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ORGANIZING FOR COMPREHENSIVE
COMMUNITY ENERGY MANAGEMENT PLANNING:
SOME PRELIMINARY OBSERVATIONS

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ORGANIZING FOR COMPREHENSIVE COMMUNITY ENERGY MANAGEMENT
PLANNING: SOME PRELIMINARY OBSERVATIONS

1. INTRODUCTION

Since 1973, energy supply and cost problems have recurringly plagued the nation's communities. Supply disruptions have produced gasoline lines, layoffs, cold buildings, and school closings for some communities. Public utilities have frequently requested voluntary conservation as well as making forced curtailments. Virtually all communities are bearing the brunt of escalating energy prices.

In response to these pressures, many local governments have initiated programs to reduce energy consumption. Others are exploring local government's broader role in managing energy. For example, the City Council in Portland, Oregon, has recently adopted the nation's most stringent local energy conservation program. Similarly, 17 widely diverse communities are developing local energy management action plans as participants in the two-year Comprehensive Community Energy Management Program (CCEMP). Funded by the U.S. Department of Energy and managed by Argonne National Laboratory, this program provides the 17 communities with the means to develop local energy plans and planning processes.

The communities in the program, shown in the accompanying table, range in size from Janesville, Wisconsin (population 50,000), to Los Angeles, California, the nation's third largest city. The program has been under way since October 1978 and most communities completed the organizing phase in May 1979. The organizing phase of the CCEMP planning methodology required the communities to implement organizational structures and to develop a detailed work plan.

TABLE 1.
CCEMP PILOT COMMUNITIES

Communities	Population
<u>Small Cities</u>	
• Boulder, CO	80,000
• Greenville, NC	37,000 ^a
• Janesville, WI	50,000
• Portland, ME	66,000
• Richmond, IN	44,000 ^b
<u>Intermediate Cities</u>	
• Dayton, OH	200,000
• Knoxville (and Knox County), TN	334,000 ^c
• Seattle, WA	500,000
• Tulsa (and Tulsa County), OK	417,000 ^d
<u>Large Cities</u>	
• Los Angeles, CA	2,900,000
• Philadelphia, PA	1,800,000
<u>Counties</u>	
• Allegheny County, PA	1,500,000
• King County, WA	1,164,000
• Wayne County, MI	1,200,000
<u>Areawides</u>	
• Greater Bridgeport, CT	321,000
• South Florida, FL	2,500,000
• Toledo Area COG, OH	536,000 ^e

- ^a In Urban Area
^b In Township
^c In Knox County
^d In Tulsa County
^e In Toledo Urban Area

This report provides an assessment of the organizing phase of the 17 communities. It is based on monitoring and evaluation of the CCEMP by the Academy for Contemporary Problems, working under contract to Argonne National Laboratory. How communities have chosen to organize within the mandate of the program and how their organizational structures are beginning to function may provide insights for other communities considering more active roles in local energy management. These observations are presented recognizing that it is very early in the program, that much will be learned from each community's energy planning approach, and that the ultimate test really is whether communities can implement energy management actions where the value of energy savings or local supply exceeds the total cost.

The major purpose of this report is to provide local officials and staff with information on the early lessons from the organizing phase. A secondary purpose is to provide Argonne National Laboratory and the Department of Energy with information useful to the development of the program.

The balance of this introductory section examines the role of local energy management planning and the environment for such planning. Subsequent sections cover:

- Background on CCEMP and the issues for monitoring and evaluation
- Findings from the monitoring and evaluation
- Conclusions relevant to local energy management and the CCEMP.

The Potentials for Local Energy Management Planning

Most current energy sources are produced and distributed by regulated public utilities or large corporations and most decisions affecting energy

consumption are made by private individuals and businesses. Still, local governments have become more directly involved in local energy decision-making. Three reasons for more extensive local energy planning have become evident:

- To minimize net public expenditures on energy as part of sound fiscal management;
- To help create a decision-making environment that facilitates private sector response; and
- To facilitate local economic stability, possibly through cost effective locally generated supply.

There is also a national interest in exploring options in local energy management planning. The U.S. faces a difficult, long-term adjustment to the dramatic increases in world energy prices and the recurring supply insecurity. While progress has been made--for example, U.S. industry has cut its consumption significantly since 1973 and new consumer durables are becoming more energy efficient--much remains to be done. Integrating energy considerations into local government planning processes is one of a number of public and private sector actions that can facilitate national adjustment. The question is what constitutes comprehensive local energy planning and what distinguishes it from other traditional local planning efforts?

Energy Planning as a Community Function

From the community perspective, energy planning has some important differences from other types of local planning:

- Most community planning is oriented toward the supply of local public goods and services (water, sewer, roads, recreation)--not towards reduction of demand. Only in the last decade have attempts been made to deal with demand in local planning--namely, land use and growth management--with notable problems having been encountered.
- Most local planning has dealt with well established technologies. With energy there are a number of emerging community based supply technologies under examination and these may prove to be legitimate areas for local public involvement.

- Critical information concerning energy supply and demand is not readily available to local planners without strong cooperation of the private sector.
- In contrast to other local planning, there does not appear to be any citizen mandate for local government's involvement in energy management beyond government operations.
- At this time, authority and resources available for implementing actions are less developed than for other planning.
- No other largely privately supplied and consumed commodity is so critical to economic functioning and is subject to as many recent problems as energy.

Options open to communities for influencing energy consumption and supply vary from place to place depending on the nature of problems as well as the size and the interest of the community. The overall goal is for local government to assist in the transition of the local economy to greater energy efficiency and greater reliability of supply.

To assist in this transition, comprehensive local energy management planning requires a process with the following general capabilities:

- Access to timely information on important categories of community energy consumption, trends in consumption, and general supply conditions;
- Technical ability to provide approximate cost-benefit and implied trade-off assessments of proposed actions;
- A procedure for examining energy cost consumption in various community operations (fleets, building operations, mass transit) and community infrastructure planning processes (housing, roads, facilities, etc.), community regulatory activities (building codes) and taxation and pricing policies;
- A means by which consensus on energy consumption and supply can be developed and presented for consideration by elected officials, department heads, the private sector, or the general public; and
- A permanent coordinating function having access to information, advice, and decision processes.

How communities organize relative to these ideals will depend on the lines of opportunity available, on the general environment for energy planning, and on local governmental capacity.

The Environment for Comprehensive Local Energy Management Planning

The energy adjustment process under way in the U.S. is directly affected by the regulatory and pricing policies of the federal government. These policies create problems for energy planning that are not common in other public and private planning efforts. Even though crude oil and natural gas price controls are being phased out, U.S. energy prices currently do not reflect their scarcity values and alternate fuels still do not carry the same price tag for comparable values of energy. Under these conditions, prices do not serve as a unifying signal for short and long run planning. To further complicate the planning environment, energy has become highly politicized.

Beyond these broad considerations, the communities selected for the CCEMP pilot projects possess a range of capacity determined by their size, resources, and the general factors which influence local planning and management capability. Based on the Academy's initial monitoring work in each of the 17 communities, general capacity factors that have acted to influence the communities' organizing responses and the early functioning include:

- Available resources such as university or consultant personnel, industrial expertise, and in-house technical and analytical capability.
- Individual leadership which can vary from community to community. (In particular, the entrepreneurial and innovative role of key individuals, chief executive or staff individual, is apparent in terms of the type of leadership provided to initiate and organize the pilot projects.)
- Political complexity shaping lines of opportunity and feasible avenues for local energy planning. (In particular, the relationship between departments, legislature and executive can facilitate or impede the organizing response.)
- Community traditions in terms of the involvement of the private sector in voluntary public assistance and the cooperativeness of other institutions and interest groups in dealing with public problems.

The one community factor unique to energy management is how communities have responded to energy problems during the last six years. The Arab oil embargo, the natural gas curtailments of 1976-77 and the effects on electrical generating capacity from the UMW coal strike in 1978 have all prompted communities to take various energy management actions. Other unique factors in this regard include the operation of utilities by municipalities or local units of government. Los Angeles, for example, operates the largest municipally owned electric power generating utility in the nation. Seattle has had its own municipal distribution system since 1910. Other communities in the pilot program which distribute electricity or natural gas through municipally owned utilities include Philadelphia, Greenville, North Carolina, Richmond, Indiana, and Knoxville, Tennessee.

To a large extent, these general and unique capacity factors condition the response that the individual communities have made in regard to the CCEMP mandate. These factors will also be very important determinants of how effectively the planning process operates and how successfully elements of community energy plans are adopted and implemented.

II. THE CCEMP: ITS OBJECTIVES AND METHOD OF EARLY EVALUATION

The Comprehensive Community Energy Management Program pilot studies were initiated in April 1978 and are managed by Argonne National Laboratory. As stated in the Request for Proposal sent out to the nation's communities on April 7, 1978, there are several objectives for this two-year national program. These objectives are:

- To develop, test, and demonstrate organizational arrangements for accomplishing a comprehensive community energy management program in communities
- To test, evaluate, and improve planning/implementation approaches and methodologies for conducting a CCEMP
- To expand the available community energy data base
- To facilitate comprehensive community energy management through dissemination of methodologies and of the results of applying these methodologies
- To develop information for future federal policy related to comprehensive community energy management.

