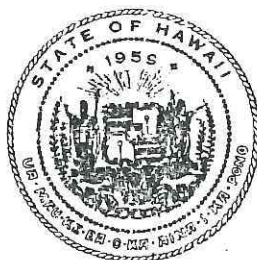


1991

A Report to the 1991 Legislature

GEOHERMAL AND CABLE DEVELOPMENT PERMITTING



Prepared by the
Department of Land and Natural Resources

State of Hawaii

in response to
Section 196D-11, Hawaii Revised Statutes

Honolulu, Hawaii

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GEOHERMAL AND CABLE SYSTEM DEVELOPMENT PERMITTING

STATE OF HAWAII

INTRODUCTION

Chapter 196D, Hawaii Revised Statutes, (Appendix A) requires that the Department of Land and Natural Resources establish a consolidated geothermal resource development permitting process in which county and state agencies are required to participate, and in which all Federal agencies having jurisdiction over any aspect of the project will be invited to participate. The statute also requires establishing an interagency group; preparing a joint agreement to coordinate permitting efforts; transferring certain regulatory functions; creating a conflict resolution process; providing information services; and establishing a repository of laws, rules, and related information concerning geothermal/cable developments.

During the initial year of the project, the Department promulgated administrative rules implementing Chapter 196D. These rules (Appendix B) became effective September 5, 1989.

Since that time, absent any application for a geothermal/cable project, the Department has concentrated on developing the forms and procedures to efficiently process applications, and has monitored existing geothermal projects to gain experience preparatory to coordinating and regulating anticipated larger projects. In addition, the Department has prepared a compendium of permit documents for use by potential project applicants. The Department has also begun efforts in the area of public information and documentation.

This report reviews the Department's past-year accomplishments to facilitate the permitting process governing the development of one of Hawaii's more significant energy resources.

Hawaii Deep Water Cable Program

In September 1990 a contract was executed to study the technical feasibility of an interisland cable system that would carry 500 megawatts of electricity over some 200 miles at depths to approximately 7,000 feet, and have a life expectancy of 30 years. Two types of cable testing took place -- laboratory tests, completed in November 1988, and at-sea tests, completed in November 1989. In both tests, the cable expected to be used in the final project met or exceeded the established requirements.

Master Development Plan

The notices of preparation for a programmatic environmental impact statement and for a federal National Environmental Policy Act environmental impact statement will be submitted in early 1991, upon completion of a majority of the activities in the master development plan and transmission corridor route selection process. At this time, the Master Development Plan is in draft form. The process of developing this plan has included extensive public participation.

CURRENT STATUS OF GEOTHERMAL DEVELOPMENT ACTIVITIES

True/Mid-Pacific Geothermal Venture

Development activities by True/Mid-Pacific Geothermal Venture entails the continuation of drilling from the site of its current well pad. Several more exploratory wells may be needed to determine whether there exists a resource of sufficient quantity and quality to supply a power plant facility. Plans are in preparation to move to a new site, pending approval of the relocation by the Department of Land and Natural Resources. The 1986 Conservation District Use Permit authorizes the incremental development of up to 100 megawatts of geothermal energy capacity. There has been no change in the company's plan to negotiate a contract to sell 25 megawatts of power to the Hawaii Electric Light Company once the resource is proven.

Puna Geothermal Venture

Puna Geothermal Venture began clearing operations for its project's well fields and power plant site in September 1990. The last of the 51 permit conditions imposed in the Hawaii County Planning Commission's Geothermal Resource Permit was met with approval. A Geothermal Asset Fund is currently being established by the County of Hawaii for the purpose of geothermal impact mitigation within the district of Puna.

Joint Interagency Monitoring Team

The Department has initiated efforts to coordinate and establish an integrated team to monitor and regulate geothermal activities in the Puna district. This team will combine State departmental resources and personnel and will cooperate with and offer assistance to Hawaii County agencies. The Natural Energy Laboratory of Hawaii Authority has been requested to explore the possibility of using portions of the net revenues from the future sale of steam from the HGP-A well to acquire additional monitoring equipment.

As of this writing, two meetings of this team have been held, an inventory of monitoring equipment has been prepared, and plans for cross training of selected personnel have been proposed. A geothermal program planning workshop is being planned also.

OTHER ACTIVITIES

Mitigation and Monitoring Workshop

In June 1990 the U.S. Department of the Interior and the U.S. Environmental Protection Agency jointly sponsored a workshop on mitigation and monitoring. The Department alerted the members of the Interagency Group about this meeting and urged their attendance. The workshop proved very informative, especially with regards to the requirement for a federal environmental impact statement.

