**MUNICIPAL ELECTRIC UTILITIES:
ESTABLISHMENT AND TRANSFORMATION**

Energy Division

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ABBREVIATIONS

APPA	American Public Power Association
CEI	Cleveland Electric Illuminating Company
CMP	Central Maine Power Company
CSW	Central and Southwest Corporation
DSM	demand-side management
EPAct	Energy Policy Act of 1992
EPE	El Paso Electric Company
FERC	Federal Energy Regulatory Commission
GWh	gigawatt hour
IOU	investor-owned utility
IP&L	Idaho Power and Light Company
Kwh	kilowatt hour
MEW	Madison Electric Works
MWh	megawatt hour
NOPR	Notice of Proposed Rulemaking
NU	Northeast Utilities
ORNL	Oak Ridge National Laboratory
PUC	Public Utilities Commission
RFP	request for proposals
SPS	Southwestern Public Service Company
UP&L	Utah Power and Light Company

EXECUTIVE SUMMARY

INTRODUCTION

There has been substantial growth in recent years in the attention given to the topic of municipal electric utilities by local governments and other interested parties. This heightened interest applies both to the establishment of new municipal utilities and to the switching of wholesale electricity suppliers by existing municipal utilities. To a considerable extent, this new interest can be attributed to the Energy Policy Act of 1992 (EPAct), which gives wholesale customers the right to buy electricity from the supplier of their choice and to receive it over the transmission lines of the former "host utility" (i.e., the utility from which the customer formerly bought electricity). The process by which new municipal utilities are established and existing municipal utilities switch their wholesale suppliers was examined in some detail in a recent Oak Ridge National Laboratory study, sponsored by the U.S. Department of Energy's Office of Energy Efficiency and Renewable Energy.

Four detailed case studies were performed that focused on existing or proposed municipal utilities in various stages of their development. The sample contains one fully functioning municipal utility that was established in the late 1980s, one city that initiated the municipalization process but reached a negotiated settlement with the host utility and stopped short of establishing a new utility, one community that is actively attempting to form a municipal utility but has not yet concluded the process, and one well-established municipal utility that switched wholesale electricity suppliers in order to lower its costs. In addition, to the case studies, information on this subject was gathered through discussions with other professionals involved in the study of utility-related issues, from a brief literature review, and from exploratory interviews with representatives of the most promising potential case study communities. From the case studies and—to a lesser extent—from the other sources, information was collected and analyzed concerning major contextual factors, the process by which municipal utilities are established and transformed, and the outcomes of these efforts. This document uses the term "transformation" rather narrowly, to refer to the switching of wholesale electricity suppliers by existing municipal utilities.

KEY FINDINGS

Eight major steps typically are involved when a community establishes a new municipal utility. The tasks that generally must be undertaken—although not necessarily in the exact order given here—are as follows: (1) initiate the municipalization effort; (2) gauge and influence public opinion; (3) conduct negotiations with the host utility; (4) acquire an electricity distribution system; (5) reach agreement with a wholesale supplier for cheaper electricity; (6) arrange transmission access; (7) procure financing;

and (8) establish the municipal utility's management structure. Nearly all the same steps also are involved when an existing municipal utility switches wholesale suppliers, although some tasks may involve a less intensive effort than is required when a new utility is first established. This study focused on the first six steps, because this is where the most intense interaction with other parties takes place and because these are the tasks most uniquely associated with the establishment and transformation of municipal utilities.

Host utilities can experience revenue reductions from the loss of customers that accompanies the establishment of a new municipal utility or the switching of wholesale electricity suppliers by an existing municipal utility. Reductions in sales by the host utilities at the case study sites ranged from an actual loss of less than 0.2% in one case to an anticipated loss of 8% in another. Losses of sales—or potential losses—at the other two sites were approximately 3%, representing revenue reductions that were large enough to concern the host utility. In the one case where a settlement was negotiated to forestall municipalization, the host utility experienced an \$8 million annual reduction in revenue. Revenue losses, where substantial, can be detrimental to a utility's financial health; in two of the cases studied, such losses contributed—to varying degrees—to the host utilities' existing financial difficulties. The precise nature of fiscal impacts will depend on an individual utility's financial strength and cost structure.

In all four cases studied, the municipalities' efforts resulted in—or have the potential to lead to—reduced rates for the communities' customers, ranging from approximately 12% to 30%. At one of the case study sites, lower rates have been negotiated between host utilities and customers to prevent municipalization. In those cases where the proposed municipal action was accomplished or a settlement was reached, customers of the host utility have not experienced rate increases, primarily because the losses were absorbed by the utilities' shareholders where revenue reductions were substantial.

In all cases but one, the municipalization and transformation efforts have resulted—or are expected to result—in a greater availability of DSM programs for local customers. This is probably due to the efforts of the new electricity supplier to provide additional services or to the municipal utility's own efforts to limit its demand charges. No changes have occurred in the host utilities' resource mix as a direct result of the municipalization or transformation efforts studied. However, utilities could tend to avoid the future use of DSM measures that lead to rate increases if they believe that their loss of customers was due to their rates being higher than their competitors'.

More than any other factor, the desire for lower rates drives local efforts to form new municipal utilities or to switch the source of wholesale electricity purchased by existing utilities. Where a settlement is negotiated to keep a municipality on the host utility's system, ratepayer savings are determined by the rate concessions that the host utility is willing to make, the customer classes that are directly affected, and the manner—if any—in which these savings are shared with the municipality's other customers.

Where a new municipal utility is established, customer savings depend on the cost of acquiring a distribution system and other needed facilities, the transmission rates charged by the original host utility, the magnitude of any stranded investment charges that must be paid, and the cost of electricity purchased from a new supplier. For existing municipal utilities that switch wholesale suppliers, customer savings are determined by the same factors that are relevant for new municipal utilities, minus the costs associated with acquiring a distribution network. And for the host utility's remaining customers, rate effects of municipal actions depend on the magnitude of revenues lost, the amount of compensation paid by the departing customers and, perhaps most importantly, on how much of the loss will be borne by utility shareholders.

EPAct has made it much easier for existing municipal utilities to switch wholesale suppliers by ensuring open transmission access. But because the establishment of a municipal utility typically means the loss of sales and revenues by the host utility, these entities almost always resist municipalization efforts and take steps to ensure that—if a municipal utility is established—the financial interests of the utility are protected. These host utility efforts, which represent the chief barrier to the establishment of new municipal utilities, can—and often do—take the form of refusing to sell the existing distribution network and seeking top dollar for these facilities if they are condemned, seeking recovery of stranded investment costs, attempting to negotiate lower rates with the utility's largest customer(s), and contesting all aspects of the proposed action in regulatory and judicial proceedings. These utility responses and the associated costs for the would-be municipal utility, in conjunction with local inertia, help explain why the passage of EPAct has not resulted in a significant number of new municipalizations to date.

Large industrial customers often play an important role in the process of forming a new municipal utility or switching wholesale suppliers. These large users of electricity, who can exert considerable influence over local government decisions, tend to be most strongly motivated where their electricity costs are considerable and the proposed municipal action promises a substantial rate reduction. Conversely, host utilities are most interested in maintaining those industrial customers whose consumption represents a substantial portion of the utility's sales.

The establishment and transformation of municipal utilities raises important equity questions, because not all electricity consumers are equally well equipped to take advantage of the potential benefits offered by these actions. Specifically, it is important to consider whether those with the power to choose will benefit at the expense of those who do not have the opportunity to make the same choices and how host utilities will distribute any adverse financial impacts among their shareholders and customers. The Federal Energy Regulatory Commission (FERC) has already addressed these issues by asserting in its March 1995 proposed rulemaking that a fair share of the legitimate and prudent obligations undertaken by host utilities on behalf of their customers should be borne by those customers should they decide to leave the system. It is expected that

additional equity-related regulatory decisions will be required in the future.

While municipalization efforts will undoubtedly continue, it is likely that the number of new municipal utilities that will be formed will not be large, at least in the near-term future. However, some municipalities and large retail customers will undoubtedly get lower rates from their host utilities through the threat of municipalization. And the number of municipal utilities actively shopping around for lower cost electricity is likely to increase over time, as existing wholesale power contracts expire. All of this is illustrative of the ways in which today's electricity industry is being reshaped into a more competitive image.

1. INTRODUCTION

Municipal ownership of electric utilities is nothing new, having been practiced in this country since the birth of the electric industry. And the number of U.S. municipal electric systems has changed relatively little in the last 60 years (Schap 1986). Despite these facts, the topic of municipalization—that is, the establishment of new municipal utilities—has generated considerable interest among city governments, utilities, and other interested parties in the last few years. And existing municipal utilities have increasingly been exploring the money-saving opportunities available by switching from their current wholesale electricity supplier to a less expensive one. The utilities that currently are serving existing and would-be municipal utilities typically are strongly opposed to the prospect of losing established customers, so the struggles between the opposing parties can become very intense.

Much of the heightened interest in municipal utilities is due to the passage of the Energy Policy Act of 1992 (EPAct), which allows the Federal Energy Regulatory Commission (FERC) to order electric utilities to transmit (or "wheel") power over their lines from electricity providers requesting this service to any bona fide wholesale customer. In essence, this open access policy gives municipal utilities the right to buy electricity from the wholesale supplier of their choice, regardless of location (Richardson 1993). It is this element of customer choice, absent in a monopoly situation, that forms the heart of competition — a concept that is assuming tremendous importance in today's utility industry.

This report presents the findings of an Oak Ridge National Laboratory (ORNL) study of the process by which municipal utilities are established and transformed¹ and the outcomes of these efforts. Under the sponsorship of the U.S. Department of Energy's Office of Energy Efficiency and Renewable Energy, four detailed case studies were performed that examine existing or proposed municipal utilities in various stages of their development. Figure 1 shows the location of these case study sites. The sample contains one case each of the following: a recently-formed and fully functioning municipal utility (Washington, Utah); a city that initiated the process of municipalization but stopped short of completion (Brook Park, Ohio); a city that is currently attempting to form a municipal utility but has not yet concluded the process (Las Cruces, New Mexico); and a long-standing municipal utility that switched wholesale suppliers in order to lower its costs (Madison, Maine). The research reported in this document is part of a larger ORNL study on competition in the electric-utility industry (Hadley and Hill 1995).

¹The aspect of municipal utility transformation on which this report focuses is the switching of wholesale electricity suppliers.

Figure 1. Location of case study sites.

BACKGROUND

The first municipal utilities were formed in the U.S. over 100 years ago, in the early 1880s. The number of municipal electric systems grew rapidly until the early 1920s and then declined significantly over the next decade. Since that time, the number of municipal utilities has experienced moderate increases and declines, but there are roughly as many municipal electric systems in existence today ("Public Power 1994 Directory") as there were in the early 1930s (Schap 1986). Currently, there are about 2,000 utilities owned by local and state governments, the vast majority of which are municipal systems. This compares to almost 950 rural electric cooperatives, about 260 investor-owned utilities (IOUs), and 10 federal power agencies. Municipal and state-owned utilities account for 14.3% of electricity sales to ultimate customers, compared to 76.4% for IOUs, 7.5% for cooperatives, and 1.8% for federal power agencies. Unlike IOUs, municipal utilities do not have to pay federal income tax, can issue tax-exempt municipal bonds, and have access to low-cost federal power. All of these factors allow municipal utilities to avoid some of the costs faced by their privately-owned counterparts and, all else being equal, provide them with the opportunity to offer lower electric rates without having more efficient operations.