From the 116 respondents to the RFP, 17 were selected by Argonne National Laboratory to participate in the pilot program. The general characteristics of these communities are shown in the following table. The communities represent a microcosm of communities nationwide and can serve as models for local energy management planning. In addition to the technical and organizational qualities of the approach presented in their proposal to Argonne National Laboratory, they were chosen for a variety of reasons, including governmental form, location, and population size. The overriding concern was to select a variety of situations for attempting comprehensive approaches to local energy management planning. These community efforts serve as a test of local governments' role and capability to lead and coordinate energy planning.

TABLE 2
CCEMP PILOT COMMUNITIES - SUMMARY CHARACTERISTICS

GOVERNMENTAL FORM						ENERGY EXPERIENCE				GROWTH RATE (1970-75) ⁹		% MANUFACTURING EMP.			
Community	Population	City Commission	Mayor-Council or Executive-Council	County Commissioners	Council Manager	N/A	None	Ad-Hoc Efforts	Energy Staff	Publicly Owned Utility	Above Regional Average	Below Regional Average	Above National Average	Below National Average	
<u>Small Cities</u>															
Boulder, CO	80,000				X			X			X			X	
Greenville, NC	37,000 ^a				X					X		X		X	
Janesville, WI	50,000				X			X			X		X		
Portland, ME	66,000				X				X			X		X	
Richmond, IN	44,000 ^b		X							X		X	X		
<u>Intermediate Cities</u>															
Dayton, OH	200,000	X							X			X	X		
Knoxville (& Knox Co.) TN	334,000 ^c		X							X	X			X	
Seattle, WA	500,000		X						X	X		X		X	
Tulsa (& Tulsa Co.) OK	417,000 ^d	X							X			X		X	
<u>Large Cities</u>															
Los Angeles, CA	2,900,000		X						X	X		X		X	
Philadelphia, PA	1,800,000		X						X	X		X	X		
<u>Counties</u>															
Allegheny Co., PA	1,500,000			X					X			X	X		
King Co., WA	1,164,000		X						X			X		X	
Wayne Co., MI	1,200,000			varies ^f			X					X	X		
<u>Areawides</u>															
Greater Bridgeport, CT	321,000					X	X					X	X		
South Florida, FL	2,500,000					X			X		X			X	
Toledo Area COG, OH	536,000 ^g					X			X			X	X		
		1	7	1	5	3	2	2	10	6	4	13	8	9	

^aIn Urban Area

^dIn Tulsa County

⁹Regional = U.S. Census Division

^bIn Township

^eIn Toledo Urban Area

^cIn Knox County

^fCounty Working with 42 local jurisdictions

This chapter presents a brief description of the planning methodology the communities are using and the methods employed by the Academy for Contemporary Problems in conducting a preliminary evaluation of the organizing phase.

The CCEMP Planning Methodology

Guidance for conducting local energy planning in the 17 communities was provided through a planning methodology based on the following assumptions:

1. To perform effective energy planning a community should know its current and future energy use patterns, including an understanding of how much of each energy form is required, for what purpose, and by whom.
2. Energy use is based on a community's physical characteristics, community activities, and local weather. If these factors can adequately be determined, then a community's energy use patterns can also be estimated.
3. The conservation and management of energy in itself has not generally been a prime community value or goal. However, energy objectives must be set to support a community's primary goals, such as providing for a viable economic base or providing for an environmentally pleasant place to live and work. Therefore, evaluations of energy solutions (alternatives) must be based not only on energy parameters, but also based on other 'variables.'*

The methodology provides a procedure and technical aids to assist communities in conducting planning for comprehensive energy management. The components and logic of the planning methodology are shown in Figure 1.

To date, all communities have completed the organizing phase (see Figure 1) which is the focus of this report. The community organizational structures are

* Comprehensive Community Energy Planning, Final Report, Volume I - Workbook, Volume II - Appendices, Volume III - Worksheets, HIT-703-3. April 1978. Prepared under U.S. Department of Energy Contract No. EC-77-C-10-0023, Hittman Associates, Inc., Columbia, Maryland 21045.

FIGURE 1. COMPREHENSIVE COMMUNITY ENERGY PLANNING METHODOLOGY

based on the organizing concepts each community was required to include in its proposal to Argonne National Laboratory.* Communities were to refine and implement the organizing concept in the first task of their contracts with Argonne, which involved:

- Implementation of the management structure including the formation of committees, the assembly of project staff, and engaging consultants, as may be needed, to conduct the planning process.
- Preparation of the work plan describing the planning activities to be accomplished, who is to do them, and how they are to be done. To be included are a description of task responsibilities and their associated cost; scheduling; methodology for data collection; analysis and staff paper preparation; procedures for coordination and review; and the process for approval of recommendations.

Virtually all communities have completed this phase and have begun to work on the technical aspects of the project including auditing and establishing of community energy management objectives. Although it is too early to know what the different community organizational structures imply for local energy management planning, some preliminary insights are possible from the Academy's monitoring and evaluation work. The remainder of this chapter describes the purpose and methods used in the monitoring and evaluation.

* The organizing concept was to include identification or description of:

- The major energy problems facing the community and the key institutions that should participate in developing an energy action plan
- The relation of key institutions to other community activities including housing and transportation and their role in affecting the energy supply and consumption patterns in the community
- The local agency having prime responsibility for energy management and the methods for coordinating between this agency and other agencies
- The methods for involving elected officials and citizens and definition of committees to achieve coordination and communication decisions
- The relationship of the CCEMP effort to other community functions.

The Role and Method for Monitoring and Evaluation

Monitoring and evaluation of the Comprehensive Community Energy Management Program are intended to assist Argonne National Laboratory and the Department of Energy in achieving the various research and policy-oriented objectives stated at the beginning of the chapter. The monitoring and evaluation process continues during the full two-year program. Its overall purpose is to draw on the collective experiences of the communities in order to:

- Provide information to other communities on methods for local involvement in energy problems;
- Improve the methods for local energy management planning; and
- Make policy recommendations about the applicability of the program nationally.

This is the first of a series of intermediate reports to be prepared concurrent with completion of the project phases. These intermediate reports rely on drafts of case studies prepared for each community. Information for the case study draws from published community documents and CCEMP planning products, on-site interviews at key points during the two-year program, and reports from on-site monitors acting as passive observers of the community process. These intermediate products form the basis for a final report to be prepared after the conclusion of the two-year effort.

In conducting the monitoring and evaluation for the organizing phase, the Academy identified important organizational considerations necessary for approaching energy planning on a comprehensive basis. These considerations followed from both the CCEMP organizational expectations and from generally accepted practices for comprehensive planning and program implementation. The considerations or issues provide the basic focus for this report. They are described briefly along with the methods used to classify the community organizing responses.

Issues for Evaluating the Organizing Phase

Evaluating a planning process which has just started is difficult since there are no "results" on which to base an analysis. Consequently, at this early stage of the pilot program, one primarily examines the formal organizational structures, stated methods of technical analysis, and intended arrangements for managing the planning processes as described in the community work plans. Only to a very limited extent is it possible to judge the early functioning of the management structures.

Within these limitations, the Academy approached this initial evaluation by attempting to explore the following broad questions:

- What variation in initial organizational response do these communities show and are there any clear explanations for major differences among communities?
- Do these differences suggest, based on early functioning, greater or less potential for successfully carrying through and implementing a comprehensive approach to local energy management planning?
- Have communities been successful in achieving commitments of individuals and institutions in the organizing stage necessary for conduct of the work and later implementation of the plan and what has facilitated this commitment?
- What methods of public access have been proposed and how are these beginning to function?
- Have communities carefully considered the Hittman planning methodology in terms of how they will adapt it to their own data analysis capabilities and planning processes?

In conducting the analysis, it was necessary to create preliminary categories encompassing the various dimensions of the community's organizing response. The Academy chose the following areas as initially most relevant to the monitoring and evaluation: management structure, public access, coordination and work plan.

The categories were intended to direct the analysis towards institutional and public management aspects of the community organizing response which make

planning for community energy management different (or more difficult) than organizing for other traditional community planning activities. Each of these four areas is discussed below.

The Role of Traditional versus Unique Management Structures. The management structure established by the CCEMP communities is the formal organization through which the planning process and planning products will be produced during the two-year pilot program. Although the communities vary, the initial RFP mandated certain components which all communities were to include. These basic components include

- A lead agency
- A policy advisory committee
- Technical support (either in the form of staff, committees, or outside consultants)
- A relation to the decision-making process in the community and other community functions.

There are at least four functions that the management structure must serve. First, it provides the location for managing the project, allocating resources, and overseeing the quality of the various planning projects. Second, it provides one means of liaison with decisionmakers in terms of its location within local government (the other means being the advisory committee structure). Third, it is the principal means for intragovernmental coordination. Finally, it serves as a resource for the advisory committee(s).

Because a comprehensive approach to local energy management planning involves so many diverse local interests and is long run in nature, the extent to which communities innovate is likely to be strongly influenced by the management structure. The specific implementation orientation of the CCEMP suggests that pilot project management structures will reflect an

action orientation. This further suggests that if the management structure is to serve as the vehicle for facilitating implementation, it must:

- Be in a position to support the actual decision-making and implementation processes in the community
- Provide a means for involvement of decisionmakers and other institutions in the community throughout the planning process
- Be capable of producing or managing the preparation of technical planning products that facilitate decision-making.

