BARGAINING FOR THE ENVIRONMENT: COMPENSATION & NEGOTIATION IN THE ENERGY FACILITY SITING PROCESS

by

JULIA MARIE WONDOLLECK

A.B., University of California, Davis
(1977)

SUBMITTED IN PARTIAL FULFILLMENT
OF THE REQUIREMENTS FOR THE
DEGREE OF

MASTER OF CITY PLANNING

at the

MASSACHUSETTS INSTITUTE OF TECHNOLOGY

SEPTEMBER 1979

Signature of Author.....
Department of Urban Studies & Planning
September, 1979

Certified by.....
Thesis Supervisor

Accepted by.....
Chairman, Department Committee

BARGAINING FOR THE ENVIRONMENT: COMPENSATION & NEGOTIATION IN THE ENERGY FACILITY SITING PROCESS

by

JULIA MARIE WONDOLLECK

Submitted to the Department of Urban Studies and Planning
September, 1979, in partial fulfillment of the requirements
for the Degree of Master of City Planning.

ABSTRACT

Compensation and negotiation are advocated by many as additions to the current energy facility siting process. Why, given their apparent desirability, are compensation and negotiation not more frequently observed? Hypotheses based on theory address this question. Before negotiations may occur, parties to a conflict must possess something to trade as well as something to be gained in the negotiations. Because negotiation and compensation are seldom applied to siting processes, people are unsure how to use them.

Evidence from the Grayrocks Dam case in Wyoming, and the Montague Nuclear Power Plant case in Massachusetts, indicates that these hypotheses are valid. The cases further indicate that the siting process, as structured, impedes rather than accomodates compensation and negotiations. Bargaining leverage is often not possessed by all affected groups and individuals. People have traditional expectations of the siting process which do not include negotiations or compensation agreements. Compensation and negotiation are frequently viewed with suspicion and as illegitimate and are therefore rejected.

Should compensation and negotiation be desired responses to energy facility siting problems, means of overcoming the obstacles outlined here must be developed and analyzed. Structural changes to the siting process and guidelines directing the use of compensation and negotiation seem warranted as initial steps.

Thesis Supervisor: Lawrence S. Bacow
Assistant Professor
Department of Urban Studies and Planning

ACKNOWLEDGEMENTS

A thesis is not simply written. Instead, it is devised, researched, pondered, analyzed, written and rewritten -- all many times over. It involves a long, sometimes tedious and often frustrating process. This thesis was no different from the rest. Many thanks are in order for those who helped me along the way.

My thesis committee deserves foremost thanks. Professor Lawrence Bacow patiently read and reread the many drafts preceding this final document. Without his guidance in thinking about the problems addressed and how to effectively present them, this thesis would never have been the learning experience it is intended to be. Professors Michael O'Hare and Lawrence Susskind both provided valuable comments and criticisms throughout this process.

Many thanks to those participants in the two siting cases who gave freely and openly of their time during my interviews. I have done my best to fairly and accurately represent their positions and perceptions. My apologies if I failed on any occasion. Special thanks to Mary Beth Gentleman (Massachusetts Energy Facility Siting Council), Fred Muehl (Franklin County Planning Department), Patrick Parenteau (National Wildlife Federation) and Paul Snyder (Nebraska Attorney General's Office) who readily and patiently gave me answers to my many questions.

And, thanks to my friends and colleagues on the Energy Impacts Project and in DUSP. Alan Weinstein shared ideas and frustrations. Debbie Sanderson's comments and direction contributed to my progress. To Fred, Phil, Martha, Katina, Howard and Steve: many thanks for providing the much needed levity while the "worker" was at work.

Above all, thanks to Brian whose patience and encouragement throughout this process will never cease to amaze me.

TABLE OF CONTENTS

Table of Contents, continued

PREFACE

The purpose of the following analysis is to present the potential role compensation and negotiation may play in the energy facility siting process. Specifically, this presentation will address four questions. First, why is the current siting process criticized? Second, why are compensation and negotiation often cited as potential tools with which to avoid siting process shortcomings? Third, if compensation and negotiation are desirable additions to the current process, why are they not observed more frequently and successfully? Finally, how may compensation and negotiation be incorporated into the siting process?

Theoretical economists have long pondered the potential resolution of market failures using market mechanisms rather than direct regulation. This thesis does not attempt to recount the entirety of economic theory supporting this contention nor does it purport to prove or disprove the theory. Instead, a brief theoretical introduction to the problem currently encountered in siting energy facilities will be provided. The theory will then be tested empirically. This thesis presents but does not test the argument that compensation and negotiation are able to overcome failures in current siting processes. Instead, it accepts the argument as valid and then proceeds one step further and asks the question: Why, given the apparent desirability of compensation and negotiation, do we not observe their successful application more often?

This analysis should be of value to several groups. It will provide policy-makers at the federal and state level with an understanding of the empirical context in which facility siting policies are applied. It will further illuminate structural and social constraints hindering

current policies. Additionally, this analysis provides local officials, individuals and groups affected by proposed large scale developments with an alternative means to evaluate and develop responses to such proposals.

Chapter I describes the problem to be addressed. It outlines several criticisms with the current energy facility siting process. Further, Chapter I explains how compensation and negotiation may address these criticisms. Finally, after establishing the nature of the problem and a proposed solution to it, Chapter I concludes with several hypotheses as to why this apparently beneficial addition to the siting process is not frequently and successfully observed. These hypotheses will then be tested using two siting cases.

Chapter II presents the Grayrocks Dam case in Wyoming. The hypotheses developed in Chapter I will be analyzed in the case presentation. This case highlights several problems in addition to those hypothesized which need to be overcome before compensation and negotiation can be successfully applied to siting facilities. Chapter III similarly presents the Montague Nuclear Power Plant case in western Massachusetts. In this case, compensation and negotiation, although considered and attempted on several occasions, never succeeded. Again, Chapter I's hypotheses are supplemented by new observations lending insight into why negotiation and compensation are seldom applied to the current siting process.

Chapter IV concludes the thesis with a summary analysis of the hypotheses developed in Chapter I in light of the two case presentations. Additionally, it presents and analyzes other problems encountered when

attempts are made to use negotiations and compensation in the siting process. From this analysis, suggestions for overcoming obstacles currently hindering compensation and negotiations in the energy facility siting process are presented.

CHAPTER I

ENERGY FACILITY SITING: THE PROBLEM AND A RESPONSE TO IT

Market Failure in the Energy Facility Siting Process

While energy consumption and forecasted demand for energy continue to increase, utilities are encountering difficulties in siting proposed energy facilities. Groups and individuals concerned with the disamenities accompanying energy facility development are rising in opposition and effectively delaying, and often halting, facility construction. Underlying this opposition is the market's failure to account for the social costs inherent in development decisions.

When choosing a site on which to construct an energy facility, a utility considers the costs associated with facility construction and operation at several locations and chooses that site which is least costly. "Least costly" to the developer does not necessarily mean a proposed facility is "least costly" to society, though. Utilities freely use a site community's amenities to attract workers and management personnel. The town's air is used as a sink for pollutants and its water for cooling or waste disposal purposes. Energy development brings increasing population, traffic, municipal expenditures and other characteristics of the "boom town" problem. Since the market system fails to incorporate these external effects into development decisions, the costs imposed must be borne by society. These costs are external to a utility's evaluations; there is no incentive to include them in initial site considerations. It is this market failure that causes problems observed in proposed energy facility siting cases today.

Four Criticisms of the Siting Process

In The Public Use of Private Interest, Charles Schultze discusses the failures of private markets to account for the social costs of their activities. He notes:

> "The problem is not that side effects exist, but that the benefits they confer or the costs they impose are often not reflected in the prices and costs that guide private decisions...often the side effects impose costs (or confer benefits) on large numbers of people who were not parties to the transaction." [12]

Side effects do accompany construction and operation of energy facilities (and other large developments) and these side effects cause damage in varying amounts to different people. The current energy facility siting process fails to encourage a more complete accounting of costs associated with proposed facilities. Current siting guidelines and regulatory restrictions allow developers to ignore many social consequences of their projects. These failings have been attacked on four accounts by theoretical economists and critics of the siting process.

First, these social costs cause opposition to facilities. Those persons receiving costs in excess of benefits promote their best interests by opposing the proposed facility. This opposition may lead to facility construction delays or disapproval when the project may actually be net beneficial to society and therefore should be sited. [6,7,10]

Second, "inefficient" sites may be chosen. A developer, not forced to account for the full range of costs as well as benefits accompanying a project, may choose to site the wrong plant in the wrong place -- the

least cost site will not be chosen and resources may be expended inefficiently. [2,7,10,12]

Third, the outcome is "unfair." As Schultze noted, many will benefit by a project at the expense of a few. It seems desirable that those bearing excess costs from a facility be repaid by those benefitting. [4,7,10,12]

Fourth, uncompensated "social costs" incite further "demoralization costs." Individuals accepting the precedent that no compensation will be paid for development impacts may make "second-best" decisions when choosing where to live, work or visit. Their utility loss is a "cost" to society. [4,7,10]

While all four market failure consequences cause concern about the current siting process, this thesis will concentrate its analysis on attributes of the opposition that arises and po tential means for overcoming these. As will be seen, the remaining three consequences are indirectly addressed by proposed solutions to the first.

A Response to Market Failure in the Siting Process

Schultze outlines three "social arrangements" for overcoming market failures causing social costs:

1 -- prohibit the cost-imposing project from occurring;

2 -- "make it up to the losers either with monetary payments (compensation) or with offsetting changes that improve their welfare (logrolling); or,

3 -- rely on a tax transfer system to even things out in the end.[12]

This thesis explores Schultze's second "arrangement." If the current process does indeed fail on the above four accounts, how might compensation offset these failures?

Webster defines "to compensate" as:

> "To be equivalent to in value or effect; to balance, offset, recompense, repay, satisfy."

and, "to negotiate" as:

> "To treat with another respecting purchase and sale; to confer with another in bargaining or trade;... to hold conference and discussions with a view to reaching agreement on a treaty, league, contract, etc."

Compensation and negotiation are complimentary; they work hand-in-hand in resolving conflicts and guiding exchanges. Compensation, in the true sense of the word, should be viewed as payment for costs imposed just as we pay workers for services rendered or shopkeepers for goods purchased. Negotiations serve to bring parties together to agree on price. In this thesis the two terms -- compensation and negotiation -- will often be used simul taneously. Although they have two separate meanings, as noted above, they occur together in practice and as proposed additions to the siting process.

Compensation may take the form of money, but not necessarily so. In siting cases nationwide, compensation has occurred with the means of exchange being parks, planning grants, impact studies, schools and prepayment of property taxes.[1,3,8,9] Further, compensation may take the form of "logrolling" concessions, as Schultze noted, in which approvals may be given in exchange for support on another issue. These exchanges are, in a sense, no different from the exchanges made in the barter economies of many lesser developed countries. In barter economies, money is not used when making transaction. Instead, the goods to be exchanged have their own specific values to the seller and the buyer. Agreements reached between any parties are based upon these relative

values.

In siting cases, as in barter economies, people face a decision to accept or reject a proposed exchange. Exchange of a good in a barter economy is comparable to the siting case in which a utility essentially "offers" to site a facility in a particular community. The good to be exchanged in the siting case is the energy facility. This good includes desirable and undesirable aspects. It brings energy and often prestige to an area in addition to jobs, tax revenues and an economic stimulus. On the other hand, it also brings people, housing construction, increased service demands and government expenditures to accomodate these expanding needs. Impacts on the natural as well as human environments accompany energy development and rapid growth.

These costs and benefits must be weighed by the "buyer" in the siting case (ie. community and environmental groups, government officials) to determine the appropriate response to the proposed exchange. The buyer's means of exchange are usually support (or non-opposition) in addition to permits and approvals required for facility construction and operation to proceed. If the proposed facility is perceived to be "net beneficial" (benefits outweigh costs to be imposed), support is expected from those persons responding to the siting. If perceived as "net costly" (costs outweigh perceived benefits), concerned parties will oppose the exchange and work to keep it from occurring.

Problems are evident in the current siting process because:

1 -- Affected groups and individuals have different concerns and therefore different perceptions of a facility's benefits and costs.

2 -- The process provides no opportunities for concerned groups to adjust the benefit/cost ratio to make it less costly to them.

3 -- Even facilities that are net beneficial to society are able to be stopped by a few groups perceiving the proposal to be net costly.*

How might negotiations and compensation address these issues?

Negotiations and compensation will not change the concerns of various groups and individuals. Instead, negotiations allow these concerns to surface and be considered in facility planning. Compensation repays those costs making a facility net costly to some parties. Just as in barter economies, negotiations allow parties to an exchange to actually participate in the exchange. Compensation places values on attributes of the exchanged goods and lets these values be reflected in the facility's final price. When a facility is no longer net costly to various individuals and groups, the rationale for opposition no longer exists. Thus, facilities which are net beneficial to society when all costs are considered will be sited.

The additional criticisms that the current siting process is inefficient, unfair and causes further demoralization costs, are

---

* For a detailed explanation of how various groups and individuals have acquired standing to sue and other leverage making them influential in the siting process, see Alan C. Weinstein, "Legal Barriers to Energy Facility Development." [13]

Briefly, several legislated avenues exist for individuals and groups to attack and potentially halt a project. The National Environmental Policy Act of 1969 (NEPA) with its Environmental Impact Statement (EIS) requirement, contains significant intervention powers for concerned groups. Similarly, the Endangered Species Act of 1973, the Clean Air Act, state environmental quality acts, state power plant siting legislation and state and local land-use regulations all provide means for concerned groups and individuals to actively respond to proposed facilities.

overcome when compensation and negotiation are incorporated into the process. Compensation forces developers to realize the total costs of proposed facilities. Thus, the efficient, cost-minimizing site will theoretically be selected. Negotiations and compensation are "fair" since they involve affected parties in the process and repay those adversely affected for society's benefit. Finally, compensation payments undermine demoralization costs. Individuals currently making "second-best" choices to avoid potentially uncompensated losess will be able to make the "best" choice knowing that compensation will be paid when losses are incurred.

