. 3 (1934) (the powers of the NMB "are wholly persuasive"); Garrison, Labor Relations in the Railroad Industry, 17 ACADEM. POL. SCI. PROC. 163, 166 (1927) ("Congress . . . in creating the new Mediation Board, gave it no judicial functions."). See also Redenius, Airlines: The Railway Labor Act or the Labor Management Relations Act?, 20 LAB. L.J. 298, 299 (1969).

The statutory language of the current RLA confirms what is made evident by its legislative history. In defining the mediatory role of the NMB, Congress simply directed it to "use its best efforts" to bring the parties to agreement, to "endeavor . . . to induce the parties to submit their controversy to arbitration" if mediation is unsuccessful, and to "notify both parties in writing that its mediatory efforts have failed" if arbitration is refused. 45 U.S.C. § 155 First (1964).

Finally, the Supreme Court has recognized the limitations on NMB procedures in cases other than those regarding representation disputes: "[I]t has no adjudicatory authority with regard to major disputes, nor has it a mandate to issue regulations construing the Act generally." Detroit & T.S.L.R.R. v. United Transp. Union, 396 U.S. 142, 158-59 (1969). See Chicago & N.W. Ry. v. United Transp. Union, 402 U.S. 570, 581 (1971).

38 See 29 C.F.R. §§ 1208.1, .3(a), .5(a), .5(a)-(b) (1971).

procedure Act\textsuperscript{40} is appropriate in assessing the activities of the NMB or the conduct of the parties during the mediation stage of the major dispute settlement procedures.\textsuperscript{41} The NMB should not be called upon subsequent to the termination of mediation to explain or defend what action it may have taken in promoting compliance or remediying violations of section 2 First.\textsuperscript{42}

To facilitate the delicate role of the NMB in promoting reasonable efforts to agree, its release of jurisdiction pursuant to section 5 of the RLA should give rise to a presumption of compliance with section 2 First during the period of mediation.\textsuperscript{43} A corollary of this presumption is that a judicial challenge to the reasonable efforts of one party, brought during the mediation stage, must be dismissed as untimely, pending the possible resolution of the dispute through mediation.

In order to overcome the presumption of compliance with the "reasonable effort" obligation, the complainant should have the burden of proving that a clear violation of the act has occurred.\textsuperscript{44} Until such a burden is met, a federal court should refuse to issue an injunction and compel compliance with the section 2 First obligation.

The practical effect of this allocation of roles between the federal

\textsuperscript{40} Administrative Procedure Act of 1946, §§ 10(a), (e), 5 U.S.C. §§ 702, 706 (1970); see Abbott Laboratories v. Gardner, 387 U.S. 136, 140 (1967); Saferstein, \textit{supra} note 39.

\textsuperscript{41} See K. Davis, \textit{Administrative Law Text} 519 (1959): "Experience has now proved that judicial review impairs an administrative program only when the review involves undue substitution of judicial for administrative judgment on problems within the agency's special competence."

\textsuperscript{42} See note 38 \textit{supra}.

\textsuperscript{43} The strength of the presumption of constitutionality of a legislative enactment exemplifies that which should be afforded to the presumption of compliance with section 2 First. See \textit{Pacific States Box & Basket Co. v. White}, 296 U.S. 176, 185-86 (1935); Note, \textit{The Presumption of Constitutionality Reconsidered}, 36 Colum. L. Rev. 283 (1936). See IAM v. NMB, 425 F.2d 527 (D.C. 1970).

The Mediation Board is entitled to as strong a presumption as the legislature, that if any state of facts might be supposed that would support its action, those facts must be presumed to exist. It has long been the law that the presumption of constitutionality available to a legislative enactment is also available to an administrative regulation.

\textit{Id.} at 540, citing \textit{Pacific States Box & Basket Co. v. White}, \textit{supra} (footnote omitted).

The IAM case involved an action by a union to compel the Mediation Board to terminate mediation and proffer arbitration during a major dispute pursuant to section 5 First. The court held that the district court had jurisdiction over the action because of the strong statutory language favoring arbitration and because of the union's assertion of the basic right to resort to self help 30 days after the Board relinquishes control over the dispute. However, the court held that Congress did not contemplate that the Board could be called on to explain its reasons for refusing to proffer arbitration, that the Board's action was entitled to a presumption of validity, and that the action could be overturned only on the basis of objective facts establishing that it was patently arbitrary.

courts and the NMB would be in most cases to preclude court review of an alleged violation of section 2 First on the merits. For the most part, the role of the federal courts would be limited to deciding whether, on the face of the record, the parties have exhausted all procedures for the resolution of major disputes. If a suit alleging violation of section 2 First is brought prior to the termination of mediation, the court will be obliged to refuse jurisdiction until NMB action has run its course. Once the procedures for mediation have been exhausted, the court should defer to the presumption of compliance.

Judicial scrutiny of the section 2 First obligation will not be foreign to the federal courts. With the exception of the Seventh Circuit in *Chicago & North Western Railway*, these courts have accepted jurisdiction and have reviewed alleged violations of section 2 First, without discussing the justiciability of that section. Although no court has adopted a presumption of compliance based upon the exercise of and deference to the mediatory function of the NMB, the courts have


46 The only conceivable situation in which a party could overcome the presumption and thereby prove a clear violation of the section 2 First obligation involves what might be called a per se violation. A refusal to bargain over subjects encompassed by the terms "rates of pay, rules, and working conditions" found in section 2 First would constitute a per se violation. See *Harper*, supra note 10, at 29-34; *Fibreboard Paper Prods. Corp. v. NLRB*, 379 U.S. 203 (1964). However, an outright refusal to bargain, *i.e.*, to "treat with," is a violation of the RLA, § 2 Ninth, 45 U.S.C. § 152 Ninth (1964). See *Virginian Ry. v. System Fed'n No. 40*, 300 U.S. 515 (1937).


been reluctant to find a violation of the "basic command" of the RLA in the conduct of a party.\textsuperscript{50} Thus the results are as likely to be the same in a case in which the presumption of compliance is adopted as in a case in which a court applies no presumption, but reviews an allegation on the merits. An approach utilizing the presumption of compliance, however, would not only spare scarce judicial resources, but would also promote a uniform application by the NMB of the substantive "reasonable effort" obligation in mediation.\textsuperscript{51}

Moreover, this proposed approach might minimize the dangers that the Supreme Court foresaw when it held section 2 First justiciable: (1) "that parties will structure their negotiating positions and tactics with an eye on the courts, rather than restricting their attention to the business at hand";\textsuperscript{52} (2) that "the party seeking to maintain the status quo may be less willing to compromise during the determinate processes of the Railway Labor Act if he believes that there is a chance of indefinitely postponing the other party's resort to self-help after those procedures have been exhausted";\textsuperscript{53} and (3) that "the vagueness of the obligation under § 2 First could provide a cover for freewheeling judicial interference in labor relations of the sort that called forth the Norris-LaGuardia Act in the first place."\textsuperscript{54}

