

DEPARTMENT OF BUSINESS AND ECONOMIC DEVELOPMENT

JOHN WAIHEE
GOVERNOR

ROGER A. ULVELING
DIRECTOR

BARBARA KIM STANTON
DEPUTY DIRECTOR

LESLIE S. MATSUBARA
DEPUTY DIRECTOR

KAMAMAILU BUILDING, 250 SOUTH KING ST., HONOLULU, HAWAII
MAILING ADDRESS: PO. BOX 2359, HONOLULU, HAWAII 96804 TELEX: 7430250 HIDPED FAX: (808) 523-8637

November 2, 1989

MEMORANDUM

TO: Mr. Roger A. Ulveling
Mr. Leslie S. Matsubara
Mr. William F. Quinn
✓ Mr. Susumo Ono
Ms. Jill Center

FROM: Maurice H. Kaya *M. H. Kaya*

SUBJECT: Geothermal Advisory Committee, Hawaii County

Attached for your information is a list of members of the recently formed Geothermal Advisory Committee (County of Hawaii).

MHK:if

Attachment

Ex officio

Mr. Harold S. Matsumoto
Office of State Planning
Office of the Governor
Room 410
State Capitol
Honolulu, HI 96813

Honorable Richard M. Matsuura
Senator
State Capitol
Honolulu, HI 96813

Honorable Spencer Kalani Schutte
Councilman
County Council
25 Aupuni Street
Hilo, HI 96720

Honorable Daniel K. Inouye
U.S. Senator
Room 772
Senate Office Building
Washington, D.C. 20510

13/89

GEOHERMAL PERMITTING/APPROVALS

DEPARTMENT OF LAND AND NATURAL RESOURCES (DLNR)

A. Geothermal Resource Subzones:

(Chapter 205, Hawaii Revised Statutes; Administrative Rules, Chapter 13-184, "Designation and Regulation of Geothermal Resource Subzones")

1. Initiated by the Board of Land and Natural Resources:
 - a. County-by-county assessment
 - b. Evaluation of criteria for designation of subzones
 - c. Public hearings by the Board of Land and Natural Resources (Board) - (Contested case hearings not applicable) - Direct appeal to Hawaii Supreme Court
2. Landowner initiated subzone designation:
 - a. Application to the Board for approval
 - b. Evaluation of criteria
 - c. 180-days processing
 - d. Public hearing before the Board - (Contested case hearings not applicable) - Direct appeal to Hawaii Supreme Court

B. Geothermal Resource Mining Lease (GRML):

(Chapter 182, Hawaii Revised Statutes; Administrative Rules, Chapter 13-183, "Rules on the Leasing and Drilling of Geothermal Resources")

1. Mining leases on State lands granted by competitive bid basis at public auction
2. Mining leases on reserved lands may be granted without public auction to the occupier or to his assignee upon two-thirds vote of the Board
3. Plan of Operations:
 - a. Application to the Board for approval
 - b. 60-days processing
 - c. Board disapproval of plan of operations may be subject to appeal by the applicant to the circuit court

C. Conservation District Use Application (CDUA):
(Chapter 183, Hawaii Revised Statutes; Administrative Rules, Chapter 13-2, "Conservation Districts")

1. For geothermal development activities - (exploration, development, and production):
 - a. Application to the Board for approval
 - b. Preparation of Environmental Assessment, Negative Declaration/EIS
 - c. 180-day processing
 - d. Public hearing before the Board
 - e. Contested case hearings not applicable - Mediation proceeding may be requested (90+ days processing)
 - f. Direct appeal to the Hawaii Supreme Court
2. For Transmission lines:
 - a. Application to the Board for approval
 - b. Preparation of Environmental Assessment, Negative Declaration/EIS
 - c. 180-days processing
 - d. Discretionary requirement for public hearing
 - e. Contested case hearing applicable
 - f. Appeal to circuit court

D. Geothermal Well Drilling Permit:
(Chapter 182, Hawaii Revised Statutes, Administrative Rules, Chapter 13-183, "Rules on the Leasing and Drilling of Geothermal Resources")

1. Application to the Department for Chairperson's approval
2. 60-days processing
3. No public hearing required

E. Historic Preservation Review:
(Chapter 6E, Hawaii Revised Statutes, Administrative Rules currently being promulgated)

1. Required for those land use and development activities which may affect historic properties, including but not limited to, State funded or State proposed projects, and for those projects located on State and Conservation lands
2. 30+ days (average) processing

GEOHERMAL PERMIT/APPROVAL FLOW CHART

Board/Landowner Proposed Subzone Designation

Public Hearings

Designation of
Geothermal Resource Subzones

Public Auction/Application for State Mining Lease

Board Approval and Issuance of a
Geothermal Resource Mining Lease

Submittal of a
Conservation District Use Application (CDUA)

Geothermal Development Activities

Environmental Assessment/
Negative Declaration/EIS

Public Hearing

Mediation

Appeal to Hawaii Supreme Ct.

Transmission Lines

Environmental Assessment/
Negative Declaration/EIS

Discretionary Public Hrg.

Contested Case Hearing

Appeal to Circuit Court

Historic Preservation Review

Board Issuance of a
Conservation District Use Permit (CDUP)