The intent of incorporating negotiations, and therefore compensation, into the siting process is not to increase the costs of siting facilities. Instead, the intent is to promote an accounting of the full costs of facility development, thereby including those currently left external to this process. Compensation and negotiation allow all parties to an exchange to participate in this exchange and assure that their interests are considered when developing the "price" of the "goods" exchanged. Each agreement will obviously differ according to the particular community and individuals involved since specific values and concerns addressed in making any exchange will vary.

The Absence of Compensation & Negotiation: Some Hypotheses

Given the apparent desirability of compensation and negotiation in siting energy facilities, why do we not more frequently observe their use? Several hypotheses can be developed in response to this question even before undertaking empirical case analyses.

The nature of negotiations, as well as barter economies, have been studied extensively. [5,11,14] These studies emphasize two major prerequisites to successful negotiations:

1 -- Before negotiations will occur, parties to a conflict must possess "something to trade." Parties without something to trade will have no leverage to influence the negotiations.

2 -- Even should all parties possess "something to trade," negotiations will not occur if parties to the conflict do not perceive "something to gain" in so doing (or, conversely, "something to lose" in not negotiating). If the outcome of negotiations will not make an individual or group better off than the perceived outcome without negotiations, then the rational approach is not to negotiate.

Additionally, aspects of the current siting process indicate other reasons why compensation and negotiation may not be readily used:

1 -- Because negotiations and compensation are not established characteristics of the current siting process, people may not realize that this option exists. Developers seldom view compensation as a cost-minimizing step in siting facilities. Concerned groups are accustomed to adversarial responses to proposed facilities.

2 -- Because they are seldom used, people do not know how to proceed with negotiations or how to incorporate compensation into the process.

Chapters II and III present and analyze two case studies of proposed energy facilities. The two case differ in many respects. The Grayrocks Dam conflict in Wyoming is of inter-state and national

concern. The Montague Nuclear Power Plant conflict in Massachusetts, at least at this stage, is of only local and regional concern. The important actors and decision-makers* differ between the two cases. Additionally, the Grayrocks Dam case illustrates a more traditional "environmental" controversy since the main object of contention was an endangered species. Montague, on the other hand, depicts a conflict involving a community and region's social, physical and economic well-being. Finally, the Grayrocks Dam case is complete; it follows the full range of steps from proposal announcement through negotiations to a final consensus by all parties. Montague has not reached completion. At present, the utility has postponed construction and suspended site review for financial reasons. As a result, this case does not present a complete overview of the siting process and decision-making from start to finish. Instead, it gives insight into the detail of several interchanges between parties to the conflict and specifically how and why they chose particular approaches to address their needs and influence decisions. These differences make the two cases incomparable yet complimentary in exploring the infrequent use of negotiations and compensation in the siting process.

---

* All persons participating in a siting process are "actors" in that process. For the purposes of this paper, an "official" decision is one made by a formal government in accordance with its legislated responsibilities. For example, "official" decisions in the siting process include permit approvals by local, state and federal agencies and governments charged with different aspects of facility review. "Decision-makers" herein refer to those making "official" decisions even though all "actors," in a sense, are decision-makers in that they actively make choices in responding to a proposal and participating in the process.

CHAPTER II

THE GRAYROCKS DAM CONFLICT

Introduction

Two conflicts make the proposed Grayrocks Dam near Wheatland, Wyoming, instructive in understanding compensation and negotiation and their potential role in energy facility sitings. First is an interstate water rights dispute between Nebraska and Wyoming over North Platte River water to be consumed by the facility. The second conflict arises between conservationists and the utilities over potential harm to the endangered Whooping Crane species downstream from the proposed dam.

Negotiations and compensation were successfully applied in this siting case. Before achieving success, though, several obstacles had to be overcome. This case illustrates why parties to a conflict adopted different strategies during different phases of the siting process. Further, it indicates the consequences of various strategies on process outcomes.

Questions that help to analyze compensation and negotiation in this case are:

-- How did different parties to the conflict acquire and use bargaining leverage?

-- How did perceived leverage change during the course of the conflict?

-- What role did uncertainty play in influencing strategies by different parties?

-- Why were negotiations more successful at later stages of the conflict than earlier ones?

-- What relationships developed between different parties to the conflicts and why?

-- How were compensation offers derived?

-- How were compensation offers received?

-- How was the final agreement perceived by participants in the negotiations?

-- What would be the expected outcome should parties not have chosen to negotiate?

Background

The Missouri Basin Power Project (MBPP) is a consortium of six utilities currently constructing a $1.6 billion coal-fired power plant on the Laramie River, a tributary of the North Platte River, near Wheatland, Wyoming. MBPP was formed in 1970 in response to heavy industrial power requirements forecasted for the utilities' service area: eastern Montana, Wyoming, Colorado, North Dakota, South Dakota, Nebraska, Iowa and Minnesota (figure 1). The six utilities were each experiencing increasing energy demands and viewed a combined effort as the expedient approach to meet this demand. Siting difficulties and cost considerations made individual efforts less efficient. The electricity generated by this facility will serve two million customers in the eight state area. [13a]

The facility has two main components: a coal-fired plant (50% completed) and an adjacent reservoir and dam supplying cooling water for this plant. The Grayrocks Dam, behind which the new reservoir will form, became embroiled in controversy involving several parties with varying interests:

-- The state of Wyoming (Wyoming) favored the project because of its economic benefits: jobs, economic growth, electricity for rural Wyoming, and irrigation water. [1, 5]

-- The state of Nebraska (Nebraska) opposed the project. It felt Wyoming would consume more than its share of North Platte River water with this project and that Nebraska's water needs would suffer as a result. [3]

-- Conservation groups (National Audubon Society, National Wildlife Federation, Nebraska Wildlife Federation, Powder River Basin Resource Council and Laramie River Conservation Council) were concerned that the plant's water use would endanger wildlife along the North Platte River, especially the endangered Whooping Crane. [1, 4]

FIGURE 1

MISSOURI BASIN POWER PROJECT
COMBINED SERVICE AREA

-- The Rural Electrification Association of Nebraska (REAN) favors the facility since it stands to benefit from the power generated. [3]

-- The six MBPP utilities obviously favor continued plant construction. [5, 8]

It is the conflict among these parties, and its gradual resolution, that will be recounted and analyzed in this chapter.

Federal Involvement

In addition to the requirements of the National Environmental Policy Act (NEPA), the federal government was involved in the Grayrocks Dam conflict through three agencies.

The U.S. Fish & Wildlife Service (USFWS)

The U.S. Fish and Wildlife Service, within the Department of the Interior, is charged with, among other things, administering and enforcing the Endangered Species Act of 1973. This Act requires that federal agencies:

1 -- use their authority to carry out programs to protect any species designated as an endangered species;

2 -- consult with the Office of Endangered Species of the USFWS whenever their actions may jeopardize an endangered species; and,

3 -- ensure that their actions do not endanger or jeopardize designated species. This requirement is accomplished by either not issuing the requested permits or by mitigating potential impacts. [6]

Section 7, the requirement that consultation must occur between the federal agency and the USFWS Office of Endangered Species, became an issue with the Grayrocks Dam proposal. The endangered Whooping Crane occupies a section of the North Platte River in Nebraska and

could be affected by diminished water flow in the river. The U.S. Army Corps of Engineers' 404 dredge-fill permit and the Rural Electrification Administration's loan guarantees, are both federal actions requiring consultation with the USFWS. [6]

The U.S. Army Corps of Engineers

Under Section 404 of the Federal Clean Water Act, the Army Corps is required to review any request to place dredge and fill material in a U.S. waterway. [2] When MBPP wanted to begin Grayrocks Dam construction, it applied to the Army Corps for this 404 permit. Although the endangered species habitat along the North Platte River had not yet been designated as critical, the designation process was underway. Regardless, under Section 7 of the Endangered Species Act, the Army Corps was required to enter into consultation with the USFWS about potential impacts on the habitat and crane. [6]

The Army Corps did begin consultation with the Office of Endangered Species. It was told, though, that the USFWS had inadequate information and would need approximately three years to do sufficient research before the impact of the dam could be determined. A hearing was held at the Wheatland, Wyoming, project site. The Army Corps then made their own determination that there would be no impact and issued the 404 permit. [2]

The Rural Electrification Administration (REA)

The REA gives loan guarantees to small electrical companies or cooperatives delivering power to rural areas in the U.S. It had guaranteed loans to the MBPP without entering into consultation

with the USFWS as directed under Section 7 of the Endangered Species Act. The USFWS had contacted the REA twice, informing it of this requirement, but the REA never responded. The USFWS never commenced action against the REA on this account since conservation groups were already doing so. [6]

The National Environmental Policy Act (NEPA)

NEPA also played a role in the Grayrocks Dam controversy. The EIS required by NEPA was attacked as inadequate on several accounts by conservation groups and Nebraska. These allegations led to several court suits and, eventually, encouraged negotiations to avoid extended and costly court battles.

The Issues

The North Platte River Ecosystem

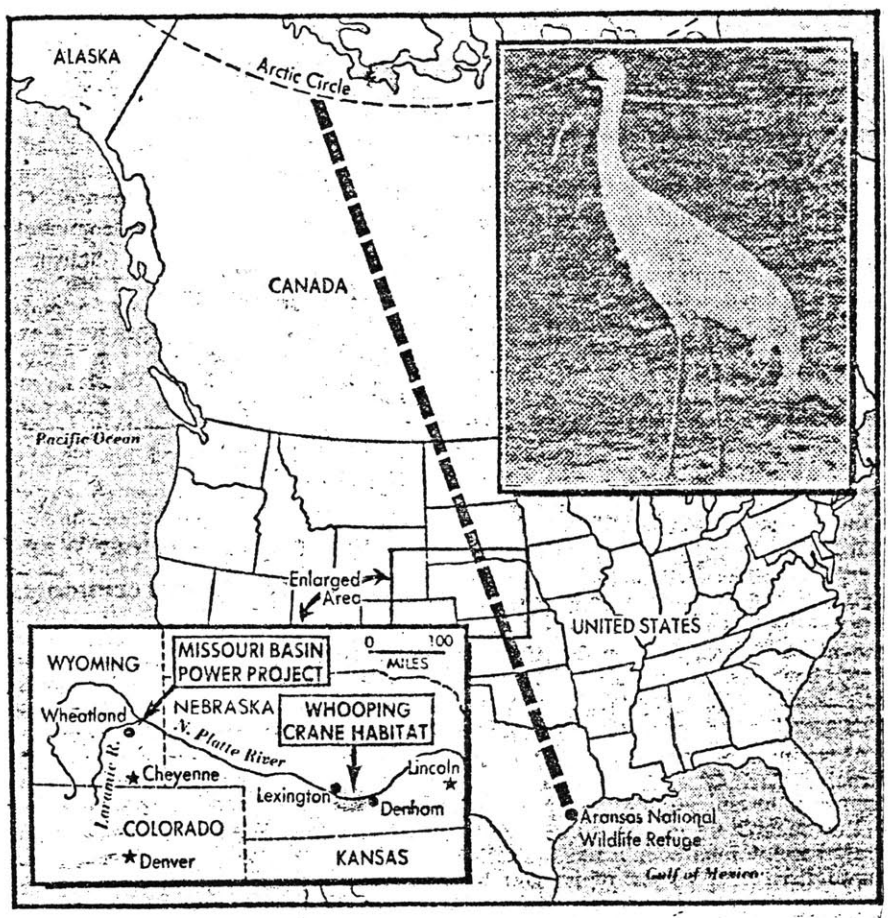
During the past 50 years, 43 dams and numerous irrigation projects have diminished streamflow in the North Platte River by almost 70%. The Missouri Basin Power Project facility will consume an additional 60,000 acre feet of water each year to satisfy cooling needs. Conservationists fear that this additional reduction in streamflow will be "the straw that breaks the camel's back" in its effect on North Platte River wildlife habitats. [13a]

The conservationists centered their concerns on the endangered Whooping Crane's critical habitat. Located on the North Platte River in central Nebraska, the habitat is 270 miles downstream from the Grayrocks Dam. It serves as a major stopover on the flyway between the Aransas National Wildlife Refuge in Texas and the Wood Buffalo National Park in Canada (figure 2). This critical habitat consists of a 60-mile long stretch of sandbars. Flood waters and ice from the annual snow melt have historically scoured the sandbars and kept them free of vegetation. [11] If streamflow along the North Platte recedes to the extent that this scouring will no longer occur, vegetation will overcome the sandbars and make them unsuitable for the Whooping Crane and other wildlife currently using them. The project's water use, conservationists contend, may diminish the river flow beyond this critical level.

Although the conservation groups are concerned about wildlife in general along the North Platte, they are focussing their efforts on the Whooping Crane. The crane is protected by the Endangered Species

FIGURE 2

WHOOPING CRANE HABITAT & FLYWAY



Broken line indicates route of the whooping crane's annual migration.