Of course, court jurisdiction over alleged violations of section 2 First is exclusive in situations over which the NMB does not exercise

\textsuperscript{50} See, e.g., Chicago R.I. & P.R.R. v. Switchmen's Union, 292 F.2d 61, 67, 70 (2d Cir. 1961), cert. denied, 370 U.S. 936 (1962). In the Chicago case, the Second Circuit reversed an injunction entered by the district court on the ground that the union had not engaged in good faith efforts to reach final agreement with the carriers. Reviewing the history of bargaining between the parties, the court of appeals concluded that the failure of the union negotiating committee to recommend the carriers' pattern settlement did not "make the Union's conduct so wholly arbitrary as to pass beyond the bounds of good faith endeavor to reach agreement." Id. at 70. Although the court assumed for the purposes of its decision that the RLA imposed a greater duty to try to reach agreement than did the NLRA, it held that neither party could be compelled to abandon a position reasonably taken. See Pan Am. World Airways, Inc. v. Flight Eng'rs Int'l Ass'n, 306 F.2d 840, 849 (2d Cir. 1962); Southern Ry. v. Brotherhood of Locomotive Firemen, 225 F. Supp. 296, 307 (M.D. Ga. 1962), aff'd, 324 F.2d 503 (5th Cir. 1963); Northwest Airlines, Inc. v. Airline Pilots Ass'n, Inc't, 185 F. Supp. 77, 80 (D. Minn. 1960). But cf. Piedmont Aviation, Inc. v. Airline Pilots Ass'n, Inc't, 416 F.2d 633, 636 (4th Cir. 1969), cert. denied, 397 U.S. 926 (1970).


\textsuperscript{52} 402 U.S. 570, 583 (1971).

\textsuperscript{53} Id.

\textsuperscript{54} Id.
mediatory jurisdiction. For example, the NMB's jurisdiction does not extend to the conferences required by section 65 that precede mediation under section 5 First. In addition, once the NMB terminates mediation, it has no jurisdiction during the thirty-day cooling off period which immediately follows. The RLA makes provision for NMB supervision during neither the status quo period following the appointment of an emergency board under section 10, the cooling off period after an emergency board report, nor the terminal period of self help.

Some cases initially involving exclusive court jurisdiction may become moot if subsequent to the institution of a suit the parties enter a different stage of the dispute settlement process. In such instances the court should decline jurisdiction. The court should decline jurisdiction, for example, if the carrier charges that the union has failed to comply with the "reasonable effort" requirement during the initial conference stage, and subsequent to the institution of the suit the NMB initiates mediation. Of course, the court may permit the suit in the extraordinary case where the complaint, as supported by the objective facts, alleges a so-called per se violation of section 2 First.

In those cases which a court must decide on the merits, a standard for assessing the "reasonable effort" obligation is necessary. Indeed, such a standard needs articulation so that the parties, the NMB, and the courts can best understand the nature of the obligation to which adherence is commanded.

III

THE "REASONABLE EFFORT" STANDARD

Both the Railway Labor Act and the National Labor Relations Act require the parties to bargain, and both statutes give substantive content to the bargaining requirement through statutory standards. The NLRA imposes a dual obligation "to meet . . . and confer" and to bargain "in good faith." The RLA also requires the parties to a

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58 Id. § 160.
59 See note 46 supra.
major dispute to meet and confer, but it is not so explicit as the NLRA in providing a standard by which to assess the parties' conduct during the course of major dispute settlement. Inasmuch as the RLA has as its purpose the peaceful settlement of disputes, the duty "to exert every reasonable effort to make and maintain agreements" clearly contemplates something more than the mere requirement to meet and confer.

One standard suggested by the language of section 2 First is the test of reasonableness. An application of this standard by the NMB or the federal courts would, in effect, tend to force a resolution of the major dispute upon the parties. The language of the RLA does not explicitly preclude the NMB or the courts from "compel[ling] either party to agree to a proposal or requir[ing] the making of a concession." However, the legislative history indicates that Congress rejected provisions designed to compel agreements. The noncompulsory nature of the major dispute settlement procedures has been emphasized in judicial discussions of the Act. The anomalous result is that the "reasonable effort" requirement does not in fact oblige the parties to conduct themselves as the reasonable man would have acted.

It is generally accepted in the lower federal courts that a require-

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   Both before and after enactment of the Railway Labor Act, as well as during congressional debates on the bill itself, proposals were advanced for replacing this final resort to economic warfare with compulsory arbitration and antistrike laws. But although Congress and the Executive have taken emergency ad hoc measures to compel the resolution of particular controversies, no such general provisions have ever been enacted. And for the settlement of major disputes, the statutory scheme retains throughout the traditional voluntary processes of negotiation, mediation, voluntary arbitration, and conciliation. Every facility for bringing about agreement is provided and pressures for mobilizing public opinion are applied. The parties are required to submit to the successive procedures designed to induce agreement. § 5 First (b). But compulsions go only to insure that those procedures are exhausted before resort can be had to self-help. No authority is empowered to decide the dispute and no such power is intended, unless the parties themselves agree to arbitration.

68 See Chicago & N.W. Ry. v. United Transp. Union, 402 U.S. 570, 579 n.11 (1971);
69 See W. Prosser, supra note 65.
ment of “good faith” bargaining satisfies the obligation “to exert every reasonable effort.” There is little discussion in the lower court opinions about the derivation of a “good faith” standard from a statute that uses the “reasonable effort” language; but “good faith” is a logical interpretation and appears to have been adopted as a matter of convenience.

Congress used a requirement similar to section 2 First in the Labor Management Relations Act of 1947 both to describe the duty to bargain in good faith and to promote agreement during the injunction period of the national emergency strike provisions. The federal

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There is no official indication as to what standard the NMB would apply in enforcing section 2 First. The administrative regulations of the NMB merely restate the section 2 First language in reviewing the obligation imposed on the parties during the mediation stage. 29 C.F.R. § 1204.1 (1971).


72 The Supreme Court has made several references by dicta to a standard of good faith. See Elgin, J. & E. Ry. v. Burley, 325 U.S. 711, 721-22 n.12 (1945). Citing to section 2 First, the Supreme Court in Burley noted that

one of the statute's primary commands, judicially enforceable, is found in the repeated declaration of a duty upon all parties to a dispute to negotiate . . . . This duty is not merely perfunctory. Good faith exhaustion of the possibility of agreement is required to fulfill it.