Submittal of Plan of Operations
for Approval by the Board

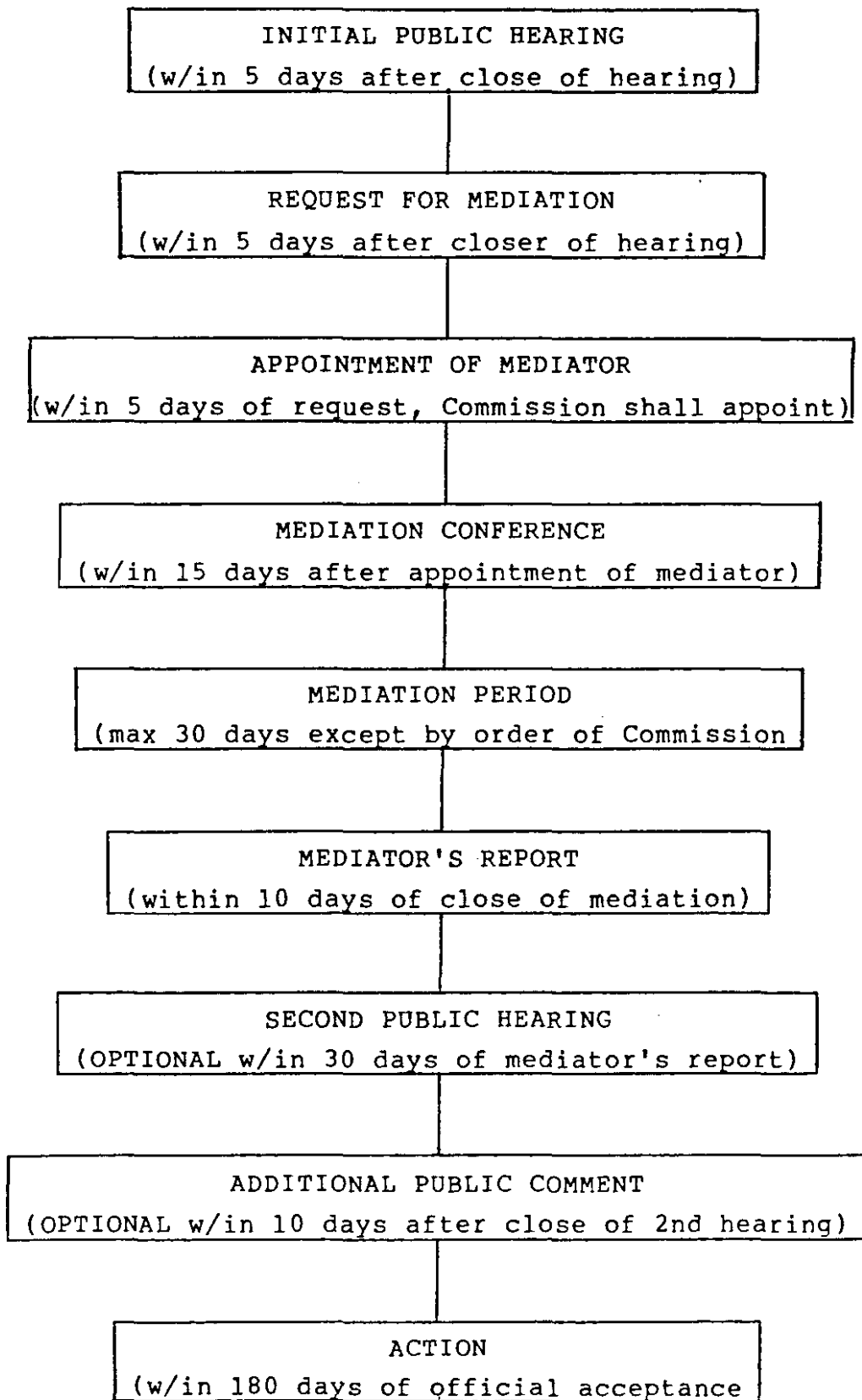
Application for a
Geothermal Well Drilling Permit

Application for a
Geothermal Well Modification Permit

Application for a
Geothermal Well Abandonment Permit

GEOHERMAL RESOURCE

* MEDIATION PROCESS



1/15/80
1/15/80

petitioner, the Commission shall recommend the approval or disapproval of the proposed amendment to the Council stating its reasons for such decision, including appropriate performance conditions in the case of an approval.

RULE 12. GEOTHERMAL RESOURCE PERMITS

12-1 Purpose and Authority

This rule governs geothermal resource permit procedures pursuant to authority conferred by section 205-5.1, Hawaii Revised Statutes, as amended, upon the Planning Commission to determine whether proposed geothermal development activities should be allowed. The Planning Commission is the issuing authority for geothermal resource permits in geothermal resource subzones located within Agricultural, Rural and Urban State Land Use Districts in the County.

The Planning Commission's approval of an application for a geothermal resource permit shall not in any way abrogate nor supercede the provisions of Chapters 182 and 183, HRS, and rules promulgated thereunder.

12-2 Definitions

As used herein, "geothermal development activities", whether for research or commercialization purposes, means exploration, development, or production of electrical energy from geothermal resources, or as otherwise defined in Hawaii Revised Statutes, Section 205-5.1.

12-3 Contents of Application

Any person who desires to conduct geothermal development activities on land that is located within a geothermal resource subzone and located within either the Agricultural, Rural or Urban State Land Use Districts shall apply to the Planning Commission for a geothermal resource permit. An application for a geothermal resource permit shall be filed in the Planning Department's office and shall include the following:

- (a) Non-refundable filing and processing fee of one thousand dollars.
- (b) Original and twenty-five copies of:
 - (1) Application form;
 - (2) Written and appropriate graphic descriptions of the property and the proposed geothermal

development activities including, but not limited to:

- (A) A description of the property for which a permit is being requested to include the property's real property tax map key designation and a description of the property's location within the County.
- (B) A written statement describing the scope of the planned activities and presenting the applicant's reasons for requesting the permit.
- (C) A preliminary plot or site plan of the property, drawn to scale, showing all existing and proposed uses and locations of structures including, but not limited to, drilling sites, wells, access roadways, water sources, waste water collection and disposal systems, the geothermal steam and/or brine collection and disposal systems, power plant(s) and electrical power distribution systems.
- (D) Preliminary elevation drawings of the proposed temporary and permanent structures.
- (E) The proposed locations and elevations and depths of all superstructures and drilling rigs, bottom hole locations, casing program, proposed well completion program, size and shape of drilling sites, and location of all existing and proposed access roads.
- (F) Areas of potential temporary and/or permanent surface disturbance, including, but not limited to, excavation and grading sites, the location of camp sites, airstrips, and other support facilities, excavation and borrow pits for roads and other construction activities.
- (G) A written description of the methods for disposing of well effluent and other wastes.
- (H) A geologist's report on the site and surrounding area's surface and subsurface geology, nature and

occurrence of known or potential geological hazards and geothermal resources, surface and ground water resources, topographic features of the land, and drainage patterns.

- (I) Pre-exploration meteorological, ambient air quality and noise level measurements that demonstrate the potential effects on surrounding properties through air quality and noise impact analysis.
- (J) A written description of the measures proposed to be taken for protection of the environment, including, but not limited to, the prevention and/or control of:
 - (i) Fires,
 - (ii) Soil erosion,
 - (iii) Surface and ground water contamination,
 - (iv) Damage to fish and wildlife or other natural resources,
 - (v) Air and noise emissions,
 - (vi) Hazards to public health and safety,
 - (vii) Socio-economic impact(s), and
 - (viii) Impact(s) on public infrastructure and services.
- (K) Statement(s) addressing how the proposed development would mitigate or reconcile:
 - (i) Any effects to residents or surrounding properties in the areas of health, environment and socio-economic activities;
 - (ii) The burdening of public agencies to provide support infrastructure such as roads, sewers, water, drainage, school and related services and police and fire protection.
- (L) Preliminary provisions and/or plans for the monitoring of environmental effects such as noise and air and water quality during each proposed phase of the project (exploration, development and production) demonstrating how the

applicant intends to comply with this rule, the rules of the State's Department of Health, and the rules of the State Board of Land and Natural Resources.

- (M) A preliminary plan of action for emergency situations which may threaten the health, safety, and welfare of employees and other persons in the vicinity of the proposed project site including, but not limited to, procedures to facilitate coordination with appropriate Federal, State and County officials and the evacuation of affected individuals.
 - (N) Preliminary timetable(s) and/or schedule(s) for each proposed phase of the project.
 - (O) Method(s) of presenting timely progress reports to the Planning Commission.
 - (P) Other pertinent information or data such as an archaeological survey which the Planning Director may require to support the application for the utilization of geothermal resources and the protection of the environment.
- (c) Graphic representations suitable for both staff analysis and public presentation, including the depiction of the project boundaries, reference points (roadways, shoreline, etc.), existing and proposed structures and appurtenances. Graphics for public presentation shall be a minimum of 2 feet by 3 feet in dimension, drawn to scale on a map or maps of 1:24,000 scale, or larger when required by the Commission.

