A NEW PROCESS FOR ENERGY FACILITY SITING

by

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B.S., Massachusetts Institute of Technology
December, 1979

SUBMITTED IN PARTIAL FULFILLMENT
OF THE REQUIREMENTS FOR THE
DEGREE OF

MASTER OF CITY PLANNING

at the

MASSACHUSETTS INSTITUTE OF TECHNOLOGY

MAY, 1979
(i.e. February, 1980)

Signature of Author.....
Department of Urban Studies and Planning, May, 1979

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May, 1979 in partial fulfillment of the requirements
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ABSTRACT

My thesis is that the process of siting energy facilities can be improved by legislative action. The legislation proposed is aimed at changing both the method and the spirit of determining the location of new energy plants.

The procedures most prevalent today almost always lead to court action and protracted appeals which result in long delays and escalating costs. To avoid this syndrome, the legislation emphasizes local options, coordination of governmental regulation, community involvement to achieve consensus, and direct compensation to residents as well as localities adversely affected by a proposed energy facility.

The Act creates the Energy Facility Siting Agency (EFSA) and gives it primary regulatory power over location, design and operation of non-nuclear energy facilities. Procedures are outlined for the submission of requests by energy companies interested in building a specific facility and localities wishing to locate the facility within their jurisdiction. A framework is created for the provision of compensation through negotiations.

The legislation is both a mechanism for promoting rationality and efficiency in the siting of energy facilities and a vehicle for the stimulation of public confidence in the fairness and justice of the process.

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ACKNOWLEDGEMENTS

Without the support and encouragement of many people, this thesis would have long remained an idea alone. Thanks must go to my advisors, Larry Susskind, Larry Bacow and Michael O'Hare, who offered valuable comments and criticisms provoking the controversy needed to spark the ideas.

Thanks also go to Sandy Congleton, whose speedy and accurate typing transferred my scrawl into a readable whole.

My parents and Louise receive my special thanks; without their support this thesis would never have been written. Saul Cohen's comments, editing, and when most needed, encouragement, were invaluable. And most of all, Oded, my special thanks for all the patience, time and, especially, good company.

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CHAPTER ONE

Introduction

Oil refineries, liquid natural gas complexes, nuclear power plants and other large-scale energy facilities are often proposed and then not built. Some particular facilities should never be built; the costs they impose on society exceed their net benefits, and to the extent that the siting process prevents the construction of facilities that are economically or socially costly it is doing a good job. But frequently, projects that appear to provide substantial net benefits to society are defeated.

Many requirements must be considered in searching for a power plant location.[1] Finding sites that are technologically feasible, cost effective as well as acceptable to utilities, regulatory agencies, "locals" and the public-at-large, has become time-consuming and exacting. The difficulty seems likely to grow as companies look for larger sites to accommodate additional plants and, hopefully, lessen the number of licensing confrontations.

The present siting process has a tendency to favor minority opposition groups, both local and geographically diffuse; moreover, the potential of the no-build option (a safeguard against truly objectionable and potentially destructive projects) is often slighted. We would like to limit opposition so as to affect those projects most deserving of obstruction. Such opposition can be useful to the extent that it helps us discriminate between good and bad projects.

The basic premise of this thesis is that power plant decisions meet with opposition because of fundamental flaws in the way society has organized itself to make such decisions; resistance can largely be attributed to

an erosion of confidence in the process by which decisions are reached. While agreement on goals is probably unachievable -- since value conflict is inevitable -- it is realistic to strive for a common feeling that the decision process is a fair and balanced one, and that all parties should therefore abide by its results.

Ours is a litigous social environment. As individuals have become both more knowledgeable about how the law works and their rights with reference to the law, as well as less submissive and more alienated, they have turned to litigation as either a way of expressing general dissatisfaction with society or achieving a personal benefit. Under these circumstances, government should take cognizance of the legal and administrative processes by which it seeks to achieve specific goals. Unfortunately, in the case of siting energy facilities, the government has not done so. It continues to employ the same mechanisms even though society's willingness to live within or adapt to such mechanisms has changed.

The adaptive mechanism developed in this thesis is a draft proposal for a general state siting law, the focus of which is a negotiation/compensation scheme which recognizes economic and political realities. Compensating individuals and communities in advance, minimizing adverse individual and community impacts, and formalizing the negotiation processes will enhance the possibilities for implementing net beneficial projects. The ultimate goal is to have concerned citizens and industry feel comfortable with the way this process is conducted and, hopefully, be willing to abide by its results.

In order to do this, we must review the current energy facility siting process and explore its weaknesses, investigate the reasons to compensate and negotiate; the validity of the initial assumption that such a

scheme is (i) in the best interests of the community; and (ii) in the best interests of the developer; and the feasibility of legally binding agreements.

The Current Energy Facility Siting Process

The power facility site identification, review and selection process is currently carried out by the utility companies which then must obtain state and local approval. Figure 1.1 describes key events in the site selection process.

The site(s) that are selected as proposed sites(s) by the utility are then subject to an involved and time-consuming evaluation process by

governmental licensing and regulatory authorities. Even though the requirements of the site evaluation process are known to the utility in advance, these requirements are not necessarily dominant in the utility's selection of preferred site alternatives. Government must weigh environmental and social, as well as economic and technical, factors in the final selection. While for non-nuclear facilities several agencies with different objectives are involved in regulation and licensing, legal requirements established by the Nuclear Regulatory Commission (NRC) are paramount in the selection of sites for nuclear facilities.

Public attitudes on key issues associated with power facility siting have strongly influenced the evolution of the site evaluation and approval process. In the broadest terms, site evaluation has developed along the following lines:[2]

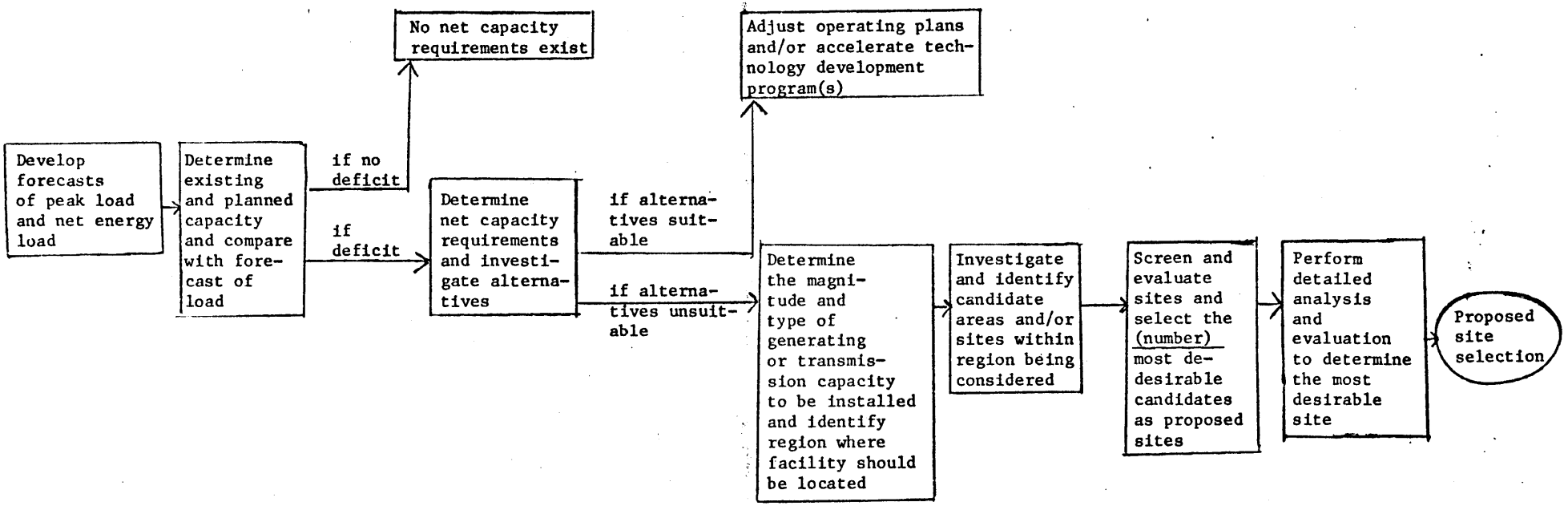
- The earliest regulations were concerned with insuring that land acquisition rules and ordinances were complied with, and that electric rates provided an equitable rate of return on investment in the new facilities.