Id. The Court thus apparently equated the “reasonable effort” requirement with that of “good faith.” See also Brotherhood of Locomotive Eng'rs v. Baltimore & O.R.R., 372 U.S. 284, 289, 291 (1963). Cf. Virginian Ry. v. System Fed'n No. 40, 300 U.S. 515, 550 (1937) (“Whether an obligation has been discharged, and whether action taken or omitted is in good faith or reasonable, are everyday subjects of inquiry by courts in framing and enforcing their decrees.”). However, the Court has shed less light on the meaning of the “reasonable effort” obligation than it has on the enforceability of section 2 First. In Chicago & N.W. Ry. the Court declined to determine “whether § 2 First requires more . . . than avoidance of ‘bad faith’ . . . .” 402 U.S. 570, 579 n.11 (1971).

73 Ch. 120, 61 Stat. 136 (codified in scattered sections of 5, 18 & 29 U.S.C.).

74 In order to prevent or minimize interruptions of the free flow of commerce growing out of labor disputes, employers and employees and their representatives, in any industry affecting commerce, shall—(1) exert every reasonable effort to make and maintain agreements concerning rates of pay, hours, and working conditions, including provision for adequate notice of any proposed change in the terms of such agreements . . . .


75 Whenever a district court has issued an order under section 178 of this title enjoining acts or practices which imperil or threaten to imperil the national health or safety, it shall be the duty of the parties to the labor dispute giving rise to such order to make every effort to adjust and settle their differences, with the
courts have applied the standard of "good faith" in assessing these two provisions.\textsuperscript{76}

It is apparent that Congress intended to require more than conferences but something less than "reasonableness" for satisfaction of the substantive obligation of section 2 First. "Every reasonable effort" represents an intermediate standard which can best be described as good faith. The test should be "whether under all the facts and circumstances the [parties] . . . acted in good faith—that is to say with a sincere desire to reach an agreement—or whether they acted in bad faith—that is, with the affirmative intention not to reach agreement."\textsuperscript{77}

\textit{Jay W. Waks\dagger}


In assessing the standard of good faith under the RLA, the NMB, the federal courts, and the parties are not without guidance. Besides the ample body of case law discussing the good faith efforts under the RLA (see note 70 supra), appropriate factors considered in enforcing the good faith bargaining obligation under the NLRA may be used in analyzing the parties' reasonable efforts to reach agreement in RLA disputes. See Norfolk & P.L.R.R. v. Brotherhood of R.R. Trainmen, 248 F.2d 34, 45 n.6 (4th Cir. 1957) ("negotiation required by the Act is the same 'good faith' bargaining required by the Labor Management Relations Act . . . ."); cf. Brotherhood of R.R. Trainmen v. Jacksonville Terminal Co., 394 U.S. 369, 380-81 (1969).

The Supreme Court has stated two caveats that should be considered in enforcing the "reasonable effort" obligation:

First, parallels between the duty to bargain in good faith and the duty to exert every reasonable effort, like all parallels between the NLRA and the Railway Labor Act, should be drawn with the utmost care and with full awareness of the differences between the statutory schemes. . . . Second, great circumspection should be used in going beyond cases involving "desire not to reach an agreement," for doing so risks infringement of the strong federal labor policy against governmental interference with the substantive terms of collective-bargaining agreements. . . .


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THE FAIRNESS DOCTRINE, THE AUTOMOBILE, AND ECOLOGICAL AWARENESS: AN AFFIRMATIVE ROLE FOR THE ELECTRONIC MEDIA IN THE POLLUTION CRISIS

When the Federal Communications Commission in 1967 applied the fairness doctrine to the advertising of cigarettes on radio and television,1 the broadcast industry responded with a unanimous chorus of outrage and opposition. Prominent among opposition arguments was the so-called parade of horribles: the opponents argued that the decision could not logically be confined to cigarettes and that controversial issues of public importance also requiring reply time might be raised by advertising of automobiles, beer and wine, detergents, high cholesterol foods, and even toothpaste with flouride.2 The feared extensions of the cigarette ruling, however, have not in fact materialized, largely because the FCC, in what seems an effort to protect commercial broadcasting, has steadfastly maintained that cigarettes are "unique" and that all other product advertising is immune from reply burdens.3

1 Television Station WCBS-TV, 9 F.C.C.2d 921 (1967); Television Station WCBS-TV, 8 F.C.C.2d 381 (1967).


The Federal Communications Commission has echoed these broadcaster fears: [A] great number of products commonly advertised over the broadcast media have pollution consequences; cars because of their gasoline engines; gasoline itself; airplanes; detergents; and, indeed, every product that is normally packaged in a non-biodegradable container. Commercials urging use of these products or services thus can be argued to raise implicit ecological questions. Other product commercials, similarly, could be argued to raise significant national policy questions: commercials promoting the use of aspirin, tranquilizers, soporifics, etc., on the ground that they indirectly promote overuse of drugs generally and thus might lead to harmful, illegal drug use; commercials depicting women in a manner charged to be offensive to the national policy of equal rights and equal treatment of the sexes etc. It is not necessary to list more examples. The contention is that, almost without exception, product commercials can be argued to raise some significant, controversial issue—and as public awareness grows, so, too, does the occasion for making such arguments.


In its reluctance to expand the scope of the cigarette ruling the FCC seems to be acting with greater discretion than valor. Today America's industrial, consumption oriented economy is coming under increasing attack by ecological action groups. The alarming predictions of ten years ago are rapidly becoming fact: America may suffocate in the products and by-products of her industrial maturity. Some products advertised on television and radio may pose greater threats to the public health than cigarettes ever could. This is especially true of the automobile, by far the major polluter of the country's air.\(^4\) Advertising that promotes the purchase and use of automobiles and ignores the deadly ecological effects of the internal combustion engine presents only one side of controversial issues of economic policy, public health, and the cultural tension between industrial expansion and the quality of individual life.\(^5\) The fairness doctrine should be applied to such advertising to ensure that both sides of these issues are heard. Such an application of the doctrine is commanded in policy and firmly based on the cigarette advertising precedent.

I

THE FAIRNESS DOCTRINE AND ITS APPLICABILITY TO PRODUCT ADVERTISING

The "controversial issues"\(^6\) aspect of the fairness doctrine crystallized in the 1949 Report on Editorializing by Broadcast Licensees.\(^7\)

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\(^4\) See notes 49-58 and accompanying text infra.

The distinction between transportation by private passenger automobile and propulsion by internal combustion must be underscored. Although the former is objectionable to many critics for the cultural and aesthetic changes it has forced, the life style accommodations it has demanded, and the high incidence of accidents it has provoked, inherently it poses no direct threat to public health. That private automobiles should continue as the preeminent American mode of transportation is the implicit premise of those who are working to develop a nonpolluting engine. Note 79 infra. The deleterious effects of the internal combustion propulsion system are the sole focus of this note. The term "automobile" is occasionally used here as a convenient shorthand for its powerplant.

\(^5\) See note 79 and accompanying text infra.