Given these expectations, the management structures will need to provide methods for coordination and public participation throughout the planning process.

The Role of Public Awareness, Participation, and Commitment. Because of the diversity of interests involved in regional energy supply and local energy consumption, the CCEMP concept needs to be examined in terms of how management structures affect participation and commitments. Outreach to members of the CCEMP community and its various interest groups is important to the planning process for a number of reasons. First, many of the interest groups have values and perspectives which need to be integrated into the planning process if the final plan is to be acceptable to the community at large. Second, public outreach and public participation is a vehicle for educating and sensitizing the public to opportunities to save money through energy conservation and to build support for broader community actions. Third, public participation also opens the spectrum of considerations for alternatives and strategies beyond what might normally occur through a technically oriented planning exercise.

The Integrating Role of Public and Private Sector Coordination. Coordination is widely recognized as a critical element of any successful planning process. Planning done outside an institutional system (management structure) accepted

by all participants can seldom be implemented. Coordination as a component of energy planning takes on increased significance because:

- Energy suppliers are predominantly privately owned and state or federally regulated. Few communities have established energy supply capabilities beyond distribution of electricity or natural gas.
- Energy planning at the community level must be linked to other local government functions. Energy supply and demand are integral components of the community's transportation, community development, public works, and government operations.
- Most communities have limited experience in effecting strategies requiring broad public/private sector commitments.

Of interest to the evaluation of coordination are methods indicated for securing coordination between energy planning and other community functions (as indicated in the management structure and work plan) and for securing the participation of key public and private actors affected by, or potentially responsible for, implementing the energy plan.

The effectiveness of coordination procedures and the degree of coordination achieved cannot be determined at this preliminary stage of the CCEMP process. The Academy's evaluation is generally confined to the community's formal prescriptions for coordination as established in their management structure or specified in the work plans.

The Work Plan as a Management Tool. The first formal product of the CCEMP process is the work plan document. Although the CCEMP mandates preparation of detailed project work plans, variations in how communities respond to this mandate are important to the evaluation of the program. The approved work plan is the first intermediate product of the planning process after submission of the initial proposals and therefore should allow for some analysis of different influences on each community's approach to CCEMP. In

general terms, the work plan is a blueprint for the performance of the entire CCEMP process as it contains the methods and process for conducting each stage and a corresponding budget. In drafting the work plan, each community has been required to identify and describe the significant choices that are likely to influence the character of the energy planning process now under way. These choices include:

- The allocation of budget resources and time among the various stages of the planning methodology
- The assignment of task responsibilities between committees, staff, consultants, and others
- Clear specification of how the community intends to produce the technical products. (Specifically, identification of the analytical approaches to be used to adapt the planning methodology to local circumstances and identification of data and how they are to be used.)
- The identification of review and coordination procedures to be used at various points in the planning process
- A procedure for the adoption and implementation of the CCEMP action plan.

Most federal grant-in-aid programs assume that a well-specified work plan prepared in cooperation with major participants in the process is more likely to produce a planning process resulting in proposed actions supported by the community. The focus for the Academy's evaluation is the variation among communities in terms of emphasis, priorities, and the method by which work plans are prepared.

To apply these four areas of evaluation, a classification scheme was devised. It is discussed in the next section.

Classifying the Community Organizing Response

As a preliminary step in evaluating the organizing stage, a classification scheme was devised and applied to the 17 communities. This approach was tried as one way of abstracting from the highly diverse set of facts for each community while still retaining the essence of each community's response to the CCEMP mandate.

The basis for the classification is an elaboration of the general issues presented above. Two sets of variables were established and simple measures specified for each. The first set includes variables describing community characteristics such as energy experience or government form, among others. The second set deals with the organizational response of each community in terms of management structure, public participation, coordination mechanisms, and project work plan. Under each of these headings specific categories and simple measures were developed. For example, management structure categories included:

- Lead designation
- Decision-making input
- Policy Advisory Committee structure
- Staff
- Role of consultants
- Role of voluntary outside technical assistance

The classification scheme was used to examine two types of cross tabular comparisons for possible relations. These were:

1. Relations between community characteristics and organizational response [e.g., does previous energy experience seem to relate to the type of advisory committee communities formed?]
2. Relations between different aspects of the organizing response [e.g., does the choice of the lead agency relate in any way to the role for the advisory committees?]

Implementation of this classification scheme showed some interesting relations; these are discussed in the next chapter. For the most part, the early lessons and evaluation of the CCEMP organizing response must be derived from the examples of the individual communities. For this reason the details of the classification and comparisons are only included as appropriate in the following text.

In considering the results of the preliminary evaluation, several factors should be kept in mind. First, the classification and attempt to ascertain patterns of relationship are subjective processes. Evaluation is conducted on judgments of a number of individuals involved in this study. Although an attempt was made to use a classification scheme, the process is by necessity not a scientific one.

The most critical consideration is the early stage of the CCEMP projects. The implications of alternative management structures for local energy management planning can only be ascertained fully at the end of the two year program. The management structure specified in the community work plans will more than likely evolve in their various dimensions as the planning process proceeds. There will be many lessons to be learned from changes made in specific communities and these as much as what they have already specified, may provide the important insights on pragmatic approaches to local energy management planning.

Another important aspect of the preliminary evaluation is the role of the original community selection process on the observed responses. These communities were selected for a variety of reasons, not the least of which were their government form and particular approaches to the CCEMP mandate. A truly random sample of communities engaging in energy management planning could

well give different results in terms of lead agency location, community structure, and a variety of other dimensions that were considered in this report.

Finally, it must be stressed that what is being evaluated is the staff and project managers' ability to construct a good work plan and develop the outlines of a good management structure. While this is an important consideration in the planning process, the key ingredient for the success of the entire program is the quality and capability of leadership and the nature of the policy and technical processes. At this stage, the only judgments that are possible relate to the initial planning documents and some of the preliminary committee and staff interaction.

III. COMMUNITY ORGANIZING RESPONSE: THE PRELIMINARY FINDINGS

Introduction

The organizing stage for most CCEMP communities lasted about eight months--from October 1978 when contracts were awarded to May or June of 1979. The schedule envisioned by Argonne and the Department of Energy originally had been much tighter. The community organizations and work plans were to have been completed in four months--by January 1979. This schedule proved to be unrealistic and several of the community work plans went through multiple revisions at the sponsor's request.

Although this program delay created difficulties for some communities in terms of hiring staff and maintaining the interest of policy advisory committees, the slower start-up allowed many communities a chance to develop a better understanding of how they would conduct the planning process. One CCEMP community project manager commented during an Academy interview that it probably should take six to eight months to gear up this kind of program. Time is needed to carefully define the scope of work for consultants; to define roles and obtain commitment and participation by qualified committee members; to allow interested members of the public time to become involved; to sort out the relations of the project to current energy management activities in the community; to establish commitments and working relationships within the various units of local government; and to translate all of these decisions into well-organized work plans that can provide a flexible framework for managing the two-year project.

This chapter attempts to bring together the monitoring and evaluation work of the Academy through July 1979 or the approximate completion of the organizing phase. A draft case study was prepared of each community's

organizing experience. The case study is based on Academy interviews with key individuals in each CCEMP community, on on-site monitor reports, and on review of the community's project proposals and final work plans. Comparisons among the communities were made from the classification scheme described in the previous chapter. That exercise, together with specific community experiences, are the basis for the observations offered in this chapter. An overview of the key findings is presented followed by details on the specific areas of concern.

Overview of Findings

The diversity of the 17 communities allows for only a few statements that are general in nature. These general findings do provide the basis for organizing a closer examination of the specific communities and anticipating some of the implications of the early organizational response.

Major findings are:

1. In spite of the planning orientation of the program, virtually all of the general purpose governments have placed the responsibility for the CCEMP function in an agency with some form of implementing authority or with coordination responsibilities reporting directly to the chief executive. Several of the communities had previous energy coordination functions, but many of the lead agency decisions are directly related to the location of the leadership for seeking the initial contract.
2. Active involvement of elected officials in the early planning process is limited to the moderate and smaller sized communities. Elected officials and other high level non-CCEMP participants have been more directly involved in the early planning process in communities experiencing slow population growth and economic development problems. Many of these communities have tied energy planning explicitly or implicitly to support of their economic development strategies.
3. Most communities have policy advisory committees consisting of high or medium level individuals from most of the important sectors (utilities, government, consumer/environmental groups, business). With the exception of five or six communities, the members of the policy advisory committees have attended meetings but did not become substantively involved in the decisions governing the organizing

phase. Those communities with active substantive committee participation generally have been able to mobilize planning resources more quickly and to specify planning processes which appear to achieve substantial early integration with other community functions (governmental, business, and community groups).