SOURCE: The Washington Post
November 27, 1978

Act and therefore gives the groups a strong legal position in negotiations with MBPP officials. Specifically, groups can sue to enjoin project construction should it threaten the Whooping Crane. The Supreme Court's recent opinion in the Tellico Dam case gives groups a high probability of stopping all construction provided they can demonstrate this harm to the endangered species. Additionally, the conservationists are taking advantage of NEPA's EIS requirement to gain further intervention leverage. They contested the adequacy of the EIS in addressing North Platte River habitats and the Whooping Crane.

Water Rights

The water rights issue in the western United States is very complex. Water rights to Laramie River and North Platte River waters have been contested on several occasions. In 1945 and in 1956 the U.S. Supreme Court issued rulings delimiting how water is to be distributed among the three states (Colorado, Wyoming, Nebraska) common to the two waterways, respectively. [3, 8] All three states seem to interpret these decrees differently, though. [5] To complicate the issue, each state has developed its own way of reallocating waters perceived as its own. Since these western states are so arid, each has irrigation districts that allocate water to farmers and ranchers, ideally in a manner that maximizes the crop return for water consumed. These districts form large networks of farmers and ranchers who are able to buy and sell "water rights" under supervision and approval of the irrigation boards in their districts. [5]

Project officials feel that Nebraska interprets the Supreme Court's rulings in a light most beneficial to Nebraska's interests. [8] Since Nebraska is furthest downstream of the three states, it has been taking advantage of its share of the water plus whatever was left over from upstream users. As a result, when the Grayrocks Dam was proposed, Nebraska feared they would no longer be able to use the same amount of water previously claimed.

Project officials believe the conservation groups "have a larger quarrel" with Nebraska than with the Grayrocks Dam and MBPP. [5] Edward Weinberg, MBPP counsel, asserts that Nebraska has been the most inconsiderate user of North Platte River water. He believes that the Grayrocks Dam will affect the Whooping Crane little compared with Nebraska's water consumption. [5] William Wisdom, attorney for Basin Electric (major interest-holders in the MBPP), points out that the Kingsley Dam, located on the North Platte River in Nebraska between the critical habitat and the Grayrocks Dam site, has a 2.1 million acre feet reservoir. He emphasizes that "this dam has absolutely no provisions for wildlife or conservation of water use in its operations at all."* [8]

---

* The Kingsley Dam and Lake McConaughy Reservoir are entirely privately-owned and operated. As there is no federal involvement in the operation and maintenance of this dam and reservoir, its water use could not be considered when determining impacts upon the Whooping Crane. Originally, MBPP officials and the Army Corps were asserting that the McConaughy Reservoir would be able to offset any water loss by the Grayrocks Dam. [8]

Nebraska, on the other hand, feels that the Supreme Court ruling allocated 75% of North Platte waters to Nebraska.* It felt that the project's reservoir was too big given the power plant's needs and that water consumption by the plant could be diminished substantially. Further, Paul Snyder, assistant Attorney General for Nebraska, points out that the project is creating a new irrigation district in addition to the dam and reservoir that will further consume North Platte River water before it enters Nebraska. [3]

Informal Negotiations

Interplay between these interests began in 1973 when the MBPP established an Environmental Advisory Committee to explore potential environmental impacts of the Grayrocks Dam. [4] It solicited input from concerned environmental groups yet, according to Robert Turner, Wyoming representative of the National Audubon Society, the project officials response to committee advice and recommendations was "negative in every regard." The committee suggested that a smaller plant would supply power needs with less environmental impact. MBPP officials disagreed and disbanded the committee in 1976. Turner feels that project representatives were generally unsympathetic to the needs of wildlife along the North Platte and saw no need to make concessions for wildlife protection. [4]

---

* The Supreme Court rulings, because they are vague in calculating river water availability and relative needs, leave a certain degree of interpretation and discretion up to the individual state. As a result, the states still contest the precise distribution of rights to Laramie and North Platte River waters. [12b]

Informal negotiations began occurring at this point between the MBPP and conservation groups, as well as between the MBPP and Nebraska. [4,8] Both interests were trying to convince the utilities to alter their proposal by decreasing water use and including measures to protect the Whooping Crane.*

Nebraska and MBPP officials met almost thirty times over the course of the conflict to discuss their differences. [5] William Wisdom asserts that specific water flows were discussed in these negotiations but that Nebraska would never agree to the levels offered. [8] Paul Snyder, on the other hand, feels that MBPP officials were never willing to concede anything in these negotiating sessions. His impression throughout was that MBPP officials were convinced that Nebraska "did not know what they were talking about." Snyder believes these sessions were nothing more than "game-playing" by the MBPP. He asserts that the MBPP was continually telling various officials different stories about what could or could not be done to alter project plans. [3]

Snyder feels the real reason project officials were not eager to seriously negotiate at first was because they believed they had "political clout" that could be used to undermine any lawsuits threatened by Nebraska. These utilities were well known in their

---

* No one was able to recall specifically which group initiated these negotiations. From my interviews with representatives of most groups, it seems probable that Nebraska and conservation group representatives originally approached MBPP officials when they determined cause for concern with project plans. When court suits became a fact instead of a threat, it is likely that MBPP officials in turn initiated further negotiation efforts.

service areas and had always received cooperation from state and local officials. Snyder notes that "nobody had ever stood up to them before"; they were "used to getting away with whatever they proposed." [3]

Similar reactions were expressed by the conservation groups. Throughout discussions between these groups and MBPP representatives, the utilities seemed unwilling to seriously consider measures directed towards protecting the Whooping Crane. Turner believes that the MBPP was in essence telling the conservation groups to "go ahead and sue us" as they seemed confident that the conservationists "could never win the suit." [4]

It is likely that the MBPP's confidence during these discussions arose from activities in Washington, D.C., where retiring Rep. Teno Roncalio (D-Wyo) was completing his final term. Pleading:

> "Do you want to send me back to Wyoming, after ten years as your friend and colleague, to face 2,000 unemployed people in Wheatland on account of a totally unjustified thing like this, the Endangered Species Act?", [13a]

Roncalio convinced the House to pass a bill exempting the Missouri Basin Power Project from all federal requirements. When the bill moved on to the Senate Conference Committee, it was altered substantially to exempt the project solely from the Endangered Species Act. Furthermore, this exemption was only to be valid if the newly-established Endangered Species Committee decides so after considering the issue "expeditiously."* [13a]

Litigation

Intervening groups would rather have avoided the time and expense involved in fighting the MBPP in court. Since informal negotiations had failed to remove the need for courtsuits, this approach remained the only alternative to having their concerns realized and acted upon. Using their only leverage -- NEPA and the Endangered Species Act -- the conservation groups and Nebraska took the MBPP to court.

The first lawsuit involving the Grayrocks Dam was filed in 1976 by Nebraska against the REA. [3] Nebraska alleged that the REA's loans to the MBPP were illegal on the grounds that the project had an inadequate EIS. Nebraska filed a second suit against the Army Corps alleging that the Corps had issued its 404 dredge-fill permit when the project, again, had an inadequate EIS. Nebraska asserted

---

* When the Endangered Species Act came up for extension in Congress in November, 1978, it was attacked as being inflexible. As a condition to extending the Act, Congress established the Endangered Species Committee. This committee is to review "irreconciliable conflicts" involving endangered species that are unable to be resolved through the Act's provisions. The committee is to grant exemptions for projects that otherwise fall under the Endangered Species Act "only if it concluded that the public interest is best served by completing the project, that no reasonable and prudent alternatives exist, and that the project's benefits clearly outweigh the benefits of any alternative courses of action which would conserve the species or its critical habitat." [10,14]

  Any settlement in the Grayrocks case must be conditioned on the approval of this committee. The Endangered Species Committee never ruled on this exemption. By the time the committee had its first meeting on January 23, 1979, an agreement between all parties in the Grayrocks conflict had been reached so that the exemption was a moot point. The committee then simply ratified this agreement, thereby exempting the project from the Endangered Species Act for as long as the agreement was upheld.

that the EIS was inadequate because it said "nothing" about impacts upon the state of Nebraska's irrigation and municipal water needs nor about the impacts upon the aquatic ecosystem along the North Platte River as it flows through Nebraska. [3] Several other lawsuits were filed by the conservation groups, again citing an inadequate EIS in addition to a failure to fulfill the requirements of the Endangered Species Act. [4]

All suits were consolidated and all plaintiffs and defendants to original suits were joined to the consolidated suit. As the lawsuit proceeded, some attempts were made by the two sides to negotiate but little progress resulted. [1,3] Both parties felt confident of winning the suit and negotiations therefore seemed unwarranted by both sides. Given the impasse, the court issued its ruling. The court enjoined the project from proceeding, the REA from issuing loan guarantees to the MBPP, and the Army Corps from issuing the 404 dredge-fill permit. [3]

It was at this point, Snyder notes, that "the real negotiations started!" [3]

Formal Negotiations

MBPP officials appealed the court's decision and felt confident the injunction would be reversed. Nevertheless, Edward Weinberg, attorney for the MBPP, noted that it was still in their best interest to proceed with negotiations, even given the "probable" court reversal. The appeal would take time; project officials estimated they would be in court a full year. They estimated further that they could lose close to $500 million if construction were delayed for this amount of time. The MBPP's immediate concern, therefore, was to settle differences as soon as possible so as to proceed with the halted construction. Reaching a quick settlement seemed to be the expedient approach given the time and money expected to be consumed by an appeal process. [5]

The conservation groups also agreed to negotiate even though it seemed that they had everything leaning in their favor. Turner (National Audubon Society) explains that they did not want to "win the lawsuit but lose the issue." His organization believes it is "better to resolve a conflict without a lawsuit." They saw in this conflict a potential for resolution and chose to negotiate rather than wait for the court appeal outcome. [4] Patrick Parenteau, attorney for the National Wildlife Federation, commented that it "is a good project from an environmental standpoint," and that the National Wildlife Federation (NWF) was not seeking to permanently stop its construction. Rather, they wanted to see some modifications to it such that the Whooping Crane would be protected. Parenteau does not believe that any of the intervenors were set on completely halting the

project. He asserts that intervenors wanted "accomodation" such that environmental concerns would be addressed sufficiently to protect the crane's critical habitat. [1]

The uncertain outcome of the Endangered Species Committee meeting on whether or not to exempt the project from the Endangered Species Act also undoubtedly influenced these groups to negotiate rather than prolong court battles. Neither group could feel confident about the committee's ruling since the committee had never met to resolve any issue.

The formal negotiations leading to a final settlement occurred during three meetings: one in Lincoln, Nebraska, in mid-October, 1978, and two in Cheyenne, Wyoming, on November 2-3, 1978. Snyder describes these negotiations as having "come about in a strange way." MBPP officials had maintained contact with REAN and other groups favoring the proposed plant and dam. While these people were not parties to any of the lawsuits, they stood to benefit by the project and were concerned about the outcome of the dispute. The MBPP sent these people as intermediaries to Wyoming and Nebraska's attorney generals to inquire whether or not they would be willing to negotiate now. Both states agreed, as did the conservation groups. [3]

Lincoln Meeting

The first meeting in Lincoln was more symbolic than a serious negotiating session. Patrick Parenteau believes that, to a large extent, the two states used these meetings for "political posturing"

purposes as elections were forthcoming and state water rights were at stake. [1] About 60 persons participated in the first meeting in Lincoln with the two governors serving as co-chairmen. The participants included representatives of all parties to the lawsuits, several Nebraska and Wyoming government officials, MBPP officials and representatives of the REAN. [8] In this meeting, the parties determined that it was possible for them to reach an agreement and that they should meet and formally negotiate later. They selected six persons to participate in these formal negotiations whom they felt reflected the divergent interests involved. These six were: Nebraska's attorney general, Nebraska's Director of Water Resources, Basin Electric's James Grahl, MBPP attorney Edward Weinberg, Patrick Parenteau of the National Wildlife Federation and David Pomerly of the Nebraska Wildlife Federation. They were instructed to immediately develop and distribute their "bottom-line proposals" which would form the basis for the negotiations. [8] Although no negotiations per se occurred in Lincoln, all parties seemed pleased with the progress that was made towards negotiation there.

Cheyenne Meeting

When the next meeting commenced a few weeks later in Cheyenne, the six participants were accompanied by their technical advisors and legal counsel. Immediately, participants realized that the size of the group was unwieldly and was leading to little progress. Thus, they devised a different approach. Advisors and counsel assembled in an adjacent room while the six representatives met as a closed

group to discuss the essence of their differences and where possible concessions could be made. Whenever one of the negotiators had a question he could simply leave the negotiations and consult with his experts. There was no mediator or arbiter presiding over these negotiations. Use of a third party was never actually considered by the participants. They felt negotiations could be successful without such outside help since all parties wanted the conflict to be resolved. [8]

At the end of two days of negotiations, the parties had agreed to a 21-point settlement. Thirty days later, a formal, binding agreement had been drawn together and signed by all parties.

The Settlement

Although the settlement has 21 points of agreement, these can be categorized into two general accords:

1 -- a $7.5 million trust fund for protection of the Whooping Crane, and

2 -- minimum streamflow levels that vary for different seasons during the year for the North Platte River.

Before the Wyoming negotiations, MBPP officials decided to offer $15 million to the intervening groups. [8] This money was to be used by the conservationists and Nebraska to purchase water rights to maintain whatever streamflow level was thought appropriate. Additionally, some money could be used to artificially protect the Whooping Crane's critical habitat. MBPP officials derived the $15 million value through calculations of how much they could afford to pay, how much they could potentially lose if a settlement was not reached and approximately what amount the concerned parties would need to satisfy their needs. [8] No one was able to recall the specific formula used to obtain this value, though.