\(^6\) The "controversial issues" aspect of the fairness doctrine must be distinguished from the "equal opportunities" and "personal attack" doctrines. The "equal opportunities" or "equal time" requirement specifies that if a broadcaster furnishes broadcast time to one candidate for political office, he must furnish an equal broadcast opportunity at an equivalent charge to other candidates. 47 U.S.C. §§ 151-52, 315 (1964). The rules governing personal attack constitute the other facet of the fairness doctrine. A broadcaster who attacks the integrity or character of a specific person or group must promptly notify the person or group attacked, supply a transcript, tape, or other record of the substance of the attack, and offer broadcast time to respond. 47 C.F.R. §§ 73.123, .300, .598 (1971). Congress has implicitly approved the fairness doctrine. 47 U.S.C. § 315(4) (1964).

\(^7\) 13 F.C.C. 1246 (1949) [hereinafter cited as Report]. This report remains the key
Briefly stated, the doctrine requires broadcasters to seek out and broadcast responsible contrasting viewpoints on controversial issues of public importance. The broadcast licensee decides in good faith whether one side of an issue has been presented, and the format, spokesman, time, and proper viewpoint for a reply. If paid sponsorship cannot be obtained, the reply time must be furnished gratuitously.

The purpose of the fairness doctrine is to ensure that all sides of an issue are heard, that no licensee broadcasts solely those shades of opinion that he himself endorses. Under fairness, America's electronic media are expected to reflect adequately her intellectual and political pluralism. The doctrine has been seen as an affirmative extension of the first amendment: not only is government prohibited from restricting individual speech, but, on radio and television at least, it also has the affirmative duty to safeguard the "marketplace of ideas" concept which lies at the heart of the first amendment. Speaking for the

document delineating broadcasters' fairness duties, although it was supplemented in 1964 by the so-called Fairness Primer, Applicability of the Fairness Doctrine in the Handling of Controversial Issues of Public Importance, 2 P & F RADIO REG. 2d ¶ 53:24 (1964) [hereinafter cited as Fairness Primer]. See also HOUSE COMM. ON INTERSTATE AND FOREIGN COMMERCE, LEGISLATIVE HISTORY OF THE FAIRNESS DOCTRINE, H.R. Doc. No. 742, 90th Cong., 2d Sess. (1968).

The original justification for the creation and authority of the FCC was the scarcity of broadcast frequencies and the need to allocate spectrum space. The Commission was authorized to license and regulate broadcasters in light of the "public convenience, interest, or necessity." 47 U.S.C. §§ 303, 307(a), (b) (1964). The Supreme Court in the landmark case of Red Lion Broadcasting Co. v. FCC, 395 U.S. 367 (1969) nominally embraced the "scarcity" rationale as the authority for the FCC's fairness regulations but hinted at a new "access" rationale based on the first amendment. See note 10 and accompanying text infra. Thus, even the total development of ultra high frequency broadcasting, with all the implications that would have for the "scarcity" rationale, would not disturb a fairness doctrine based on a right of access.

8 Report 1250-51. The broadcaster thus has substantial discretion in deciding how to meet his fairness obligations. See Committee for the Fair Broadcasting of Controversial Issues, 25 F.C.C.2d 283 (1970); Notice of Inquiry, 30 F.C.C.2d 26 (1971); Fairness Primer 1913.


Supreme Court in *Red Lion Broadcasting Co. v. FCC,* Justice White said:

It is the right of the viewers and listeners, not the right of the broadcasters, which is paramount. . . . It is the purpose of the First Amendment to preserve an uninhibited marketplace of ideas . . . rather than to countenance monopolization of that market . . . by . . . a private licensee. . . . [T]he right of the public to receive suitable access to social, political, aesthetic, moral, and other ideas . . . is crucial here.12

Although it was always understood that controversial issues might arise in a variety of situations and broadcast presentations,13 it was never expressly stated that they might arise in the context of a product advertisement.14 But in 1966 a New York attorney, John F. Banzhaf III, urged precisely that conclusion upon the Commission. Banzhaf argued that “cigarette advertisements . . . deliberately seek to create the impression and present the point of view that smoking is socially acceptable and desirable, manly, and a necessary part of a full rich life.”15 Because of this implicit message, Banzhaf contended, licensee stations that broadcast cigarette advertising have an affirmative obligation under fairness to “endeavor to make [their] . . . facilities available for the expression of contrasting viewpoints held by responsible elements.”16

To the surprise of the broadcast and tobacco industries, the FCC agreed. In a terse, three-page opinion letter,17 the Commission ruled that fairness was applicable to cigarette advertisements, since the normal use of this product can be a hazard to the health of millions of persons. [Cigarette advertisements] clearly promote the use of a particular cigarette as attractive and enjoyable. Indeed, they understandably have no other purpose. We believe that a station which presents such advertisements has the duty of informing its audience of the other side of this controversial issue of public

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13 Report 1250. For an enumeration of many of the varied contexts in which controversial issues have arisen thus bringing fairness into play, see 53 *Iowa L. Rev.* 480, 485-86 (1967).
14 Leventhal, *supra* note 1, at 98-105, argues that fairness was never intended to apply to product advertising.
16 405 F.2d at 1086.
17 Television Station WCBS-TV, 8 F.C.C.2d 831 (1967). This ruling was later supplemented by a longer memorandum opinion and order in which the Commissioners detailed the broadcasters’ new duties and responded to many opposition arguments. Television Station WCBS-TV, 9 F.C.C.2d 921 (1967).
importance—that, however enjoyable, such smoking may be a hazard to the smoker's health.18

The Commission stressed that although equal time was not required, a “significant” amount of time must be devoted to the expression of the antismoking viewpoint.19 By being this specific, both as to the amount of reply time and as to the nature of the controversial issue, the Commission removed much of the discretion usually allowed a broadcaster in this area.20

On appeal to the District of Columbia Circuit, the Commission's ruling was upheld.21 Judge Bazelon found justification for the Commission's ruling in its statutory duty to regulate broadcasting in the public interest22 rather than in the fairness doctrine per se.23 The court did note, however, that the authority to regulate broadcasting with only the public interest as a guide carried with it the danger of censorship.24 For that reason the court narrowed the controlling regulatory standard to that of “public health,” reasoning that this standard was indisputably a major part of the public interest yet specific enough to be constitutionally unobjectionable.25

The true significance of the FCC approach sanctioned in Banzhaf will become clear only if it is used as a precedent for imposing fairness obligations on other product advertising. The Banzhaf decision did not immediately drive cigarette advertising from the airwaves.26 However, its significance as a protracted regulation of commercial ad-