Even before the passage of EPAct in 1992, it was not uncommon for a utility to allow its transmission lines to be used to send another utility's power to a wholesale customer (Hill 1988). This practice is commonly referred to as "wholesale wheeling." Since EPAct, however, such arrangements can be enjoyed by wholesale customers everywhere, regardless of the interests or proclivities of the utility whose lines they need to use². An absolute lack of transmission access should no longer prevent any municipality from forming its own utility or keep an existing municipal utility from switching wholesale suppliers. Because of this, a number of cities have actively considered these options in recent years. In the absence of retail wheeling, whereby individual consumers would buy electricity from the power supplier of their choice, large industrial customers throughout the country have expressed considerable interest in—and support for—the establishment and transformation of municipal utilities as a means of lowering their energy costs. For the municipalities involved, however, finding a new supplier willing to sell electricity at an attractive price can present challenges. Also, would-be municipal utilities still must live with the restrictions placed on them by a 1987 federal law that limits the ability of public utilities to use tax-exempt municipal bonds to finance the acquisition of private assets (Kemezis 1994). New rules proposed by FERC in its Notice of Proposed Rulemaking (NOPR) of March 29, 1995—often referred to as the "Mega NOPR"—call for all utilities to file non-discriminatory open access tariffs that would apply to all wholesale transactions, including their own (FERC 1995); this means that, in the future, arranging acceptable transmission rates should be easier than it currently is.

The passage of EPAct has not caused a rapid increase in the rate of municipalizations. In fact, not a single municipal utility has begun operations since EPAct went into effect, although the town of Broken Bow, Oklahoma, has established its own utility and will begin selling power soon, and the town of Jay, Maine, recently voted to explore the formation of a municipal electric district. According to the American Public Power Association (APPA), 11 municipalities currently are actively studying the possibility of forming their own utility (APPA 1995). Other cities (e.g., Bennington, Vermont; Defiance, Ohio; Romeo, Michigan) have considered municipalization in recent years but have postponed or abandoned their efforts because of the difficulties involved or because the utility by which they have historically been served (referred to in this report as the "host utility") has responded by offering lower rates for the municipality's largest customers. And there are several recent instances (e.g., Little Rock, Arkansas; Kennebunk, Maine) of existing municipal utilities seeking cheaper suppliers but sticking with their host utility in return for lower rates.

²The ability of wholesale customers to take immediate advantage of wholesale wheeling opportunities will be limited in some cases by the terms of existing wholesale contracts that require them to buy power from their current host utility for some specified period of time.

RESEARCH METHODS

Detailed case study information was collected for Washington, Utah; Brook Park, Ohio; Las Cruces, New Mexico; and Madison, Maine. These data were gathered through telephone interviews conducted with the key parties involved in activities associated with the creation and operation of the municipal utility. In most cases, this included representatives of the municipality, the original host utility, the new wholesale supplier, the state regulatory commission and, where appropriate, the city's largest industrial customer (see Appendix A).

The case study sites were selected to provide a mix of the various stages in the life of a municipal utility. As mentioned earlier, the cases consist of one successfully established municipal electric utility, one city that began the process of establishing a municipal utility but stopped short of completion, one city that is currently immersed in the municipalization process, and one pre-existing municipal utility that recently switched wholesale electricity suppliers. Preliminary information on these cases, and on a number of others that were considered but were not chosen for further study, came from discussions with other professionals involved in the study of utility-related issues and from a brief review of the literature concerning municipalization. Subsequent exploratory interviews were held with representatives of the most promising potential case study communities, and the information gathered in this manner was used to identify those cases expected to provide the clearest insights into the key issues involved in these endeavors. Some effort also was made to obtain a reasonable mix of geographic location, city size, and urban versus rural locales. Municipalities that were considered but not selected for this study are: Azusa and Banning, California; Chicago, Illinois; Alma and Romeo, Michigan; Albuquerque, New Mexico; Massena, New York; Bryan, Clyde, Defiance, Marion, and Toledo, Ohio; Broken Bow, Oklahoma; and Kanab, Utah.

The four case studies identified earlier are the primary source of information used in this report. However, data gathered through interviews with other informed parties, from the brief exploratory interviews with non-selected sites, and from the secondary sources reviewed were used to augment the case study findings. Accordingly, the conclusions presented in this report generally are based on more than just the four detailed case studies and, as a result, are offered with more confidence than if they were based on the case studies alone.

SCOPE OF REPORT

The remainder of this report goes into more detail on how new municipal utilities are formed, how existing utilities switch wholesale electricity suppliers, and how these efforts affect the key parties involved. Chapter 2 presents brief chronologies of the key events involved in each of the four case studies: Washington, Utah; Brook Park, Ohio; Las Cruces, New Mexico; and Madison, Maine. Chapter 3 describes several major

contextual factors—government regulations, size of municipal service area, and electricity price and reliability—that could influence local establishment of electric utilities and the switching of electricity suppliers by existing municipal utilities. Chapter 4 describes the process by which municipal utilities are formed and discusses the following six important steps: (1) initiating the effort; (2) gauging and influencing public opinion; (3) conducting negotiations with the host utility; (4) acquiring a distribution network; (5) reaching agreement with a wholesale supplier for cheaper electricity; and (6) arranging transmission access. All of these steps except for the fourth one also are involved when an existing municipal utility switches wholesale suppliers, although some steps may not involve as extensive an effort as is required when a new municipal utility is formed. Chapter 5 discusses the outcomes of these efforts in terms of the financial health of the host utility, electric rates, and the utilities' resource mix, focusing primarily on the use of demand-side management (DSM) resources. Finally, Chapter 6 presents the conclusions of this study concerning the most important factors influencing the establishment and transformation of electric utilities and what is likely to happen in this area in the future.

2. CASE STUDY CHRONOLOGIES

WASHINGTON, UTAH

Washington, Utah is a small town located in the southwestern corner of the state. In the late 1980s, when it established its municipal utility, it had a population of approximately 4,000 residents and very little industrial activity. Many of its residents worked in the nearby town of Saint George, which, with a population of 28,500, is the largest municipality in the southern half of Utah. While St. George has been served by its own municipal utility since the early 1940s, the residents of Washington historically purchased their electricity from IOUs, most recently from Utah Power and Light Company (UP&L). Washington's residents also paid substantially higher rates than did the customers of the Saint George utility.

In 1986, following shortly after several increases in electricity rates, the Washington City Council discussed the possibility of buying UP&L's local distribution network, establishing its own municipal utility, and purchasing wholesale power from a less expensive supplier. The city apparently was motivated by a desire to save its customers money as well as to be independent of UP&L and have greater control over future growth in the community. A cursory review of the issue indicated that such a move would probably result in slightly lower electric rates for the city's customers. Shortly thereafter, the Mayor held a press conference at which he introduced the idea of municipalization and expressed the belief that rates would probably decline by at least 2% as the result of such a move. Then, to gauge public opinion, the city sent a written questionnaire to all city residents exploring their attitudes toward UP&L and the establishment of a municipal utility. According to the city manager, 45 to 50% of local residents responded to the questionnaire, and about 98% of those favored municipalization. Because the projected rate reduction was quite small, it is likely that Washington's electric consumers, like the city government, were motivated by a desire for independence and the ability to attract and serve large industrial customers. Encouraged by public response to the survey, the city sponsored a feasibility study by the Intermountain Consumer Cooperative Association. That study, performed in 1987, supported the Mayor's earlier estimate of a 2% rate reduction associated with municipalization.

Because the survey showed local residents to be overwhelmingly in favor of municipalization, no subsequent activities were undertaken by the city to stimulate additional public support for this course of action. UP&L did, however, try to generate some public interest in opposing the municipalization effort, but without much success. Throughout the two year period during which municipalization took place, there was never very much concern about it expressed by the public.

Due to an earlier regulatory order issued by the Utah Public Service Commission (1981), UP&L was obligated to sell its local distribution network to the City of Washington if the city requested this. This decision dates back to 1981, when the city's previous electric supplier—CP National Corporation—sold its system to UP&L. At that time, the city was not prepared to buy the system and operate its own municipal utility. However, the Public Service Commission did require UP&L to grant an option to purchase the local distribution system to any municipality in the old CP National service area that requested it within a specified time period.

UP&L never refused to sell the local distribution network to the city—a position that it was legally prevented from taking according to the terms of Washington's buy-out option. However, reaching agreement on the terms of the sale involved a negotiation process between the city and the utility that lasted about eight months. The major points of contention were the price to be paid by the city for the utility's distribution system and the terms of the transmission agreement by which the city would wheel wholesale power from its new supplier along UP&L's transmission lines. The city was aided in its efforts to get UP&L to wheel power by its major new supplier—Idaho Power and Light Company (IP&L)³—which had an existing agreement with UP&L that allowed UP&L to wheel power over IP&L's lines. Also, UP&L had prior experience with wheeling power over its own lines for other utilities, so the proposed contract with Washington was not an unprecedented arrangement.

In late 1987, the city agreed to purchase the Washington distribution system from UP&L for about \$1.5 million and also arrived at a mutually acceptable transmission agreement with its former utility. To finance the buy-out and to pay for the construction of some additional transmission lines, city council voted to float a 15 year revenue bond for \$3.1 million. No referendum was required, but the council did stipulate that a long-term contract with an alternative electricity supplier (i.e., IP&L) had to be signed before the bond could be approved. In February 1988, the agreed-upon purchase price was transferred from the city's bonding agent to the utility and the municipal buy-out was completed. Since that time, the Washington municipal utility has been operated and maintained by the city government.

As experienced by the former host utility, the effects of Washington's municipalization have been very minor. UP&L only lost about 1,500 of its roughly half-million customers and experienced no significant loss of revenue as a result. Neither the rates charged to the remaining customers nor the utility's resource mix changed as a result of the Washington municipalization. For the City of Washington, however, there were some noticeable effects. Electricity rates were reduced by 2% when the municipalization was completed, and there have been two subsequent 2% reductions since then. Also, additional savings are anticipated once the costs of buying the system

³The City of Washington purchases a small amount of its power from the Colorado River Storage Project (operated by the Western Area Power Administration), but it receives over 90% of its electricity from IP&L.

are paid off early in the next century. But in the years since municipalization, the rates charged by the IOU serving the area (currently PacifiCorp since UP&L's merger with Pacific Power and Light in 1989) have declined even more than they have in Washington. PacifiCorp's customers are now paying less than Washington's [approximately 6.8 cents per kilowatt hour (kWh) for PacifiCorp's residential customers as compared to 7.5 cents per residential kWh in Washington). Since municipalization, the city no longer offers the uniform billing option (i.e., spreading annual electricity charges equally over a 12 month period) that UP&L had provided.

BROOK PARK, OHIO

Brook Park, Ohio (population 22,900) is a suburb of Cleveland and home to a large Ford engine and casting manufacturing operation that employs 5,500 people and accounts for approximately 75% of the electricity consumed in the city. Electricity is provided to the community's 8,000 customers by the Cleveland Electric Illuminating Company (CEI), a subsidiary of Centerior.

