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Activities of the Department of Energy in Education

***Annual Status Report
FY 1978***

Published January 1979

U.S. Department of Energy
Assistant Secretary for Intergovernmental
and Institutional Relations
Office of Education, Business and Labor Affairs

MASTER

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The Education Programs Division serves as a "port of call" in the Department of Energy (DOE) to those concerned with the role of educational processes and institutions in implementing the National Energy Plan. In addition, the Division is responsible for administering the following programs which serve overall Departmental missions:

1. Faculty Development Program

The Faculty Development Program is designed to improve the quality of energy education on the elementary, secondary and college level by enhancing the individual teacher's understanding of energy options and issues. This is accomplished through 1-3 week summer workshops which present a variety of energy-related learning experiences for the teachers. These workshops are hosted by various colleges and universities throughout the country and are selected by the Department of Energy on a yearly basis. (Guidelines available.)

2. PREFACE Program

The Pre-Freshman and Cooperative Education for Minorities and Women in Engineering Program provides funds to colleges and universities, which grant engineering degrees, for projects aimed at increasing the educational opportunities available to minority group members and women in the field of engineering. Activities supported include enrichment experiences for students prior to their freshman year in college, financial support and appropriate reinforcement efforts during the freshman year of engineering studies, and cooperative education programs to pre-freshman and freshman minority and women students in engineering (the latter is normally provided by local industry). This program operates on a recurring yearly cycle. (Guidelines available.)

3. Laboratory-Cooperative Program

This program represents a variety of activities that bring college and university faculty, undergraduate and graduate students to Department of Energy Laboratories and Energy Research Centers to participate in ongoing research programs and intensive instructional sessions on energy-related topics. (Guidelines available.)

4. Materials Development Program

The major objective of this program is to develop and disseminate energy education curriculum materials for use in schools. Materials range from kindergarden to the adult/professional level. Most of these materials are available, free of charge, by writing to the Department of Energy, Technical Information Center, P.O. Box 62, Oak Ridge, Tennessee 37830.

5. Special Projects in Energy Education & Training

This aspect of the Education Programs Division provides for the evaluation of proposals submitted by individuals and institutions that demonstrate innovative ideas and unique insights in support of the Department of Energy's programs but which do not fall within the guidelines of a specific program. (Guidelines available.)

6. Public Education Program

This program is designed to provide energy and energy-related information and learning experiences to the public through cooperative efforts with existing civic, public interest, business and labor organizations which have demonstrated the ability to sustain significant public education programs. Such cooperative programs are intended to foster among the public an increasing ability to formulate informed perspectives on energy issues and marketplace options.

7. Used Energy-Related Laboratory Equipment Program

Under this program, colleges, universities and junior colleges receive grants of used energy-related laboratory equipment in an effort to encourage research and development at these institutions in life, physical and environmental sciences and engineering. (Guidelines available.)

8. Vocational-Technical Education Program

The purpose of this program is to ensure an adequate supply of technical and skilled trained manpower in the various energy areas needed to implement the National Energy Plan. This is achieved by coordinating a number of training strategies with community colleges, secondary and postsecondary technical/vocational schools, and technician training programs in industry and labor unions. Activities include a National Energy Education Communications Network, Energy Technician Training Clearinghouse, conferences, workshops and special projects.

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INTRODUCTION

The Department of Energy's responsibilities in implementing President Carter's National Energy Plan include identifying the appropriate role of educational activities and institutions in that work. Education serves the first principle of that plan..."that the energy problem can be effectively addressed only....by a public that understands its seriousness...." In addition, education produces the necessary manpower, at all levels and in all fields, required for the timely development of new energy resources and in improved energy conservation efforts.

This staff study was conducted by Mr. John Ortman of the Education Programs Division of the Office of Education, Business and Labor Affairs. The study describes educational activities as they existed one year after the creation of the Department of Energy. Note that we have included in the study educational activities of educational institutions, with the deliberate exception of the very substantial research activity conducted by universities.

This report is intended to assist DOE program managers in the utilization of educational process in their operations and to provide guidance and information to the public about the Department's educational activities. It is also intended to supplement DOE, IR-0008, Activities of the Department of Energy in Energy Education. For additional historical information, please consult DOE, IR-0008.

