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GEOTHERMAL POWER ORGANIZATION

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PROJECT BACKGROUND AND STATUS

The Geothermal Power Organization (GPO) was formed in 1993 to serve as an advisory group of geothermal industry professionals working on energy conversion technologies and equipment. The formation of the GPO involved the consolidation of the functions of the former Energy Conversion Panel (ECP) and the Technical Advisory Group (TAG). Since its inception, the GPO has provided an effective forum for discussions on the research needs for the geothermal industry and the promotion of geothermal energy for the production of electricity in a cost-effective fashion. The GPO has promoted an active exchange of ideas that provides industry response and guidance on the DOE Geothermal Division energy conversion program.

As a result of the members' active involvement in the GPO and at the bi-annual meetings, a fundamental change in the structure of the organization was instituted by DOE to assist the industry in pursuing cost-shared research and development with DOE. Efforts over the last year have centered upon investigating the various options for establishing a cost-sharing capability, and then implementing the most appropriate mechanism that met with agreement from the GPO members and the DOE. Significant strides have been made in moving the process forward, and as a result, a Memorandum of Understanding and a new, more structured organizational charter have been developed and are currently under review. The signing of the MOU should take place in January, 1996.

PROJECT OBJECTIVE

The objective of GPO is to provide industry-driven research objectives and guidance in advancing state-of-the art of geothermal energy conversion technology supported by DOE.

Technical Objectives

The Geothermal Power Organization provides a forum for:

- The presentation of proposals for industry projects related to geothermal technology for sponsorship by members of the GPO.

Technical Objectives (continued)

- Exploring the level of members' interest in potential technological problems to aid in developing future industry sponsored projects.
- Advising the geothermal industry, academic organizations and other research-oriented groups of the needs and interests of GPO.
- Facilitating the development of laboratory and research results related to geothermal energy conversion technology.
- Providing critical analyses of the technical aspects and direction of the energy conversion programs in the DOE Geothermal Division.

Expected Outcomes

- Project proposals submitted to GPO for consideration of cost-shared funding by industry and the DOE Geothermal Division.
- Development and promotion of priority research areas through cooperative research partnerships.
- Continued active participation by GPO members in exchanging information and ideas about energy conversion issues both at the GPO meetings and through informal channels.
- Increased visibility for the energy conversion sector and the important contributions that can be made by it in reducing costs of geothermal power.

APPROACH

Currently, the coordination and management of the GPO are done by NREL, with oversight provided by the DOE Geothermal Division. After signing the MOU, GPO will be managed by one of the industry members of GPO, with less involvement of the DOE and NREL. Meetings are held twice a year to solicit feedback from the geothermal industry, discuss research priorities, and maintain communication with the industry members on pertinent issues.

RESEARCH RESULTS

The GPO has provided ongoing industry-driven research objectives and guidance to improve energy conversion efforts supported by the DOE. An outcome of the GPO has been the institution of a cost-sharing capability for the geothermal industry with the DOE Geothermal Division. Research projects will be proposed by the industry members at the next GPO meeting

(April, 1996), and with approval of funding by DOE, the highest priority projects will be initiated in 1996.

FUTURE PLANS

Bi-annual meetings will continue to be planned and carried out during the Geothermal Resources Council annual meeting (Fall) and the DOE Geothermal Program Review (Spring). Providing that cost-sharing funds are available from DOE, proposals will continue to be submitted by industry and projects undertaken that further the goals and objectives of the GPO.

INDUSTRY INTEREST AND TECHNOLOGY TRANSFER

The members of the GPO are drawn from a cross-section of the geothermal community who are working on geothermal energy conversion technologies and equipment. The following sectors are represented in the GPO: plant operators, plant owners, equipment manufacturers, equipment and project developers, utilities, and environmental constituents. Currently, there are approximately 25 active members of the GPO.

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