In June 1991, Brook Park's mayor hired consultants to conduct a brief study of whether it was feasible for the city to establish its own municipal utility and leave the CEI system. At that time, the mayor noted that he had already talked to Ford, and that the company had agreed to become a long-term customer of Brook Park's municipal utility if the city were to establish such an entity (*The Plain Dealer* June 13, 1991). At the same time, a Ford spokesman announced that the company had done some research of its own and had found that buying power from a Brook Park municipal utility would result in cost savings of about \$8 million a year for Ford (roughly 25% of its electric bill) and would also save the average residential customer approximately \$250 annually. CEI's rates were substantially higher than those charged by some other Ohio utilities; Ford, for example was paying CEI nearly 6 cents per kWh as opposed to the 3.6 cents per kWh it was paying at another facility in Ohio Power's service territory. Not surprisingly, CEI made it clear that it did not want to lose the Brook Park Ford facility, one of its top five customers.

The initial feasibility study commissioned by Brook Park concluded that the city's electric customers could save up to 30% on their bills as a result of municipalization. The savings would come from buying wholesale power from less expensive sources, wheeling it over CEI's transmission lines, and distributing this cheaper electricity to the city's customers. This finding, presented to city council in August 1991, was disputed by CEI, which said that establishing a municipal utility would cost several times as much as the city's consultants reported. A large part of these additional costs was comprised of \$75 million in damages that CEI said Brook Park would owe the utility as compensation for the stranded investment that would result from the city leaving the system. CEI announced its intention to sue Brook Park for this \$75 million if the city established its own municipal utility (*The Plain Dealer* August 29, 1991).

In November 1991, Brook Park voters approved the establishment of a Department of Public Power by a margin of more than three to one (*The News Sun* November 7, 1991). This measure, whose passage allowed the city to proceed with its plans to establish a municipal utility, had been actively supported by the local government and organized labor. CEI, which opposed the measure, did not wage an aggressive campaign against it, but the utility made it clear that it did not intend to sell its distribution network to the city. Brook Park—like all the case study cities examined for this report—has the state-granted right to condemn and acquire utility property and could have pursued this route. Instead, the city government decided that a better approach would be to build its own system, even though this course of action could take up to two and a half years, because this was seen as more cost-effective than paying CEI's asking price.

In January 1992, city council authorized the mayor to sign a new contract with the consulting firm that had performed the initial feasibility study; this time, the consultants were to perform a more detailed analysis aimed at the actual establishment of a municipal utility. Three months later, Ford announced that it had agreed to pay the city half of the approximately \$1 million in consulting costs and attorney's fees that were expected to be required over the course of the municipalization effort. Ford's agreement with the city stipulated that if Ford decided not to become a customer of the new utility, it would pay the city 100% of feasibility study costs and other expenses incurred up to the date of its withdrawal. And while Ford did not formally commit itself to be a customer of the new municipal utility, it expressed its intent to buy power from the city. In June, the city council approved contracts with five additional consulting firms to provide it with needed technical and legal assistance related to the municipalization effort.

While Brook Park proceeded with its plans, CEI was involved in vigorous behind-the-scenes negotiations with the city and Ford in an effort to prevent the loss of the city's (and, most importantly, Ford's) business. In April 1993, city council approved an agreement that had been reached after more than 300 hours of negotiations with CEI and Ford, whereby the utility would reduce the automaker's annual electric bill by \$8 million and Ford would pass along \$1.6 million of those savings to the city (*The Plain Dealer* April 30, 1993). In turn, Brook Park would issue a yearly check for \$188 to every electric customer in the city. The agreement, which covers a five year period, is expected to save both Ford and the average Brook Park electricity user more than 20% on their electric bills. At the end of the five years, the city will be free to proceed with the physical construction of a municipal electric system, provided that CEI is given a year's advance notice and CEI's service within the city is not replaced for two additional years. The utility agreed to provide Brook Park with a four circuit delivery point connecting the city with CEI's electric grid. The utility also reserved the right to seek recovery of stranded investment costs. And the parties stipulated that any disputes concerning future interconnection and wheeling arrangements would be handled by binding arbitration. In addition, CEI agreed to provide every Brook Park electric customer—upon request—with a free energy audit and conservation recommendations (up to a maximum total

expenditure of \$1.2 million) and to finance a study of the feasibility of building a waste-to-energy plant on Ford property. Ford, for its part, agreed to reimburse the city for all of its municipalization-related consulting and attorneys fees incurred to date.

Apart from the discount given to Ford, rates throughout the CEI system were not altered. In fact, the utility's customers are currently subject to a three year rate freeze instituted by CEI in 1992. The utility's resource mix has not been affected as a result of the settlement, other than the above-mentioned conservation and alternative energy measures undertaken on behalf of Brook Park. The new lower rate for Ford Motor Company resulted in an annual revenue reduction of \$8 million for CEI. While this contributed slightly to the utility's existing financial difficulties (reflected in a January 1994 reduction in the company's shareholder dividend) it also was responsible for the retention of CEI's much-needed Brook Park customer base.

LAS CRUCES, NEW MEXICO

Las Cruces, with a current population of about 70,000, is the largest city in southern New Mexico and the second largest city in the state. It sits about 45 miles north of two much larger municipalities: El Paso, Texas, and Ciudad Juarez, Mexico, each of which has more than half a million inhabitants. Currently, electric service in Las Cruces is provided by the El Paso Electric Company (EPE), an IOU which filed for bankruptcy in January 1992. The utility has approximately 27,000 customers in Las Cruces, and the vast majority of them are in the residential sector. But even without substantial sales to industry, the power supplied to Las Cruces [approximately 400 gigawatt hours (GWh) per year] represents about eight percent of EPE's total sales and revenues.

Officials in the Las Cruces city government have long been concerned with the electric rates charged by EPE. In the mid-1970s, the city opposed the utility's involvement in construction of the Palo Verde Nuclear Plant in Arizona, and Las Cruces has regularly intervened before the New Mexico PSC in the utility's rate cases since that time. In 1987, the city government hired an Albuquerque firm to conduct an initial feasibility study of energy alternatives, in order to identify ways to lower energy costs for the city's residents and businesses. A subsequent study by a nationally-known consulting firm suggested that the establishment of a municipal utility might be beneficial, allowing the city to buy cheaper wholesale power from another source. As a follow-up to this, the city commissioned a detailed study of the potential effects of municipalization. In early 1992, shortly after EPE filed for bankruptcy, the city received the results of that study, which indicated that local customers could reduce their rates by 13 to 27% by buying the local distribution network from EPE and purchasing electricity wholesale from a less expensive supplier. Before the end of the year, the city council had passed an ordinance establishing a municipal utility and hired a law firm with expertise in such matters to represent them in their upcoming municipalization effort.

In May 1993, EPE signed a merger agreement with Central and Southwest Corporation (CSW), a Dallas-based IOU. Final approval of the merger hinges on the receipt of all necessary regulatory approval from a variety of agencies (e.g., Texas and New Mexico utility regulatory commissions, FERC, Securities and Exchange Commission) and on there being no "material adverse effect" to EPE's assets. Subsequent to the establishment of the merger agreement, Las Cruces intervened before FERC in the interest of protecting its future right to receive wholesale power across EPE's existing transmission lines at a reasonable rate.

In January 1994, the city of Las Cruces issued Requests for Proposals (RFPs) seeking: (1) a supplier of wholesale electricity to the planned municipal utility; and (2) a company to operate and maintain the city's electric distribution system. In May 1994, contracts for both these services were awarded to the Southwestern Public Service Company (SPS), headquartered in Amarillo, Texas. SPS, whose existing service territory is not contiguous with Las Cruces, would wheel its power to the city across EPE's transmission lines (City of Las Cruces 1994b). At the end of August, a referendum was held on the question of whether Las Cruces should acquire from EPE (either through negotiations or the exercise of eminent domain) the electric distribution system located within the city. The city government and SPS actively supported a "yes" vote on the measure, spending roughly half a million dollars on this, while CSW waged a \$1.4 million campaign against the city's acquisition of the local distribution system. The opposing parties differed significantly over how much the local take-over would cost and, consequently, whether the city could actually deliver the promised rate reduction. Despite opposition to municipalization by the local chamber of commerce and other business organizations, which opposed government encroachment in the private sector, the vote went two to one in favor of acquiring the local network. The following month, CSW notified EPE that the loss of Las Cruces's electric customers through municipalization could derail the planned merger of the two IOUs (*The Electricity Daily* September 14, 1994).

To date, no negotiations have taken place between Las Cruces and EPE concerning concessions that the utility could make to keep Las Cruces from leaving the system. As for the amount that Las Cruces would have to pay to buy the local distribution network, the opposing parties have not directly discussed it but they are widely divergent in their stated positions on the system's worth. A large part of the difference lies in how each party defines the facilities involved. Las Cruces wants to purchase only the distribution system, which it values at approximately \$27 million, based on original cost less depreciation. Meanwhile, EPE and CSW hold that fair compensation would have to include payments for *all* facilities—including generation and transmission—related to the city's electric service. Since the entire EPE system is valued at \$2.2 billion and Las Cruces accounts for about eight percent of system sales and revenues, the utilities suggest that a minimum fair purchase price would be equal to about eight percent of total system value, or approximately \$170 million.

When EPE filed for bankruptcy back in 1992, an automatic stay went into effect preventing the taking of any of its assets. Subsequently, Las Cruces went to court to have this stay lifted and, in September 1994, the city prevailed when a federal bankruptcy court judge agreed to lift the stay as of January 1, 1995 (*The Electricity Daily* September 21, 1994). Now, the city is free to pursue the condemnation of EPE's distribution network in the New Mexico state courts. The city recently selected two firms to appraise the value of the existing distribution system, and these studies are expected to be completed in late spring or early summer of 1995. At that time, the city is likely to take the next step toward acquisition of EPE's local network. The city council has expressed its interest in attempting to negotiate a buy-out, but it appears willing to proceed with condemnation proceedings if necessary. Building a new distribution system, which would be more expensive than purchasing the existing network, is possible but is considered to be the city's least attractive option (City of Las Cruces 1994a). Local government officials anticipate successful completion of the municipalization process, although there is substantial uncertainty concerning when this will occur. The most optimistic projection is that operations could begin in less than two years, but some observers believe that considerably more time than that could be required.

Should Las Cruces succeed in its establishment of a municipal utility, the outcomes will depend to a very large extent on the price paid by the city to EPE for its existing facilities. If the purchase price approximates what the city considers to be fair, the citizens of Las Cruces are likely to experience significant rate reductions. Currently, residential customers in Las Cruces pay nearly 11 cents per kWh, while SPS's residential rate is only about 7 cents per kWh. However, the loss of Las Cruces would result in EPE receiving less revenue to cover its fixed costs, and the utility's remaining customers could face higher rates as a result. On the other hand, if EPE receives what it asserts is fair remuneration, the utility could emerge unscathed but Las Cruces residents could end up paying *more* for their electricity because of the city's need to recover the purchase price through electric rates. However, the city has said that if acquisition costs are so high that rates would increase, the municipalization effort would be abandoned. FERC's recent "Mega NOPR" (FERC 1995) proposed that host utilities be allowed the opportunity to recover "legitimate and verifiable" stranded costs resulting from the loss of customers through municipalization, and that these costs would be recovered through transmission rates. However, the exact magnitude of any stranded costs that EPE would be allowed to recover is still unclear. Cost aside, it is possible that a municipal utility in Las Cruces could be vulnerable to supply interruptions, because the city would still receive power over EPE's transmission lines and SPS would have only a single feed into the EPE grid; however, the existing tie-in has been extremely reliable in the past and the city's contract with SPS specifies that the utility will supply backup reserves to Las Cruces, as needed, from a power pool. As for the availability of DSM programs, Las Cruces has expressed some interest in providing more of these as a way of controlling customer demand and keeping the city's costs low.