12-4 Properly Filed Application

Within twenty days of receipt of an application, the Planning Director shall review it to determine if it is complete in that it includes the supporting data required pursuant to Section 12.3 of this rule. An application that is determined to be complete shall be officially accepted within twenty days of receipt of the application and the applicant shall be so notified in writing.

12-5 Hearing and Notification

- (a) The Planning Director, on behalf of the Planning Commission, shall set a date for a public hearing to be held within a period of ninety days from the date of

official acceptance of a properly filed and completed application.

- (b) The Planning Commission shall conduct a public hearing. Upon appropriate request for mediation from any party who submitted comment at the public hearing, the Planning Commission shall order the requesting party or parties, the applicant and the appropriate agencies to submit to the mediation process outlined in Section 12.5.1 of this rule.
- (c) Promptly after the Planning Director fixes a date for the public hearing and at least 15 days before the date of the public hearing, the applicant shall mail a notice of the hearing to owners of interests in properties, as shown on the current real property tax rolls at the County Real Property Tax Office, within a minimum of three hundred feet of the perimeter boundary of the property for which a permit is being requested (or as determined by the Planning Director), and to other interested persons or groups as may be determined by the Planning Director. The applicant shall also make a reasonable attempt or best effort in notifying residents within one thousand feet of the perimeter boundary of the property of the public hearing. Such notice shall state:
 - (1) Name of the applicant;
 - (2) Precise location of the property involved;
 - (3) Nature of the proposed geothermal development activities; and
 - (4) Date, time, and place of the hearing.
- (d) If the notification requirement set forth in section 12.5 (c) has not been met, the Planning Commission shall not conduct a hearing and further action on the application shall be deferred until the notification requirement is met.
- (e) In addition to said notice and at least fifteen days prior to the date of the hearing, the Planning Commission shall publish notice of the hearing in a newspaper of general circulation in the County which includes the information provided under section 12.5(c)(1-4) of this rule.

12-5-1 Mediation

- (a) Persons Entitled to Request Mediation. Any person, including interested government agencies, who submitted

comment at the public hearing may, upon appropriate request, seek mediation of issues raised by that person at the initial public hearing. Upon receipt of an appropriate request, the Planning Commission shall require the parties to participate in mediation. All appropriate requests for mediation shall be consolidated in a single mediation conference. The Planning Commission shall not be a party to the mediation, and shall not be permitted to attend mediation conferences. The Planning Department may be a party to the mediation if it makes an appropriate request.

- (b) Requests for Mediation. A request for mediation shall be made in writing to the Planning Commission, shall contain a brief statement of the issue or issues raised by that person at the public hearing, and shall contain the name, address, phone number and signature of the person requesting mediation.
- (c) Time for Submission of Request. The original and ten (10) copies of the request for mediation shall be filed with the Planning Commission within five days after the close of the initial public hearing and one copy of the request shall be served on the applicant.
- (d) Appointment of a Mediator. Within five days after receipt of a timely request, the Planning Commission shall appoint a qualified mediator. Appointment of the mediator by the Planning Commission shall be final, except as provided in Section 12.5.1(e).
- (e) Qualifications of Mediator. No person shall serve as a mediator in any dispute in which that person has any financial or personal interest in the result of the mediation, except by the written consent of all parties to the mediation. Prior to accepting an appointment, the prospective mediator shall disclose any circumstances likely to create a presumption of bias or prevent the prompt completion of the mediation. Upon receipt of such information, the Chairperson shall either replace the mediator or immediately communicate the information to the parties for their comments. In the event the parties are unable to agree as to whether the mediator shall serve, or in the event the appointed mediator becomes unable or unwilling to serve, the Chairperson will appoint another mediator. The mediator shall not be an employee of any County agency or its staff.
- (f) Notice of Mediation Conference. The applicant and any person submitting a timely request for mediation shall be notified by the Planning Commission of the date,

time, and place of the first mediation conference by depositing such notice in the mail to the return address stated in the application and in the request for mediation. The notice shall be mailed no later than ten days before the start of the mediation conference.

- (g) **Mediation Conference.** The initial mediation session shall be held within 15 days after the appointment of the mediator. The mediator shall fix the time and place of each subsequent mediation session. The conference shall be held within the County of Hawaii unless all parties and the mediator agree otherwise. The mediation period shall not extend beyond thirty days after the initial mediation session, except by order of the Planning Commission. Mediation shall be confined to the issues raised at the public hearing by the respective party or parties requesting mediation.
- (h) **Authority of Mediator.** The mediator shall attempt to help the parties reach a satisfactory resolution of their dispute, but shall not have authority to impose a settlement upon the parties. The mediator may conduct joint and separate meetings with the parties and make oral and written recommendations for settlement.
- (i) **Privacy.** Mediation sessions shall be private. The parties and their representatives shall have the right to attend the joint mediation sessions. Other persons may attend only with the permission of all parties to the mediation and the consent of the mediator.
- (j) **Confidentiality.** Confidential information disclosed to a mediator by any party in the course of the mediation shall not be divulged by the mediator to anyone, including other parties to the mediation. All records, reports, or other documents received by a mediator while serving in such capacity shall be confidential. The mediator shall not be compelled to divulge such records or to testify in regard to the mediation in any administrative proceedings or judicial forum.
- (k) The parties shall maintain the confidentiality of the mediation and shall not rely on, or introduce as evidence in any arbitral, judicial, administrative, or other proceeding:
 - (i) views expressed or suggestions made by any other party with respect to a possible settlement of any disputed issue;
 - (ii) statements or admissions made by any other party in the course of mediation proceedings;

- (iii) proposals made or views expressed by the mediator;
 - (iv) the fact that the other party had or had not indicated willingness to accept a proposal for settlement made by the mediator.
- (l) Stenographic Record. There shall be no stenographic record or electronic recordation of the mediation process.
 - (m) Recommendation of Mediator. The mediator shall submit a written report containing recommendations to the Planning Commission, based upon any mediation agreement reached between the parties or stating that no agreement was reached, for consideration by the Planning Commission in its final decision. The written report of the mediator shall be filed with the Planning Commission and served on all parties to the mediation within 10 days of the close of the mediation conference.
 - (n) Second Public Hearing. If there is no mediation agreement, or if the mediation agreement does not resolve all issues submitted for mediation, the Planning Commission may, in its sole discretion, hold a second public hearing to receive additional comment related to the unresolved mediation issues. The second public hearing, if to be conducted, shall be held within thirty (30) days after receipt of the mediator's report. Within 10 days after the second public hearing, the Planning Commission may receive additional written comment on the unresolved mediation issues raised at the second public hearing by any party.
 - (o) If a second hearing is held, the Planning Commission shall consider the comments raised at the second hearing before rendering its final decision. The Planning Commission shall then determine whether a geothermal resource permit shall be granted for geothermal development activities described in the application.
 - (p) Expenses. The parties shall each bear their respective costs, fees and expenses.