4. The skill and experience of the CCEMP project manager is emerging as a pivotal element in the organizational phase. In a few cases, entrepreneurial type individuals who initiated the community response have stepped back in favor of individual managers with direct skills in project and technical management.
5. Finding energy-experienced staff at salaries commensurate with community pay scales has presented difficulty in communities conducting most of their own audit work. Subcontracting of technical work to consultants is common, though the communities with well-prepared work plans appear to be integrating consultant work with development of their own analytical capabilities.
6. All communities indicate formal mechanisms for coordination, usually through the plan adoption process. Intergovernmental coordination, where it has occurred, is largely achieved through informal channels such as staff exchange of information. It is too early to assess the extent of coordination and the requirements vary for the different stages of the planning methodology. Many communities achieve informal coordination through their policy advisory committees and through the location of the CCEMP lead.
7. Similarly, public access and education are specified in most of the work plans. Methods vary from traditional uses of the media and work shops to representation on the policy advisory committees. Again, it is too early to assess how public participation is functioning, though the few communities using completely open membership on the policy advisory committee appear to be achieving convergence of interests around energy issues central to the communities.
8. CCEMP work plans, in almost all communities, were reported either by staff or by staff and consultants working together. With the exceptions noted above on advisory committees, committee involvement has been to review and comment. Due to the involved nature of the technical portions of the CCEMP planning methodology, it is not surprising that volunteer policy advisory committee members have had minimal participation. Where broader involvement in the work plan preparation has occurred, it has primarily been through small negotiating sessions within government and with consultants.

These general findings set the stage for more detailed examination of the various dimensions of the community organizing responses.

The Variations in CCEMP Organizations and
the Early Functioning

Although the analytical framework and classification scheme treated coordination mechanisms separately, at least at this early stage, they are more logically considered under the various components of management structure. Consequently, this section presents detailed findings on

- Location of the Lead Agency
- Involvement of Decisionmakers
- Policy Advisory Committee Structure
- Staffing and Technical Support
- Public Access and Participation
- Preparation of the Work Plan

Location of the Lead Agency

The lead agency plays the sustaining and coordinating role in the process. It has the ultimate responsibility for conducting the planning process and producing the planning products. Ideally, it determines visibility inside and outside of government; it determines status, including access to decision-makers; it provides one of the two means for achieving coordination (committees being the other); and it either provides technical capability or manages consultants, or both.

Long run energy decision responsibility is spread among many private and public sector organizations. In particular, private utilities, large consumers and the general public largely determine community energy use. In this environment, local government efforts to participate in long run decision-making suggest a highly regarded and influential lead agency.

Given the numerous determinants of local energy consumption, the limited control of supply, and the diffuse nature of decisions affecting energy, the lead agency must be able to effect strong coordination. Coordination can be facilitated by the nature of the lead agency. Its position relative to elected officials and to other agencies, its authority, and its relation to the private sector are facilitating factors to effective coordination.

Choice of lead agency for the CCEMP in part reflects the importance accorded to the pilot project. Given the demonstration nature of the program, the recurring crisis atmosphere surrounding energy, and the implementation mandate of the program one would expect location in line agencies or policy coordinating offices. Line agency is defined as one with some direct implementation authority (capital expenditures, regulations, or operating policies). Policy-coordinating offices are defined as functions with liaison, information, or review responsibility which cut across departmental lines. These would generally be located in a mayor, city manager, county commissioners, or county executive's office.

Findings. Looking at the backgrounds of the 17 communities, one finds no distinguishing influence in their choice of lead agency. The communities show a variety of location by size, type of government, and previous energy experience. Table 3 shows the variety of choices the 17 communities have made in locating their CCEMP activity.

Of the general purpose governments (excluding areawide planning bodies) only three communities have chosen to place their lead in planning agencies. These are Knoxville, Boulder, and Allegheny County. For example, Knoxville's program is being conducted by the Metropolitan

TABLE 3
CCEMP PILOT COMMUNITIES - LEAD AGENCY CHARACTERISTICS

COMMUNITIES	LEAD AGENCY	PRINCIPAL RESPONSIBILITIES	REPORTING TO
<u>Small Communities</u>			
Boulder, CO	City Planning Department	Agency for land use planning and regulation technical support	City Manager Boulder Planning Board
Greenville, NC	Energy Conservation & Management Office Greenville Utilities Commission	Public utility for water, sewer, and electricity	Greenville Utilities Commission
Janesville, WI	Public Works Division	Line agency for public facilities operation, engineering-planning-building inspection services, fleet maintenance, solid waste, streets, and storm drainage	City Manager
Portland, ME	Office of Energy Conservation City Manager's Office	Staff to energy advisory body	Assistant City Manager Portland Energy Reduction Team
Richmond, IN	CCEMP Department	Staff to CCEMP effort	Mayor
<u>Intermediate Communities</u>			
Dayton, OH	Central Services Department	Line agency for property management, motor equipment, data processing and purchasing	City Manager
Knoxville, TN	Metropolitan Planning Commission	Comprehensive planning agency for city and county	Metropolitan Planning Commission Board
Seattle, WA	City Energy Office	Initiate energy conservation programs, coor- dinate non-electrical City conservation programs, and respond to federal grants for energy conser- vation programs/applications	Mayor

TABLE 3 (continued)

COMMUNITIES	LEAD AGENCY	PRINCIPAL RESPONSIBILITIES	REPORTING TO
Tulsa, OK	Energy Conservation Division Commissioner of Streets and Public Property	Monitor city energy utilization, initiate energy conservation projects in city facilities, and assist in development of community-based energy objectives	Commissioner of Streets and Public Property
<u>Large Cities</u>			
Los Angeles, CA	Energy Coordinator Mayor's Office	Policy analysis support to Mayor on national/state energy issues and Dept. of Water and Power electrical supply/conservation efforts, and various energy committee and program responsibilities	Mayor
Philadelphia, PA	Office of the City Representative and Director of Commerce	Line agency for airport and civic center operation and lead agency for economic development - public relations	Mayor
<u>Counties</u>			
Allegheny Co., PA	Energy Division County Department of Planning and Development	Comprehensive planning for county and administration of balance of county CDBG funds	County Board of Commissioners
King Co., WA	Energy Planning Project Office of the County Executive	Staff to CCEMP effort	County Executive
Wayne Co., MI	Office of Program Development and Coordination	Administration of balance of county, CDBG and CETA funds and coordination of new federal funding initiatives	County Board of Commissioners
<u>Areawides</u>			
Greater Bridgeport, CT	Greater Bridgeport Regional Planning Agency	Comprehensive and functional areawide planning	Greater Bridgeport Regional Planning Agency Governing Body
South Florida, FL	South Florida Regional Planning Council	Comprehensive and functional areawide planning, A-95, and Development of Regional Impact review agency	South Florida Regional Planning Council Governing Body
Toledo Area, OH	Toledo Metropolitan Area Council of Governments	Comprehensive and functional areawide planning and A-95 review agency	Toledo Metropolitan Area Council of Governments Executive Committee

Planning Commission, the City-County planning body for the area. This choice is the traditional approach for policy/planning tasks which cover both the city and the County. The arrangement is patterned after existing participatory structures established for metropolitan waste water and transportation planning.

Boulder will incorporate its CCEMP action plan in the Boulder Valley Comprehensive Plan. Amending this plan requires approval by both the City and County Planning Boards as well as the City Council and County Commissioners. This process requires a wide and strong basis of community support. The City Planning Department and City Manager are the key actors in this phase. The Planning Department will make the formal presentations to the other city and County organizations in seeking final adoption of the plan.

In Allegheny County, several energy activities were already coordinated by the Department of Planning and Development. The department also handles all County community development monies.

Among the other local governments five have chosen line agencies (including the municipal utility in Greenville) and six are in policy/coordinating offices. Although these locations have often resulted from the process by which communities learned of the CCEMP (initiative of specific individuals), several of the communities had energy offices or energy coordinators prior to the pilot program. These include Dayton, Los Angeles, Allegheny County, Greenville (Energy Conservation Unit of the Greenville Utilities Commission), King County, Seattle (City Energy Office), Tulsa, and Portland.

In two cases where the lead is a line agency or policy coordinating offices, most of the actual work will be conducted by a planning department. For example, the program is being managed by the Mayor's Energy Coordinator in Los Angeles but the work is to be done by the Department of

Planning with help from the Community Development Department, the Transportation Department, and the Department of Water and Power (city owned utility).

In several cases, communities have established the lead agency to play a strong role in intragovernmental coordination. Examples include:

- Seattle, where the CCEMP project manager chairs the Municipal Support Group consisting of managerial staff from city operating departments and the executive department's Office of Management and Budget and the Office of Policy Planning. The Municipal Support Group is supposed to review interim products, provide available data, manage small analytical tasks, coordinate larger funded tasks, and communicate to the policy advisory committee (Energy Ltd. Citizens Committee) activities relating to the CCEMP.
- Portland (Maine), where the Assistant City Manager is directing the CCEMP and will provide direct coordination for the project with other departments and take responsibility for liaison at the City Manager, Mayoral, and Council levels.
- Dayton, where the City Energy Coordinator-Central Services Director will facilitate formal review and adoption with the City Manager, Office of Management and Budget, Law Department, and Office of Intergovernmental Affairs. The Energy Analyst under the Energy Coordinator will facilitate acquisition of information to be used by the University of Dayton, Research Institute which is preparing all of the CCEMP planning products.

These examples represent one of several levels of coordination likely to be needed if the CCEMP concept is to prove viable.