1990 International Symposium on Geothermal Energy

In August 1990 the Geothermal Resources Council held its international symposium in Kailua-Kona, Hawaii. The symposium was co-chaired by William F. Quinn, chairman of the Governor's Advisory Board on the Geothermal/Cable Project. Fifteen (15) papers were presented on current geothermal issues in the State. The Department presented a paper entitled "Geothermal and Cable Development Permitting Act", (Appendix F) which summarized the role of the Interagency Group and its progress to date.

Newspaper File

A chronological file of newspaper articles regarding geothermal activities in the State of Hawaii continues to be maintained. The file has been useful in monitoring and assessing public information and opinion regarding the proposed geothermal/cable project.

APPENDIX A

Chapter 196D, Hawaii Revised Statutes

[CHAPTER 196D GEOTHERMAL AND CABLE SYSTEM DEVELOPMENT]

SECTION

- 196D-1 SHORT TITLE
- 196D-2 FINDINGS AND DECLARATION OF PURPOSE
- 196D-3 DEFINITIONS
- 196D-4 CONSOLIDATED PERMIT APPLICATION AND REVIEW PROCESS
- 196D-5 CONSOLIDATED PERMIT APPLICATION AND REVIEW PROCEDURE
- 196D-6 INTERAGENCY GROUP
- 196D-7 STREAMLINING ACTIVITIES
- 196D-8 INFORMATION SERVICES
- 196D-9 CONSTRUCTION OF THE ACT; RULES
- 196D-10 TRANSFER OF FUNCTIONS

196D-1 CONSERVATION AND RESOURCES

- 196D-11 ANNUAL REPORT
- 196D-12 SEVERABILITY
- 196D-13 EXEMPTIONS FROM CERTAIN STATE LAWS
- 196D-14 DEVELOPMENT OF GEOTHERMAL RESOURCES ON MAUI

[§196D-1] Short title. This chapter shall be known and may be cited as the Geothermal and Cable System Development Permitting Act of 1988. [L 1988, c 301, pt of §1]

[§196D-2] Findings and declaration of purpose. The legislature hereby finds and declares that:

- (1) The development of Hawaii's geothermal resources, which are located principally on the island of Hawaii and possibly on the island of Maui, represents a substantial and long-term source of indigenous renewable alternate energy that could be used to generate electric energy to meet the State's electric energy needs and concurrently help to reduce the State's need for imported fossil fuels;
- (2) The State has deemed it appropriate that the private sector should develop these geothermal resources, and, to that end, has sought to encourage private sector exploration and development of geothermal resources;
- (3) The private sector companies seeking to develop geothermal resources are, however, unable or unwilling to expend the substantial amounts of funds needed to develop these resources to their full extent without an assured and sufficiently large market for the electric energy to be generated therefrom, and the present and projected electric energy demand on the island of Hawaii does not provide an assured and sufficiently large market;
- (4) The greatest present and projected demand for geothermally generated electric energy is located on the island of Oahu;

- (12) The development of geothermal resources and a cable system, both individually and collectively, would represent the largest and most complex development ever undertaken in the State;
- (13) Because of the complexities of both projects, there is a need to develop a consolidated permit application and review process to provide for and facilitate the firm assurances that companies will require before committing the substantial amounts of funds, time, and effort necessary to undertake these developments, while at the same time ensuring the fulfillment of fundamental state and county land use and planning policies;
- (14) The development of geothermal resources and a cable system are in furtherance of the State's policies, as expressed in the state plan and elsewhere, to develop the State's indigenous renewable alternate energy resources and to decrease the State's dependency on imported fossil fuels; and
- (15) A consolidated permit application and review process for the development of the State's geothermal resources and the cable system should be established by an act of the legislature. [L 1988, c 301, pt of §1]

[§196D-3] Definitions. As used in this chapter unless the context clearly requires otherwise:

"Agency" means any department, office, board, or commission of the State or a county government which is a part of the executive branch of that government, but does not include any public corporation or authority that may be established by the legislature for the purposes of the project.

"Applicant" means any person who, pursuant to statute, ordinance, rule, or regulation, requests approval or a permit of the proposed project.

"Approval" means a discretionary consent required from an agency prior to the actual implementation of the project.

"Department" means the department of land and natural resources or any successor agency.

"Discretionary consent" means a consent, sanction, or recommendation from an agency for which judgment and free will may be exercised by the issuing agency, as distinguished from a ministerial consent.

196D-3

CONSERVATION AND RESOURCES

"Environmental impact statement" means, as applicable, an informational document prepared in compliance with chapter 343 or with the National Environmental Policy Act of 1969 (Public Law 91-190).

"Interagency group" means the body established pursuant to section 196D-6.

"Permit" means any license, permit, certificate, certification, approval, compliance schedule, or other similar document or decision pertaining to any regulatory or management program which is related to the protection, conservation, use of, or interference with the natural resources of land, air, or water in the State and which is required prior to or in connection with the undertaking of the project.