12-6 Criteria for Issuance of Geothermal Resource Permit

The Planning Commission shall grant a geothermal resource permit if it finds that the applicant has demonstrated that:

- (a) The proposed geothermal development activities would not have unreasonable adverse health, environmental, or socio-economic effects on residents or surrounding property; and
- (b) The proposed geothermal development activities would not unreasonably burden public agencies to provide roads and streets, sewers, water, drainage, school improvements, and police and fire protection; and
- (c) There are reasonable measures available to mitigate the unreasonable adverse effects or burdens referred to above.

12-7 Action

- (a) Unless there is mutual agreement to extend the period of time for the Planning Commission's action, the Planning Commission shall take action on a properly filed and complete application within six months (180 days) of the date a complete application is filed; provided that the time limit may be extended by agreement between the applicant and the Planning Commission.
- (b) The Planning Commission's action shall either:
 - (1) Grant the geothermal resource permit as requested by the applicant based upon the satisfaction of criteria in section 12.6 above and stating the reasons therefore, subject to performance, reporting and other appropriate conditions imposed by the Commission.
 - (2) Grant the geothermal resource permit as may be modified from the applicant's request and stating the reasons therefore, subject to performance, reporting, and other appropriate conditions imposed by the Commission.
 - (3) Grant the geothermal resource permit in phases or increments dependent upon the timely and progressive completion of a precedent phase or increment and stating the reasons therefore, subject to performance, reporting, and other appropriate conditions imposed by the Commission.
 - (4) Deny the geothermal resource permit and stating the reasons therefore.
- (c) The Chairperson of the Commission shall issue official written notification to the applicant of the

Commission's action including any performance, reporting, and other appropriate conditions imposed by the Commission.

12-8 Requirements Prior to Initiating Construction

Prior to initiating construction of an approved project or any phase of an approved project, the applicant shall submit the following to the Planning Director:

- (a) Copies of approved permits and other applicable approvals for the project or any phase of the project from other County, State or Federal agencies as applicable.
- (b) Final plans or provisions for monitoring environmental effects of the project or any phase of the project such as noise, air and water quality as may be required to insure compliance with County rules and the rules of the State's Department of Health and Board of Land and Natural Resources, and other permit-issuing agencies.
- (c) A final plan of action to deal with emergency situations which may threaten the health, safety, and welfare of the employees and other persons in the vicinity of the proposed project site. The plan shall include procedures to facilitate coordination with appropriate State and County officials and the evacuation of affected individuals.
- (d) A final site plan and elevations of proposed temporary and/or permanent structures for the project or any phase of the project.

12-9 Amendments of Permit and Conditions

- (a) For any amendments to the geothermal resource permit or its conditions the permittee shall set forth in writing:
 - (1) The specific amendment requested;
 - (2) The reasons for the request, including statements addressing the criteria listed under section 12.6(1) through (3) of this rule; and
 - (3) Any other applicable information requested by the Planning Director.
- (b) In the case of any amendment concerning a time extension to the permit or its conditions, the permittee shall file the request not less than ninety days prior to the deadline for performance of the condition, setting forth:

- (1) The affected condition;
- (2) The length of time requested; and
- (3) The reasons for the request.

If either the Planning Director or the Planning Commission is not able to act on a properly filed time extension request prior to the deadline for a time extension, the geothermal development activities allowed by the Geothermal Resource Permit may be continued by the Planning Director.

- (c) All of the procedures set forth in sections 12.4 through 12.12 of this rule and the procedures set forth in other applicable Planning Commission rules shall apply.

12-10 Enforcement of Permit and Conditions

- (a) If the Planning Director determines that there is noncompliance with the geothermal resource permit or its conditions, the Planning Director shall so inform in writing the permittee and, if applicable, other appropriate County, State or Federal agencies, setting forth the grounds of his determination. Upon receiving notice of the determination of noncompliance, the permittee shall have five days to provide a written response to the notice of determination of noncompliance.
- (b) Notwithstanding any written response submitted by the permittee, if the Planning Director affirms the determination of noncompliance, he shall so advise the permittee in writing. The permittee shall have five days thereafter to correct the noncompliance; provided that the Planning Director may allow a longer period upon a finding of good cause, such as where circumstances beyond the permittee's control will prevent compliance within the five-day period.
- (c) The permittee may request a hearing with the Planning Commission to amend the permit, should compliance be impossible or impractical to meet.
- (d) If the permittee fails to correct the noncompliance within the required time period, the Planning Director shall refer the matter with his recommendations to the Planning Commission for further disposition, which may include, but is not limited to, either the revocation or the modification of the permit.

- (e) Notwithstanding any other provision of this section, pending a hearing by the Planning Commission the Planning Director may immediately and temporarily suspend the permit and operations allowed thereunder. Notice of a temporary suspension shall be provided in writing or orally with subsequent written confirmation within three days to the permittee and shall set forth the reasons for the temporary suspension. The Planning Director may reactivate the permit upon a subsequent finding of the permittee's compliance with the permit condition. Subject to the Planning Commission rules, the permittee may at any time request a hearing before the Planning Commission for its review and action with regard to the permit's temporary suspension or any subsequent refusal of the Planning Director to reactivate the permit. Referrals by the Planning Director to the Planning Commission and reviews by the Planning Commission of the Planning Director's action shall be heard at the Commission's next meeting when the matter can be placed on the Commission's agenda.

12-11 Penalties

If a permittee, its successors or assigns do not comply with any provision of a permit or its conditions issued under this Rule they may be subject to a civil fine not to exceed those provided for by applicable statutes.

12-12 Appeals

- (a) Any decision made by the Planning Commission pursuant to a public hearing or hearings under this rule may be appealed directly on the record to the supreme court for final decision and shall not be subject to a contested case hearing. Sections 91-14(b) and (g), Hawaii Revised Statutes, as amended, shall govern the appeal, notwithstanding the lack of a contested case hearing on the matter. The Planning Commission shall provide a court reporter to produce a transcript of the proceedings at all public hearings under this rule for purposes of an appeal.
- (b) For the purposes of an appeal from a decision from a public hearing, the record shall include:
- (1) The application for the permit and all accompanying supporting documents, including but not limited to; reports, studies, affidavits, statements, and exhibits.
 - (2) Staff recommendations from County agencies submitted to the Planning Commission in consideration of the application.

- (3) Oral and written public testimony received at the public hearings.
- (4) Written transcripts of the proceedings at the public hearings.
- (5) The written recommendation received by the Planning Commission from the mediator with any mediation agreement.
- (6) A statement of relevant matters officially noticed by the Planning Commission and/or any of its members at the public hearings.
- (7) The written decision of the Planning Commission issued in connection with the application and public hearings.
- (8) Other documents required by the Planning Commission.