J. C. Kellett, Jr.
Director
Education Programs Division
Office of Education, Business
and Labor Affairs

THE ROLE OF DOE IN EDUCATION

I. Overview

The purpose of this report is to describe the various programs the Department of Energy (DOE) administers in which education and training play a significant role. This will help to answer some of the many questions raised by the public as to what the Federal Government, particularly DOE, has done and is doing to prepare the U. S. citizenry to meet the energy challenges of the future. It will also assist school administrators, educational planners and DOE program managers by identifying worthwhile education programs.

There are six major areas in which DOE plays a significant role in supporting and coordinating education-related programs in the U. S. These areas are: (a) training; (b) curriculum development; (c) educational special events; (d) facilities support; (e) the Energy Extension Service; and (f) public education.

A. Training

Before discussing the various training programs under the Department of Energy's administration, an important and essential feature of all DOE training programs must be mentioned here, and that is DOE's commitment to the policy of providing equal employment opportunities for minorities and women in energy-related careers.

UNIVERSITY/DOE LABORATORY COOPERATIVE PROGRAM

CONTACT: Harold Young 252-6350

Program Description: This program formally came into being in 1964. Under this program, university/college students and faculty participate in energy research and training activities at DOE national laboratories.

Progress: In FY 1978, a total of over 1,100 students and faculty participated in the program, representing major fields of study such as life and environmental science; physical science, engineering, mathematical science and social science.

PREFACE

CONTACT: Ruth Ann Verell 252-6480

Program Description: The Pre-Freshman and Cooperative Education Program (PREFACE) began in 1973 for the purpose

of providing support to a number of minority group members and women for enrichment activities and first-year costs at engineering institutions.

Progress: In FY 1978, 16 engineering institutions received grants for training an estimated total of 970 participants.

FACULTY DEVELOPMENT PROGRAM

CONTACT: Chris Kjeldsen 252-6482

Program Description: This program, originating in 1971, provides for teacher (mostly secondary; some elementary and college) training by university faculty and other resource people during summer workshops, with the emphasis on enhancing teacher's skills in energy education.

Progress: In FY 1978, 68 institutions received grants to conduct teacher workshops during the summer.

SOLAR TRAINING CENTERS

CONTACT: Mort Prince 376-1952

Program Description: In September 1977 the Energy Research and Development Administration selected eight universities across the country to include Alaska and Hawaii, to offer training programs in solar-related meteorology.

Progress: In October 1978 the centers became fully operational, offering short courses, community awareness programs and minor/major degree programs in solar meteorology.

SUEDE PROGRAM

CONTACT: Debbie Langford 376-1983

Program Description: In October 1978 the Department of Energy, the Department of Labor, and the Community Services Administration initiated the Solar Utilization Economic Development and Employment (SUEDE) Program. This program provides training opportunities to CETA trainees in solar installation and maintenance skills. The program will be pilot-tested in 10 low-income communities in the U. S.

Progress: The program is in the initial stage of implementation.

GRADUATE TRAINEESHIP PROGRAM

CONTACT: James C. Kellett 252-6480

Program Description: The Graduate Traineeship Program began in 1965 to support graduate students pursuing careers in energy technologies such as nuclear engineering, radiation protection, environmental science, fusion, geothermal, solar, social science and conservation.

Progress: In FY 1978, 120 traineeships were awarded at 56 higher education institutions. (This program has been subsequently phased out due to programmatic revisions.)

FUSION ENGINEER TRAINING PROGRAM

CONTACT: Len Arzt 353-4098

Program Description: In February 1977 the Office of Fusion Technology initiated a program with the Westinghouse Electric Corporation to train graduate students in fusion engineering. Five students participated, leading to certificates of achievement in March 1978.

Progress: In February 1978 an additional five graduate students entered the program. They are currently working with Westinghouse engineers on engineering problems related to fusion.

B. Curriculum Development

For further details concerning curriculum projects not mentioned below, please consult DOE/IR-0008, Activities of the Department of Energy in Energy Education. These projects utilize the Technical Information Center in Oak Ridge, Tennessee, as a chief distributor for these materials.