- During the late 1950s and early 1960s regulation at the federal level was focused on the safety of power plant operation, particularly for nuclear power plants. Recently, these early safety criteria have been challenged and additional emphasis has been focused on the safety and security problems associated with the transportation, reprocessing and storage of nuclear fuel and radioactive waste products.

- During the late 1960s emphasis was also placed on insuring that power facilities were in compliance with environmental law and did not significantly degrade the quality of the local environment.

- During the early 1970s new regulatory emphasis was focused on establishing the need for each facility addition and on establishing that the specific site and type of facility selected were consistent with projections of need.

FIGURE 1.1. KEY EVENTS IN THE SITE-SELECTION PROCESS BY ENERGY DEVELOPERS



- Very recently, increasing emphasis has been placed on insuring that the type of facility selected is consistent with a region's primary energy requirements and availability profile and with future requirements.

This evolution of site approval legislation and requirements has led to the current situation in which a variety of public agencies hold jurisdiction over various aspects of facility siting. Table 1.2 indicates that in the case of Boston Edison's nuclear Pilgrim Unit #1, for example, 46 different permits or approvals were required from seventeen federal, state and local jurisdictions; many of these actions involved receiving the same permit from different agencies.

The Environmental Impact Review/Environmental Impact Statement (EIR/EIS) process does not come into play, for the most part, until after sites have been selected and land has been acquired by the applicant. The traditional approach to facility siting by the private utilities puts the public, and especially those adversely affected by a proposed facility, in the position of "spoilers". The public review process (EIR/EIS) begins at the point when the utility feels it has nearly completed its work.

Because the private process for site selection and the public process for project evaluation do not occur simultaneously, site selection encounters long delays and results are less predictable.

Previous analysis has demonstrated that there are certain generic problems with the current siting process. The Energy Impacts Project (EIP), under the direction of Professor Michael O'Hare, has developed a theoretical base for understanding ways to improve the siting process. These theo-

TABLE 1.2 [3]

PERMITS REQUIRED FOR CONSTRUCTION AND INITIAL OPERATION OF BOSTON EDISON'S PILGRIM STATION-UNIT #1*

I. TOWN OF PLYMOUTH

- Board of Appeals
  - A special permit to authorize use of the plant site
- Commission of Public Safety
  - Permits to build structures
  - Permits for alterations and repairs (to existing structures at site)
  - Electrical wiring permits
  - Plumbing permit
  - Elevator inspection certificates
- Board of Health
  - Disposal works construction permits
- Fire Department
  - Fuel oil storage permit
- Town - General
  - Construct and repair sewage disposal system
  - Permission to work overtime at site
  - Transmission line tree trimming
  - Permission to cross public ways with overhead wires

II. COMMONWEALTH OF MASSACHUSETTS

- Massachusetts Department of Public Works

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*Application for a construction permit for Pilgrim #1 was filed in June, 1967, and the plant became operational in July, 1972.

TABLE 1.2 (continued)

- Access road connection to Route 1A
- Placement of oceanographic instruments
- Waterfront construction and dredging
- Transmission crossings
- Tree trimming

. Massachusetts Department of Public Utilities

- Transmission-certificate of convenience and necessity
- Transmission-right of eminent domain
- Transmission-exemption from zoning

. Massachusetts Department of Public Health, State Examiners of Plumbers

- Sanitary permits for station and recreational areas

. Massachusetts Department of Public Health, Board of Environmental Health

- Permit to operate heating boiler
- Permit to operate temporary startup boiler
- Approval of station operating procedures
- Approval of all interconnections between city water line and plant water systems (i.e., fire protection, make-up demineralizer)

. Massachusetts Department of Public Safety, Division of Fire Prevention

- Fuel storage permits
- Use of explosives

. Massachusetts Department of Public Safety, Board of Boiler Rules

- Heating boiler operating permits

TABLE 1.2 (continued)

- Pressure vessel inspection certificates

. Massachusetts Water Resources Commission

- Salt water use permit
- Permit to conduct marine hydrology studies
- Water quality certificate

. Massachusetts Department of Natural Resources

- Breakwater construction and dredging permit
- Transmission line easement in state forest

. Massachusetts State Board of Labor and Industries

- Boston Edison has registered with the Massachusetts Board of Labor and Industries for storage of radioactive sources

III. U.S. GOVERNMENT

. United States Atomic Energy Commission (now NRC)

- Exemption to place concrete before receipt of an official construction permit
- Pilgrim Station construction permit*
- Nuclear fuel storage
- Nuclear source storage
- Licensing of station operators
- Pilgrim Station operating permit

. United States Army Corps of Engineers

- Placement of oceanographic instruments
- Waterfront construction, dredging and spoil disposal

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*The AEC (now NRC) Construction Permit process, including preparation of the Preliminary Safety Analysis Report (PSAR) is by far the most involved element of the site approval process.

TABLE 1.2 (continued)

- Water refuse (Environmental Protection Agency)

. Federal Aviation Administration

- Meteorology tower construction
- Main off-gas stack construction and lighting

ries have been explicated through case studies that have generated a number of hypotheses regarding compensation through negotiation.

Why Compensate?

The benefits and costs from a given energy development are often asymmetric. The benefits of an energy development are distributed regionally (e.g., less expensive or more readily available energy) or even nationally (e.g., increased energy independence), whereas the costs are largely borne by individuals who live near the development. On the grounds of equity and efficiency, this mismatch should be reduced; one way to achieve this is for the beneficiaries of energy development to compensate the losers for their incurred costs.[4]

If we site a facility without compensating losers, then we set a precedent. Since people are generally averse to risk, they avoid choices that threaten them with an uncompensated loss -- even if they are actually "fair bets".

Here, "efficiency" refers to society's use of its resources; a policy which causes people to change from more to less efficient investments reduces overall economic planning. Thus, today's siting precedent reduces the efficiency of future decisions and produces demoralization costs.*[5]

The initial point of facility impact is on governments, while other impacts are visited directly upon individuals. Increased demand for public

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*Demoralization costs are reductions in future net benefits which occur when a current decision limits future choice. See Frank I. Michelman, "Property, Utility and Fairness: Comments on the Ethical Foundation of 'Just Compensation' Law," in Harvard Law Review, Vol. 80 (1967), p. 1214 ff.

services is an example of the former; and increased housing costs is an example of the latter. Ultimately, however, all the impacts of energy development are borne by individuals: it is taxpayers, not governments, who shoulder the larger tax burdens necessary to finance increased levels of public services.

One proposition which developed out of case studies in western boomtowns is that individuals, rather than whole communities, ought to be compensated for a myriad of changes resulting from energy development.[6] These changes range from social impacts such as disruption of community social relations to economic impacts such as inflation, to impacts on the natural environment such as increased air and water pollution.

It has been further argued that only the original residents of a community experiencing energy development deserve compensation, since development has foreclosed one of their options: they can no longer live in the community as it existed prior to development.[7] Immigrants who move to the community to do construction work or to enter secondary sectors such as retailing are not deserving candidates for development-related compensation, for it is implicit in each newcomer's decision that this choice will leave him better off than would not having moved to the community.[8]

In addition to individual compensation, however, some costs, such as public service shortfalls, fall on the community as a whole and may be compensated through tax payments. While many impacts accompanying energy facilities are economic (fiscal) in nature and thus quantifiable, others are social or environmental, difficult to enumerate and even more difficult to fix with a monetary value. "In-kind" compensation offsets the impact of development by other than monetary means.[9] A developer/utility may pro-

vide a new park which, while not restoring the community to its previous state, may provide a trade-off that meets with favorable community reaction. Wildlife preserves to satisfy environmental concerns, providing a buffer, offsetting impacts of other facilities, or offering additional neighborhood or community facilities are all potential means of compensation.

Other ways in which companies can facilitate compensation include prepayment of local taxes, underwriting the cost of needed public facilities or services, guarantee of municipal bonds, making loans to local governments, providing technical or planning assistance, supervising the construction or operation of public facilities, and monitoring the fiscal, environmental and social impacts that accompany energy development despite mitigation programs.

To interest an energy company in conducting impact-mitigation and compensation programs, communities can adopt taxation and regulation policies that permit energy development, promise to publicize widely the local effects of energy development both beneficial and adverse, and demonstrate substantial intent and ability to act in cooperation with the company.[10]

Compensating for fiscal, environmental and social costs could cause developers:

(i) to choose a different site than they would have otherwise;

(ii) to prefer a different project design or technology; or

(iii) to reject a project totally.

By compensating individuals and community for negative impacts of energy facilities, we bring these costs into the cost/benefit calculations and thereby (i) present a truer picture of the project's impacts on society, and (ii) force the developer to respond fully.

