League of Women Voters of Minnesota Records

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Version 3
August 20, 2018

LEAGUE OF WOMEN VOTERS OF MINNESOTA
555 WABASHA • ST. PAUL, MINNESOTA 55102 • TELEPHONE (612) 224-5445

To: Florence Chichester, Manager
LWV Ed Fund Energy Education Project
League of Women Voters of the United States
1730 M Street N.W.
Washington, D.C. 20036

From: Margaret Post, Manager
Energy Education Project, LWVMN

Date: January 13, 1978

ENERGY EDUCATION PROJECT

The Minnesota League of Women Voters Energy Education Project consists of four programs that were developed to meet identified needs of Minnesota residents for energy education. These needs are:

1. Convincing the public that there is an energy problem. Leaguers have repeatedly expressed concern for basic energy education, reasons for a "crisis," and possible alternative sources for the future. Utilities, Minnesota Energy Agency, and vocational technical schools are involved in conservation education audits, retrofit training, etc. No organization is confronting the public with the basic policy issues at this time.
2. Helping communities deal with problems at the local level: land use, transportation, conservation. Nearly 60 Minnesota communities have "Energy Awareness" committees to form policies that deal with energy issues. But many still do not know how to get local action going; there is a need to have communities know the range of existing services and programs.
3. Gathering information on existing and program services available throughout the state. This had not been done by the Energy Agency, and energy resource persons need to know where to direct requests for information, speakers, training, etc., outside the Minnesota Energy Agency.

From these needs four programs were developed in Minnesota under the Department of Energy grant project.

I. Fall Energy Workshops

Five energy workshops were organized and run in several parts of the state during September, 1977. An energy committee presented background on issues of a national and international scope. Minnesota Energy Agency personnel presented aspects of the agency's Community Outreach programs, and two films, "The Bottom of the Oil Barrel" and "The Sunbeam Solution" were shown to participants. More than 400 Leaguers and community leaders attended these workshops. Samples of announcements and press releases are enclosed. Cost of travel, equipment rental, mailings, etc., were more than $7,00. Participants at the fall workshops were urged to consider signing up to receive more training for working as energy resource persons in their communities. Forty-one persons representing 29 Leagues expressed an interest in further training at that time.

II. Winter Workshops

Two energy education workshops are planned for January 28 in Anoka, a northern Twin Cities metro suburb, and February 4 in Owatonna in south central Minnesota. These workshops have been advertised to Leaguers as aimed at helping them to be "energy resource persons" in their communities. These persons are volunteers who will help their communities confront basis policy issues and stimulate local energy action. Grant monies will pay for transportation and lunch, and in the case of long distance travelers, one overnight. Approximately 100 participants are expected in Anoka, and 50 are expected in Owatonna. Enclosed are announcements of the workshops and the tentative agenda. The press release is being prepared at this time. One will be sent to each of the communities hosting in advance of the workshops. A release will be sent to the community newspaper where each participant resides following the workshops.

The workshop sessions are intended to give participants current information on Minnesota supplies, prices and outlooks. The Energy Agency transportation specialist will delineate transportation, energy and land use problems. During lunch the newly appointed Public Advisor will address participants on "Citizen Participation in Power Plant Siting and Transmission Line Routing in Minnesota." Afternoon sessions are primarily "how to." The director of the Energy Agency's Outreach Programs will describe all services and programs designed by the Minnesota Energy Agency for local communities. Next Leaguers will share energy education programs which they have already tried in their communities. Finally, the films, "Bottom of the Oil Barrel" and "The Sunbeam Solution," will be shown. Methods for

getting them into communities and a discussion guide will be presented.

III. Films

Purchase and circulation of the two films, "The Bottom of the Oil Barrel" and "The Sunbeam Solution," was the way chosen to help fulfill the basic energy education needs, particularly for young adults and adults. Cost of the two films was $862. One copy of each film was already available for a fee through the University of Minnesota film library. A Minneapolis utility, Minnegasco, owned "Sunbeam" and would circulate it free within the metro area. A request was made to Northern States Power that the utility purchase a set of the films for circulation in the Twin City metro area. NSP viewed the films and considered them to be "inappropriately doomsday-ish." The utility countered with an offer to purchase two films of its choice for the LWV energy education project. These films will be viewed by the League during the coming week.

It was decided that the League's copies of "Bottom of the Oil Barrel" and "The Sunbeam Solution" should be designated primarily for outstate circulation. Minnesota has an excellent State Library network with a traveling film collection. An arrangement was made with the State Library to place the films on the circuit. The films will be cleaned and repaired when necessary; they will receive free publicity through the library system and will be circulated free to the public on a first-come-first-serve basis. When the films are in one part of the state, they can be checked out by someone in any other part of the state when available.

The films will enter the film circuit on February 14, 1978. Leagues will be notified 6 weeks in advance of the arrival of a film at an area library so that they might plan showings in schools, community meetings, etc. Feedback on film useage will come through quarterly reports from the State Library, and evaluation sheets will be provided to Leaguers. A discussion guide is being written to accompany the films as an aid in presentation.

IV. Energy Education Programs Services Resource List

Seventy-two letters of inquiry were sent to organizations, major utilities, agencies and educational bodies in Minnesota or serving Minnesota, requesting that they provide information about energy education projects and services ongoing or planned for the future. Information is being received at this time and will be compiled for workshop participants. A sample of the inquiry is enclosed. The costs incurred were for secretarial time and mailing. We hope to have sufficient funds to send copies of the energy education resource list to public libraries throughout the state.

BUDGET SUMMARY

I. Fall Workshop

A. Planning Committee

	Grant Budget	Spent	Balance
Travel	$797.00	$186.90	$610.10
Tools	20.00	10.00	10.00
Communications	45.00	-0-	45.00
Supplies	26.00	22.12	3.88
Total	$888.00	$219.02	$668.98

B. Workshops

	Grant Budget	Spent	Balance
Letters	$ 9.00	$ -0-	$ 9.00
Travel	172.00	202.80	(30.80)
Lodging and Meals	140.00	107.52	32.48
Film and Projection Rental	200.00	156.50	43.50
Publications	35.00	75.61	(40.61)
Xerox and Secretarial Expense	200.00	151.82	48.18
Total	$756.00	$694.25	$ 61.75

{II. Winter Workshops - Project #1 / IV. Programs Services Resources List}

	Grant Budget	Spent	Balance
Travel	$1200.00	-0-	$1200.00
Meals	240.00	-0-	240.00
Space Rental	150.00	-0-	150.00
Communication	51.00	30.86	20.14
Total	$1641.00	$ 30.86	$1610.14

III. Films – Project #2

Purchased Films $862.15

Project Manager	$ 365.00	-0-	$ 365.00

NSP

NORTHERN STATES POWER COMPANY

414 NICOLLET MALL
MINNEAPOLIS, MINNESOTA 55401

D. W. McCARTHY
PRESIDENT

February 8, 1978

Ms Margaret Post
Ms Kathy Gilder
1874 West Skillman Avenue
Roseville, Minnesota 55113

Dear Margaret and Kathy

NSP was pleased that you could attend the Consumer/ Utility Conference on January 20 and 21. I appreciated the opportunity to read the literature which you enclosed with your letter of February 1. It was well done and certainly covered all of the aspects of the energy situation. It is my definite belief that the public should be involved and should let their elected officials know of their views on the energy issues. Only with a strong national and local energy policy will the energy suppliers adequately do their job.

The continued involvement of the League of Women Voters in this matter will be greatly appreciated.

Sincerely

REPORT FORM

Energy Education Projects

Please complete one form for each energy-related project which you have completed since February 1, 1978, and mail it to the state office. The original will be put into League files for sharing with other Leaguers involved in energy. One copy will be sent to the national League office, and another will go to the Minnesota Energy Agency Local Services Division for its record of results of Agency training workshops.

Please complete one form per project, i.e., one for each presentation you make. Another form will be sent to you upon receipt of this report. Please call Marge Post at 612-636-4409 if you have any questions.

Name _____

Address _____

Phone _____

League (if applies) _____

What was the project?

Who organized it? (League only or coalition of groups)

When was it held?

Where was it held?

Cost of project - source of financing:

How many people attended?

What went right?

What went wrong?

What would you change next time?

LEAGUE OF WOMEN VOTERS OF MINNESOTA

555 WABASHA • ST. PAUL, MINNESOTA 55102 • TELEPHONE (612) 224-5445

March 15, 1978

PROJECT PROPOSAL: ENERGY RESOURCE DIRECTORY FOR MINNESOTA

The League of Women Voters of Minnesota proposes to produce an Energy Resource Directory for Minnesota in cooperation with the Minnesota Energy Agency.

Definition

An Energy Resource Directory will be a compilation of existing energy-related services, programs and projects available in Minnesota. It will be designed to aid individuals and groups get specific energy-related information and services. In looseleaf format it would be part of the Energy Awareness Handbook for local governments in Minnesota designed by the Minnesota Energy Agency. The information in the Energy Resource Directory would also be made available to the public by distributing copies of the Directory to public libraries, vocational-technical energy resource centers, community colleges and key energy resource persons including League of Women Voters members trained as energy resource people at one of the training sessions offered jointly by the League of Women Voters of Minnesota and the Minnesota Energy Agency.

Objectives

The Energy Resource Directory will

- direct households to appropriate groups or agencies for energy-related assistance or information;
- provide easy access to existing energy resources for groups interested in promoting energy education activities and programs in their communities;
- make explicit to the public the specific services offered by existing energy-related projects and programs;
- provide a reference tool that can be easily updated;
- provide a tangible measure of existing energy efforts in Minnesota;
- provide the groundwork for evaluation of existing energy efforts in Minnesota and a base for long-term energy service planning for the state.

Program Description

Information about existing energy-related services, programs, and projects available in Minnesota will be gathered by mailed questionnaires and personal interviews. Information will be gathered not only from Minnesota-based groups, but also from national energy-related organizations that serve Minnesota. The emphasis of the Directory will be on services available to regional or larger-than-regional areas of the state. Of particular importance in the project will be the definition of services available through

the Minnesota Energy Agency and other governmental bodies. The Directory will also include programs available in specific metropolitan areas of the state. In addition, the Directory will include descriptions of exemplary programs servicing small population centers as examples of what other communities can do.

The Directory will include the following information about each energy-related service, program, or project:

- name of organization
- address, phone, and contact person
- description of existing and planned program(s), project(s), and/or service(s)
- definition of clientele the program(s), project(s), and/or service(s) will serve.

Approximately 150 questionnaires will be mailed. All organizations not responding to the questionnaire will be contacted by phone.

Definition of Responsibilities

The Energy Resource Directory will be produced cooperatively by the League of Women Voters of Minnesota and the Minnesota Energy Agency. The League of Women Voters of Minnesota will be responsible for

- collecting information about existing and planned energy-related services, programs, and projects in Minnesota;
- organizing the collected data and writing the Directory;
- typing the Directory.

The Minnesota Energy Agency will be responsible for

- printing the Directory;
- mailing the Directory.

Timetable

March 1 - April 15	Gathering of information by questionnaire and interview
April 15 - May 1	Organization and writing of Directory
June 1	Completion of Directory

Project Budget for League of Women Voters Responsibilities

The following figures only cover the costs to the League of Women Voters of Minnesota for carrying out its responsibilities listed above. The costs to the Minnesota Energy Agency for printing and mailing the Directory are in addition to the $1,550 budget listed below.

	Project Budget
Personnel	
Project Manager	$ 500
Project Director	500
Supplies	
Postage	25
Materials	25
Copying	20
Secretarial Time	125
Travel and Telephone	110
Overhead and Fiscal Administration	245
	$1,550

LEAGUE OF WOMEN VOTERS
Of Wake County - ENERGY CONSERVATION PROJECT

SUMMARY 3/9/78

ENERGY ATTITUDE SURVEY

Yes 687 1) Do you believe there is an energy problem? No - 30 - Not Sure 1 Maybe 1

Yes 715 2) Do you believe there is a need to conserve energy? No - 5

_____ 3) My greatest energy concern is:

298 a) higher heating/cooling costs.

218 b) a need for specific information on what can be done to save energy and money.

141 c) a need to learn methods for installing energy-saving materials.

294 d) a general interest in energy conservation.

Produced by the League of Women Voters of Wake County - ENERGY PROJECT: financed entirely with federal funds from the Dept. of Energy under contract EC-77-C-01-2165.

SUMMARY - MAR - APR - MAY (Mtgs. & Sun Day)

LEAGUE OF WOMEN VOTERS

Of Wake County - Energy Project

VI-A

3825 Barrett Drive
Raleigh, NC 27609
781-5736

ENERGY ATTITUDE SURVEY #_____
(Fall)

149 1. Do you believe there is an energy problem?

150 2. Do you believe there is a need to conserve energy?

_____ 3. Your reason for attending this meeting:

(68) A. Concern about higher heating/cooling costs

(63) B. Need for specific information on what can be done to save energy and money

(57) C. To learn methods for installing energy-saving materials

(72) D. General interest in energy conservation.

(8) E. Utilities Commission

NAME _____ ADDRESS _____

- The use of nuclear power to replace dwindling fossil fuels
- more research
- dev. alternative energy savers that are cost competitive

(Over)

- transportation
- home heating and cooling, and water heating
- for information

2 - CAC Mtg.

2 - High School Research

- Encourage use of peak time pricing

League of Women Voters of the United States 1730 M Street, N.W., Washington, D. C. 20036 Tel. (202) 296-1770

memorandum

THIS IS GOING DPM

March 13, 1978

TO: State, Local and ILO Presidents

FROM: Ruth C. Clusen, President
Betty N. MacDonald, Energy Chair

RE: Statement of National Position on Energy

I. ANNOUNCEMENT OF POSITION

The national board adopted the enclosed new national Energy position during its regular meeting the week of March 6-10. It represents the views of Leagues of all sizes throughout the fifty states, the District of Columbia, Puerto Rico and the Virgin Islands. Reports from over 1000 Leagues--an excellent percentage of return--were carefully read, tabulated and analyzed.

The new Energy position retains all elements of the energy conservation position that was adopted in May 1975 but goes far beyond that single issue. Leagues agreed that the United States should:

* make a significant and progressive reduction in its energy growth rate.
* give priority to conservation, renewable resources and the environmentally sound use of coal in the U.S. energy mix between now and the year 2000.
* shift to predominant reliance on renewable resources beyond the year 2000.

In addition, as you will see, members backed a number of policies and regulatory actions to bring about these changes. League members also concluded that while the national good must take precedence as the country moves toward national energy goals, differences in the needs and resources of states and regions must be taken into account and costs and benefits equitably distributed.

II. LEAGUE COMMENTS AND CONCERNS

Considering the complexity of the study, reactions to the Energy consensus questions were remarkably positive. Of course, some Leagues told us that they felt the topic was overwhelming and the questions difficult, lengthy and technical. Many others, however, indicated an understanding of the impossibility of limiting a study that by definition affects so many important topics and is not easily divisible.

We would like to respond to each one of the Leagues that commented on the consensus form or content but that would be too time-consuming and costly. Instead this memorandum will be our way of saying thank-you for the effort you made to cope with a difficult task. You handled it with skill and imagination.

III. ACTION POSSIBILITIES

In the past three years, Leagues have found many opportunities for action on specific energy conservation proposals. That action will continue but will be broadly expanded under the new Energy position.

At the present time we are examining the Administration's proposed national energy plan and current energy legislation to determine how the new Energy position can best be applied at the national level. We expect that the recently adopted position will also afford many opportunities for action at state and local levels. Because of the complexities of energy issues, we are developing guidelines to help you determine the types of policies and proposals that may and may not be supported under this position. Until these guidelines are completed, we urge you to carefully consider the appropriateness of particular actions in the context of the entire position. Of course, we would be happy to assist you in making those determinations. Further guidance will come to you in the usual channels, such as the National Board Reports, Report from the Hill and specific memoranda.

Also enclosed is a sample press release for use in your community.

Enclosures:2
Statement of energy position
Press release

Statement of Position on Energy

as announced by the National Board March 9, 1978

The League of Women Voters of the United States believes that the United States cannot and should not sustain its historical rate of energy consumption. Not only as a responsible member of the world community but also in the national interest, the United States must make a significant and progressive reduction in its energy growth rate. To achieve this goal, the nation must develop and implement energy strategies that--while taking account of differences in the needs and resources of states and regions--give precedence to the national good.

Between now and the year 2000, while arriving at long-term energy strategies, the United States should develop and use a mix of energy sources based on the following policies:

- Top priority must be given to conservation; renewable resources, especially solar heating and cooling, bioconversion and wind; and the environmentally sound use of coal.
- Dependence on imported energy supplies must be reduced.
- Because finite supplies of domestic oil and natural gas must be conserved, reliance on these sources should not be increased.
- Reliance on nuclear fission (light water reactors) should not be increased. Special attention must be given to solving waste disposal and other health and safety problems associated with this energy source.

Beyond the year 2000, the United States should rely predominantly on renewable resources. To make this change possible, the federal government should:

- // give top priority to conservation and to the development and use of solar heating and cooling, solar electricity and bioconversion;
- // emphasize energy-efficient technologies, especially cogeneration and district heating;
- // Support the development of fusion and geothermal energy;
- // give extremely low priority to the plutonium breeder reactor.

To achieve a reduced energy growth rate and the optimum mix of sources and technologies, the federal government should:

- // use research and development funds, tax incentives and loan guarantees to encourage business, industry and individual consumers to conserve energy and to shift toward the development and use of renewable resources.
- // use tax disincentives to promote energy conservation and, in the case of individual consumers, to foster the use of renewable resources.
- // gradually deregulate oil and natural gas prices and at the same time tax windfall profits attributable to deregulation;
- // set mandatory standards for energy conservation.

Federal standards and compliance timetables that protect the environment should not be relaxed in pursuit of national energy goals.

In developing national energy strategies, the federal government should spread costs and benefits(environmental, social, economic, health) as equitably as possible. In keeping with this criterion, states and regions should take steps to maximize conservation and to utilize their indigenous, renewable resources. There should be assistance for low-income individuals, when changes would bear unduly on the poor.

In the distribution of roles and responsibilities, the following principles should apply:

- // The processes used to develop and implement national energy strategies should give a voice to all levels of government.

- The federal government should set national standards to reach policy objectives. States may set more stringent standards, within the context of national policy. Implementation and enforcement of national standards should be primarily at the state level.
- States and regions should cooperate with each other and with the federal government to achieve national energy goals.
- Public understanding and cooperation are essential to the success of any national energy strategy. Citizen participation in decision making must be assured at every governmental level.

League of Women Voters of the United States 1730 M Street, N.W., Washington, D. C. 20036 Tel. (202) 296-1770

news release

Going on DPM

(The following is a sample press release on the energy position which you may wish to adapt for use in your media. You also may wish to insert a couple of paragraphs relating the national position to your League study.)

The League of Women Voters of the U.S. today announced a new energy position based on the results of a comprehensive, two-year study of energy sources, growth rates and policies which was recently completed by local Leagues.

In making the announcement, Ruth C. Clusen, President of the League of Women Voters of the U.S., said "the findings of our study indicate League members strongly favor pursuing national energy policies which place conservation at their foundations and build on increasing use of renewable resources, especially solar heating and cooling as well as coal. To achieve this, the nation must develop and implement energy strategies that account for differences in the needs and resources of states and regions but gives precedence to the national good."

The study was based on reports from League members in all 50 states, the District of Columbia, the Virgin Islands and Puerto Rico, and is one of the most extensive looks at energy ever completed by a public interest organization, Mrs. Clusen said.

The League's energy position calls for implementation of federal policies which would:

-- make a significant and progressive reduction in U.S. energy growth rate.

-- gradually deregulate natural gas and oil prices and tax resulting windfall profits.

-- set mandatory federal conservation standards.

OVER

-- give top priority to conservation, use of renewable resources and the environmentally sound use of coal.

-- reduce dependence on imported energy supplies.

-- not increase reliance on nuclear fission (light water reactors).

--provide for the development of nuclear fusion but give extremely low priority to the plutonium breeder reactor.

--support the development of geothermal energy.

To achieve these goals, the Leagues said the federal government should use research and development funds, tax incentives and loan guarantees to encourage businesses, industry and individual consumers to conserve energy and to shift toward the development and use of renewable resources. Leagues also supported tax disincentives such as taxes on gas guzzlers to promote conservation.

"Critical to the success of any national energy policy is adequate citizen participation in the decision-making processes. Since the energy issue pervades all sections and levels and lifestyles of our country, all segments of society should have a say about these choices," Mrs. Clusen said.

The League will use its new national energy position to help shape programs at the federal, state and local levels which implement these goals, Mrs. Clusen said.

# # #

March 1978

League of Women Voters of the United States 1730 M Street, N.W., Washington, D. C. 20036 Tel. (202) 296-1770

news release

Contact
Cynthia Kuhn
Public Relations
296-1770 ext. 264

HOLD FOR RELEASE
Monday, March 20, 1978

Washington, D.C.--The League of Women Voters of the United States today announced its support of gradual deregulation of domestic natural gas prices with taxes on resulting windfall profits.

This decision was prompted by the recent findings of a two-year study of the U.S. energy situation completed this month by League members across the country. The purpose of the study was to determine the optimum mix of energy sources the U.S. should use, energy growth rate targets and policies to bring them about

Members of approximately 1,000 Leagues nationwide took part in the study, making it one of the most extensive looks at energy ever taken by a public interest organization. The study findings will be the basis of League action on federal energy proposals.

In announcing the results, Ruth C. Clusen, President of the League of Women Voters of the United States said, "Our members took a hard look at our national energy picture and concluded that it is time for some fundamental changes in the direction of reduced consumption and additional use of renewable resources, especially solar heating and cooling. Leagues will be throwing their full support to gaining passage of federal energy legislation as well as state and local programs which are responsive to these goals."

In addition to favoring deregulation of natural gas while taxing windfall profits, the League's energy position calls for federal policies which would:

-- make a significant and progressive reduction in the U.S. energy growth rate.

MORE

-- set mandatory federal conservation standards.

-- give top priority to conservation, use of renewable resources and the environmentally sound use of coal.

-- reduce dependence on imported energy supplies.

-- not increase reliance on nuclear fission (light water reactors).

-- provide for the development of nuclear fusion but give extremely low priority to the plutonium breeder reactor.

-- support the development of geothermal energy.

Addressing a much debated energy source, Leagues agreed there was a place for nuclear energy in America's energy supply mix. Although 61 per cent opposed any increased reliance on nuclear fission or atom splitting processes, an equally strong 60 per cent were in favor of the federal government placing high or mid priority to the development of nuclear fusion, a process where atoms come together or fuse into a smaller mass to produce energy. League concern on nuclear energy centered over the fission question, and the waste, health and safety problems associated with it. Some 47 per cent strongly opposed use of the plutonium breeder reactor with an additional 27 per cent only willing to give it very low priority.

Virtually all Leagues responding (99 per cent), said increased conservation should be the keystone of any national energy program. "We can not continue growing at the present rate. We are wasting rather than using (energy) efficiently," remarked the League of Women Voters of the Richmond, Virginia area. On the average, participants called for reduction in the annual energy growth rate from the current 3.5 per cent level to 2.27 per cent by 1985 and to 1.35 per cent by 2000. To reach those levels, 85 per cent of the participants expressed support of mandatory federal standards for energy conservation. Participants also believed increased conservation could be the result of federal policies such as providing federal research and

development funding, tax incentives such as credits for installing insulation, tax disincentives such as increasing taxes on gasoline or on gas guzzlers, and loan guarantees. All of these policies should apply to consumers as well as business and industry, the study concluded.

Another point stressed in the study was the desire to put increasing national emphasis on renewable sources to meet our energy needs. Beyond the year 2000, the respondents believed renewable resources should be predominant in the U.S. energy source mix. Leagues specifically mentioned solar heating and cooling, solar electric, bioconversion such as burning wood or organic wastes, cogeneration or using end products of one energy process as an energy resource and wind. To encourage businesses and industries to make the shift to renewable resources, 89 per cent of respondents supported federal research and development funding; 81 per cent favored tax incentives and 61 per cent listed loan guarantees.

Realizing any such fundamental shift in the U.S. energy consumption patterns will take time, the participants set out what they believed were realistic interim energy goals between the present and 2000. Specifically, the study concluded the optimum mix of energy sources for the remainder of the 20th century would include increased use of renewable resources of solar heating and cooling, bioconversion and wind as well as coal, the single fossil fuel listed. What made coal acceptable in the short term to a large 86 per cent of League participants was a strong caveat that the federal government should not relax its standards and compliance timetables which protect the environment. Leagues also recognized that domestic coal is the single fossil fuel available in sufficient quantities to meet future energy demands and that declining quantities of oil and natural gas would not and could not continue to provide the lion's share of our energy needs.

The League of Women Voters of Diablo Valley, California, gave a typical response to the coal question by saying "...increased use of coal must include maintenance of

clean air standards, efficient and proper land use and awareness of water needs and availability." From Seward County, Nebraska, came the comments that "the energy needs and environmental quality of this country should be considered as mutually interacting."

Also before 2000, participants favored policies which would reduce the nation's dependence on imported energy sources. Some 89 per cent called for less use of imported oil while 79 per cent favored decreased use of imported gas.

One of the more striking findings of the League's study was the absence of regional divisions in the data. Although some sections of the nation have more energy sources at their disposal than others, the study revealed a distinct commitment to development of a national energy policy which principally pursues a national goal of reduced consumption and increased independence from foreign suppliers while accounting for differences in the needs and resources of states and regions.

One North Dakota League said: "North Dakota is a worried coal-producing state, anxious to preserve its clean environment, but willing to help with other areas' needs <u>if</u> our needs for clean air and water and wise land use can be met too" (emphasis in original).

Other typical comments came from the League of Women Voters of Pittsburgh, Pennsylvania, another coal-rich area: "We feel energy resources are a federal resource and that we need to have strong federal leadership to set policy and develop commitment. While a region should not be exploited to benefit another area, it should not be able to withhold an energy necessity from the rest of the country. There must be a compromise. Federal Departments of Energy should develop a comprehensive plan balancing benefits and disadvantages for each area."

"The national interest should take precedence over regional interests," concluded the Cranford, New Jersey League.

The variations which did occur revealed some of the awareness that different regions had concerning their particular resources. For instance, 82 per cent of respondents in Federal Energy Region VI (Texas, Oklahoma, New Mexico, Arkansas and Louisiana) favored gradual deregulation of natural gas and oil, reflecting their own relative wealth of those resources. On the low side was Federal Energy Region IX (California, Nevada, Arizona and Hawaii) which only had 39 per cent favoring such a policy, with 46 per cent undecided on the question. The study's average national response was 64 per cent in favor of gradual deregulation.

When asked how domestic oil should fit into the U.S. energy mix, the Pacific Northwest (Washington, Oregon, Idaho and Alaska) gave a 48 per cent response in favor of reduced use of oil, compared to a 34 per cent response in the mid-Atlantic states, including Pennsylvania which is relatively oil-wealthy. Overall, 38 per cent called for less use of domestic oil while 39 per cent said they favored using domestic oil at the same rate as now.

On nuclear fission, the far west including California was more strongly in favor of decreasing its use (41 per cent) compared to the mid-Atlantic states of Pennsylvania, Maryland, Delaware, Virginia and West Virginia (17 per cent).

As the federal government and state governments formulate energy policies and programs, citizen participation should be actively solicited, the study found. The Gary, Indiana LWV said: "We must listen to one another, try to understand one another's problems and reach agreement by compromise."

"We need a public awareness of an existing crisis and the emotional involvement to meet the crisis ... to rise above our regional interests and cooperate for the good of the nation as a whole," the Salina, Kansas League said.

"Since the energy issue pervades all sections and levels and lifestyles of our country, all segments of our society, not just the energy producers, should have a say about our choices," the Racine, Wisconsin League concluded.

# # #

Reporters please note: complete national energy position based on study's findings attached.

League of Women Voters Education Fund • 1730 M Street, N.W., Washington, D.C. 20036 Tel. (202) 659-2685

memorandum

March 29, 1978

TO: Energy Education Project Managers of the State Leagues and the Leagues of Puerto Rico, the Virgin Islands and the District of Columbia

FROM: Florence Chichester, Project Manager, LWVEF Energy Education Program

RE: Report of the LWVEF Energy Education Program

Many of you have asked what projects were being carried out by Leagues in other states and I am pleased to send you a copy of the February 1978 Report of the LWVEF Energy Education Program. It describes the variety of energy education activities you all have undertaken and was sent as the mid-term report to the project officers at the Department of Energy (DOE). Copies have also been sent to various other persons at DOE involved in or interested in the LWVEF program, and copies are being sent to the LWVEF Energy Consortium donors.