Implications. While the lead agencies in the CCEMP communities are predominately "action oriented" this dominant locational choice does not diminish the importance of developing valid information. In fact, given the uncertain nature of what local government's role in energy can and should be, traditional forms of public intervention such as provision of timely planning information through planning agencies may be one of the contributions of a more active local government role in energy.

Although premature, some prescription on the role of the lead agency is possible, based on review of the 17 communities. For example:

- Management capacity, ability to influence implementation and ability to effect coordination is likely to be more important to the CCEMP process than departmental titles in selecting lead
- Political support for the lead agency, type and role of advisory committees, and calibre of project management will be more important to functioning of the process than any specific location
- Coordinating offices next to strong executives or major operating agencies appear to offer optimal conditions for location of the planning process, assuming that a comprehensive approach to energy is necessary for local government to contribute to energy management.

These considerations imply that the higher the visibility and more influential the location, the greater the likelihood of public and private sector participation and ultimate implementation of energy alternatives. This clearly requires strong local political support for the CCEMP concept.

Involvement of Decisionmakers

Elected official interest, support, and even direct participation in a planning process strongly indicates the importance of the activity to the community. Their active involvement during the process should increase the likelihood that actions will be implemented. In addition, elected official involvement can add to the community educational benefits of the project by drawing attention to the process.

Findings. Participation has taken a variety of forms during the organizing phase. Involvement in selecting members of the policy advisory committees, public endorsement of the program, structuring of the original organization, and support during the adoption process are the most common actual or planned involvement to date.

Elected official involvement is most typical of the moderate and smaller sized communities. For example, in Dayton, a City Commissioner chairs the Steering Committee (principal policy advisory body); in Tulsa, elected officials are serving on the advisory and project management committees. In Knoxville and Portland, elected officials serving on the policy advisory committee have participated in review and approval of community work plans. In Richmond, the Mayor was actually directly involved in the proposal (to Argonne). Fully one-third of the Wayne County (Michigan) Commissioners will play an active role with six serving as the Board of Commissioners' Special Energy Committee and three serving on the Energy Management Committee. In King County, the County Executive was active in screening individuals and organizations for steering committee membership and soliciting their participation. Because of the mutual benefit, the King County Executive and the Seattle Mayor have established an agreement outlining coordination methods and establishing a joint technical resource group. In the areawide planning agencies elected officials have participated in selection of consultants in one case, and review and approval of the project work plan in the other. In the larger communities, elected official participation has largely been passive.

In addition to size, two other factors tend to distinguish the level of elected official involvement to date. These are the rate of community population growth compared to the Census Division and the degree of energy experience (see Table 2).

Those with growth rates below their regional average show greater activity on the part of elected officials than those communities with above average rates. These slower growth communities have more consistently integrated

their participation in local energy management planning with economic or urban development activities and objectives. Those with no energy experience show an active involvement of elected officials. Those which have considerable experience relative to operation of community-owned utilities show little involvement of elected officials, presumably because energy issues are more familiar to the community and to local government.

Implications. The importance of early and continuing participation of elected or other top officials is based on one clear assumption. Without their participation, it will be harder to achieve implementation of CCEMP at the end of the planning process. The same holds for officials from the private sector. Specifically:

- Where elected officials are directly participating or actively supporting energy planning effort, one would expect to see final plans adopted more readily.
- Participation will probably result in more pragmatic short-term alternatives (though the opposite could also be true).
- As the process proceeds towards proposal of specific actions, one would expect some elected officials to become more directly involved and this is called for in many of the community work plans.
- Elected official participation, where practical (primarily smaller communities), raises the status of the planning effort giving it greater likelihood of intra and intergovernmental participation, cooperation from the private sector, and access to community resources.
- Where contending factions characterize local public decision-making, political consensus may be more easily achieved by involvement during the process.

This last point is particularly important in the formation and functioning of the policy advisory committees.

Policy Advisory Committee Structure

The policy advisory committee plays an integral role in the overall management structure and potentially can serve a variety of functions. At the

broadest level, the advisory committee can serve as a vehicle for coordination and linkage to other institutions in the community as well as the departments within the government, by virtue of its membership and assigned role. It can play a decision-making role in shaping the planning products and in review of these products. It also has the potential of serving as a linkage to the implementation process and may oversee the management of actual work products by the staff. In addition to the policy advisory committee, many communities have set up separate technical advisory bodies. The policy advisory committee in the 17 CCEMP communities reflect some or most of these characteristics to varying degrees.

In examining the community policy advisory committee structures and their early functioning, the Academy focused on four characteristics: linkage, composition, form, and role. These were defined as follows:

- Linkage refers to the unit within the local government which the committee serves. Linkage is either to a decision-making body (city council or the mayor's office) or to a planning body (planning commission, planning department, or other non-line agency).
- Composition of the committee refers to the types of individuals appointed to participate in the advisory process. The distinction here is between policy level individuals only (organizational representatives, decisionmakers or other nontechnically oriented individuals) and combined policy-technical (defined as the former type of individual augmented by people with specific energy-related technical and planning skills).
- Form of the committee refers to whether it is a single body or is composed of several committees managed through a steering committee or reporting to some other coordinating body.
- Role of the policy advisory committee refers to both its functions and the extent to which it has been involved in the planning process through Stage I (Organization and Work Plan Preparation). For purposes of this work, the role is characterized simply as either passive or active.

Making effective use of citizen advisory committees and keeping their interest is a challenge in any planning process. Committee participants usually are busy individuals who will not continue to contribute if the exercise is not directly relevant to the community's interest and to that of their own institutions or groups. Maintaining involvement will depend on how the advisory committee is managed and how critical local energy planning is perceived to be. The committees to date have shown a wide range of interest and participation.

Findings. The policy advisory committee structures of Philadelphia, Seattle, and Portland (Maine) provide examples of how communities have structured their policy advisory committees to accomplish coordination, public access, decision-making, and advisory objectives. Their structures are shown in Figure 2.

- Philadelphia's policy advisory committee is the Energy Management Committee (EMC). It is open to all members of the public and currently has a membership of 50 individuals from all sectors of the Philadelphia community. The Executive Steering Committee is 12 individuals selected on the basis of their interest and knowledge who are willing to devote time to the process. This committee sets the agenda for the Energy Management Committee and provides decision-making guidance on development of the CCEMP process. The Energy Management Committee is to serve as the formal coordination and public access vehicle to consumer groups, utilities, and other units of government. Members of the EMC will serve on various task related subcommittees overseeing the work of consultants and CCEMP staff. Coordination within the Philadelphia City government is accomplished through the Urban Strategy Committee on Energy and Environment. This committee is part of Philadelphia's Urban Strategy Task Force consisting of management personnel from various city departments. The committees have interlocking membership including chairpersons which facilitates communication and management.
- Seattle's 24-member policy advisory committee was appointed by City Council, but reports to the Mayor through the City Energy Office. Membership is from all sectors of the community. Task oriented subcommittees are to be established, in part from the membership of the Energy Ltd. Citizens Committee. The balance of subcommittee membership will be experts, although membership is to

PHILADELPHIA, PA

SEATTLE, WA

PORTLAND, ME

FIGURE 2. EXAMPLES OF CCEMP COMMITTEE STRUCTURE

be open ended. Recommendations of subcommittees are to be transmitted to the Citizens Committee for consideration. The Municipal Support Group, which has been discussed previously, is the mechanism for coordination, review, and technical support for the CCEMP staff.

- Portland's energy-management program is overseen by PERT, the Portland Energy Reduction Team, a 26-member body originally formed in 1977 and expanded to serve CCEMP. In appointing the members, the City Council tried to balance PERT among energy suppliers, major business consumers, governmental representatives, and representatives of the public. PERT is chaired by a city councilman with a particular interest in energy. An Executive Team of 10 senior staff members of city agencies meets monthly to provide advice to the staff. Staff work is done by the Office of Energy Conservation, five people from the Executive Department, three of them on loan from the Planning Department. The six PERT subcommittees monitor plan-preparation and add their expertise where needed. The Public Awareness subcommittee is primarily responsible for seeking community participation through workshops and other means, in defining issues and objectives, selecting strategies, and preparing the plan. After approval of the plan, PERT will present it to the Council for adoption.

Other communities also provide interesting variations. For example, the South Florida Regional Planning Council plans to use its Energy Review Group (committee for broad based review and coordination) to create public access and develop regional consensus on all CCEMP documents. A delphi process (a group voting technique) will be used in lieu of formal Energy Review Group meetings. For the objective and strategy formulation tasks of the planning methodology, workshops of 100-150 individuals representing local jurisdictions, private suppliers and consumers will be assembled under the guidance of the Energy Review Group. Nominal Group Technique will be used to develop recommendations from workshop participants.