Negotiation and Mediation

EIP case studies describe negotiation as a procedure that inevitably improves the overall siting process. Negotiation is the medium for inclusion of individual and community estimates of social costs which, in turn, enables developers to anticipate the degree of resistance to energy development and induces the developers to choose socially-preferable sites.

When disputes are caused by misunderstandings, communication between the conflicting groups can lead to improved comprehension of positions, and perhaps generate some agreement. The Seabrook nuclear plant controversy serves as an example of what can occur in a process which does not allow for negotiation among concerned and affected parties. As presently structured, the siting process allows for the consideration of alternatives through the National Environmental Policy Act (NEPA) (and also through the Nuclear Regulatory Commission (NRC) in the case of a nuclear plant). The major difficulty, as experienced at Seabrook, is that the consideration of alternative sites occurs too late to be meaningful -- the amount of investment made in the "original" site and the "momentum" behind it ensure that it alone will be considered.[11]

Litigation often causes environmental disputants to focus on technicalities of law and procedure. For example, opponents of nuclear power often dispute the effects of a plant's cooling system, although the basic opposition is to nuclear power. Major steps are then taken to improve the operation of the cooling system, even though it is only a minor concern of plant opponents. This is less satisfactory than dealing directly with the issue of whether or not the country should deploy the technology in ques-

tion, an issue which could be dealt with head-on through negotiation.

The law currently compels neither side to negotiate but ensures almost everyone's right to litigate. Neither side would rationally seek to negotiate until it felt that the benefits of negotiation would outweigh the costs. Industry has little incentive to negotiate if it believes it can build a plant despite objections, or if it believes that no concession will reduce opposition or ensure development. Opposition groups have little incentive to negotiate if they believe that they can win in a judicial forum. Likewise, if they adopt a long-run strategy which seeks to raise the cost of a new technology through litigation delays, then bargaining will hold no attraction for them.

The involvement of government regulatory groups as parties to the conflict usually adds another dimension to the negotiation. Negotiated settlements may require governmental approval, zoning variances, or other special considerations which neither project opponents nor proponents can deliver.

The incentives for private companies to negotiate with proposed host communities and individuals originate in the profit motive. The corporation's intention to maintain long-term viability and mitigate problems fosters the positive community relations that are essential to an energy company's plans to maintain long-term growth. Corporate profit depends on low employee turnover and high worker productivity which, in turn, requires that each facility's working environment be acceptable to employees. For both reasons, corporate mitigation of adverse impacts is of the highest concern to energy companies.[12]

The concept of mediation techniques derives from the model of

labor-management negotiation. Susskind, Richardson and Hildebrand posit that the labor-management analogy may be inappropriate or at least inefficient.[13] They point out that:

> Labor-management disputes are bi-lateral; environmental disputes [or those revolving around development] are usually multi-lateral.
>
> In labor-management negotiation, it is usually clear who represents labor and who represents management (and they are usually empowered to speak for the interests they represent). It is much less clear who should be a party to environmental mediation efforts.
>
> In a labor-management dispute, both sides have a strong incentive to bargain. Neither side really wants a strike. In many environmental disputes it is not clear that those who want to stop a project have a motive to sit down at the bargaining table [or that the developer has with whom to bargain].
>
> In a labor-management dispute it is not that difficult to identify the terms of the bargaining, although it may be hard to define the right level of salaries, fringe benefits, seniority rights, working conditions, etc. to change. In environmental disputes, it is unclear what the terms of bargaining ought to be. Issues are usually framed in an all-or-nothing way, the prospects for identifying fair trades or compensation in environmental disputes are, at present, slim.[14]

Encouragement of negotiation requires the initiation of new procedures and institutions. These new procedures must solve the thorny problems of recognizing particular groups as parties to a negotiation and must assure the representation of the different interests. It is essential to define who has a stake in the outcome of a conflict and who can speak for the groups involved; at the same time, there will also be a need to limit the number of participants in order to avoid cumbersome negotiations and runaway costs.

It is also necessary to find intervenors, facilitators, or neutral

parties with credibility in the eyes of the groups or interests participating; narrow the agenda of issues to be negotiated; create situations in which the bargains that are made can be held secure; and ensure that the incentives to bargain are substantial. Additionally, the creation of bargaining deadlines would encourage progress in negotiations. These new procedures must, therefore, produce incentives that facilitate bargaining and avoid the creation of still another step on the path to litigation.

Delay

The consequences of delaying an energy project are asymmetrical. Long court delays may have disastrous economic effects on an electric utility, which will inevitably affect the entire consuming public, but they impose much smaller costs -- even benefits -- on individual or small groups of litigants.

The legal and administrative framework of the energy facility siting process is itself a major source of distortion because of the important role time plays in the choice of location. For one thing, postponement can be just as costly as blind progress. Every month of delay in the scheduled operation of a nuclear power plant can run in the millions of dollars.[15] Moreover, any unexpected lengthening of the construction period can harm the developer's financial integrity and eventually prove fatal to the project. The longer the construction period, the more the firm must borrow and the greater its interest payments. Meeting increased interest payments may require additional capital funding. Since the construction costs of many energy facilities built by regulated utilities cannot be charged to the rate base until the facility begins operating, a regulated developer

may not be able to obtain the needed funds from operating revenues. Nor can even an unregulated developer profit from a partially-built refinary. This shortfall eventually forces the developer either to dip into liquid reserves or to reduce dividend payments, which in turn restricts access to financial markets and to funds needed to finish construction. The developer may decide that, although a facility may eventually earn an acceptable return, the short-term costs of further delay are too great to continue the project.

A less recognized effect of delay is that it almost always shifts the incidence of environmental impacts as well. Prolonged litigation over the development of a hydroelectric facility at Storm King Mountain in New York, for example, is reported to have had a profound effect on the mix of plants in the New York City area.[16] By forcing delays in the scheduled retirement of older oil-burning plants, the scenic qualities of the Hudson River seem partly to have been preserved at the expense of air quality in Manhattan.

Pro-facility groups, on the other hand, do not have comparable options to speed up the siting of a plant. The process is designed more to protect society from decisions to site bad projects than to expedite decisions to site good ones.

Delay is an indicator of ad hoc decision-making. Important policy issues are being made on a case-by-case basis. The longer-term consequences of a set of decisions is not being considered. Neither the objectives of securing adequate power supplies nor that of protecting environmental values is well served in the long-run by a process marred by alienation and drawn out by legal battles.

Legally Binding Agreements

The ability of communities or environmental groups to bind themselves to an agreement is severely limited. No group can represent all environmental concerns, nor unequivocally commit its entire membership to a course of action. For example, in a nuclear power plant dispute, environmental groups can sign a consent decree withdrawing their objection to the issuance of a construction permit. They cannot, however, limit the intervention of other environmental groups in the proceedings on either the same or different grounds, or prevent splinter groups or even individuals from their own organization from continuing opposition. Likewise, a local government cannot commit members of the community to refrain from opposing a development through litigation.[17]

Therefore, the developer currently has little incentive to provide compensation to a community or opposition group -- the developer is not bound by law to do so and, without some form of community opposition group commitment, will receive nothing in return for such payment.

Contracts, performance bonds, indemnification agreements, insurance against impacts and the ratification of agreements by court order are all potential mechanisms for compensating governments, individuals or groups which bear the negative side-effects of development. However, none of these techniques solves the problem of binding members of communities or diffuse interest groups to agreements reached through negotiation.

Susskind, Richardson and Hildebrand posit that, with legislation, one could bind individuals to an agreement by setting up a process whereby a court supervises the selection of representatives to act as agents of

recognized interests.[18] They build on the analogy of the procedure currently employed to appoint representatives to class action suits.*

This type of legislation would be most difficult to pass politically, let alone to implement. Beyond these constraints is the question of how desirable is "judicial supervision"? If we succeed in binding individuals to these agreements, are we muzzling opposition instead of merely removing some of their incentives to oppose?

