

NONINSTRUCTIONAL OPERATIONS

Energy Management/Education

The procedures that follow are generally based upon and referenced to material that is contained in the Northwest Energy Education/Management (NEE/M) Handbook. Major implementation phases are as follows:

District-Wide Commitment

After the adoption of an energy management policy, district staff will review materials related to past and present energy consumption. (See Section 2 of the NEE/M Handbook.) A list of speakers and audio-visual materials will be compiled to be used at presentations to principals, parent groups, teachers and students. (An excellent source list has been compiled in Resource Guide for Energy Conservation--Idaho, Montana, Oregon, Washington, available from the Bonneville Power Administration, P. O. Box 3261, Portland, Oregon 97208.) The county extension agent may also be an excellent resource for assistance in this aspect of the plan.

Energy Manager and Energy Management Committee

The manager should know the district's buildings, be familiar with the rudimentary elements of heating, ventilating and electrical systems, and be able to work with a wide range of people. The manager is responsible for coordinating the efforts of the district's energy management committee and assisting each building's energy management team.

The district's energy management committee will be composed of the energy manager, a director, a principal, a teacher, a business office representative, a maintenance staff member, a curriculum staff member, a utility representative, a student, a parent, and a representative from the business community. (See the NEE/M Handbook, Section 3, for other models.)

The energy management committee will:

- A. Determine the current district status (consumption, cost of present and future energy, types of equipment). Annual energy consumption equating for cooling/heating degree days can be computed by using the procedures and forms found in NEE/M Handbook, Section 4, pages 3-6. (See also Energy Sourcebook for Educational Facilities, published by Council of Educational Facility Planners, 29 West Woodruff Avenue, Columbus, Ohio 43210.)
- B. Develop energy goals and objectives. (Objectives are best stated in the form of percentage of consumption to be saved as a result of a proposed action.) The Walk-Through Audit/Survey located in Section 4 of the NEE/M Handbook should be useful in developing goals and objectives after reviewing each site. The actual walk-through audit might be conducted in conjunction with the building energy team. (An extensive survey form is available through the Washington State Energy office--Washington Energy Auditor Training Manual.)

- C. Recommend specific energy goals and objectives to the board which, in turn, will establish parameters for the committee to continue its work.

Building Energy Management Team

This team is the equivalent of the district's energy management committee. The team supplies the necessary data to the committee for district level decision-making. Like the energy management committee, the building team will make building recommendations and plans. The team should include the principal, teachers, parents, a custodian, students and any available community member with expertise. The team will:

- A. Participate in inservice training.
- B. Conduct a walk-through audit/survey.
- C. Develop on-site conservation and/or cost operation/maintenance plans. Some alternatives are described in Section 4 of the NEE/M Handbook. Other materials provide suggestions, e.g., National Electrical Contractors' Association guide, Total Energy Management (1976), Washington Department of Energy.
- D. Submit plans to the energy management committee.
- E. Implement plans as approved by the energy management committee. (Cost items would necessitate board approval. Such proposals would require technical assistance, including life cycle cost analysis.)
- F. Monitor consumption as conservation and operation/maintenance changes go into effect.

Technical Assistance

Schools that show the least energy efficiency should receive priority for the most extensive technical assistance audits. Since major modifications usually require substantial capital investments, priority should be given to buildings which:

- A. Evidence energy expenditures somewhat in excess of 25 percent above the most energy-efficient schools in the system.
- B. Show a payback period of fifteen years or less.
- C. Show a payback period which does not exceed the life expectancy of the building.

When appropriate, technical assistance audits will be contracted for and conducted at specific sites. The energy management committee will review technical assistance audit data and recommend district level retrofitting to the superintendent and the board.

Education

Students will be engaged in the monitoring activities of the school. Information relative to supply, consumption and related costs will be infused into the curriculum whenever possible. Teachers will have access to instructional curriculum activities as contained in programs such as Energy, Food and You and Energy and Man's Environment and the National Science Teachers' Association materials.