MADISON, MAINE

Located along the Kennebec River approximately 40 miles north of the state capital of Augusta, the town of Madison, Maine is home to about 4,700 residents. The Madison Electric Works (MEW), a municipal utility, provides electric service to 2,300 customers in Madison and three nearby towns. Nearly all of MEW's customers are in the residential sector and, until very recently, the utility typically sold less than 25,000 megawatt hours (MWh) a year. Dwarfing the area's small consumers is Madison's largest employer and taxpayer—Madison Paper Industries—which purchases about 350,000 MWh annually. Until last year, Madison Paper bought nearly all of this electricity from the Central Maine Power Company (CMP), which also supplied over 90% of the power sold by MEW. Recently, however, both MEW and Madison Paper terminated their contracts with CMP; the paper company now buys its electricity from MEW which, in turn, purchases wholesale power from Northeast Utilities (NU)—wheeling it over CMP's lines. Prior to the switch, Madison Paper's consumption accounted for about 3% of CMP's sales.

Since the early 1980s, MEW had been looking for a less expensive source of wholesale electricity. In the spring of 1993, the town approached Madison Paper and asked if the company would buy power directly from MEW if the municipal utility could lower its rates substantially. The paper company—whose existing contract with CMP would allow it to obtain a new supplier in September 1994—expressed its support for such an effort. MEW's own contract with CMP extended until October 1996. Still, in mid-July 1993, the town sent out a RFP seeking bids from companies wishing to supply wholesale power sufficient to cover MEW's existing load (beginning in October 1996) and Madison Paper's consumption (as of September 1994). Prospective bidders were given only 10 days to respond, and all communications were to go through the consulting firm that was working with the town on this. MEW received eight responses, but CMP did not respond within the allotted period, choosing instead to wait until after the other bids were in and then negotiate directly with the town. However, in early August, approximately one week after the official response period ended, the town announced that it had selected NU as its new wholesale supplier. A day or two later, CMP submitted its own proposal, but by then it was too late; MEW signed a wholesale supply agreement with NU the following day—August 5, 1993. According to the city, the process was conducted so rapidly because the market was right for getting a quick response and a good price.

Although the bidding and selection processes were completed very rapidly, MEW's subsequent transition from CMP to NU took substantial time and effort. According to state law, MEW was required to submit a bulk power agreement, describing its proposed purchases from NU, to the Maine Public Utilities Commission (PUC) for its approval. It is possible that another reason that MEW moved so quickly to establish its contract with NU was to allow ample time for a PUC decision before Madison Paper's existing contract with CMP was to expire. Both CMP—which wanted to keep its current

customers and avoid future defections—and the state Office of Public Advocate—which expressed concern that the proposed contract was not necessarily the most economical option—intervened in opposition to the proposed contract. Meanwhile, NU intervened on its behalf and the PUC Advocacy Staff expressed support for the proposal. In addition, CMP filed a proposed stranded investment tariff with the Maine PUC which would allow it to obtain compensation for the loss of Madison Paper (and other customers leaving the CMP system), and the paper company intervened in response to that. Finally, CMP filed a transmission service agreement with FERC, calling for a transmission rate of \$39.38/kw-yr and an annual stranded investment charge of approximately \$4.1 million; both MEW and NU intervened in opposition to these filings. Vigorous negotiations ensued involving MEW, CMP, and NU. A settlement agreement was reached in May 1994, shortly before PUC and FERC hearings were scheduled to begin in the pending cases (NU, CMP, MEW 1994); this three-way settlement was supported by the PUC Advocacy Staff. A month later, both the Maine PUC and FERC approved those elements of the settlement agreement over which they had jurisdiction. MEW and Madison Paper both stopped buying electricity from CMP on September 1, 1994. On that same date, MEW began receiving wholesale power from NU and supplying it to the paper company.

Highlights of the three-way settlement include the following: (1) MEW is to purchase power from NU under the bulk power agreement for at least 10 years, with a subsequent option for five more years; (2) CMP is to wheel NU's power to MEW at the rate of \$22.29/kw-yr for the next 10 years, substantially less than originally proposed by CMP; (3) MEW is to make settlement payments to CMP totalling \$1.5 million over three years; \$1.4 million of this is to be provided by Madison Paper and the remaining \$100 thousand by NU; (4) NU is to pay CMP a total of \$8.4 million over the following seven years; (5) NU and CMP are to enter into capacity exchanges designed to give CMP \$8.5 million in cumulative net present value savings; these exchanges are to take place during outages of CMP's and NU's existing nuclear plants; and (6) CMP drops its stranded investment charge in favor of the above-mentioned compensation.

Under its former contract with CMP, the rates paid by MEW were comparable to those paid by other wholesale customers in the same region. Under the new contract, MEW is paying substantially less and, accordingly, the rates paid by MEW's customers have dropped from 9 or 10 cents per kWh to 6.7 cents per kWh. There has been no change in the availability of DSM programs for MEW's customers, but NU is expected to assist MEW in developing new DSM programs in the future. For its part, NU is profiting from the arrangement because it has surplus capacity and is now able to sell additional electricity at a rate that covers the utility's marginal costs and still contributes something to its fixed cost investment. According to the NU-MEW contract, the rate paid by the municipal utility will increase over time so that, after 10 years, NU's wholesale rate to MEW will be approximately the same as what CMP currently charges.

although there have been some recent adjustments to the utility's DSM offerings. The biggest effect of losing MEW and the subsequent negotiation of incentive rates with some large customers has been to contribute to the financial difficulties experienced by CMP and its shareholders. Recently, CMP's dividend to its shareholders was cut in half, the utility wrote off \$100 million of its book value, and the price of CMP stock dropped substantially. In addition, there has been a negative effect on the utility's bond rating due to the market perception of CMP's vulnerability to further customer losses. However, under the terms of the three-way settlement with MEW and NU, CMP could be better off than if it had been successful in retaining MEW as a customer at a substantially reduced rate. Most notably, CMP can now obtain power from NU when its nuclear units are down.

Probably the biggest threat to CMP is that MEW's switching suppliers could lead to more customer defections. Shortly after MEW left the system, the other two municipal utilities that purchase power from CMP issued RFPs seeking cheaper electricity. CMP promptly submitted proposals and retained both these wholesale customers. Immediately outside MEW's existing distribution system, there are retail customers who would like to be able to buy the municipal utility's lower cost electricity, and MEW welcomes this possibility. CMP, however, is resisting this erosion of its customer base and recently signed a five-year contract at attractive rates with a large retail customer located just outside MEW's current service territory. Elsewhere in the state, three out of four towns that recently voted on the question of forming municipal utility districts opted not to do so (*Electric Utility Week* November 14, 1994); in the fourth case, CMP signed a five-year contract with the town's largest customer, providing it with 15% off its previous rate. In all of these instances, CMP had campaigned vigorously against the municipalization effort. In addition to its efforts to retain existing customers, CMP seems inclined to be more cautious about making investments in long-term capacity that could become "stranded" if large customers leave the system. However, since CMP now has surplus capacity, it will probably not be called on to make such investments for several years.

3. CONTEXT

LAWS AND REGULATIONS

Legislative and regulatory requirements governing the formation of municipal utilities, the wheeling of electricity, and related subjects comprise an essential component of the environment in which municipal utilities—and would-be utilities—operate. Laws and regulations at both the federal and state levels can be important.

Federal Requirements

The major influence that the federal government exerts on the establishment and transformation of municipal utilities is through FERC's authority to require wholesale wheeling and to set the terms and conditions of electricity transmission contracts. This can be very important to municipalities seeking to establish their own utilities as well as to existing municipal utilities wishing to reduce their expenses because, in both instances, obtaining the lowest possible wholesale rates often entails buying electricity from an outside supplier and wheeling it over the lines of the original host utility⁴. Clearly, in such cases, the transmission rate charged by the host utility will help determine the municipal utility's overall costs.

An important intent of EPAct was to promote greater wholesale competition in order to achieve lower electric rates for consumers (Kelliher 1993). Practically speaking, this means that FERC must make sure that the rates charged for transmission are not unreasonably high, to avoid inhibiting competition and also to avoid providing an extraordinary return to the transmitting utility at the expense of the wholesale customer. FERC's recent "Mega NOPR," as explained in Chapter 1, addressed this by proposing that all utilities file non-discriminatory open access tariffs that would apply to all wholesale transactions (FERC 1995). The issue of "stranded investment," which also was treated in the "Mega NOPR," has the potential to dramatically affect the transmission rates (or related charges) paid by wholesale customers who switch electricity suppliers and by former retail customers who become wholesale customers through the establishment of a municipal utility. Simply put, stranded investments are costs (e.g., for generating facilities) that have been incurred by a utility for the purpose of serving a customer who subsequently exits the system, leaving the host utility with a commitment to pay for the resources in question but with reduced revenues to do so. This promises to be a very important issue (Baxter and Hirst 1995) and, not surprisingly, it has already generated considerable contention. As shown in Chapter 2, the issue of stranded investment was raised in all but one of the case studies, and the amounts claimed by the host utilities were considerable. In fact, the only case in which stranded investment was

⁴In some cases, lower rates can be obtained from the host utility through the *threat* of leaving the system, without actually going through with it.

not discussed (Washington, Utah) was one where the host utility had served the municipality for a relatively short time and the town's right to buy the distribution system and form its own utility had been clearly established in advance by the state utility regulatory commission.

In a 1992 ruling—the first in which it addressed the issue of stranded investment—FERC approved the Entergy Corporation's proposal to recover these costs on a case by case basis by levying a surcharge on the transmission tariffs charged to former customers. This was appealed by Entergy's wholesale customers, led by the Cajun Electric Power Cooperative, and a federal appeals court ruled in July 1994 that FERC must reconsider its earlier decision because of its potential anticompetitive effects. By the time the court issued its decision, however, FERC had already developed a proposed rule on the recovery of stranded costs and had solicited public comment on this. FERC received comments and reply comments from dozens of interested parties (e.g., APPA, Edison Electric Institute, various municipal utilities and state regulatory agencies) and, not surprisingly, the opinions expressed were widely divergent, ranging from the contention that this is a serious potential problem for host utilities to the assertion that the recovery of stranded costs represents the antithesis of competition. The "Mega NOPR" issued in March 1995 proposed that states should, in most cases, handle the stranded cost issue associated with retail wheeling, but that FERC "should be the primary forum for public utilities to seek recovery, through FERC's jurisdictional transmission rates, of stranded costs resulting from wholesale wheeling for newly created wholesale customers who leave their franchised utility's supply system (e.g., through municipalization)" (FERC 1995). Specifically, stranded costs could be recovered through an adder to the departing customer's transmission rate, and the recoverable amount would be "based on a 'revenues lost' approach rather than a hypothetical cost-of-service approach." As for stranded costs incurred when an existing municipal utility switches wholesale suppliers, the "Mega NOPR" proposed that stranded cost recovery be allowed "if the seller can demonstrate that it had a reasonable expectation that the contract would be renewed and can meet other evidentiary criteria..." These provisions are likely to result in higher-than-anticipated costs for existing and would-be municipal utilities if they had not counted on having to reimburse the host utility for its stranded investment.