Legislation recognizing the right of communities to compensation for damage caused by energy facilities could take on a variety of forms. That which seems most appealing in its simplicity and efficacy is suggested by David Kretzmer in his paper, "Creating Binding Compensation Agreements between Developers and Host Communities."[20] He opts for legislation granting a general right to compensation with details and amounts to be worked out by negotiation. As part of the state reviewing process for energy facilities, approval for construction would not be granted unless the developer had satisfied the reviewing board that it would compensate the host community for damages which would be caused by the facility. No provision would be provided by the statute, including the negotiation clause, as to what exact damage would be compensable at what rate. The reviewing board would presumably be satisfied with any compensation provisions which received joint community/developer approval. A system similar to this operates in the state of Washington -- apparently with some success.[21]

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*In class action suits:

"The court supervises the selection process to ensure that the agent selected is truly representative of the interests of the class and ensures that the class has truly homogenous interests. By statute, it is possible to bind all members of a class to an agreement entered into by the representative."[19]

Such mandatory compensation has a number of advantages: (1) the legislation grants potential host/affected communities the power of veto; (2) it is not overly complicated; (3) it assumes that the right to compensation will reduce opposition to facilities but is not used as an excuse to prohibit such opposition; and (4) by legalizing the right to compensation, such legislation would legitimize compensation in the eyes of both parties, eliminating any hint of bribery. The scheme is not without shortcomings, as (1) it does not guarantee against a community's delaying a project, and (2) it does not bind residents to accept the facility.

If the compensation agreements tie payments to various stages of progress in the construction of the facility, it should severely limit the occasions for communities to unleash opposition after the agreement had been made and the company too far committed to back out. In regard to the second point, the incentive of residents to oppose will be weakened if an attempt is made to divide some of the compensation received among affected residents.[22]

An insurance scheme covering (1) calamities and unforeseen events, and (2) diminution in individual property values with the burden of proof on the landowner would be further incentive for both parties to stick to their agreements. Various appraisal techniques already in existence could be used to measure the extent of "wipeouts" (diminutions in property value) resulting from the facility. Insurance against the chance that the impacts will be greater than what was predicted or anticipated guarantees the parties to the agreement that they will be "held harmless". Amounts of insurance would be set by state enabling legislation.

Current court decisions (i.e., Penn Central Transportation Company

versus City of New York)[23] concerned with claims of landowners regarding the impact of regulation on a parcel's capacity to earn a reasonable return, ensure that nondollar compensation in mitigating overregulation be economically grounded in a police power rather than an eminent domain basis. However, it still seems very unlikely that the courts can establish workable rules that would readily distinguish vaguely compensable from vaguely noncompensable situations. The standards that have been set are essentially standards for judicial review of legislative and administrative programs for compensation. To avoid litigation each time a transaction takes place, the standards must be translated into more concrete and quantified form by the legislatures that implement compensatory programs. These legislative efforts must consider the ethical implications as well as accounting aspects. Case-by-case adjudication should not be the primary method of refining society's compensation practices.

These generic siting issues can be reduced to a set of subissues that include:

- the multiplicity of regulatory agencies;
- the determination of energy needs;
- making of energy policy;
- the timeliness of public participation;
- technical assessment;
- consideration of alternatives.

Multiplicity of Agencies

Frequently, citizens have found an appreciation for the "big picture" lacking in governmental regulation of utility proposals, and have therefore turned a critical eye to the bureaucratic practices of the licensing agencies. Here, what is revealed more often than not is rigid adherence to narrow procedures, and to counteract this so-called "tunnel vision," groups often feel it necessary to initiate direct court action. Regulatory authority is fragmented across technologies and across categories of impact. Thus, no single agency has a perspective broad enough to consider all relevant trade-offs, and there is no inclination to second-guess the developer on choices made earlier in its planning. The fragmented review of energy facility proposals results in a situation where many agencies look at a single alternative in a narrow way, while a broad perspective encompassing many alternatives is conspicuously absent. Also, the scheduling of the review process is such that many options are foreclosed by the time agencies begin their evaluation, because strong forces have developed for approval of the proposed project.

In order to (i) balance competing interests, (ii) consider issues which have historically fallen through the cracks of separate agency reviews, and (iii) allow government to address complex issues in a coherent fashion, authority to regulate energy facilities should be centralized in a single state agency and care must be taken to equip it with appropriate administrative and financial resources. While creation of such an agency may be viewed as bureaucratic proliferation, it has two overriding advantages over existing agencies: there is no bias by virtue of history or

incumbent staff, and the ability of both energy development-oriented and environmental agencies to play a strong advocacy role in the review process can be preserved.

Needs Assessment

Forecasting methods often do little more than extrapolate from historic trends, are insensitive to "end use" needs, and consider a limited number of options.

In order to address questions concerning alternative ways of meeting anticipated loads, conservation, efficient use of existing equipment and safety of the energy facility itself, needs assessments must be based on inventories of current facilities, estimates of future capacities, and evaluations of technological capabilities. They must also include an extrapolation of demand in light of proposed growth rates and assumptions about changes in demand. The assessments should be made at the state level with interagency cooperation to ensure that the necessary information is at hand. The utilities should also participate in preparing the assessments, especially with respect to technical options and defining existing capacity.

Energy Policy

There is no state-wide energy policy. An energy policy must set priorities and describe strategies for meeting the needs assessment.

Public Participation

While in principle the licensing proceedings of energy facilities

are to allow full, free and honest discussion of all relevant issues with the public-at-large, in practice the regulatory process has not provided for effective communication among concerned parties.[24] For example, no vehicle for public participation is employed throughout the agency review process, and the formal public hearing is not held until after an agency has tentatively decided to approve the project. The only way a concerned citizen can directly influence the decision is to try to stop it by becoming an intervenor in an adjudicatory hearing.

Public participation infers that the whole process should work to create an involved and informed citizenry. Participation must be available to a broad and representative group of individuals and organizations, and interaction must be timely and designed so as not to exclude or discourage participation. The public must be confident that all views, needs, and suggestions are being fully accounted for and that an equitable solution to a difficult problem is actively being sought.

Technical Assessment

The technically-trained professional is no longer assumed to make decisions about large-scale projects in an abstract, supposedly "objective" way.

Technical assessment cannot be divorced from the political process and therefore must be formally linked to a negotiation scheme.

Quality of Decision-making

It is important to assemble a competent decision-making body that can command a high level of public respect, as an agency can be no better than the people who run it!

Consideration of Alternatives

The range of alternatives must be made broad enough to represent real choices and must include the option of doing nothing. Alternatives should not be limited to construction-related plans, and should specifically include measures to distribute benefits broadly and provide compensation where necessary to achieve equity.

Identification of Effects

Adequate information must be made available on the adverse and beneficial effects of each alternative, and on the incidence of those effects. Any effects which any particular interest thinks are important should be included, whether or not they can be readily quantified.

Clarification of Trade-offs

Trade-offs must be highlighted and the issues of choice fully clarified. Uncertainties which may exist should be explicitly identified, and careful consideration should be given to options left open or foreclosed by proposed alternatives.

Incorporation of Values

All affected interests should have full opportunity for timely and constructive involvement of all phases of activity, and should have full access to relevant data. Careful attention must be paid to the views, needs, and suggestions of different groups, and equitable solutions must actively be sought.

CHAPTER TWO

Introduction

This chapter will describe and detail how the reforms suggested in Chapter One might be accomplished through new state legislation. The legislation will create an Energy Facility Siting Agency (EFSA) which will develop energy policies and procedures for licensing sites.

The chapter will emphasize the need for building upon the results of federal research; will call for the development of facility siting guidelines that are tailored to differences among complex energy technologies; will require an assessment of future energy demands, as well as an overall energy policy to serve as an explicit framework for evaluating proposed projects; will seek to promote development of energy policy; and will involve communities in the implementation process. The legislation will also establish a mediation council that includes energy companies, local governments, EFSA and an independent mediator. The mediation council will be responsible for negotiating appropriate compensation for parties adversely affected by siting decisions. The concepts of negotiation and compensation are central to the purpose of the legislation.

It is important to recognize, however, that legislation is just the starting point for policy-making; administrative implementation has been known to depart from the tentative direction set by the legislature. The execution of policy depends heavily on the political orientation of responsible managers, on the way in which personality conflicts are resolved, and on informal understandings among the key actors (i.e., the legislature, the executive and various interest groups). Siting decisions have economic, environmental and social consequences. Anticipated disruptions or economic

losses trigger strong emotional reactions. Legislation cannot erase strong emotional and economic motivations. It can, however, set up a framework for addressing conflict so that compromise can be affected through negotiated trade-offs.

The framework for this legislation is built upon a set of working principles which are used as criteria for the general guidelines of the suggested legislation to follow. The working principles are derived from general organizational theories[25] and their incorporation into the legislation should enhance the siting process.

(a) Minimization of Lines of Command. The fewer layers of government which regulate and through which funds must pass, the fewer delays in the operation, and the clearer the delineation of responsibilities.