18 Television Station WCBS-TV, 8 F.C.C.2d 381, 382 (1967).
19 Id.
20 See note 8 and accompanying text supra. The Commission in addition strongly suggested specific reply spokesmen. 8 F.C.C.2d at 382. This particularity gave rise to the charge that the FCC had substituted its “fiat” for the usual licensee judgment. See Television Station WCBS-TV, 9 F.C.C.2d 921, 940-42 (1967).
22 Id. at 1091-99.
23 The Supreme Court was at this time still considering the constitutionality of the fairness doctrine in Red Lion Broadcasting Co. v. FCC, 395 U.S. 367 (1969), a case on appeal from the District of Columbia Circuit.
24 405 F.2d at 1095-96.
25 Id. at 1096-99. Having narrowed the standard, the court concluded that the Commission had acted within it. 405 F.2d at 1099. See text accompanying notes 41-42 infra.
26 There is some question as to whether the Banzhaf ruling or the federal package labeling requirements (15 U.S.C. §§ 1331-39 (1970)) have actually reduced smoking. Although in the last 10 years there has been a 17% reduction in the number of adult men who smoke, in the last two years alone smokers between 12 and 18 years of age have increased by one million. TIME, March 22, 1971, at 73-74. The fairness doctrine, however, was not intended to dictate social choices, but only to see that they are informed. It may have achieved its purpose even though the public response is not dramatic.
vertising was obscured when Congress completely banned radio and television cigarette advertising.\textsuperscript{27}

II

FAIRNESS AND AUTOMOBILE ADVERTISING

Friends of the Earth (FOE), an environmental action organization, asked the FCC in March 1970 to rule that automobile and oil company\textsuperscript{28} advertising implicitly presents one side of the controversial public issue of the benefits and detriments of automobile use, and that the fairness doctrine requires reply time.\textsuperscript{29} FOE argued that automobile and oil company advertisements imply that automobiles are consonant with an unpolluted environment and that automobile use is a requisite of the "full rich life."\textsuperscript{30} It maintained that under \textit{Banzhaf} and in light of the FCC's duty to regulate broadcasting in the public interest, antipollution forces should be allowed to utilize television and radio to inform the public of the health hazards inherent in the normal use of automobiles.

The Commissioners rejected FOE's argument, stating that it was not in the public interest to burden or restrict automobile or oil company advertisements.\textsuperscript{31} Cigarettes, they said, were "unique," and therefore fairness was inapplicable to other product advertising.\textsuperscript{32} That "cigarettes are unique" needs little verification, but the Commissioners elaborated on this conclusion by delineating specific ways in which cigarettes differed from automobiles.\textsuperscript{33} The weakness of these distinc-


\textsuperscript{28} Although their specific contributions to air pollution may differ, both the internal combustion engine and its fuel are ultimately joint causes of pollutant emissions. Letter from Jerome Kretchmer, Administrator of New York City Environmental Protection Administration, to Dean Burch, Chairman, Federal Communications Commission, June 20, 1970 (on file at the \textit{Cornell Law Review}). Thus no distinction is drawn here between oil company and automobile manufacturer advertising.

\textsuperscript{29} Friends of the Earth, 24 F.C.C.2d 743 (1970), \textit{remanded}, No. 24,556 (D.C. Cir., Aug. 16, 1971). FOE's formulation of the controversial issue was exceedingly narrow. It argued that the question was whether small-displacement engines and non-leaded gasoline should be used by the public until nonpolluting transportation is developed. 24 F.C.C.2d at 744. \textit{See} note 78 and accompanying text infra.

\textsuperscript{30} 24 F.C.C.2d at 744. FOE here borrowed the language Banzhaf had used in his successful cigarette campaign. \textit{See Banzhaf v. FCC}, 405 F.2d 1082, 1086 (D.C. Cir. 1968), \textit{cert. denied}, 396 U.S. 842 (1969). FOE used as an example advertising which showed an automobile on a white beach.

\textsuperscript{31} 24 F.C.C.2d at 749.

\textsuperscript{32} \textit{Id.} at 748.

\textsuperscript{33} \textit{Id.} at 746-47. First the Commission contended that "[c]igarette smoking does not
tions suggests the Commission’s more fundamental fear that if fairness were applied to automobiles, it would have to be applied to the advertising for a host of other ecologically injurious products. The result, in the Commissioners’ view, would be a serious undermining of the commercially supported broadcasting system.

On appeal this express concern for the stability of public broadcasting was not fully explored. Although the District of Columbia Circuit did not enthusiastically reaffirm Banzhaf, it found Banzhaf and FOE indistinguishable. Automobile and oil company advertising, the court said, did in fact present one side of a controversial issue of public importance, and therefore the FCC had erred in holding the fairness doctrine inapplicable. The court remanded the case to the Commission for a finding as to whether the licensee station had involve a balancing of competing interests. The benefits and detriments involved in the use of ecologically harmful products are of a more complex nature, and do not permit the simplistic approach taken as to cigarettes.” Id. at 746. The Commission, however, must consider competing interests in any decision to impose obligations on broadcasters. Indeed, competing interests were involved in the cigarette decision. Manufacture, sale, and service of automobiles is a major American industry, and a step which would adversely affect Detroit’s promotional campaigns is not to be taken without caution. It remains, however, within the FCC’s competence to balance automotive promotional interests against the interest of national health. The scales tip in the latter’s favor. See notes 49-58 and accompanying text infra.

The Commission then stated that it would have barred cigarette advertising altogether had that not been forbidden by federal law. But no one, it said, “proposes to stop promoting or using the fruits of the technological revolution.” 24 F.C.C.2d at 746. This argument is fallacious because: (1) it falsely equates cigarette advertising and automobile use (id. at 754 (dissenting opinion)); (2) it is circular; and (3) it is simply inaccurate (see note 79 infra).

Third, the FCC admitted that government ecological action is needed, but contended that such action should be direct and not focus on the “peripheral advertising aspect.” 24 F.C.C.2d at 746. The reliance broadcasters and industry place on the power of television advertising belies the suggestion that it is of “peripheral” importance. In addition, the Commission was not perceptibly moved by this consideration in the cigarette ruling. Direct legislative action preceded the Banzhaf decision. 15 U.S.C. §§ 1331-39 (1970).

Note 33 supra.

See note 2 and accompanying text supra.


The matter was noted briefly. Friends of the Earth v. FCC, No. 24,556 (D.C. Cir., Aug. 16, 1971).

We do not minimize either the seriousness or the thorny nature of the problems. Pending, however, a reformulation of its position, we are unable to see how the Commission can plausibly differentiate the case presently before us from Banzhaf insofar as the applicability of the fairness doctrine is concerned.

Id.

The court accepted the narrow formulation of the controversial issue involved. Text accompanying note 29 supra.
discharged its fairness obligations, and if it had not, what other positive actions must be taken to achieve programming balance.

The District of Columbia Circuit’s failure to consider fully the Commission’s concern for commercial broadcasting is unfortunate. Burdensome or unwarranted restrictions upon advertising might seriously harm the broadcast industry, but it does not follow that restrictions are never warranted. The Commission seems to be acting under the assumption that no limits can or will be imposed in the advertising area and that therefore fairness cannot be manageably extended. This is simply not true. The Banzhaf decision provides explicit and implicit limits that can serve as guidelines to distinguish those products which are proper subjects for advertising regulation in the public interest. Only if a product exceeds the guideline limits should the broadcaster who advertises it be impressed with fairness reply obligations. Since automobile and oil company advertising by far surpasses these guidelines, ecological reply time is therefore in the public interest.