RULE 13. STATE LAND USE DISTRICT BOUNDARY AMENDMENT

13-1 Purpose and Authority

This rule governs State Land Use district boundary amendment procedures pursuant to authority conferred by Section 205-3.1 of the Hawaii Revised Statutes and Chapter 28 of the Hawaii County Code, which allow the County to amend State Land Use district boundaries for lands fifteen acres or less located in the State Land Use Urban, Rural, and Agricultural districts. District boundary amendments to lands situated within the State Land Use Conservation district, however, are not covered by this rule.

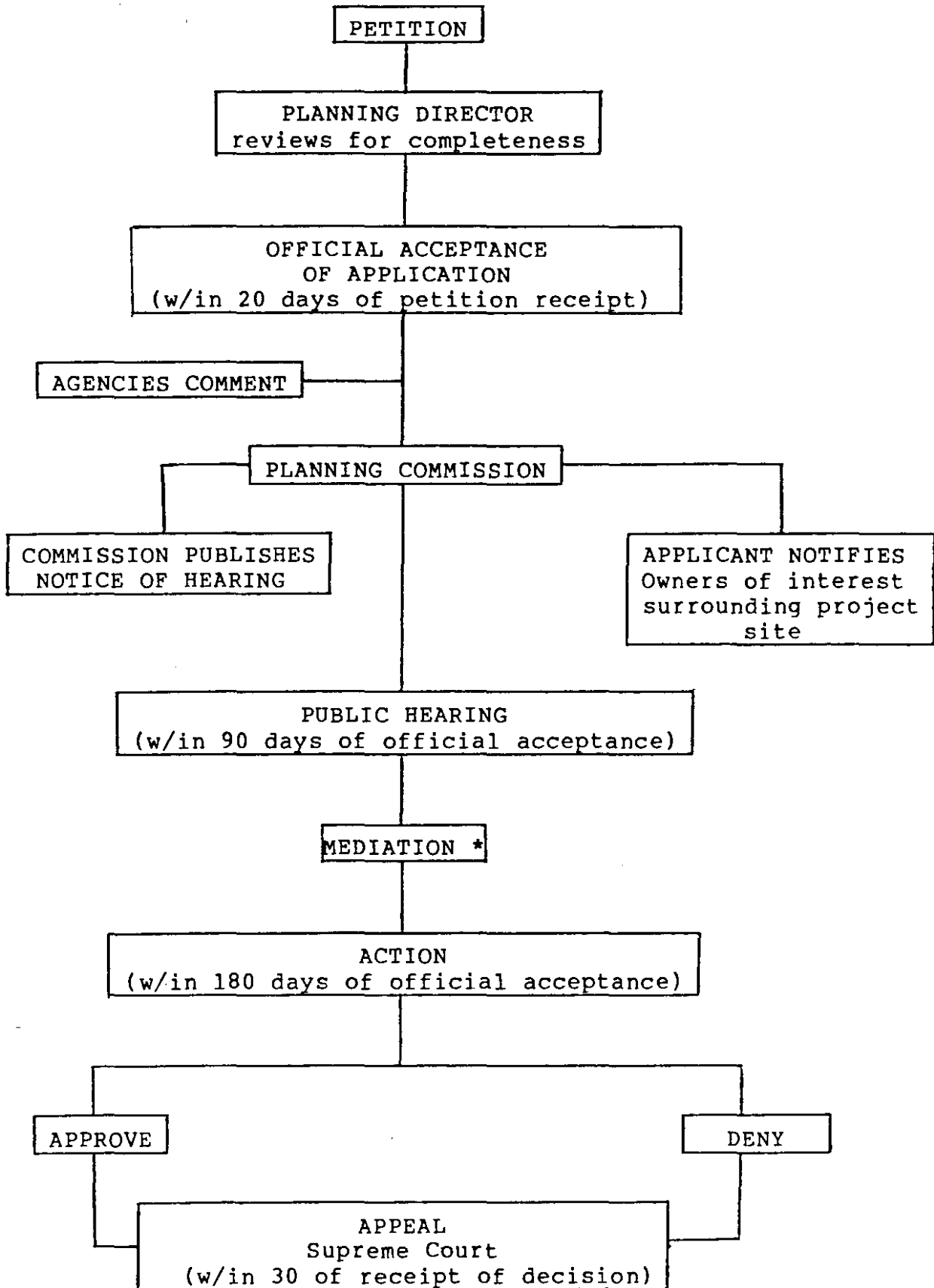
13-2 Standing to Submit Petition for State Land Use District Boundary Amendment

A petition for a change in district boundary may be filed by any department or agency of the state or county, or by any person with a property interest in the land sought to be reclassified. A petition may also be initiated by resolution of the County Council.

13-3 Contents of Petition

A petition for a State Land Use district boundary amendment shall be filed with the Planning Department and shall include the following:

GEOHERMAL RESOURCE PERMIT



APPENDIX A

PLANNING COMMISSION RULES (EXISTING)

- Rule 1. General Rules
Adopted: August 24, 1984
- Rule 2. Petition for Adoption, Amendment, or Repeal of Rules
Adopted: August 24, 1984
- Rule 3. Declaratory Rulings
Adopted: August 24, 1984
- Rule 4. Contested Case Procedure
Adopted: April 21, 1982
Amended: August 24, 1984
- Rule 5. General Plan Amendments
Adopted: June 26, 1984
- Rule 6. Special Permits
Adopted: April 16, 1969
Amended: March 7, 1979; October 17, 1979; and
August 24, 1984
- Rule 7. Use Permits
Adopted: October 10, 1984
- Rule 8. Rules and Regulations Relating to Shoreline Setback
Adopted: August 25, 1971
- Rule 9. Special Management Area Rules and Regulations
Adopted: October 16, 1975
Amended: February 22, 1980; June 26, 1984; August 24, 1984;
and October 10, 1984
- Rule 10. Appeals
Adopted: June 26, 1984
- Rule 11. Zoning Amendments
Adopted: June 26, 1984
- Rule 12. Geothermal Resource Permits
Adopted: September 26, 1986
Amended: February 12, 1988
- Rule 13. State Land Use District Boundary Amendment
Adopted: March 16, 1987

EXPERIMENTS IN DIRECT USE AT NOI'I O PUNA

Andrea Gill Beck
Field Representative, Hawaii Energy Extension Service

Department of Business and Economic Department
99 Aupuni St. #214
Hilo, Hawaii 96720

ABSTRACT

A total of nine small business ventures, artistic endeavors and experiments have been funded by the Community Geothermal Technology Program (CGTP) in Hawaii. The program provides small grants for pre-commercial enterprises utilizing geothermal heat and by-products. These grantees are the first, and, thus far, the only direct heat users in Hawaii; their efforts have encouraged others to consider the ample heat resource in the Puna District.