Project Reports

As you can see, some of the information in the report is very general because many activities had not yet taken place when the report was compiled. I hope you will fill in the gaps for me in your next project reports. Let me know the outcome of scheduled events, new activities you have arranged, attendance, response and impact (if you are able to assess it), what you have learned, etc. I would like to have ten copies of major items that you produce for the project (brochures, publications, flyers, etc.) for use in preparing the final report to DOE and the Energy Consortium donors. You need only send one or two copies of large items (such as posters). I would also like a clean, final copy of your PSA, film or slide show scripts, along with a description of accompanying slides or film scenes. Photographs of displays or exhibits would be very useful and I am particularly interested in receiving examples of newspaper or other media coverage of your projects.

Energy Conservation in Schools

Also enclosed, for your information, is a pamphlet, "Questions and Answers on Energy Conservation in Schools," that has been developed by Educational Facilities Laboratories (EFL) "as part of a public information program alerting citizens to the impact of rising energy costs on education." As the pamphlet states, EFL is a nonprofit organization that provides information on the building and operation of facilities for public institutions.

Several of you have been involved with conservation in schools and we thought you would be interested in this free pamphlet, which you may order in greater quantity from EFL.

Convention Showings of Films or Slide Shows

Some of you may have heard from your state or local presidents or resource chairpersons that showings of selected League films or slide shows will be scheduled during convention. Nancy Thompson of the LWVUS PR staff is handling this event. If you are interested in having your film or slide show considered for convention showing, please send Nancy, immediately, a copy of your final script (with description of slides or film scenes) and information on running time and how the production was put together. Her deadline is April 5th but Nancy assures me she will make every effort to consider all scripts received. Do send yours in as soon as possible, however, if interested. Nancy will need time to notify those whose scripts have been given viewing time to deliver the slide show or film to the convention press room on Sunday, April 30th between 4-6 p.m. or 7-8 p.m.

If your film or slide show is scheduled, an operator, a projector, screen and cassette recorder will be provided. (We will not be able to accomodate video tape cassettes.) We ask that a delegate responsible for your film or slide show (you, if you are attending convention) be present in the viewing room one hour before the show time at which your production is scheduled. The slide show schedule will be posted at convention for the convenience of all League delegates.

Convention Discussion of Projects

There are two scheduled times when Betty MacDonald, Chairman of the National Energy Committee, and Energy Department staff will be available at convention for informal discussion of the energy program. These are Monday, May 1st from 9 a.m.-12:30 p.m. and Friday, May 5th, during the Program Breakfasts scheduled to take place from 7:30-9:00 a.m. These periods are aimed at general program discussion but we can and undoubtedly will also discuss the energy education projects. If enough of you or your League delegates would like an opportunity to discuss the projects in more detail, we would be happy to schedule a meeting during lunch or an informal evening session. Let me know, in advance, if possible, but at least on your arrival at convention. I look forward to seeing some of you in Cincinnati and will be happy to talk with you about the projects whenever we can arrange a convenient time.

cc: State Presidents

2 enclosures

Minnesota

League of Women Voters Education Fund •1730 M Street, N.W., Washington, D. C. 20036 Tel. (202) 659-2685

memorandum

APR 20 1978

April 1, 1978

TO: Margaret Post, Manager
Energy Education Project
LWV of Minnesota

FROM: Florence Chichester, Project Manager, LWVEF
Energy Education Program

RE: 2nd Stipend Payment

Attached is the check for your final stipend payment of $182.00. Contrary to the instructions given you for the first stipend payment, please do not record this payment on a voucher. Just acknowledge receipt of the stipend in a brief statement in any other communication with us (i.e., the interim report, letter with questions about the project, cover letter to a set of vouchers, etc.). As before, if your project has more than one project manager, only one person will receive the payment (the same who received the first payment), but that person should divide the stipend as you yourselves may have agreed.

Those of you who have not yet received the first stipend payment will note that this check covers the full stipend amount. Do not hesitate to contact me if you have any questions.

cc: State President

League of Women Voters Education Fund •1730 M Street, N.W., Washington, D. C. 20036 Tel. (202) 659-2685

memorandum

This is going on DPM

TO: State, Local and ILO League Presidents

FROM: Holly O'Konski, Chairman, National LWV Land Use Committee

DATE: April 14, 1978

RE: A New Publication: Impacts of Western Coal Development

This mailing brings you the latest Land Use publication, Impacts of Western Coal Development. This CURRENT FOCUS explores some of the socio-economic and environmental problems that often accompany rapid development of energy sources: strained social services caused by quick population growth, competition for scarce water supplies, and boom and bust cycles. It also reviews some federal and state programs designed to help communities ease the growing pains.

Most of the information for the pub was gathered on the scene at two League-sponsored Western regional conferences funded by a grant from Resources for the Future. We're sure that you will be interested in this first-hand look at a region that will contribute significantly to our future energy supplies. But although the focus is on the west, many of the impacts discussed are applicable to any community facing rapid growth.

Be sure to bring this publication to the attention of your League's Natural Resources, Energy, Land Use, and Human Resources chairmen for all of them work on the issues discussed. The pub could also serve as a good reference for local officials grappling with these growth-related problems.

The Impacts of Western Coal Development

CURRENT FOCUS

All along Main Street, Farmington, New Mexico are signs of change—trailer parks just over the hill, a bulldozer breaking ground for a new shopping center, the telltale traffic jams and angry drivers waiting for the new traffic light to change. And the blueprint has been drawn for an industrial park, due to be built on the sage-covered rocky mesa. Some residents resent these changes and have trouble coping; in nearby Durango, mental health clinics are flooded with Farmington business.

Farther down Main Street the desert-like landscape opens up again, the hustle and bustle left behind. Once out of town, one can see forever into the flat, rocky horizon. But a grey streak mars the sky. Twenty miles southwest of town, Utah International, Inc. operates the second largest strip mine in the country (on land leased from the Navajo Indians). Its biggest customer, the Arizona Public Service Four Corners Power Plant, is a mile or so away. Ironically, Utah International is also the power plant's biggest customer, using one-third of the plant's power output in its strip-mining operations!

Touring the Farmington area one recent fall day were 90 assorted individuals—federal, tribal, state and local decision makers and representatives of public and private interest groups—from the four state region of Colorado, New Mexico, Arizona and Utah. They were participating in a conference sponsored by the League of Women Voters Education Fund and funded by Resources for the Future (a Washington, D.C.-based research and education organization). The following week a similar group from North Dakota, South Dakota, Wyoming and Montana gathered in Billings, Montana. All the conference participants had two things in common. One was a readiness to learn from one another and from experts. The other was a fact of overriding importance: they all came from states that are experiencing explosive energy development.

With the ever-growing U.S. energy demand and dwindling U.S. supplies of oil and natural gas, coal reserves stand out as the most plentiful of America's remaining fossil fuel reserves. And, though coal is more environmentally destructive to mine and more polluting to use than oil and gas, it is a high-quality source of energy. Pressures for stepping up coal mining are intensifying. The Carter National Energy Plan, for instance, proposes doubling today's level of coal production to 1.2 billion tons by 1985. Though there is widespread skepticism that this goal can be met, most experts agree that U.S. coal use is likely to rise steeply.

All rapid development brings some growing pains. The nation's most accessible coal reserves underlie western states characterized by small communities and an especially fragile ecology. Major exploitation of these coal supplies will impact on a region vulnerable to rapid change. Moreover, uranium, oil shale and geothermal energy—all looked upon as inviting means to enlarge the U.S. energy stock—are found primarily in the same region.

Farmington residents, like "locals" elsewhere in the eight-state region, differ widely in their reactions to prospects of development. While industrialization can bring economic growth and new job opportunities to areas that have been short on both, its effects can be depersonalizing, threatening to change quiet, traditional lifestyles of an economy long dependent on farming, ranching and recreation.

The two LWVEF conferences, each including both long-time residents and newcomers, were well situated to examine the many issues implicit in change for their region. This publication, an outgrowth of those conferences:

- ☐ capsulizes some facts about western coal development;
- ☐ discusses the socioeconomic issues raised at the conferences;
- ☐ highlights features of model state programs designed to prevent or alleviate energy development impacts; and
- ☐ recaps some federal programs that impacted communities might find useful for managing change.

Why concentrate on coal when other energy development is also afoot in the same region? A look at the accompanying chart on energy development prospects for Federal Region VIII (which covers six of the eight states involved in the two conferences) gives the answer. Of the 340 total projects charted, 220 of them are coal related.

The setting

To an energy-hungry nation, western coal, concentrated in Wyoming, North Dakota, Utah, Colorado, Arizona, New Mexico and Montana, seems like manna from heaven. It is low in sulfur content and thus relatively clean-burning. It is accessible by lease since a full 80 percent of the resources are owned by the federal government or by Indian tribes who are willing to lease them for development. And at first glance, it seems attractive to mine, as most of it lies in thick layers near the earth's surface.

But several laws passed in the last two years may have a significant effect on how much western coal will be produced.

Written consent In some cases, federally owned resources lie beneath privately owned or previously leased surface. The Surface Mining Control and Reclamation Act of 1977 (PL 95-87) requires developers to obtain written consent from the surface land owner in order to mine federally owned resources below the surface—and 63 percent of strippable federal coal deposits in the West do lie beneath privately owned surface. This law also requires a developer to reclaim surface land disturbed by mining activity and return it to its

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Education Fund
1730 M Street, N.W.
Washington, D.C. 20036

former state of productivity. On many arid western lands this will be costly at the least and perhaps impossible, given the scanty rainfall in some areas.

Best available control technology (BACT) Western coal *is* less polluting to burn than eastern; but the Clean Air Act Amendments of 1977 (PL 95-95) require BACT on all new pollution sources. Some have interpreted this tough requirement as a concession by Congress to eastern coal operators who feared that the balance might otherwise have been tipped too far westward. In any case, BACT requirements affecting new plants burning western coal, plus its lower heat value and greater distance from markets, severely cut the economic advantages gained by its accessibility for mining.

Leasing regulations are no longer as lenient as they once were. The Mineral Leasing Act of 1920 let coal companies postpone mining leased land until coal prices increased. But in 1976 Congress overrode a presidential veto to enact the Federal Coal Leasing Act Amendments (PL 94-377) in order to forbid such speculation by requiring a certain level of production from a mine in a certain amount of time. At the same time, they mandated a study of the federal coal policy and an environmental impact statement to determine its effects. Both of those studies are due for release in August 1978.

These restraining forces may slow the breakneck pace of coal development, but they certainly will not halt it.

Boom and bust

Energy development—preparing and working mines, constructing and operating facilities to convert coal to usable energy—has far-reaching reverberations. The preparing and constructing phases usually have far more jarring social and economic impacts on nearby communities than the operating phase. Rapid growth places immediate stresses on the local government's revenues and personnel and radically changes the area's economic base. Since more people come to build conversion facilities and to open coal mines than stay to operate them, communities often have trouble accommodating the temporary population. Newcomers increase demand for housing and schools, and for recreational, medical and other municipal facilities and services. All this requires money, planning and technical expertise. As was true during the gold rush and more recently during construction of the Alaskan pipeline, sudden development usually means "boom towns." It can also mean a jolting slowdown when the facilities are finished and developers depart, leaving behind a far smaller work force to operate them. And if later the natural resource is exhausted and the industry moves on, the boom may even be followed by bust.

Planning for population growth

A great deal of uncertainty and unpreparedness surrounds the coming of energy development in western communities. According to a 1977 Government Accounting Office (GAO) study, allowing time for environmental and related studies, permits, equipment acquisition and construction time, it takes four to fifteen years to open a new strip mine and three to thirteen years to open a new deep mine in the West. During this period, industry plans, employment estimates and construction schedules can and usually do change. There is often confusion over whose responsibility it is to plan and prepare for impacts of this development—industry, local, state and/or federal government.

A community undergoing rapid growth needs to have planning expertise and staff to integrate new development at the local level. But small towns seldom have the funds or foreknowledge needed to hire such staff. In Federal Region VIII, of the 188 communities expected to be impacted by energy development by the year 2000, only 9 percent have professional planners, only 6 percent have full-time engineers and only 3 percent have city managers. According to one expert, without such staff, expertise and revenues to prepare for the boom, a community can be thrown into chaos and budget deficits for at least five to eight years.

Sweetwater County, Wyoming provides a good example. In 1970 the county's population was 18,000. At that time oil and gas resources began to be developed rapidly and construction also started on a coal-fired generating plant. Within four years the population had grown to 37,000, a 19-percent annual growth rate. According to the 1977 GAO study, a five-percent increase was the most the county could have absorbed in order to manage the growth and prevent serious socioeconomic problems. And Rosebud County, Montana—after experiencing a population boom during the construction of two 330 megawatt generating plants—is showing signs of decline as the construction workers leave.

Lack of funds is the most obvious obstacle to successful management of growth in boom towns, especially since many rural towns are financially squeezed even under normal conditions. Tax payments from newcomers help eventually, but before they ever pay a tax bill the newcomers bring demand for immediate services. Additional housing, social and municipal services and schools cannot wait to be built until tax payments are made. Even when collected, these revenues may not provide sufficient relief. Local governments have always relied on the property tax to fund local public services. But many new residents, perhaps knowing they will move on, or perhaps from lack of choice, settle for trailer housing, which never produces an assessment high enough to underwrite needed services for residents.

The happenstance of jurisdictional boundaries can make things even worse. Development may occur in one community or county (which gets tax receipts from the industry) while a neighboring municipality or county becomes the "bedroom" community for the first, and—without such increased tax revenues—is called upon to house the families of workers at the neighboring plant and to provide schools and community services out of a slender public purse filled only by residential property taxes.

Housing, schools, municipal and social services

A sudden population increase can throw a housing market into chaos. With hundreds of new families demanding immediate shelter, speculation becomes rampant, prices soar and builders are overwhelmed with business. Careful planning is needed to determine how much of the new demand for housing is temporary. Many of the incoming families can't afford to buy a permanent house, and builders can't supply them fast enough even to those who can afford them. Trailer parks are often the answer. Mobile homes are much criticized by planners and by home owners with higher tax bills; they are none too popular even among tenants. But trailers often prove to be the only viable way to house large numbers of transient workers. Of the 6,000 new houses built early in Sweetwater County's boom period (doubling the existing supply), 5,500 were mobile home units, many clustered into trailer parks. In Page, Arizona, 70 percent of the population lived in trailers in 1976, but only half of those people indicated they preferred trailer housing. Most were transient, according to a survey that showed that over half of the town's population has lived in Page for less than two years and that 40 percent expected to move within two years.

The school system in Sweetwater County became wholly inadequate once the boom began. There weren't enough teachers or enough space to accommodate the number of new children. The school districts, bonded to the limit set by the state constitution, asked industry to contribute mobile classrooms. With tax revenues lagging behind growth in numbers, school officials had to forego hiring needed teachers, social workers and school counselors.

The story is much the same in other areas. The financing and construction of needed public services often lags behind demand. Public water and sewer disposal systems are strained and deficiencies in water-pumping capacity can seriously limit the system's ability to meet emergency needs such as fires.

Health problems also increase dramatically. Studies show a direct correlation between air pollution—especially from sulfur dioxide, which is a by-product of coal-fired power plants—and illness and premature death from respiratory ailments such as bronchitis, asthma, emphysema and lung cancer. And, while inadequate medical facilities and shortages of qualified medical personnel are common to any rural area, rapid growth compounds the problem. The demand for mental health services also reflects the strain and typically increases at a faster rate than does population. In Sweetwater County, mental health clinics increased their caseload nine times over in four years, while population less than doubled.

It is not uncommon to have additional needs for law enforcement staff and facilities. Between 1974 and 1976, in Craig, Colorado, another boom town, crimes against people increased tenfold while the population doubled.

Preliminary, planned, or proposed new or expanding energy facilities in Federal Region VIII*

	Coal Mines		Electric Power Plants			Coal Conversion	Bio Conversion	Oil Shale	Tar Sands	Geothermal	Coal Slurry	Uranium Mines	Oil Refineries	Uranium Mill & Enrichment	Natural Gas Proc. & Storage	Railroads	Pipeline Petr. N.G.
	U.G.	Strip	C.F.	Nuc.	Other												
Colorado	46	31	6	0	4	1	0	7	0	0	1	30	3	8	0	2	2
Montana	0	12	4	0	5	5	0	0	0	0	1	0	0	0	0	0	0
North Dakota	0	11	3	0	0	3	0	0	0	0	0	0	0	0	0	Numerous	1
South Dakota	0	0	5	0	4	1	0	0	0	1	0	1	0	1	1	0	1
Utah	31	3	6	0	4	1	1	3	2	2	1	21	0	0	3	1	1
Wyoming	6	31	5	0	1	5	0	0	0	0	2	15	3	4	1	1	0
Regional Total	83	88	29	0	18	16	1	10	2	3	5	67	6	13	5	4	5

*Source: Department of Energy, Department of Interior, Bureau of Mines, *Projects to Expand Energy Sources in Western States* by Charles Rich, 1977.

Pressures

Changes in economic life are linked in subtle ways to changes in the social fabric of impacted communities. The Northern Great Plains Resources Program, composed of federal, state and private groups studying regional impacts of resource development, notes that as a boom town's original population becomes overwhelmed by newcomers, community life often changes dramatically. Before the influx, rural communities may enjoy a slow pace of life, little congestion, and a well-integrated, stable community where everyone knows everyone else. After development begins, the local residents may have new job opportunities for higher pay, in exchange for long hours of hard work at often psychologically unrewarding tasks.

Water

So far, no one has found a way to manufacture water. In the Rocky Mountain Area—where nearly all available surface water is already being used by the region's farmers, ranchers, recreation industry and municipalities—energy development is directly competing for that scarce commodity.

Furthermore, since much of mining will be strip mining over vast acreages, the competition will also be for the use of land itself. Even though much of the arid and semiarid land is suited only to grazing, many farmers and ranchers have made their living off the land for decades. And reclamation, even applying the most stringent standards, cannot be the answer in many cases. Because of low rainfall, the characteristically sparse vegetative cover has taken hundreds of years of successive growth to reach its present fragile but stable existence. Successful reclamation of disturbed land requires at least 10 inches of rainfall annually, yet many strip mining locations have less and require irrigation. For example, the average rainfall in the Farmington area, the locus of one of the conferences, has been only six inches yearly over the past 20 years and averaged only four inches over the past several years of drought. Sterling Grogan, Utah International's chief of reclamation, told conference participants touring the mine that his company is the industry leader in reclamation techniques but candidly admits it may not be successful in reestablishing grazing land. They estimate it will take ten years before they will know if new vegetation will survive *and reproduce* once irrigation is stopped.

The Navajo Reservation offered conference participants a living laboratory for learning about the conflicts created by water shortages. The reservation is not only the site of the strip mine and power plant described earlier, but is also home to the Navajo Irrigation Project (NIP), the largest irrigation project in the country. More water than is available would be required if six proposed coal gasification plants are sited there.

NIP resulted when, in 1962, Congress finally honored an 1868 treaty agreement and authorized the money and water necessary to sprinkler irrigate 110,630 acres of dry but fertile desert land on the reservation. When completed, NIP is expected to employ 3,000 people and may create another 15,000 jobs in associated agribusinesses, services and supplies. Given the 1976 unemployment rate of 65 percent on the reservation and a median annual income of $800, the project has been well received.

One of the gasification projects planned for the reservation, now in the process of securing necessary project permits, could offer even more economic growth over a 25-year period. If the project, which involves four plants, is built, an influx of 10,000 to 30,000 newcomers is projected (mostly non-Indian). The company will buy its coal from Utah International, Inc. and has water permits from the state. Still needed are federal loan guarantees to finance the project and construction permits from the Navajo Tribal Council.

Whether to grant the permits is a big question for the council as it evaluates costs and benefits for the tribe. Will economic growth outweigh the environmental degradation (including possible effects on agricultural products)? Will Indians benefit from an influx of non-Indians? Water supplies will have to be considered; in January 1976, the Department of Interior determined that there is not enough water for all the projects (gasification plants and NIP) plus the population growth that will accompany the project.

Transportation

If on-site conversion presents problems of water use and air quality, why not ship the coal out as is, so that the users at the end of the line pay the environmental costs of conversion? Certainly a lot of eastern coal has been dealt with on those terms. But because eastern coal produces more energy per ton, and because the distances are shorter, it was and is more economical to transport. In addition, the temper of the times has changed. Now, urban energy consumers want to improve their air quality and preserve their ever costlier water supply, rather than increase their pollution problems by accepting coal conversion facilities.

Some coal trains do run from the Rockies to eastern and West Coast markets. Typically over 10,000-ton capacity each, the length of these "unit trains" makes them virtual conveyor belts, slicing towns en route in half.

Burlington Northern, the largest western coal moving company, expects an increase in coal traffic over the next decade from 55 to 200 trains per week. Residents of Wyarno and Lusk, Wyoming, both near one of the largest strip mining operations in the country (in Decker, Montana), have expressed concern about the trains. Lusk's mayor, William Hammond, commented in 1976 on the trains that cross the town's main street, "We get one freight a day through here now and that ties up traffic coming in and out of town. What do we do if there's a fire or if someone has a heart attack on the other side of these tracks once these unit trains start running?"

Slurrying is another way to move coal, sending a thick liquid mixture of coal and water through pipelines for conversion nearer end users. But coal slurry contains large amounts of water that the West can ill afford to lose. Another major factor in the slurry debate is acquiring rights-of-way in order to build the pipelines. The congressional approval that is required to grant the right of eminent domain to slurry builders may be hard to come by since this is a "taking" of land many private land owners (including railroads, a major competitor) claim is unjust.

Public sentiment

Traditional ties to the land are strong and many of the old timers don't want things to change. The Aldersons, one such family in southern Montana, own an 8,000-acre cattle ranch that is sitting on coal deposits. But according to Caroline Alderson, they won't sell or lease their land. "Our family," she says, "put this together, and it's been in the family since 1889. We have a strong feeling of responsibility to the past and the future. We like being here—the land has been good to us."

Many area residents attending the Billings conference expressed anger over seeing the region become a "national sacrifice area," housing mines and conversion facilities for the rest of the nation. Many felt that other, more urbanized regions should accept the plants and their pollution since they use most of the energy produced. Others recognized that if conversion plants go elsewhere, so do the opportunities for jobs and economic growth.

Dr. Helen Ingram of Resources for the Future and the University of Arizona, shared with conference participants in Farmington the results of a survey about the attitudes of locals in the Four Corners area of Utah, Colorado, New Mexico and Arizona. She found that most people favor energy development and the economic growth and new job opportunities it brings. But they are also committed to their small town ways of life and the pristine environment they now enjoy. Dr. Ingram concluded that residents are unwilling or unable to make the choices necessitated by limited water supplies and by the consequences of a pro-growth regional policy. She attributes the attitude in part to a lack of the kind of leadership that would help people realize the need to set priorities and to make decisions based on limits.

Studies by J.S. Gilmore published in *Science* (1976) indicate that some residents of energy boom towns feel hostile and suspicious of newcomers. Sociologist R.L. Gold at the University of Montana's Institute for Social Science Research finds that in many of these areas local residents now, for the first time, lock their cars and houses. Women are becoming reluctant to go out alone. At the Farmington conference, sociologist Dr. Elise Boulding of the University of Colorado, questioned whether social institutions can integrate changes at such a rapid pace, since "community is built on trust relationships, an organic process that requires time and one in which people feel they have some control over decisions affecting their lives".

4-Ds

Gillette, in Campbell County, Wyoming, was one of the early boom towns, first triggered in a 1960's oil rush, when its population of 3,580 doubled over the decade. By 1976, with one strip mine, the population was 15,000. Four more mines expected to open by 1985 could push the population up to 43,000.

In recent years, Gillette has received much publicity—mostly negative. Some of it was spurred by the phrase "Gillette Syndrome," coined by ElDean Kohrs, a Wyoming clinical psychologist to describe the "4-Ds" of divorce, delinquency, drunkenness and depression. Though things are improving now—as Gillette residents at the Billings conference were quick to point out—for a time the characterization seemed all too accurate. Data from a study that compared Campbell County to two neighboring counties revealed the stresses that Campbell County residents were undergoing. Campbell had a divorce rate 33 percent higher than one of two neighboring counties and 85 percent higher than the other. It had, comparatively, 57 percent and 487 percent more individuals on welfare. There were 67 percent and 205 percent more arrests. Campbell County had 390 percent more incidents of people driving under the influence of alcohol. Its law-enforcement budget was 102 percent that of one of the neighboring counties and 167 percent higher than the other. Mental health clinics were overburdened, and the high school dropout rate had tripled as construction hiring drew teenage response.

In 1975 Gillette experienced severe increases in child abuse, truancy and fighting in schools. These changes may have been due, in part, to problems noted by Wyoming child psychiatrist Dr. Dennis Frisbee. He finds that when adults are uprooted, many of them have so much trouble adjusting that it is hard for them to give their children the necessary emotional and moral support. The result for children, he finds, has been higher rates of learning disabilities, behaviorial disorders and often an inability to deal with conflict.

One developer's solution

These problems can in turn adversely affect energy development projects by contributing to a high turnover rate among workers and thus lowering productivity. Industry planners, concerned about this turnover rate and loss of profits, have sought ways to make living conditions more pleasant for workers and thus increase production efficiency. In several cases their solution has been to recycle an old idea, the company town. One such is the planned community of Colstrip, Montana. The coal developers—Western Energy Company—hired planning and design consultants to build a town that would meet short-run social needs and would also allow for future expansion. The town includes: housing (apartments, houses and mobile home courts), a school, commercial center, community center, bank, shopping center, supermarket, motel and churches. Bike paths and greenways were built and a park system developed. A water treatment plant, water distribution system, sewer collection and treatment facilities were all constructed. It is the company's hope that residents will eventually buy their homes and the town's commercial properties. But even though the company sought citizen input during the planning stages in order to build what its brochure calls a town with "concern and compassion for citizens," some participants at the Billings conference reported that residents still look upon it as a company town where decisions are made *for* the citizens, not *by* them.

What governments can do to help

State programs

Since states have their own revenue-raising activities and also the power to define what lesser units of government can do about raising money, they play a doubly critical role in adapting tax policy to ease the problems that communities experience when energy development hits their town. Some of the Rocky Mountain states have tinkered with the whole gamut of revenue-producing tools, such as bonds, property taxes, sales taxes, growth taxes and industry taxes. The severance tax (a tax on mined coal) is the most widely used. Bonds are commonly used only as a last resort since they increase or create taxes, often a source of much resentment to local residents.

Some states also enjoy sizeable royalties from federal mineral- and timber-leasing programs. A state now gets 50 percent of the federal revenue collected from the mineral or timber lease activity in that state, up from 37.5 percent. In addition, states have the power to shape energy development through a variety of controls such as siting and planning requirements.

The following is a brief description of some of the programs developed by states to prevent or alleviate adverse impacts from energy development.

Colorado In 1973 the federal government leased several large oil shale tracts for development in Colorado. The state set aside the $73 million in royalties that it got over three years in a trust fund that now draws yearly interest of nearly $4 million. Loans from the fund go to needy, impacted communities to help plan and finance facilities and services to meet the boom. Though Colorado has no specific siting criteria or strong land use legislation, the state has encouraged the formation of impact assistance teams in areas of energy development. The teams vary but typically include the city's mayor, county

commissioners, a hospital administrator, a school superintendent and state representatives. The teams work with industry to assess the impact of the proposed energy development and to identify where financial responsibilities will fall. The state's energy impact assistance office then works with the team to gather needed funds from various loan and grant sources.

Wyoming This state has the most comprehensive program in the West to prepare for socioeconomic impacts of energy development. It includes tax measures, siting controls and community-wide planning.

Wyoming and its counties can generate revenues in several ways. An optional 1-percent sales tax can be levied, and has been used by nine impacted counties. An 8.5-percent severance tax imposed on the gross value of the extracted coal is divided among the state general fund, the state's mineral trust fund, a water development account and a special fund for facilities such as schools and roads. In addition, a coal impact tax will be levied at 2 percent (as of 1978) of the coal value produced, until $160 million has been raised. The combined coal taxes (10.5 percent) will fund water, sewer and road projects in impacted areas.

Some of these funds—in addition to other bonds, grants and donations from the federal government—are distributed as loans to counties, municipalities and school districts under Wyoming's Joint Powers Act. Though the act enables—even encourages—these government units to plan, finance and operate jointly needed services (such as fire and police protection, health facilities, schools, courthouses and water, sewer and solid waste facilities), no county has so far volunteered to share its tax revenues with a municipality.

Wyoming's Industrial Siting Act authorized the creation of the Industrial Siting Council in 1975. The council is composed of seven Wyoming residents appointed by the governor, approved by the Senate. Its meetings are attended by heads of eleven related state agencies. Under the act, a developer cannot construct a facility costing more than $50 million without a siting permit, which is granted by the council only after it has determined that "the cumulative effect of the facility on the environmental, social, and economic conditions in the area, in conjunction with other facilities, will not substantially impair health, safety and welfare of the people." The council may require that an applicant share in the financing of necessary public facilities. The act has been tested twice—in connection with the Jim Bridger plant in Sweetwater County and the Missouri Basin Power Plant (MBPP) in Wheatland. The MBPP planners were not issued a siting permit until the plant had developed comprehensive plans to help manage impacts they would cause. They were required to help plan and finance water and sewer, housing, recreation, road, mental health and school facilities. (Montana has passed similar legislation.)