(b) Coordination. The more explicit the role of each level and the more direct the line of relationship, the greater the possibilities for developing effective coordination. Coordinating mechanisms must take into account existing functions and responsibilities at the state, local and federal levels.

(c) Legal Authority. In all policy matters, clarity of legal authority is very important. Those who are asked to implement must have the power to do so.

(d) Political Responsibility. A balance must be struck between the exercise of authority that responds to the desires of the local majority, at the same time allowing for minority opinion to be heard, and that which responds to more general state/national needs.

This legislation provides a framework in which the state/national governments set technological guidelines and standards, and the local

governments provide primary input and maintain veto power over siting and construction.

While the following draft proposal provides a model for state legislatures, variations will undoubtedly be necessary in order to ensure conformance with existing statutes and regulations in any particular state.

ENERGY FACILITY SITING ACT - Snynopsis of Objectives

1. To determine the energy needs of the state and to ensure that the facilities needed to provide adequqte energy supplies are built.
2. To encourage expeditious and efficient planning and siting of energy facilities.
3. To ensure that the socio-economic impacts of proposed facilities are evaluated in the assessment of any site.
4. To ensure, through the reduction of conflict, more efficient and equitable siting of energy facilities by compensating residents as well as localities adversely affected by a proposed energy facility.

ENERGY FACILITY SITING ACT

Draft Proposal 3/10/79

Section 1. Definitions

1. "Bid" refers to an offer, by the local jurisdiction, of what is acceptable compensation and mitigation. An accepted bid attests to a locality's intent to facilitate the development of the energy facility in return for compensation by the project nominator (the developer).

2. "Community" refers to the residents in an area surrounding a prospective energy facility site, provided that the community shall be represented by a legal organ, such as local government.

3. "Compensation" refers to the amount of indemnification paid by a developer to a local jurisdiction and its residents at the time of the bid, in exchange for the right to develop an energy facility. "Residents at the time of the bid" refers to those persons legally residing within the local jurisdiction at that time.

4. "Energy facility" refers to any of the following facilities: (a) electric generating plants with a capacity of 150 mega-watts or more; (b) petroleum refineries with a capacity of 25,000 barrels per day or more of crude oil; (c) synthetic gasification plants, oil shale extraction operations, and processing plants, coal liquification and gasification plants, liquified natural gas conversion facilities, and uranium enrichment facilities; (d) offshore petroleum loading of marine transfer facilities within state jurisdiction; (e) underground or strip coal mine operations; and (f) any other facilities or additions to facili-

ties defined and identified by the EPSA Board pursuant to this Act.

5. "Energy Facility Siting Board" is composed of five members appointed by the Governor.

6. "Local jurisdiction" refers to any general purpose unit of local government as defined by the Bureau of Census or which is deemed by the Governor and the courts to have authority to represent its constituents in contractual agreements.

7. "Mediation Council" is composed of project nominator, a professional staff member from EPSA, an independent mediator appointed by the Governor of the state, and for each site a site representative.

8. "Mitigation" refers to measures taken to nullify the adverse effects upon a community or its residents of an energy facility through such techniques as change in facility design or in physical or social structures within the community.

9. "Negotiation" refers to the bargaining process which takes place within the mediation council enabling site and project nominators to agree on compensation and mitigation measures.

10. "Project Nominator" refers to any corporation or person(s) who propose to develop and "energy facility."

11. "Site" refers to any proposed or approved location of an energy facility.

12. "Site Nominator" refers to any local jurisdiction which proposes to locate an energy facility within its jurisdiction.

13. "Social and economic costs" refer to the negated effects upon the community of construction and operation of the energy facility.

Section 2. Creation of a State Energy Facility Siting Agency (EFSA)

This section creates a state agency that will have primary regulatory power over the location, design and operation of nonnuclear energy facilities. The agency will have licensing jurisdiction over all energy facilities within the state and will establish a mediation council and finance its operations. The agency's budget will be part of the Governor's executive budget rather than part of another state agency's budget.

To ensure that the complex issues involved in the construction and operation of energy facilities are dealt with in a comprehensible fashion, that competing interests are balanced, and that the siting process itself is free of bias:

1. The Energy Facility Siting Agency (EFSA) is hereby created by this Legislative Act.
2. The Governor, with the advice and consent of the legislature, shall appoint five members to the EFSA Governing Board. These members shall have knowledge or experience relating narrowly to energy systems or more broadly to land use problems.
3. The EFSA Governing Board will appoint the EFSA Director. The Director will appoint the staff, including administrative and research personnel.
4. All Governing Board appointments and the appointment of the Director will be co-terminous with the term of the Governor.
5. The EFSA will be an independent agency of state government responsible directly to the Governor. Its budget will be part of the Governor's executive budget.

Section 3. Definition of EFSA Powers

This section outlines the powers accorded the EFSA in this legislation.

EFSA shall have the following powers:

(a) develop a state energy policy.

(b) conduct a state energy needs assessment.

(c) ensure adequate citizen participation.

(d) review project nominations for compliance with already existing state and federal regulations.

(e) request site nomination proposals.

(f) conduct technical assessment of all nominated sites.

(g) assure that each niminated site has an Environmental Impact Report (EIR).

(h) establish a mediation council for negotiating levels of compensation.

(i) exercise licensing power over the siting and construction of all non-nuclear energy facilities. With reference to nuclear facilities where the Nuclear Regulatory Commission (NRC) is the regulatory agency, the EFSA will carry out those regulations for which it is legally responsible, being especially careful not to abrogate any of its rights to the NRC, especially if EFSA standards are more stringent than those of the NRC.

In evaluating proposed energy facilities and specific sites, the EFSA must consider energy supply as well as safety and environmental objectives as indicated by environmental interest

groups. Other state agencies must be formally consulted, but they may not exercise veto power over site and construction licensing.

Section 4. Energy Policy

This section deals with the development of state energy policy. The EFSA is responsible for formulating the policy and keeping it up-to-date in light of national and state energy forecasts, the development of alternative energy technologies, and energy consumption patterns.

To develop a statement of energy priorities for the state of _____:

1. The EFSA must develop policies in accordance with national energy legislative and agency programs.

2. The state-wide energy policy must include:

   (a) a ranking by priority of different energy technologies according to available natural resources, the state environmental base, and commitment to existing facilities' infrastructure.

   (b) programs to pursue new energy sources, including a recommendation on the degree to which the state should support research and development for each technology beyond that undertaken by the federal government.

   (c) conservation programs tailored to the state's economic, sociological, environmental, and climatic constraints.

   (d) plans to manage crises, or to accommodate the dislocations or inequities resulting from inaccurate needs assessments or failure to provide energy sources.

   (e) the EFSA must update this policy with each renewal of the tenure of its Governing Board (or every fifth year, if gubernatorial terms are only two, rather than four, years).

Section 5. Needs Assessment

This section mandates a state needs assessment to be conducted by the EFSA every fifth year. The assessment is based on trends in energy consumption, price elasticity, conservation practices, changes in rate structures used by energy distributors, energy technologies and site-specific resources.

To address questions concerning alternative ways of meeting anticipated loads, conservation, efficient use of existing equipment and safety of the energy facility itself, as well as all other aspects of the fuel cycle in (state):

1. The EFSA screens entire state and prepares preliminary report containing an assessment of energy needs according to time-horizons used in national energy policy-making. Sources of data include utility companies and state and federal agencies. EFSA shall have subpoena power to secure utility company studies.
2. The assessment of demand must reflect changes/trends in energy consumption brought about by higher prices of energy, price elasticity, conservation practices stimulated by consumer education, and overall national energy policy.
3. The assessment must include an inventory of the physical plant and markets for existing energy facilities within the state and in bordering areas that serve as suppliers or markets.
4. The assessment must reflect the impact of changes in current rate structure used by utilities and other energy distributors.
5. The assessment must include as an alternative, the possibility of meeting anticipated power loads through purchase of power from sour-

ces currently being used, both major power grid systems, and local, potential self-contained systems.

6. Needs assessment should take into account trends that may limit the need for additional capacity, such as governmental, industrial or private conservation measures that reduce the rate of growth in demand.

7. The assessment must include consideration of experimentally-tested new technologies which could influence demand and provide alternative supplies of energy.

8. The assessment must include, for each technology, a review of existing points-of-view on the safety of all aspects of the fuel cycle, including, in the case of nuclear power, the hazards connected with transporting, processing and storing large amounts of radioactive wastes.

9. The assessment must identify the reliability of the needs according to time-frames appropriate to each of the technologies.