State Requirements

In all of the case study states, local governments can own and operate municipal utilities and condemn utility assets in order to acquire them for the use of the municipality. In addition, states can exercise control over the establishment and transformation of municipal utilities in a number of different ways. At each of the case study sites, state governments have the authority to do one or more of the following: review bond issues; approve mergers and acquisitions; set value of condemned assets; determine service territory boundaries; establish requirements for withdrawal of the host utility; approve large sales contracts; and approve transmission contracts. All of these functions allow the states to oversee the formation of municipal utilities, and some also

give the states a role in supervising the switching of wholesale electricity suppliers by an existing utility. State decisions can facilitate or impede the process, and specific terms and conditions set by the states can affect how the municipal utility functions and the effects it has on its customers and the host utility. Many, if not all, of the mechanisms listed above probably give state governments the leverage to deal with the issue of stranded investment. However, only one of the case study states—Maine—has *explicitly* addressed the issue of stranded cost recovery. There, the state regulatory commission began a rulemaking proceeding on the recovery of stranded investment in late February 1995. The rule proposed by the PUC would allow former host utilities to collect stranded costs from newly formed municipal utilities through the assessment of an exit fee; the stranded costs to be recovered would be calculated as one-half the difference between embedded and marginal costs (Maine PUC 1995a). But less than two months after it was introduced, the proposed rule was withdrawn because the "Mega NOPR" issued by FERC in March 1995 asserted FERC jurisdiction over the issue of stranded costs associated with the establishment of new municipal utilities (Maine PUC 1995b). The "Mega NOPR" acknowledged that both FERC and the state PUCs have the legal authority to address stranded cost issues associated with municipalization and that the states have several possible mechanisms for dealing with this, such as imposing an exit fee as a condition of creating a new utility and taking up the issue in state proceedings on the condemnation of the host utility's local facilities. However, the proposed rule clearly states FERC's belief that it should be the primary forum for addressing municipalization-related stranded costs.

SIZE OF MUNICIPAL SERVICE AREA

Table 1 shows important characteristics of the area served by the existing or proposed municipal utility for each of the four case studies. At the time of interest, the population of the municipal service area ranged from 4,000 to 70,000, and the number of customers varied from approximately 1,500 to 27,000. These numbers show that there were substantial differences among the sites in the size of the distribution network needed to provide service to the utility's customers. However, the largest difference among sites was in their electric sales, which totaled only 20 GWh per year in Washington, Utah and reached 650 GWh per year in Brook Park, Ohio. These sales were an important determinant of how important the community in question was to its host utility and the intensity of impacts engendered by its loss to another electricity supplier. The magnitude of these sales was determined less by the population of the service area than by the presence of large industrial customers. Madison, Maine and Brook Park were home to large industrial facilities, while Las Cruces, New Mexico and Washington served no customers of that size. Large industrial customers often are interested in lowering their electricity rates by buying lower cost power from a newly formed municipal utility or negotiating lower rates with their existing suppliers, while the host utility is generally highly motivated to keep large industrial customers on the system.

Table 1. Important Characteristics of Municipal Service Area

Municipality	Population ^a	Approximate Number of Customers	Approximate Electric Sales
Washington, UT	4,000	1,500	20GWh/yr.
Brook Park, OH	22,900	8,000	650GWh/yr. ^b
Las Cruces, NM	70,000	27,000	400GWh/yr.
Madison, ME	4,700	2,300	375GWh/yr. ^c

^aDescribes approximate population at the time of interest for the case study.

^bApproximately 75% of these sales are to the Ford Motor Company.

^cOver 90% of these sales are to Madison Paper Industries.

COMPARATIVE PRICE AND RELIABILITY OF ELECTRICITY

In three of the four cases studied, the quest for lower electric rates was extremely important in motivating the municipal government to form a new utility or switch wholesale suppliers⁵. In the fourth case (Washington), cost also was a factor but it probably was less important than the town's desire for independence and control over future community growth. In the three cases where price was very important, there was a clear opportunity for buying cheaper electricity from a supplier other than the host utility. In two instances (Brook Park and Las Cruces), there was a utility with a major interconnection with the host utility whose retail rates were substantially lower than those charged by the host. In the other case (Madison), the rates charged by other nearby utilities were comparable to those of the host utility, but another wholesale supplier was willing to offer significantly lower rates because it had substantial surplus capacity.

Reliability of service was not an issue in any of the cases studied. Without exception, the municipalities studied were satisfied with the reliability of service they received from their host utilities, believed it to be comparable to that offered by neighboring utilities, and did not seek any improvement in it.

⁵The prospective loss of franchise fees and local tax revenue does not appear to have significantly dampened local desires to establish or transform a municipal utility.

4. PROCESS

Figure 2 shows the eight major steps involved in the municipalization process. These steps, which do not always follow the exact order shown here, are very similar to those identified in a Coopers and Lybrand report (1993) which presents findings from a study of nine cases of attempted or completed municipalization. Nearly all eight steps also are involved when an existing municipal utility switches wholesale electricity suppliers, although some tasks may not involve as extensive an effort as is required when a new municipal utility is formed. For example, a feasibility study—which typically is performed during the initiation stage when a new municipal utility is established—would not normally be required when an existing utility switches wholesale suppliers. Also, the amount of financing needed, if any, would be much less when a municipal utility is switching electricity suppliers than when it is first created. However, the only steps that would—by definition—never be involved when an existing utility switches suppliers are obtaining a distribution network and establishing a utility management structure.

This report deals only with the first six steps shown in Figure 2, beginning with initiating the effort and ending with arranging transmission access. The focus is on these steps because this is where the most intense interaction with other parties is involved. Also, the first six steps are most uniquely associated with the establishment and transformation of municipal utilities, while the last two are commonly associated with a number of different city operations. For these reasons, the topics of municipal finance and management are considered beyond the scope of this report.

INITIATION

In all three cases involving the actual or proposed establishment of a new municipal utility, the process began with the performance of a preliminary study by the city to explore the feasibility of this course of action⁶. In addition, initiation of the municipalization process typically was marked by discussions of the question by the local legislative body. In two of the three cases involving municipalization, a survey or referendum was used to help ascertain public opinion relatively early in the process. And in those instances where there was a very large industrial customer—Ford Motor Company in Brook Park and Madison Paper Industries in Madison—that customer was consulted by local officials to determine its level of support for the city's contemplated action. Of extreme importance in these cases was getting assurances from the large customer of its intentions to purchase power from the municipal utility. This was true whether the effort in question was to municipalize or to switch an existing municipal utility's wholesale electricity supplier. In two cases, the city's efforts were initiated in

⁶Typically, this was followed at a later date by a much more detailed study.

anticipation of the expiration of the host utility's franchise to serve the city (Las Cruces) or expiration of the utility's contracts to serve the existing municipal utility and the area's largest industrial customer (Madison).

Figure 2. Major steps in municipalization process.

KEY PARTIES INVOLVED

Figure 3 shows the key parties involved, to date, in the case study efforts. These parties were essentially the same whether the action in question was the establishment of a new municipal utility or the switching of wholesale suppliers by an existing utility. In all cases, not surprisingly, the municipality and its host utility were key participants. Without exception, the municipalities initiated the efforts under study, although it is likely that, in at least one instance, the city was encouraged along this path by its largest industrial customer. All of the municipalities involved were interested in obtaining lower rates, and this was apparently the primary motivation in three of the four cases. In one case, the town's desire for independence and control over future community growth probably was tantamount. For their part, the host utilities invariably wanted to keep their customers and, therefore, did what they could to keep the city on their system. Actions taken toward this end included the use of advertising and other forms of mass communication to attempt to generate public opposition to municipalization, participation in regulatory proceedings, and negotiations with the municipality and its largest customer to entice them to stay with the host utility.

Figure 3. Key parties involved in case study efforts, to date.

The state regulatory commission was involved in three of the cases and is expected to be involved in the fourth one (Las Cruces) if the city proceeds to issue bonds and the host utility withdraws its electric service from the city. While the general role of the commission—regulating the utility industry—was the same from case to case, specific actions taken by state regulators varied from establishing, in advance, the municipality's right to acquire its host utility's distribution network without initiating condemnation proceedings (Washington) to approving, after the fact, the terms of agreements reached through negotiations among the key parties (Brook Park and Madison). Federal regulators also were involved in three of the four cases studied. FERC's oversight of wholesale power purchases and transmission rates made it a player in both instances (Washington and Madison) where wholesale tariffs were established and wholesale wheeling was used. And in a third case (Las Cruces) FERC was responsible for reviewing the proposed merger between the host utility and another IOU; should the municipalization process proceed to the point where an official wholesale tariff must be filed and a transmission agreement is needed, FERC will be involved in regulating those as well.

The new wholesale supplier was involved in three cases, and probably would have been active in the other one (Brook Park) if the city had gotten to the point of selecting a new source of electricity. These parties were interested in providing power to the municipal utilities in question, and generally did what they could to assist their prospective customer, from campaigning in local elections in support of municipalization to participating in regulatory proceedings and negotiations with the host utility. Except for the town of Washington, all the municipalities had consultants who assisted them, often by performing feasibility studies and providing related technical services.

Finally, in both cases where large industrial customers were located in the municipality's service area (Brook Park and Madison), these entities were involved in the process. The objective of these participants was to obtain lower rates and, accordingly, they supported their municipalities' efforts to obtain less expensive electricity. In the absence of retail wheeling, buying lower cost power from a municipal utility represents the best option available to industrial customers for accessing cheaper electricity. And the prospect of losing a major customer to a newly formed municipal utility can provide a powerful incentive for host utilities to negotiate lower rates with the party they wish to keep on the system. In Brook Park, Ford Motor Company provided considerable financial support to the city (eventually paying 100% of its legal and consulting fees) and also was a key player in the negotiations that eventually led to an agreement reducing customer costs.

GAUGING AND INFLUENCING PUBLIC OPINION

In all three cases where the formation of a municipal utility was proposed, the issues surrounding this were discussed at open meetings of the local legislative body.

While this clearly afforded a means for gauging public opinion, attendance at these events was often minimal. Local government officials also sought to determine public opinion in all three municipalization cases by either holding a referendum (Brook Park and Las Cruces) or conducting a city-wide survey (Washington). In the one case (Madison) where an existing municipal utility switched wholesale suppliers, the topic was discussed in open meetings of the utility's governing board, but few local residents showed up for these. A synopsis of the methods used to gauge public opinion is provided in Figure 4.

Figure 4. Main methods used to gauge public opinion.