The MBPP presented the $15 million offer to participants in the Cheyenne negotiations. The money was rejected for several reasons. Nebraska wanted a guaranteed streamflow through the state and did not feel assured by this offer that it would be obtained. Moreover, Nebraska officials viewed money offers as "very suspect." Snyder comments that Nebraska realized the negotiations were constantly in the public's eye and, as a result, it wanted to make sure that the "state of Nebraska was not given any money except legal fees."

Nebraska wanted to be sure that the money did not appear to be a "payoff to Nebraska." [3]

The conservation groups also wanted guaranteed minimum streamflows. They were unsure how successful maintaining specific streamflow levels could be through water rights purchases. Guaranteed streamflows would make their efforts to protect the Whooping Crane's habitat more likely to succeed.* [1,4]

When the $15 million offer was rejected, project officials met to develop their next offer. The second offer halved the money to $7.5 million and provided several water concessions. [8] Discussions involving the $7.5 million offer were not as directed as those occurring over water use. Since water levels were the major contention, the offer of money caught Nebraska and the conservation groups by surprise. [1,3] Never did they discuss the value of $7.5 million versus, for example, $7 million or $8 million.

---

* In Nebraska, as in several western states, water is allocated by the state to users only if it will be put to a "beneficial use." "Beneficial uses" include agriculture, mining, municipal water needs, recreation, and the maintenance and propagation of fish and wildlife. The intent behind the $15 million offer was that this money could be spent purchasing water rights and artificially protecting the Whooping Crane's habitat. It seems at face value that this would legitimately fall under the "maintenance and propagation of fish and wildlife" intention. There is a catch in western water law, though, which states that any "beneficial use" must entail "physical removal of the water from the stream." [11,12a,12b] The Wildlife Management Institute, a privately-funded scientific organization devoted to the restoration and improved management of wildlife, asserts that the only way money will be useful in boosting stream flows is if the negotiators can "change Nebraska state law." [7,11] The U.S. Fish and Wildlife Service believes that there are "ways to get around these restrictions." The fact that Nebraska was participating in the negotiations led participants to believe that there would be no problems with purchasing water rights to be left in the river. [4]

As a result, they never determined that $7.5 million was the appropriate amount of money to protect the Whooping Crane.

Both groups were hesitant to discuss receipt of money as part of any agreement. Nebraska feared that it would appear as though it was "selling out" to the utilities for money and thus not upholding the best interests of its citizens [3] The National Wildlife Federation did not feel it could fulfill its raison d'être without risking its reputation if it accepted money from the utilities. [1] Given these hesitations, participants began discussing alternative means of addressing the Whooping Crane's needs. They did not want to subject Nebraska and the conservation groups to public misconceptions. It was at this point that Patrick Parenteau devised the trust fund idea. [1] Paul Snyder emphasized that it was the development of this "independent" trust fund with a separate board of trustees that made the final settlement acceptable to Nebraska. [3]

This "change in name" of the $7.5 million offer assured that the money would actually be used for its designated purposes and thus removed appearances of misconduct by Nebraska or the conservation groups. The trust fund is established for perpetuity. Its yearly interest will be invested in protective measures for the Whooping Cranes and their habitat. [11] The settlement is a legally-binding contract, signed by all parties to the negotiations. It has a monitoring stipulation included to assure implementation of its provisions. [9]

Analysis

Several problems precluding the application of negotiations and compensation to the siting process became apparent in the Grayrocks case. These problems validate the hypotheses set forth in Chapter I and illuminate other obstacles not able to be predicted by Chapter I's theoretical presentation.

Prerequisites for Negotiation

The Grayrocks case illustrates the importance of parties to a conflict perceiving something to be gained or to be lost should negotiations not occur. While all parties did possess bargaining leverage as noted in the case presentation, it was not until the uncertainty posed by the Endangered Species Committee's eventual ruling that they perceived each could possibly be worse off without than with negotiations. They chose to negotiate when they realized that not negotiating could possibly lead to an outcome which would be less desirable.

The extent and success of negotiations with Grayrocks followed closely the shifting leverage by different parties throughout the process. It was not until all groups possessed this crucial "something to trade" that negotiated compromise was viewed to be in everyone's best interests. The utility's bargaining leverage included the fact that the project was going to increase the region's energy resources, provide irrigation water to Wyoming for agricultural expansion, provide jobs and economic development stimulus, and tax revenues to Platte County, Wyoming. Further, the utilities had money and expertise

resources which could be used as potential means of compensation. Nebraska and conservation groups also possessed bargaining leverage. They had a court victory leaning in their favor and felt confident the appeal would not overturn the earlier court decision. They had the potential absolute power of the Endangered Species Act, should the Endangered Species Committee rule in their favor. Further they could continue to impose costly delays which the MBPP wanted to avoid. Thus, in the Grayrocks Dam case, the conflict reached the point wherein all parties possessed the means and the desire to negotiate. Negotiations therefore occurred and were successful.

It is only obvious that the MBPP would rather not have had to negotiate. When faced with costly delays due to litigation by Nebraska and the conservation groups, they are pleased that the settlement allowed them to get on with their work at a lesser cost than would drawn-out court battles. Basin Electric Power Cooperative general counsel, William Wisdom, provides the following analogy of his company's reaction to the settlement:

> A young man, walking along a street in his hometown, encounters an elderly gentleman who is an old family friend. The young man asks congenially, "How are you enjoying your old age?", to which the elderly gentleman can do little more than reply, "When I think about the alternatives, just fine!" [8]

The MBPP would much rather not have to pay the $7.5 million nor concede to reduced water consumption, but, given the delays and costs inherent in other approaches to gaining approval to restart construction, the settlement was quite attractive.

Similarly, conservation groups viewed negotiations and a settlement

as a more desirable alternative to extended litigation. While it is true that these conservation groups, like the utilities, were uncertain about the Endangered Species Committee ruling, they also did not have the resources to continue in a court battle.

The Structure of the Siting Process

The Grayrocks Dam conflict also pointed to characteristics of the siting process, as currently structured, which encourage litigation and hinder negotiations. No framework exists in the siting process into which negotiations and compensation can easily be incorporated. Instead, concerned groups had to circumvent the process and undertake negotiations outside established channels. The siting process, with its specific requirements which do not include negotiations and compensation, directed all interests into adversarial positions wherein their strategic responses were dictated by what was acceptable in a court of law.

For example, Dr. Keith Harmon of the Wildlife Management Institute, commented on Nebraska's strategies before the Grayrocks formal negotiations:

> "The position of the state of Nebraska is clear. The Whooping Crane, on the state's part, was used as a vehicle to legally force the release of flows from the Grayrocks Project for use in Nebraska. That use will be for agricultural irrigation, not cranes, once it enters the state. During testimony on Grayrocks, the State conceded that Platte River flows had never been reserved for Whooping Cranes." [11]

Bob Turner noted that Nebraska was much more interested in water for irrigation purposes than to protect the endangered Whooping Crane.

He saw Nebraska's involvement as a bitter inter-state battle for water rights with Wyoming. He commented that the endangered species issue was a "convenient vehicle" for them to address their concerns as they had no other alternatives. Turner stressed that the Endangered Species Act was a "handle everyone could grasp," and they did. [4] Paul Snyder readily admits that Nebraska had "no force or legal standing to influence any decisions" in the Grayrocks case. All they could really do was present testimony at open hearings unless they addressed procedural issues via NEPA and the Endangered Species Act. [3] The latter approach was the one chosen as it held the most promise for getting their concerns realized and acted upon.

Perceptions of Negotiations & Compensation

The surprised reaction to and immediate rejection of the first $15 million offer illustrates that money offers are viewed with suspicion. While the water flow levels were also compensation to affected parties, this compensation was not monetary and was directed specifically at the major concern: minimum water flows in the North Platte River. The legitimacy of water level concessions was never questionned. Not until the $15 million was reduced to $7.5 million and labelled a "trust fund" instead of "money" was it accepted.

Paul Snyder emphasizes that the trust fund is "independent" and therefore "not a bribery." [3] A public figure, especially in this post-Watergate era, has much to lose if his constituency perceive his actions as illegal or unethical. Since negotiations and compensation offers such as these were seldom observed, Snyder logically feared

their legitimacy would be overrun with misconceptions and bribery charges by the public. Although the intent of the $7.5 million trust fund was clear, both Nebraska and the conservation groups feared that it would not also be clear to their constituencies. When this "unlabeled" money was given the title "trust fund," though, it was accepted more readily even though applied to the same needs and purposes; all that had changed was its name and assurances that it would be used for the specified purpose.

A Qualified Success

Negotiations succeeded in the Grayrocks case because they led to consensus by all parties. Two factors make this a qualified success, though. First, the negotiations were not perceived as appropriate nor as addressing the "real" issues by some participants. Second, while compensation was part of the final agreement, discussions did not center upon the compensation to be paid or whether or not the amount was correct. Instead, discussions focussed on whether or not the offer would be accepted by Nebraska and the conservation groups.

Negotiations are viewed as a qualified success because parties to the conflict are not in agreement that the nature of the outcome or the actual negotiations were meaningful to the issues of concern. The National Audubon Society feels the settlement is "excellent" because it is now forcing the utilities to pay "economically what it is costing" to construct this plant. Turner feels that the payment and concessions are "directed at the facility's environmental impacts" and therefore are legitimate compensation. He further emphasizes

that "it was not a bribery"; it "was the right thing for the utilities to do." [4]

While Nebraska's Paul Snyder simply comments that Nebraska "got what they wanted," [3] Basin Electric's general counsel Bill Wisdom believes that this settlement "didn't have a damn thing to do with the issues; all we did was buy a lawsuit." [8] Edward Weinberg, MBPP attorney, feels that the utilities got the "bum end" of the deal. He saw the negotiations as "the constructive thing to do" but the settlement as misdirected with the time, effort and concessions not meaningful to the real issues. [5]

Thus, while the negotiations can be labeled a success because they ended in a signed, binding agreement, this consensus does not also encompass the legitimacy of the negotiations which occurred nor the contents of discussions therein.

The second reason the success is a qualified one is that, while compensation was paid via water flow agreements and the trust fund, discussions failed to center on the exact value of the trust fund and whether or not this $7.5 million was the appropriate amount to be paid, not just the appropriate means of compensation to settle their differences. Discussions surrounding the water flow concessions were much more directed.

Summary

In summary, the Grayrocks case highlights several obstacles hindering the application of negotiations and compensation to the siting process. Knowledge of these problems will give direction to policy-makers intent on improving the siting process through use of these two tools. Most importantly, though, the Grayrocks case illustrates that compensation and negotiation can be used successfully.

Important points raised in the Grayrocks Dam conflict presentation and analysis include:

1 -- Before negotiations will proceed, parties to a conflict must possess "something to trade."

2 -- Further, before negotiations will proceed, parties to the conflict must perceive something to be gained via negotiations or, conversely, something to be lost should negotiations not occur.

3 -- The siting process, as structured, does not easily accomodate negotiations or compensation agreements.

4 -- Compensation offers, especially when taking the form of money, are viewed with suspicion and rejected. Parties to a conflict fear that such offers give appearances of being "bought off" or "selling out" to the developer.

5 -- Compensation must be directed at specific impacts and the amount and type of compensation must be specifically negotiated. Without these measures, compensation offers create confusion and are viewed as illegitimate.

6 -- Traditional expectations of the siting process do not include negotiations between affected parties. Instead, the process directs parties to the conflict into adversarial roles most often involving court battles.

CHAPTER III

THE PROPOSED MONTAGUE NUCLEAR POWER PLANT

Introduction

The Montague case, unlike the Grayrocks Dam conflict, does not proceed to completion. Total state and federal agency involvement never occurred. Conflicting interests were never able to resolve their differences. Negotiations did not succeed and offers of compensation were rejected. The utility postponed construction dates on three occasions for financial reasons. The process is currently at a standstill.

The Montague case highlights difficulties local communities encounter when facing a proposed energy facility within their jurisdiction. These communities possess little experience and few resources with which to evaluate and prepare for large scale developments. While negotiations with the developer towards compensation agreements could ease the burden and facilitate the siting process, such negotiations and agreements seldom occurred. Montague's failure to resolve differences between concerned groups lends insight into several obstacles hindering compensation and negotiations in siting facilities. Further, the Montague case illustrates the reaction which may be expected when traditional expectations and attitudes of the siting process are undermined when the concepts of negotiation and compensation are introduced.

Questions helpful to the Montague case analysis are:

-- What role does information, or the lack thereof, play in the process?

-- How does risk or uncertainty influence various actors in developing strategies in the process?

-- How was bargaining leverage distributed among different actors?

-- How were offers of compensation calculated and received?

-- How were opportunities for negotiation perceived?

-- How did traditional expectations of the siting process influence participant strategies?

Background

Montague, Massachusetts, is a town of 8600 located in Franklin County, 100 miles west of Boston. The Connecticut River flows along its western border and separates it from Greenfield, the county seat (figure 1).