In FY 1978, the following curriculum projects have been initiated or continued:

SOLAR CORRESPONDENCE COURSE

CONTACT: Debbie Langford 376-1983

This course, developed by the Home Study Institute of Columbus, Ohio, through the Sheet Metal and Air Conditioning Contractors National Association (SMACNA) and the Northamerican Heating and Air Conditioning Wholesalers Association (NHACW) began in March 1978. Since then a total of 263 students have enrolled in the course. (As of November 1978)

SOLAR VO-TECH/COMMUNITY COLLEGE CURRICULUM

CONTACT: Debbie Langford 376-1983

In early 1978, the Solar Technology Transfer Branch sponsored a project to develop curriculum materials and procedures for the training of solar installer instructors. Materials are currently (November 1978) being developed through a series of four workshops, which began in September 1978.

ORAU MINI-COURSES

CONTACT: Don Duggan 252-6482

In mid-April 1978 the Oak Ridge Associated Universities initiated a project to develop two mini-courses in solar and wind energy for grades 9-12 and 4-6. Projected date of completion for classroom use is the winter of 1978.

ENERGY CONSERVATION EDUCATION PROGRAMS FOR SCHOOLS

CONTACT: Don Duggan 252-6482

In May 1978 the Education Programs Division issued a Request for Proposals (RFP) to develop a comprehensive program of energy conservation for schools. The project is now (November 1978) under development by Energy Education Programs, Inc., of Woodstock, Illinois. The project will result in the production of three energy conservation packets for elementary, secondary, and postsecondary administrators.

THIRTY-TWO (32) PERSONALIZED ENERGY-RELATED INSTRUCTION UNITS IN SCIENCE

CONTACT: Don Duggan 252-6482

In June 1978 the Education Programs Division provided funds for the development of 10 units to be incorporated within a 32-unit, self-study, package for grades 9-12. The 32-unit set is expected to be completed by December 1978.

DRIVER'S EDUCATION BOOKLETS

CONTACT: Darrell Beschen 633-8780

In June 1978 the Office of Transportation Applications and Commercialization initiated the development of two driver education booklets, Program Administration/Instructor Handbook and Driver Fuel Economy Guide. They will be available from:

Office of Transportation, Applications and Commercialization,
Conservation and Solar Application, U. S. Department of Energy,
Washington, D.C. 20461.

EASY ENERGY READER

CONTACT: Don Duggan 252-6482

In August 1978 a curriculum development project was begun to produce a booklet containing articles from magazines and newspapers for use in language arts classes. The projected date for availability is in the Spring of 1979.

INTERDISCIPLINARY SECONDARY MODULES

CONTACT: Don Duggan 252-6482

Two new NSTA interdisciplinary units were developed in final form, Bringing Energy to the People: Washington, D.C. and Ghana and Networks: How Energy Links People, Goods, and Services. These are the most recent members of a larger group under development by NSTA; additional information on this major project is given in IR-0008.

Another project underway, not mentioned in DOE/IR-0008, is the development of four sets of learning materials dealing with: energy use in the U.S.; potential energy supply in the future; energy technology; and energy systems. These units were contracted to the NSTA under ERDA in September 1977.

The Educational Services Program of the Technical Information Center, functions as a clearinghouse for many of the above-mentioned materials. Available materials are indexed to facilitate distribution, and many are organized into packets that can be used to fill requests from teachers.

C. EDUCATIONAL SPECIAL EVENTS

Program Description: Special events and activities concerning energy education have been sponsored by the Department of Energy and its parent organizations. These special events include analyses and studies of the role of education in achieving the National Energy Plan which are useful to the academic community and DOE planners.

Progress:

REGULARLY SPONSORED EVENTS

CONTACT: Don Duggan 252-6482

Regularly sponsored events include special energy awards presentations in conjunction with International Science and Engineering Fairs; energy exhibits; and national energy contests.

The DOE also jointly publishes, with the National Science Teachers Association, the Energy and Education Newsletter for teachers and administrators; the Department also regularly supports the "Educational ABC of American Industry" which reaches 2.7 million junior high students.