The Wyoming Community Development Authority (WCDA) was established in 1975 as a state level agency with the authority to issue up to $100 million in tax-exempt revenue bonds. Funded by the coal severance tax and by repayments of loans, proceeds are available as loans to impacted communities to be used for public housing and other facilities. The WCDA—composed of the governor, state treasurer and seven appointees—attempts to set standards for quality of development and costs and repayments of needed facilities and services. To date, however, fundable projects are waiting for a court decision on the constitutionality of the legislation authorizing the bonds. James Daley, counsel for the WCDA, told the Billings conferees that the legislation will be a useful tool in growth and quality of growth management, if it passes the legal tests.

New Mexico In 1974, New Mexico established the New Equalization Formula, similar to Wyoming's Joint Powers Act, under which tax-poor cities and tax-rich counties are encouraged to share funds voluntarily, to help "equalize" the financial burdens of providing needed public services.

Utah Utah's Resource Development Act of 1975 gives the state the authority to require prepayment of sales and use taxes from those engaged in natural resource development. The state then loans funds to impacted communities. However, in addition to federal Internal Revenue Service complications, there is confusion if a company does not complete the development for which it prepaid taxes.

Montana Montana has several innovative programs. The state's 30-percent severance tax is the largest in the nation. When first passed in 1975, some feared that such a large tax would discourage further development in the state but this has not been the case so far. Advocates of the large tax stress its two main justifications: it generates enough money to cover the high costs of social and economic impacts of coal development throughout the state, and it creates a fund for future use once the nonrenewable resource has been exploited. Montana also has set aside a portion of the coal severance revenues to fund the Renewable Resources Development Act. Under this act, the state can issue general obligation bonds to finance the development of such renewable resource projects as irrigation, park acquisition and county land planning.

Federal programs

Numerous federal programs exist that energy impacted communities could—but so far rarely do—tap for aid. Many communities, lacking a planning staff, are unaware that these programs exist. And in small communities that have relied on part-time volunteer public officials, the lack of coordination among federal programs, as well as complicated application processes, discourage their use, even when they are known.

In 1976 the Department of Energy's (DOE) (formerly Federal Energy Administration), Office of Energy Conservation and Environment and Office of Policy, Program Development and Environment prepared a book, *Federal Assistance Programs and Energy Development-Impacted Municipalities* describing pertinent federal programs. Following is a brief description of some that communities (or states) have found to be particularly useful.

☐ The Department of Housing and Urban Development's (HUD) 701 Program provides aid to states and localities for the development, implementation and evaluation of comprehensive plans for economic, social, housing and physical development needs. While the program was designed for communities of 50,000 and over, exceptions are made for "special need," which covers communities experiencing "rapid urbanization due to large scale production from major sources of energy resources." Recipients must match federal funds by one-third. The requirement for comprehensive plans and matching funds provide incentive for small communities to plan jointly with neighboring communities and create multijurisdictional planning districts and areawide plans.

☐ The Housing Act of 1949, as amended in 1974 by the Community Development Act, authorizes HUD to make loans to public organizations for land acquisition, development of new housing, and rehabilitation of existing housing. Technical assistance grants are also available.

☐ The Federal Water Pollution Control Act includes a grant program of the Environmental Protection Agency (EPA) to give local or regional governments, via the state, 75 percent of the planning and construction costs of municipal waste treatment systems, with no upper limit on total project costs. The state disburses the funds and sets the criteria for ranking applicants within the state. Since criteria generally include a judgment of "the relative needs for prevention and abatement of pollution," a state or the EPA could reflect concern for impacted communities by assigning higher priority to certain criteria characteristic of boom towns.

☐ Section 208 of the Federal Water Pollution Control Act administered by EPA encourages areawide water quality treatment planning and management through a grant program. The program is designed to meet the needs of all areas with water pollution problems due to industrialization, urbanization and nonpoint sources such as runoff from agriculture and forest lands. Governors must define boundaries for designated areas for which 208 planning is to be done and name the regional agency responsible for planning that area's waste treatment management system. The agencies may be regional planning commissions, councils of governments or an agency created specifically for 208 planning. In areas not designated by the governor to do their own 208 planning, the state must develop a plan. Once an application is approved by EPA, the agency gets 75-100 percent federal funding to develop its plans.

Other federal programs described in *Federal Assistance Programs and Energy Development-Impacted Municipalities* provide aid for law enforcement, fire protection, schools, transportation, health care and medical facilities. Generally, the effectiveness of a federal program for energy impact assistance depends on the programs' population requirements, flexibility, timeliness and the relative simplicity of the application procedure.

Where to go from here

In attempting to manage rapid energy development, it is important that decision makers and citizens not lose sight of what is desirable for their communities. Growth can be advantageous to a region's economy and help raise the standard of living. But it must be balanced against social and environmental costs, and long range effects must not be ignored. At the Farmington conference, Dr. Elise Boulding posed the basic challenge: "A distressing aspect of the whole energy impact debate is the absence of any clearcut images of what we would like society to be like. I want to start with asking what is good for human beings? What is the range of human capacities? How can we use the resources in our environment to activate and potentiate these capacities, for the sake of human welfare?"

The two conferences were not mere recitals of problems. They were strongly focused on identifying what citizens can do to help their local and state regions do a better job of managing growth problems. Some of the collective wisdom is reported here. Conferees felt it was especially important that they be informed of developments in their community and that they establish and maintain good communications with all parties concerned. Participants at both regional conferences felt the meetings themselves were an invaluable step towards opening those channels of communications among industry representatives, local, state, tribal, and federal officials and citizens and interest groups.

There are several things citizens can do to keep this process going:

☐ In some states the Department of Energy, the Department of Commerce and/or the Farmers Home Administration have set up task forces to study or develop programs to provide assistance to energy-impacted communities. Check to see if your state has one. If so, is there a broad representation on its committees?

☐ Bring the federal programs described above to the attention of your local officials. They may not know they exist.

☐ The Environmental Policy Institute (EPI), which does research and education in the public interest, established the Citizens Coal Project to help citizens insure that the strip-mining law is fully enforced. Interested citizens can contact the project's Washington, D.C. headquarters or its western regional office (Carolyn Jones, 2239 East Colfax Street, Denver, Colorado 80206. Phone (303)388-4295).

On a national agenda there are two items to keep an eye on:

☐ Senator Gary Hart of Colorado has introduced the Inland Energy Development Assistance Act (S 1493). According to Hart, the bill "will establish a comprehensive program to provide both technical and financial assistance to states, local governments, and Indian tribes as they attempt to manage and control the adverse effects of energy development activities." The Administration plans to introduce similar legislation in early to mid-1978. This kind of legislation proposes to do for inland communities impacted by energy development what the coastal zone management program does for coastal communities. (See Resources, for LWVEF CZM publications.)

☐ Final DOI regulations for strip mining and reclamation are due by August 3, 1978. They should be available for public comment six to eight weeks prior to their due date. Public hearings will probably be scheduled during the comment period. Check with the Office of Surface Mining, Department of the Interior, Room 7348, 18th and C Streets, N.W. Washington, D.C. 20240; (202)343-4743.

In addition you can tap into:

☐ The Regional Energy/Environment Information Center at the Denver Public Library (1357 Broadway, Denver, CO 80203). The center has, on a computerized retrieval system, a collection of relevant impact studies produced by private groups, EPA, and the Departments of Interior, Energy, Commerce, Health, Education and Welfare, and Agriculture.

☐ The Regional Environmental Assessment Program (REAP) (316 N. 5th Street, Rm. 521, Bismark, ND 58504); the Old West Regional Commission (201 Main Street, Suite D, Rapid City, SD 57701 or 228 Hodden, Empire Bldg., Billings, MT 59101); and the Northern Cheyenne Research Project (Box 388, Lame Deer, MT 59034). Each develops data relating to natural resources. They have computer analysis systems that use the information to project the environmental, socioeconomic and cultural impacts of a resource development proposal.

Resources

Analysis of Financing Problems in Coal and Oil Shale Boom Towns, University of Denver Research Institute (July 1976). Order Report No. FEA/D-76/361 free from DOE, Office of Energy Conservation and Environment, Office of Environmental Programs, Washington, D.C. 20461.

Energy Futures: Industry and the New Technologies, Stewart W. Herman and James S. Cannon (752 pages, 1976). Order from Inform, Inc., 25 Broad Street, NYC, NY 10004; $25.

Federal Assistance Programs and Energy Development-Impacted Municipalities (Feb. 1976). Order publication No. FEA/D-77/039, free from Department of Energy, Region VIII, P.O. Box 26247, Belmar Branch, Lakewood, CO 80226.

Financial Strategies for Alleviation of Socioeconomic Impacts in Seven Western States (May 1977) and *Western Boomtowns: Part I, A Comparative Analysis of State Actions* (June 1976). Free while available from the Western Interstate Energy Board, 3333 Quebec Street, Suite 2500, Denver, CO 80207 (303-837-5851).

High Country News. Published biweekly at 331 Main, Lander, WY 82520. Annual subscription, $12.00; single copies 50¢.

Rapid Growth from Energy Projects, Ideas for State and Local Action (59 pages, 1976). Free from U.S. Department of HUD, Washington, D.C. 20410.

Rehabilitation of Potential Western Coal Lands, by the National Academy of Sciences (198 pages). Order from Ballinger Publishing Co., 17 Dunster Street, Harvard Square, Cambridge, MA 01238; $7.95.

The Energy Boom in Southwest Wyoming, Report of the Federal Interagency Team, Community Planning and Development and U.S. Department of Housing and Urban Development (32 pages, June 1976). Free from HUD.

The Southwest: A Region Under Stress, by F. Lee Brown, Allen V. Knesse, M.D. Williams (67 pages). A report on a joint project of Resources for the Future and the University of New Mexico. Free while available from Bureau of Business and Economic Research, Institute for Applied Research Services, The University of New Mexico, Albuquerque, NM 87131.

U.S. Coal Development—Promises, Uncertainties, (Sept. 1977). Order from U.S. General Accounting Office, Washington, D.C. 20548; $1.

LWVEF publications

Coastal Zone Management Program, 1975, 6 pp, #572, 35¢.

Energy and Our Coasts: The 1976 Coastal Zone Management Amendments, 1977, 6 pp, #699, 40¢.

Energy Dilemmas: An Overview of U.S. Energy Problems and Issues, 1977, 39 pp, #688, $1. 5-9 copies, 80¢ each; 10-49 copies, 60¢ each.

Energy Options: Examining Sources and Defining Government's Role, 1977, 55 pp, #628, $1. (Same discounts as *Energy Dilemmas.*)

Federal Environmental Laws and You, 1978, 12 pp, #564, 75¢.

Growth: An Invitation to the Debate, 1977, 6 pp, #146, 40¢.

Growth and Housing: Connections and Consequences, 1977, 6 pp, #192, 40¢.

Growth and Water: Can We Maintain the Pressure?, 1977, 6 pp, #111, 40¢.

Monitoring Your CDBG Program, 1977, 6 pp, #120, 40¢.

Onshore Impact of Offshore Oil, 1976, 6 pp, #661, 40¢.

Order all LWVEF publications from the LWVUS, address below.

Researched and written by Jane Weil, Project Manager, Land Use Department. This publication was funded in part by a grant from Resources for the Future, Inc.

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Sun Day
1028 Connecticut Avenue, N.W., Room 1100
Washington, D.C. 20036
(202) 466-6880

COMMUNITY GROUPS IDEA SHEET

*Organize the neighborhood to build a solar greenhouse for the community. Discuss differences in home-grown garden crops and fuel intensive agriculture.

*Encourage Sun Day lesson plans and contests for schools. (See our education packet.)

*Encourage the local community center or church to build a collector to save on heating bills.

*Organize workshops on energy conservation and retro-fitting.

*Contact National Solar Heating and Cooling Information Center for an energy audit package and conduct energy audits in homes, schools, libraries and businesses.

*Contact your state energy office for information on federal, state and local loan/grant programs for energy conservation and the installation of solar equipment.

*Organize workshops on the job impact of energy conservation and solar power. (Contact Sun Day for source material.)

*Do research on the solar potential for your neighborhood; investigate climate, design, cost.

*Explore the feasibility of community-owned cooperative enterprises: a construction company which can build solar facilities; a smallscale manufacturing firm (to produce collectors, windmills, ovens, etc.); a community recycling center.

*Investigate energy conservation and renewable energy sources for housing co-ops and public housing.

*Plant community gardens in vacant lots, window boxes, back yards, etc.

*Encourage community credit unions and land banks to offer low-interest, long-term, deferred payment loans for energy conservation and renewable energy projects.

*Hold hands-on workshops to construct community solar projects, similar to old-time barn raisings.

(over)

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*Urge your local government to sponsor a loan program for energy conservation and solar projects in which the loan payback is calculated on the basis of the value of the energy saved.

*Encourage a local solar manufacturer or distributor to offer technical assistance and materials for model community solar projects.

*Develop a low-cost public transit system for the community.

*Send your ideas to the Sun Day office.

Sun Day
1028 Connecticut Avenue, N.W., Room 1100
Washington, D.C. 20036
(202) 466-6880

INDIVIDUAL IDEA SHEET

*Conduct an energy audit in your own home or apartment.

*Visit local heating and cooling store and ask questions about available solar equipment.

*Contact local public interest, environmental, consumer, business, church and other community groups and urge them to participate in Sun Day.

*Contact local radio shows and ask them to run public service announcements, interviews, and debates on solar energy.

*Radio stations play sun shows.

*Local movie houses to play sun film festivals and short subjects on solar energy.

*Give a book on solar energy as a gift to yourself or a friend.

*Urge your local stores to reduce energy consumption.

*Urge your local bank to offer mortgage credits for solar installations and energy conservation retrofits.

*Urge the schools your children go to to run Sun Day programs and to schedule PTA meetings about solar energy.

*Wear cotton or other non-synthetic fabrics on Sun Day and everyday thereafter.

*Plant an individual vegeatable garden.

*Work with neighbors to plant community gardens on vacant plots.

*Persuade a local community center to build a solar greenhouse.

*Urge your local library to set up a Sun Day exhibit.

*Survey your local library to determine how adequate is the selection of books on solar energy.

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*Donate books on solar power and alternative energy strategies to your local library.

*Ride a bicycle.

*Write your congresspersons what they are planning to do for Sun Day, urge them to support the solar legislation (write Sun Day for a legislative packet).

*Contact your Mayor, county commissioners, city councilmen and local planning boards and freeholders. See what they are planning and urge them to support local legislation.

*Urge your local church to set up a study group on solar energy.

*Help set up a tour of solar homes in your area (Sun Day office has a list of them by region).

*Meet with other staff where you work to discuss ways to participate in Sun Day.

*Volunteer at a local Sun Day office.

*Contact local tree nurseries and urge them to offer Sun Day discounts.

*Take a carpool to work on Sun Day (and every day thereafter).

*Build a solar collector or install insulation in your home.

*Distribute Sun Day buttons, bumper stickers, T-shirts.

Send any new ideas to Sun Day for inclusion in next idea sheet.

ENERGY 24

BRINGING IN THE OIL

In Short

As production of U.S. domestic oil has declined imports have risen, to meet growing demand. This country now imports roughly half of the oil that we use. The spawning of a new breed of facilities--called supertankers and superports--to bring in the oil has touched off another debate in the energy arena. Proponents stress the economic benefits: lower transportation costs and industrial growth in adjacent coastal areas. They also predict less oil spills in fragile coastal areas. Critics, on the other hand, point to the environmental hazards and potential social consequences: mammoth oil spills difficult or impossible to contain and the effects of more intense industrialization on both pristine habitats and already densely developed areas.

Background

In the past decade, the world petroleum transport system has made a dramatic switch from World War II vintage tankers of 20,000 deadweight tons (dwt) to Very Large Crude Carriers (VLCCs) of 200,000 dwt and leviathan Ultra Large Crude Carriers (ULCCs) that exceed 400,000 dwt. (Deadweight tonnage for a tanker roughly measures how much oil it can carry.)

The incentive for using supertankers is economic: building and operating them costs considerably less per dwt than for smaller tankers. Transportation costs are also cut, because supertankers need fewer trips than smaller vessels to transport an equivalent amount of oil. A VLCC, capable of carrying a million and a half barrels of crude oil, could cut the delivered cost by as much as 50 cents a barrel. Considering that the U.S. imported an average of 7.9 million barrels per day of oil in 1977, the savings could be impressive. These savings would probably not be felt by the American consumer, however, since tanker transport costs represent only a small fraction of the price of finished petroleum products.

VLCCs are almost a quarter-mile long, half a football field wide, and 60 to 90 feet deep, so huge that they are difficult to maneuver, often taking miles to complete simple course and speed changes. Because supertankers require terminals with deep drafts of up to 100 feet, no existing U.S. ports, except Valdez, Alaska, the trans-Alaskan pipeline terminal, can handle VLCCs. Our deepest continental ports--Los Angeles, Long Beach and Seattle--are capable of berthing only ships up to 150,000 dwt. As a result, crude oil destined for the U.S. must either be shipped to deepwater ports in Canada or the Caribbean and then transshipped to U.S. ports in smaller vessels or be transferred from supertankers anchored offshore in deeper water to smaller ships or barges--a procedure called lightering--before entering our ports. The extra transfer, of course, adds to the transportation cost of the oil.

Are superports and supertankers a better choice than present practices? Here are the issues.

Conventional versus Supertankers

How do supertankers compare with conventional ones on the environmental side? The foremost risk, regardless of size, is oil spillage. A 1976 report by Congress' Office of Technology Assessment (OTA) says tankers accidentally spill 200,000 tons of oil each year worldwide, 12,000 tons of that in U.S. waters within 50 miles of the coast. World shipping records seem to indicate that tankers above the 80,000 dwt class are less likely to spill oil than are smaller ships. A U.S. Coast Guard study using 1969-73 data showed that smaller ships spilled about four and a half times as much oil in relation to their carrying capacity as ships over 80,000 dwt. The statistics cover a short time span however; and oil spills don't occur on a regular schedule. This skewed distribution makes it hard to generalize from the data. VLCCs are also new in comparison to smaller tankers and the probability of accidents seems to increase with age. Moreover, one massive spill from a supertanker can cause enormous damage--witness the recent *Amoco Cadiz* accident off the French coast.

However, the use of supertankers could result in less crowded harbors and channels and, consequently, less chance of spillage either from collision or from ships running aground. And because they require fewer load transfers, the chance of spillage during ship-to-shore pumping operations is also less.

Inshore versus Offshore Deepwater Ports

There are currently three approaches to developing adequate facilities for handling supertankers: in-

shore ports located either where natural harbor depths reach the requisite 100 feet or where existing ports have been artificially deepened, and offshore ports located in deep water usually outside the 3-mile territorial limit. *Natural deepwater harbors* would be limited to the Puget Sound region and certain parts of Maine--generally pristine areas--where only minimal dredging would be needed. The use of *existing ports* would require substantial dredging but could mean that pristine coastal areas would be preserved from development.

The other alternative is to construct *offshore deepwater ports*, designed around single-point moorings called monobuoys, from which oil would be carried to land through underwater pipelines. Dredging would mainly occur during construction of the underwater pipelines and take place in offshore areas rather than in inshore estuaries and marshes where its environmental effects are particularly damaging. A tradeoff exists in that underwater pipelines can be a source of chronic oil leaks or accidents. Another serious drawback of monobuoy ports is that oil spills, if they do occur, would be harder to clean up than at a fixed berth in a sheltered harbor. But the overriding advantages are that spills would have farther to travel before reaching sensitive coastal habitats and that supertankers would be kept out of crowded ports and waterways.

In view of these prevailing environmental and safety advantages, offshore deepwater ports seem to be preferred by both government and industry. The Council on Environmental Quality (CEQ) remarked in its 1977 report, Oil and Gas in Coastal Lands and Waters: "Siting U.S. superports 20 or 30 miles offshore in naturally deep water, with pipeline delivery to shore, is a good choice environmentally." In early 1977 the U.S. Department of Transportation approved license applications from two oil industry consortiums formed to finance and plan construction of deepwater terminals off Louisiana (LOOP) and Texas (Seadock). The LOOP consortium plans to start construction this year and to finish by 1989. Projected cost: $806 million; capacity: 3.4 million barrels a day. The Seadock project remains in limbo, because some of its original backers object to the conditions and requirements of its license.

Economics versus Environment

While oil spills are the most obvious environmental risk, the impacts of attendant onshore industrialization, while less evident, may be more crucial. Building or expanding storage tank farms, refineries and petrochemical plants near these ports will directly affect land use patterns, water quality and quantity, and air quality. While deepwater ports could generate a sizable increase in industrial activity, employment and tax receipts, terminal-related activities could lead to heavier demands on utilities, public services, transportation systems and water resources. Such consequences depend, of course, on whether the ports would bring in more oil than present facilities could handle. A deepwater port located in the Gulf Coast region, where well-established refining and petrochemical industries dominate coastal land usage, would provide a continued source of crude oil necessary to the area's economic growth. But in more densely populated coastal areas of the country like the Mid-Atlantic region, where competition for coastal access is keen, deepwater port development could intensify demands on already strained land, air and water resources. Dispersing the ports in various locations could help dissipate social, economic and environmental pressures onshore.

State versus Federal Jurisdiction

The Deepwater Port Act of 1974, the most important of the pertinent federal laws, establishes a licensing and regulatory program governing offshore port development beyond the 3-mile territorial limit. (Jurisdiction within the 3-mile limit, in state waters, is shared by a number of federal, state and local government entities.) The Secretary of Transportation can issue licenses for owning, building and operating deepwater ports that comply with the Clean Air Act, the Federal Water Pollution Control Act, the Marine Protection, Research, and Sanctuaries Act, and the coastal zone management programs of directly affected states. The U.S. Coast Guard is responsible for enforcement.

States within 15 miles of a specific deepwater port or linked with the port by pipelines that traverse their boundaries have the right to veto a license and/or to impose certain stipulations on it. The amount of general power a state has to protect its coastal land and water before national and international authorities take precedence is still very unclear. The U.S. Supreme Court recently ruled that parts of a 1975 Washington state law banning tankers over 125,000 dwt and stringently controlling those of 40,000 to 125,000 dwt were unconstitutional because they addressed issues preempted by federal law. Increasingly, coastal states are voicing concern about tanker safety and offshore oil safety--issues under federal jurisdiction--and demanding a larger say, on the grounds that they are the ones that may have to bear most of the risks for bringing in the oil.

FYI

American Petroleum Institute. "Deepwater Terminals." FACTSHEET. January-February 1978.

Arthur D. Little, Inc. POTENTIAL ONSHORE EFFECTS OF DEEPWATER OIL TERMINAL-RELATED INDUSTRIAL DEVELOPMENT. Vols II and III.

Gillman, Katherine, OIL AND GAS IN COASTAL LANDS AND WATERS. Council on Environmental Quality. 153 pp. April 1977.

United States Congress, Office of Technology Assessment. COASTAL EFFECTS OF OFFSHORE ENERGY SYSTEMS. 288 pp. November 1976.

Researched and written by Celia Epting, Staff, LWVEF, Energy Department

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League of Women Voters of the United States 1730 M Street, N.W., Washington, D. C. 20036 Tel. (202) 296-1770

memorandum

This is going on DPM
May 1978

TO: State, Local League and ILO Presidents

FROM: Dotty Powers, Energy Chair

RE: Amplification of National Energy Position

This memorandum, a follow-up to our March 18, 1978 memo announcing the League's new national energy position, encloses the amplification of the energy position.

The amplification sets forth in more specific terms what the League supports in the energy area. It both interprets and spells out in greater detail the broad points enunciated in the Statement of National Position on Energy and retains all elements of the Energy Conservation Position. It is, of course, an integral part of the national energy position as is the case in other national program issues (See Impact on Issues 1976-78, Pub. No. 326) and will be published in the 1978-80 edition of Impact on Issues immediately after the Statement of the National Energy Position.

In addition to serving as guidance to the national board in applying the energy position at the national level, this amplification also provides Leagues with guidelines that will help you determine the types of policies, actions and proposals that may and may not be supported under this position at the state or local levels. We realize, however, that because of the complexities of energy issues and the newness of the position, there will be occasions when you are uncertain about how to determine action in a particular instance. In such cases we, of course, will be glad to assist you in any way we can.

For background information, you may want to refer to the Spring 1978 VOTER which includes the full statement of the energy position and a Mini-report from the Hill and also the April 1978 Report from the Hill.

Enclosure

LWVUS
May 1978

AMPLIFICATION OF NATIONAL ENERGY POSITION

ENERGY GROWTH RATE

The League supports a *"significant and progressive reduction in the national energy growth rate."* If the necessary steps are taken, the United States can and should reach an annual energy growth rate slightly more than 2% by 1985 and significantly less than 2% by 2000 in an orderly, gradual way. (Note: Long-term U.S. energy growth rate has averaged 3.5% annually; the 1950-59 rate averaged 3.1% while the 1960-73 rate averaged over 4.0%.)

ENERGY SOURCE MIX

"Top priority to conservation" means that conservation of energy--using less and using it more efficiently--should be the keystone of U.S. national energy strategy. Energy conservation can extend the use of present non-renewable resources and buy time for additional development of renewable resources and other environmentally benign sources and technologies.

"Top priority to renewable resources, especially solar heating and cooling, bioconversion and wind," means that the League supports federal policies and programs that would make them more market competitive and expand their use to supplement conventional sources in the transition period and move them to major sources beyond 2000. In addition, some of these technologies permit decentralized production, providing alternatives to large, central systems.

In assigning *"top priority to the environmentally sound use of coal,"* the Leagues recognize that U.S. coal reserves are far more abundant than domestic oil and gas reserves, the fuels that dominate our current energy mix, and should therefore be increasingly utilized with the strong caveat that federal standards and compliance

timetables protecting the environment should not be relaxed. Technologies should be developed and utilized that promote the extraction, conversion, transportation and use of coal in a way not damaging to the environment.

"Dependence on imported energy sources must be reduced" reflects League concern about the continuing rise in energy imports, particularly oil, and the resulting U.S. vulnerability to supply cut-offs and balance of payments problems. The League does not generally support such limiting policies as quotas and tariffs, though it does recognize that the current world pricing situation results from a cartel situation rather than free market forces.

The League believes that domestic pricing policies should reflect the actual price of imported sources and that this policy would lead to reduced imports. Reduced consumption, increased use of renewable sources and coal will also bring about greater independence of foreign supplies. Obligations undertaken by the United States under the International Energy Program to reduce demand for imported oil should be an integral part of the U.S. energy policy.

"Reliance on domestic oil and natural gas should not be increased" reflects Leagues recognition that domestic reserves are finite and that there must be a shift away from predominant reliance on them. But the League is not opposed, per se, to increased exploration for and production of domestic oil and gas. Federal policy actions should encourage industries and utilities to convert from oil and gas to coal and other more abundant fuels, promote increased efficiency in the use of oil and gas, and lead toward reserving these fuels for uses in which they have the maximum value and for which there are presently no substitutes.

The League *"opposes increased reliance on nuclear fission"* but recognizes its place in the nation's energy mix. This does not mean that the League is opposed to the

construction of all new nuclear light water reactors but that nuclear fission's present proportionate share in the mix is the maximum use of this energy source which is acceptable. Future government nuclear priority should be in the direction of fusion and away from the plutonium breeder reactor.

Decisions among various energy sources should be guided by certain additional criteria:

1. Choices should be consistent with an integrated, balanced national strategy for optimum source mix.
2. Between now and 2000 preferred alternatives e.g. conservation, renewable resources and the environmentally sound use of coal, must be fully considered before turning to domestic oil and gas or to light water reactors. Least preferable alternative is use of imported oil or gas.
3. Maximum utilization should be made of indigenous sources, such as geothermal, wind and hydroelectric.
4. Environmental protection is a primary consideration.
5. Economic consequences must be taken into account, with particular concern for impact on employment and on low-income population.

FEDERAL POLICIES AND REGULATORY ACTIONS

Achieving an optimum mix of energy sources requires immediate initiation of policy and regulatory actions that will effect progressive changes in production and use during the transition period and make possible commercialization beyond the year 2000.

In more specific terms the League supports:

[] Increased federal research and development funding for renewable resources and for conservation research, development and demonstration.

[] Financial incentives to business, industry and individual consumers to promote conservation investments such as tax credits for insulation expenditures and energy-efficient technologies.

[] Tax incentives to business, industry and individual consumers to promote the use of renewable resources such as tax credits for insulation of solar heating and cooling, solar hot water heating and solar electric.

[] Conversion and investment credits for businesses and industries to encourage a switch from oil and gas to coal and renewable resources.

[] Tax disincentives or penalties to business, industry and individual consumers to discourage consumption, such as increasing taxes on gasoline and a tax on gas guzzlers.

[] Gradual decontrol of oil and gas prices to encourage conservation and the shift to renewable sources and coal with accompanying tax measures to recoup any resulting windfall profits.

