NEVADA GEOTHERMAL COMMERCIALIZATION PLANNING

Quarterly Progress Report

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Task 1 - Area Development Plans

The Nevada Department of Energy (NDOE) currently has nine Area Development Plans in the preparation process. All background information has been collected and developed into the first section of the various plans. This background information includes:

1. Physical Characteristics of the Geothermal Resource Area
  - a. Location and Relief
  - b. Climatic Conditions
  - c. Geological Setting
  - d. Hydrology
2. Land Ownership and Land Use
3. Population
4. Transportation Facilities
5. Design Information

Each of the nine remaining geothermal resource areas are being analyzed separately to evaluate the major potential applications for each geothermal resource site.

Task 2 - Site Specific Development Plans

Requests for Proposals have been prepared and distributed to engineering and geothermal consulting firms for the preparation of three Site Specific Development Plans. The areas selected for these studies include: Hawthorne, Gabbs, and Carlin.

Hawthorne appears to have potential for geothermal development. Two hot wells were known in the area, and this past summer a third was drilled. Water temperatures are reported to be near boiling. Much interest has been expressed by the local governing body to use hot water from these wells to heat the governmental buildings. Interest has also been expressed by the management of the El Capitan Casino--the owners of the third well--to use hot

water from the well to heat the hotel and casino. The military establishment at the ammunition depot has also expressed interest. The Site Specific Development Plan will be done in conjunction with a study being performed by the Oregon Institute of Technology.

Several hot wells have been drilled in the Gabbs area. The domestic drinking water supply for the community must, in fact, be cooled before it can be used. The community is looking at the potential for the development of a district space heating system. There may also be some potential for space heating applications at Basic Refractories--the major industry of this community. The Site Specific Development Plan should address the development of these applications and a possible source of funding for the proposed development.

The community of Carlin is located several miles west of Elko. There are several known hot springs in the area. To date nothing has been done about developing this resource. The purpose in this Site Specific Development Plan is to evaluate the various potential applications possible for this resource. A variety of industrial applications and space heating applications will be considered.

Task 3 - Outreach

The following outreach activities have occurred:

1. Completion of Nevada's geothermal pamphlet.
2. Personal or telephone contact with about 50 parties interested in geothermal redevelopment. Range of requests ran from individual space heating applications to greenhousing. Depending on the nature of the request, the party was referred to local private consultants, or given either direct assistance from this office, referred to the Nevada Bureau of Mines and Geology for resource assessment work, or to Oregon Institute of Technology for engineering or economic studies.

3. Initial development of Moana Area Homeowners Workshop.
  - a. Topics to be covered have been developed
  - b. Audience has been identified
4. Presentations to various consumer groups
5. Meeting with State Department of Economic Development and interested industrial developer
6. Continued organizing efforts in the Nevada Chapter of the Geothermal Resource Council.

Task 4 - Institutional Analysis and Update

1. NDOE staff is completing a rewrite and update of Nevada Institutional Handbook. Final document should be completed after receipt of additional information from the Department of Conservation and Natural Resources.

2. NDOE staff appeared before the Nevada Legislative Commission to Study Geothermal Issues. Recommendations made to this group include:

- a. Enact legislation that limits needed water appropriation to consumptive uses only.
- b. Enact legislation that defines the geothermal resources and clearly delineates burden of proof vis a vis ground water system.
- c. Consider enactment of legislation that will provide a safeguard to those who are engaged in non-consumptive geothermal uses, (i.e. closed loop space heating systems).
- d. Enact legislation that expands existing property tax allowance to commercial and industrial applications.
- e. Enact legislation which exempts the cost of renewable resource systems from sales taxes.
- f. Enact legislation which provides for a property tax credit for renewable resource systems (dependent upon approval of proposed constitutional amendment).

- g. Enact legislation which requires the Public Service Commission to allow utilities to include construction work in progress in rate base on an incremental basis for geothermal electric generation facilities.
- h. Enact legislation which allows public utilities to expense reasonable geothermal exploration and development costs.
- i. Enact legislation authorizing amortization of the cost constructing and developing geothermal facilities whose useful life is shortened because of reservoir or technical problems. (Of course, such legislation must include requirements that utilities take adequate safeguards including reservoir insurance, adequate pre-construction exploration activities, etc.).
- j. Enact legislation requiring utilities to justify non-use of geothermal for new electric generation projects.
- k. Enact legislation exempting or restricting Public Service Commission regulation of steam or hot water sales. One option is to exempt sales to five or less customers from any regulation.
- l. Enact legislation requiring state and local governmental entities to review feasibility of utilizing geothermal and other renewable resources in new projects.

The committee has made several recommendations based on NDOE's input. Bills are currently being drafted for presentation to the 1981 Legislature.

Task 5 - Impediment Analysis and Update

The NDOE has been involved in a number of activities in this area. The agency has reviewed Environmental Protection Agency environmental regulations and Internal Revenue Service's temperature limitations for tax credits and has made appropriate comment to the decision makers in each agency. The NDOE has also addressed the problem of a backlog of applications for water use permits from the State Water Engineer's Office and will be having meeting with that agency to evaluate methods of overcoming this problem.

A major impediment involving ethanol production has been identified. This impediment is that there is no tax credit or relief on gasohol. The NDOE has met with several developers of ethanol facilities to discuss the issue. The agency is currently preparing legislation to eliminate the present disincentive.

Task 6 - Administrative Activities

1. Preparation of the 1980 Nevada Geothermal Commercialization Planning Semi-Annual Report
2. Development of 1980 Geothermal Commercialization Cooperative Agreement Proposal
3. Preparation of:
  - a. Cost Management Reports
  - b. Contract Management Summary Reports
  - c. Cost Variance Reports
4. Attendance at Salt Lake Geothermal Resource Council Meeting