ENERGY CONSERVATION WORKSHOP-TRAINING REQUIREMENTS FOR TECHNICIANS

CONTACT: Martin Zlotnick 353-2816

In October 1977 this workshop was sponsored by the DOE to examine the relationship between the DOE and the community colleges for training students in energy conservation and energy-related technical skills. This workshop developed a number of conclusions and recommendations pertaining to community colleges, industry and government. A need for close communication and cooperation between industry and educational facilities was emphasized so that community colleges could provide training truly responsive to the special needs of each community and thereby increase the opportunities for the placement of graduates in energy-related fields. There were also specific recommendations for curriculum development and planning activities by DOE. It was the general consensus of those attending the workshop that there is no currently identifiable market to justify the creation of an energy conservation job category. Consequently, it was suggested that required training for existing professions and trades be expanded to include energy conservation concepts and technologies. The workshop took place in Atlanta, Georgia.

THE FIRST NATIONAL WORKSHOP ON ENERGY EFFICIENCY EDUCATION THROUGH TECHNOLOGY TRANSFER

CONTACT: Mike Shapiro 353-2843

In mid-December 1977 the DOE sponsored this workshop in Washington, D.C. The primary goals of the workshop were:

(1) to assess the potential of continuing education as a means of increasing the professional skills of engineers and scientists for energy conservation; (2) to make recommendations regarding education programs and policies needed to encourage technology transfer; and (3) to identify modes of industry,

university, professional society and government cooperation in this field. The workshop was conducted by members of "Project Proceed" of the Massachusetts Institute of Technology which is funded by NSF. They are currently developing continuing education modules on energy efficiency for practicing engineers.

SUN DAY FAIR

CONTACT: Erich Parker 376-1985

On Sun Day, May 3, 1978, the Solar Technology Transfer Program of the Department of Energy jointly sponsored a Sun Day Fair with the Baltimore City Public Schools System and the Mayor's Office of Energy and Conservation. The Fair was held at Southwestern High School in Baltimore and was attended by students, teachers, school and city officials, DOE representatives and members of the general public. The objective of the Fair was to create a greater awareness of solar energy and encourage community participation in solar and conservation efforts. Activities of the Fair included solar exhibits, films, special presentations, speeches, student projects and solar curriculum for elementary and secondary teachers.

CURRICULUM EVALUATION PROJECT

CONTACT: Don Duggan 252-6482

In May 1978 the Education Programs Division initiated a project with the University of California Energy Extension Service to develop an evaluation design for DOE energy education curriculum materials. The design, finished in September 1978, addresses such issues as acceptability of the materials to teachers, students, and parents; impact on students, implementation procedures used by teachers, selection of evaluation criteria, and adequacy of the materials in accomplishing stated objectives.

STATE ENERGY EDUCATION POLICY

CONTACT: Don Duggan 252-6482

In May 1978 the Education Commission of the States began a study to identify State education policies as they relate to energy education grades K-12. This study, to be completed in report form, will be based on data gathered by questionnaires sent to governors' offices, state legislatures, state energy offices, and state education agencies. This study was made possible through a grant from the Education Programs Division of the Office of Education, Business and Labor Affairs and is expected to be finished in early 1979.

R&D IMPACT ON HIGHER EDUCATION

CONTACT: Larry Akers 252-6350

In September 1978 the Education Programs Division initiated a contract with the MITRE Corporation to assess the impact of DOE-funded university research activities on educational programs at these institutions. The study is aimed at determining what training/education benefits are obtained by graduate students engaged in the research process. This project is currently underway.

WPI STUDY

CONTACT: Don Duggan 252-6482

In November 1978 three students from Worcester Polytechnic Institute began a research project aimed at developing a fossil energy curriculum module. The project is currently underway and is designed for social studies and general science classes, grades 9-11.

NATIONAL ENERGY EDUCATION, BUSINESS AND LABOR CONFERENCE

CONTACT: Revonda Williams 252-6482

In January 1979 the Office of Education, Business and Labor Affairs will sponsor a conference in order to bring together representatives from business, labor, education and public interest groups to discuss a number of emerging issues. The principal topics to be addressed at the 3-day meeting are energy policy, energy technician training and employment, Federal assistance programs, public energy education, and energy conservation in school buildings. The Conference will be characterized by large, small and optional sessions; energy exhibits and films; two working luncheon sessions, specialized presentations; and keynote speaker addresses. Task force reports covering solar, conservation, coal mining, petroleum and nuclear technologies will be available to Conference participants. The Washington Hilton, Washington, D.C., has been selected to host the Conference.