The Greater Bridgeport Regional Planning Agency will exercise very close management control through its Steering Committee. This policy advisory committee consists of six members of the Agency itself and each will

serve as coordinator for seven task-oriented advisory committees. The Steering Committee will make project policy decisions, be responsible for overall direction of the program and recommend commitment of funds. Greater Bridgeport is an example of the use of subcommittees to carry some of the policy advisory responsibility for the CCEMP effort. The seven advisory committees are intended to be functional in nature, providing input during day-to-day activities, providing evaluation of proposed strategies, and providing active assistance during public participation. These seven committees are:

- Public Policy Committee - the elected or appointed chief executives of the five member towns
- Commerce and Industry Committee - representatives of the local business and banking community
- Energy Suppliers Committee - representatives of groups actively involved in energy supply such as United Illuminating, Southern Connecticut Gas Company, Independent Connecticut Petroleum Association, and Northeast Utilities
- Environmental Committee - representatives of a currently operating (but unnamed) environmental program
- Planning and Development Committee - representatives of the Planning and Zoning Commissions of the five towns
- Transportation Committee - representatives of the Transportation Endorsement Board Technical Committee, including Town Engineer, the Tri-State Regional Planning Agency, Connecticut Department of Transportation, and the Federal Highway Administration
- Citizens/Consumers Committee - representatives of active existing groups to develop and support the consumer point of view.

One member of the Steering Committee will be assigned to each Advisory Committee as a member. The Steering Committee member is expected to develop an Advisory Committee point of view and represent it in agreeing to Steering Committee actions in the course of project development.

Review of community policy advisory committee structures showed the following general patterns:

- The action orientation of the program reflected in the selection of lead agency also follows for the linkage of the policy advisory committee. In all of the general purpose governments except Knoxville, Boulder, and Allegheny County, the policy advisory committees report directly or indirectly to a decision-making body. Some make direct recommendations to the CCEMP management and advise council or the executive, while others make their recommendations directly as in Wayne County.
- Composition. A majority of the 17 communities have chosen advisory committees which include both managerial or policy level individuals and individuals with specific technical expertise in energy or related areas. The composition of policy advisory committees shows a definite split between small and intermediate communities. The small communities have policy advisory committees consisting of both policy level and technical individuals. Intermediate cities have predominantly policy level membership.

As the accompanying table shows, the chair for the advisory committees vary from mayors to professionals from the private sector. Five are elected officials and two involve CCEMP staff.

In 10 of the 17 communities public sector representatives are the dominant committee background. Richmond is the only community with a policy advisory committee all from the public sector, as shown in Table 5. In some cases, the individuals are from within local government agencies or are elected officials. For example, Allegheny County's Policy Advisory Committee includes a mayor from one of the communities in the County. Philadelphia has representatives from Federal agencies and areawide planning bodies serving on its Energy Management Committee. The areawide planning agencies include a variety of elected officials from the planning jurisdictions on either the policy advisory committees or functionally oriented subcommittees. The degree of public official representation shows no pattern relative to community size, though the smaller communities show a larger proportional representation. Civic and consumer/environmental interests predominate in only two communities: Tulsa and Allegheny County (where labor union representation on the committee is strong). Although environmental and consumer groups are represented, in general, policy advisory committees do not have representation from low income interest groups. Some cases, Seattle, for example, did make an attempt to include such representation.

Individuals from investor or municipally owned utilities serve on all but three of the community policy advisory committees. The three cases all represent special situations, however. Richmond has an all public committee, Allegheny County has a companion Technical Advisory Committee with Vice-President level representation from utilities and Greater Bridgeport's

TABLE 4

POLICY ADVISORY COMMITTEE CHAIRS

Small Cities

Boulder: Energy Consultant (private)
Greenville: Technical Institute Department Chairman
Janesville: N/A
Portland: Mayor
Richmond: Mayor

Intermediate Cities

Dayton: City Commission member
Knoxville: CCEMP Project Manager
Seattle: (1) Boeing Engineer, (2) President: Washington State
Nurses Association
Tulsa: Bank Vice President

Large Cities

Philadelphia: Utility (municipal) executive
Los Angeles: CCEMP Project Manager/City Council Member

Counties

Allegheny: Engineering Professor, University of Pittsburgh
King: Washington University Vice President Business and Finance
Wayne: County Board of Commissioners Chairman

Areawides

Greater Bridgeport: Appointed officials - Chief Executive
South Florida: No chairman - CCEMP project staff
Toledo Metropolitan Area COG: County Commissioner

TABLE 5. DOMINANT ELEMENTS OF ENERGY POLICY
ADVISORY COMMITTEES

	Energy Suppliers	Public Sector	Civic/ Environ- mental	Private Sector
<u>Small Cities</u>				
Boulder		X		
Greenville		X		X
Janesville*				X
Portland				X
Richmond*		X		
<u>Intermediate</u>				
Dayton		X		
Knoxville*		X		
Seattle			X	
Tulsa				X
<u>Large Cities</u>				
Los Angeles		X		
Philadelphia				X
<u>Counties</u>				
Allegheny*			X	
King		X		
Wayne		X		
<u>Areawide</u>				
Greater Bridgeport		X		
South Florida		X		
Toledo				X

*Advisory committees that do not have representatives from all four groups:

Janesville = Energy Suppliers, Public Sector

Richmond = Energy Suppliers, Civic/Environmental, Private Sector

Knoxville = Civic/Environmental, Private Sector,

Allegheny = Energy Suppliers

Greater Bridgeport = Energy Suppliers, Civic/Environmental, Private Sector

Steering Committee consists only of agency representatives, though an Energy Suppliers Advisory Committee with utility representatives has been established.

- Form showed no relevant patterns among the communities.
- Degree of participation (role) by policy advisory committee members shows a number of patterns. Slow growth communities show more active role for advisory committees with the opposite for rapidly growing communities. The type of lead agency does not seem to show any relation to the participation and activity to date of the policy advisory committees. The split among the 17 communities is approximately even and there is no pattern evident between line agency, policy coordinating, and planning. There is no distinction between size of community and the degree of activity (passive/active) of the advisory committee.

In general, where decisionmakers are more directly involved in the process, there is also a more active role for the policy committee in guiding management of the CCEMP. This correlation is shown in the accompanying table. Among the communities where decisionmakers are active, the majority have chosen a multiple form for their committee structure. For those communities with passive decisionmaker involvement, more have committee structures involving both policy and technically oriented individuals. In contrast, those with active decisionmaker participation slightly favor policy oriented committee composition.

Implications. Analysis of the structure, planned role, and early functioning of the policy advisory committees provides the following observations:

- Although multiple committee structures allow participation by a larger number of individuals, they also reflect a more ambitious role for the lead committee. This can involve responsibility for review of planning products, assistance in the direction of staff or consultants, intra- and intergovernmental coordination, a means for public access, and access to public and private decisionmakers.
- Regardless of the scope of the advisory committee's role, their effectiveness in accomplishing program objectives depends heavily on commitment and continuing participation, and on the types of individuals involved. The calibre of the committee will be a signal to the community of the importance attached to the planning effort. Without high level participation, including elected officials and department management personnel, it will probably be very difficult to obtain decisions on proposed actions at the plan adoption stage.

TABLE 6

DECISIONMAKER INVOLVEMENT AND ROLE
OF POLICY ADVISORY COMMITTEE

Decisionmaker Participation	Role of Policy Advisory Committee	
	Passive *	Active*
<u>Passive *</u>		
Boulder	X	
Greenville	X	
Janesville	X	
Seattle		X
Los Angeles	X	
Philadelphia		X
Allegheny County		X
South Florida	X	
<u>Active *</u>		
Portland		X
Richmond		X
Dayton	X	
Knoxville	X	
Tulsa		X
King County	X	
Wayne County		X
Greater Bridgeport		X
Toledo Metropolitan Area COG	X	

*Defined as "passive" if decisionmakers do not provide direct leadership or participate in committee deliberations and "active" if they do.

- The policy advisory committee should serve as the forum for building consensus and finding common ground on conflicting community values. Consensus building at this stage of the planning process allows a screening of proposed actions prior to presentation of the formal plan and adoption process. Using the policy advisory committee for this purpose will require representation and participation by representatives from utilities as well as community groups.
- Early experience in the 17 CCEMP communities suggests that even where committee members are expected to play an active and substantive role, implementation of this objective is difficult to achieve. Program delays have not helped. The ability of staff to present concise information for deliberation in working sessions of the committees appears to be an essential ingredient in maintaining committee involvement.

Staffing and Technical Support

Sorting out and attempting to analyze energy issues at the community level is a challenging assignment. Published data are generally not available in sufficient detail, sampling is time consuming and expensive, and much useful planning information is proprietary. Most communities do not find it practical to maintain in-house staff with extensive analytical capabilities with the exception of the very largest. Similarly, there is a limited availability of experienced individuals to staff community programs, particularly project coordinators and energy analysts. The technical portion of the planning methodology (audit, setting of objectives, and analysis of alternatives and strategies) was designed to assist staff and consultants with some of these analytical and capacity development problems. Access to sophisticated skills and analytical capability is likely to be very important in supporting hard decisions that have to be made in adopting and implementing local energy actions.

The type of staff selected to run the programs and the ability of communities to integrate consultants' work into the community decision process are important to the ultimate effectiveness of the planning exercise. Of

particular concern is the commitment that community decisionmakers have where extensive reliance is placed on preparation of the plan by outside consultants.

Findings. Staffing by communities for their CCEMP programs follows a general pattern. Project managers are generally individuals who were involved in initiating the proposal. These are often individuals with policy or coordinating responsibilities. Backgrounds vary widely, but few have technical backgrounds (engineering, architecture, etc.); in some cases, though, these initiators have stepped back in favor of day-to-day management by individuals with more technical backgrounds (public administration, business management or planning).