[] Mandatory energy conservation measures including thermal efficiency standards for buildings, efficiency standards for major new appliances, mileage standards for new automobiles with no relaxation of auto emission control standards.

[] Redesign of utility rate structures to reduce energy demand and minimize the need for new generating capacity by such techniques as marginal cost or peak load pricing concepts.

[] Public education that provides a basic understanding of what energy is, what it does and the social, economic and environmental costs and benefits associated with its production and use.

HB

LEAGUE OF WOMEN VOTERS OF MINNESOTA

555 WABASHA • ST. PAUL, MINNESOTA 55102 • TELEPHONE (612) 224-5445

To: The Energy Agency Hearings on the Biennial Energy Policy and Conservation Report
From: Mary Poppleton, Director of Natural Resources for the League of Women Voters of Minnesota
Date: May 11, 1978

I am Mary Poppleton, Director of Natural Resources for the League of Women Voters of Minnesota.

The League of Women Voters at the local, state and national levels has been studying energy since 1974. We reached a national consensus on Energy in March of 1978. A copy of our consensus is on file at the Energy Agency.

During the past year we have cooperated with the Energy Agency in training 95 League members to be Energy Resource Persons in their communities. Training emphasized the reality of the Minnesota energy situation. Energy Agency personnel taught the data on supply, demand and transportation alternatives that is included in this EPCR. They provided ideas for energy education projects in local communities. The Local Services Division under Dixie Diehl continues to provide information and support to Leaguers promoting energy education in their communities.

The League of Women Voters believes that democratic government depends upon the informed and active participation of its citizens. Leaguers from all over the state report that their fellow citizens are not informed about the reality of our energy situation. There is strong evidence that Minnesotans do not believe there is an energy problem.

The League has responded to this with an effort at teaching the basics of the energy situation through a film/discussion program aimed at adult community groups.

The report indicates that efforts are being made to provide energy data curriculum at adult levels. The League strongly recommends that the Agency direct education efforts at the general adult public who will not be affected by formalized instruction. These efforts should start with the realities of supply, demand and alternatives available to Minnesotans that form the basis of this report. Conservation efforts and techniques will be a national outgrowth of the energy information provided.

An informed public will actively participate in the wide areas of choice available to them. The League strongly recommends that the Agency find all possible ways to involve informed citizens in energy decision-making. We support the Agency's recommendation for a Citizen Advisory Committee to the Agency. We urge the consideration of an ombudsman so that the public might meaningfully participate in the certificate of need process for power plants and transmission lines.

(Over)

We thank you for allowing us to speak today and look forward to continued cooperation with the Agency in the future.

League of Women Voters of Minnesota, 555 Wabasha, St. Paul, MN 55102 - May, 1978

(Sent on Letterhead)

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LEAGUE OF WOMEN VOTERS OF MINNESOTA
555 WABASHA • ST. PAUL, MINNESOTA 55102 • TELEPHONE (612) 224-5445

To: Florence Chichester, LWVUS
From: Margaret Post, Energy Education Project Manager, LWVMN
Re: Report of May 25, 1978
Date: May 30, 1978

Enclosed is the Energy Education Project Report dated May 25, 1978. I don't know if you want to consider this to be the interim report or the final report. If another report is necessary, please let me know, and I will write it in June.

This project is difficult to wrap up; we started something that is just beginning to work. What is missing is further funding to continue newsletters and other means of reinforcing energy resource persons. There is a great demand for our energy films, and other copies are needed. It is like not having the money to bring in the harvest after setting out a gorgeous garden.

I spoke briefly with Dixie Diehl, Director of Local Services at the Minnesota Energy Agency, regarding this situation, and she asked me to give her time to think it over. Although business is interested in our project, no one has come forward with money to keep it running. I do think it might be possible to obtain business assistance for certain aspects of the project, but it has to be running to get further!

Please send another 1000 copies of "Politics" for distribution to audiences with film programs. Let me know if plans for further funding materialize.

I am gathering statistics on how many people have seen the films and am expecting more report forms in the near future.

Budget information will follow next week.

League of Women Voters of Minnesota, 555 Wabasha, St. Paul, MN 55102 - May, 1978

THE MINNESOTA ENERGY EDUCATION PROJECT

The LWVMN Energy Education Project now includes training and support for energy resource persons throughout the state, five films with a discussion guide, and an energy resource directory which is nearing completion. A summary of developments in each of these areas since January, 1978, (the date of the previous memo describing LWVMN project progress) will be given below.

Energy Resource Person Training and Support

Two energy education workshops were given to help Leaguers become "energy resource persons." These persons are volunteers who will help their communities confront basic policy issues and stimulate local energy action. One workshop was in Anoka, a norther Twin Cities suburb, on January 29; the other workshop was in Owatonna, a south central Minnesota community, on February 4. Ninety-five persons, primarily Leaguers representing 30 Leagues, attended the two training sessions. These workshops were designed in cooperation with the Minnesota Energy Agency. They followed the format described in the previous January 13, 1978, memo, including speakers from the Minnesota Energy Agency, the State Public Advisor, and Leaguers willing to share their experiences in carrying out local energy education programs.

Newsletters, Board Memos, and Minnesota Energy Agency mailings were sent to energy resource persons to provide continuous support for local efforts. A report form was designed to encourage local Leagues to communicate with the state office about their energy education projects. Those that have been returned to date are included in the addendum to this report.

Since February, energy resource persons have given discussion programs, contacted local governments and schools to stimulate interest in energy policies, toured a coal-fired electric generating plant, and promoted Sun Day activities in their communities. Other resource persons are laying the groundwork for local energy programs; they have contacted community groups and advertised the film-discussion program for 1978-79.

"Bottom of the Oil Barrel" and "The Sunbeam Solution" were the initial two films purchased by LWVMN. These were shown at fall and winter energy workshops and then put into the library film circuit in February, 1978. Northern States Power Company, a utility serving most of Minnesota, donated two other films to LWVMN; "Energy 2000" and "Energy--Critical Choices," which will also be put into the state library film circuit. An analysis of film circulation problems showed the "The Sunbeam Solution" was in great demand but not easily obtainable within St. Paul city limits. Education monies from the LWVMN Natural Resources Chair were used to purchase another copy of that film to be placed in the St. Paul Public Library.

Internal planning, reporting, focusing and building of the energy resource persons and film-discussion programs:

1. A report to the state Board in February on the workshops and film program with requests for state Board input in future planning.
2. A report at State Council in April, describing the program to Leaguers and encouraging them to think of it in terms of community service.
3. Board Memos, which are mailed to every member of every local League Board in the State of Minnesota, have included directives on holding public energy-related forums, and publicity regarding energy programs Leaguers are trying in their communities.
4. In cooperation with the Minnesota Energy Agency, packets of Sun Day information went to all energy resource persons.

5. State LWV Leadership Workshops, planned for June 6 and 7, will have two energy focuses: Joel Barker, futurist and consultant in communications to Northern States Power, will give an evening of instruction in scenario-building, cross-impact matrix, and the use of the futures wheel. Honeywell engineers will demonstrate the Honeywell Home Analyzer, a computer in a suitcase that can tell homeowners what is the best energy-reducing investment.

Films and Discussion Guide

Purchasing energy films with the LWV Ed Fund grant has proven to be a prudent decision. The Minnesota Energy AGency owns only 8 films which are in constant demand, as are the energy films owned by the large utilities in the state.

A film discussion guide has been written to assist energy resource persons presenting the film-discussion program to senior high students and adult community organizations. The guide was designed to help viewers separate the issues so that they might feel more powerful in helping to shape energy policy. A continuous marketing effort is being made to get Leaguers around the state to offer the film-discussion program on energy as a community service.

Energy Directory

In December, 1977, the Energy Education Project Manager began collecting information on energy-related services, projects and programs existing or planned in Minnesota. This information would be necessary for energy resource persons who were instigating or coordinating local energy programs or information. After 72 questionnaires had been mailed, it became apparent that the project would require additional funding for completion. Results of the manager's mailing were taken to the Director of Local Services at the Minnesota Energy Agency. The MEA was enthusiastic about the collection of that date and asked that the LWVMN submit a proposal for a contract to collect data and write an energy resource directory for the State of Minnesota.

The first proposal was submitted in January, 1978. In March the League was aksed to submit another proposal using federal guidelines because federal monies were to be used. A copy of the final proposal was submitted to the national LWV office.

T he information is being gathered at this time; the deadline for completion is July, 1978. The directory will be organized according to county and region and indexed by service. Margaret Post is Project Manager, and Kathy Gilder is Editor.

The Minnesota Energy Agency is responsible for printing the directory. It is to be part of a "Local Energy Awareness Handbook" that will go to local governments and public libraries. LWV energy resource persons will also receive copies.

Impact of the Energy Education Project on LWVMN

The Energy Education Project, particularly the energy resource directory, has opened many doors for the League of Women Voters in Minnesota. The Minnesota Energy Agency referred to the League as a primary servicing organization in its biennial report published in April. It asked the League to sit with state Senators and Representatives and the Energy Agency Director, John Milhone, to hear testimony during each of five hearings on the agency's report during the past two weeks. The MEA Local Services Director asked the LWV project manager to sit on an interview panel when the Agency filled its most recent local outreach position.

Other organizations have called on the League to be involved in energy education programs. The manager has spoken before the state convention of the American Legion and judged energy education projects for the Future Homemakers of America at its state meeting. The Minnesota Chapter of the American Petroleum Institute contacted the LWV grant manager for discussion and consideration of possible cooperation in energy projects in the future. Honeywell Energy Resource Center personnel offered to demonstrate their Home Analyzer for Leaguers and have shown a strong

desire to cooperate on further energy-related projects. Two small local firms have offered to find funding to purchase energy materials of their choice for distribution to school or community groups.

The Future of the Minnesota Energy Education Project

The foundation has been laid for a good energy education program in Minnesota, but its future is uncertain. The energy resource person training workshops and the periodic newsletters sent to these people, both financed from the LWV Ed Fund, seemed to be important catalysts promoting local Leagues to undertake education activities. No money in the LWVMN budget has been allocated to fund these state services next year. Reimbursement for expenses and a small stipend may be necessary to encourage qualified Leaguers to lead film-discussion programs in their communities and act as role models for other Leaguers wishing to develop those skills.

FINAL BUDGET SUMMARY - June 5, 1978

LWVMN Education Grant

I. Fall Workshop

A. Planning Committee

	Grant Budget	Spent	Balance
Travel	$797.00	$186.90	$610.10
Tools	20.00	10.00	10.00
Communications	45.00	-0-	45.00
Supplies	26.00	22.12	3.88
Total	$888.00	$219.02	$668.98

B. Workshops

	Grant Budget	Spent	Balance
Letters	$ 9.00	$ -0-	$ 9.00
Travel	172.00	202.80	(30.80)
Lodging and Meals	140.00	107.52	32.48
Film and Projection Rental	200.00	156.50	43.50
Publications	35.00	75.61	(40.61)
Xerox & Secretarial Expense	200.00	151.82	48.18
Total	$756.00	$694.25	$ 61.75

II. Winter Workshops - Project #1
IV. Programs Services Resources List

	Grant Budget	Spent	Balance
Travel	$1200.00	$827.93	$372.07
Meals	240.00	325.50	(85.50)
Space Rental	150.00	218.62	(68.62)
Communication	51.00	110.96	(59.96)
Total	$1641.00	$1483.01	$157.99

III. Films - Project #2 Purchased Films $888.72

Project Manager	$365.00	$365.00	$ 00.00

JUL 10 1978

League of Women Voters Education Fund •1730 M Street, N.W., Washington, D. C. 20036 Tel. (202) 659-2685

memorandum

July 5, 1978

TO: Energy Education Project Managers

FROM: Florence Chichester, Energy Department

RE: Project Wrap-up and Final Reports--Energy Education Grant

EXTENSION

As many of you already know from phone conversations with our staff, some time ago we requested an extension of the energy education project from the Department of Energy. We are pleased to notify you that this extension has been granted. This will give you more time to complete your projects and to write your final reports.

FINAL REPORTS

Many thanks to those of you who have already submitted your final reports. If, after reading this memo, you wish to send us additional comments and/or other information such as examples of media coverage or follow-up, please do so.

Please send me all final reports (or supplemental information) by July 25, 1978, sooner if possible. My report to DOE is due in late August and it is essential that I have your reports no later than July 25 in order to complete the LWVEF report. Before preparing your final report, be sure to review the objectives of the LWVEF Energy Education Project as stated in our August 8, 1977 memo to state League Presidents and the May 2, 1977 narrative statement of the original proposal to DOE, copies of which you also received. Quoting from the August 8 memo: "The objective of the LWVEF energy program is to inform as many League members and as much of the general public as possible about basic energy problems, the nation's energy outlook, and the energy alternatives or options that must be considered".

In your final report, in addition to describing project activities completed since your last report to LWVEF and a brief summary of the entire project, you should evaluate the project in terms of the LWVEF objectives and those your state League outlined in its project proposal, covering the following points:

1. Was the project effective in meeting the stated objectives, particularly in reaching the public, and how? Please try to estimate the number of people reached in some way by the project since DOE is interested in hard numbers.

2. What aspects or activities were successful and why; were not successful and why? What would you have done differently?

3. Briefly describe any follow-up activities generated by the project and any

planned for the future.

4. What problems did you encounter in carrying out the project? What would you suggest be done differently by the state League or by the LWVEF?

Be sure to also enclose with your final report 10 copies of items produced for the public (publications, flyers, brochures, etc.) and samples of media coverage, but you need not include items you have already sent us. If you have an extra copy of a tape, slide show, or film produced for the project, do send it. We would like to keep some items on file as exhibits to show DOE or other interested people.

FINANCIAL REPORT

Your final financial report need not be mailed at the same time as the project report, especially since you may incur costs in preparing the final report that you will want to charge to the grant. We do ask that you continue to submit your vouchers, with attached documentation of expenditures, as soon as possible. The deadline for submission of your final financial report and vouchers is August 31, 1978, although we recognize there will be individual instances where this cannot be done. This itemized report should show the total amount budgeted, spent, and the balance. Please send all bank statements and cancelled checks with your financial report. If you expect to have unexpended funds and would like to propose using these for a particular activity please notify us as soon as possible; certainly no later than July 25, when your project report is due.

AND FINALLY

We hope that the project has been rewarding for you and the state League. The Department of Energy, the Energy Consortium contributors and our National Board have been very much impressed by the quality and creativity of your activities. We wish you could have personally heard the many nice things said about your work.

I have enjoyed working with you and only wish I could have visited more of the projects.

cc: State League Presidents

JUL 28 1978

League of Women Voters Education Fund •1730 M Street, N.W., Washington, D.C. 20036 Tel. (202) 659-2685

memorandum

July 1978

TO: State League Presidents

FROM: Dotty Powers, Chair, National Energy Committee

RE: Energy Education Outreach Program--Phase II

I am pleased to announce that the Department of Energy (DOE) has awarded the League of Women Voters Education Fund (LWVEF) a grant of $183,775 to continue our energy education outreach program. As we stated in our proposal to DOE, "The League firmly believes that the understanding, support and cooperation of the American people are essential in dealing with the energy dilemmas that face us and that a public energy education program is the first step to achieving that goal." The aim of the first phase of the LWVEF energy education program was to inform as many League members and as much of the general public as possible about basic energy problems, the nation's energy outlook, and the energy alternatives or options that should be considered. That aim remains the same but the objective in the second year will be to reach a greater number and/or different groups of people.

PROJECT PROPOSALS DUE SEPTEMBER 20, 1978

Included in the new grant are funds for twenty state League energy education projects at about $4000 each and a project workshop here in Washington, D.C. for representatives of those Leagues. WE ASK THAT INTERESTED STATE LEAGUES SUBMIT A PRELIMINARY PROPOSAL FOR AN ENERGY EDUCATION OUTREACH PROJECT TO THE LWVEF BY SEPTEMBER 20, 1978. Using the attached proposal form, briefly describe your League's plan for an energy education project and include a general budget. We know that you will plan to take advantage of the momentum and interest developed during the first year's efforts and that you will build on the programs and the materials such as conferences, slide shows, publications, brochures, etc., that were developed under the previous project. For example, were the programs and materials effective in design? Were they advertised and distributed as fully as possible? If not, how can you increase their impact and audience?

An integral part of the project proposal is a brief evaluation of the previous state League project under the LWVEF Energy Education Program. Consider the objectives established for that project and its relation to other state League energy education objectives. Was it successful? If not, what things do you think should be done differently in another project? We hope this evaluation will be your starting point in planning a project for the second phase.

In planning, you might want to consider using the print or broadcast media--short energy programs or films for TV, TV/radio public service announcements (PSAs), newspaper ads, articles or energy supplements. Conferences or meetings can be good ways to inform and educate but also consider what interesting things you can do to attract enough people to make them really

effective. You are certainly not limited to any of the above suggestions. Be imaginative! Remember, however, that as we read your proposals we will be looking for three major points--1) that you have carefully considered the first project and have decided "where you should go from there"; 2) that the proposal includes plans to reach a larger or different audience from that which was reached before; and 3) that you consider the best and widest possible distribution of effective audio-visual or printed materials produced for the first project.

To help you in thinking about and planning your project, refer to the February 1978 Report of the LWVEF Energy Education Program, sent to all state Leagues in March. You may also find the enclosed copies of the final report of the LWVEF's Energy Conservation Technology Education Project and the November 1977 Energy Education Project Guidelines useful. (Updated guidelines will be sent when the project is approved.)

A CAVEAT: Remember that any grant coming from the LWVEF must be used for educational purposes only. You may not spend money for legislative action. In other words, LWVEF money cannot be used for lobbying or urging support for or opposition to particular bills.

SELECTION OF STATES

Details of your proposed project need not be worked out in this preliminary proposal. Since, however, these proposals will be the basis for the selection of the 20 state Leagues to receive grants, you will want to provide as clear an overall plan as possible. The 20 Leagues selected will be asked to send two representatives to the project workshop in mid-October at which time they will receive guidance and information that will enable you with their assistance to refine the proposal for final submission to the LWVEF.

THE FINAL PROJECT PROPOSALS FROM THE 20 SELECTED STATE LEAGUES WILL BE DUE IN THE LWVEF ON NOVEMBER 10, 1978. The proposals will be reviewed by the national energy committee at its November meeting and the committee's comments and suggestions will be sent to you shortly afterward. If at that time the state League and the LWVEF are in agreement, a check for half of the project funds and detailed project guidelines and accounting procedures will be sent to the state League and the project may begin. See the attached tentative project schedule for further project dates.

PROJECT WORKSHOP

The LWVEF will pay all expenses for two representatives of each selected state League to attend the above mentioned energy education outreach workshop, tentatively scheduled to take place October 18-20 here in Washington. Full details of the workshop have not yet been settled but further information will be sent to the selected Leagues and their representatives when arrangements are complete. Among other things, we do plan to discuss outreach methods and grant procedures. The workshop will be similar to others conducted here in October 1977 and January 1978 as part of the LWVEF's Solid Waste and Section 208 Water Quality Management Planning grants. Many of the League members who attended those work-

shops participated in the subsequent grant projects and found the workshop experience to be very useful.

CHOOSING YOUR REPRESENTATIVES--ONE THE PROJECT MANAGER

Of the two representatives you select to attend the workshop, one should be the person who will manage the state League's energy education outreach project. To protect the Education Fund's status this person must agree not to lobby on any energy issues and to accept a limitation on other lobbying activities while serving as project manager. It is also important that the project manager not be a current state board member who has many other demands on his or her time and who may be called upon to represent his/her League in a lobbying capacity, particularly now that the LWVUS has a national energy position. As in the first project, a stipend, probably about 10% of the grant, will be offered to every project manager as a small measure of compensation for the duties and responsibilities undertaken.

The second national workshop participant could be someone who will assist on the project in some way (as co- or assistant manager, treasurer, etc.) or someone who is assisting in planning the project.

WORKING WITH OTHERS; SEEKING ADDITIONAL FUNDS

Even though the League is known for its ability to get extra "mileage" out of its funds, you may wish to augment your project funds in various ways--"in-kind" contributions, co-sponsorshop of activities by other organizations, direct contributions, etc. We encourage you to seek such ways to make your grants go further and to extend your contacts and cooperation in the state. Be sure to let your state energy office know what you are doing and find out if they would be willing to provide assistance or even help finance activities. Many state Leagues were successful in the first phase of our energy education outreach program in garnering additional money and cooperation and we hope that those contacts will continue.

Several state Leagues might decide to work together on a regional project. This approach was suggested for the first phase but no states found it workable at that time. Such proposals would be gladly considered now. (They must, of course, be a joint product of the Leagues to be involved.) The amount of funding to be provided for a regional project, if selected, will be determined later depending on what the proposal intends to accomplish.

If your League solicits contributions and the donor wishes the money to be tax-deductible, remember that unless your League has set up its own 501 (c)(3) organization, the money must be donated to the LWVEF and forwarded to the LWVEF Office of State and Local Grants, earmarked for your state League. For further information on this procedure, refer to the LWVEF publication, Guidelines for State and Local League Use of Tax-deductible Money (pub. #361, 15¢) or write Felice Sorett, Director of State and Local Grants.

We are certain that many of you will plan excellent phase II projects and we look forward to receiving your proposals. Three copies of this memo are being sent so that you may give one to each of your chosen representatives, should your state be selected, in addition to keeping one for the state League files. A copy is also being sent to every phase I project manager.

If you have any questions, please do not hesitate to contact the LWVEF energy staff at 1730 M St., N.W., Washington, D.C. 20036 or call Florence M. Chichester, Project Director, or Isabelle P. Weber, Energy Department Coordinator, at (202) 659-2685, extensions 310 or 230 respectively.

cc: Phase I Project Managers
National Board

enclosures:
1. Proposal Form
2. Tentative Project Timetable
3. Final Report of the LWVEF Energy Conservation Technology Education Project
4. November 1977 Project Guidelines

League of Women Voters Education Fund
1730 M Street, N.W.
Washington, D.C. 20036

_____
(state)

PRELIMINARY PROPOSAL FOR A STATE LEAGUE
ENERGY EDUCATION OUTREACH PROJECT
(PHASE II)

Date:

State President:

League:

Address & Phone:

Address & Phone:

1. Workshop Participant (project manager):

   Address & Phone:

2. Workshop Participant:

   Address & Phone:

****

Evaluation of Phase I

1. Briefly, what were the objectives of the first state League energy education project?

2. From the state League's point of view, was the project successful in meeting those objectives?

   a. If yes, what aspects contributed significantly to its success?

   b. If no, why not? What, if anything, do you think should have been done differently or should be done differently in another project?

Description of Phase II

Describe your overall proposed project, including your plans to make full use of effective materials developed in the first phase and to increase your audience or to target certain groups. (Attach an additional sheet, if necessary.)

Timetable Give a brief outline of goals or activities you would plan to accomplish in each time period.

Nov--Dec

Jan--Feb

March--April

May--June

Budget Attach a general, proposed project budget

SEND THIS PROPOSAL BY SEPTEMBER 20, 1978 TO THE ENERGY DEPARTMENT, LEAGUE OF WOMEN VOTERS EDUCATION FUND, 1730 M ST., N.W, WASHINGTON, D.C. 20036.

July 1978

TENTATIVE PROJECT SCHEDULE

Preliminary proposals due in LWVEF	Wed., Sept. 20, 1978
Selection of 20 state Leagues to be invited to Workshop and to receive funding; Notification of state Leagues immediately afterwards, and Additional workshop information sent to participants.	Last week in Sept.
Project Workshop	Wed.-Fri., Oct. 18-20
Final Proposals due in LWVEF	Fri., Nov. 10
Energy Committee Review	Tues.-Fri., Nov. 14-17
Committee comments and checks sent to state Leagues	Week of Nov. 20
Starting date for all state League projects	Mon., Nov. 27
Suggested completion date for all state League projects	Fri., June 1, 1979
Final reports of all state League projects due in LWVEF	Mon., July 2, 1979

JUL 28 1978

League of Women Voters Education Fund • 1730 M Street, N.W., Washington, D.C. 20036 Tel. (202) 659-2685

memorandum

July 1978

TO: State League Presidents

FROM: Dotty Powers, Chair, National Energy Committee

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An integral part of the project proposal is a brief evaluation of the previous state League project under the LWVEF Energy Education Program. Consider the objectives established for that project and its relation to other state League energy education objectives. Was it successful? If not, what things do you think should be done differently in another project? We hope this evaluation will be your starting point in planning a project for the second phase.

In planning, you might want to consider using the print or broadcast media--short energy programs or films for TV, TV/radio public service announcements (PSAs), newspaper ads, articles or energy supplements. Conferences or meetings can be good ways to inform and educate but also consider what interesting things you can do to attract enough people to make them really

effective. You are certainly not limited to any of the above suggestions. Be imaginative! Remember, however, that as we read your proposals we will be looking for three major points--1) that you have carefully considered the first project and have decided "where you should go from there"; 2) that the proposal includes plans to reach a larger or different audience from that which was reached before; and 3) that you consider the best and widest possible distribution of effective audio-visual or printed materials produced for the first project.

To help you in thinking about and planning your project, refer to the February 1978 Report of the LWVEF Energy Education Program, sent to all state Leagues in March. You may also find the enclosed copies of the final report of the LWVEF's Energy Conservation Technology Education Project and the November 1977 Energy Education Project Guidelines useful. (Updated guidelines will be sent when the project is approved.)

A CAVEAT: Remember that any grant coming from the LWVEF must be used for educational purposes only. You may not spend money for legislative action. In other words, LWVEF money cannot be used for lobbying or urging support for or opposition to particular bills.

SELECTION OF STATES

Details of your proposed project need not be worked out in this preliminary proposal. Since, however, these proposals will be the basis for the selection of the 20 state Leagues to receive grants, you will want to provide as clear an overall plan as possible. The 20 Leagues selected will be asked to send two representatives to the project workshop in mid-October at which time they will receive guidance and information that will enable you with their assistance to refine the proposal for final submission to the LWVEF.

THE FINAL PROJECT PROPOSALS FROM THE 20 SELECTED STATE LEAGUES WILL BE DUE IN THE LWVEF ON NOVEMBER 10, 1978. The proposals will be reviewed by the national energy committee at its November meeting and the committee's comments and suggestions will be sent to you shortly afterward. If at that time the state League and the LWVEF are in agreement, a check for half of the project funds and detailed project guidelines and accounting procedures will be sent to the state League and the project may begin. See the attached tentative project schedule for further project dates.

PROJECT WORKSHOP

The LWVEF will pay all expenses for two representatives of each selected state League to attend the above mentioned energy education outreach workshop, tentatively scheduled to take place October 18-20 here in Washington. Full details of the workshop have not yet been settled but further information will be sent to the selected Leagues and their representatives when arrangements are complete. Among other things, we do plan to discuss outreach methods and grant procedures. The workshop will be similar to others conducted here in October 1977 and January 1978 as part of the LWVEF's Solid Waste and Section 208 Water Quality Management Planning grants. Many of the League members who attended those work-

shops participated in the subsequent grant projects and found the workshop experience to be very useful.

CHOOSING YOUR REPRESENTATIVES--ONE THE PROJECT MANAGER

Of the two representatives you select to attend the workshop, one should be the person who will manage the state League's energy education outreach project. To protect the Education Fund's status this person must agree not to lobby on any energy issues and to accept a limitation on other lobbying activities while serving as project manager. It is also important that the project manager not be a current state board member who has many other demands on his or her time and who may be called upon to represent his/her League in a lobbying capacity, particularly now that the LWVUS has a national energy position. As in the first project, a stipend, probably about 10% of the grant, will be offered to every project manager as a small measure of compensation for the duties and responsibilities undertaken.

The second national workshop participant could be someone who will assist on the project in some way (as co- or assistant manager, treasurer, etc.) or someone who is assisting in planning the project.

WORKING WITH OTHERS; SEEKING ADDITIONAL FUNDS

Even though the League is known for its ability to get extra "mileage" out of its funds, you may wish to augment your project funds in various ways--"in-kind" contributions, co-sponsorship of activities by other organizations, direct contributions, etc. We encourage you to seek such ways to make your grants go further and to extend your contacts and cooperation in the state. Be sure to let your state energy office know what you are doing and find out if they would be willing to provide assistance or even help finance activities. Many state Leagues were successful in the first phase of our energy education outreach program in garnering additional money and cooperation and we hope that those contacts will continue.

Several state Leagues might decide to work together on a regional project. This approach was suggested for the first phase but no states found it workable at that time. Such proposals would be gladly considered now. (They must, of course, be a joint product of the Leagues to be involved.) The amount of funding to be provided for a regional project, if selected, will be determined later depending on what the proposal intends to accomplish.

If your League solicits contributions and the donor wishes the money to be tax-deductible, remember that unless your League has set up its own 501 (c)(3) organization, the money must be donated to the LWVEF and forwarded to the LWVEF Office of State and Local Grants, earmarked for your state League. For further information on this procedure, refer to the LWVEF publication, Guidelines for State and Local League Use of Tax-deductible Money (pub. #361, 15¢) or write Felice Sorett, Director of State and Local Grants.