The next step toward full commercialization is the establishment of a geothermal "mini-park," which will be sited immediately next to the Natural Energy Laboratory of Hawaii's Puna Geothermal Facility and which will use hot brines from the laboratory. This incubator will service at least ten direct heat businesses, with geothermal heat being provided at a cost well below that of conventional sources.

BACKGROUND

Hawaii has one geothermal well and power plant, both known as "HGP-A" for "Hawaii Geothermal Project--Abbott." The well was first flashed in 1976; the 3-MW power plant has been operating since 1982, with electricity sold to the local utility. In 1985, a direct use laboratory, Noi'i O Puna (Puna Research Center) was dedicated adjacent to the power plant, and in 1986 the first direct use experiments began under the Community Geothermal Technology Program (CGTP).

The CGTP was conceived of and is administered jointly by the State of Hawaii Department of Business and Economic Development (DBED) and the University of Hawaii at Manoa's Hawaii Natural Energy Institute (HNEI.) Funds have been provided by the U.S. Department of Energy, the County of Hawaii, and a number of private donors. Two phases of grants have been awarded, the first in 1986, and the second in 1988.

The purposes of the CGTP are to encourage the use of waste heat and by-products from HGP-A, to support small business enterprises in the Puna District, where the geothermal

laboratory is located, and to allow access to the geothermal resource by individuals, entrepreneurs, community groups and non-profit agencies who may not otherwise be able to take advantage of the laboratory. Since HGP-A produces a wet resource--about 80,000 lb/hr of a fluid which is 57% liquid and 43% steam--and the power plant does not make use of the liquid portion, much excess heat is available for economic use. In addition, approximately 500 lb/day of amorphous silicon dioxide precipitates out of the brine into disposal ponds, and is also available for experimentation.

Most of the work on grants funded by the CGTP has taken place at Noi'i O Puna. This public laboratory may be used for private, proprietary research, as well as publicly-funded projects. The resources available at Noi'i O Puna include: high pressure brine (160 psig at 370 deg.F, or 188 deg.C); low pressure brine (15 psig at 250 deg.F, or 121 deg.C) low pressure steam (15 psia at 250 deg.F, or 121 deg.C); and hot potable water (50 psig at 210 deg.F, or 99 deg.C). Compressed air and electricity (480 vac single- and triple-phase; 240 vac single- and triple-phase; and 120 vac single phase) are also available.

The pilot phase of the CGTP awarded grants to five projects: 1) "Green Papaya Powder Drying" (\$10,301); 2) "Bottom Heating System Using Geothermal Power for Propagation," (\$11,350); 3) "Experimental Lumber Drying Kiln," (\$10,800); 4) "Hawaii Glass Project," (\$10,144); and 5) "Cloth Dyeing by Geothermal Steam," (\$6,119).

The second phase of the CGTP also awarded five grants, including a continuation of the bottom heating project from the pilot phase, for an additional \$3,610. The four new projects are: 1) "Geothermal Aquaculture Project" (\$15,000); 2) "Media Steam Sterilization and Drying" (\$15,000); 3) "Silica Bronze" (\$15,000); and 4) "Electrodeposition of Minerals in Geothermal Brine" (\$8,422).

The last of the five pilot projects was completed in early 1988, and final reports are being prepared. Several of the principal investigators have indicated an interest in

state to be kiln-dried. Some lumber is air-dried locally, a process which takes between one and two years, and results in a moisture content of around 14%. Irwin and Leaman also used a dehumidified chamber, which was an improvement over air drying but offered no control over the final moisture content.

Also unavailable to local woodworkers was a drying schedule for koa and other Hawaiian hardwoods. Drying schedules dictate the varying temperatures and humidities required within the kiln. The partners expected to develop drying schedules and to design computer software to run the kiln automatically.

A small experimental kiln, 5' x 16' x 5' h (1.5m x 5m x 1.5m), was built at Noi'i O Puna, with a computerized control system and sensors (Fig. 3). A plenum in the walls of the kiln distributed warm air throughout its length. The heat source was the geothermal brine; heat was transferred to potable water at the laboratory's shell-in-tube heat exchanger, and to the air by means of a simple coiled-pipe heat exchanger at the kiln, along with a circulating fan operated by a 1/3 hp motor. Fresh water could be sprayed into the air circulating system to increase humidity, when the drying schedule called for it. The kiln held less than 1,000 board feet of lumber.

Leaman, who designed the software, had counted on an air temperature of 140 deg.F (60 deg.C). However, due to heat exchanger inadequacies, the air temperature was lower than optimal. Despite this and problems with adequate air circulation, charges of lumber were repeatedly dried, taking four to eight weeks for satisfactory results, depending on the thickness

of the lumber. The partnership continued to operate the kiln on a semi-commercial basis after the conclusion of their research.

Although the experiment was successful in demonstrating the application of geothermal heat to lumber drying and the island's wood-working industry still has a need for a local kiln, the King Koa partners have decided not to pursue this project. A larger kiln would be necessary for the operation to be commercially viable.

GLASS MAKING

Identifying a use for the geothermal silica, and simultaneously encouraging the local community of hot glass artists, were the goals of the Hawaii Glass Project, undertaken by two artists, Norman Miller and Bill Irwin. Miller experimented with several glass formulas, finally developing a unique mixture using 93% indigenous Hawaiian materials. The grantees mobilized 24 artists across the state of Hawaii who created 110 art objects from the formula and displayed them at an exhibition. (Ref. 3)

Recovering the geothermal silica was laborious. The amorphous silicon dioxide precipitates out of the brine as it cools, and forms rocky crusts as the brine evaporates from the laboratory's disposal ponds. Because the brine is salty, the glass makers needed to wash the silica before it could be used. Thus, the silica had to be in a stage with particles large enough not to wash away, but not yet hardened to a crust. It must also be free of other contaminants, such as rust from the pipes or cinder dust from the surrounding basalt lava, which could affect the color and workability of

Table 1. Growth Data for Selected Palm Species With Geothermal Bottom Heating (From Ref. 2)

Seed-Plant Name	Site	Date Planted	Date Germination Begins	Date Transplant Maturity	Germination % Count
Pritchardia Pacifica	heated	6/6/87	6/27/87	8/14/87	82
	unheated	6/6/87	7/17/87	10/10/87	59
Bismark Nobilis	heated	7/18/87	9/15/87	2/19/88	62
	unheated	7/18/87	10/20/87	6/2/88	21
Phoenix Reclinata	heated	10/21/87	11/15/87	3/10/88	74
	unheated	10/21/87	1/2/88	4/28/88	53
Roisonea	heated	10/27/87	12/8/87	4/2/88	49
	unheated	10/27/87	12/13/87	5/1/88	19
Livistona Rotundifolia	heated	12/24/87	2/19/88	3/29/88	31
	unheated	12/23/87	3/15/88	5/25/88	2
Manila	heated	2/20/88	3/20/88	4/29/88	87
	unheated	2/20/88	4/2/88	5/25/88	41

D'Anna has tested methods of shredding coconut husks and has also constructed dual steaming chambers from old shipping containers. After developing a net bag to hold the material while it is being steamed and, later, marketed, he will run tests to demonstrate that the steamed product can be certified as sterile. Other local materials could also be pasteurized for commercial nursery use.