10. In order to ensure the inclusion of all pertinent information, a preliminary report is to be circulated for review and comment among agencies concerned with the following areas:

    (a) Public Utilities;

    (b) Science and Technology;

    (c) Economic Planning and Development;

    (d) Environment (Land, Air and Water Management).

11. The preliminary report must be circulated among utility companies throughout the state for review and comment and made available to the general public upon request.

12. The preliminary report is to be published one month in advance of

public hearings.

13. Upon completion of steps one through twelve, the EFSA must prepare a final report which incorporates initial assessment and inter-agency, utility and public input. An initial statement of environmental advantages and disadvantages of each technology is included.

14. The assessment should be updated every fifth year in concert with the energy policy of the state.

Section 6. Citizen Participation Requirements

This section deals with the establishment of mechanisms for citizen participation in the site-licensing process, and the creation of the post of ombudsman. Citizen participation is desirable, not only on the grounds of political expediency, but because people are less likely to oppose a decision which they have helped to make.

To ensure citizen participation in the energy facility siting process:

1. The minimum guidelines for public participation in the development and revision of all regulations are:

   (a) the EFSA must hold public hearings on proposed criteria and standards to guide the site selection and evaluation process. The Governing Board has the responsibility for developing and enforcing these standards and criteria.

   (b) the EFSA must hold public hearings when revising any regulations.

   (c) all EFSA meetings must be open to the public, and all records, files and correspondence must be available for public inspection. The Governing Board can reserve the right to hold Executive Sessions in reviewing the reports of the mediation council. Mediation councils also reserve the right to hold Executive Sessions.

   (d) announcements of public hearings will be publicized in such media as television and radio broadcasts and newspapers two weeks prior to the specific event. The EFSA shall allocate _____percent of its budget for public participation purposes.

(e) a post within the EFSA will be established for an ombudsman, whose duty it will be to ensure that concerned citizens are involved in the proceedings by being given opportunities to present oral and written testimony.

Section 7. Project Nomination

In this section a project nomination process is developed. An energy company wishing to build a specific facility must submit a "nomination" to the EFSA describing the particular technology, how such a facility would fit in with the state's energy policy and needs assessment, and the site characteristics necessary for the development of such a facility. The company is not nominating a specific site; rather, it is describing the desirable characteristics of possible sites.

To inform the state of a desire to construct an energy facility:

1. Public utilities, publicly-financed energy development corporations and private industries seeking a license for a particular project must inform the EFSA, via a written nomination, of the type of technology and the methods of financing which will be employed by the applicant in constructing a facility.
2. The nomination must include:
   (a) a description of the technology, its size, production goals and expected capital costs at existing bonded interest rates, services required (water, roads, sewer), needed work force (numbers and skills), and projected construction schedule.
   (b) the physical characteristics of a particular desirable site(s).
   (c) a description of all necessary connections between the proposed project and existing power distribution networks.
   (d) an assessment of the role the project will play in meeting the state's energy production needs.
3. The EFSA will review nominations to see that they are consistent with

state energy policy and needs assessment.

4. The EFSA will certify through its own review process the capacity of the project nominator to implement the proposed project after evaluating its fiscal and technological soundness.

5. The EFSA will extract a performance bond based on _____percentage of the project's projected capital cost to guarantee "good faith" negotiation with local communities during subsequent phases of the energy facility siting process.

Section 8. Request for Site Proposal (RFSP)

After a developer has submitted a project nomination, the EFSA must develop and distribute a Request for Site Proposal to all local governments within the service region (applicable only to the area within the state and not extra-state service area) proposed by the developer. The RFSP must describe the general facility design and desirable physical site requirements, must include a site nomination form and compliance checklist (meeting state and federal requirements) to be completed by the local community.

To ensure that all potential sites are considered for evaluation by EFSA, sites are nominated by communities in the following fashion:

1. EFSA will develop and distribute an information package based on information obtained through the project nomination process to all local governments within the proposed service district (region).
2. EFSA must include in the information package data from all other state and federal regulatory agencies that relate to facility construction and operation.
3. The information package must contain:
   (a) a rough, preliminary architectural facility design (to be provided by the project nominator);
   (b) minimum physical site requirements (to be provided by the project nominator);
   (c) a site nomination form, to be developed by EFSA and completed by a local community, which describes the physical and legal constraints binding the land parcel which the community wishes to nominate. The form must include a section detailing the

process of site solicitations within the local community;

(d) a compliance checklist which identifies all state and federal requirements that preclude development. Every state and federal regulatory agency must approve the compliance checklist before it becomes part of the information package.

4. The site nominator must be the local government(s) in which the land parcel is located. The local government must publicize, within two weeks of receipt of the RFSP, its search for sites within the jurisdiction. Individually-owned, as well as corporate and public tracts, must be considered by the locality.

5. EFSA shall evaluate RFSPs in the light of the site nominator's fulfillment of site requirements and its ability to meet the conformance checklist.

Section 9. Site Nomination

Once the local jurisdictions receive the RFSP, they may nominate a site(s) within the jurisdiction which they believe complies with the site requirements listed in the RFSP and resubmit the site nomination form and compliance checklist (both part of the RFSP package) to the EFSA. In addition, the site nominator (local jurisdiction) must submit to the EFSA a description of the ownership(s) of the site, local zoning ordinances, existing infrastructure, potential mitigating measures that might minimize environmental dangers and adverse impacts.

To allow for the selection and evaluation of specific locations on which approved projects can be sited:

1. Sites may be nominated by the chief officer of the local jurisdictions (municipality or, in case of unincorporated land, the county) or, in the case of any site for which there is no local jurisdiction, by the chief officer of the state or federal agency with jurisdiction over that parcel.
2. Financing of the site nomination process will be provided by site nominator.
3. Upon request, EFSA will provide technical assistance to local jurisdictions to help them prepare their nomination packages.
4. In partial compliance with Section 6, to assess citizen reaction to the proposed site, at least two public hearings will be conducted in the local community making the nomination.
5. The EFSA will develop a questionnaire which the local government shall circulate to assess citizen reaction to the proposed facility.

The questionnaire will elicit attitudes towards use of the proposed site, as well as perceived social and economic impacts. This questionnaire will have only a non-binding informational role; it will not serve the function of a referendum.

(a) all registered voters and property owners within _____miles of the proposed site, regardless of whether they are located within the jurisdiction, will receive a questionnaire.

6. The local government must complete the site nomination form.

(a) if the site straddles more than one locality, then all localities involved must join as site nominators.

(b) if the site is located in one municipality, but its environmental impact area overlaps other jurisdictions as determined by EFSA in the review of the RSFP form, then the nomination will be rejected, unless other jurisdiction(s) are co-nominators.

(c) in nominating a site not actually owned by site nominator, written agreement of the owner(s) is a necessary part of the application unless intention to take land by eminent domain is clearly stated.

7. The local government must indicate whether the site is in conformance with state and federal regulations included in the RFSP compliance checklist. If the site does not comply with all state and federal laws and regulations, the site nominator must justify its request for specific exceptions.

8. The local government must also submit to EFSA transcripts of all public hearings conducted within the community, an analysis of the results of the questionnaires, copies of media announcements, and a

sampling of "pro" and "con" letters to the editor if such exist.

9. The local government shall submit an application fee of_____ to EFSA with the site nomination.

10. The site nominator's response to EFSA's RFSP must also include:

(a) description of ownership of the site(s) as well as an assessment of problems involved in assembling the various parcels;

(b) maps describing present uses of the site as well as population distribution within a proximal area to the site dependent on the technology and specified in the RFSP;

(c) applicable local zoning and local ordinances;

(d) availability of suitable pipeline/power grid connections between the site and the existing distribution network;

(e) an explanation of the potential mitigating measures that might be needed to minimize environmental dangers and adverse social impacts;

(f) a budget for conducting the necessary investigations to prepare a focused environmental impact assessment of the site. The impact statement would be made by the site nominator with technical assistance from EFSA (see Section 11).

11. EFSA shall include with its announcement of the RFSP closing dates for receipt of site nominations.

Section 10. Environmental Impact Report (EIR) Preparation

This section elaborates the requirement of an Environmental Impact Report (EIR) for each site which must be prepared for the technical screening phase. The EIR is to spell out short- and long-term environmental effects in cost-benefit terms, both state-wide and locally, so that residents of the affected areas can use the EIR in constructing bids for mitigation measures and compensation.