Support staff run the gamut of professional backgrounds, but tend to be from engineering, planning, or public administration. Several CCEMP directors are augmenting their staffs through the use of student interns. In all but two communities, staff will both coordinate the project and conduct portions of the technical analysis. The two exceptions are (1) Dayton where the entire project is subcontracted to the University of Dayton Research Institute, with the CCEMP staff providing liaison with City Departments; and (2) Tulsa where the policy advisory committee plans to assume responsibility for management and direction of the technical staff.

Consultants are involved in all but four of the communities. These are Janesville, Portland, and Richmond (all small communities) and Los Angeles. Janesville's project is very small (\$11,000 contract) and focuses only on the residential and municipal sectors. All work is to be done through cooperation of agencies within the local government and outside assistance including the local investor-owned utility. Portland is trying to conduct all work

in-house, though not in the city's traditional pattern for policy development planning.* In Richmond, as many tasks as possible will be accomplished by using local citizens and community groups who possess the necessary background and skills to carry them out. As stated in their work plan, "only when no local agent can be found will the CCEMP go to city employees, temporary CCEMP employees, or out-of-town consulting firms or individuals,"** though students from Earlham College are working on the project. As was already mentioned, Los Angeles will use its Planning Department and other city Departments to perform the analytical work, though consultants may be added at a later date. Voluntary technical assistance is also planned for through the Technical Advisory Consortium. Los Angeles is the only large urban area not presently relying on consultant assistance.

In the other 13 communities the consultants' role varies from providing selected technical inputs (under the close supervision of CCEMP staff or policy advisory subcommittees) to consultant responsibility for one or more complete tasks. For example, in Philadelphia four different consultants account for 44 percent of the total project budget. They will perform portions of the energy audit, identification and evaluation of energy management strategies, development of a simulation model to evaluate energy policies, and assist in the definition of data collection and in the projection of supply and demand. In contrast, the University of Toledo Engineering Department will expend 90 percent of resources budgeted for the

* Their traditional approach involved forming of a standing committee with council representation, providing staff support, and development of the program along "lines of opportunity". The CCEMP differs in that the standing committee is much larger, more staff has been assigned, the duration is longer, start-up is slower, and the program is highly structured and thus perceived to be predetermined.

** It should also be noted that Richmond is the only community that has established its own Department for the CCEMP pilot project.

community energy audit and almost half of the budget for preparation of the CCEMP action plan for the Toledo Area Metropolitan Council of Governments.

Communities seeking technical assistance have relied both on university faculty or university research institutes and on small and medium sized consulting firms. Where communities have delegated complete task responsibility, it has been to university departments or university research institutes. In these cases, university personnel played a major role in helping the community prepare the original proposal application. Consultants also assisted in the application process of several of the communities. In one case original financial commitments had to be renegotiated and scopes of consultants' work altered after the community had had a chance to examine more closely how it wanted to conduct the CCEMP.

The only general pattern among the communities is the use of consultants by all communities where the lead agency is a planning body. In all of these cases, consultants either perform several of the planning methodology tasks or play a major role in selected technical inputs on specific tasks.

Voluntary technical assistance is being received by many communities through subcommittees to the policy advisory committee or through separate technical advisory committees such as in Los Angeles and Allegheny County. In Allegheny County, utility research executives are providing assistance on the audit and other phases of the planning methodology.

Implications. The managerial and technical skills, community and government experience, position, and political support for the CCEMP project manager are the pivotal elements in the CCEMP process. Within a community's resources and capabilities, the type of individual selected will be a major factor in how each program functions. Beyond this basic consideration, the preliminary review suggests that

- The ability to manage technical consultants in part depends on past experience of the project management staff as well as the community's general relationship with consulting organizations. Complete delegation of one or more tasks of the planning methodology to consultants will be of interest to observe during the course of the two-year program. It would appear that whole-sale delegation will most likely be successful in situations in which the managing agency has a strong working relationship and credibility with other units of local government and with the other institutions in the community.
- On the basis of early attempts by staff to involve advisory committees in review of the work plan (see section on work plan), the method of presentation of technical information and planning products by staff will be important to both constructive committee involvement and critical to public understanding and support.

Public Access and Participation

Creating workable methods for public access is never very easy but is important to any local planning exercise. It is particularly important to energy management because of the diversity of potential interests affected by any local energy action. Given the uncertainty in the country currently about direction for energy supply, technology, and pricing, and the consequences of this uncertainty it is important that public participation serve as a vehicle for reaching a variety of views and inputs. It should also serve to educate the public on proposed actions and options. This can be done through citizen based membership on committees or through formal public communication and public participation mechanisms such as workshops, public meetings, and opinion sampling.

The methods of achieving public participation and access can be classed as:

- Public education, defined as attempts and programs to disseminate findings from the CCEMP planning products and to educate the general public on the nature of the energy situation, trends, options, and consequences facing the given community. Public education can be through a variety of media such as newsletters, leaflets, slide shows, or other forms of media presentation.
- Public reaction, defined as establishing forums through which the public can comment on specific alternatives or actions or aspects of the CCEMP planning process and planning products. Public reaction can be obtained through public meetings, through opinion sampling, or through open access to public meetings on the CCEMP.
- Public involvement, defined as more formal, systematic, and continuing efforts to involve the public in various aspects of the CCEMP process. This can be through workshops, special committees designed to seek public input, through opinion sampling, or through other direct means of public comment, reaction to and discussion of the various aspects of the planning process. Many of the communities will achieve public input through advisory committee membership and direct communication to their constituent organizations.

Findings. All of the communities indicate they will use various methods of public education to achieve awareness of the program. This will occur at various phases of the project, but most often prior to plan adoption. Most communities plan for various methods of public reaction, but only seven indicate formally seeking public involvement. Examples from the communities help illustrate various methods for seeking public involvement.

Dayton is interesting because of the variety of approaches it is planning to use to secure public participation. Three methods for securing broader based public participation are integrated into the Dayton CCEMP organization and work plan. These are citizen input, public education and public hearings. Community-wide surveys and interviews with organizational leaders, conducted by the Action Plan Team, are components of citizen input into the energy objectives and alternative strategy selection process. Status reports, or

position papers, circulated through local media channels and community groups are planned to increase public awareness and education. In addition, steering committee communication to constituent organizations is encouraged as another means for public education. Finally, public hearings are anticipated at times deemed appropriate by the Steering Committee (the policy advisory committee for the Dayton CCEMP).

Los Angeles will use a variety of public media methods for securing public participation in addition to the representation on its Energy Management Advisory Board (the policy advisory committee for the city). A color slide show will be used as a basis for briefing local officials and the public on the basic energy issues and alternatives facing the city. State of the art technical seminars will also be conducted in order to educate local officials on problems and opportunities. Public participation during the various tasks will be through standard city procedures, such as newsletters, public media, press releases, public service announcements and mailing lists.

The method in King County for public participation calls for the establishment of a task force from which six to seven subcommittees will be formed. The basis for the subcommittees are to be major consuming sectors, such as residential, transportation and industrial. Membership of the subcommittees will include Steering Committee members (the King County advisory committee) and other individuals to be appointed by the County Executive upon the recommendation of the Steering Committee. The responsibilities assigned to the task force include analysis of the results of the community energy audit, identification of key issues and policy objectives, formulation of central energy management objectives and identification and evaluation of program alternatives. It is anticipated that the task force subcommittees will be active for only 5 of the 24 month CCEMP project.

Beyond education and public reaction, which all or most of the communities anticipate doing, only seven are currently planning for actual public input. Communities with the most extensive planned citizen input are those with more extensive energy experience. Interestingly, six of these communities were also classified as having passive policy advisory committees. This suggests that formal planned public input may serve as a substitute for a more active role for the policy advisory committees.

For example, in Greenville a Technical Advisory Group consisting of local residents with energy-related expertise and a Citizens Task Force Committee and its subcommittees provide a broad range of community input to the CCEMP planning process. South Florida Regional Planning Council is using extensive citizen involvement in its Energy Working Group (providing technical guidance and in its Energy Review Group (providing review and coordination). Program review and public participation are visualized as the principal functions of the Energy Review Group. Workshops are to be utilized in connection with Formulation of Objectives (Task 3) and Assessment of Alternative Actions and Strategies (Task 4). At each of these workshops, 100-150 representatives of local jurisdictions and private sector suppliers and consumers will be assembled. The Nominal Group technique will be employed to secure recommendations from workshop participants. This technique has been used successfully by Council Staff on other problem areas and over an extended period of time.

In contrast, only one of the communities with limited energy experience currently plans for active citizen involvement during the project. This is not surprising given the newness of the subject to these communities.

While it is too early to observe functioning of planned public access programs, a recent experience in Philadelphia illustrates the potential

benefits of public representation on the policy advisory committee. A potentially divisive issue between neighborhood based groups and the local utility was resolved through negotiation within the Executive Steering Committee. Both parties to the dispute agreed to accept some compromise on how the role of nuclear power would be handled in the CCEMP planning process.

Implications. Two considerations seem relevant based on planned public access programs and some very limited experience with their early functioning.

- As communities progress with the program, community awareness should increase through media exposure. Demands for access to the process may require modification of current public participation programs. Crisis situations in energy supply and the manner in which the information from technical analysis is presented will contribute to public sensitivity to the planning process.
- Ideally, public access methods will serve to achieve convergence among interests (utilities, industry, neighborhood groups) as part of the planning process, rather than allowing differences to become divisive issues at the point of plan adoption.