In December, 1973, Northeast Utilities (NU) announced that Montague was their "preferred site for twin 1150 megawatt nuclear units," scheduled to begin operations in 1981 and 1983. This proposal brought confusion and divisiveness to Franklin County, especially when compensation or negotiation issues arose. Opposing views of the project, as well as the process by which it was to be sited, led to several factions within Montague. Those actively addressing NU's proposed facility were:

-- the town of Montague (Board of Selectmen, Planning Board, Airport Commission)

-- Franklin County (County Commission, County Planner)

-- towns in Franklin County (Wendell, Leverett)

-- the Massachusetts Energy Facility Siting Council

-- several intervening opposition groups

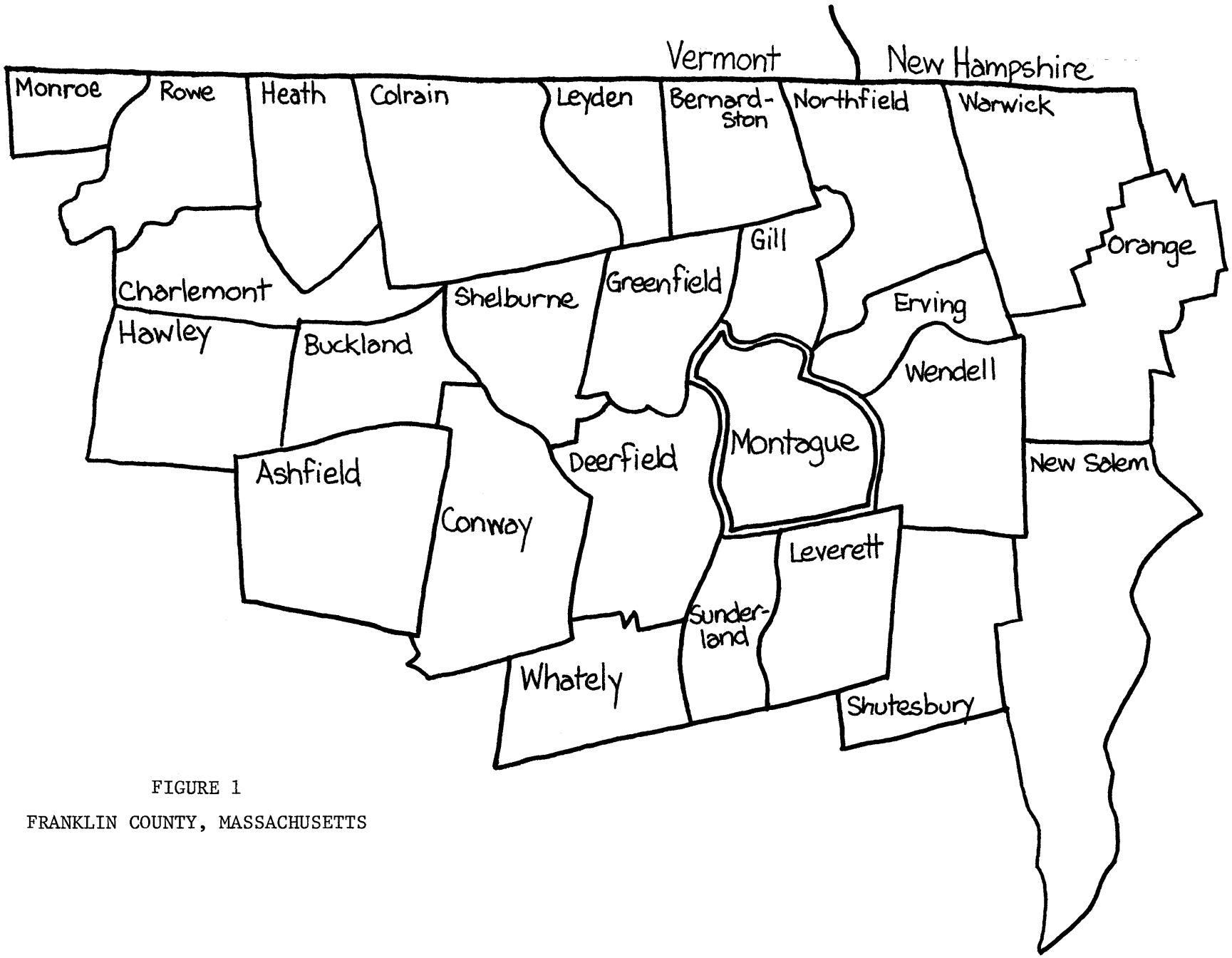


FIGURE 1

FRANKLIN COUNTY, MASSACHUSETTS

Town of Montague

Montague, like the county around it, has a high unemployment rate. Construction of NU's facility would provide employment opportunities for many Montague and Franklin County unemployed. Additionally, the facility would decrease Montague's tax rate significantly during the construction period. It is estimated that the property tax rate will drop by almost $100, yielding an eventual rate of just $17 in 1985. [17]

Northeast Utilities is not new to Montague. Its subsidiary, Western Massachusetts Electric Company (WMECo), has been present there for decades. It "sold" (for $1.00) one of its unused buildings to the town for use as a city hall, operates a hydroelectric facility there, and pays the majority of Montague's tax revenues. [3,10,17] Montague officials are therefore very familiar with NU officials and have developed a strong trust relationship with them. Selectmen Chairman William Powers classifies NU as a "friend and neighbor...not the big, bad wolf people make them out to be." [9]

Given this trust relationship, combined with the facility's tax benefits, Montague's Planning Board and Board of Selectmen strongly support NU's proposal. [8,9] A vote immediately following NU's announcement indicated 75% of Montague voters also supported the proposal.* [9]

The Board of Selectmen and Planning Board support is significant. The boards have permitting and rezoning power, both of which must be

---

* No more recent vote has been taken to reconfirm this support.

exercised before NU may construct and operate its units. Additionally, these boards have power over other appointed governing bodies in Montague.

A municipal airport is located in Turners Falls, a section of Montague near NU's proposed site. Since the facility includes two, 570-foot cooling towers, restrictions on airport use are required by the U.S. Nuclear Regulatory Commission (NRC), to prevent airplane accidents involving the towers. [12, p. 41] The Turners Falls Airport Commission must rule on NU's request for restrictions on aircraft size and takeoff patterns. Although a part of Montague's government, the commission's concerns lie not with the town's unemployment profile or coffers but instead with the continued operation and possible expansion of the Turners Falls Airport. [6] Therefore, the commissioners are at odds with the Board of Selectmen's support for the facility. The only leverage the Airport Commission has over NU in this siting process is their decision to approve or not approve NU's requested restrictions.

Franklin County

Twenty-six towns comprise rural Franklin County. It is governed by a three-member elected county commission with various boards and commissions serving other specific functions. New England states contain little or no unincorporated land and, as a result, county government is weak compared to town, city or state governments.

County Commissioners are unsure whether to support the plant or not. On the one hand, the tax benefits to be bestowed upon Montague warrant county support. On the other hand, other towns in Franklin County may bear a large portion of costs during plant construction

without also receiving a share of the tax revenue benefits. County Planner Fred Muehl believes it is unfortunate that the development is not a more labor-intensive one that could relieve some of the existing unemployment in the area, especially given the capital to be invested in the nuclear units. Additionally, although Fred Muehl is openly opposed to nuclear power, the county commission seems to be providing Muehl with substantial discretion in developing the county's response to the proposal. The only leverage the county has over the proposal is whether or not to abandon county roads through the site for NU's benefit. [3,7]

Franklin County Towns

Towns surrounding Montague realize they will be burdened with increasing traffic, home construction, service demands and school enrollments should the facility be constructed. Although they are unsure what the full extent of these impacts will be, Franklin County towns do realize they will not share in Montague's tax benefits in order to offset these costs. The Harbridge House report, The Social and Economic Impact of a Nuclear Power Plant Upon Montague, Massachusetts and the Surrounding Area (to be discussed in more detail later), summarized the predicament in which these towns find themselves:

> "Nearby towns, with no job or tax benefits to gain and possibly some small amount of population, jobs (and taxes) to lose may oppose the plant and subtly resent Montague...opposition to the plant may occur solely on the grounds that it represents a perceived safety risk that other towns are not willing to accept." [17, p. V-29]

This opposition is precisely what was observed around Montague. Two

towns in the county (Wendell and Leverett) have publicly voiced their opposition to the power plants. [7,13j] In public meetings, other towns have discussed possible steps to addressing their concerns in the Montague process (Northhampton and Northfield). [7] County towns have no official decision role in the siting process and thus have no substantive leverage over NU.

Massachusetts Energy Facility Siting Council

The Massachusetts Energy Facility Siting Council (MEFSC) was influential in advancing negotiations in Montague. Immediately following NU's announcement it began discussions with town and county representatives to help them evaluate their planning needs given NU's plans. The MEFSC encouraged both the town and county to develop socioeconomic studies indicating potential impacts from the plants. It further introduced the idea of a mitigation council* into the process proceedings. [3]

Established in 1973, the MEFSC has legal jurisdiction to review energy projects from a state-wide perspective. It is predominantly concerned with the cost, need and environmental impacts associated with the facility. The MEFSC believes that most power generated by the plants will actually be used in Connecticut, not western Massachusetts, and that other benefits from construction (jobs,

---

* This MEFSC idea would establish a mitigation council charged with assuring that costs associated with the plants' construction and operation will be borne by the "responsible" party. If adopted, the council would be attached as a licensing condition to NU's permits. The council will be discussed in more detail later in this paper.

economic stimulus) will be short-lived and will not offset the environmental, social and economic costs. The MEFSC favors smaller facilities than that proposed for Montague. [3]

Other Intervenors

While several groups arose in opposition to NU's proposed facility, none actively sought negotiations or compensation. For the most part, these groups can be classified as "absolutist"; they want no nuclear power plant sited in their town or county.

The Alternative Energy Coalition (AEC), New England Coalition Against Nuclear Pollution and Sam Lovejoy voiced opposition to NU's plans precisely because it was a proposed nuclear plant. Issues of negotiation and compensation are not relevant to their cause -- halting the further development of nuclear power. The AEC concentrated its efforts in educating county residents on alternatives available to nuclear power and hoped to sway public opinion in that direction. The New England Coalition Against Nuclear Pollution was actively opposing the proposed Seabrook, New Hampshire, nuclear plant and thus gave little more than their name in opposition to the Montague plants.

Sam Lovejoy, on the other hand, adopted a more active position against NU's Montague proposal. As a co-founder of the AEC and the Clamshell Alliance, and an official intervenor in the Montague siting process, Lovejoy devotes himself full-time to fighting nuclear power nationwide, with special emphasis on Montague, his home.

Although Lovejoy has no official decision role in the siting process, he has successfully hindered NU on several occasions. He

first knocked down NU's meteorological tower on the Montague Plains site. He was arrested after turning himself in to the police, charged with "willful and malicious intent to destroy property" and was acquitted on a technicality. By filing for official intervenor status with the NRC, he is able to participate in all formal steps in the siting process. He hopes to hinder NU's progress by raising procedural issues in this process. He has become a shareholder in Northeast Utilities to assure his access to reports and documents pertaining to NU operations and financial status. He successfully removed the Montague town coordinator from office with conflict of interest charges in the coordinator's association with NU. He also became actively involved in NU's attempts to obtain "grandfather status" to remove them from MEFSC jurisdiction. Further, Lovejoy consulted with the Federal Aviation Administration (FAA) and the Massachusetts Aeronautics Commission (MAC) when NU requested restrictions on airport use in Montague. Lovejoy charged that NU was acting improperly in requesting these restrictions and tried to convince Airport Commissioners not to consider the request. [5]

In other words, Sam Lovejoy is, and will continue to be, violently opposed to NU and its plans, using whatever tools he can acquire as leverage over the utility. He is <u>not</u> inclined to negotiate, nor to encourage negotiations by town or county officials. His position is made all too clear with his comment to the Congressional Subcommittee on Energy and the Environment:

> "...and I can tell you right now that that nuclear power plant will not be built in Montague, no way, no how, unless Sam Lovejoy is dead or in jail, and it is that simple..." [16]

Compensation & Negotiation in the Montague Process

Following its announcement, NU immediately commenced siting proceedings. It filed the appropriate dockets with the NRC, a needs forecast with the MEFSC (not without first questioning the MEFSC's jurisdiction over its facility) and also began formal communications with Montague and Franklin County governments. While NU prepared for the state and federal hearings and permitting decisions, it also began seeking those approvals needed at the local and county levels.

NU's proposal promised many benefits to Montague and the surrounding county but was not without its costs. While the power generated will serve New England generally through the NEPOOL grid (New England Power Pool*), the associated jobs, tax revenues and economic growth will be generated in the immediate area. Accompanying these economic benefits, the facility will bring increased home construction, impacts on local services (fire, police, schools) and increasing road maintenance needs from heavy traffic in addition to other infrastructural needs. [3,7,17] The fact that the plants are proposed

---

* NEPOOL is a regional organization designed to "enhance the reliability and improve the economics of bulk power supply." It was established in 1971 by New England's utilities to take advantage of the economies of scale inherent in regionwide planning and provision of power. The member utilities have physically interconnected their systems so as to coordinate planning and operations in servicing the entire New England region. [15]

to be nuclear powered also causes uneasiness among some local residents. The impact on airport operations and local aesthetics from the two 570-foot cooling towers as well as the plants' transmission lines are cause for concern. [1] Thus, Montague and Franklin County were individually faced with evaluating these potential benefits and relevant costs to their jurisdictions and deciding what position to adopt in response. With the costs and benefits discussed only in the above generalities, this evaluation proved difficult for both governments.