D. Facilities Support

The DOE and its predecessors have provided support to educational facilities throughout the country in the following four ways: (1) by maintaining the operation of nuclear reactors housed at colleges and universities; (2) by providing

funds for the installation of solar electric, solar heating and cooling, and solar hot water systems in school buildings; (3) by sponsoring the development and implementation of school energy conservation programs; and (4) by assisting minority institutions to develop graduate programs.

1. Reactor Sharing and Fuel Assistance Program

CONTACT: George Rogosa 353-3613

Program Description: Under this program universities and colleges receive financial support for the operation of nuclear reactors located on their campuses. The reactors are used as both teaching and research resources.

Progress: In FY 1978 a fuel fabrication line was established at Atomics International of Canoga Park, California, for the issuance of plate-type fuel elements to a number of institutions. An estimated 1.1 million dollars was expended for this project. This program was transferred from the Education Programs Division of IR to the Office of Energy Research for FY 1979 implementation.

2. Solar Heating and Cooling of School Buildings

CONTACT: Steve Caracciolo 376-9807

Program Description: Under the National Solar, Heating and Cooling Act of 1974, the DOE and the Energy Research and Development Administration have solicited proposals for solar demonstration projects for residential, commercial and nonresidential buildings.

Progress: Thus far, three cycles of a Program Opportunity Notice have been issued, with the fourth cycle due to be released in late December 1978.

3. School Energy Conservation Programs

CONTACT: Harry Lane 633-8656

Program Description: On October 15, 1978, the National Energy Act was passed by Congress. One of the bills of the Act provides for grants of \$900 million over the next 3 years to improve the energy efficiency of schools and hospitals. The two phases of the grant program are:

Phase I: Preliminary Energy Audits - grants to states to assist schools and hospitals

Technical Assistance - (Detailed energy audits) - grants to states and schools and hospitals

Phase II: Projects - grants to schools and hospitals in payments of project costs (design, acquisition, and installation of conservation measures)

The operation of the schools/hospitals program is divided into two phases. Under the first phase, the DOE will issue grants to each state to conduct a statewide program of preliminary energy audits in all appropriate buildings. These preliminary energy audits will collect data such as building type, size, energy use level and energy systems for each eligible facility. They will also identify change in operations and maintenance procedures which would reduce energy consumption without significant capital expenditures, and analyze the payback periods of various retrofit measures. It is estimated that an energy savings of at least 10-15 percent would result if recommendations identified by the preliminary audits were implemented.

In Phase II, DOE will make grants to schools and hospitals for technical assistance programs and energy conservation projects. To be eligible for a technical assistance grant:

- 1) the facility must have had an acceptable preliminary energy audit, either under Phase I or independently;
- 2) the operations and maintenance procedures recommended by that audit must have been implemented; and
- 3) results of that audit must indicate that further retrofit modifications, involving significant expense, would pay back in 10 years or less.

To be eligible for an energy conservation project grant, the building must have had a detailed energy analysis which indicates the building improvements proposed will pay back in 10 years or less.

Grants under the second phase will be awarded to eligible institutions in accordance with statewide plans developed by each state energy office and approved by DOE. Grant applications will be submitted on a yearly basis to DOE through the state energy offices. The state energy offices will then approve and prioritize them for funding and then forward the applications to DOE for final approval and grant award.

AASA TEN-SCHOOL PROJECT

CONTACT: Howard Ross 376-4672

Program Description: In the summer of 1977, the American Association of School Administrators received ERDA support to administer a 10-school energy conservation project. The project is designed to implement and measure energy savings in 10 elementary schools located throughout the country.

Progress: In FY 1978 construction, installation of monitoring systems and energy monitoring at 9 sites have been completed.

SENSOR DEVELOPMENT

CONTACT: Howard Ross 376-4672

Program Description: The Division of Buildings and Community Systems develops a number of commercialization and utilization plans for energy conservation technologies which become available from current research efforts.

Progress: In the spring of 1978, Lawrence Berkeley Laboratory was contracted to develop and demonstrate an indoor quality sensor. A RFP was issued in September 1978 to colleges and universities to compete for the demonstration of this device in one of their campus facilities.