An Environmental Impact Report (EIR) must be conducted for every nominated site in compliance with the State Environmental Quality Act (SEPA). To ensure the assessment of the environmental impacts of each site/technology combination:

1. EFSA will submit to the state legislature a proposed total budget for conducting the EIRs necessary for each site proposal.
2. EFSA, jointly with each local jurisdiction which nominates a site, shall negotiate a contract with an EIR consultant.
3. The EIR must identify any adverse environmental effect which cannot be avoided should the proposal be implemented.
4. The EIR must assess the short-term and long-term environmental costs and benefits with particular reference to impact upon renewable versus exhaustible resources.
5. The purpose of the EIR process is to inform the local jurisdiction, its surrounding areas, and all other interested parties of the extent of the potential impacts. The EIR must be prepared and presented in a clear and succinct manner so that it can be useful to the site negotiator in constructing a bid for mitigation measures

and compensation within the framework of the mediation council (see Section 12).

Section 11. Technical Assessment of Sites

All nominated sites must undergo a technical screening conducted by the EFSA staff and circulated for review and comment to governmental agencies with interests in the project. Results of the analyses and acceptance or rejection of the sites will be conveyed to both site and project nominators.

The technical screening of all nominated sites is a prerequisite in assessing nominations for technical acceptability:

1. EFSA staff will conduct the technical screening of each site nomination to ensure that each site meets existing state and federal regulations.
2. Evaluation must be according to a standardized method.
3. Nominations must meet minimum site feasibility constraints established in the RSFP information package, or site nominator must justify its request for specific exceptions.
4. EFSA conducts in-depth evaluation of each nomination and prepares preliminary report which includes a hearing in which site and project nominators take part. Final report designates sites which pass technical screening. Report includes statement of environmental advantages and disadvantages and describes facility design conditions and other measures necessary to ameliorate adverse effects.
5. If no site passes the technical screening, EFSA will inform project nominator that an alternative energy technology must be used, which would require a new project nomination.

*This section establishes a mediation council consisting of three permanent members: the project nominator, an EPSA staff member, and an independent mediator appointed by the Governor of the state; and an ad hoc member for every given site: the site nominator. The council's purpose is to bring together the parties directly involved in the siting of a particular facility and give the site nominator(s) (the locality(ies) desiring the siting of the proposed facility within its jurisdiction) an opportunity to "bid" for the right to locate the facility on land within its boundaries. The bidding consists of each site nominator, in consonance with the rest of the council, developing a package that includes the levels of compensation which the community expects for itself and individuals living within a specified geographical impact area.**

To ensure that the siting of an energy facility in the state is both equitable and efficient, and that compensation is distributed in an equitable and timely manner:

1. A mediation council shall be established and shall consist of three permanent members: the project nominator, a professional staff member from EFSA and an independent mediator: the project nominator; a professional staff member from EFSA and an independent mediator to be appointed by the Governor of the state who must receive unanimous approval from the other members of the council; and, an ad hoc member for every given site; the site nominator.

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*The bid package is then presented to the voters of the jurisdiction (s) in a nonbinding referendum. The results of this referendum might influence the decision of the local government on bid submission and could have an impact on the decision of the developer to continue. The bid will also include those measures which the community expects to take to attract the project. The project nominator then decides upon the desired site - supposedly that site which requires the least amount of compensation to be paid by the developer.

2. The representative of the site nominator must have the authority to act on behalf of the local governmental authority.

3. The mediation council must determine the boundaries of the geographical impact areas within which residents or workers would receive compensation for each site under construction.

4. The mediation council shall specify the changes in the facility needed to mitigate its impact on the community and the individuals within the geographical impact area.

5. The mediation council shall negotiate an offer of two types of compensation. These compensations will be paid by the project nominator to the successful site nominator.

   (a) compensation for public service costs incurred during construction of the facility shall be determined by the mediation council in consultation with the appropriate governmental agency within each site nominator's jurisdiction. Upon completion of the facility, the negotiated public service compensation shall be paid through property taxes.

   (b) an amount and form of compensation for social and environmental costs incurred by the facility shall be paid both to those individuals who will be negatively affected and to the community-at-large. Monetary and in-kind payment, and mitigatory measures must all be considered as possible forms of compensation.

6. The mediation council shall negotiate, for each nominated site, an insurance bond; the bond shall be used to pay persons owning property at the time of announcement of facility for any decrease

in property value directly caused by the facility within five years of its completion. The EFSA shall determine the decrease by comparing prevailing housing market values to the general consumer price index for housing in the states.

7. The performance bond, submitted by the project nominator and the application fee submitted by site nominators shall be held in an EFSA trust until one site has been selected. The application fees shall then be returned to all unsuccessful site nominators.

8. The mediation council shall decide on a time schedule for the construction of the facility. The council shall also decide on a time schedule for compensation payments in accordance with the facility's construction and operation schedules.

9. If, in the opinion of the mediator, delays in construction schedules or compensation payments are deliberate on the part of either project or site nominator, the med ator shall demand payment of a fine; the fine shall be the amount of the performance bond for the project nominator and the application fee in the case where fault lies with the site nominator.

10. In the case where fines are incurred, they shall be placed in an EFSA fund which shall be used to defray future costs of energy facility siting and as grants to future site nominators.

11. With completion of facility, the application fee shall be returned with interest to the site nominator. The performance bond shall be returned to the project nominator only after all compensation has been made.

12. The mediation council shall develop a bid package for each nominating jurisdiction, consisting of the comprehensive list of stipu-

lations that a jurisdiction will require in exchange for its accepting the proposed project at the level of impacts indicated in the project nomination and the EIR. These stipulations may include mitigation, acceptable levels of compensation, property taxation formulae, safety and health standards, and protection against future facility changes. The bid package shall also detail the concessions offered the project nominator by the local jurisdiction, such as zoning variances, guarantees against property tax escalation, etc.

13. A formal public report to all site nominators shall summarize the contents of all packages, providing the residents with the opportunity to compare the various bids prior to the holding of nonbinding referenda.

14. The bid package must be presented to the voters of the jurisdiction(s) in a nonbinding referendum.

15. The local government having jurisdiction over the site shall either ratify the bid package, propose a counter-bid to the mediation council, or withdraw nomination, following the nonbinding referendum.

16. A counter-bid by the site nominator shall be dealt with via the mediation council's established negotiation process.

17. The project nominator shall assess all ratified bids and either accept one or propose a subsequent round of counter-offers to all site nominators.

18. All counter-offers resulting in new bids shall be ratified by the local government having jurisdiction over the site. This ratification shall include submission of the bid package to the voters of

the jurisdiction in a nonbinding referendum (cf. #15).

20. The project nominator shall select a site and meet the final bid of the local jurisdiction.

21. The project nominator may request state aid to meet a bid. This request would be submitted to EFSA. Should EFSA approve the request, EFSA shall submit its recommendation to the state legislature. The state legislature may then either allocate public resources to be added to the bid or deny them.

22. In the event that the project nominator cannot meet the bid and the legislature chooses not to allocate public resources for this purpose, no site shall be selected and the project shall not be built.

Section 13. Commitments

Agreements between project nominator and site nominator are necessary for licenses to be issued by EFSA. A performance bond and an application fee are elicited from the project nominator and site nominator, respectively, to ensure good faith bargaining.

In order to facilitate successful energy sitings:

1. Agreements between project nominator and site nominator are necessary prior to issuance of construction and operation licenses by EFSA to project nominator.
2. EFSA shall hold the performance bond to ensure good faith bargaining by the project nominator and compliance with the stated level of compensation and impact mitigation measures.
3. EFSA shall hold the application fee to ensure good faith bargaining by the site nominator.
4. Willful violation of the agreement, as determined by the independent mediator, shall be considered a gross misdemeanor and be brought by the EFSA to the attorney general for court action.
5. For each day that the construction or operation of the facility is willfully delayed, the court may assess civil penalties in an amount of _____.

Section 14. Special Report to the Legislature

Periodic Special Reports to the Legislature regarding the future location of energy facilities within the state will serve as both an evaluation of the current situation and as the basis for future nominations.

Every fifth year a Special Report on the future location of energy facilities within the state must be submitted to the legislature and is to include:

1. A discussion of factors that have been found in reviewing proposals for development which have impeded the identification or development of potentially desirable sites.
2. A description of the means by which inequities among successful site nomination bid packages are to be corrected.
3. A discussion of the relationship between siting and other aspects of energy facility planning, including transmission line site and capacity planning.
4. A discussion of the advantages and limitations of the technical screening and EIR processes, and a description of the steps necessary to ensure their proper use.