In Madison and Washington, the local government took no steps to increase public support for the proposed action, which was very strong from the start. The host utility in Washington tried to stimulate local *opposition* to municipalization, but with no apparent success. In the other two cases, local referenda were held and substantial efforts were made to influence public opinion. In Brook Park, Ford Motor Company and

much of the city were very supportive of municipalization from the beginning, but the city still waged a vigorous campaign in favor of this action, making its views known in a variety of ways, including the publication of several issues of a newsletter aimed at local residents. The city was joined in its pro-municipalization campaigning by organized labor. In Las Cruces, significant attempts to influence public opinion were made on both sides of the issue, and the methods used to reach the local citizenry included press releases, public speakers, and other mass communications. In this case, there was substantial public support for municipalization at the beginning of the process, especially from residential customers, but the local chamber of commerce and other business groups opposed the establishment of a local utility.

In those instances where efforts were made to influence public opinion, it appears that there was relatively little change in local sentiment over time. This could indicate that public opinion tends to get firmly set early in the process and is difficult to change after that. It is also possible that opposing campaigns may have the effect of cancelling each other out. Another possibility is that the objective facts were so compelling in the cases studied that efforts to sway community members were largely irrelevant. Or perhaps many people do not consider electricity supply an important issue and do not pay much attention to discussions of this topic.

NEGOTIATIONS

In all the cases studied, host utilities were unhappy about losing their customers through municipalization or the switching of wholesale suppliers by an existing municipal utility. In fact, host utilities invariably resisted the shrinking of their customer base to the extent possible and, failing that, struggled to minimize the financial damage associated with customer defections. Negotiations between a municipality and its host utility—over whether or not the municipality would leave the system and also over the terms of such a departure—was a very important forum in which this struggle took place.

In Brook Park, negotiations between the city, Ford Motor Company, and the host utility led to an agreement that reduced rates for Ford, shared those savings with the city's other customers, and consequently kept the city from forming its own utility—at least for the time being. These negotiations took place over a period of approximately a year and a half and were conducted by staff members from each organization who were knowledgeable about the technical and political issues involved. While most of the negotiating was done by these individuals, each party also had their attorneys present at the sessions. Host utilities also can keep *existing* municipal utilities on their system by the timely negotiation of lower rates when the wholesale customer indicates its willingness to go elsewhere to reduce costs⁷.

⁷For example, the Little Rock, Arkansas, municipal utility recently shopped around for new wholesale suppliers but stayed with the Entergy Corporation after negotiating a substantial rate reduction.

In two of the cases studied (Washington and Madison), negotiations began too late to keep the municipality on the host utility's system so they focused instead on the terms that would govern the municipality's departure. The questions addressed in Washington by representatives of the city and the host utility were the price of the distribution system, the terms of the transmission agreement, and the timing of municipalization. In Madison, the key topics negotiated by the municipality, the host utility, and the new wholesale supplier were the terms of transmission and the resolution of CMP's stranded investment claim⁸. The talks in these cases did not last as long as the negotiations in Brook Park did, but they still extended for several months.

In Las Cruces, there have been no direct negotiations between the city and the host utility concerning the city's acquisition of the local distribution system or any other issues related to municipalization. However, the city did attempt to get lower rates by proposing new terms for the renewal of the utility's franchise when it expired a few years ago. Should the city's effort to establish its own utility proceed, it is likely that negotiations with the host utility will eventually be conducted. These would probably focus on what the city will pay for the host utility's distribution network and transmission services, but it theoretically could also look at what rate reductions the utility would have to make to keep Las Cruces as a customer.

In general, it is problematic for a host utility to offer all retail customers residing in a given municipality lower rates than are charged to similar customers in other cities served by the same utility, because most state regulatory commissions forbid the establishment of discriminatory rates. In those instances where there are large energy-intensive industries located in the municipal service area, this problem can be circumvented by designing a special rate for large industrial customers, which state regulators typically will allow. Also, a recently proposed Massachusetts law suggests a way in which entire municipalities can negotiate lower rates without actually establishing their own utilities and buying power wholesale. The proposed mechanism is the creation of a local "consumer service district" which would be empowered to obtain electric service for its jurisdiction via a competitive bidding process (Montigny 1995). This approach, which is sometimes referred to as "competitive franchise legislation," is described by one industry observer as a way "to take back distribution franchise rights from private utilities and offer them for bid under time-limited contracts" (Ridley 1995).

While it is very common, it is not necessary that direct negotiations be held by the municipality and host utility whenever a municipal utility is established or transformed. Theoretically, all the issues involved can be addressed and resolved through regulatory and judicial proceedings, without the parties sitting down together and attempting to reach a negotiated settlement by themselves. However, direct negotiations offer the host utility the possibility of forestalling municipalization or the switching of wholesale

⁸In this case, the negotiation process was complicated because the negotiating parties were simultaneously involved in litigation over the same issues.

suppliers by an existing municipal utility. And even where that does not happen, engaging in negotiations gives the participants the opportunity to craft a settlement that maximizes their benefits—or at least minimizes their pain—and which avoids the possibility of unpleasant surprises imposed by the presiding regulatory or judicial body.

SYSTEM DEVELOPMENT

As a number of communities have already discovered, establishing a new municipal utility or transforming an existing one can be an expensive and time-consuming undertaking. A new wholesale supplier must be located, a contract must be negotiated with that entity regarding the supply of electricity, and agreements have to be reached with the host utility concerning fair transmission rates. Along the way, participation in various regulatory proceedings is likely to be required, and judicial proceedings could also be involved, depending on the issues raised by the interested parties. For those municipalities that are establishing a new utility, agreement on an appropriate price for the distribution system must be reached with the host utility—which can involve a legal battle concerning condemnation of the utility's facilities—or a duplicate system must be constructed. Findings from the case studies related to distribution, wholesale power supply, and transmission are discussed separately below.

Distribution

Where a new municipal utility was established or proposed, acquiring a distribution network by purchasing the host utility's existing system was favored in two cases, while building a duplicate system was proposed in only a single instance (Table 2). The attraction of buying an existing network is that it is already there and, theoretically at least, allows a municipal utility to begin operations sooner than if it had to build a new system from the ground up. Also, buying the host utility's network could be less expensive and it avoids the potential technical and aesthetic problems associated with building a new set of wires around the existing ones. On the other hand, a utility's refusal to willingly sell—which is very common—necessitates local government condemnation of the utility's facilities, which can involve lengthy and expensive litigation. In one of the cases studied (Las Cruces), the city and the host utility's estimates of what the utility's local assets were worth differed by almost \$150 million⁹. Presumably, this dramatic difference of opinion would have to be resolved in court or through intensive negotiations.

⁹This does not primarily represent a difference in what the parties think the host utility's distribution system is worth. Rather, it reflects the parties' differing views over the portion of the host utility's *total* assets for which the departing municipality should provide reimbursement.

Table 2. Municipal Utility Characteristics

Municipality	Transmission	Distribution	Old Supplier	New Supplier
Washington, UT	Wholesale wheeling	Purchased utility's network	Utah Power and Light Company	Idaho Power and Light Company ^a
Brook Park, OH	Had proposed wheeling	Would have built duplicate system	Cleveland Electric Illuminating Company	N.A. ^b
Las Cruces, NM	Proposes wholesale wheeling	Proposed purchasing utility's network	El Paso Electric Company	Southwestern Public Service Company
Madison, ME	Wholesale wheeling	N.A. ^c	Central Maine Power Company	Northeast Utilities

^aWhile this utility supplies nearly all of Washington's electricity, a small amount of power is provided by the Colorado River Storage Project.

^bNot applicable because municipal utility has not been formed.

^cNot applicable because municipal utility already owned its own distribution network.

An interesting question concerning distribution facilities has been raised recently in Falls Church, Virginia, where the city is considering the establishment of a municipal utility that would purchase less expensive wholesale electricity from another supplier and wheel it to the city using the host utility's transmission lines. The unusual element here is that the city wants to replace the electric meters and tie-ins leading to the homes and businesses of individual customers without purchasing the poles and wires that comprise the bulk of the distribution system (*Richmond Times Dispatch* March 16, 1995). That part of the distribution system would remain under the ownership of the host utility and would be used by the city on a cost-of-service basis. This proposed arrangement, which has been dubbed "Muni Lite" by some industry observers (*The Electricity Journal* 1994), is being strongly opposed by the host utility. This case is potentially important because it raises the question of what is the minimum investment in facilities and equipment that a municipality must make in order to be classified as a bona fide utility. It also is important because other cities are likely to follow suit if Falls Church successfully establishes a municipal utility under the terms sought. In a similar vein, a consumers' group in California recently suggested legislation that would allow the establishment of Consumer Owned Utilities that would perform all major utility functions but would lease transmission and distribution facilities from their host utilities rather than acquiring them outright (Ridley 1995).

Wholesale Power Supply

The host utilities and new wholesale suppliers involved in each of the case studies is shown in Table 2. In two cases (Las Cruces and Madison), the municipality issued a RFP soliciting competitive bids for wholesale electricity and identified a suitable new supplier in this manner. In one case (Washington), the city found a new wholesale supplier with the help of the state municipal utility association. After the selection process was complete, the new wholesale supplier helped the municipality resolve its differences with the former host utility in both cases where those issues have been directly addressed. In one instance, the new supplier was formally involved in settlement negotiations. In the other instance, the new supplier exercised a more informal influence on the host utility, based on existing wheeling arrangements already in effect between the two. Finally, there was one case (Brook Park) in which the municipalization process was stopped before a new supplier of wholesale electricity was formally selected.

Transmission

As shown in Table 2, wheeling was the method of choice for transmitting electricity at all four case study sites. In both cases where transmission of electricity has already begun (Washington and Madison), this has been accomplished by wheeling power over the lines of the host utility. In the other two cases, where transmission of electricity has not yet occurred because a new municipal utility has not been officially established, wheeling was the method proposed. While there have been instances in which municipal utilities have constructed their own transmission lines to connect themselves to the service territory of a nearby utility, this can be very costly and does not seem like an approach that will be widely used in the future, especially since the passage of EPAct which assures open transmission access for wholesale customers. Based on this study, it appears that obtaining transmission access was not difficult in half the case study areas even prior to the passage of EPAct but, in the other cases, it is likely that EPAct makes it easier for a utility to use its host's transmission lines than it would have been in the past. And with the non-discriminatory open access tariffs proposed in FERC's recent "Mega NOPR," it appears that utilities that engage in wholesale wheeling will be assured a fair transmission rate.

In one of the cases studied (Madison), the host utility claimed that the loss of its municipal customer resulted in a substantial stranded investment, and it attempted to recover this by filing a proposed stranded investment tariff with the state regulatory commission and also through the terms of the transmission service agreement that it filed with FERC. Ultimately, these state and federal contentions were settled after extensive negotiations between the host utility, the municipality, and the new wholesale supplier. The issue of stranded investment also was raised by the host utility in the Brook Park case. Because municipalization was avoided—at least for the time being—it is unclear whether this issue would have been raised before FERC in conjunction with the

transmission agreement, or if the utility would have sued for recovery of these assets in state court. In the future, it is likely—based on FERC's proposal in its recent "Mega NOPR"—that the issue of stranded costs will be addressed by FERC in the context of transmission rates.

5. OUTCOMES

The chief outcomes associated with the four case studies of municipal utility establishment and transformation are addressed below. In two cases (Washington and Madison), the effects described are those resulting from completion of the proposed action: municipalization in Washington and switching wholesale suppliers in Madison. In one case (Brook Park), the outcomes of interest are those stemming from the negotiated settlement that prevented—at least for the time being—formation of a municipal utility. And in the final case (Las Cruces), where the effort under study is still very much in progress, the focus is on the *projected* effects of municipalization. The outcomes of interest are the financial health of the host utility, the rates paid by customers of both the municipal and host utilities, and the resource mix utilized by these utilities. The topic of reliability of service is not addressed because that generally has not changed as a result of the kinds of municipal actions discussed in this report.