We are certain that many of you will plan excellent phase II projects and we look forward to receiving your proposals. Three copies of this memo are being sent so that you may give one to each of your chosen representatives, should your state be selected, in addition to keeping one for the state League files. A copy is also being sent to every phase I project manager.

If you have any questions, please do not hesitate to contact the LWVEF energy staff at 1730 M St., N.W., Washington, D.C. 20036 or call Florence M. Chichester, Project Director, or Isabelle P. Weber, Energy Department Coordinator, at (202) 659-2685, extensions 310 or 230 respectively.

cc: Phase I Project Managers
National Board

enclosures:
1. Proposal Form
2. Tentative Project Timetable
3. Final Report of the LWVEF Energy Conservation Technology Education Project
4. November 1977 Project Guidelines

League of Women Voters Education Fund
1730 M Street, N.W.
Washington, D.C. 20036

_____
(state)

PRELIMINARY PROPOSAL FOR A STATE LEAGUE
ENERGY EDUCATION OUTREACH PROJECT
(PHASE II)

Date:

State President:

League:

Address & Phone:

Address & Phone:

1. Workshop Participant (project manager):

   Address & Phone:

2. Workshop Participant:

   Address & Phone:

****

Evaluation of Phase I

1. Briefly, what were the objectives of the first state League energy education project?

2. From the state League's point of view, was the project successful in meeting those objectives?

   a. If yes, what aspects contributed significantly to its success?

   b. If no, why not? What, if anything, do you think should have been done differently or should be done differently in another project?

Description of Phase II

Describe your overall proposed project, including your plans to make full use of effective materials developed in the first phase and to increase your audience or to target certain groups. (Attach an additional sheet, if necessary.)

Timetable Give a brief outline of goals or activities you would plan to accomplish in each time period.

Nov--Dec

Jan--Feb

March--April

May--June

Budget Attach a general, proposed project budget

SEND THIS PROPOSAL BY SEPTEMBER 20, 1978 TO THE ENERGY DEPARTMENT, LEAGUE OF WOMEN VOTERS EDUCATION FUND, 1730 M ST., N.W, WASHINGTON, D.C. 20036.

July 1978

TENTATIVE PROJECT SCHEDULE

Preliminary proposals due in LWVEF	Wed., Sept. 20, 1978
Selection of 20 state Leagues to be invited to Workshop and to receive funding; Notification of state Leagues immediately afterwards, and Additional workshop information sent to participants.	Last week in Sept.
Project Workshop	Wed.-Fri., Oct. 18-20
Final Proposals due in LWVEF	Fri., Nov. 10
Energy Committee Review	Tues.-Fri., Nov. 14-17
Committee comments and checks sent to state Leagues	Week of Nov. 20
Starting date for all state League projects	Mon., Nov. 27
Suggested completion date for all state League projects	Fri., June 1, 1979
Final reports of all state League projects due in LWVEF	Mon., July 2, 1979

FINAL REPORT

ENERGY CONSERVATION TECHNOLOGY EDUCATION PROGRAM
CONTRACT # EC-77-C-01-2165

By the
League of Women Voters Education Fund

to the
Office of Building Conservation

Department of Energy

Celia Epting
Project Manager
July 1978

TABLE OF CONTENTS

EXECUTIVE SUMMARY

Introduction

The need to curb our energy appetite became all to clear at the time of the Arab oil embargo. But when the embargo and the ensuing fuel shortages proved to be only temporary most citizens seemed all too ready to forget new-found wisdom about energy conservation and to return to pre-embargo behavior.

the long-term changes in lifestyle patterns and personal attitudes that must take place in response to the fundamental changes in our energy resources will come only when citizens are convinced that energy conservation is necessary. So far, Americans have been skeptical about the benefits of changing their living habits and--even when willing to change--confused about what steps to take to conserve energy.

In May 1977, the League of Women Voters Education Fund (LWVEF) contracted with the Division of Buildings and Community Systems of the Department of Energy (DOE) to conduct pilot projects in four communities to "demonstrate to the public how to use energy more efficiently in the home". The contract covered a one-year period: three months for local project planning leading to LWVEF pilot grant awards and selection of resource materials by LWVEF for use by the pilot projects; and nine months for the projects

to carry out their individual programs. It stipulated that the LWVEF would submit three reports to the contractor: (1) a detailed work plan that would outline the overall program scope and schedule (September 1977); (2) a mid-term report summarizing project activities to date that would be utilized as an information transfer mechanism among the projects, DOE and other interested parties (January 1978); and (3) a final report that would summarize the overall activities and evaluate the effectiveness of the pilot program in terms of meeting objectives (July 1978).

Briefly, these objectives were: (1) to inform people of how energy is used in the home; (2) to offer residents simple, practical information and demonstrations on energy-efficient appliances, materials and household practices that would result in net maximum dollar savings; (3) to motivate the public to adopt lifestyle changes leading to greater energy efficiency; (4) to identify attitudinal and institutional obstacles to the use of energy-saving technology; (5) to test the efficacy of pilot projects in convincing individuals to invest in energy-efficient technology for use in their homes; (6) to assess the usefulness of materials utilized by the projects; and (7) to enlighten DOE and other government agencies regarding citizen attitudes and needs at the local level.

Highlights of Findings and Achievements

Based on personal contact and on information collected in participant surveys which were conducted by each pilot project, the following statements can be made regarding public attitudes toward energy conservation.

- Most people felt that an energy shortage exists (with the exception of the Tucson area) and that there *is* a need for conservation.

- Furthermore, people felt that they, as individuals, could make an impact on reducing energy consumption, but only seemed willing, at this point, to undertake *easy-to-do* conservation methods. There was a strong emphasis on "do-it-yourself".

- Skepticism continues to pervade citizen reaction to government; that is, there is a continuing and increased distrust of politicians and government in general, utilities and energy companies. *Credibility* is a serious and critical factor in trying to reach equitable solutions to energy problems.

- Coupled with public skepticism and cynicism towards government and business is the rip-off syndrome. Many people felt victimized by high utility bills, insulation companies, etc.

While it is often difficult to determine whether a citizen has really been taken advantage of, the point is that many people *believe* they are being ripped off, and that is the problem that needs to be dealt with.

Through the efforts of the four pilot projects, the LWVEF Energy Conservation Technology Education Pilot Project succeeded to a considerable degree in meeting the ambitious objectives set forth in the contract. A total of 18,051 people were directly reached through project activities. There have been numerous benefits resulting from this program--tangible and intangible--but the findings of the report point to three salient achievements:

- The development and increase of citizen awareness of the importance of home energy conservation in these communities, evidenced by the number of residents who adopted energy-saving practices and invested in energy-efficient home improvements.
- The addition to the communities of a cadre of well-informed local energy leaders who will continue to share their knowledge of and training in energy conservation methods with other community residents and area neighbors long after this program has ended.
- The strengthening of coordination among community organizations, local government and the media that will enable these communities to deal with their energy problems more willingly and assuredly and perhaps to set examples for nearby areas to follow.

The Method

Receiving individual grants of $7,120.00, the pilot programs were to conduct a series of outreach programs tailored to the diversities of each locality for a nine-month period. Activities for disseminating information would be guided by a basic format:

Public Meetings designed to reach community leaders and a cross-section of the residential population with general information on home energy consumption and available energy-conserving techniques;

How-To Clinics providing demonstrations on installing insulation, weatherstripping, stormwindows and other energy efficient techniques available for heating and cooling homes and apartments; and

Clearinghouse Services offering a variety of services and information as a follow-up to the meeting and clinics.

To test the efficacy of the pilot program, the Leagues selected were to represent a mix of climates, types of communities and socio-economic groups. Based on their interest and involvement in energy conservation activities, nineteen Leagues were invited to submit grant proposals. They were the LWVs of West Hartford, CT; Central Bershire, MA; Wilmington, DE; Wake County, NC; Charlottesville-Albermarle County,

VA; Atlanta-Fulton County, GA; LaGrange Area, IL; Indianapolis, IN; Central St. Louis County, MO; Tulsa, OK; Loveland, CO; Durango, CO; Bozeman, MT; Laramie, WY; Boise, ID; Tucson, AZ; Los Alamos, NM; Northfield, MN and Seattle, WA.

Selection would be based on criteria set forth in the DOE contract. These included a variety of geographic locations and demographic characteristics, areas with energy supply problems, opportunity for cooperation with federal, state, regional or local energy conservation programs already underway or planned, and proven organizational capability and projected effectiveness of local League programs. Although all of the proposals were well organized, containing many creative and worthwhile ideas, the following four best met the criteria and objectives of the contract and, therefore, were chosen for the pilot program: Tucson, AZ; West Hartford, CT; Northfield, MN and Wake County, NC. The selection of these projects would provide optimum geographic representation and mix of metropolitan and rural areas.

Directed by project managers, who were local League members, the pilot projects were to be responsible for planning and implementing their own activities. This would involve coordination with local government and other community organizations, selection of speakers, publicity arrangements, and education of and coordination with the local media. The managers were also requested to submit trimonthly

reports to LWVEF, outlining their progress and upcoming plans.

The LWVEF was to furnish technical and administrative assistance to the projects throughout the twelve-month period. This would include supplying publications and materials for use by the projects, advice on activities to effect greater community participation and on handling problems, on-site visits, liaison among projects to facilitate the sharing of experiences, and grant management oversight.

Mechanisms for evaluating community response both to project activities and to the general energy problem were to be built into the projects' programs. In meeting this requirement, the projects amassed information on a variety of subjects: public attitudes toward the energy problem, the need for conservation and information disseminated by government and business; energy use habits and changes in those habits; and investments made in energy-saving technologies.

All projects conducted some type of evaluation at each function that enabled them to determine what information participants considered useful, inadequate, or not helpful. Suggestions for improvement were incorporated into subsequent programs while worthwhile items were retained. This review afforded the projects the continuous feedback necessary to ensure that activities would be best suited to the needs and desires of their individual communities.

In addition, three of the projects conducted follow-up surveys after completing their activities by contacting a percentage of participants to ascertain what investments or lifestyle changes had been made as a result of the project's efforts. (See Appendices III-VI).

Resource Materials

The contract specified that the LWVEF would provide the pilot projects with publications and other materials on energy conservation. These were divided into four catergories: (1) reference materials for the pilot Leagues and local libraries; (2) clearinghouse materials; (3) citizen energy kits; and (4) how-to materials. A thorough review of existing publications and audio-visual materials appropriate for public dissemination was conducted. This resulted in a bibliography of selected materials which were used by the projects (Appendix I). The bibliography was also shared with state League projects under the DOE Energy Education Outreach grant and made available to all Leagues and the public upon request. With the exception of the how-to category, all materials were ordered by LWVEF and sent to each project in installment shipments from the national office.

The projects themselves developed additional resource materials that ranged the full media spectrum--printed brochures and handouts, slide shows, videotapes and handbuilt demonstration models. All

these were reviewed by LWVEF before use. They also utilized the resources available from their state agencies, distributing state publications and borrowing films and even personnel to train volunteers to conduct home energy audits. The printed and audio-visual materials used by the individual projects are listed in Appendix II.

Contents of Report

The main body of the report is in three parts. Part ONE consists of four individual summaries of the activties and findings of the pilot projects. Each contains a brief community orientation, program summary, outreach statistics, assessments by project of participant attitudes and motivation incentives, subsequent actions taken by participants and in some cases, the community as a whole, and finally, obstacles encountered by the pilot project during its operation.

Part TWO consists of an assessment of LWVEF program management. The Findings and Recommendations are contained in Part THREE. In this section, the overall pilot program is evaluated in terms of outreach potential, activities which seemed most effective, and public attitude feedback. Demographic variables and obstacles impacting the projects are discussed.

Appendix I contains the bibliography compiled by the LWVEF. Additional resource materials used by each project are listed in Appendix II. Appendices III-VI contain supporting documents.

Contacts

For the purposes of this report, activities of the pilot projects are summarized only. For additional information on specific activities conducted by the projects, contact the local League managers. For further information on the pilot program, contact the DOE or LWVEF program manager.

DOE Program Manager

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LWVEF Program Manager

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Kathleen Golas
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West Hartford, CT 06119

Betty Doak
LWV of Wake County
Box 17022
Raliegh, NC 27609

PART ONE

Summaries of Pilot Projects

Tucson, Arizona

West Hartford, Connecticut

Northfield, Minnesota

Wake County, North Carolina

Tucson, Arizona
Southwest region; population: 437,000
LWV membership: 383

Community Orientation

Tucson is a typical, spreading metropolitan city which continues to grow rapidly. Located in a desert environment, where reliance on underground and imported water is essential to its existence, it has provided an interesting case study for conservation. As the Tucson LWV stated in its grant application: "Tucson is at an interesting crossroads in conservation awareness and is probably ripe for creative approaches to conservation education". Recently, Tucsonans have been facing increasingly higher water bills and have become aware of conservation as a way of lowering their bills. Through residents' efforts, water use declined 20% in 1976 despite an approximate 4% increase in population. During this time, however, *utility* bills soared, even beyond the highest water bills. In this climate of opinion, the Tucson LWV was interested in seeing if the lessons learned in *water* conservation could be carried over to *energy* conservation.

Program Summary

Attempting to effectively reach a large, diversified and widely distributed metropolitan audience is a difficult task. To tackle these demographic problems, the Tucson LWV chose a *personalized* approach,

aimed at reaching a large number of people throughout the city through small-group presentations. Rather than try to get people interested in energy and invite them to meetings, the project offered its services to established groups, presenting programs flexibly designed to serve the specific needs of each group.

A brochure describing its program and offering its services was sent to 750 local organizations in the fall. Surprisingly, the requests from this initial mailing were so numerous, totalling 97, that the project spent from January through May filling them, with no further advertisement needed. Approximately 20 requests were turned down because of scheduling conflicts. It is worth noting that the project continues to receive requests and hopes to fill them this summer if possible.

Each discussion was different, therefore, but all shared a common theme of practical, inexpensive, and "easy-to-do" ways to save energy and money. Presentations employed a set of portable displays, specifically designed and built for the project, on weatherstripping, windowshading, roofing/insulation, cooking, refrigeration, water conservation and energy-efficient appliances. These provided an excellent mechanism for demonstrating various energy-efficient techniques and for illustrating how easily the participants could implement these techniques themselves. In fact, rather than tell people they <u>should</u> save energy, the project stressed <u>how</u> people who wished to save energy

could do so. The project demonstrators, totalling 8 League members, did not pose as experts, but rather emphasized that they were homemakers who had tried various ways to save energy themselves and were sharing what they had learned through experience and research. An open discussion format led, at times, to a lively exchange among participants and project leaders. When people mentioned things they had tried that didn't work, an effort was made by the project to learn why and then add this knowledge to its repertoire of information.

Capitalizing on the heightened community awareness of conservation, the project stressed water conservation in all its talks by pointing out that saving hot water saves the energy needed to heat the water, and that saving water conserves the energy needed to pump it up. This subject often led naturally into hot water heaters and how energy could be saved by turning gown thermostats, draining accumulated sediment once a month, etc. Specific emphasis was placed on weatherstripping and caulking. In general, the more expensive energy-saving measures, such as insulation, were downplayed, but not discouraged. Items discussed throughout the program were:

Water conservation

energy-efficient care of appliances

weatherstripping and caulking

keeping cool in the summer (e.g. window-shielding, reflective coatings)

solar energy

efficient use of fireplaces

insulation (including consumer cautions)

general household energy analysis

One of the most popular demonstrations was a "do-it-yourself" solar cooker, built with standard home tools for $30. The cooker was used both as a vehicle to stimulate discussion on other types of solar energy--an already proven source in the Southwest--and to bake cookies and cakes for refreshments at the meeting.

Groups addressed during the project were categorized as follows: 15 homemaker clubs, 12 senior citizen groups, 9 social groups, 10 service groups, 6 church groups, 16 school groups (ranging from fourth grade to junior college), 2 garden clubs, 6 professional organizations, 1 environmental group (Southern Arizona Environmental Council), 12 public meetings and 4 exhibits. (This listing exceeds the 97 total because of cross-categorization).

In addition to the community-wide presentations, the project produced three videotapes on water conservation, care of appliances and weather-stripping. Copies of the tapes were made for Tucson's public libraries, where video machines are available for public use. Local TV stations are also being approached for using the tapes on programs such as hints for the housewife and morning talk shows.

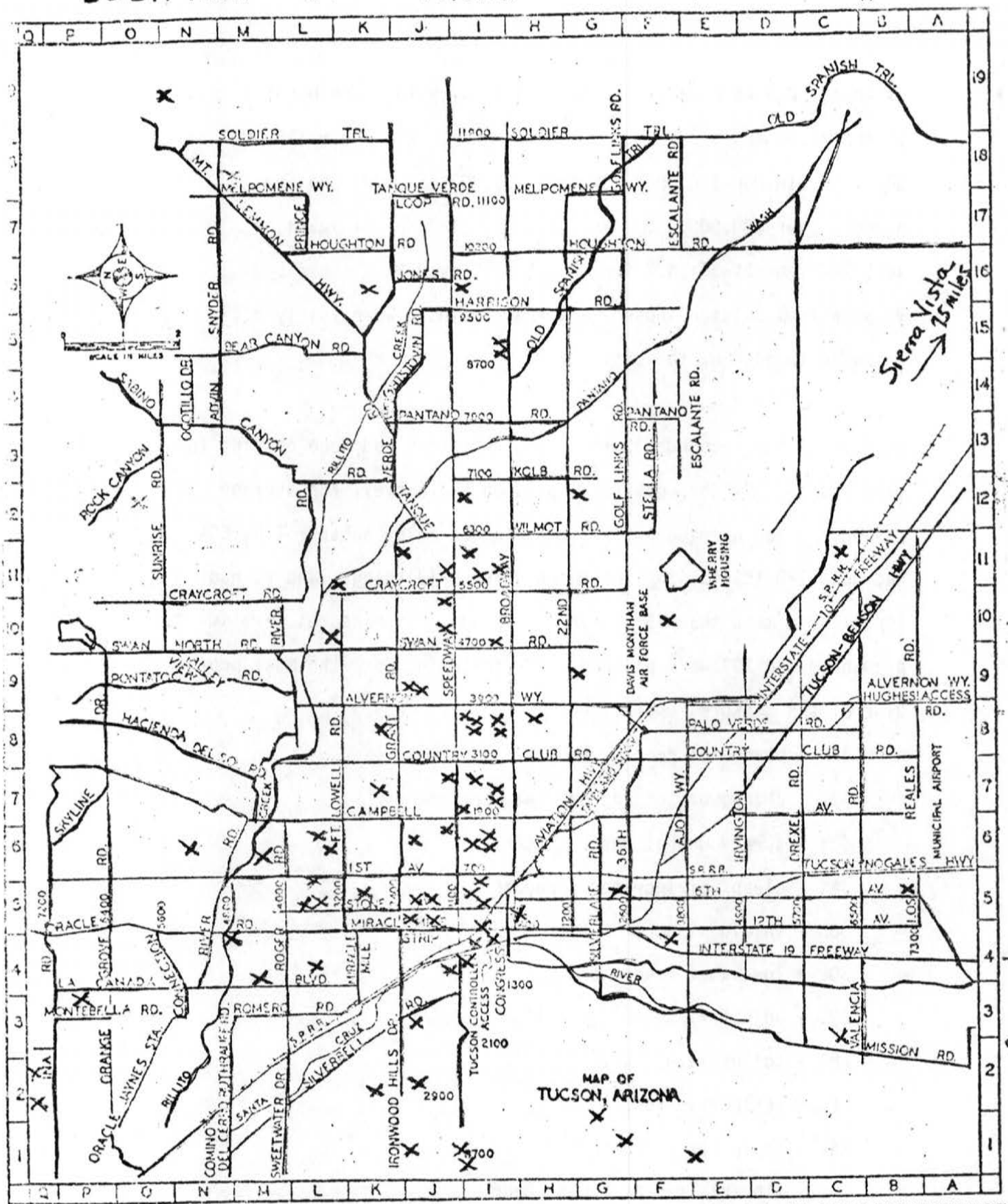
Outreach Statistics and Conservation Actions

Approximately 2,300 people attended the 97 group meetings. An additional 500-700 people visited the projects' exhibits at the El Con Shopping Center (part of a Sun Day event), the University of Arizona and the Arizona State Home Economics Convention in Tucson, and its exhibit at an event sponsored by the Arizona Energy Department in Phoenix.

As illustrated by the map on the following page, the project achieved maximum geographic coverage of the metropolitan area. Generally, the north and east sides include higher income people, while the west and south tend to represent lower income populations. The central area is mixed. Several out-of-town trips were made: Green Valley, to the south, is a retirement community; Sahuarita, nearby, contains retirees and many mine employees; Sierra Vista is primarily supported by Fort Huachuca Army Base; Marana is largely a farming community; and Catalina contains retirees and mine employees. Phoenix, of course, is the state capital.

A total of 650 follow-up surveys were mailed, representing approximately 25% of the meeting participants. Selection of the people contacted was relatively random, but necessarily biased toward those with legible handwriting. (A guest book was circulated at each meeting to provide a record of participants). The project received 220 responses--a return rate of 35%.

LOCATION OF TALKS



Of these, 22% were male and 78% female, a ratio corresponding to the group audiences. *Income statistics:* 25% under $10,000; 32% from $10,000-$20,000; 25% from $20,000-$50,000; and one percent over $50,000. *Age categories:* 3% under 21 years of age; 16% from 21-35; 40% from 35-65; 31% over 65. *Location:* 9% were from outside Tucson, and the remainder were fairly distributed throughout the city.

Only 6% of the respondents indicated that they had done nothing to save energy. Of the measures listed on the survey, the average respondent had carried out 4.2 and planned to do another 1.8; 50% had done 1-8 things; 25% indicated doing 9-13 things; and 6% had implemented more than 13 measures. In sum, 919 measures were implemented and 397 were planned. The following were the most popular of the measures undertaken:

45% - change of cooking habits

43% - change of setting on heater or cooler

42% - turn down hot water heater

34% - clean refrigerator condenser

30% - shield windows

30% - low-water landscaping

29% - adjust flame or pilot lights

26% - toilet water saver

25% - reflective roof

24% - drain hot water heater

flow-restrictor shower head

caulking, weatherstripping

Action with regard to solar devices was as follows: 24% indicated they had either made or bought or planned to make or buy a solar cooker or other solar device. Since many of the same people checked both categories, a figure of 10% was derived to indicated those who had already gone to or planned to go to some form of solar energy.

Participant Attitudes and Motivation Incentives

The survey respondents seemed to have a very positive attitude toward energy conservation and were willing to do something about it. People were asked to check statements that most nearly agreed with their viewpoints:

80% consider conservation worthwhile because of dwindling resources.

65% consider conservation worthwhile because we import too much oil.

23% believe conservation won't lower their bills--rates will go up anyway,

20% find conservation worthwhile because of high bills.

15% aren't sure what to believe because of distrust of leaders.

4% don't foresee an energy shortage.

Several problems or reasons for negative attitudes surfaced in the many group discussions that the project feels must be honestly faced and dealt with. These were:

1. What's the use of conserving, they'll just raise the rates to get the same amount of revenue.

2. What I use is so little, compared to what the government uses, and look how they waste energy. If the government is funding this program to get me to cut back, why don't they spend money on cutting back on their own operations?

3. The utilities and energy companies make too much profit. They should be satisfied with less. (After one talk where this was a big point, the local newspaper had a headline about 19% return to stockholders in the local utility this year). My savings just feed their profits.

4. Why turn off heater pilots in the summer? We pay a minimum gas charge anyway and that's our only gas use.

5. Why can't houses be better designed for energy efficiency ? (One example-a ranch style house with bathrooms at both ends and a water heater in the middle. The owner asked for two heaters, one near each bathroom but the architect refused. Result: loss of heating through uninsulated pipes.)

6. Why doesn't the government do more about getting us cheap solar energy? They have cheap hot-water heaters in Japan and Israel. Why does it cost more than $1000 here? The government just works to help the utilities sell more energy (e.g. nuclear).

7. I don't trust what anyone says about energy--they all have vested interests. U.S. energy policy is directed by the energy companies. Bureaucrats keep finding ways to raise my taxes. I don't believe there is an energy shortage; it was just made up by the oil companies to raise the price of oil.

Response to the presentations was, for the most part, very favorable. 75% indicated they were helpful, while 61% stated the talks inspired them to take at least one conservation step. 7% checked one of the negative responses.

The 15 homemaker clubs were among the most responsive groups addressed. It seemed that members of these clubs were accustomed to doing things for themselves and to having programs on such topics as cooking

so that conservation fitted well within their format. The 10 service clubs were generally responsive, although the time allotted for the presentations was usually too short to allow in-depth discussion. An amusing aside is that the project demonstrators--all female--found no negative reaction to a women's group giving this kind of advice to men.

Response from the 12 senior citizen groups was more diverse: about one-third seemed quite apathetic (these tended to be organized for nutritional and socialization purposes) and the other two-thirds ranged from very interested to militant (about issues such as nationalization of utilities which they suggested and favored). Energy costs appeared to be a significant problem for many of the elderly on fixed incomes whose health would permit very little change in indoor temperature settings.

The 9 social groups were among the least successful with some outstanding exceptions. There were a few individuals who resented being educated during a social event. The public meetings yielded the lowest attendance. At the meetings scheduled by the Citizens Partcipation Council--organized by city ward to involve the public in city decision-making--the least interested proved to be audiences located in the lower-income sections of the city. Another group, however, which was located in an islated low-income community, seemed hungry for <u>any</u> kind of information.

Obstacles

The negative attitudes outlined above can be interpreted as behavioral obstacles to saving energy. These did not appear to affect the project, the most likely reason being that the demonstrators were members of volunteer, nonpartisan community organizations and not government employees.

The project had planned to establish an energy information clearinghouse with a public telephone line. The State Energy Office had previously told the project that it had no funds to set up one. During the fall, however, funds became available and a WATS line was established by the state. Rather than duplicate the service, the project publicized the state number.

Also planning to work with schools to provide materials on conservation, the project found the local school district uninterested. In cases where presentations were made in classrooms, arrangements were made through teachers who had heard about the project from sources other than school administration.

The most apparent obstacle associated with the Tucson project seemed to be time. The overwhelming response from community organizations for presentations left the project with little time to implement other activities it had outlined in its proposal. Preparation and production of the videotapes required more time and effort than previously

planned. They were completed only shortly before the project ended. While capable of probably reaching more people, their effectiveness as opposed to the small group presentations, remains unknown.

WEST HARTFORD, CONNECTICUT
Northeast region; population: 70,000
LWV membership: 320

Community Orientation

The town of West Hartford leads many other cities in its recognition of and action regarding energy conservation. There is a permanent municipal Energy Committee that recommends energy-conserving measures to be adopted by the town government. One of these, the modification of the heating/air conditioning/ventilation systems of 14 municipal buildings, has already been implemented. This type of visual government action coupled with the high cost of energy in the New England area would seem to engender a general awareness and concern regarding energy on the part of community residents. There have been no organized residential energy conservation programs, however, and the pilot project enabled the West Hartford LWV to fill this important gap.

Program Summary

Variety seems to most accurately describe the programs and events sponsored by the West Hartford project. Emphasis was also placed on reaching children as well as adults. A student art contest resulted in an energy conservation logo that was used on all advertisements and materials associated with the project. Three workshops focused on the "basics" of home weatherization, offering participants instructions on how to calculate the heat loss for

their homes. A "Junior Energy Savers" program was instituted in all the public elementary schools in West Hartford to make children aware of the need for energy conservation and to develop an alternative approach to dispensing energy information. As a spin-off of this effort, the project manager was invited to a meeting of the "Science Vertical Team", a group representing each of the city's 18 public schools, to discuss the junior program and to gain the support of teachers for school energy conservation programs.

The project also capitalized on regional institutions and interests. For instance, it kicked off its activities with a New England style Energy Town Meeting and sponsored a program on wood burning stoves, wood being a viable fuel source in New England. To promote the city's recycling program and the idea that reuse of products and materials results in substantial energy savings, the project constucted an exhibit on recycling opportunities in West Hartford and published a recycling handout. The exhibit is regularly circulated throughout area banks, municipal buildings and shopping centers.

Projects

Energy Logo Contest

Energy Town Meeting

3 Home Insulation Workshops

Wood Burning Stove Program

Preliminary Landlord-Tenant Program

Junior Energy Savers Program

Solar Energy Fair

Clearinghouse Service

Recycling Exhibit and Handout

Miscellaneous Outreach Activities

Science Vertical Team Meetings

Distribution of Energy Audit Questionnaires for the Connecticut State Energy Extension Service

Outreach Statistics and Conservation Actions*

Energy Town Meetings. 71 of the 131 participants who completed initial evaluations were reached by telephone survey. More than 50% of these people indicated that they had taken some measure to conserve energy since the meeting. Twelve respondents attended subsequent project programs; 19 read the energy saving tips printed daily in the local newspaper that were provided by the project (Appendix).