A Socioeconomic Study

Once NU announced its plans for the Montague units, MEFSC staffmembers met with county and town representatives to help them develop a response to the proposal and a strategy for action. It was evident from the start that neither the town nor the county were able to fully evaluate the implications of such a large facility on their own, but would need some outside resources and expertise. The MEFSC urged both governments to undertake a socioeconomic study of their respective jurisdictions to better understand the full extent of impacts and what preparation would be needed. [3] Montague, unable to afford such a study, presented this need to NU, and the utility readily agreed to provide funding to the town for the study. [9]

County Planner Muehl helped Montague's Planning Board choose five well-known research and consulting firms as potential candidates for the assignment. These were approved by NU, and the town then selected Harbridge House, Inc., of Boston, as its consultant. To maintain

objectivity in the study and to avoid any appearances of conflicting interests, NU allotted the town $38,000 to pay for the study and gave them full responsibility for it. [9,10] In November, 1974, The Social and Economic Impact of a Nuclear Power Plant Upon Montague, Massachusetts and the Surrounding Area was published. [17]

The Harbridge House study analyzed Montague's future both with and without the nuclear facility. Without the facility the town was predicted to "closely resemble its recent past and present" with little population increase, land-use change or economic growth. The study predicted a tax rate increase of approximately $60 by 1985. This increase gave Montague a total tax rate of $117 by 1985 as opposed to a predicted $13 rate should the plant be constructed. Additionally, with the facility, Montague would experience housing construction of 600-1000 net new units and a population increase of 25-40% over the ten year construction period to 1985. Accompanying this growth, new economic opportunities would occur. [17]

When the county requested a similar study from NU, the reaction was neither as prompt nor as receptive. Surrounding Franklin County communities fear that they will experience costs exceeding benefits; while some jobs and tax revenues will result, these will be minimal compared with those in Montague. Impacts, especially during the construction phase from traffic and public service use, are expected to outweigh these benefits. [7] Although the title on Montague's study implies that surrounding towns were included in the analysis, the study's contents seldom mention these other towns. NU was not willing to promote a county-wide study similar to that completed in Montague.

It is significant to note NU's reluctance to support a county study expected to portray its facility unfavorably, as opposed to its willingness to fund Montague's study, obviously a boost to its plans. This concession to Montague favorably reflected upon and stregthened its already strong reputation in town. NU saw no need to establish a strong reputation in the county, though, as it perceived little that the county could do to hinder its plans.

The Town Coordinator Position

As mentioned earlier, NU has developed a very favorable reputation in Montague. NU realized the magnitude of the proposed facility and the fact that Montague's part-time government would experience difficulties preparing for and managing town affairs with the changes it would bring. Montague selectmen expressed these concerns to the utility in informal discussions. As a result, NU volunteered $30,000 to fund a "town coordinator" position to help Montague with its planning and administrative matters. [9] Additionally, this coordinator position would assure the Harbridge House researchers a town representative with whom to maintain frequent contact.

Lucien Desbien, a local schoolteacher, was hired to fill this position in June, 1974. His responsibilities were to:

1 -- "Act as an administrative assistant to selectmen in the relationship between the town and NU.

2 -- "Keep selectmen informed of the utility's action and NU of Montague's needs during construction of the plants, as well as providing a liaison among utility, citizen, and official town groups on specific utility-related needs.

3 -- "To provide assistance to NU on its administrative responsibilities in meeting regulations and requirements of the town.

4 -- "To act as a 'guided' spokesman for the town in relations with appropriate state, federal and local agencies during the construction process.

5 -- "And provide selectmen with assistance on the day-to-day operations of their office as well as providing staff assistance in gaining grants and procurement assistance at state and federal levels." [13a]

After serving less than two years, Desbien was forced to vacate his post. Sam Lovejoy had brought suit against the town of Montague alleging a conflict of interest in relations between the coordinator and NU. Desbien had denied Lovejoy access to written communications between NU and Desbien which were legally public documents. The court concurred and Desbien was removed from office. [5]

This experience alarmed Montague officials. They wanted the facility to be successfully sited and would "do whatever they could" to assure this outcome. [9] They had originally perceived NU's funding of the town coordinator position as legitimate. The need for a full-time person in town was directly a result of NU's project. If this seemingly legitimate form of compensation by NU to Montague had turned sour, town officials wondered what was to prevent further apparently innocent exchanges from also involving a conflict. With this uncertainty, Montague officials adopted a very cautious stance in which negotiations, especially over compensation, were avoided whenever possible.

Industrial Land Purchase

With this fear of conflict of interest, town officials carried on relations with the utility more selectively. The next communication with NU occurred when Montague approached the utility to purchase a parcel of its surplus land adjacent to the town's industrial park. At the town meeting, purchase of sixty-four acres was approved and the necessary $40,000 appropriated. NU immediately offered to give the money back to the town but the Board of Selectmen refused, not wanting to be "beholden for nothing." Fearing the potential for bribery charges arising in such an exchange, the selectmen gave the offer little consideration. They did not want to appear, or actually be placed, in the position of "owing" the utility something at a later date for this "gift." Selectmen Chairman Powers admits that a feared conflict of interest in town-utility relations is what spurred the board's rejection of this offer; a fear undoubtedly supported by the town coordinator experience. [9]

Even with NU's emphasis that the offer was not a "gift," but instead money needed by the town in accomodating the facility, this offer was rejected. The Montague selectmen placed full support behind NU. They wanted the plant and its tax and economic benefits to become a part of their town. The selectmen did not want to risk losing the facility and its benefits and thus avoided any situations which might hinder NU's progress. Given the outcome of NU's seemingly innocent offer of the town coordinator position which they had accepted, the selectmen predictably rejected this new offer. NU, on the other hand, saw it to be in its

best interests to maintain their established rapport with town officials. Concessions to the town such as the industrial land were negligible within the $2.3 billion to be invested in the two nuclear units.

Road Abandonments

These early concessions by NU (socioeconomic study, coordinator, industrial land) indicated a desire both to maintain a favorable reputation in town and to facilitate plant construction. A favorable reputation with the county, though, seemed to be of less importance, especially given the county's seemingly minimal influence on the siting outcome. As becomes evident in the debate over road abandonments requested by NU, the county did have leverage over NU and, further, had every intention of using this leverage to its fullest potential.

Although the NRC and MEFSC site review with environmental impact hearings and evaluations were still being scheduled, NU began seeking local approvals, also needed for facility construction and operation. NU felt confident that state and federal permits would be forthcoming after these hearings. [10] Requesting various local actions posed problems, though, which had not been foreseen. The county had still not adopted a firm position on the proposal and did not intend to do so until it could feel confident with whatever decision was made. It still wanted a socioeconomic study done similar to Montague's. [7]

Both town and county roads pass through the Montague Plains site. The utility requested both governments to officially abandon these roads in order that their ownership would automatically revert to NU as the adjacent landowner. These roads were the only land parcels

not in NU's possession. Moreover, the county road abandonment decision was the only bargaining leverage it had over the utility (the town had further decisions regarding zoning changes, construction permits and service extensions). NU saw little reason to expect such a request to be rejected. The roads through the site were seldom used and road abandonment would remove any county or town responsibility for further maintaining them. It appeared to be an agreement in which all parties would assuredly benefit. [10]

In Montague, NU's request was discussed at a representative town meeting* where NU explained that the Nuclear Regulatory Commission requires utility control of the entire proposed site before licensing hearings may begin. [10] Sam Lovejoy disagreed with NU's statement. He claimed that the utility was "blackmailing" the town and further cautioned that road abandonment would give NU one of the largest "consolidated parcels" of land in Montague with essentially no requirements on its use. Lovejoy reminded the town that road abandonment would diminish their "already weak" bargaining position with the utility by losing one of their few leverage points. [13c]

Despite Lovejoy's warnings, the selectmen saw no need to negotiate. As an asset, the roads on the site meant little to the town. The selectmen saw no reason to risk losing the facility's fiscal benefits by turning down NU's request. Just before the town meeting approved the roads abandonment, Selectman Powers announced:

---

* Many New England communities have representative town meetings -- an annual convention where elected town representatives vote on all proposed appropriations and legislation facing the municipality.

"The issue is: Do we want the plant or do we not?" Later, Lovejoy told Powers that he was "doing the utility's work for them," to which Powers replied, "whatever we can do to promote the plant, I will do it." [13c,g] In September, 1978, Powers reaffirmed his support for the facility, commenting:

> "...and I have not changed my mind...and not because of monetary considerations on my part. The need for power has been proven* and as of now nuclear is the only proven way." [9]

While Montague saw no advantage in soliciting an exchange for this road ownership transfer, the county perceived and acted upon NU's request much differently. The county was more inclined to negotiate the abandonment and much less inclined to freely dispose of the roads than was the town. Speaking for the county commission, Fred Muehl comments that these roads are public property and it is therefore unwise to abandon them for a private purpose without compensation. He emphasizes that the county is more than willing to discuss the issue with NU but that they are not going to "roll over and die" like Montague. He believes that the county sees its appropriate response to be "what have you got to trade?" such that some substantive discussions occur between the county and the utility. [7]

The county has several concessions in mind when it mentions "compensation" to the utility. It wants "NU to agree to...offsite

---

* Hearings verifying need have not been held yet by the NRC and MEFSC in the Montague process.

monitoring, an evacuation plan, choosing towers lower than the 570-foot towers originally announced and a study of the social and economic impact on the rest of the county, not Montague alone." Additionally, Commission Chairman Thomas Merrigan states that, "there may be others, too, but the more we come to agreement on, the more costly time we will save at hearings later." [13h]

The county is wary about relinquishing their little leverage over NU too early in the siting process, thereby losing any future bargaining potential. Muehl calls NU's approach to obtaining road abandonment a "class piece of hijacking strategy" given that it is the county's only decision in the process. [7]

NU seems confused by the county's reaction to a request traditionally viewed as non-controversial. It fails to comprehend the county's concerns in holding on to the roads until concessions are discussed and assured. NU quieries whether "anyone, anywhere has had to pay for a county road abandonment?" [2] No further discussion on county road abandonment is occurring. Muehl believes that NU knows what it must do to gain the roads. On the other side of the river in Montague, Selectman Powers is charging the county commissioners with holding the roads "hostage" in the siting process. [9]

Turners Falls Airport Restrictions

Confusion was mounting in Montague. County road abandonment seemed unlikely since discussions between NU and the county were at an impasse. No one seemed able to understand how the town should deal with the utility and respond to its requests. Although compensation offers by NU seemed legitimate when specifically addressing impacts imposed by NU, the town coordinator conflict-of-interest charge surprised Montague officials. Furthermore, both the road abandonment conflict and the industrial land transaction indicated their strong desire for the facility. The Selectmen's full support of NU's proposal resulted in their continual rejection of potential compensation.

With the county road abandonment issue still unresolved, NU turned its efforts to obtaining required airport restrictions from the Turners Falls Airport Commission. The proposed facility included two 570-foot cooling towers. These cooling towers are designed to withstand the impact of a 15,000 pound aircraft without producing a "criteria accident." (An accident which results in radioactive exposure exceeding NRC guidelines.) The cooling tower design made two restrictions on airport use necessary so as to preclude any "criteria accidents" from occurring. The first restriction requested was logically that no aircraft exceeding 15,000 pounds be allowed to land or take off from the airport. The second was that future takeoffs use a right-hand turn pattern instead of the conventional left-hand pattern. [12,13c]

NU presented this request before the November, 1975, airport commission meeting and the commisssion agreed to discuss and vote on

it at their next meeting in December, 1975. At that time, the airport commission's three members were Alfred Lucas, William Powers (no relation to the Board of Selectmen chairman), and Winthrop Cummings. [6]

Alfred Lucas, airport commission chairman, classifies himself as a "firm believer in negotiation." Accordingly, he sought discussions over compensation with the utility before considering the requested restrictions. As Lucas perceived it, NU was "taking our air space" and should pay for it. He did not believe that the town or the airport commission "owed" the utility such restrictions, nor that they should just be given away. Since no offer from NU appeared to be forthcoming, the restrictions were denied in December, 1975, by a 2-1 vote. Cummings was the lone commissioner supporting the restrictions. [6]

Two years later, in April, 1977, NU reapplied for the restrictions. No action was taken and, in late June, the Greenfield Recorder reported that NU had offered the commission $35,000 for the restrictions required by the NRC. Airport Commission Clerk George Schacht, told the paper that "the figure was thrown on the table" at the April meeting and was "footballed around" but never with any "legitimate bargaining." [13d] This sudden surfacing of the offer came two months after it had allegedly been made and one month after NU had supposedly withdrawn it.