A. Type of Danger Posed by the Product Advertised

While upholding the FCC’s general authority to regulate broadcasting in the public interest, the Banzhaf court cautiously based its approval of the Commission’s regulation of cigarette advertising on the narrowed “public health” standard: “with First Amendment issues lurking in the near background, the ‘public interest’ is too vague a criterion for administrative action unless it is narrowed by definable standards.” Under Banzhaf, therefore, requests for advertisement reply time based on political, social, or moral opposition to the product advertised are not to be sustained.

Automobile use and cigarette smoking both undeniably endanger public health. The same may be said, however, about many advertised

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40 Since the Commission’s original decision in Friends of the Earth was based solely on the inapplicability of the fairness doctrine, the Commission never ruled on the defendant station’s allegation that even were fairness applicable it had satisfied its fairness obligations through its regular programming.

41 Banzhaf v. FCC, 405 F.2d 1082, 1096-97 (D.C. Cir. 1968), cert. denied, 396 U.S. 842 (1969). The public health standard was preferable because “[t]here is perhaps a broader . . . consensus on that value . . . than on any other likely component of the public interest.” Id.

42 Id. at 1096 (footnote omitted).

43 But see Retail Store Employees Union, Local 880 v. FCC, 436 F.2d 248 (D.C. Cir. 1970), where the same court held that the FCC should have considered in more than summary fashion, a striking union’s fairness challenge to a broadcast license renewal. The union charged that the station, without referring to the strike, had broadcast the retailer’s advertisements while refusing to broadcast union messages urging people not to cross the picket lines.
products, such as alcoholic beverages and high cholesterol foods. The "public health" standard, therefore, is itself insufficient to rebut the parade of horribles. Additional standards are necessary.

B. Extent and Provability of the Harm Resulting from Use of the Advertised Product

Injuries from cigarette smoking, according to the Banzhaf court, were substantial and fully documented by "overwhelming scientific evidence, by the findings of Government agencies, and by Congressional reports and statute." Advertisements for products posing only conjectural, unproven, or insubstantial threats—even to the public health—should therefore not be burdened with reply duties. Environmental injuries resulting from automobile use, however, are unfortunately far from conjectural. They are evidenced by an impressive volume of governmental and private documents. In several respects automobile use constitutes a greater public health hazard than cigarette use ever did.

Automobiles are responsible for from sixty percent to eighty

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44 See note 2 and accompanying text supra.
45 405 F.2d at 1098, quoting Television Station WCBS-TV, 9 F.C.C.2d 921, 952-53 (1967) (concurring opinion). "[Cigarette smoking] is . . . a danger to life itself . . . [and] threatens a substantial body of the population, not merely a peculiarly susceptible fringe group." 405 F.2d at 1097.


48 See Wegman, Cigarettes and Health: A Legal Analysis, 51 CORNELL L.Q. 578, 685-95 (1966). Compare the health hazards enumerated there as resulting from cigarette smoking with the hazards outlined in notes 49-58 and accompanying text infra.
percent of America’s air pollution. Each year automobile exhaust systems dump 180 billion pounds of pollutants into the atmosphere. These emissions contain a murderous arsenal of poisons:

(1) **Carbon monoxide** is a colorless, odorless gas, a by-product of incomplete combustion. It displaces oxygen in the blood stream and aggravates pre-existing anemia, heart and blood diseases, chronic lung disorders, and overactive thyroid conditions. Internal combustion vehicles in the United States emit sixty-three million tons of carbon monoxide into the air each year.

(2) **Sulfur oxides** are corrosive gases released when sulfur-containing fuel is not completely ignited. Stationary sources produce the great preponderance of such gases, but automobiles emit almost a million tons a year. Sulfur oxides harm the respiratory tract and delicate lung tissue.

(3) **Particulates** are minute solid and liquid substances released into and suspended in the atmosphere. Particulates of asbestos, a virtually indestructible material commonly found in brake linings and clutch facings, have in recent years been discovered in the ambient air in increasing quantities. Asbestos particles can lodge in the lungs and complicate pre-existing conditions, and may also cause asbestosis. Tetraethyl lead, a common gasoline additive which improves the combustion process, is another primary source of particulate pollution.

(4) **Hydrocarbons**, unlike carbon monoxide, are nontoxic by-products of incomplete combustion. They constitute a major component, however, of the photochemical “smog” which plagues large cities. More than half of the thirty-two million tons of hydrocarbons emitted annually into the air is produced by transportation vehicles.

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49 S. REP. No. 745, 91st Cong., 2d Sess. 3 (1970); see VANISHING AIR 28.
50 VANISHING AIR 28.
For each 1,000 gallons of gasoline consumed there is emitted:
3,200 lbs. carbon monoxide
200-400 lbs. organic vapors
20-75 lbs. oxides of nitrogen
18 lbs. aldehydes
17 lbs. sulphur compounds
2 lbs. organic acids
2 lbs. ammonia
.3 lbs. solids.
52 ENVIRONMENTAL QUALITY 63. The subsequent list of weights in the text draws upon this source as well.
(5) Nitrogen oxides combine with hydrocarbons to form ozone, nitrogen dioxide, peroxyacyl nitrates, aldehydes, and acrolein. These chemicals are further ingredients of smog, which causes eye and lung irritation, low visibility, and aesthetic decay in metropolitan areas. Transportation vehicles emit eight million tons of nitrogen oxides each year.

The chemicals enumerated above have been shown to contribute to the incidence of emphysema (the nation's fastest growing cause of death\textsuperscript{53}), bronchitis, asthma, allergies, genetic mutations,\textsuperscript{54} cancer, heart disease, and even common viruses.\textsuperscript{55} There have, in addition, been air pollution "disasters" in which weather inversions\textsuperscript{56} contributed to the deaths of extraordinary numbers of people.\textsuperscript{57} The dangers involved in cigarette smoking pale by comparison. Indeed, one commentary notes that a New York City pedestrian inhales the equivalent in toxic materials of almost two packs of cigarettes each day.\textsuperscript{58}

These facts emphasize that the automobile, as distinguished from other products whose dangers have been less well substantiated, is a proven and substantial health hazard—indeed, one of the country's greatest health problems.\textsuperscript{59}