4. Minority Institutions Program

CONTACT: Rich Stephens 376-9387

Program Description: The Office of Energy Research supports the development of graduate training programs in minority institutions as a part of the overall effort to assure the participation of minority institutions in energy research.

Progress: In FY 1978, DOE assisted eight minority institutions to improve their energy research capability which, in some cases, involves improvement in their graduate training programs.

E. Energy Extension

CONTACT: Ron Kessler 252-6240

Program Description: In September 1977 the ERDA began funding a 10-state, 19-month pilot program called the Energy Extension Service. Under this program each state was awarded \$1.1 million to devise a plan to assist small energy consumers such as small businesses, schools, hospitals, citizens and government agencies.

Progress: In FY 1978 the following states participated in energy education activities:

1. Michigan

In 23 of Michigan's 83 counties, the EES Youth Education Program and participating high school teachers and administrators are making available educational activities and learn-by-doing experiences for young people and their parents. High school students are being encouraged to heighten their energy awareness and to cultivate an energy conservation ethic. This is done by taking part in assembly programs, energy fairs, theatre groups, and through the creation of posters, publications and displays. Senior high school students will also be asked to conduct home and transportation energy audits with their families. In addition, as a means of evaluating the youth program, an energy conservation aptitude/attitude questionnaire is being used with a target group of 100,000 high school students.

2. Alabama

In Alabama, a boiler efficiency seminar program is underway for public and industrial buildings. Under this program, extension agents present boiler demonstrations and lectures to groups representing schools, hospitals, local government buildings, and other public facilities. Two special presentations have been given in Montgomery and Birmingham to meetings of state school representatives.

3. Tennessee

The Tennessee Energy Extension Service has conducted energy education projects in two areas:

Adult Education: In February 1978 the Tennessee Energy Extension Service sponsored a 6-week course for homeowners on how to weatherize their homes. This course was offered at two high schools in Nashville in conjunction with the Metro Nashville Schools Adult Education Program. A similar course is planned for the fall of 1978, to be conducted in six Nashville schools.

Teachers' Workshops: Two teachers' workshops are scheduled during October 1978 to provide teacher training and materials for energy education classes. Lesson plans to cover subjects such as solar energy, jobs and energy, food and energy, and clothing and energy will be developed for the workshops.

4. Washington

In Washington two pilot programs to monitor school bus transportation and routing systems are underway. The monitoring system being used in the two school districts is based on a computer model previously used in Pennsylvania. It is hoped that by comparing the use of the computerized routing system with other more intuitive systems in the State, ways will be identified to save 10 to 15 percent in energy and costs. It is projected that Washington will totally rely on school buses for student transportation by 1981.

In addition to the above, which falls within the EES's official responsibilities, a number of "unofficial" energy education activities have been initiated. For example, the Public Energy Awareness has been modified for school use treating such topics as the physics of energy, the principles of conservation and alternative resource utilization. In addition, efforts are being made to implement curriculum programs such as Energy and Man's Environment and the Economy. Also, energy studies faculty from Central Washington University have been asked to design several optional graduate level courses to address teachers' needs in the energy field. Other activities include use of the environmental simulator, involvement in Sun Day and energy conservation contest for 4-H members.

5. Connecticut

The EES in Connecticut has supported school-related energy activities in two areas:

Energy Audits: As part of the EES demonstration program in Connecticut, two buildings in 100 of 169 towns will undergo energy audits. Some of these buildings are schools. Efforts are being made to insure that these audits will satisfy the audit requirements anticipated in the upcoming schools and hospitals legislation.

Energy Curriculum: A staff person assigned under the State Energy Conservation Program (SECO) has responsibility for dealing with teachers, school boards, and curriculum specialists concerning energy curricula. This person provides assistance, information available, publications, etc., to interested educators. Also, as part of the EES Program, the Cooperative Extension Service has placed an Energy Associate in each of the eight EES county offices. Two of these Energy Associates have been directly involved in school youth programs.

