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Final Report - Accomplishments of the Small-Hydro Outreach Program

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Cooperative Outreach Program for Small-Hydro Development in California, Agreement No. DE-FC49-80R9 10034

In September 1980, the Small-Hydro Outreach Program was established by the U. S. Department of Energy and the California Department of Water Resources to promote and encourage the development of small hydroelectric power projects as a renewable energy resource in California. Projects at existing hydraulic structures were particularly emphasized since they have less potential for adverse effect on the environment.

Some of the activities leading to the successful completion of the outreach program were accomplished with the cooperation of the Governor's Task Force on Small Hydroelectric Development. The members of the task force are representatives of State agencies involved in the review or permitting process of a proposed power plant in California. The Department of Water Resources serves as the chair of the task force.

Before the outreach program was established, the task force had compiled a list of potential hydro facilities at existing hydraulic structures. The efforts of the outreach program were first aimed at informing the owners of the potential and development procedures for their sites. When the small hydro rush "snowballed" in the Spring of 1981, numerous requests for information on small hydro development on free flowing streams where no diversions or hydraulic structures existed were received. The outreach program was modified at that time to consider small hydro projects at both undeveloped and developed sites.

The main accomplishments of the outreach program have been the publication of Small-Scale Hydro News, conducting a Small-Scale Hydro Workshop and the distribution of bulletins, reports, and pamphlets to various persons interested in small hydro development.

Over 3,000 people were contacted during the program through the Small-Scale Hydro News, the Small-Scale Hydro Workshop, various local meetings, and personal contact. The mailing list comprised of California utilities, water service agencies, manufacturers of small hydro equipment, consulting engineering firms, State Assembly and Senate members, local government officials, newspapers, environmental groups, Federal agencies, and other public and private parties including applicants to the Federal Energy Regulatory Commission. All parties concerned with small hydro development in California were included.

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Small-Scale Hydro News

Because many small hydro "how-to-do-it" reports were already available, staff recognized a need for a newsletter to inform developers of the various activities and changes in the small hydro field. Three issues of Small-Scale Hydro News were published. Each newsletter involved approximately one month of staff time for the production of the newsletter. The newsletters reported on items such as regulation changes of the Federal Energy Regulatory Commission, financing, California Public Utilities Commission activities, new publications and activities of the Governor's Task Force on Small Hydroelectric Development. The newsletters were well-received as indicated by the high number of requests for the newsletter. Approximately 3,000 copies of each issue were distributed.

Small-Scale Hydro Workshop

As the interest in small hydro development increased last year, there was a need for a workshop to help developers understand the Federal and State permitting procedures. Approximately twenty requests were received each week for such information. Many other organizations were having workshops on technical problems of small hydro development, but there were none on resolving environmental problems. Financing and utility negotiations were also recognized to be potential problems. The workshop speakers were coordinated to provide insight on these problems. The City of Redding was chosen to be the site of the workshop because of the area's high level of small hydro activity. Brochures and other advertisements describing the workshop were distributed prior to the workshop and folders were compiled for the attendees.

Over 450 people attended the workshop. The audience posed many questions to the speakers. The speakers provided information on expediting the project approval process and recent State and Federal legislation. The audience was receptive to the speakers, and many expressed their appreciation for the workshop.

Because of the overwhelming attendance, more folders containing the handouts were compiled and sent to those who did not receive it at the workshop. These folders were also made available to those who were unable to attend.

It was not possible to hold another workshop because of budget constraints.

Bulletins, pamphlets, and brochures

The following were distributed to those requesting information:

1. Small Hydroelectric Potential at Existing Hydraulic Structures in California, California Department of Water

Resources, April 1981. Describes in detail the regulatory process for approval of small hydro developments.

2. Small-Scale Hydro News.
3. Department of Water Resources lists on known hydroelectric consulting engineering firms, manufacturers of small hydro equipment and status of small hydropower development at existing hydraulic structures in California.
4. Water Rights Implications of Small Hydroelectric Installation, State Water Resources Control Board, August 1981.
5. California Department of Fish and Game Guidelines for Development, August 1981.
6. California State Policy on Small Hydroelectric Development, October 1981.
7. Small-Scale Hydro, Office of Appropriate Technology, June 1980. Explains the regulations and hurdles confronting a developer.
8. How to Accelerate State Review, Governor's Office of Planning and Research, July 1981. Describes the State's environmental review process.
9. Environmental Assessment of Small Hydroelectric Development at Existing Sites in California, California Energy Commission, August 1981. Assists developers to evaluate environmental feasibility of a project.
10. Forest Service FERC Liason Officers in California, U. S. Forest Service.
11. Hydroelectric Power Project Pocket Primer, State Water Resources Control Board. Provides definitions, facts and figures on small hydro.
12. Tax-Exempt Financing for Privately-Owned Projects, Dean Witter Reynolds, Inc., August 1981.
13. Informational brochures on the California Alternative Energy Source Financing Authority and the State Assistance Fund of Energy, California Business and Industrial Development Corporation.

In conjunction with the Task Force on Small Hydroelectric Development, staff provided input during the preparation of many of the above reports.

Personal Contacts

Most contacts to the programs have been by telephone or letter. On several occasions, staff made presentations on the status of small hydro activities in California to local government groups. In the early stages of the program, staff intended to personally contact all owners of potential small hydro projects at existing hydraulic structures. As the small hydro interest increased and numerous requests for information were received, it was no longer possible to personally contact these owners. The mailing list, however, included these owners.

The Small Hydro Outreach Program was successful in encouraging the development of small hydroelectric power projects in California. By January 1982, Federal Energy Regulatory Commission permits or license applications had been filed for development of approximately 500 MW of new capacity at existing facilities. Even though the outreach program terminated at the end of January 1982, the Department continues to receive many requests for information. It responds to all requests and will continue to monitor small hydro activity in California and nationwide. It also plans to publish more editions of Small-Scale Hydro News with its own funding. The outreach program's activities were effective in distributing information to interested parties.