Insulation Workshops. 40 of the 54 participants were contacted by phone (about 74%). Almost 70% of these indicated that at least one specific energy conservation measure had been taken as a direct result of attending the workshops. The following indicates what measures were taken and by what percentage of those questioned:

31% weatherstripping

26% storm windows/doors

28% insulation

* Refer to chart on page 32 for summary tabulation.

18% flow-restrictor shower head

38% caulking

28% recycling papers

5% general replacements or repairs

Most of the measures undertaken were "do-it-yourself", 33% of those who did not take any action cited lack of money as an obstacle.

Woodburning Stove Program. 42 of the 56 participants were surveyed by phone (about 77%). About 45% indicated that the program had led to adoption of a conservation measure including weatherstripping, insulation, caulking and purchase of stove.

Junior Energy Savers Program. This program was evaluated by questionnaires sent to elementary school teachers and local League members. 44 of a possible 170 teachers responded. Below is an excerpt from the results:

1. Have you distibuted the materials (Junior Energy Savers booklet, sticker, "Tips for Energy Savers") to the children?

   Yes 43 No 1[a]

If Yes, which of the following describes your method of distibution?

26%[b] Distributed materials with minimal discussion.

67% Distributed materials after thorough discussion.

42%[c] Distributed "Junior Energy Savers" booklet to be completed and returned. Stickers distributed after return of booklet.

[a] Teacher plans to distribute at end of a conservation unit.

[b] More than one half also checked "Discussed other..."

[c] Teachers were not instructed to do so.

- Made a "draftometer" with children. (one teacher)

7% Did a lesson centering around meter reading. (three teachers).

74% Discussed other aspects of energy and energy conservation.

33% Other: _____

2. Asking for a show of hands, how many children in your class actually checked through their house with a parent?

17% indicated 80-100% of class "checked through..."

19% indicated 50-80% " "

31% indicated 20-50% " "

Only 28% out of approximately 320 League members who were requested to complete questionnaires responded. Twenty two of those conducted the home energy check suggested in the program materials. Ten stated that the materials led the household to take conservation measures.

Solar Energy Fair. An estimated 500 people viewed projects and/or picked up educational materials. An exhibit of student or class projects from area schools was an integral part of the event. Five area schools including one elementary school, one junior high school and three high schools particpated, involving a total of twenty students. The project consisted of: four solar ovens, a passive collector, two solar collectors, a parabolic reflector, a greenhouse, a photovoltaic cell, a windmill, and four model houses.

Clearinghouse Service. A total of 163 calls were logged on the project's Energy Info Line. The listing on the next page provides a breakdown on information requested:

132 registration for project's programs
17 inquiries on fuel assistance program
1 hot water heater
2 home insulation
1 efficient use of clothes dryer appliance
1 solar energy information
3 project's Solar Energy Exhibit
1 information on firm offering free energy audit
5 requesting written energy conservation materials

In addition to answering phone requests, the project mailed information to participants who had indicated questions on their follow-up evaluation sheets. A variety of materials was also distributed through the public library.

Resource Materials. Approximately 500 citizen energy kits were distributed to the public through the various activities conducted by the project. Most participants felt the materials in the kits were very helpful, particularly "Tips for Energy Savers", of which an additional 5,000 copies were distributed. The manual, In the Bank . . .Or Up the Chimney, was also offered for sale at each project function. Five thousand "Junior Energy Savers" booklets, published by the West Hartford LWV with funds provided under the project, were distributed to elementary school children. Teachers and parents who were surveyed indicated that the children related well to this material and that these were a useful motivational tool.

Particpant Attitudes and Motivation Incentives

A survey of those attending the Energy Town Meeting indicated that most of them believed there is an energy shortage and that most Americans are energy "wasters". An overwhelming number believed that they as individuals could make an impact on energy consumption and that it was their responsibility to conserve energy voluntarily. In fact, 128 out 131 respondents indicated that they practiced energy conservation in their homes. There was mixed response to questions asking if technology would "bail us out" of the energy shortage, and if Americans would conserve if government controls were imposed.

The major incentive listed for conserving energy was saving money. Most people attended the programs to learn what things they could do that would lead to energy, and therefore financial, savings. Many of the measures adopted were through "do-it-yourself" efforts.

Both initial and follow-up evaluations indicated that participants felt the project's programs were very worthwhile and informative. The focus on simple, practical, "how to" information was greatly desired and many requested more materials/programs on such subjects as insulation R-values, techniques and materials and contract arrangements with insulation companies.

Newspaper coverage devoted to the project was outstanding. Of course, this was primarily due to the project's efforts at supplying the press

with well presented, timely news items and general information. Once the media's attention was captured, it began producing numerous articles on conservation subjects, independent of project requests for coverage.

Obstacles

By sponsoring a landlord/tenant workshop, the project had hoped to target rental property owners to interest them in conservation measures. This was an ambitious objective since neither the federal government nor the states had done much work with this group. A combination of lack of interest on the part of landlords and high consultant costs for managing the workshop, however, prevented the project from fully implementing the program.

A telephone survey of thirty apartment owners/managers showed eleven interested in participating in such a program. The West Hartford LWV also addressed a meeting of about fifteen apartment owners/managers sponsored by the Chamber of Commerce. Participants were given a copy of an energy savings table taken from "Energy Cost Reductions for Apartment Owners and Managers" prepared by the Institute of Real Estate Management and the League survey to complete; only two surveys were returned to the project manager. The Energy Cost Reduction publication was sent to those owners surveyed, with copies made available through the newly-formed West Hartford Property Owner's Association.

SUMMARY TABULATION - WEST HARTFORD PROJECT

Event	Attendance	# of initial survey respondents	# of follow-up survey respondents	% of survey respondents adopting conservation means
1. Energy Town Meeting 10/13/77	180	131	71	50
2. Home Insulation Workshop 10/20/77*	16 registered 13 attended	10	8	
3. Home Insulation Workshop 10/26/77*	33 registered 26 attended	17	20	70
4. Home Insulation Workshop 12/8/77*	21 registered 15 attended	13	11	
5. Woodburning Stove Program 1/25/78	90 registered 56 attended	47	42	45
6. Junior Energy Savers Program 2/78	5,000	N/A	44/170 (teachers)	17% indicated 80-100% of class 19% " 50-80% " 31% " 20-50% "
7. Solar Energy Fair 5/3/78	500	N/A	N/A	N/A
TOTAL	5,790	218	196	-

* attendance at workshops limited to 30 people.

SUMMARY TABULATION - WEST HARTFORD PROJECT (CONTINUED)

Type of Conservation Measure	# of Recipients
1. weatherstripping	22
2. storm windows/doors	17
3. insulation-walls/attic/basement	31
4. caulking	30
5. general replacement or repairs	2
6. recylcing papers	11
7. flow restrictor-shower head	20
8. woodburning stove	10
9. other	25
TOTAL	168**

**For Projects 1-5 only; 168 out of 290 participants.

Two proposals for managing the workshop were received, but estimated costs exceeded the project's available funds for this activity ($600 and $1,000+ cost estimates received; total project budget: $7,120). Copies of the proposals were sent to the state energy department. The project manager felt that, to be cost effective, such a program should be implemented statewide. Should the state decide to attempt a program in this area, the League would offer its assistance.

Another obstacle encountered was public skepticism vis-a-vis the quality of insulation and of companies installing insulation--a skepticism reinforced by several rip-off stories that appeared in area newspapers. Therefore, people wanted to know exactly what kind and how much insulation was needed for their particular house. This kind of in-depth analysis was difficult to offer in a broad community education program, such as the pilot project, which had limited funding.

In some instances, the cold New England winter presented a formidable obstacle. A winter storm occurred the night of the woodburning stove program. Nevertheless, 56 out of 90 pre-registered people did attend.

NORTHFIELD, MINNESOTA
North Central region; population: 12,000
LWV membership: 30

Community Orientation

Northfield is located in an agricultural area made up primarily of family farms; yet it is only 40 miles south of the Minneapolis/St. Paul metropolitan area. The city also enjoys the resources of two colleges , Carleton and St. Olaf.

Many of the Northfield homes built before 1945 are poorly insulated. To make matters worse, a number of those living in these pre-1945 homes are on low and fixed incomes. For them, the rising cost of heating "leaking" houses creates a severe economic hardship. Because Northfield is experiencing growth at a much faster rate than the state as a whole, there is also a boom in housing construction. On both scores, the time seemed ripe in Northfield for instruction on energy conservation techniques.

Program Summary

The heart of the Northfield project was the *neighborhood* energy meeting. Volunteers throughout the community opened up their homes to their neighbors for an on-site energy audit and discussion of home energy-saving practices. Hosts hand-delivered invitations along with the project's citizen energy kits to their neighbors. In preparation for these neighborhood sessions, the project arranged for the Minnesota Energy

Agency to train fifteen volunteer residents in home energy auditing and to give trainees the "basics" about types of insulation, caulking compounds and weatherstripping. The trained volunteers then conducted audits and led discussions at the "open house" neighborhood meetings.

Another major undertaking of the project was the organization, coordination, and production of "Energy Conservation Week In Northfield". By enlisting the support of other community organizations, the City of Northfield, the public and private schools and the public library, the project was able to offer a variety of activities including a radio show on conservation and urban expansion, store displays on energy conservation by local merchants, and a one-day Energy Fair of exhibits, demonstrations and continuous "how to" workshops.

The project also organized a tour of energy-efficient homes, located in the community, in conjunction with its other Sun Day events. The homes demonstrated both active and passive solar systems and how an older home could be retrofitted and heated exclusively with wood.

Projects

3 public meetings ("Energy and the Environment", "Solar Energy-Ready When You Are", "Energy Roundup-Overview of the Energy Situation")
Energy Conservation Week
Energy Fair
Sun Week
Tour of Energy-Efficient Homes

40 Neighborhood Energy Meetings

2 Radio Shows ("Energy Conservation as a Total Lifestyle", "Urban Expansion and Energy Conservation").

Letters to Landlords in Northfield Area

Outreach Statistics and Conservation Actions

Neighborhood Energy Meetings. The project set 75 meetings as its goal to blanket the community with "how to" information. A total of 40 meetings were actually held throughout the city and surrounding area. Approximately 900 people were invited and received information packets. Of these, 340 attended meetings and 174 completed surveys (Appendix). Fifteen community residents were trained in conservation techniques and how to conduct home energy audits. Resulting conservation measures often listed were: Lowering thermostats (most to 65°), adding insulation in attics, caulking around windows, installing storm windows and doors, adding glass doors and chimney caps to fireplaces, using small wattage bulbs in lamps, conserving water through shower flow-restrictors, recycling cans and glass, using car pools, and monitoring energy use of appliances.

Energy Fair. 18 exhibits set up by various businesses and community organzations. Approximately 750 people attended within a 30 mile radius of Northfield. This was an impressive turnout considering it was held in January in the middle of the Minnesota winter.

Energy Efficient Home Tour. Four homes were included in the tour. 135 people participated in the tour during a four-hour period. The most pop-

ular homes were the new active solar home and the retrofitted older home heated with wood. The project noted that people were full of questions on how to do things themselves. The project distributed 2,000 packets of conservation materials during its operation. Publications considered most useful by the participants were the five published by the Minnesota Energy Office (listed in Appendix II). Attendance at other project activities was as follows:

45 "Energy and the Environment" public meeting, 10/18/77

70 "Solar Energy" public meetings, 11/16/77

22 "Energy Roundup" public meeting, 12/6/77

35 Solar Energy Forum, 5/3/78

The establishment of the Mayor's Task Force on Energy was an important conservation action instituted by the whole community through its local government. The Northfield LWV stated in its grant proposal that it would work with the city to set up an ongoing body to oversee energy policy and enactment. To this end, it developed a list of tasks which needed to be done, regularly conferring with the Mayor and City Administrator. These tasks are to be accomplished by various city agencies with oversight provided by the task force. Susan Gove, the pilot project manager, has been appointed to serve on the task force, as well as Margit Johnson and Karl Hella, two of the volunteer trainees and Dave Robinson, owner of the active solar home which was on the project's home tour.

Public Attitudes and Motivation Incentives

The chart on the following page summarizes the attitudes of two groups. The first set of columns list responses of 174 people who attended the

ATTITUDE SUMMARY OF NORTHFIELD RESIDENTS

Statement	Respondents from Neighborhood Meetings					4H Respondents				
	Agree Strongly	Agree Somewhat	Disagree Somewhat	Disagree Strongly	Don't Know	Agree Strongly	Agree Somewhat	Disagree Somewhat	Disagree Strongly	Don't Know
1. The public has been given a realistic picture of the energy situation facing the United States.	27	77	41	22	7	5	6	3		1
2. There is a definite energy shortage.	93	62	12	3	4	12	2		1	
3. Technology will "bail us out of the energy shortage.	20	45	63	31	15		4	7	3	1
4. Americans will conserve energy only when government controls are imposed.	34	76	46	15	3		7	4	2	2
5. As an individual, I can make an impact on energy consumption.	66	85	13	1	1	5	9			1
6. Anything I have done (or will do) to conserve energy was primarily to save money rather than energy.	23	61	56	17	2	1	5	4	4	2
7. The topics of this meeting were those that I expected to be covered.	87	69	2	1	1	2	7	2		1
8. I learned a great deal from the information presented at this meeting.	66	87	5	1	1	6	7	2		
9. I consider myself well informed on these topics before the meeting.	19	87	43	9	2	2	10	1	2	

neighborhood energy meetings and received "how to" information. The second set of columns list responses of 15 4H students who received instructions on energy-saving techniques, but did not have the benefit of the home energy audit tour. It is interesting to note the correlation among answers of the two groups, with the exception of statement "7".

Several consensus statements regarding the energy situation and related actions can be derived after studying the chart. Respondents generally feel that the public has been given a realistic picture of the nation's energy situation, although some seem slightly uneasy about the information disseminated. Most agree that there is an energy shortage, although the consensus is that technology will not "bail us out". And, while the majority believes that individual efforts can affect consumption, the consensus is that government controls will still be necessary to achieve sufficient conservation. Finally, saving money is a major incentive for conserving energy, although other important factors contribute substantially, and perhaps equally as much, to public motivation.

Respondents indicated that they were satisfied with the information provided by the project program and indeed learned more about home energy conservation even though they considered themselves relatively well-informed before attending the meetings.

In summary, the pilot project was well received by the community. The

project itself received additional impetus when the Northfield LWV was nominated for an American Motors Conservation Award in the fall of 1977. Newspaper coverage was excellent and, as in other projects, articles on conservation exceeded those specifically connected with project activities. The project also seemed to stimulate and strengthen coordination among the various community agencies and groups, particularly on large events such as Energy Week and Sun Day activities.

Obstacles

Motivation, according to the project manager, remains the major obstacle in convincing Northfield residents of the need to conserve energy. "There are a lot of people who are trying to conserve energy but the education process is far from won". This undoubtedly can be attributed to the fact that energy continues to be relatively cheap and plentiful in this area (most homes are heated with natural gas imported from Canada). Although many people realize that the situation might change in the future, it is difficult to motivate them to act before it actually happens. This situation seems somewhat ironic considering that the Minnesota climate obviously requires high consumption of energy.

WAKE COUNTY, NORTH CAROLINA
Southeast region; population: 261,000
LWV membership: 175

Community Orientation

High public consciousness of the need to conserve already existed in metropolitan Raleigh due, no doubt, to its location in the Research Triangle Park area. Although several organizations, such as the North Carolina Agricultural Extension at N.C. State University and the Wake County Agricultural Extension Office, were already actively promoting energy conservation programs, no comprehensive nor coordinated effort had been made to reach all residential or income groups. Thus, the Wake County LWV geared all of its efforts in this direction.

Program Summary

Because of these ongoing conservation programs, the Wake County project felt that there was need for coordination among groups and dissemination of information. It decided to utilize the eighteen Community Task Forces (CTFs)--geographically-based citizen groups formed to participate in housing and community development activities--which blanket the Raleigh area to achieve its objective. Using three task forces, representing a demographic mix of community residents, the project tested various conservation program formats to determine what information was most appropriate and useful. Project funds

enabled the Wake County LWV to refine and reproduce an energy conservation slide show used to introduce its programs. The project then held workshops for community organizational leaders in hopes that they would carry the conservation message back to their own groups. The project, in effect, attempted to create a *ripple effect* in the community that would lead to greater conservation awareness and action.

To further encourage this ripple effect, the project ran a contest among all eighteen CTFs to determine the number of energy-saving measures practiced or invested in by residents. Using the homes of families chosen from the CTFs to project real-life situations, it produced a TV show on conservation that featured walk-through home energy audits. Fifty calls regarding additional information were received after the show was aired. A shopping mall show, consisting of 23 exhibits from local businesses, government and service organizations, was also organized.

In addition, the project established an active clearinghouse service that was mainly to distribute citizen energy kits and other conservation materials to interested citizens and other groups. Publications considered most useful were "Tips for Energy Savers" and In the Bank...Or Up the Chimney.

Projects

6 Community Task Force meetings

2 Conservation Workshops for Organizational Leaders

Meeting with Garden Clubs in Durham, N.C. and with Wake County Con. Officer

"Living Lightly" Contest for CTFs

Mall Show

TV Show

Radio Show

Conservation Slide Show

Sun Day Activities

Clearinghouse Service

Outreach Statistics And Conservation Actions

The following list gives the number and kinds of people reached directly through the project's activities and the potential outreach from those participants.

ACTIVITY	NUMBER OF PEOPLE ATTENDING	KIND	POTENTIAL OUTREACH
Five points CTF meeting	15	cross-section agewise homeowners	Information re meeting sent by neighborhood to over 200 people
North Central CTF meeting	45	few renters, mostly homeowners cross-section age	Newsleter mailed or delivered to 500 people write up of meeting included
Southeast CTF meeting	20	young adults homeowners	Vice Chair kept publication packets (50) to distribute at later meetings
East Raleigh CTF meeting	25	middle age homeowners	Newsletter re meeting distributed to 500 homes

ACTIVITY	NUMBER OF PEOPLE ATTENDING	KIND	POTENTIAL OUTREACH
Central CTF meeting	15	young and elderly, some renters-low to mod. income, some homeowners.	50 energy packets passed out to be distributed and contest checklists.
South Central CTF meeting	14	middle age & elderly homeowners	100 energy packets passed out and contest checklist.
Garden Club (Durham, N.C.)	15	young homeowners	
"Living Lightly" Contest		all 18 CTFs	2000 contest checklists distributed
Mall Show		cross-section of community-some people from region	5000
TV Show		Audience-Raleigh & Wake Co.; Durham; Chapel Hill; Willow Springs; Goldsboro; Dunn; Fayetteville; Carthage; Clayton; Youngsville.	50 follow-up phone calls for specific information
Workshops	N.C. Energy Div.; Dept. of Commerce FHA.; Rep. from Garden Club; Ag. Ext. NCSU; Community Task Forces; church classes; Gov. Office Citizen Affairs; Wake Co. Oppor. Inc. (CAP).		
Radio Show	Afternoon Music Program; Talked between records 1 hour.		WPTF (oldest and largest listening audience in area)
Co-op w/ Wake Forest Cons. Officer	2 Town Meetings; talk w/ students		200 information packets
Co-op with Ag. Ext.	Synergy Workshop		All 100 counties in N.C. represented at workshop
Co-op with N.C. Historical Soc.	State meeting		150 participants 150 information packets
Clearinghouse Phone	Calls for materials and information		100 calls 4500 packets disseminated

ACTIVITY	NUMBER OF PEOPLE ATTENDING	KIND	POTENTIAL OUTREACH
SUN DAY	Programs-6 elem. schools Slide-Tape use at secondary schools Booth on mall		600
State Council LWV	18 Leagues		75

The "Living Lightly" contest checklist, distributed to about 2000 homes, illustrates energy-saving measures undertaken by Raleigh residents:

INSULATION:	attic	204		
	exterior walls	130		
	floors	87		
DRAFT-PROOF:	storm windows	161		
	storm doors	175		
	plastic on windows and doors	60		
	caulking	145		
	weatherstripping	162		
HEATING:	close off unoccupied rooms		193	
	keep fireplace damper closed		167	(unless fire is going)
	electric heat pump system		31	
	heat with wood		47	
	clock thermostat		75	
	lowered thermostat setting		207	(65° day; 55° night)
	furnace serviced (once a year)		178	
	clean and replace filters		200	
COOLING:	ducts properly insulated		120	
	whole house ventilating fan		74	
	set thermostat 78°		115	(whole house air-conditioned)
	open windows on cooler days		210	
HOT WATER:	repair leaky faucets			230
	insulate hot water storage tanks			92
	insulate hot water pipes			74
	lower temperature on water heater			163 (to 110° -120°)
	flush sediment from bottom of tank			45 (per month-several buckets)
KITCHEN:	use cold water to operate food disposal			91
	install aerator at kitchen sink			49
	use pressure cooker or slow cooker			103
	microwave ovens			17
	small ovens for small jobs			136

	use dishwasher only when full	136	
	let dishes air dry	129	
	schedule energy-intensive appliance use only during off-peak periods	91	(dishwasher, dryer,
	refrigerator temperature (38°-40°)	159	clothes washer, oven)
	freezer temperature (5°)	111	
	defrost manually	98	
	refrigerator door seals are air-tight	232	
	cook whole meals in oven	135	
LAUNDRY:	wash clothes in warm or cold water	244	
	separate drying loads into heavy and light items	210	
	use clothes line	148	
BATHROOM:	take showers rather than baths	174	
	install flow restrictor at pipe in showerhead	31	
LIGHTING:	light-zone your house or apartment	283	(Task lighting-reading, sewing, etc.)
	reduce overall lighting (remove one bulb out of three in fixture)	116	
	install solid state dimmers	87	
	use fluorescent lighting		
	use outdoor lights only when needed	196	
APPLIANCE USE HABITS:	turn off appliances when not in use	266	
	keep in good working order	214	
	use appliances that take least amount of energy	137	
	don't use instant on features of TV set	111	
TRANSPORTATION:	use public transportation	63	
	motorcycle	6	
	moped	1	
	bicycle	16	
	walk	97	
	share your ride	80	(carpool or van)
	go shopping w/ neighbor	57	(occasionally)
	eliminate unecessary trips	192	

Public Attitudes and Motivation Incentives

A brief "Energy Attitude Survey" was distributed to all participants at the meeting. The results: 836 participants believe an energy

problem exists; 865 believe conservation is necessary. The project reported that people expressed an overall concern that government and business "have failed to be honest with the general public regarding oil, coal and emission controls on autos which cut down on mpg of gasoline". Moreover, most people are concerned that when the public is asked to conserve energy, it should be able to see the benefit from financial savings as well as from conservation of national natural resources.

Many of the business exhibitors participating in the Mall Show were very enthusiastic and encouraged by the number and types of questions asked by the viewers. They felt that most viewers displayed a fair knowledge of the subject and of products exhibited: the project felt that two years of "hard" winters have caused people in the area, and the South in general, to become more aware of energy problems.

Reasons for attending the meetings were as follows:

366 - general interest in energy conservation.

366 - concern about higher heating/cooling costs.

281 - need for specific information on what can be done to save energy and money.

198 - learn methods for installing energy-saving materials.

Obstacles

Considering that prior community conservation education had been conducted

and that the project's activities were widely publicized, turnout at the CTF meetings and workshops appeared quite low. Perhaps the attitudes expressed in the surveys about the need to conserve were directed toward the "other guy". Perhaps, also, people didn't want to make the effort to attend "another" meeting. The "sharing of information" workshops generated few requests for project materials for other group meetings. However, word of the project circulated well throughout, as well as outside of, the Raleigh area; the project supplied over 500 information packets to meetings held in Durham, Wake Forest, Asheville and Wilmington. This might be attributed to the TV show which received prime time coverage, good publicity and newspaper coverage, and the project's diligent efforts at coordinating with state and local government agencies and civic organizations.

PART TWO

ASSESSMENT OF LWVEF GRANT MANAGEMENT

LWVEF PROGRAM MANAGEMENT

The LWVEF was responsible for selecting the pilot League projects and providing them with technical and administrative assistance throughout the program.

Nineteen Leagues, already involved in citizen education activities on energy conservation, were invited to submit grant proposals. A copy of the contract narrative, which included criteria for choosing the pilot projects, was sent to all applicants to assist them in developing their proposals. Selection of only four Leagues out of many capable applicants was difficult. A screening committee composed of members from the LWV National Energy Committee (representative of different national regions) and the LWVEF staff, with input from the DOE project manager, was formed to evaluate the incoming proposals. This review mechanism, together with prior formulation of the criteria, greatly facilitated the selection decision and ensured fair treatment of all applicants.

The contract specified that the LWVEF would provide the pilot projects with publications and other materials on energy conservation. The LWVEF elected not to publish any new materials since an extensive search revealed an abundance of existing literature and audio-visuals in the subject area. A bibliography was compiled of resources most appropriate for public dissemination (Appendix I). With the exception

of the "how to" category, supplies of all materials were ordered by LWVEF and sent to each project in installment shipments from the national office. Since materials for the citizen energy kits numbered ten to twenty thousand copies, this method of supply/distribution proved both inefficient and expensive.

The projects themselves voiced a preference for choosing their own materials that could address local energy issues and problems and, thus, could be more relevant to their audiences. In fact, the projects drew on state resources and develped their own materials to fit specific activities. The bibliography and reference materials provided by LWVEF were considered very useful by the projects, however. These materials, it appears, alone would have been sufficient for the projects' resource needs.

The LWVEF program manager visited all four projects: West Hartford, October 13-14; Northfield, December 6-7; Wake County, January 19-20; and Tucson, Febuary 13-14. Site visits were extremely useful because they provided the local project manager, other League members and the LWVEF program manager with an opportunity to talk about their successes, problems and future plans. These conversations helped establish a close working relationship between the national and local components of the program. Suggestions on how the national office could improve the support it was providing to local project activities were also solicited.

In retrospect, it would have been more helpful to visit all project sites earlier in their programs, as in the case of West Hartford. The program manager would have then been better able to provide guidance on and suggest ideas for project activities and programs before they were actually underway. Early site visits would have also improved management oversight, allowing the program manager to clear up any questions on grant instructions and to see that project start-ups proceeded smoothly and expeditiously.

The program manager served as a liaison among the local projects, facilitating the sharing of experiences through correspondence, reports and conversations. Copies of the four original proposals, the mid-term report, and samples of activities undertaken by each project were exchanged among the Leagues via the national office. Each project was thus able to gain ideas from the other League's activities and adapt them for their own community. The program manager feels that more attention could have been given to this function. A more formalized exchange process, such as a "swap shop" bulletin, recapitulating the projects' activities to date, could have been developed to keep the projects better informed and up-to-date on each other's progress and experiences.

PART THREE

FINDINGS AND RECOMMENDATIONS

FINDINGS AND RECOMMENDATIONS

Outreach and Program Assessment

The Summaries of the activities and community outreach of the four pilot projects in PART ONE indicate that these projects were highly successful in developing and increasing citizen awareness of the importance of home energy conservation. *Direct* community participation in project activities is listed below.

LWV Project	Total Persons Reached
Tucson	3,000
West Hartford	5,790
Northfield	1,397
Wake County	7,864
Total	18,051

Moreover, as the project statistics show, a significant number of participants surveyed from all projects indicated that they had adopted energy-saving practices and/or had invested in energy efficient home improvements in direct response to the pilot project programs.

Why were the projects, on the whole, successful in educating and motivating community residents in energy conservation? And, in particular, which activities seemed more effective than others in

generating community interest and involvement, and why? There seem to be three major factors pointing to the success of the LWVEF Energy Conservation Technology Education Pilot Program.

One, the pilot projects were carried out by *local volunteer citizen groups* already well established in the communities. These LWV groups have a long track record in citizen education activities and enjoy a reputation in their communities for being impartial and well informed. These groups, composed of volunteer members, with no vested interest in the information they disseminate, possess a higher credibility with the public. For this reason, the information they dispense is received more readily than that which is generated by the government, particularly at the federal level, and by business.

In addition, the LWVs know their communities in terms of government structure, political organization, community orientation and attitudes and local resources. The pilot projects were thus in a position to utilize this knowledge and devise resources and techniques particularly appropriate to local needs and situations. For instance, the Tucson small-group presentations proved extremely useful in reaching a large and widely distributed metropolitan audience.

Furthermore, the local LWVs are adept at bringing together diverse groups and agencies within communities to discuss current topics and issues and to work on community projects and special events. The pilot projects were ideally equipped, then, to convince various local groups to

join them in organizing and sponsoring energy conservation programs, etc. They were also experienced in coordinating with and incorporating energy conservation programs, already underway into their project activities. The Sun Day activities, in which they motivated a wide variety of groups and agencies to participate, are an outstanding illustration of this ability.

A second factor contributing to their succuss is that the projects were organized and led by citizens who did not present themselves as energy *experts*. Rather, they emphasized the sharing of objective information or information learned through personal experience. As the Tucson pilot project manager put it: "The project demonstrators did not pose as experts, but rather, emphasized that they were homeowners who had tried various ways to save energy themselves and were sharing what they had learned through experience and research".