C. The Inevitability of Injury

Banzhaf stressed that it was the "normal use" of cigarettes, not their abuse, which produced the hazard to health.\textsuperscript{60} When injury results solely from the purchaser's abuse of the product, of course, there may

\begin{footnotes}
\item[53] \textit{VANISHING AIR} 16-17.
\item[54] \textit{Id.} at 10-12.
\item[55] \textit{Id.} at 10.
\item[56] That is, polluted air that does not rise and dissipate.
\item[57] In 1948 such an inversion occurred in the mining community of Donora, Pennsylvania. Almost half of the town's 16,000 inhabitants fell ill, and 17 died, a number far above ordinary. In 1952 a "killer smog" in London lasted several days and resulted in 4,000 deaths. See H.R. REP. No. 728, 90th Cong., 1st Sess. 4 (1967).
\item[58] R. RiENOW & L. RiENOW, supra note 50, at 111.
\item[59] Injuries to individual health are not the only "costs" of air pollution and automobile use. Americans spend $800 million each year cleaning fabrics soiled by air pollution. Damage to crops and livestock totals $500 million. \textit{ENVIRONMENTAL QUALITY} 72. There are also social and psychological costs. Los Angeles school children are forbidden to play outside on "smog alert" days. Visitors to the United States are frequently impressed by our soot. These things too are real "costs" of air pollution even though they cannot be measured in dollars. Indeed, to do so might debase "the very values one is trying to preserve." \textit{VANISHING AIR} 20.
\end{footnotes}
be less reason to restrict that product or to regulate its advertising. Automobile accidents resulting in harm\(^6\) and the damage from some advertised products, including aesthetic injury from discarded product containers, might similarly be considered to be caused by purchaser abuse. It is clear, however, that automotive air pollution is an inevitable by-product of normal driving and the normal combustion process.\(^6\)

Harm to the atmosphere is consequently inevitable whenever a person drives. And harm to the individual is likewise unavoidable since an individual has no choice in the matter of breathing.\(^6\)

### III

**The Electronic Media and Environmental Awareness**

The *Banzhaf* guidelines provide a framework for manageable extensions of fairness to product advertising. Since automobiles clearly exceed the guidelines, a parade of horribles would not inevitably result if clean air groups were granted automobile advertising reply time. But it is not enough merely to show that extending fairness to automobile advertising is manageable and legally supportable: the extension must also be soundly rooted in public policy.\(^6\)

Unquestionably, air pollution is a national health problem of major magnitude and automobiles are the primary source of pollutants. Equally obvious is radio and television advertising's promotion of the purchase and use of automobiles, and implication that motorists enjoy a healthy, full, rich life style.\(^6\) No mention is made that automobiles


\(^6\) See note 79 infra.


\(^6\) See notes 6-9 and accompanying text supra.

\(^6\) All automobile and oil company advertising implicitly promotes the sale and use of automobiles, and this fact in itself is sufficient to require reply time. Cf. Democratic Nat'l Comm., 25 F.C.C.2d 216, 225-26 (1970). Some advertisements, however, take express note of the environmental problem and by doing so present directly, rather than implicitly, one side of the issue. For example, General Motors has produced an advertisement, promoting no particular automobile model, in which a spokesman explains GM's catalytic exhaust mechanism. The closing line is, "GM made you a promise to get the car out of the pollution problem, and General Motors is doing it." Compare the complaints of industry spokesmen that automobile manufacturers cannot possibly meet 1975 federal
are contributing to the destruction of the very atmosphere necessary to life. The implications of this destruction at least require public exposure. Among them is the sobering thought that the internal combustion engine and America's national health may be in irreconcilable conflict.66

One of the greatest problems faced by environmentalists is educating Americans to embrace new attitudes, to change their life styles to conform to the “new comprehension” of things.67 Environmental education has been proclaimed as a national goal by both the Council on Environmental Quality68 and the Congress.69 More and more it is being realized that Americans “as a society, can no longer

pollution standards. E.g., TIME, May 17, 1971, at 46. A Texaco advertisement implies that walking is the only environmentally “clean” alternative to driving and that the rational response to pollution problems is to improve gasoline. But walking is not the only form of nonpolluting transportation and there is evidence that there is no such thing as a nonpolluting gasoline. See note 79 and accompanying text infra. Such advertising gives the impression that industry is solving a problem which in fact may be insoluble without a transportation revolution. Note 79 infra. See Turner, Ecopornography or How To Spot an Ecological Phony, in THE ENVIRONMENTAL HANDBOOK, supra note 63, at 263.

Commissioner Mary Gardiner Jones of the Federal Trade Commission has urged advertisers to adopt “socially oriented” sales messages, to associate product use with a better country rather than with personal success or status. Jones, The Cultural and Social Impact of Advertising on American Society, 1970 LAW AND SOCIAL ORDER 379, 394-95. Contemporary television commercials largely depict life at its most superficial level, with protagonists seemingly concerned only with the unceasing pursuit of luxuries. Jones's suggestion to channel advertising towards social rather than personal goals is therefore well motivated. But the suggestion carries a serious potential for deceit.

A good illustration is Chevron's “bag” advertisement, featuring former astronaut Scott Carpenter. A huge plastic bag is shown attached to the exhaust pipe of a car which is idling on “brand X” gasoline. The air in the bag is black; Carpenter terms it “dirty exhaust.” After six tankfuls of Chevron's product are used, the bag is transparent. Carpenter pronounces the exhaust “clean.” Such advertising, although “socially oriented,” seems clearly misleading. The “clean” exhaust still contains invisible hydrocarbons, carbon monoxide, nitrogen oxides, and lead particulates.


The FCC has stated that fairness will apply to product advertisements that deal directly with controversial issues of public importance, such as ecological balance. Notice of Inquiry, 30 F.C.C.2d 26, 81 n.5 (1971). It has already applied the doctrine to one environmental advertisement, that of Standard Oil of New Jersey concerning the company's Alaska oil drilling operations. National Broadcasting Co., 40 U.S.L.W. 2047 (F.C.C. June 30, 1971).

66 See note 79 and accompanying text infra.


68 ENVIRONMENTAL QUALITY 221-22.

afford the luxury of not knowing the environmental consequences of . . . decisions.”70 Granting time to environmentalists to reply to automobile advertising is merely recognizing the American people's right to be fully informed and to make environmentally conscious choices. Considering the magnitude of the problem of environmental decay, environmental awareness should be developed and nurtured in all possible ways.