According to Lucas, this figure does not appear in the minutes of the meeting and, had it been raised, that it was probably in a purely hypothetical context. Lucas further notes that in conversations

with airport manager and commission clerk George Schacht, and others at the airport, a figure of $400,000 had been derived as an acceptable amount for granting the restrictions. This amount would allow the airport to construct a new cross-wind runway across the north-south runway currently used. This figure was never discussed with either the commission or the utility, though. [6] MEFSC staffmember Mary Beth Gentleman believes that the source of the $35,000 figure was a recently published master plan for the airport, showing that airport expansion could occur with state and federal funds supplementing local funds on a share basis. $35,000 would be Montague's approximate share. [3]

The selectmen were outraged by the alleged utility offer to the commission. They publicly renounced the commission for "putting the arm" on NU, and requested NU to withdraw its offer. NU denied ever having made it. [13d] The selectmen saw no reason for the utility to pay any amount to the airport commission, perceiving that it was probably not going to expand anyway and that the restrictions were of little consequence to its daily or projected operations. [9] Selectman Waidlich commented that since NU has provided almost half of Montague's revenue for so many years, compensation for such restrictions "is not appropriate" at this time. [13f] Selectman Powers agreed, claiming they could approach the utility later with specific concerns and negotiate then. Schacht noted that this was a "nice premise" but that the town should "not give anything away." Powers replied that "you're blackmailing the utility," to which Schacht retorted, "No. It's selling a valuable product." [13d]

The Selectmen perceived the commission's consideration of this offer as an attempt to block construction of the plant. The Board emphasized that they had not used such "ballbat tactics" when giving the road through Montague Plains to the utility. Selectman Chairman Powers addressed the commission, commenting that:

> "We [the Board] have to decide whether we're going to let you block the plant." [13d]

Commission Chairman Lucas replied that the commissioners "are not opponents of nuclear power, only advocates of aviation." [13d] By this point, though, NU had withdrawn its request for the airport restrictions. Airport Commissioner Cummings commented that:

> "One gets the feeling the deal is being made outside the commission, because they're [NU] avoiding us. They must feel they can get the restrictions elsewhere." [13d]

Cummings' observation perhaps held more truth than he realized, for selectmen began exploring the possibility of granting NU the restrictions in a town meeting. The Selectmen felt confident that Montague residents would support granting the two restrictions "based upon previous actions in favor of the utility." [9] This approach was never advanced, though, as the Greenfield Recorder at that point published in an editorial:

> "The selectmen have the authority to clear this up quickly. They appoint the three port commissioners. One has resigned (Powers) and one is serving after expiration of his term (Lucas). Northeast's mammoth complex project deserves clear policy-making. The Montague selectmen would do well to announce their policy and then see that all areas of government under their authority follow it." [13e]

Selectman Powers concurred, commenting that the surest way to alleviate this conflict would be by the selectmen reappointing people to the

commission who "thought they way they did." [9]

Soon afterward, the selectmen appointed Warren LeMon to the commission seat vacated by Powers' resignation. LeMon publicly supported the nuclear plants. Lucas was reappointed with the understanding that he would adopt the same posture as town officials on this issue. [6]

After this changeover in commission membership (and presumably ideology) NU's request for airport restrictions again went officially before the commission. They voted 3-0 to discuss it at their next meeting in November. This public hearing was large, with most persons attending opposed to the restrictions. [5] Unexpectedly, a Federal Aviation Administration representative appeared and indicated that impacts associated with these restrictions must be determined before the restrictions may be granted. Without such analysis, and without approval of the Massachusetts Aeronautics Commission, federal funds for the airport could be jeopardized. [5] At this meeting, Schacht proposed that the town sell the airport to NU for $282,000, but Commissioners LeMon and Cummings ignored this proposal and voted 2-0 to grant the restrictions. After the vote, Schacht exclaimed: "You just gave them away. You just sold the town out. Never once did you negotiate." [13i] Lucas missed this meeting as he was in Maine on his yearly hunting trip. He considered cancelling this trip but decided otherwise for he felt confident the vote was "destined to turn out that way." He realized his presence at this meeting would not change the decision outcome. [6]

A Mitigation Council

By this point, it was becoming evident that a new approach was needed to address needs in Montague and the surrounding county in a manner that would not so totally confuse and frustrate officials, intervenors and the utility. Since negotiations were constantly stifled and compensation viewed clearly with suspicion, an alternative was needed that could structure and guide further attempts at conflict resolution.

The MEFSC realized the county's difficulties in determining what impacts to expect and thus developing a response to NU's proposal. They further realized the town's reluctance to even pursue or discuss these matters. Thus, the MEFSC began encouraging both governments to consider establishing a mitigation council as a provision to NU's final licensing. This council would allocate responsibility to address specific impacts as they arise during the four project phases: pre-construction, construction, post-construction and entombment. [3] The mitigation council idea was never fully discussed or developed before NU postponed construction dates for its facility for a third time. The following issues remain unresolved:

-- Who should serve on the council?

-- What does "mitigating an impact" actually mean to them?

-- How should responsibility for impacts be allocated?

-- What impacts will qualify for mitigation and who makes this decision?

Selectman Powers sees these issues as delineating the "gray areas" of uncertainty surrounding the proposal. He readily agrees that

advantages exist in having criteria established which indicate where responsibilities lie when problems arise. [9] The county hopes this council would specifically place responsibility upon the utility for problems such as traffic congestion control, road repairs, service burdens, court costs and security costs. [7]

NU agrees that responsibility should be allocated for mitigating impacts but never fully accepted (or rejected) the mitigation council idea; it would rather deal directly with individual towns as problems arise than through a council. [10] County commissioners feel, since Franklin County governments are part-time, that direct communication with NU when impacts arise will be less likely to occur than would action by a mitigation council established precisely for that purpose. [3,4,7] Montague selectmen, on the other hand, are indifferent. [9]

The MEFSC hopes that a mitigation council would assuage fears that the utility and other parties will not accept responsibility for impacts. Further, it hopes that such a council would reduce time-consuming attempts in the siting process to outline all possible impacts when so many uncertainties are involved. The MEFSC also hopes that the mitigation council would provide an incentive for the utility to further minimize impacts. [3] Unfortunately, the mitigation council would not illuminate nor compensate for the less-quantifiable social costs such as aesthetic impact of the cooling towers or uneasiness accompanying such close proximity to a nuclear plant.

Should the mitigation council idea become more fully developed and accepted by the town and county, the MEFSC and NRC must approve it before it is an actual licensing condition.

Analysis

Bargaining Leverage

The Grayrocks Dam case success is contrasted by Montague's failure. Although Montague selectmen did possess bargaining leverage over NU, selectmen did not perceive any advantage in negotiating. Negotiations did not promise a "better" outcome for them. Instead, negotiations were viewed as an irrational risk to this desired economic stimulus for their town. Benefits from NU's facility were clearly perceived as outweighing costs. The observed, and rationally expected position, therefore, was for these selectmen not only to not negotiate, but to further prevent other parties from doing so and thereby risking Montague's facility. Sam Lovejoy's warning about their "already weak" bargaining leverage was understandably ignored.

Perceptions of Negotiations & Compensation

Adverse perceptions of negotiations and compensation as arising out of "back room deals" were perpetuated in Montague when the town was charged with a conflict of interest in NU's town coordinator association. Although NU's original offer to fund this position and thus supplement Montague's unprepared planning resources seemed legitimate, allegations upheld in court indicated otherwise. This experience strengthened the Selectmen's attitudes in questioning compensation and negotiation.

The Structure of the Siting Process

The structure of the siting process, combined with the apparent adverse perceptions of compensation and negotiation, helped to preclude their use. Without distinguishing between the two terms, Montague Selectman Walter Garbiel stated his position on the airport restrictions request by NU:

> "I might be willing to negotiate but I will draw the line at bargaining." [13d]

His comment suggests apprehension about the legitimacy of negotiations and compensation agreements as well as a misunderstanding of the meaning of negotiation. In Montague generally, negotiations posed an often confusing and frustrating stumbling block for the town, utility and intervenors. Agreement was difficult to achieve as to when compensation was justified, what form the compensation should take and the terms under which negotiation over compensation should occur. As no established framework existed in the siting process for guiding and legitimizing negotiations, discussions most often centered on the question of means rather than the much disputed ends.

Traditional Expectations

Traditional expectations of the siting process also posed an obstacle for negotiations and compensation. Never before have negotiations been in the forefront of community-developer relations although, rationally, there is no reason for them not to be. Montague selectmen do not understand why other towns in the county are suddenly so concerned with the distribution of tax benefits and construction impacts associated with the facility. Powers comments that Montague

observed "huge benefits go to Erving in particular, and Northfield from reservoir pumped storage facilities but didn't take on the same attitude." [9] Similarly, NU was caught by surprise when payment for road abandonment and airport restrictions was requested. Never before have they encountered such suggestions.

Negotiations over Compensation

Compensation, by definition, is used to repay specific costs imposed. If perceived as a gift or a reward for cooperation, accusations of "selling out" or being "bought off" acquire a certain validity. If compensation is not directed at a specific cost, it is easy to understand why adverse perceptions arise. Another problem utilities may encounter when compensation offers are undirected and not determined through negotiations, is a ratchet effect. In later siting attempts, communities will expect "at least as much" as was "given" to the previous site community.

The Greenfield Recorder noted Montague's inclinations in an editorial:

> "Perhaps under the influence of then new member William J. Powers, the selectmen appeared to adopt a more acceptable attitude: The town would do what it could to help Northeast but it would not accept money, unless, in fact, impact or damages required municipal expense. When soon after Northeast asked to be given the town's rights to undeveloped roads through the sandy scrub-brush-covered plains, the selectmen proposed that town meeting members do so without charge. Some members wanted to charge Northeast but the majority agreed with the selectmen." [13e]

Requesting compensation only for those impacts requiring municipal

expense apparently became the town's policy. Given Montague's support for the facility, this was the rational position to adopt.

For example, in Montague's industrial land purchase from NU, the selectmen faced this dilemma. NU justified its offer to return the purchase price to the town, stating that the proposed facility would no doubt impose various costs on the town. This money, if given back to Montague, could be used to overcome these costs. Because the offer was not directed at specific impacts, though, selectmen viewed the offer as a gift and rejected it with little discussion.

Summary

In summary, the Montague case illustrates several obstacles precluding compensation and negotiation in the siting process:

1 -- Parties to a conflict must possess "something to trade" as well as "something to gain" in negotiations before negotiations will occur.

2 -- Sufficient information is necessary before concerned groups can adopt a position on a proposal and participate in negotiations concerning the proposal.

3 -- Compensation offers are viewed as suspect; as entailing a conflict of interest.

4 -- Negotiations are not completely understood. Bargaining is viewed as illegitimate.

5 -- The balance of power in the siting process lies with the government officials where it has traditionally been. These officials see it to be their responsibility to act in the public's interest and do not view negotiations involving other interests as appropriate.

6 -- As structured, the siting process does not accomodate and guide negotiations.

7 -- Absolutist groups do not view negotiations as a rational strategy to adopt.

CHAPTER IV

CONCLUSIONS

Obstacles to Negotiations & Compensation

The case presentations and analyses in Chapters II and III indicate several reasons why compensation and negotiation, while apparently desirable additions to the siting process, are not frequently observed. Both cases illustrate, to varying degrees, the problems hypothesized in Chapter I. Further, the Montague and Grayrocks cases reveal several additional difficulties not apparent when discussing compensation and negotiation from the theoretical perspective of Chapter I.

The Structure of the Siting Process

First, the siting process contains no established network within which communication may occur between the developer and those groups opposed to a particular project. The developer is given the overwhelming responsibility of acting in the public interest by minimizing costs -- including social costs -- without being provided any incentive to actually do so. Equally as overwhelming, government officials are charged with assuring that the developer has fulfilled this responsibility. Hearings and permitting proceedings, combined with the utility's proposal docket reviews, supposedly provide decision-makers with enough relevant information to make this determination. But, the siting process has apparently failed to address all interests at stake in various siting proposals. It leaves many parties unrepresented and with no means to effectively represent themselves.

The structure of the current siting process encourages concerned groups to adopt, as their only viable option, adversarial responses to proposed facilities. While the process allows such groups to intervene in formal permitting and licensing hearings involving federal, state and local officials, intervenor status does not allow these groups any participation in official decision-making. Beyond surfacing concerns and potentially influencing official decision-makers, the intervenor position contains little leverage with which to attain developer action on their needs. This lack of early involvement and unintentional encouragement of adversarial positions leads to distrust instead of trust and cooperation among various parties to the conflict.

Administrative Difficulties

The second problem area involves difficulties encountered when parties actually do consider using negotiations and including compensation as part of their proposal evaluations. As evidenced in the two cases, people are unclear on how to proceed with negotiations, when negotiations are appropriate, how to calculate the appropriate amount as well as type of compensation, or what form agreements should take. Often, people do not possess the essential "something to trade" such that negotiations may be meaningfully pursued. Further, even should this bargaining leverage be possessed by all parties, it is possible that some parties will still perceive greater advantages in alternate approaches (ie. litigation). When alternate approaches lead to outcomes satisfying <u>their</u> interests "better," concerned parties will not pursue

negotiations.

Traditional Expectations

The third problem area is caused by traditional expectations of the siting process. Compensation and negotiation have seldom been applied to siting energy facilities. As a result, their use is not naturally considered as an option by government officials, utilities or individuals concerned about a specific proposal.

Utilities are accustomed to proposing their facilities, acquiring local, state and federal permits and approvals, employing whatever public involvement is required and, finally, proceeding with facility construction and operation. Historically, this approach has been successful from their perspective. Thus, negotiations are seldom considered and rationally not advanced.

Government officials and regulators are accustomed to fulfilling their responsibilities by enforcing established rules and regulations, not negotiating over them. Further, their roles, as well as the rules and regulations they enforce, are assumed to be in the "public interest." Further involvement of outside groups seems a redundant addition to their efforts. In theory, negotiations seem unnecessary given the intent behind the established rules and regulations.

Community groups and individuals are involved in the process through public hearings. Seldom do they have a more direct communication with utility officials than through their elected government representatives. As opposition by such groups increased without a formal means for considering and acting upon the concerns underlying the opposition,

litigation was advanced. Now, litigation has become the approach concerned groups are accustomed to adopting and seeing adopted.

Actor Perceptions and Attitudes

The fourth problem area arises because people view compensation and negotiation with suspicion. Compensation to many people implies being "bribed," "bought off" or "selling out" to the developer. Negotiations imply "back room deals" and are therefore considered inappropriate. Negotiations are often not deemed more desirable than litigation. Oftentimes, this litigation is the approach an organization is accustomed to pursuing and which has proven successful in the past. Sierra Club President Theodore Snyder, explains that his inclination "is to be more combative, to adhere to our principles longer, and to resist giving up anything in a compromise until all other efforts to achieve our goals have been exhausted." Moreover, he comments that "environmental litigation certainly has achieved many gains for us and is extremely important...it's an important part of our program." [4] Negotiations and compensation agreements are thus viewed frequently as a second-best approach to advancing interest groups' concerns.

Other Problem Areas

This paper revealed two additional obstacles hindering application of compensation and negotiation to the energy facility siting process.