This low-key approach seemed to alleviate or dispel citizen's distrust of "expert" or "official" information. (See discussion on public attitudes). Further, the "open dialogue" formats employed in their various meetings and programs, encouraged exchanges of information and ideas among participants and demonstrators/discussion leaders. These techniques seemed to result in a more receptive attitude on the part of participants to learn and then take action on those energy-saving measures they considered affordable and best suited to their individual situations.

The third major factor related to the dissemination of simple, practical information. The projects focused on basic energy-saving measures which people could undertake themselves. The Tucson demonstration models, the Wake County slide show and TV program, the West Hartford "junior energy saver" booklet and insulation workshops, and the Northfield "walk-through" energy audits were highly useful tools for illustrating "how to" conservation techniques. The projects found that most people are confused about what steps to take to conserve energy and have heard conflicting advice from energy experts and officials and that there is a need, therefore, for basic, practical information. This need applied to all projects regardless of the differing climates and energy supply situations represented by the four pilot projects--factors which supposedly affect public awareness. The majority of participants seemed eager to learn about the "easy-to-do" energy savers, but showed little interest in measures which required large financial investments.

While these basic success ingredients were common to all pilot programs, certain techniques and activities were apparently more effective than others in stimulating community interest and involvement. The mobile and informal presentations developed by the Tucson project resulted in a great deal of direct participant involvement and interaction. Keys to its success: it met other organized citizen groups on their own territory (e.g. at the groups' own meeting place and time),

its portable presentation fit well into other program formats, and the open exchange among demonstrators and participants served to reinforce initial group interest. Not spending time and effort on setting up its own meetings allowed the project to concentrate on the content and thrust of its presentations.

Similar in theory to the Tucson technique were the neighborhood energy meetings conducted by the Northfield project. These were also mobile presentations that relied on "on-the-spot" demonstrations via home energy audits and utilized volunteer citizens as discussion leaders. However, the Northfield neighborhood meetings did not have the built-in benefit of an already organized group meeting guaranteeing attendance as did Tucson. Slightly over one third of those invited to any neighborhood meeting actually attended. Nevertheless, citizen education and involvement on such a personal and localized level are rarely attempted, and efforts for doing so should continue. The fact remains that the techniques used by both projects proved to be highly successful for demonstrating home energy conservation.

To illustrate further that the transfer of successful techniques does not always meet with similar results elsewhere, the Wake County project shared its expertise developed through the CTF test programs with leaders of other organizations. The project received few requests for its program materials, indicating that very few follow-up programs were conducted by these leaders. The fact that these people were not actually

part of a volunteer corps trained specifically to carry out project activities made a difference in their commitment to conservation education in the community.

Programs which addressed local or regional interests and concerns also proved to be very effective. Offering a variety of activities, the West Hartford project's woodburning stove program evoked the most favorable community response undoubtedly because wood is an abundant resource in New England as well as a viable means for heating homes. Sun Day events were well attended in all four projects areas, indicative of the high level of public interest in solar energy.

At the other end of the spectrum from small-group gatherings were the large scale events that generated substantial community interest. The Wake County Mall Show, the Northfield Energy Fair and Energy-Efficient Home Tour attracted large crowds which also displayed a high level of interest in energy conservation. These events captured the public's attention with a variety of exhibits, speakers and activities. They also provided a medium for community social interaction.

The clearinghouse service encountered mixed community response. Of the four projects, West Hartford and Wake County services were the most utilized. Tucson did not even find it necessary to set up an energy information telephone line. And, while Northfield promoted such

a service throughout its project, it received only 7 calls. Overall, the clearinghouse service was not worth the money and effort invested in it. Therefore, it should not be a requirement of future community education programs, but rather an optional communication channel for projects to utilize if they so choose.

Northfield, Wake County, and West Hartford projects ran highly successful publicity campaigns. They captured the attention of the local press both on their projects and on energy conservation issues by supplying it with well-presented, timely news items and general information. Consequently, numerous articles were printed which focused on energy conservation that were quite independent of project activities. Because Tucson received such an overwhelming response from its initial mailing to local organizations announcing its presentation service, the project manager decided that no further promotion was needed. It still was able, however, to generate spin-off articles in the local press.

Use of the other media was also valuable in gaining public interest. A prime-time TV airing of the home energy audit program prepared by the Wake County project drew responses from a 100-mile radius. Through its radio talk shows, Northfield was able to attract a larger audience to its day-long Energy Fair. Moreover, the projects' use of public announcement spots on radio and TV helped promote attendance at their programs and meetings.

Public Attitudinal Assessment

Based on personal contact and interaction with community residents and participant surveys which were conducted by each project, the following generalizations can be made about public attitudes concerning energy conservation. Despite the regional differences. participants' attitudes were, for the most part, similar.

1. A majority of participants felt that an energy shortage exists in this country. Tucson participants were the only exception, possibly due to climatic factors, a preoccupation with water shortage problems, and the region's relatively easy adaptability to the use of solar energy.
2. Most people were convinced there is a need for energy conservation. While the reasons for this viewpoint varied, those most often cited were dwindling natural resources, high energy prices, and dependance on foreign imports.
3. An overwhelming number of people felt that they, as individuals, could make an impact on reducing energy consumption. This response, however, seems to conflict with the level of willingness to adopt and undertake meaningful conservation practices and investments. Participants' strong interest in learning ways to save energy extended only to "easy-to-do" measures that involved minimal effort and money but that produced visible savings. Nonetheless, their willingness to make even some simple and easy investments indicates

progress in the citizen education process--a step beyond the initial stage of general recognition of the existance of an energy problem.

Other attitudes commonly held by participants that surfaced in discussions and the surveys pertain to government and energy-related businesses.

4. Skepticism and cynicism continue to pervade citizen reaction to government. Distrust of politicians and government in general and of utilities and energy companies continues to increase. Credibility is a serious and critical factor in trying to reach equitable solutions to energy problems.

5. Coupled with public skepticism toward government and business is the ripoff syndrome. Many people feel they are victimized by high utility bills, insulation companies, etc. While it is often very difficult to determine whether this is true, the point is that many people <u>believe</u> they are being ripped off, and that is the problem that needs to be dealt with.

6. Similarly, many participants expressed feelings of frustration and helplessness in the face of conflicting advice from experts. A common reaction was "What's the point of conserving? My bill will go up anyway!" The technical jargon that often accompanies energy issues only adds to this confusion and clouds citizen judgement about solutions.

7. The public tends to look for a villain who can be blamed for the energy problem, such as the oil companies during the Arab oil embargo--a view that remains. Utilities are a current target due to skyrocketing water, gas and electricity bills. Yet the real villain has been the voracious energy appetite of the American lifestyle. The positive results from this pilot program indicate, though, that a growing number of people are becoming more cognizant of wasteful energy habits, but this education process is both slow and long-term.

Recommendations

1. Participation of citizen groups in developing and operating public energy conservation education programs should be increased. Furthermore, all levels of government should significantly contribute to the financial support and endorsement of citizen group efforts in such public education programs. The pilot program verifies the high degree of effectiveness of citizen groups to educate their fellow community members. Barriers that exist between the public and government institutions are minimized and, in most cases, eliminated. Full attention can be directed toward the true purpose of education and lead to more positive and prolific accomplishments.

2. Public energy conservation education programs should emphasize and promote local or community level interest. Attitudes and behavior regarding energy use are extremely personal and subjective; change

must occur in *individual* perception and habits. These can be influenced, to a certain extent, by group actions if the size of the group remains small. Local or community-level education efforts can scale down to the group level without sacrificing outreach effectiveness. Since home energy conservation begins with the consumer/homeowner/renter, it makes since to use the level that is most efficient in reaching the target.

Locally-oriented programs help decentralize the education process. They also encourage the utilization of local resources (including people) that are often most appropriate and best equipped to meet local needs. Moreover, local programs can take advantage of existing community education programs and promote coordination among a wide variety of local and state agencies and citizen groups working on conservation awareness. The state energy extension services should particularly utilize effective local groups and promote local level involvement.

3. Emphasis should be placed on public energy conservation information that is simple, practical and "easy-to-do". The projects reported that individual citizens feel that they can reduce energy comsumption. They are willing to take actions that are easy and practical but are confused by conflicting advice offered by experts. The two most popular publications of the program--Tips for Energy Savers and In the Bank...Up the Chimney are straightforward and packed with practical advice and instructions. More often than not, energy

publications are replete with technical language and jargon that make them inappropriate for the average citizen.

4. Greater attention should be paid to the particular conservation problems associated with rental properties. There is a dearth of existing energy conservation materials addressed to renters and rental property owners. Furthermore, current citizen education programs are not reaching these groups. Information specifically designed to address the unique problems and needs (including incentives to conserve) of both renters and landlords should receive high priority.

Concluding Remarks

An undertaking such of the scope and brief duration as this pilot program does not really end when the contract period terminates. Educational activities initiated by the local projects will, most likely, be continued in some fashion by the local League, other community groups, the local government, interested citizens and/or some combination of the above. Community residents who have educated themselves about home energy conservation will be repeatedly called upon for presentations and interviews by interested groups and the media. Three of the project managers have already been selected to serve on local and state advisory committees--two on municipal energy committees and one on a state advisory committee on citizen affairs. In addition, energy conservation publications and films that were donated by all four projects to their public libraries will become part

of permanent collections and displays and will be circulated throughout the library systems.

The information included in this report on the number of persons involved, the extent of media coverage, the number of inquiries for information, etc., is but one indicator of how effective the pilot projects were. Citizen awareness and participation cannot always be precisely linked to specific events or numbers. There is no precise way to measure the projects' true impact on community residents vis-a-vis energy conservation, but one can assume that these people are much more aware of energy problems and solutions as a result of this pilot program.

Citizen education in subject areas that require changes in personal attitudes and lifestyle patterns is a *gradual process*, involving long-term effort and commitment. This *process* does not provide immediate or visible results that can be easily quantified or that fit into a precise format or schedule. Rather, it first plants a seed or a new idea and fertilizes that seed with continued and well-balanced information, until the roots take hold and the idea matures into more responsive and responsible public attitudes and lifestyles.

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Publications:

Energy Options, LWVEF Pub. #628, 55 pp., Single copies $1.00, discounts for larger orders.

Energy Dilemmas, LWVEF Pub. #688, 39 pp., Single copies $1.00, discounts for larger orders.

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Energy:The Case for Conservation, Worldwatch Paper 4, Denis Hayes, January 1976, 77 pp., Worldwatch Institute, 1776 Massachusetts Ave., N.W., Washington, D.C. 20036, $2.00, discounts for larger orders.

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* In the Bank... Or Up the Chimney?-A Dollars and Cents Guide to Energy-Saving Home Improvements, HUD, April 1975, 69 pp., #023-000-00297-3, $1.70.

* Tips for Energy Savers, FEA, 73 pp., Office of Energy Conservation and Environment, Washington, D.C. 20406;.FEA/D-76/513, (Order #0-566-806)FREE

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Solar Energy: Ready When You Are: a 35mm color slide show with sound track that takes an up-to-date look at the potential of solar energy in contemporary residential and commercial buildings. FEA, Order from National Audiovisual Center, GSA, Order Section, Washington, D.C. 20409. Catalog No. 008901, $280.00

II. Clearinghouse Materials

NSTA Factsheet #7: Solar Heating and Cooling, John M. Fowler, Order from ERDA Technical Information Center, P.O. Box 62, Oak Ridge, TN 37830.FREE

NSTA Factsheet #9: Energy Conservation-Homes and Buildings, John M. Fowler, Order from ERDA Technical Information Center, P.O. Box 62, Oak Ridge, TN 37830, FREE.

ERDA Factsheet: Insulation, 8 pp., Order from ERDA Technical Information Center, P.O. Box 62, Oak Ridge, TN 37830, FREE.

ERDA Factsheet: Heat Pumps, 6 pp., Order from ERDA Technical Information Center, P.O. Box 62, Oak Ridge, TN 37830, FREE.

Understanding Your Utility Bill, FEA, 11 pp., Washington, D.C. 20461, FEA/A-75-422 (currently being revised)

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III. Citizen Energy Kits

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NSTA Factsheet #9: Energy Conservation-Homes and Buildings, see above reference

ERDA Factsheet #7: Solar Heating and Cooling, see above reference.

ERDA Factsheet: Heat Pumps, see above reference.

IV. Possible Selections for "How To Clinics"

Workbooks:

* Home Energy Savers' Workbook, FEA, Easy-to read workbook that outlines steps to reduce home energy costs and provides guidance for the homeowner in evaluating home energy consumption efficiency. #041-018-00116-8, 50¢. Also available from FEA regional offices and state energy offices.

In the Bank..or Up the Chimney, see above reference.

* Project Retrotech Kit on Home Weatherization, FEA Conservation Paper #28, A through D FEA/D-75-456-457-458-459-R, GPO #1976-0-207-917.

Slides/Films:

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available for purchase from Eagle Film Labs, 4971 N. Elston St., Chicago, ILL 60630 Price $50.00.

The Insulation Story (National Mineral Wool Insulation Association): presents practical information and advice on insulation, storm windows and doors, weatherstripping and caulking. Approx. 24 min., 80 color slides with script. $25.00 prepaid with 20% discount to educational institutions. Available from: National Mineral Wool Insulation Association, 382 Springfield Ave., Summit, NJ 07901.

The Home Energy Check (Owens-Corning Fiberglass Corp): Slide presentation outlining steps to cut energy waste in the home. Contact local Owens-Corning Fiberglass Corp. representative or Peter G. Mathon, Energy Communications, Owens-Corning Fiberglass Corp., Fiberglass Tower, Toledo, Ohio 43659 for more information.

* Order from Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402

Additional Resource Materials

Conservation Guide 1: Home Energy Audit, Minnesota Energy Agency, 720 American Center Building, 160 East Kellog Blvd., St. Paul, MN., 55101, 15 pp.

Conservation Guide 2: Ceiling Reinsulation, Minnesota Energy Agency, 11 pp.

Conservation Guide 4: Windows and Doors, Minnesota Energy Agency, 15 pp.

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ENERGY SURVEY RESULTS TABULATED

ENERGY SURVEY

Appendix III

1. Please check each of the energy conservation measures you have either done or plan to do:

		have done	plan to do
A.	Install shower flow restrictor	48	39
B.	Install toilet water saver	58	36
C.	Turn down hot water heater	87	19
D.	Drain hot water heater	49	32
E.	Insulate hot water heater	17	23
F.	Adjust gas flames or pilot lights	61	13
G.	Change heater or cooler temp. setting	92	7
H.	Clean refrigerator condensor	76	30
I.	Change some cooking habits	100	6
J.	Make or buy solar cooker	7	23
K.	Make or buy other solar device	4	19
L.	Shield windows	67	25
M.	Paint roof white or reflective	51	14
O.	Caulk windows or cracks	50	24
P.	Adapt fireplace	14	5
Q.	Change to low-water landscaping	66	11
R.	Other (Please list)	18	
		919	397

2. Please check the statements that most nearly agree with your opinions:
   - 35 A. I don't know what to think about energy - I have little confidence in what the leaders say.
   - 189 B. I consider energy conservation worthwhile, because our resources are dwindling.
   - 11 C. I don't think there is an energy shortage, either now or in the foreseeable future.
   - 150 D. Energy conservation is important because we import too much foreign oil.
   - 15 E. We don't need to conserve energy if we concentrate on finding new supplies of fossil fuels or develop new technologies.
   - 52 F. Energy conservation is worthwhile because my bill is too high.
   - 14 G. I want to save energy but need more information.
   - 28 H. I want to save energy but need financial or technical help.
   - 5 I. I wanted to try one of your ideas, but couldn't buy what I needed. (Please tell what you tried to get.)
   - 57 J. Energy conservation won't lower my bill - they'll just raise the rates anyhow.
   - 1 K. I not interested in energy.
   - 3 L. Other (Please write out on other side or elsewhere.)

3. Please tell us your reaction to the talk we gave your group.
   It was: 167 helpful, 158 interesting, 2 dull, 8 nothing new,
   4 too short 2 too long, 1 couldn't understand,
   134 inspired me to try at least one conservation idea,
   2 can't remember. 2 couldn't hear

4. Please tell us a little about yourself:
   - A. 52 Male 173 Female
   - B. Age: 8 under 21, 43 21-35, 96 36-65, 73 over 65
   - C. How many people are in your home? 15 1 2, 37 3, 24 4 26 5, 3 6, 0 over 6.
   - D. Income level: 67 under $10,000 a year, 76 $10,000-$20,000 a year, 63 $20,000-$50,000 a year, 3 over $50,000.
   - E. Type of group where you heard our talk:
     47 homemaker 40 senior citizen club 22 school 16 church
     23 professional 21 service club 5 can't remember 44 other

ENERGY SURVEY

As a participant in the "Energy Town Meeting", your views are an essential part of the League of Woman Voters Energy Conservation Education Pilot Project. Please complete this survey before leaving tonight. Your answers will be held in strict confidence and used only for this project.

1. Do you believe there is an energy shortage? _yes _no _don't know
2. Do you feel technology will "bail us out" of the energy shortage? _yes _no _don't know
3. Do you believe you as an individual can make an impact on energy consumption? _yes _no _don't know
4. Do you believe most Americans are energy "wasters"? _yes _no _don't know
5. Do you believe it is the responsibility of every U.S. citizen to conserve energy voluntarily? _yes _no _don't know
6. Do you believe Americans will conserve energy only when government controls are imposed? _yes _no _don't know
7. Would you conserve energy to save money? _yes _no _don't know
8. Are you a homeowner? _yes _no
   If yes, single-family? _, two-family? _, three-family? _
9. Are you a renter? _yes _no. If yes, single-family? _, other _____
   Do you pay heat? _yes _no. Hot water? _yes _no. Electricity? _yes _no
10. Do you practice energy conservation in your home? _yes _no
    If yes, check the following measures you follow
    __ turn down thermostat to 68° or less during the day, 60° or less at night
    __ pulling shades and/or closing drapes at night in the winter
    __ adjusting water heater to 140° or less
    __ opening dishwasher to let dishes air dry
11. Do you have adequate insulation? _yes _no. Storm windows? _yes _no.
    Air conditioning? _yes _no
12. How did you learn about the "Energy Town Meeting? Newspaper _, Newsletter _, radio _, flyer _, poster _, school _, other (explain) _____
13. Why did you attend?

14. Did the speakers provide useful information? _yes _no
    Comments:

15. Were the exhibits interesting and helpful? _yes _no
    Comments:

16. Overall was the meeting worthwhile? _yes _no
    Comments:
17. Do you plan to attend one of the Home Insulation Workshops? _yes _no
18. Do you represent a local organization? _yes _no _____organization

Name_____
Address_____
Phone_____

THANK YOU

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4. Do you believe most Americans are energy "wasters"? _yes _no _don't know
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6. Do you believe Americans will conserve energy only when government controls are imposed? _yes _no _don't know
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13. Why did you attend?

14. Did the speakers provide useful information? _yes _no
    Comments:

15. Were the exhibits interesting and helpful? _yes _no
    Comments:

16. Overall was the meeting worthwhile? _yes _no
    Comments:
17. Do you plan to attend one of the Home Insulation Workshops? _yes _no
18. Do you represent a local organization? _yes _no _____organization

Name_____
Address_____
Phone_____

THANK YOU

ENERGY TOWN MEETING

Questionnaire

(131 Responses)

	Yes	No	Don't Know	Yes-Cheap Energy
1.	119	4	5	3
				No Answer
2.	50	44	34	3
3.	107	13	10	1
4.	124	4	2	1
5.	128	2	1	
6.	75	37	17	2
7.	122	3	3	3
8.	111	18		2 (students)
	3 (2-family houses)			
9.	18 (5 single family houses)			
	7 yes all 3			
	1 no-heat yes, water and electricity			
	8 none			
	2 n.a.			
10.	128	3		
	109 68° or less			
	107 drapes			
	52 water heater			
	53 dishwasher			

11.	68 yes	60 no adequate insulation	3 N.A.
	120 yes	8 no storms	3 N.A.
	111 yes	17 no air	3 N.A.

12. 2 radio
1 poster
26 flyers
49 newspaper
18 newsletter
9 school
4 friends
9 school
3 Energy Comm.
4 N.A.

13. Most - to learn
to conserve
50 save $
One student reporter
Several girl scouts working on badges
One - my energy bill is $2,000

Yes	No	No Answer
110	17	4
114	10	7
114	13	4

Comments:

Unfavorable

Lousy speakers (but knowledgeable)
More specific (more depth)
Not enough for knowledgeable people
Too commercial
Too long
Too repetitive

Favorable

Showed what can be done
Overall helpful
Good literature
Excellent
Super
Selection of speakers & topics excellent
Video - good
Well run

Telephoner:

Name: _____ Telephone: _____

I. Did the Energy Town Meeting lead you to take any measures to conserve Energy? (e.g. install flow restrictor shower head, insulation, buy pilotless gas appliances, other energy conservation measures)?

Yes_____ No_____ If yes, what did you do? If no, what prevented you from taking such measures?

II. Have you attended any of the League's other Energy programs? (E.G. Home Insulation Workshop or Woodburning Clinic?)

Yes_____ No_____ If yes, which ones?

III. Have you seen the League's energy tips in The Herald?

Yes_____ No_____

IV. Have you any questions concerning energy conservation that were left unanswered?

Yes_____ No_____ What is the question?

(After question, say, "We will try to get back to you with some information on that.")

V. The League is setting up an energy clearinghouse. After February 15th you can call the Energy Info Line at 233-7669 for additional information on energy conservation.

Thank you for your cooperation.

FOLLOW-UP

71 Responses

I. 34 Yes 29 No

Installed:

storm doors	2
water-saving shower head	13
woodburning stove	2
pilotless appliances	2
storm windows	4
insulation	12
caulked	10
weatherstripped	5
turned down thermostat	13
turned off appliances not in use	3
signed up for infrared picture	1

Reasons they didn't:

felt they had done everything suggested	11
couldn't find insulation	3
lack of money but planning in the future	11

II. 12 Yes 59 No

Nuclear Energy Program	2
Home Insulation Workshops	9
Woodburning Clinic	1

III. Yes 19 No 52

IV. Yes 7

Questions: More solar information
Why rates keep going up when people conserve
Why town doesn't recycle metal
Most efficient use of appliances, i.e. toaster oven vs. oven
Name of water-saver shower head
Applied to Community Winterization Project
last March and it was never done.

HOME INSULATION WORKSHOP SURVEY

Please take a few minutes to complete this survey before leaving. Your views are an essential part of the League of Women Voters Energy Conservation Education Pilot Project.

1. How did you learn of the workshop? (Explain briefly) Newspaper __, Newsletter __, Radio __, Flyer __, School __, other _____.

2. Which of the following best describes what you learned about home energy savings: Nothing new __, A little bit more __, A great deal more __.

3. What part of the workshop was
   (a) most worthwhile _____.
   (b) least worthwhile _____.

4. If the workshop were to be given again, what aspects would you want expanded or dealt with more fully? (check one or more)
   ___ the annual savings calculations
   ___ materials and insulation techniques
   ___ dealing with a contractor and getting help generally
   ___ other aspect(s) Explain briefly _____
   _____

5. Do you feel the workshop will stimulate you to specific energy conservation measures in your home? yes ___ no ___.

6. Other comments:

THANK YOU!

THE LEAGUE OF WOMEN VOTERS, WEST HARTFORD, CONNECTICUT
BOX 191 – 06107

WORKSHOP I SURVEY - OCTOBER 20, 1977

(10 Responses)

1. 3 Newspaper
   2 Newsletter
   3 Flyer
   1 School
   1 Friend
   2 LWV

   Some indicated more than one source

2. 4 A little bit more
   6 A great deal more

3. 5 All of it
   5 Calculations

   most worthwhile

   1 Some technical details on slide
   9 No Answer

   least worthwhile

4. 7 Materials
   4 Dealing with contractors

5. 9 Yes 1 No Answer

6. Excellent
   Thank you

WORKSHOP II SURVEY - OCTOBER 26, 1977

(17 responses)

1.
- 7 Newspaper
- 5 Flyer
- 1 School
- 2 Energy Town Meeting
- 3 League
- 1 Newsletter

Some indicated more than one source

2.
- 9 A great deal more
- 8 A little bit more

3. Most Worthwhile:
- 9 Calculations
- 1 Definitions in Worksheet
- 3 All
- 4 No Answer

Least Worthwhile:
- 2 Film
- 1 Open of Session II
- 14 No Answer

4.
- 4 Annual savings
- 13 Materials
- 5 Dealing with contractor
- 1 Other - use of wood

5. 14 - Yes 2 - No 1 - A little

6. Comments:

Educational
Very well done
Thank you
My house not typical
People - knowledgeable
Excellent

HOME INSULATION WORKSHOP SURVEY

1. How did you learn of the workshop? Newspaper 6 Newsletter 4 Flyer 3 School 1

2. Which of the following best describes what you learned about home energy savings: nothing new 1 a little bit more 2 a great deal more 10

3. What part of this owrkshop was (a) most worthwhile: meeting Cathy Golas, discussion of insulation thickness and use, the computing of heat loss and fuel usage, all parts, fine program, explanations and help from instructor (b) least worthwhile: all the numbers-I wanted practical "how to" information, maybe a few more examples of materials, materials discussion, nothing

4. If the workshop were to be given again, what aspects would you want expanded or dealt with more fully?

4 the annual savings calculations
8 materials and insulation techniques
3 dealing with a contractor and getting help generally
1 other aspect(s) Explain briefly : When do we get it, how do we put it in, how do we pay for it, danger when working with old homes

5. Do you feel the workshop will stimulate you to specific energy conservation measures in your home? yes 12 no 1

6. Other comments: excellent presentation, workshop on heating systems would be appreciated, well worth it, very worthwhile, thank you very much, dull dulll dullll I wonder how all these numbers go over in a town without accountants and engineers

HOME INSULATION WORKSHOPS EVALUATION

(Please make calls by next Board meeting. Return completed forms to Betty Gallo at the meeting or before to 37 Ware Avenue)

Suggested introduction:

Hello, I am (name). I am calling for the League of Women Voters Energy Project. We are calling all participants at our Home Insulation Workshops. Would you be willing to answer a few follow-up questions?

1. Identify specific energy conservation actions taken this year as a result of your attending insulation workshops:

	Do-It-Yourself	Contractor	$ Spent
____a) weatherstripping	_____	_____	_____
____b) storm windows/doors	_____	_____	_____
____c) insulation walls/attic/basement/ floors (identify by circling)	_____	_____	_____
____d) flow-restrictor shower head	_____	_____	_____
____e) caulking	_____	_____	_____
____f) recycling papers (Town Recycling Program)	_____	_____	_____
____g) general replacement/repairs	_____	_____	_____
____h) other _____	_____	_____	_____

2. If no action, what obstacle prevented you from doing something to conserve energy?

3. Were the materials in your Energy Kit helpful? _____Yes _____No

   Which publication did you find most helpful? _____

   Which publication did you find least helpful? _____

4. Have you any yet unanswered questions concerning energy conservation?

5. Announce Clearinghouse Energy Info Line 233-7669 4pm - 6pm Mon-Fri.

Interviewer _____ Date _____

FOLLOW-UP

Home Insulation Workshop 10/20

13 people attended

8 responses

1. Identify specific energy conservation action taken this year as a direct result of your attending insulation workshops:

		Do It Yourself	Contractor	$ Spent
4	a) weatherstripping	4		
1	b) storm windows/doors		1	$300
3	c) insulation walls/attic/basement	2	1	390
1	d) flow-restrictor shower head	1		
4	e) caulking	4		
3	f) recycling papers (Town Recycling Program)	3		
1	g) general replacement/repairs	1		
3	h) other--insulated drapes	1		
	wrapped hot air runs	1		
	leaking faucet	1		$25

2 None

2. If no action, what obstacle prevented you from doing something to conserve energy?

2 money

1 had already done everything

3. Were the materials in your Energy Kit helpful?

7 yes 0 No 1 No Answer

Which publication did you find most helpful?

3 R-Values 1 Energy Costs 1 Calculation Booklet

4. Have you any yet unanswered questions concerning energy conservation?

More information about thermal camera

Dangers of foam insulation

FOLLOW-UP

Home Insulation Workshop 10/26

26 people attended

20 responses

1. Identify specific energy conservation action taken this year as a direct result of your attending insulation workshops:

		Do It Yourself	Contractor	$ Spent
6	a) weatherstripping	5	1	
5	b) storm windows/doors	4	1	$400-few hundred
5	c) insulation walls/attic/basement/ floors (identify by circling)	5		$150-$200
4	d) flow-restrictor shower head	4		
8	e) caulking	8		
4	f) recycling papers (Town Recycling Program)	4		
	h) Others--insulated siding		1	$5,000
	turned down heat			
	sealed cellar windows			
6	None			

2. If no action, what obstacle prevented you from doing something to conserve energy?

2	money	5	done everything
1	just sold house	1	can't get insulation

3. Were the materials in your Energy Kit helpful?

14	Yes	4	No	2	No Answer

Which publication did you find most helpful?