The critical role the electronic media—especially television—could play in promoting environmental awareness cannot be understated. Television is a primary influence on beliefs and attitudes in America.71 It is “the prime [instrument] for the management of consumer demand,”72 one which “provides . . . a relentless propaganda on behalf of goods in general. From early morning until late at night, people are informed” that various goods are “the source of health, happiness, social achievement, or improved community standing.”73 The impact of television, in fact, cannot be equaled by any other communications medium.74

It is a force of this magnitude that Detroit marshals every time it buys network time to promote its products. Fairness, even in its everyday meaning, requires that television allow the other side substantial opportunity to rebut the implicit and powerful advertising message that automobiles are consonant with the national health. The public interest could only be served by a clear FCC ruling to this effect. “Americans are being grossly oversold an automotive product and life-style they neither need nor may really want, and which may eventually kill them with its exhaust by-products.”75 Television's awesome

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72 J. Galbraith, The New Industrial State 208 (1967). The author also notes that “[t]he industrial system is profoundly dependent on commercial television and could not exist in its present form without it.” Id.
73 Id. at 209.
74 “Television is one of the most powerful forces man has ever unleashed upon himself. The quality of human life may depend enormously on our efforts to comprehend and control that force.” N. Johnson, supra note 71, at 3.
power to persuade and educate should be available to curb pollution, not simply reserved for industrial advertisers whose products cause the pollution.\textsuperscript{76}

\section*{Conclusion}

President Nixon in a recent executive order directed federal agencies to "initiate measures needed to direct their policies, plans and programs so as to meet national environmental goals."\textsuperscript{77} Elimination of air pollution and promotion of environmental awareness and education are indisputably national environmental goals of high priority. Application of fairness to automobile advertising can only advance these goals; any threat to commercial broadcasting posed by such an application could be neutralized if the FCC embraced as guidelines the standards implicit in \textit{Banzhaf}.\textsuperscript{78}

Definition of the controversial issue is of critical importance. Friends of the Earth asked whether low lead gasoline and small engine cars might be preferred until nonpolluting transportation is developed.\textsuperscript{79} But broader issues than this are involved. Can America's interest in the public health and its economic investment in the internal combustion engine ever be reconciled? There is increasing evidence that reconciliation is impossible, that Detroit's tack-on devices will not solve the problem, and that alternate modes of transportation less damaging to the environment must be developed.\textsuperscript{79} More broadly, it

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\textsuperscript{76} Television's response to the ecology crisis has in many ways been encouraging. It has broadcast some remarkably sensitive and informative documentaries and news reports. \textit{See The Environment, the Consumer, and the Broadcaster}, in \textit{Survey of Broadcast Journalism 1969-70, Year of Challenge Year of Crisis} 81 (M. Barrett ed. 1970). Television owes a greater duty, however. The effect of a myriad of artfully aimed automobile "spots" can scarcely be countered by an occasional documentary. "[S]ince not all of a station's audience is normally listening to broadcasts at any one time, repetition increases the likelihood that a given message will be heard by any individual, and may also increase its impact on those hearing the message more times than one." Retail Store Employees Union, Local 880 v. FCC, 435 F.2d 248, 257 n.61 (D.C. Cir. 1970).

The FCC's cigarette ruling, approved by the \textit{Banzhaf} case, imposed spot reply burdens despite a showing that the defendant television station had broadcast several news and information programs on the health dangers of smoking. Banzhaf v. FCC, 405 F.2d 1082, 1086 (1968), cert. denied, 396 U.S. 842 (1969). In \textit{Banzhaf}, Judge Bazelon noted that "[a] man who hears a hundred 'yeses' for each 'no,' when the actual odds lie heavily the other way, cannot be realistically deemed adequately informed." \textit{Id.} at 1099.

\textsuperscript{77} \textit{Exec. Order No. 11514,} 3 C.F.R. 531 (1971 Comp.).

\textsuperscript{78} Friends of the Earth, 24 F.C.C.2d 743, 744 (1970). This formulation of the issue was adopted by the court of appeals. Friends of the Earth v. FCC, No. 24,556 (D.C. Cir., Aug. 16, 1971). \textit{See note 29 supra.}

\textsuperscript{79} Internal combustion is an inherently wasteful way of generating energy. Harmful by-products seem to be inevitable. For example, an automobile has to be almost perfectly
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must be asked whether America, in the name of national health and ecological survival, can overcome in a crucial area the psychological inertia of its citizens, the opposition of vested industrial interests, and a heritage of mindless consumption and commercialism. The Commission should not—and could not with right—define the issue this broadly. But the effort to inform Americans of the injurious environmental effects of automobile use is only part of a larger struggle towards a new ethic of ecological harmony. This struggle is one of the most important Americans will ever make. The Federal Communications Commission, through unwarranted fear of unmanageable consequences, or merely from timidity, should not refuse to pick up the guidon.

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tuned for an emission control device to function properly. For this reason most devices are ineffective. In addition, some by-products, notably nitrogen oxides, cannot be prevented by any known emission controls. The inevitability of emission pollutants resulting from the internal combustion process has led many responsible persons to conclude that it should be abolished as a method of propulsion. See Lessing, The Revolt Against the Internal-Combustion Engine, FORTUNE, July 1967, at 81-84. Two states, Hawaii and California, have considered legislation to ban the internal combustion engine entirely. See VANISHING AIR 30; Comment, supra note 47, at 195. The President, Congress, the Department of Transportation, and the Council on Environmental Quality have at least contemplated the possibility. See 42 U.S.C. §§ 1857b-1(a)(2), -6e (1970); ENVIRONMENTAL QUALITY 89; SENATE COMMERCE COMM., THE SEARCH FOR A LOW EMISSION VEHICLE (1962); S. REP. NO. 745, 91st Cong., 2d Sess. (1970); H.R. REP. NO. 1146, 91st Cong., 2d Sess. 51-53 (1970) (additional views of Representative L. Van Deerlin, Representative R. Ottinger, and R. O. Tiernan); Presidential Message on the Environment, 6 WEEKLY COMP. PRES. DOCS. 160 (Feb. 10, 1970); 1 BNA ENVIRONMENT REP.—CURRENT DEVELOPMENTS 491 (Sept. 4, 1970). Remark upon the 1970 Clean Air Amendments, Senator Edmund Muskie commented that "Detroit has told the Nation that Americans cannot live without the automobile. This legislation would tell Detroit that if that is the case, they must make an automobile with which Americans can live." 116 CONG. REC. S 16092 (daily ed. Sept. 21, 1970) (remarks of Senator Muskie).

There are several proposed alternatives to propulsion by internal combustion including gas turbines, Rankine cycle engines (steam), and electricity. All emit few pollutants, but feasibility and efficiency problems remain. The German-developed Wankel engine, which features a revolving triangular rotor in a combustion chamber instead of a piston, has been touted as a low pollution powerplant although employing internal combustion. See N.Y. Times, Oct. 3, 1971, § 6 (Magazine), at 18. The Japanese automobile industry is now selling Wankel-powered automobiles in the United States. TIME, April 5, 1971, at 84.

Automobile manufacturers have not been aggressive in developing a nonpolluting automobile. See United States v. Automobile Mfrs. Ass'n, 307 F. Supp. 617 (C.D. Cal. 1969), aff'd per curiam sub nom. City of New York v. United States, 397 U.S. 248 (1970). Because of their major investment in the internal combustion engine they have consistently refused to admit the feasibility of alternative propulsion systems. VANISHING AIR 26-68. As the problem of motor vehicle emissions continues to grow, however, such alternative propulsion systems look increasingly necessary, and their implementation increasingly possible. See I BNA ENVIRONMENT REP.—CURRENT DEVELOPMENTS 633, 661 (Oct. 16, 23, 1970).