Preparation of the Work Plan

The work plan is the first formal planning product produced by the communities. A well defined and organized statement of how technical work will be produced and used increases the likelihood that the planning process will be systematic. A good work plan requires prior coordination of analytical expertise, understanding of how analysis will be accomplished, and an understanding of how the resulting information will support the decision and policy process.

The expectation for the community work plans was clearly stated in Argonne's request for proposal. These were:

"This work plan will specify in detail the resources (personnel and dollars) that will be devoted to each task. It will provide a step-by-step description of each work element, identifying data sources, as appropriate; levels of approval and coordination expected to be

necessary for the satisfactory completion of the contract effort; and documentation of final commitments associated with cost sharing and coordination with other agencies as required".

A thorough work plan forces participants in the planning process to think through how they are going to accomplish the various planning objectives. This thinking through process should help to produce a flexible management tool which provides:

- A clear management structure/system in which participants know who is in charge; responsibilities are divided clearly among staff, committees, consultants; supervision and lines of communication are identified; and the schedule is workable and understood.
- Knowledge of data needs and resources including identification of what is needed, how to get it, and the specific arrangements for access
- A clear statement of the methodology and process showing that the planning methodology has been internalized to local circumstances.

The community work plans showed considerable variance relative to these three characteristics. Some indicated how the planning methodology would be adapted or extended to community circumstances; others primarily identified what they would do using the planning methodology as a guide. Review of the work plans did not involve an attempt to "evaluate" their quality. Rather, the emphasis and process of preparation were the areas of concern. Three specific factors were examined:

- Work plan emphasis between the audit and strategies/alternatives tasks

This provides some indication of whether the community intends to emphasize in their CCEMP the provision of general information or the evaluation of specific actions

- Source of work plan preparation (staff or staff/consultants) and the degree of participation by the policy advisory committee (passive or active)

This provides some indication of both the coordination and public access that has taken place during the work plan preparation

- Adherence to the planning methodology

The intent here is to identify what circumstances have prompted extension of the methodology in order to learn (later in the project) from their experiences what methodological innovations are practical.

Findings. Review of the community work plans and the process for their preparation showed only a few general patterns:

- Emphasis. There is no pattern between size of communities and the relative emphasis they place on the planning methodology except for the larger communities, which have allocated more resources to evaluation of alternatives and strategies. It should be noted that both of these communities (Los Angeles and Philadelphia) have considerable experience in energy problems and are in a position to consider implementation of specific alternatives.

As also might be expected, where advisory committees are linked to planning bodies (four of five) and where the project lead is a planning agency (five of six)*, budget emphasis is given to the audit; conversely, action-oriented lead agencies, in eight of 11 cases, assign greater resources to the strategy stage. The information and support role of planning agencies appears to be reflected in their planning methodology emphasis.

- Preparation. Who prepares the work plans does not seem to be associated with any other factor. However, in 11 of the communities, policy advisory committees did not play an active role, which suggests that in early phases broad commitment to the process is not evident in many communities. Alternatively, this may suggest that conduct of the technical portions of the planning methodology is not viewed as very critical by these advisory committees.

The most notable examples of active committee participation are Tulsa and Philadelphia. In Tulsa, a specific committee structure was established for the purpose of reviewing selective aspects of the work plan and permanent management structure; upon completion of organization this committee was dissolved. Philadelphia's management structure and work plan were also modified during the work plan development process with the participation of the committee structure. In the case of the work plan, consultant responsibilities were altered from sole responsibility for individual tasks to selected technical inputs in several of the tasks.

*This includes the three areawide agencies.

It should be noted that as of July 1979, three communities did not have approved work plans. The reasons for this vary. In one case, the community had been unable or unwilling to complete arrangements with the original consultant and had to drop them completely. Internal local government commitment was also difficult to achieve. In the other cases, the communities had difficulty in developing work plans acceptable to the sponsoring agency.

Adherence: Almost half the communities are planning to make some modifications to the planning methodology. Three or four are making extensive modifications and five are following it without any major changes.

Intermediate cities consistently chose to make selective modifications and/or additions to the planning methodology. Most of these modifications are in the audit phase of the methodology. For example, Dayton plans to add a calibration step to validate average energy consumption values given in the planning methodology. A computerized system for processing information will be developed for the audit, objectives and issues and strategies/alternatives tasks. Knoxville plans to make three alternate 1982 projections of energy consumption for use in the objectives setting task. Seattle will condition future energy supply projections on pricing considerations. They will also employ end use sector surveys in the community energy audit. Two special studies will be conducted, one on Integrated Community Energy Systems and one on district heating.

Communities making extensive modifications include one each from small, large, counties and areawide agencies. Janesville is unique in that no special committee structure has been created for CCEMP and the scope of the project is restricted to the residential and government operations sectors. Philadelphia's work plan indicates substantial modification to the audit, issues and objectives, and alternative/strategies tasks as well as linking the CCEMP action plan to the city urban strategy. For example, they will use a sector specific stratified sample for the audit stage. In the strategies task an energy policy simulation will be conducted involving incorporation of energy considerations into the Philadelphia Econometric Model. Wayne County has collapsed the issues/objectives and alternatives/strategies into one stage with three separate products distinct from those suggested by the planning methodology. These are: public policy alternatives, local government operations, and county government operations. In addition, the audit will be conducted on a general basis for each of the 42 suburban governments. The South Florida Regional Planning Council will modify the planning methodology of the audit stage by combining the residential sectors into three from the suggested five and by including recreational boating in the audit. They also plan to establish a regional energy information index to index, store, and make accessible all primary and secondary data resulting from the energy audit.

Only one general pattern was found in the extent to which communities intend to modify the planning methodology. All communities proposing extensive original work have advisory bodies linked to decision-making bodies, multiple committee form, and policy technical committee composition. Line agencies propose either selective modification/addition or extensive original work to the planning methodology; while planning lead agencies propose either strict adherence or selective modification/addition to the planning methodology. Planning agencies exhibit a consistent preference for emphasis upon information (audit) and for substantial responsibility assigned to consultants. These patterns may be reflective of their sensitivity to credibility of the effort and their lack of implementation authority. By contrast, most general purpose governments place a greater budget emphasis upon the strategies and have a more varied pattern of consultant roles.

Implications. A well organized and substantive work plan appears to be as much a reflection of a community planning process that is already well managed and functioning as it is a necessary condition for successful early functioning. What the work plan provides is a focal point for negotiations and agreement among those involved as to their respective roles and responsibilities. The work plan then is the formal statement of these agreements and commitments. Where this negotiation and thinking through has not occurred, there have often been understandable difficulties in preparing work plans acceptable to Argonne National Laboratory.

Communities that have proposed either selective modification/addition or extensive original work to the planning methodology and restrict consultant role to selected technical inputs may demonstrate a higher level of sophistication for successful energy management planning, assuming changes are made because of a more thorough examination of the planning methodology and its applicability to local characteristics and functions.

IV. CONCLUSION

Seventeen communities have now invested several months in establishing organization structures and work plans for conducting pilot projects in local energy management planning. However, those communities that have launched their programs quickly and have been able to develop thorough work plans do seem to share two general characteristics. These are:

- An integration of public functions and private activities
- A convergence of community interest groups around areas of common values.

Integration of community functions and private activities implies an organizational structure which builds working relationships at both the technical and policy level between the public and private sector. This can be accomplished through appropriate advisory committee structures and through the selection of a broad based set of individuals appropriate to each committee function. Tying of the committee to a decision-making body appears to be an important part of the integration process.

Convergence of interests requires creation of an environment where interest groups can interact and achieve consensus on actions in the direct interest of the community. The mechanisms for creating this include broad based representation on the advisory committee or committees, the establishment of outreach to the public and provision of the opportunity for input from the public to the various objectives and alternative/strategy consideration in the planning process.

Beyond these general statements, the monitoring and evaluation suggests several decisions and actions which may facilitate the organizing response. These can be divided between the organizational structure and early functioning.

Organizational Structure

- Organizational development should be preceded by the formation of an interdepartmental task force or committee to facilitate governmental coordination and by a small but broadly based policy advisory committee including utility representatives, neighborhood and environmental groups.
- The chair of the policy advisory committee should probably be an individual outside of the immediate planning process. This helps to broaden the sense of community commitment.
- Multiple committee structures with a strong but representative steering committee allow specialization of roles, greater participation and a sharing of the burden of voluntary contribution of time.
- Consultants can play a strong supportive role, but their technical support needs to be carefully chosen so that the community develops its own residual capacity.

Early Functioning

- The policy advisory committee and interdepartmental representatives need to play an initiating role in shaping the work plan if subsequent commitment is to be expected. Similar considerations hold for decisionmaker participation.
- How technical aspects of the program are presented by staff appears to be very important to maintaining interest. This means synthesis and summary of elements of the program to allow deliberation by advisory committees.

Lessons from conduct of the audit phase will provide ample substance for further evaluation of the Comprehensive Community Energy Management Program. Evaluation of experience with the community energy audit will be the topic of the next intermediate product from the Academy's monitoring and evaluation effort.