2	degree days	2	calculations
1	Energy Savers	1	211

4. Have you any yet unanswered questions concerning energy conservation?

What wall insulation is best?

Hard to correlate degree days with savings

Dangers of Foam Insulation

FOLLOW-UP

Home Insulation Workshop 12/8

15 people attended

11 responses

1. Identify specific energy conservation action taken this year as a direct result of your attending insulation workshops:

		Do It Yourself	Contractor	$ Spent
2	a) weatherstripping	2		$10 approx.
4	b) storm windows/doors	3	1	up to $300
3	c) insulation walls/attic/basement/ floors (identify by circling)	3		
2	d) flow-restrictor shower head	2		
3	e) caulking	3		
4	f) recycling papers (Town Recycling Program)	4		
1	g) general replacement/repairs	1		
1	h) other new oil fired boiler		1	$1500
4	None			

2. If no action, what obstacle prevented you from doing something to conserve energy?

2	Already done	2	Will do
1	Lack of time	1	Couldn't find insulation

3. Were the materials in your Energy Kit helpful?

8 Yes 1 No 2 No Answer

Which publication did you find most helpful?

R-Values

Estimating Losses

On Foundations

Which publication did you find least helpful? No Answer

Home Insulation Workshop 12/8 Follow-Up

4. Have you any yet unanswered questions concerning energy conservation?

Would like workshop on cleaning and adjusting furnaces.

Roof area needed for solar water heater.

WOODBURNING STOVE PROGRAM

1. How did you learn of the program? Newspaper advertisement 17 Newspaper news article 3 Flyer 9 Newsletter 7 Poster 2 Other 12 .

2. Do you own a woodburning stove? 17 yes 29 no

3. If yes, why did you purchase it? Save fuel, heat vacation home, replace oil system, supplement heat, save money, emergency heat, heat an unheated family room, good price.
   Do you also burn coal? 0 yes 17 no

4. Do you have access to wood? 33 yes 10 no

5. Have you applied for a state permit to cut on state land? 5 yes 41 nO

6. Do you practice energy conservation in your home? 47 yes 0 no

   If yes, check the following measures you follow
   47 turn down thermostat to 68 or less during the day, 60 or less at night
   42 pulling shades and/or closing drapes at night in the winter
   25 adjusting water heater to 140 or less
   23 opening dishwasher to let dishes air dry
   31 participating in the town's paper recycling program

7. Do you have adequate insulation? 25 yes 20 no. Storm windows? 41 yes 4 no

8. Which of the following best describes what you learned tonight about woodburning stoves: nothing new 1 , a little bit more 15 , a great deal more 29.

9. What part of the program was (a) most worthwhile: whole program, questions and answers, creosote problems, safety information, visual presentation, problem-solving, comparisons of different stoves, chimney discussions, slides, information on buying and installation, getting a more realistic view, etc. (b.) least worthwhile: no comments on brand names, some questions redundant, most graphics-inadequate size

10. Other comments: Excellent, very informative, interesting, enjoyable, useful, need specific information on brand names from individuals not associated with the specific products, program is woth tax dollars, more workshops like this one, not as anxious to get wood stove now, advertise these workshops more widely, congratulations to the organizers of LWV

WOODBURNING STOVE PROGRAM -- (Follow-up)

Thank you for agreeing to make calls for the Energy Project. Please make the calls by April 14 and return forms to: Betty Gall, 37 Ware Ave. W. Hartford, CT 06119. If you have any questions please call 233-7955 or 232-0257. A few of these calls may be short long-distance calls. Please submit a bill to the League when you return the forms. Thank you.

Suggested Introduction: Hello. My name is _____. I am calling for the League of Women Voters Energy Project. We are doing a follow-up to the Woooodburning Clinic you attended. Would you mind answering a few questions?

1. Did the Woodburning Stove Program lead you to take any measures to conserve energy (e.g. adding insulation, purchase stove, caulking, and/or weatherstripping)?

   Yes _____ No_____ If yes, what did you do?

   If no, what prevented you from taking measures?

2. Were any of the energy materials given to you at this program especially helpful and did they lead you to take any measures to conserve energy?

   Yes _____ No_____

3. For energy-related information call the Energy Info Line 233-7669 between 4 pm and 6 pm Monday - Friday. Thank you for your cooperation.

FOLLOW-UP

Woodburning Stove Program

(56 attending)

42 responses

1. Did the Woodburning Stove Program lead you to take any measures to conserve energy (e.g. adding insulation, purchase stove, caulking and/or weather-stripping)?

19 Yes

If yes, what did you do?

- 8 bought stove
- 5 weatherstripping
- 8 insulation
- 5 caulking
- 1 storms

23 No

If no, what prevented you from taking measures?

- 5 intend to buy stove
- 6 had stove
- 1 lack of money
- 3 already had done everything
- 4 don't own house
- 1 just bought house
- 1 info wanted for future building
- 4 just wanted information

2. Were any of the energy materials given to you at this program especially helpful and did they lead you to take any measures to conserve energy?

29 Yes 12 No 1 No Answer

RESULTS 44 of a possible 170 responses

QUESTIONNAIRE: League of Women Voters RE: ENERGY SAVERS

1. Have you distributed the materials ("Junior Energy Savers" booklet, sticker, "Tips for Energy Savers") to the children?

   Yes 43 No 1* * Teacher will as a culmination of a conservation unit.

   If Yes, which of the following describes your method of distribution:

   26%* Distributed materials with minimal discussion. * More than one half also checked "Discussed other ..."

   67% Distributed materials after thorough discussion.

   42%* Distributed "Junior Energy Savers" booklet to be completed and returned. Stickers distributed after return of booklet.
   *Teachers were not instructed to do so.

   - *Made "draftometer" with children. * Only one teacher

   7%* Did a lesson centering around meter reading. * Three teachers

   74% Discussed other aspects of energy and energy conservation.

   33% Other: _____

2. Asking for a show of hands, how many children in your class actually checked through their house with a parent?

   _____ Number out of class

   17% indicated 80-100% of class "checked through .."
   19% indicated 50- 80% "
   31% indicated 20- 50% "

3. Has this program led you to a greater awareness of energy conservation?

   Yes 29 No 14

   If Yes, what specifically has this program accomplished: Some of the comments:

   "The program helped to develop a greater awareness of the energy problem and the need for conserving energy."
   "The youngsters were able to feel they were able to do something positive to save energy."
   "Booklet 'Tips for Energy Savers' was excellent."

4. Comments: "Excellent resource and reference. Contributed greatly to awareness through involvement. Youngsters related well to resource materials. Good motivational technique."

   "Very helpful, interesting, well organized."

5. Grade Level: _____

Thank you for your cooperation. Return questionnaire to: (Prior to May 30) Your Vertical Science Team Member

Attention: Vertical Science Team Members. Please send to: Art Woznicki, Education Center

RESULTS 28 responses IV-J

LEAGUE'S LATEST

THE LEAGUE OF WOMEN VOTERS • WEST HARTFORD, CONNECTICUT

PRESIDENT: Brita Tate 521-1864 EDITOR: Ki Miller 236-0731
MEMBERSHIP: Mary Meyer 521-1431 April 1978

TO: PARENTS OF ELEMENTARY SCHOOL AGED CHILDREN

FROM: KATHY GOLAS, ENERGY PROJECT MANAGER

Please help us evaluate the "Junior Energy Savers Program" by taking time now to complete the following questions and return to:

Kathy Golas
145 Ballard Drive, 06119

These are needed for our final report to National this month. PLEASE HELP and PLEASE HURRY! Thanks.

(1) Did your child/children bring home
"Junior Energy Savers Booklet" YES 26 NO 2
"Tips for Energy Savers" YES 22 NO 6

(2) Did you (or your spouse) check through your home and answer the questions posed?
YES 22 NO 6

(3) Did these materials lead you to take any measures to conserve energy?
YES 10 NO 18

If YES, what did you do:
27% lower thermostat
12% install shower head
19% recycle paper
8% recycle glass
15% install caulking and/or weatherstripping
8% other (please specify) turn out lights, furnace adjustment

(4) Do you think your children have become more aware of energy conservation?
YES 24 NO 4

(5) How would you rate your household concerning energy conservation awareness? Please circle one number.

Energy Savers _____ Energy Wasters

	10	9	8	7	6	5	4	3	2	1	0
%	4	21	32	14	14	18	0	0	0	0	0

(6) Age of child/children:
School:

(7) Comments: "Had already taken measures in question 3."
"My child loved the booklets."

THANK YOU FOR YOUR COOPERATION

Appendix V

174 People Answering Questionnaire at Neighborhood Energy Meetings

EVALUATION SHEET

League of Women Voters Energy Education Grant Program

Name _____ Phone No. _____

Address _____

1. Please check the extent to which you agree with the following statements.

		Agree Strongly	Agree Somewhat	Disagree Somewhat	Disagree Strongly	Don't Know
a.	The public has been given a realistic picture of the energy situation facing the United States.	27	77	41	22	7
b.	There is a definite energy shortage.	93	62	12	3	4
c.	Technology will "bail us out" of the energy shortage.	20	45	63	31	15
d.	Americans will conserve energy only when government controls are imposed.	34	76	46	15	3
e.	As an individual, I can make an impact on energy consumption.	66	85	13	1	1
f.	Anything I have done (or will do) to conserve energy was primarily to save money rather than to save energy.	23	61	56	17	2
g.	The topics of this meeting were those that I expected to be covered.	87	69	2	1	1
h.	I learned a great deal from the information presented at this meeting.	66	87	5	1	1
i.	I considered myself well informed on these topics before the meeting.	19	87	43	9	2

2. Please indicate the areas in which you would like more information.

3. Please list those specific things which you <u>have done</u> to save energy.

4. Please list those specific things which you <u>plan to do</u> to save energy.

5. Other comments about this meeting or the League Energy Program in general. (Please use back of sheet)

15 - 4H Students Ages 9-16

EVALUATION SHEET

League of Women Voters Energy Education Grant Program

Name _____ Phone No. _____

Address _____

1. Please check the extent to which you agree with the following statements.

		Agree Strongly	Agree Somewhat	Disagree Somewhat	Disagree Strongly	Don't Know
a.	The public has been given a realistic picture of the energy situation facing the United States.	5	6	3		1
b.	There is a definite energy shortage.	12	2		1	
c.	Technology will "bail us out" of the energy shortage.		4	7	3	1
d.	Americans will conserve energy only when government controls are imposed.		7	4	2	2
e.	As an individual, I can make an impact on energy consumption.	5	9			1
f.	Anything I have done (or will do) to conserve energy was primarily to save money rather than to save energy.	1	5	4	4	2
g.	The topics of this meeting were those that I expected to be covered.	2	7	2		1
h.	I learned a great deal from the information presented at this meeting.	6	7	2		
i.	I considered myself well informed on these topics before the meeting.	2	10	1	2	

2. Please indicate the areas in which you would like more information.

3. Please list those specific things which you <u>have done</u> to save energy.

4. Please list those specific things which you <u>plan to do</u> to save energy.

5. Other comments about this meeting or the League Energy Program in general. (Please use back of sheet)

H.B.

LEAGUE OF WOMEN VOTERS OF MINNESOTA

555 WABASHA • ST. PAUL, MINNESOTA 55102 • TELEPHONE (612) 224-5445

To: Florence Chichester, LWVUS
From: Margaret Post, Energy Education Project Manager
Re: Supplemental Report
Date: August 8, 1978

SUPPLEMENTAL REPORT
League of Women Voters of Minnesota's Energy Education Project

The League of Women Voters of Minnesota's Energy Education Project was designed to "identify the energy education needs of rural, small town and urban areas, and to incorporate them into a statewide energy outreach program." A planning committee determined that the need was at the local level for energy resource persons who could provide a national and state focus to the reality of the energy problem as well as practical information on action that communities and individuals could take to deal with the problem.

Two series of workshops were held in Fall, 1977, and in Winter, 1978, to give Leaguers and community leaders exposure to energy issues and to exchange energy education ideas. Workshops were planned and staffed in cooperation with the Minnesota Energy Agency; fall workshops attracted more than 500 in 5 state locations; winter workshops trained 95 persons to be "energy resource persons" for their local communities.

According to the LWVMN proposal for the State League Energy Education Program, energy resource persons trained in these workshops would:

1. Contact government, business and community organizations to present energy education programs;
2. Act as information sources for their communities in energy conservation;
3. Act as liaisons between the Minnesota Energy Agency and the community;
4. Encourage community leaders to form Energy Commissions;
5. Contact and cooperate with other groups involved in energy education;
6. Promote the wise use of energy.

An addendum to the proposal outlined a plan to purchase energy films and circulate them as an energy education project for energy resource persons in their communities if funds allowed.

Additional funding from industry and government secured a total of 5 energy films for the project. Four are in a statewide film circuit, and one is in the St. Paul Public Library film collection which is not served by the statewide circuit.

Finally, as an outgrowth of the LWVMN Energy Education Project, the LWVMN collected data and wrote a state energy resource directory which was completed at the end of July, 1978. The Minnesota Energy Agency will publish the directory

in Fall, 1978, and will circulate it as part of its outreach program to local units of government, libraries and selected educational institutions.

Activities Reported

Local

Thirty-one Leagues had representatives as energy resource persons during the winter workshops. Representatives of 23 Leagues and two non-League individuals responded to the enclosed questionnaire regarding energy education projects in which they were involved since the winter workshops. Below are descriptions of activities drawn from questionnaire returns:

I. Film Programs: 11 Leagues reported that they had conducted energy film programs in their communities. Approximately 2,000 non-Leaguers viewed the films. Four additional Leagues have plans for community-wide film discussion programs beginning in Fall, 1978. A sample announcement from the St. Paul League describing such a program to community organizations is attached. The new state film catalog will soon be released, advertising the films to librarians, teachers and other interested citizens who will have access through the film circuit. Circulation and viewer statistics will be kept by the state library system and by the St. Paul Public Library. The films remain the property of the League of Women Voters of Minnesota.

II. Energy Fairs: 5 Leagues reported that they cooperated with other community groups in organizing local energy fairs. Approximately 10,000 persons attended these fairs. League energy films were shown at booths during three of the fairs.

III. Sun Day Activities: 10 Leagues reported participation in Sun Day activities. Approximately 8,500 persons were involved in the reported events, but some energy resource persons' activities cannot be recorded in numbers such as sending in songs and bibliographies to radio stations, instigating local government declarations on Sun Day, and sponsoring school poster projects. One resource persons arranged solar displays in the shopping mall where she is manager. Two others organized successful tours of solar homes and solar water heating projects. Several persons mailed or carried Sun Day packets to school districts and individuals. The Minnesota Energy Agency supplied materials to all energy resource persons.

IV. Local Energy Awareness Committees: 7 Leagues reported efforts in the formation of energy awareness committees for local governments. Energy policies have already been adopted by some governmental units.

V. Other Reported Local Activities: In addition to the above activities, energy resource persons have reported a wide range of energy education ventures they developed to serve their communities' needs:

Setting up an energy booth at a county fair;
Teaching insulation techniques to civic groups (200);
Demonstranting and testing a solar hot water heater (60);
Producing a local television show on the major energy issues;
Conducting home energy audits (18);
Bringing an agriculture extension speaker to talk to farmers on energy and agriculture (25);

Conducting a workshop and touring a large coal-fired electric generating plant (40);
Helping to get energy planning grants for local communities;
Providing bibliographies and information to a local radio station.

State

Statewide Energy Education Activities:

Showing of the League's energy films to the state curriculum committee developing elementary energy curriculum (50 teachers);
Speaking about the project to the state convention of the American Legion (100);
Judging energy projects at the state convention of the Future Homemakers of America (50);
Sitting on hearing panels for statewide citizen participation in the Minnesota Energy Agency's Biennial Report (1,000);
Arranging Honeywell Home Analyzer demonstrations at State Council (100);
Sitting on interview committee for hiring of two local outreach personnel for the Minnesota Energy Agency;
Developing commercial placemats with Wisconsin Paper Mills with energy quizes and games to be sold to Minnesota restaurants;
Collection of data and writing of Energy Resource Directory for Minnesota.

In addition, at the suggestion of the Minnesota Energy Agency, the project manager sat on the consumers panel during the Region 5 Solar Energy Policy Forum in Chicago on June 26, 1978.

Evaluations

I. Workshops: Both energy education workshops had excellent evaluations, and judging by the activities that were carried on later in local communities, the results continue to be far-reaching. Planning for the workshops took many hours of thought and negotiations but created a positive foundation for later Minnesota Energy Agency-project cooperation. Participants indicated that travel expenses and lunch, paid for by the grant, were essential in their involvements. Paid babysitting fees would have attracted more interested volunteers.

II. Local Activities: Direction on energy education projects was open-ended. This accounts for a wide variety of projects at the local level. More grant money should have been allotted for resource persons' communication and support following the workshops.

III. Films: The skills and time commitment required of film/discussion leaders are too demanding for most volunteers. Although a discussion guide was written, no training for the leader was provided. At the same time, the films meet a very real need in the state. They will have the widest possible circulation and will be cleaned and repaired at no cost to the project.

IV. Statewide Activities: Workshops and resulting local activities built excellent communication between the project, the Minnesota Energy Agency, and the Public Advisor. Large utilities, businesses & statewide citizen organizations with energy interests became aware of the League energy project through the directory project.

V. National support: Just as more grant monies should have been allotted to the state project for local support, more resources should have been allotted to the national office for state support for idea-sharing and other communications.

St. Paul League
of Women
Voters

Central Manor
26 E. Exchange Street
St. Paul, MN 55101
(612) 222-3178

May 23, 1978

Greetings!

The League of Women Voters of St. Paul has a film/discussion program on the politics of energy in which your group may be interested. The purpose of the energy program is to involve audiences in the reality of the energy crisis, to assist them in understanding the major policy issues, and to enlarge their perception of their own power in the energy choices ahead.

There are four different films on energy available to us which we can choose to show. These films explain the facts of the energy situation and explore some of the alternatives.

The following are some of the issues we would like to explore with the audience along with showing one or two films.

1. How much do we really know about energy?
   The discussion leader will point out some of the facts on energy such as why there is an energy problem, where does our energy come from? Where does it go?

2. What havebeen the policies on energy in this country?
   How is that changing?

3. The discussion leader will point out the energy problems that we are concerned about.

4. What are our choices in solving the energy problem?
   Growth rate? New sources? How should they be implemented?

By pointing out some of the facts on energy and then discussing the film with the audience we hope to involve people in the decision making process so they have a voice in effecting our energy policy based on sound facts and an explicit set of values.

We will also have available to the audience names and addresses of legislators to contact in order to express their views on energy.

Groups or persons interested should contact:

Virginia Mahlum, 298-1305
or
Kathleen Gilder, 774-2947

League of Women Voters of Minnesota, 555 Wabasha, St. Paul, Minnesota - July, 1978

QUESTIONNAIRE
Energy Resource Persons SAMPLE

Name: Marj Jacobsen

Address: 1767 West Mark, Winona, MN 55987

Phone: 507 452 2644

League Member? x Yes _____ No

Please describe energy-related activities in which you have been involved since February, 1978:

Sun Day x

Film Programs x

Local Energy Policy Committee x

School Programs _____

Energy Fairs _____

Other (please describe):

Two of us from our local League set up a home audit for persons in the community. Our two trained energy persons worked with us. As the time was limited they were able to do only 18 audits, but hope to do more this fall. Everyone who had it done was very pleased with the audit.

If you checked any of the above, describe briefly when, where, how many people attended for each activity:

May 3, 1978 The energy committee in cooperation with several other groups celebrated Sun Day in the Mall in down town Winona. We estimated around 2000 people in attendance throughout the day. The film drew around 200.

Do you plan to be involved in energy-related activities during 1978-79?

_____ Yes _____ No

If yes, please describe what is planned.

We hope to, but as yet aren't certain what will be done besides more audits.

If funding were available to continue this project, which direction should we take?

1. Same as this past grant program: x
2. Same as this past grant program with energy resource persons receiving pay for work: _____
3. State-wide TV film showing: _____
4. Purchase of materials for library: _____
5. Other (please suggest!): more education of public to the real need for energy conservation. Speakers--public hearings---panel discussions

Will you be available as an energy resource person in 1978-79? x Yes _____ No

LEAGUE OF WOMEN VOTERS OF THE UNITED STATES 1730 M STREET, N.W., WASHINGTON, D.C. 20036 — LEAGUE ACTION SERVICE — $7.50 A SESSION

Action Alert

SPOTMASTER ALERT: For latest developments on League issues call Spotmaster (202) 296-0218 from 1 p.m. on Fridays to 3 p.m. on Mondays (EST).

August 16, 1978

TO: State and Local Leagues

FROM: Ruth Hinerfeld, President; Nancy Neuman, Action Chair; Dorothy Powers, Energy Chair

RE: Tax Credits for Energy Conservation and Solar Energy

For Immediate Attention

Conferees on the tax portions of the National Energy Act last year agreed in principle to provide tax credits for the purchase and installation of energy conservation and solar energy devices and tentatively resolved many of their differences over how the tax credits should work. But, because of the continuing controversy over the crude oil equalization tax, the tax credits system has never been formally adopted in conference.

There is a growing fear that the tax credits for energy conservation and solar energy will not be adopted this year because they are tied in conference to the crude oil equalization tax and other controversial tax measures in the National Energy Act. There is also a fear that continued delay in enacting the tax credits will make it more difficult for the nation to achieve energy conservation and the use of renewable resources in an expeditious manner. Indeed, solar energy companies report that their sales have dropped in the last year because people are waiting for passage of the tax credits before investing in solar devices.

Conservation and solar advocates have now adopted two strategies to secure passage of the tax credits this year. First, pressure will be brought on the conferees, from inside and outside the Congress, to separate the tax credits from the other tax elements of the National Energy Act so that they can be finally adopted by the House and Senate. Second, moves will be made in the House and Senate to attach the tax credit provisions to other tax bills moving through the Congress. For either of these strategies to be successful, there must be strong general support for passage of the tax credits this year.

Please write, call, or send mailgrams to your Members of Congress (MCs) urging that they work for and support passage of tax credits for conservation and solar energy. Emphasize that the tax credits are a crucial element of any national energy strategy and that the Congress' work on energy this session will not be complete unless the tax credits are adopted.

C 439

If you have an MC on the conference committee (listed below) ask that the tax credits be separated from the rest of the tax portions of the National Energy Act so that they may be adopted promptly by the full House and Senate. Ask MCs who are not on the conference committee to contact the conferees and urge that the tax credits be separated. In any case, ask your MCs to support the tax credits on the floor by voting to attach them to other bills. The vital point to be made is that tax credits for the purchase and installation of conservation and solar energy devices should be passed this year.

Conferees on the tax portions of the National Energy Act: Senate: Long (D LA), Talmadge (D GA), Ribicoff (D CT), Gravel (D AK), Bentsen (D TX), Hathaway (D ME), Matsunaga (D HI), Moynihan (D NY), Curtis (R NB), Hansen (R WY), Dole (R KS), Packwood (R OR), Laxalt (R NV). House: Ullman (D OR), Ashley (D OH), Staggers (D WV), Bolling (D MO), Foley (D MA), Rostenkowski (D IL), Vanik (D OH), Corman (D CA), Waggoner (D LA), Rangel (D NY), Dingell (D MI), Rogers (D FL), Eckhardt (D TX), Moffett (D CT), Sharp (D IN), Wilson (D TX), Reuss (D WI), Archer (R TX), Steiger (R WI), Anderson (R IL), Brown (R MI), Brown (R OH), Collins (R TX), Horton (R NY), Wydler (R NY).

General Provisions-- General agreement has been reached on the following provisions for a tax credits system: Energy conservation tax credits would be available for 20% of the first $2000 of expenditures on an extensive list of items, including weatherstripping, storm windows and/or doors, clock thermostats, and flue constrictors to reduce heat loss from furnaces. Solar tax credits would be available for 30% of the first $2000 and 20% of the second $8000 of expenditures, up to a maximum credit of $2200. Eligible solar items include active and passive heating and/or cooling, water heating, photovoltaics, and wind equipment. The executive branch could expand the list of items eligible for both solar and conservation tax credits.

Both types of credits would be available until 1986 and could be carried forward by a taxpayer for up to two years if tax liabilities would be more than offset by the credits in a particular year. The credits could be claimed by homeowners, renters, condominium owners, and cooperatives, but only for expenditures on principal residences in the U.S. or its territories. Finally, expenditures on new or existing residences would be eligible for the solar credits while only expenditures on residences in existence on April 20, 1977 would be eligible for the conservation credits.

League of Women Voters Education Fund
1730 M Street, N.W.
Washington, D.C. 20036

MINNESOTA
(state)

PRELIMINARY PROPOSAL FOR A STATE LEAGUE
ENERGY EDUCATION OUTREACH PROJECT
(PHASE II)

Date: September 12, 1978

League: Minnesota

Address & Phone: 555 Wabasha, St. Paul, MN 55102
(612) 224-5445

State President: Helene Borg

Address & Phone: P.O. Box 5, Mound, MN 55364
(612) 472-2674

1. Workshop Participant (project manager): Marg Post

   Address & Phone: 1874 W. Skillman, Roseville, MN 55113 - (612) 636-4409

2. Workshop Participant:

   Address & Phone:

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Evaluation of Phase I

1. Briefly, what were the objectives of the first state League energy education project?

   To identify the energy education needs of rural, small town and urban areas and to incorporate them into a statewide energy outreach program. In practice this goal meant training League and other community leaders as energy resource persons, purchasing films for film/discussion programs for community groups and writing a directory of energy-related agencies, organizations and businesses involved in energy education in Minnesota.

2. From the state League's point of view, was the project successful in meeting those objectives?

   a. If yes, what aspects contributed significantly to its success?

   The project demanded cooperation with the Minnesota Energy Agency that resulted in a solid working relationship between the LWVMN and the agency. Please see LWVMN Phase I "Supplemental Report" of August 8, 1978 for activities resulting from energy resource persons training. Films are circulating, meeting a need for energy-related audio-visual materials available to adults as well as to the shcool aged. Finally, the directory filled a need in the state for coordination of existing energy education efforts.

   b. If no, why not? What, if anything, do you think should have been done differently or should be done differently in another project?

   Monies were spread much too thinly and none was left for follow-up on any of the three projects. Energy Resource Persons are requesting more information on projects they might try in their communities but there is no money for idea-sharing. The films are advertised in a catalogue in public libraries across the state but community groups are not aware of them unless they have been specifically contacted by resource persons who have chosen to do so. The directory is being indexed and will go to the printers in the near future. There is no money for publicity efforts and coordination to see that the right people know about the directory and what it can do for them.

Description of Phase II

Describe your overall proposed project, including your plans to make full use of effective materials developed in the first phase and to increase your audience or to target certain groups.

During Phase II the LWVMN proposes to follow through on the efforts begun during Phase I by activities described below.

1. Energy Resource Persons and LWV Energy Chairs have requested updates and idea sharing on energy education projects that have been tried in communities across the state. Phase II monies will go toward writing and mailing four newsletters on energy and education projects.

2. Under Phase I the LWVMN purchased five energy films which are now circulating through a state library film network. Under Phase II these films will be advertised on brochures and mailed to adult community organizations including those identified in the directory project. Other monies will purchase additional media material. Under consideration at this time are "Solar Energy" and "Wind and Water," two films made from a Nova production and now available through Time-Life Films, and "Grassroots Energy," a new film dealing with the power line conflict in Minnesota. The Minnesota Energy Agency will contribute a copy of its slide/tape show on the Biennial Report which gives an analysis of the Minnesota energy situation. This will be circulated to local Leagues if grant monies are available for postage and handling. Under Phase II the slide/tape show will be advertised and mailed upon request.

3. The LWVMN collected data and wrote an energy resource directory for Minnesota under Phase I. Under Phase II the LWVMN will advertise and promote the directory across the state.

Timetable — Give a brief outline of goals or activities you would plan to accomplish in each time period.

Nov--Dec	Purchase of additional films; writing of film brochures; promotion of Energy Resource Directory; writing of first energy resource newsletter.
Jan--Feb	Update mailing list for energy resource persons; mail first newsletter; begin circulation of Minnesota Energy Agency slide/tape show; mail advertisements of films and slide/tape show; writing second energy resource persons newsletter.
Mar--Apr	Continue promotion; mail second newsletter; write third newsletter.
May--June	Continue promotion; mail third newsletter; write fourth newsletter, mail.

Budget

Film purchases	$800
Film promotion	200
Slide/tape promotion	400
Directory promotion	500
Newsletters	300
Manager's stipend	400
Grant administration	500
Presentations	500
Telephone	100
Travel	300
	$4000

SEND THIS PROPOSAL BY SEPTEMBER 20, 1978 TO THE ENERGY DEPARTMENT, LEAGUE OF WOMEN VOTERS EDUCATION FUND, 1730 M ST., N.W., WASHINGTON, D.C. 20036.