Mancur Olson's "logic of collective action" [3] explains why individuals often do not actively pursue an end which benefits them to a small extent but society greatly. Compensation and negotiation will do

little to change the incentive structure causing many people affected by a project to remain uninvolved. Thus, their costs and benefits and concerns will remain unaccounted and unconsidered in project evaluations.

Further, compensation and negotiation do not address the concerns of those groups adopting "absolutist" positions. Groups opposed to a facility on ideological grounds will continue to be opposed with or without compensation or negotiation as part of the siting process.

Research into these two areas is needed before either may be more fully understood and possible strategies developed to address them. This thesis yields little insight into the potential resolution of these two difficulties.

Steps Toward Compensation & Negotiation In the Energy Facility Siting Process

Compensation and negotiation are new concepts to energy facility siting. Before they may be effectively applied to the siting process, those difficulties evidenced in the two cases must first be overcome. While further analysis of siting problems needs to occur before specific changes may be recommended, this presentation indicates several initial steps deserving consideration. General steps directed specifically at shortcomings observed in the current siting process, will be presented below.

The Structure of the Siting Process

Involve those to be affected by a proposed facility as early as possible in facility planning and the siting process. Early involvement allows concerned parties, government officials and utilities to realize the full range of costs and benefits as well as alternatives to proposals sooner in facility planning. Utilities will be better able to accomodate these concerns in their planning and accounting if the concerns surface earlier than in the current process. Consensus building steps in the process may encourage various groups to work together in evaluating tradeoffs and developing the final proposal.

Administrative Difficulties

Establish guidelines for using compensation and negotiation. These guidelines would accompany structural changes in the siting process and should clearly outline:

-- how to structure and organize negotiations with consideration to circumstances that vary among siting cases

-- how negotiations should proceed

-- who participates in the negotiations

-- how to determine the appropriate amount and type of compensation

-- what role formal governments should play in negotiations and compensation agreements

-- who should initiate and oversee or mediate the negotiations if necessary

-- how information can be used and disseminated earlier in the siting process

-- how to allocate bargaining leverage among parties perceived to have legitimate interests at stake in a particular proposal

-- what form a final compensation agreement should take

Traditional Expectations

Traditional expectations of the siting process that exclude negotiation and compensation can only be overcome through structural and administrative changes to the current process. When structural flaws impeding negotiations are offset, and when guidelines are established directing the effective use of both negotiations and compensation, then these traditional expectations should be undermined.

Actor Perceptions & Attitudes

Problems involving the legitimacy of negotiations and compensation agreements will be addressed when guidelines are established clarifying and encouraging their use. Additionally, structural changes incorporating negotiations into the process, should offset current misunderstandings. Any official recognition and acceptance of compensation and

negotiation (ie. guidelines or structural changes) should help to legitimize both compensation and negotiation.

Concluding Comment

The above steps will not assure the effective use of compensation and negotiation in the energy facility siting process. Instead, these steps should guide further analysis into current siting problems and their potential resolution. Additionally, these steps may allow other problems to surface that were not realized in the two case analyses in this paper. The implications of various problems and alternative solutions should be understood and addressed in a coordinated manner when developing new policies for energy facility siting.

The Prospects for Compensation & Negotiation

Recent legislation and court cases give bargaining leverage to community and environmental groups choosing to intervene in the siting process. As a result, these groups have become more influential in the decisions of traditional economic interests. The current siting process must be adjusted to accomodate the broader interests and influence of these people. Negotiations and compensation agreements are potential additions to the siting process which may serve this need. While several obstacles do hinder their use, changes to the siting process should be able to overcome these and encourage negotiations and compensation to occur.

Although advances must still be made, negotiations and compensation are now viewed with greater legitimacy than before. As became clear in the Grayrocks case, attitudes towards negotiation and compensation are changing. Further, these concepts are becoming accepted beyond individual case levels and into the policy levels of utility and special interest group leadership. Richard Swisher, a Tennessee Valley Authority (TVA) socioeconomic impact mitigation program representative, describes TVA's new attitude toward compensation for energy development impacts, one much different from that previously advanced by TVA:

> "Impact assistance programs that attempt to mitigate the negative effects of rapid energy development should be looked on as part of the cost of the project." [2]

Similarly, at a recent conference on environmental mediation, Michael McCloskey, executive director of the Sierra Club, emphasized the need for "direct negotiation between adversaries" to overcome the

polarization of traditionally opposed groups. He believes these groups have considerable common ground between them that should be realized and pursued. [1]

These changing attitudes towards compensation and negotiation, combined with the realization that alternatives to the current siting process are in order, will promote the increased application of compensation and negotiation in the future. Should it be decided in formal policy arenas that incorporating compensation and negotiation into the facility siting process is indeed desired, then the obstacles outlined here must first be overcome.

REFERENCES

Chapter I -- Energy Facility Siting: The Problem and a Response to it

[1] Baldwin, Pamela; Environmental Mediation: An Effective Alternative? A Report of a Conference held in Reston, Virginia, January 11-13, 1978; RESOLVE, Center for Environmental Conflict Resolution; Palo Alto, California; April 1978.

[2] Coase, R.H.; "The Problem of Social Cost"; The Journal of Law and Economics, Volume III, October 1960.

[3] Gladwin, Thomas N.; "The Management of Environmental Conflict: A Survey of Research Approaches and Priorities"; Presented at the Reston, Virginia Conference on Environmental Mediation, January 1978.

[4] Michelman, Frank I., "Property, Utility, and Fairness: Comments on the Ethical Foundations of 'Just Compensation' Law," Harvard Law Review, Volume 80, 1967.

[5] Nash, Manning; Primitive and Peasant Economic Systems, Chandler Publishing Co., Scranton, Pennsylvania, 1966.

[6] Olson, Mancur; The Logic of Collective Action (second edition), Harvard University Press, Cambridge, Massachusetts, 1971.

[7] O'Hare, Michael, "Not on My Block, You Don't -- Facility Siting and the Strategic Importance of Compensation," Public Policy, Volume 25, Number 4, 1977.

[8] Pattison, Malka L. and Philip A. Marcus; "Communities and Energy Developers Can Work Together"; Planning, January 1979.

[9] Rivkin, Malcolm D., "Negotiated Development: A Breakthrough in Environmental Controversies," The Conservation Foundation, Washington, D.C., 1977.

[10] Sanderson, Debra R., "Rationales for Compensation in Energy Facility Siting Processes," Energy Impacts Project, Laboratory of Architecture and Planning, Massachusetts Institute of Technology, Technical Paper No. 11, June 1979.

[11] Schelling, Thomas C., The Strategy of Conflict, Oxford University Press, 1971.

[12] Schultze, Charles L., The Public Use of Private Interest, The Brookings Institution, Washington, D.C., 1977.

Chapter I Continued:

[13] Weinstein, Alan C., "Legal Barriers to Energy Facility Development," Energy Impacts Project, Laboratory of Architecture and Planning, Massachusetts Institute of Technology, Technical Paper No. 14, June 1979.

[14] Wessel, Milton R., The Rule of Reason: A New Approach to Corporate Litigation, Addison-Wesley Publishing Company, 1976.

Chapter II -- The Grayrocks Dam Conflict

Phone Interviews:

[1] Mr. Patrick Parenteau, Attorney, National Wildlife Federation, Washington, D.C., December 19, 1978 and January 26, 1979.

[2] Mr. Michael Reilly, Legal Counsel, U.S. Army Corps of Engineers, Omaha, Nebraska, March 5, 1979.

[3] Mr. Paul W. Snyder, Assistant Attorney General, State of Nebraska, Lincoln, Nebraska, March 13, 1979.

[4] Mr. Robert Turner, Wyoming Regional Representative, National Audubon Society, Sheridan, Wyoming, March 13, 1979.

[5] Mr. Edward Weinberg, Attorney, Missouri Basin Power Project, Washington, D.C., March 8, 1979.

[6] Mr. David Westly, U.S. Fish & Wildlife Service, Office of Endangered Species, Arlington, Virginia, March 16, 1979.

[7] Mr. Lonnie L. Williamson, Secretary, Wildlife Management Institute, Washington, D.C., March 13, 1979.

[8] Mr. William Wisdom, General Counsel, Basin Electric Power Cooperative, Bismarck, North Dakota, March 9, 1979.

Other References:

[9] Agreement of Settlement and Compromise, Basin Electric Power Cooperative, et.al., December 4, 1978.

[10] Audubon Magazine, "Perspective -- The God Committee," by Robert Cahn, May, 1979, Volume 81, Number 3, page 10.

[11] Outdoor News Bulletin, Wildlife Management Institute, "Dam Settlement Leaves Whoopers in Jeopardy," February 9, 1979, Volume 33, Number 3, pages 1-3.

[12] Sierra, The Sierra Club Bulletin

(a) Calkin, Brant, "An Archaic Quirk of Western Water Law," February/March 1978, Volume 63, Number 2, page 31.

(b) Fischer, Hank, "Montana's Yellowstone River -- Who Gets the Water?", July/August 1978, Volume 63, Number 5, pages 13-15.

(c) Hamilton, Bruce, "The Whooping Crane: A Success Story," May/June 1979, Volume 64, Number 3, page 56.

Chapter II Continued:

[13] The Washington Post

(a) "Rare Whooping Crane vs. Western Power Project," November 27, 1978, pages A1, A7.

(b) "Whooping Crane Safety Promised, Dam Fight Ends," November 28, 1978.

(c) "Saving a Place for Cranes," Editorial, November 29, 1978.

[14] Yaffee, Steven L., "Prohibitive Policies and the Endangered Species Act," Unpublished Ph.D. Dissertation, MIT Department of Urban Studies and Planning, Cambridge, Massachusetts, May 1979.

Chapter III -- The Proposed Montague Nuclear Power Plant

Interviews:

[1] Raymond and Lorna Coppinger, Chestnut Hill Landowners' Association, March 21, 1978.

[2] Mr. Bernard Fox, Project Manager, Northeast Utilities' Montague Nuclear Power Station, written correspondence, August 31, 1978.

[3] Ms. Mary Beth Gentleman, Massachusetts Energy Facility Siting Council Staff, February 21, 1978, April 20, 1978 and September 7, 1978.

[4] Mr. Philip B. Herr, Philip B. Herr & Associates, Inc. Boston, Massachusetts, April 20, 1978.

[5] Mr. Sam Lovejoy, Co-founder, Alternative Energy Coalition and Northeast Clamshell Alliance, March 21, 1978 and September 1978.

[6] Mr. Alfred Lucas, Chairman, Turners Falls Airport Commission, March 21, 1978.

[7] Mr. Fred Muehl, Head Planner, Franklin County Planning Department, March 22, 1978 and February 1, 1979.

[8] Mr. Ed Potter, Montague Planning Boardmember, February 1, 1979.

[9] Mr. William Powers, Chairman, Montague Board of Selectmen, March 21, 1978 and (written correspondence) September 7, 1978.

[10] Mr. William Semanie/Mr. Robert Barrett, Northeast Utilities Public Information Managers, March 21, 1978 (joint interview) and July 24, 1978 (phone interview with Mr. Semanie).

Other References:

[11] Environmental Report; Construction Permit Stage; Montague Nuclear Power Station; Units 1 and 2; Docket No. 50-496 and -497; Volume 3, Section 9.2.4 and ff, "The Choice of a Site"; June 27, 1975, Supplement 7.

[12] Final Environmental Statement Related to Construction of Montague Nuclear Power Station Units 1 and 2; U.S. Nuclear Regulatory Commission, NUREG-0084; February, 1977; Section 9,2, "Sites," pages 9-15 and 9-16, and Section 5, page 41.

Chapter III Continued:

[13] The Greenfield Recorder, Greenfield, Massachusetts.

(a) July 6, 1974; "Montague Coordinator Eyes Unfamiliar Duties with Caution," page 12.

(b) April 19, 1977.

(c) May 9, 1977.

(d) June 28, 1977, pages 1, 10, "NU Offers $35,00 for Airport Rights"

(e) June 30, 1977; "Montague's Northeast Policy," Editorial.

(f) July 19, 1977.

(g) August 2, 1977, page 1.

(h) August 3, 1977.

(i) November 3, 1977, page 1, "NU Supported by Airport Board."

(j) February 13, 1978.

[14] Herr, Philip B. and Associates, Inc. "Socioeconomic Impact Outline," Franklin County Planning Department, January 16, 1978.

[15] New England Power Pool: Description, Analysis, Implications; Energy Program Technical Report: 76-2; New England Regional Commission; Boston, Massachusetts; March, 1976.

[16] "Oversight Hearings on Nuclear Energy -- New England Regional Nuclear Power Issues," Hearing before the Subcommittee on Energy and the Environment; Committee on Interior and Insular Affairs; House of Representatives; Boston, Massachusetts; November 14, 1975.

[17] The Social and Economic Impact of a Nuclear Power Plant Upon Montague, Massachusetts, and the Surrounding Area, Harbridge House, Inc., Boston, Massachusetts, November, 1974.

Chapter IV -- Conclusions

[1] Baldwin, Pamela; Environmental Mediation: An Effective Alternative? A Report of a Conference held in Reston, Virginia, January 11-13, 1978; RESOLVE, Center for Environmental Conflict Resolution; Palo Alto, California; April 1978.

[2] Pattison, Malka L. and Philip A. Marcus; "Communities and Energy Developers Can Work Together"; Planning, January 1979, pages 22-24.

[3] Olson, Mancur; The Logic of Collective Action (second edition), Harvard University Press, Cambridge, Massachusetts, 1971.

[4] Sierra: The Sierra Club Bulletin; "A Conversation with Ted Snyder"; October/November/December 1978, Volume 63, Number 5, page 37.