6. Wyoming

In July 1978 the Wyoming Energy Extension Service (WEES) and the University of Wyoming College of Education sponsored an Energy Education Workshop for 19 Wyoming high school teachers. The purpose of this workshop was to introduce the teachers to the use of E-CON, a home energy conservation education guide developed by the WEES. The participants attending the workshop gained hands-on experience with a number of WEES services, including the computerized data-base search and information retrieval source, the Home Energy Analyses program, and the toll-free Energy Hotline. The schools represented at the workshop received an instrumentation package containing a thermograph for measuring and recording temperature, a wind anemometer for monitoring wind velocity, and pyranometer for reading solar radiation. These instruments are used at Renewable Resource Monitoring Stations (RRMS), as part of the E-CON program.

7. Wisconsin

In Wisconsin, an Energy Demonstration Centers Project is underway to cut energy waste in local government buildings in eight communities located throughout the State. Once remodeled with energy conservation improvements, the buildings will be opened to the public as energy conservation demonstration centers. The J. E. Jones Elementary School and Armstrong High School are participating in the project.

F. PUBLIC EDUCATION

CONTACT: Joe Carvajal 252-6484

Program Description: On June 30, 1977, then Assistant to the President James R. Schlesinger announced that the League of Women Voters Education Fund was being awarded a \$200,000 grant to conduct a nationwide public energy education program by the U. S. Energy Research and Development Administration's (ERDA's) Office of Public Affairs. The grant was made to support public energy education activities of the League in all 50 States, Puerto Rico, the Virgin Islands, Guam and the District of Columbia.

Progress: The success of the League of Women Voters Education Fund energy education project prompted the Education Programs Division of the new Department of Energy (DOE) (which absorbed the education functions of ERDA's Office of Public Affairs) to enhance the level of support provided to nonprofit, national membership organizations wishing to conduct public energy education efforts. A Notice of Program Interest was published

on March 31, 1978, inviting proposals from public interest, labor, civic and other organized "publics" with nationwide membership and delivery systems. Four projects were selected for funding. The grantees, amounts and brief descriptions of the projects follow.

League of Women Voters Education Fund \$184,000

The League of Women Voters has over 140,000 members in 1,350 chapters in all 50 states, Puerto Rico, Guam, and the District of Columbia. The League of Women Voters of the U. S. will receive support for an intensification of their current public energy education program across the Nation. The League will conduct major conferences and produce television and radio programs on major energy policy issues, sponsor practical workshops on conservation and solar energy for consumers and energy fairs and engage in a wide variety of additional activities under the DOE grant.

United Steelworkers of America \$70,000

The United Steelworkers of America (USWA) is the largest union affiliated with AFL-CIO having over 1,250,000 members. The USWA will conduct a member education project including seminars for union leaders from all parts of the United States on the nature and scope of the Nation's energy problems, followed by regional seminars for union members. In addition, "do-it-yourself" demonstration projects on conservation actions and solar heating for water and space will be conducted. USWA will match dollar for dollar DOE's contribution in support of this activity which is expected to serve as a model to be emulated by other major unions.

Alliance to Save Energy \$21,000

The Alliance to Save Energy is a private, non-partisan organization whose purpose is to design and implement public education and technology interchange programs to reduce the amount of U. S. energy waste. With DOE support the Alliance will develop an energy conservation seminar based upon the best materials and techniques currently available to improve energy efficiency in existing homes. The seminar will be used with home improvement contractors, civic groups and others.

National Council of Churches \$60,000

The National Council of Churches unites over 180 Protestant and Orthodox denominations and Roman Catholic orders with over 40

million individual members. Funds provided the National Council of Churches will permit development and implementation of a pilot energy education project and production of written materials on ethical and humanistic dimensions of energy production and use. Funds will also lay the groundwork for public discussions of these topics in cooperation with churches throughout the U. S. Written material will include titles such as "Social Dimensions of Energy Production and Use" and "Comparative Social Costs of Energy Sources."

During the latter part of FY 1978, plans were developed for a national conference that would focus national attention upon needs and targets of opportunity in the area of public energy education. Early involvement by public interest, environmentalist, consumer, labor and business organizations was obtained in order to assure their appropriate involvement in the conference which is scheduled to take place during January 1979 and in the Nation's public energy education process as a whole.

In connection with the conference a task force comprised of private-sector leaders in the field of public energy education was commissioned to prepare a "white paper" on the subject to serve as the focal point for discussion at the conference.

DOE DEPARTMENTAL EDUCATION/TRAINING ACTIVITIES