CHAPTER THREE

Conclusion: Strengths and Weaknesses of Proposed Legislation

The heart of this legislation is a negotiation/compensation process that recognizes political realities. The legislation puts forward an incentive scheme which promotes consensus. The no-build option is retained by communities, thus acknowledging the situations in which community opposition to a facility is overriding. This differs markedly from arbitration which imposes solutions. Neither scheme eliminates subsequent appeals through the courts.

Chapter One dealt with the generic issues and subissues of energy facility siting. Chapter Two incorporated suggested solutions to these issues into the proposed legislation. What follows is a systematic and summary analysis of the comparative strengths and weaknesses of the legislation.

This legislation mandates a reorganization of regulatory authority and a balancing of public versus private responsibilities through a system of negotiation and compensation.

The present multiplicity of regulatory agencies results in a fragmented review of energy facility proposals where many agencies look at a single alternative in a narrow way.

As the sole regulatory agency, the EFSA should have a sufficiently borad perspective to encompass a much wider variety of technologies and site alternatives than any single agency concerned with one part of the issue. EFSA would have the ability to consider relevant tradeoffs which

at present escape the review of the separate agencies.

A provision for Governing Board members with knowledge and/or experience relating narrowly to energy systems or more broadly to land use problems, is intended to ensure that the decision-making body can command a high level of public confidence and respect.

Since terms of EFSA Board members are coterminous with that of the Governor, the possibility exists that continuity of service and experience may be interrupted. However, this gives EFSA greater leverage with the Governor and the legislature.

With the EFSA as lead agency, energy policy is tied to both needs assessment and project nomination. In a coordinated action, EFSA will solicit input from the other state and federal agencies, and from the utlilities. The role of EFSA in directing technology screening and site selection should inspire public confidence because the process is not left in the hands of the utilities.

The EIR/EIS is conducted before sites have been selected and land aquired by the applicant. With this balancing of public and private responsibility, review of alternatives is no longer limited to construction issues, but includes measures aimed at distributing benefits broadly, and achieving equity through compensation. In addition, nominations for sites which do not meet all technical criteria may include an explanation as to why a site is nevertheless desirable. This enables greater flexibility in future stages of the process: more options are kept alive longer.

The legislation mandates that any impacts which a particular interest group thinks are important be included in EFSA's analysis. EFSA holds public hearings at the beginning of both the technology and site selection

processes, not, as is currently the case, only after a project and site has tentatively been approved. The site nomination section of the legislation creates opportunities for much broader participation (i.e., questionnaires, hearings, nonbinding referenda).

The agency post of ombudsman is designed to increase public confidence in the decision process, and to provide a mechanism for including minority views, both local and geographically diffuse, in the selection of both technology and site.

The most effective vehicle which this legislation offers for increased participation, however, is compensation for individuals and communities through negotiation.

Negotiation is the medium used for including individual and community estimates of social costs. This, in turn, enables developers to anticipate the degree of resistance to energy development and induce the developers to choose preferable sites. The greatest degree of participation can be expected when an individual has something to gain personally from participating in the process.

Negotiations occur within the framework of the mediation council. The council cannot impose a solution. Under certain conditions, there is widespread opposition to a facility and the facility should not be built. The legislation proposes an incentive scheme. The scheme is based on consensus and aims to minimize individual challenges in courts. If the council or the EFSA were to impose a solution when parties do not agree, the plant would be sited by default. This is not effective because such an imposition could eventually be challenged in the courts by individuals.

There would be less faith in the process of compensation through negotiation. Although the process of bids and one-round of counter-bids is time-consuming, it may avoid lawsuits which could stretch out for years, and with ultimate cost to the consumer. Thus, by lengthening the review and negotiation process, construction time is likely to be shortened.

The compensation agreement ties payments to various stages of the facility's construction, to try to limit a community's opposition which may arise after the agreement has been made and the company too far committed to back out easily. By reducing alienation and trying to avoid drawn-out legal battles, this legislation trys to combine the objectives of securing adequate energy supplies and safeguarding environmental values.

We feel that this legislation provides a legal process to achieve the efficient and equitable siting of energy facilities in tune with our present social environment. Clearly, some of the specific details of the Act have been arrived at arbitrarily. Also, in certain instances the legislation has been left purposefully vague in order to provide some leeway in its implementation. The following is offered as both summary and explanation for salient questions that may arise from a reading of the Act.

Needs Assessment and Energy Policy

Although the legislation emphasizes consideration of a wide range of technologies and forecasting methods, no strategy is prescribed for ranking preferred technologies. Also, some aspects of the needs assessment are tentative and some technologies are untested and hard to analyze.

The different technologies must be assessed in terms of different time frames, making the process more complex, and no strategy is prescribed for meshing the results of various forecasting techniques. The intergovernmental coordination strategy required in EFSA's development of needs assessment is not fully designed.

Financing

The EIR is financed by the state. The scope of the EIR is determined by how much each community spends and, with each community spending the same amount, the EIRs are more standardized. Poorer communities have an equal chance at nominating sites. In the case where there are many site applications, however, the state may provide less funds per EIR, and the result may be poorer quality EIRs. The legislation does not allow communities to supplement the cost of EIRs since inequalities among site nominators are not encouraged.

The site nomination process is financed by elite nominators (locality[ies]), as part of the gamble that the community takes by entering a bid and as a measure of its initial interest. The disadvantages are that poorer communities may not have an equal chance, although they may want the plant more than others. The cost may discourage communities from entering a bid and fewer sites may be nominated. If, however, the entire process were to be financed by the developer, the number of sites for each project would be limited in the interests of cost savings. Thus the bid process would become less competitive.

Participation

The measures to increase the opportunities for participation are

admittedly not problem-free. There exist logistical problems of distributing, collecting, tabulating and analyzing a large number of questionnaires. Moreover, the questionnaire results and nonbinding referenda may be viewed by many people as having little consequence because they lack legal weight. No citizen participation techniques other than public hearings are specified. Attempts to coalesce diffuse interests through the public hearing process may reach only the most articulate or best-financed groups. In addition, public hearings do not afford such opportunity for group learning through dialogue, cross-examination, etc.

Site Nomination

In the legislative scheme, individuals cannot be site nominators. The advantage is that since individuals have to go through the community, there is a greater guarantee that the site request, if approved, will be more acceptable within the community. While this could have the effect of reducing the number of sites to be reviewed; it is likely that most individuals proposing viable sites could find the appropriate sponsorship.

Technical Assessment

To expedite matters, existing state and federal regulations are used as basic screening criteria. This could result in overregulation. Nominations for sites which do not meet all technical criteria may include an explanation as to why the site is nevertheless desirable. Such exceptions are permitted to provide greater flexibility in future stages of the process by keeping alive a larger number of options.

However, no strategy is prescribed for verifying, in advance, the safety of those sites which do not meet all screening criteria, and yet continue to be considered. The legislation may thus allow some sites to be considered that might be found faulty only towards the very end of the process, in return for greater initial flexibility.

Mediation Council

Although negotiation is mandated in the legislation, certain aspects of the process have been left open.

The legislation does not define standardized geographical impact areas. This presents a problem but legislating standardized boundaries presented even greater problems because geographical boundaries are abritrary and unreal. The lack of more specific guidelines for drawing geographical impact boundaries may provide opportunity for major political conflict on that issue alone.

Within the framework of the mediation council, local government, most familiar with local problems, has the opportunity to deal directly with the siting issues. Localities may, however, lack a clear mechanism for involving local citizens in agreeing on mitigation measures and appropriate compensation.

In addition, there is a possibility of legal problems if very divergent claims for compensation are made by similarly situated landowners.

By compensating individuals and communities for negative impacts of energy facilities, we bring these costs into the cost/benefit calculations and thereby (1) present a truer picture of the project's impacts on society, and (2) force the developer to respond fully. However, a pre-

cedent is established for public compensation in environmental matters which could be very costly if expanded to other areas.

In enacting legislation, legislators must try to respond to public need in ways that are both cost-efficient and socially beneficial. The energy crisis requires that our law-makers take bold and unprecedented initiative. We believe that the negotiation-compensation system proposed is an innovative process, that is a logical alternative to a system that is now not working well, and that it provides legislators the opportunity to offer the public a politically-popular mechanism based on consensus. The Act presents the prospect for breaking the current log-jam, in which new facilities are being developed with increasing infrequency and at greater costs. On the other hand, the Act avoids the alternative of governmental action fiat.

There is no ironclad guarantee for the success of the proposed legislation. However, the process of compensation through negotiation that has as its objective a consensually-based solution is in keeping with current political and social philosophical trends. It therefore offers prospects for success and deserves serious consideration.

Notes

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