FINANCIAL HEALTH OF HOST UTILITY

Actual and potential losses of sales by the host utilities at the case study sites are shown in Table 3. These range from the scanty (actual loss of less than 0.2% in Washington) to the substantial (anticipated loss of 8% in Las Cruces). Losses—or potential losses—at the other two sites are approximately 3%, representing a revenue reduction that is large enough to concern the host utility. In the Madison case, the direct loss of customers and additional revenue reductions caused by the subsequent negotiation of incentive rates with some large customers contributed to the financial difficulties that led the host utility to write off \$100 million of its book value. In Brook Park, the settlement that was negotiated assured that no customers were lost, but the host utility suffered an \$8 million annual reduction in revenue as a result of the lower rate given to

Table 3. Changes in Retail Electricity Prices and Sales

Municipality	Loss of sales for host utility	Reduction in electricity rates for municipality
Washington, UT	Less than 0.2%	Approx. 12% ^a
Brook Park, OH	Approx. 3% was <i>averted</i>	More than 20% ^b
Las Cruces, NM	8% is <i>anticipated</i>	13–27% is <i>anticipated</i>
Madison, ME	Approx. 3%	Approx. 30%

^aAlthough Washington's rates fell by 12%, the residential rates of its former host utility fell by 20% during that same period.

^bOnly Ford Motor Company received a *direct* reduction. Other customers received a refund provided by Ford to the city.

the city's largest industry. In Madison—and, to a lesser extent, in Brook Park—the loss of revenues related to the municipalities' efforts contributed to a substantial cut in shareholder dividends paid by the utilities. In Las Cruces, the host utility believes that the revenue reduction associated with the projected 8% drop in sales could have serious consequences, but the relative extent to which this loss would be absorbed by the shareholders and the utility's remaining customers is unclear. In the Washington case, the small proportion of total sales that was lost had negligible effects on the utility's financial well-being.

All in all, it appears that moderate to large revenue reductions—whether due to the loss of customers or the negotiation of lower rates to keep them—can have definite negative effects on the financial health of the host utility and its shareholders, at least in the short term. However, the precise impact will depend on a particular utility's financial strength and cost structure. Customer losses, for example, will have a more serious effect on utilities with high fixed costs than on utilities whose fixed costs are relatively low.

RATES

In all four cases studied, the municipalities' efforts resulted in—or have the potential to lead to—reduced rates for the customers of the municipal utilities (Table 3). Customer savings range from approximately 12% to 30% although, in the case of Washington, the original host utility's rates actually have fallen more than have the rates charged by the new municipal utility. The reader is reminded that, at one of the case study sites, customer savings were realized due to the lower rates offered by the host utility to *prevent* municipalization. In fact, there have been a number of cases recently in which host utilities have offered substantially reduced retail rates to the largest industrial customers of a potential municipal utility in order to keep them on the system (e.g., Romeo and Alma, Michigan; Jay, Maine) or have given wholesale rate reductions to existing municipal utilities (e.g., Kennebunk, Maine; Little Rock, Arkansas) to prevent them from switching wholesale suppliers. Where a new municipal utility is established or an existing one switches wholesale suppliers, the magnitude of the savings realized by ratepayers is determined by the cost of the electricity purchased from the new supplier as well as by transmission rates, the cost of acquiring a distribution system and other needed facilities, and any stranded investment charges that might be assessed—all of which will be reflected in retail rates. In addition, rates will be favorably affected by municipal utilities' exemption from paying federal income tax, their ability to issue tax-exempt bonds, and their access to low-cost federal power.

Customers of the host utility have not experienced rate increases as a direct result of municipalization or transformation efforts in any of the cases where the proposed municipal action was accomplished or a settlement was negotiated. This is due largely to the fact that, where revenue reductions were substantial, the losses were primarily absorbed by the utilities' shareholders. In Las Cruces, where the future of the city's

municipalization effort is unresolved, the potential effects of the establishment of a municipal utility on the host utility's remaining customers is unclear. It is possible that the host utility's remaining customers could face higher rates, depending largely on the amount of money paid by Las Cruces for the host utility's distribution system and for any stranded investment costs, and on how any revenue losses are allocated among ratepayers and shareholders.

RESOURCE MIX

A utility's resource mix is the combination of resources, both on the supply- and the demand-side, that it uses to meet its customers' needs. In all cases but one, the municipalities' municipalization and transformation efforts have resulted—or are expected to result—in a greater availability of DSM programs for their customers. In Brook Park, the settlement reached between the key parties required the host utility to provide free energy audits for Brook Park customers and to pay for a study of the feasibility of constructing an alternative energy generation plant in the city. In Madison, the availability of DSM programs did not change immediately upon switching wholesale suppliers, but the new supplier is expected to assist the municipal utility in developing new DSM programs in the future. And in Las Cruces, the city is considering the provision of more DSM programs, assuming its municipal utility is established, as a way of controlling customer demand and keeping the city's wholesale power costs low. In contrast, the establishment of a municipal utility in Washington did not result in increased availability of DSM programs for the city's customers.

As with rate impacts, no changes have occurred in the host utility's resource mix as a direct result of municipalization or transformation efforts in those cases where the proposed municipal action was accomplished or a negotiated settlement was reached. However, host utilities that lose customers because their rates are higher than their competitors' could tend to avoid the future use of DSM measures that lead to rate increases. In Las Cruces, the establishment of a municipal utility could conceivably result in some reduction in the availability of DSM programs to the host utility's remaining customers because of the sudden capacity surplus that would result from an 8% reduction in sales¹⁰. And, in general, a significant loss of customers by the host utility and the resulting excess capacity could be expected to reduce the utility's need to aggressively pursue the use of DSM resources. The advent of excess capacity also can allow a utility to avoid or defer the acquisition of new supply-side resources.

¹⁰This sudden surplus could conceivably be reduced if EPE's excess power were sold to other CSW operating companies in the event that the EPE - CSW merger is finalized.

 

6. CONCLUSIONS

The preceding chapters suggest a number of conclusions about the establishment and transformation of municipal utilities. Chief among them are the following:

The formation of new municipal utilities and the switching of wholesale electricity suppliers by existing municipal utilities are reflective of modern-day competition in the utility industry. The growing availability of wholesale transmission access, which allows municipal utilities to shop around for the most economical source of electricity and wheel that power to their jurisdiction, significantly increases the potential for competition in the electric utility industry. While utilities have long wished to expand their sales, the element of customer choice was formerly lacking, and it is this expanded ability of consumers to choose which characterizes today's more competitive climate. Also, the establishment and transformation of municipal utilities provide illustrations of de-integration in the utility industry. When a new municipal utility is formed, it typically takes over the task of distributing electricity to its customers and buys wholesale electricity from an outside supplier, purchasing only transmission services from the original host utility which, at one time, provided all the aforementioned functions. Similarly, when an existing municipal utility switches wholesale electricity suppliers, the generation and transmission functions are split off from each other.

The desire for lower rates is the chief incentive for the establishment and transformation of municipal utilities. This, more than any other factor, drives local efforts to form new municipal utilities or switch the source of wholesale electricity purchased by existing ones. Because of this, the existing host utility can often keep its existing customers by offering them lower rates. The desire for local control over future electric service can also be a strong motivator for establishing a municipal utility, but concern with the reliability of service rarely is a significant factor.

EPAct has made it considerably easier for existing municipal utilities to switch wholesale suppliers, but it has not removed the major roadblock to the formation of new municipal utilities. In the past, many municipal utilities could not easily change their supplier of wholesale electricity, because their transmission access was limited. Today, host utilities can be ordered by FERC to wheel power from a willing seller to a bona fide wholesale customer, so the number of potential sources of wholesale electricity available to existing municipal utilities is often considerably greater than it was only a few years ago. And the non-discriminatory transmission tariffs proposed in FERC's "Mega NOPR" should assure fair transmission rates. However, the availability of open transmission access has not dislodged the chief barrier to the establishment of new municipal utilities, which is the host utility's efforts to prevent municipalization and to ensure that, *if* a municipal utility is established, the financial interests of the utility are protected. Because the establishment of a municipal utility typically means the loss of sales and revenues by the host utility, these entities almost always fight it and take all possible steps to prevent

adverse fiscal impacts. These efforts can—and often do—take the form of refusing to sell the existing distribution network and seeking top dollar for these facilities if they are condemned, seeking recovery of stranded investment costs, attempting to negotiate lower rates with the utility's largest customer(s), and contesting all aspects of the proposed action in regulatory and judicial proceedings. These utility responses and the associated costs for the would-be municipal utility, in conjunction with local inertia, help explain why there has not been a flood, or even a significant trickle, of new municipalizations since the passage of EPAct in late 1992.

State and federal regulators have various mechanisms by which they can control the establishment and transformation of municipal utilities. The state-given authority for municipalities to own and operate their own municipal utilities and to condemn property for that purpose is very important; it is also very common. In addition, the states examined for this report can perform a variety of functions—such as approving utility acquisitions and setting the value of condemned assets—which can help determine key outcomes for the municipality, the host utility, and their customers. The availability of these multiple oversight points could allow states to address the issue of stranded cost recovery. On the federal level, FERC exercises oversight over wholesale purchases and transmission access and has proposed that host utilities be allowed the opportunity to recover costs that are stranded when existing municipal utilities switch wholesale suppliers. FERC also has proposed that it be the primary forum for dealing with the recovery of stranded costs associated with municipalization. This agency's stranded cost recovery proposals, if adopted, are likely to result in higher-than-anticipated costs for municipalities if they had not expected to be held accountable for stranded costs.

The acquisition of a distribution system by a new municipal utility can be a very time-consuming and expensive task. While developing the terms of a transmission agreement with the host utility and signing a contract with a new wholesale supplier can present challenges, the acquisition of a distribution system tends to be a more difficult and costly task. This is because building a new distribution network is often very expensive and buying the existing one typically necessitates dealing with the host utility's unwillingness to sell; should that be overcome, the sensitive tasks of establishing a mutually acceptable purchase price and resolving any disputes over stranded investments still remain. In the future, it is likely to be more common for prospective municipal utilities to try to control their costs by attempting to purchase something less than the entire distribution system—especially if there are cases in which this approach is used successfully—but such efforts will probably provoke ferocious utility resistance and extensive litigation. In general, it tends to be considerably easier for an existing municipal utility to switch wholesale suppliers than it is for a municipality to form a new utility.

Large industrial customers often play an important role in the process of forming a new municipal utility or switching wholesale suppliers. These large users of electricity can exert considerable influence over local government decisions, particularly where the

industry in question employs many area residents, maintains good communications with local officials, is willing to make a substantial contribution toward financing the technical studies and legal battles that frequently are involved with efforts of this type, and commits itself to being a long-term customer of the municipal utility. Since the prohibition against retail wheeling that generally applies today does not allow retail customers to directly contract with lower cost electricity suppliers, the purchase of cheaper power through a municipal utility provides industrial customers with an opportunity that they would not otherwise have to lower their electricity costs. Large industrial customers tend to be most strongly motivated where their electricity costs are considerable and the proposed municipal action promises a substantial reduction in rates. At the same time, host utilities are most interested in keeping an industrial customer—through negotiation of lower rates or other means—when the customer is large and its consumption represents a substantial portion of the utility's sales.