BRONZE CASTING

Another new grant is "Silica Bronze," which entails the use of geothermal silica as a refractory material in casting bronze artwork. Silica and plaster together are used to make an investment casting for the "lost wax" process of creating sculpture. Currently, bulk silica is imported to Hawaii.

The artist grantee, Henry Bianchini, has addressed the problem of recovering and washing the geothermal silica which was identified earlier by the glassmaking grantees. Bianchini, however, does not require silica of the same purity as is necessary for glass; traces of rust and other contaminants do not affect his product. Bianchini has removed some silica from the geothermal laboratory's disposal ponds and taken it to his workshop in a nearby residential area.

A washing structure, consisting of raised shelves lined with wire mesh and muslin fabric, was constructed, as well as a water storage tank, since the area is not served by the public water supply. Water sprayed from irrigation tubing automatically washes the salts from the silica, and a roof of translucent corrugated fiberglass sheets allows the material to solar dry. Silica has been successfully washed, and then used in a trial investment casting, with mixed results. The artist will continue to experiment with the casting mixture to develop one suitable for creating several sculptures for the program.

ELECTRODEPOSITION

The final project concerns more basic research: whether useful compounds, such as calcium carbonate, will precipitate from the geothermal brine onto an electrically-charged metal grid. Past international research has shown that calcium carbonate can be successfully precipitated from seawater onto metal structures, which may have a variety of economic uses. The chemical similarities between seawater and the geothermal brine, and possible future commercial applications of the deposited materials, make this research project intriguing.

The investigator, Dr. Patrick Sullivan of Honolulu's Oceanit Laboratories, will be constructing his bench-scale experiment at Noi'i O Puna. He hopes to produce and analyze deposits, determining the composition and structural characteristics of the material to see if additional work to produce quantities of the

material would be warranted.

OTHER WORK

Additional investigations, not funded by the Community Geothermal Technology Program, have also been proposed. The Department of Business and Economic Development is supporting a project to design, construct and test a dry-heat treatment chamber at Noi'i O Puna to disinfect papayas of fruit flies. Export of this popular tropical fruit has been limited due to inadequacies in current treatment methods, which are required to eliminate fly larvae so that the pest does not spread.

Researchers and potential entrepreneurs have also approached the Natural Energy Laboratory of Hawaii with inquiries relating to geothermal spa development, refrigeration and ice making, and a variety of agricultural product dehydration proposals. Among the commodities considered for drying are macadamia nuts, kukui nuts, cacao beans, tropical fruits, fish and meat.

"MINI-PARK"

The next step toward commercial development of geothermal enterprises is a "mini-park," to be located adjacent to Noi'i O Puna on 10-15 acres (4-6 ha) of land owned by the Kapoho Land and Development Company, a major private landowner in Puna. The company's planner has completed a proposed layout of ten plots, approximately one acre each, which could be leased by entrepreneurs ready for pre-commercial ventures. Such ventures could have started, on a smaller scale, at Noi'i O Puna, before "graduating" to the mini-park incubator.

Although the land will be privately owned, and the users will negotiate leases directly with the owner, geothermal fluids will be provided by the Natural Energy Laboratory of Hawaii. The entrepreneurs will pay the laboratory for the Btu used, with a cost per Btu calculated to be 30% to 40% that of the least expensive conventional fuel, for instance, residual fuel oil. These payments would cover part of the laboratory's costs to install and maintain the fluid supply infrastructure. Electricity, telephone service, and water will also be provided, at metered retail rates, and there may be a common office/retail building, where accounting, secretarial, photocopying, and facsimile services would be provided to tenants.

A draft Facilities Use Agreement between the Natural Energy Laboratory of Hawaii and Kapoho Land Partnership, which manages the lands, was under review in Honolulu as of mid-1989. Among the questions being resolved is the liability involved in transferring the geothermal fluid from public to private property. It is hoped that the agreement will be finalized and the mini-park dedicated before the end of 1989, providing geothermal direct heat users with the



Figure 3. A computer-controlled experimental lumber kiln was heated by geothermal energy.

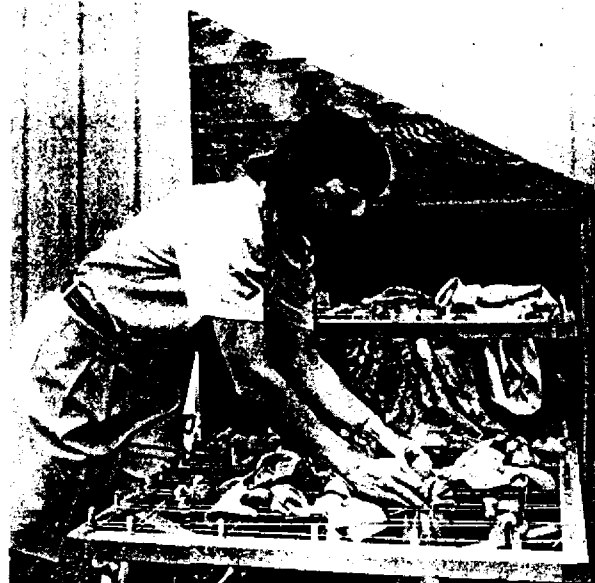


Figure 5. Low-pressure untreated geothermal steam, released into this chamber, fixes and alters dyes in fabric.

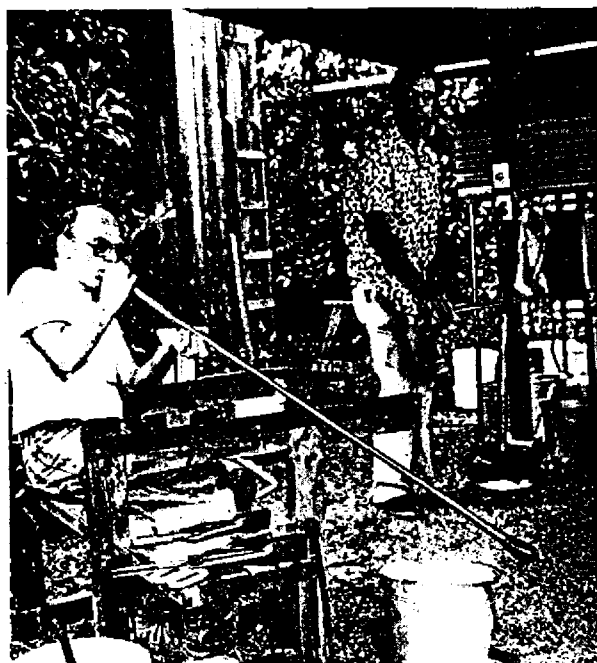


Figure 4. Art glass was created from geothermal silica, using 99% indigenous materials.