Direct negotiations can have beneficial results for the parties involved. Through direct negotiations with the municipality and other interested parties, host utilities can sometimes keep a prospective municipal utility and its largest customer(s) from leaving the system; the typical inducement to stay with the host utility in such cases is lower rates. These lower rates generally would have to be given directly to the municipality's largest industries rather than to all customers, to avoid violating restrictions on discriminatory pricing, unless state laws or regulations are passed allowing municipalities to negotiate lower rates for the entire community. In addition, existing municipal utilities can be kept from switching wholesale suppliers through rate negotiations. Even where the proposed municipalization or transformation cannot be prevented, negotiations over the terms governing a municipality's departure from the host utility's system still can be useful to all sides. Such negotiations allow the interested parties to craft an agreement that satisfies their needs to the extent possible and avoids the possibility of unwanted consequences associated with regulatory or judicial decisions.

The financial health of the host utility and the availability of DSM programs for its customers can be negatively affected by the establishment of a new municipal utility or the switching of wholesale suppliers by an existing municipal utility. Where the loss of customers or the terms of a negotiated settlement result in medium to large revenue reductions for the host utility, negative impacts to the financial health of the host utility and its shareholders are likely to occur, at least in the short run. However, the precise nature of these will be determined by a utility's cost structure and financial situation. As for the availability of DSM programs, the sudden occurrence of capacity surpluses due to customer losses could lower a host utility's interest in providing such programs for its customers. And a heightened utility concern with rates could have a similar dampening effect on DSM. However, the establishment and transformation of municipal utilities often seems to stimulate increased interest in DSM resources within the municipality as the electricity supplier attempts to provide additional services or the municipal utility tries to limit its demand charges.

Rate effects, which generally are positive for the municipalities involved, are determined by a few key factors. Electric rates usually decline as a result of the formation of a new municipal utility, the switching of wholesale suppliers by an existing municipal utility, or the achievement of a negotiated settlement between the key parties involved. Where a settlement is negotiated, customer savings are determined by the rate concessions that the host utility is willing to make, the customer classes that are directly affected, and the manner (if any) in which these savings are shared with other customers within the municipality. Where municipalization occurs, customer savings depend on the cost of acquiring a distribution system and other needed facilities, the transmission rates charged by the original host utility, the magnitude of any stranded investment charges that must be paid, and the cost of electricity purchased from a new supplier. For existing municipal utilities that switch wholesale suppliers, customer savings will be determined by the same factors minus the costs associated with acquisition of a distribution network. The magnitude of stranded investment charges, if any, that should be paid by departing customers is a major source of contention among the parties involved and has the potential to significantly affect rates. For the remaining customers of the host utility, rate effects of municipal actions depend on the magnitude of revenues lost by the utility, the amount of compensation paid by the departing customers and, perhaps most importantly, on how much of the loss will be borne by utility shareholders.

The establishment and transformation of municipal utilities raises important equity questions, which need to be addressed by federal and state regulators. When municipalities form a new utility, when existing municipal utilities switch wholesale suppliers, or when large industrial customers negotiate lower rates in return for staying with their host utility, they are making choices that are not equally available to all utility customers, because not all electricity consumers are located in communities that are served by existing municipal utilities, not all municipalities are well-equipped to establish a new utility, and not all customers have sufficient leverage to successfully bargain for favorable rate treatment. Accordingly, these actions raise the basic question of whether those with the power to choose will benefit at the expense of those who do not have the opportunity to make the same choices. Another basic question concerns how host utilities will distribute any adverse financial impacts among their shareholders and their customers. A number of specific questions arise from these basic queries, including the following: In those cases where a new municipal utility is formed or an existing municipal utility switches wholesale suppliers, will a host utility's remaining customers be saddled with higher rates? Where lower rates are negotiated to induce a large customer to stay with its host utility, will higher rates accrue to the host utility's remaining customers? What proportion of stranded investment costs should be borne by the municipal utility, the customers of the host utility, and the host utility's shareholders? If utilities and their shareholders are seriously hurt as a result of customer defections, how will this affect the structure of the utility industry and the ability of IOUs to serve customers in the future? State and federal regulators need to consider these, and similar, questions when making general policy decisions and case-specific rulings related to the establishment and transformation of municipal utilities. FERC already has entered this arena by asserting

in its "Mega NOPR" that departing customers should bear their fair share of the legitimate and prudent obligations that host utilities assumed on their behalf. It is expected that additional regulatory decisions will be required in the future to address the issues raised here.

Based on the information presented above, it appears that new municipal utilities will continue to be formed but probably not in large numbers, at least in the near-term future. However, some municipalities and large retail customers will undoubtedly get lower rates from their host utilities through the threat of municipalization. Since EPAct has made it easier for existing municipal utilities to switch wholesale suppliers, the number of municipal utilities actively shopping around for lower cost electricity is likely to increase over time as existing wholesale power contracts expire. As a result, some existing municipal utilities are likely to sign contracts with new suppliers in the coming years and others will probably receive lower rates from their host utility in return for staying on the system. All in all, the efforts to establish and transform municipal utilities illustrate some of the important strategic and societal issues, and challenging questions, associated with an increasingly competitive utility industry.

REFERENCES

- American Public Power Association 1995. *"Reply" Comments of the American Public Power Association in FERC's NOPR on Recovery of Stranded Costs*, Washington, D.C., January 23.
- Baxter, Lester and Eric Hirst 1995. *Estimating Potential Stranded Commitments for U.S. Investor-Owned Electric Utilities*, ORNL/CON-406, Oak Ridge National Laboratory, Oak Ridge, Tennessee, January.
- City of Las Cruces 1994a. *Las Cruces' Position on Distribution System Alternatives*, Las Cruces, New Mexico.
- City of Las Cruces 1994b. *Watts Up? 17: How will Southwestern Public Service Company Deliver Electricity to the City of Las Cruces?* Las Cruces, New Mexico.
- Electric Municipalization and the Energy Policy Act of 1992* 1993. Coopers and Lybrand, Philadelphia, Pennsylvania.
- Electric Utility Week*, November 14, 1994.
- Energy Policy Act of 1992*. Public Law No. 102-486, Washington, D.C., October 24.
- "Falls Church Eyes 'Muni Lite'" 1994. *The Electricity Journal*, Vol. 7, No. 10, p. 5, December.
- Federal Energy Regulatory Commission 1994. *Recovery of Stranded Costs by Public Utilities and Transmitting Utilities, Notice of Proposed Rulemaking*, Washington, D.C., June 29.
- Federal Energy Regulatory Commission 1995. *Promoting Wholesale Competition Through Open Access Non-discriminatory Transmission Services by Public Utilities* (Docket No. RM95-8-000) and *Recovery of Stranded Costs by Public Utilities and Transmitting Utilities* (Docket No. RM94-7-001), *Notice of Proposed Rulemaking and Supplemental Notice of Proposed Rulemaking*, Washington, D.C., March 29.
- Hadley, Stanton W. and Edward L. Hillsman 1995. *Electric Retail Market Options* (Draft), ORNL/CON-418, Oak Ridge National Laboratory, Oak Ridge, Tennessee, May.
- Hill, Lawrence J. 1988. *Public Power in the U.S. Electric Utility Industry: Regulatory Issues and Comparative Financial Indicators Across Ownership Types*, ORNL/TM-10497, Oak Ridge National Laboratory, Oak Ridge, Tennessee, January.

- Kelliher, Joseph T. 1993. "Pushing the Envelope: Development of Federal Electric Transmission Access Policy," *American University Law Review*, Vol. 42, Winter 1993.
- Kemezis, Paul 1994. "Municipal defense - the best offense?" *Electrical World*, Vol. 208, No. 11, pp. 52-55, November.
- Maine Public Utilities Commission 1995a. *Order Commencing Rulemaking: Recovery of Stranded Costs* (Docket No. 95-055), February 27.
- Maine Public Utilities Commission 1995b. *Order Terminating Rulemaking: Recovery of Stranded Costs* (Docket No. 95-055), April 18.
- Montigny, Mark 1995. *To Establish Guidelines for Competition in the Electric Utility Industry* (Proposed Legislation), Massachusetts Senate, Boston, Massachusetts, January.
- NU, CMP, and MEW 1994. *Settlement Agreement among Northeast Utilities Service Company and Central Maine Power Company and Town of Madison, Department of Electric Works*, May 16.
- "Public Power 1994 Directory" 1994. *Public Power*, Vol. 52, No. 1, January-February.
- Richardson, Alan H. 1993. "Public Power and the Energy Policy Act of 1992," *Public Power*, Vol. 51, No. 1, pp. 25-31, January-February.
- Richmond Times Dispatch*, Richmond, Virginia, March 16, 1995.
- Ridley, Scott 1995. "Seeing the Forest from the Trees: Emergence of the Competitive Franchise," *The Electricity Journal*, Vol. 8, No. 4, pp. 39-49, May.
- Schap, David 1986. *Municipal Ownership in the Electric Utility Industry, A Centennial View*, Praeger Press, New York, New York.
- The Electricity Daily*, September 14, 1994.
- The Electricity Daily*, September 21, 1994.
- The Plain Dealer*, Cleveland, Ohio, June 13, 1991.
- The Plain Dealer*, Cleveland, Ohio, August 29, 1991.
- The Plain Dealer*, Cleveland, Ohio, April 30, 1993.

The News Sun, Berea, Ohio, November 7, 1991.

Utah Public Service Commission 1981. *Report and Order in the Matter of the Application of CP National Corporation and Utah Power and Light Company for the Sale and Purchase of the Public Utility Electric Business of CP National for Service in Washington, Iron, and Kane Counties*, Case No. 80-023-01 and 80-035-02, Salt Lake City, Utah, June 4.

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APPENDIX A. CASE STUDY RESPONDENTS

CASE STUDY RESPONDENTS

Washington, Utah

- Tom Forsgren, PacifiCorp
- Ralph McClure, City Manager, Washington, Utah
- James Miller, Idaho Power and Light Company
- Julie Orchard, Utah Public Service Commission, Commission Secretary

Brook Park, Ohio

- Thomas Coyne, Mayor, Brook Park, Ohio
- Robert Fortney, Public Utilities Commission of Ohio, Staff
- Al Price, Ford Motor Company
- Steve Puican, Public Utilities Commission of Ohio, Staff
- Todd Schneider, Cleveland Electric Illuminating Company

Las Cruces, New Mexico

- John Curl, New Mexico Public Service Commission, Staff
- Holman King, Central and Southwest Corporation
- David Krupnick, Southwestern Public Service Company
- Robert McNeil, El Paso Electric Company, New Mexico Division
- Jerome Trojan, Assistant City Manager, Las Cruces, New Mexico

Madison, Maine

- Chris Bean, Madison Paper Industries
- Catherine Ogilvie, Northeast Utilities
- Joanne Steneck, Maine Public Utilities Commission, Staff
- Eric Stinneford, Central Maine Power Company
- George Stoutamyer, Madison Electric Works