A Bill for an Act Relating to the Development and Use of Geothermal Energy.

Be It Enacted by the Legislature of the State of Hawaii:

SECTION 1. The Hawaii Revised Statutes is amended by adding a new chapter to be appropriately designated and to read as follows:

**“CHAPTER
GEOTHERMAL AND CABLE SYSTEM
DEVELOPMENT PERMITTING ACT OF 1988**

§ -1 **Short title.** This chapter shall be known and may be cited as the “Geothermal and Cable System Development Permitting Act of 1988.”

§ -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;
- (5) The State, with the support and assistance of the federal and county of Hawaii governments, has been exploring for several years the technical, engineering, economic, and financial feasibility of an interisland deep water electrical transmission cable system that would be capable of transmitting geothermally generated electric energy from the island of Hawaii to the islands of Maui and Oahu, and believes that a cable system may be feasible and desirable;
- (6) The development of such a cable system will not be undertaken without the firm assurance that a sufficient amount of geothermally generated electric energy will be continuously available to be transmitted through a cable system once it becomes operational;
- (7) The fundamental interrelationship between the development of geothermal resources and a cable system and the magnitude of the cost to undertake each of these developments clearly indicate that neither will be undertaken without the firm assurance that the other also will be undertaken in a synchronized and coordinated manner to enable both developments in substance to be completed concurrently, thereby en-

sure that revenues will be available to begin amortizing the costs of each of these developments;

- (8) A major and fundamental difficulty in the development of both geothermal resources and a cable system is the diverse array of federal, state, and county land use, planning, environmental, and other related laws and regulations that currently control the undertaking of all commercial projects in the State;
- (9) These controls attempt to ensure that commercial development projects in general are undertaken in a manner consistent with land use, planning, environmental, and other public policies, except that some of these specific laws, regulations, and controls may be repetitive, duplicative, and uncoordinated;
- (10) To a limited extent, the State and counties have sought to ameliorate this difficulty through the enactment or adoption of measures to improve the coordination and efficiency of land use and planning controls and specifically to facilitate the development of geothermal resources;
- (11) Notwithstanding these efforts, the complexities, the magnitude in scope and cost, the fundamental interrelationship between the development of geothermal resources and a cable system, the inherent requirement for the coordinated development of the geothermal resources and a cable system, the substantial length of time required to undertake and complete both developments, and the desirability of private funding for both developments require that affected state and county agencies be directed to pursue and develop to the maximum extent under existing law the coordination and consolidation of regulations and controls pertinent to the development of geothermal resources and a cable system;
- (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.

§ -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.

"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 -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.

"Person" includes any individual, partnership, firm, association, trust, estate, corporation, joint venture, consortium, any public corporation or authority that may be established by the legislature for the purposes of the project, or other legal entity other than an agency.

"Project" means the commercial development, construction, installation, financing, operation, maintenance, repair, and replacement, including without limitation all applicable exploratory, testing, and predevelopment activities related to the foregoing, of:

- (1) A geothermal power plant or plants, including all associated equipment, facilities, wells, and transmission lines, on the island of Hawaii for the purpose of generating electric energy for transmission primarily to the island of Oahu through the cable system; and
- (2) An interisland deep water electrical transmission cable system, including all land-based transmission lines and other ancillary facilities, to transmit geothermally generated electric energy from the island of Hawaii to the island of Oahu, regardless of whether the cable system is used to deliver electric energy to any intervening point.

§ -4 Consolidated permit application and review process. (a) The department is designated as the lead agency for the purposes of this chapter and, in addition to its existing functions, shall establish and administer the consolidated permit application and review process provided for in this chapter, which shall incorporate the permitting functions of those agencies involved in the development of the project which are transferred by section -10 to the department to effectuate the purposes of this chapter.

(b) The consolidated permit application and review process shall incorporate:

- (1) A list of all permits required for the project;
- (2) The role and functions of the department as the lead agency and the interagency group;
- (3) All permit review and approval deadlines;
- (4) A schedule for meetings and actions of the interagency group;
- (5) A mechanism to resolve any conflicts that may arise between or among the department and any other agencies, including any federal agencies, as a result of conflicting permit, approval, or other requirements, procedures, or agency perspectives;
- (6) Any other administrative procedures related to the foregoing; and

ACT 301

(7) A consolidated permit application form to be used for the project for all permitting purposes.

(c) The department shall perform all of the permitting functions for which it is currently responsible and which are transferred to it by section -10 for the purposes of the project, and shall coordinate and consolidate all required permit reviews by other agencies, and to the fullest extent possible by all federal agencies, having jurisdiction over any aspect of the project.

§ -5 Consolidated permit application and review procedure. (a) The department shall serve as the lead agency for the consolidated permit application and review process established pursuant to section -4(b) and as set forth in this section for the project. All agencies whose permitting functions are not transferred by section -10 to the department for the purposes of the project are required to participate in the consolidated permit application and review process.

(b) To the greatest extent possible, the department and each agency whose permitting functions are not transferred by section -10 to the department for the purposes of the project shall complete all of their respective permitting functions for the purposes of the project, in accordance with the timetable for regulatory review set forth in the joint agreement described in subsection (c)(3) and within the time limits contained in the applicable permit statutes, ordinances, regulations, or rules; except that the department or any agency shall have good cause to extend, if and as permitted, the applicable time limit if the permit-issuing agency must rely on another agency, including any federal agency, for all or part of the permit processing and the delay is caused by the other agency.

(c) The procedure shall be as follows:

- (1) The applicant shall submit the consolidated permit application using the consolidated permit application form, which shall include whatever data about the proposed project that the department deems necessary to fulfill the purposes of this chapter and to determine which other agencies may have jurisdiction over any aspect of the proposed project.
- (2) Upon receipt of the consolidated permit application, the department shall notify all agencies whose permitting functions are not transferred by section -10 to the department for the purposes of the project, as well as all federal agencies, that the department determines may have jurisdiction over any aspect of the proposed project as set forth in the application, and shall invite the federal agencies so notified to participate in the consolidated permit application process. The agencies, and those federal agencies that accept the invitation, thereafter shall participate in the consolidated permit application and review process.
- (3) The representatives of the department and the state, county, and federal agencies and the applicant shall develop and sign a joint agreement among themselves which shall:
 - (A) Identify the members of the consolidated permit application and review team;
 - (B) Identify all permits required for the project;
 - (C) Specify the regulatory and review responsibilities of the department and each state, county, and federal agency and set forth the responsibilities of the applicant;
 - (D) Establish a timetable for regulatory review, the conduct of necessary hearings, the preparation of an environmental impact statement if necessary, and other actions required to minimize duplication and to coordinate and consolidate the activities of the applicant, the department, and the state, county, and federal agencies; and

- (E) Provide that a hearing required for a permit shall be held on the island where the proposed activity shall occur.
- (4) A consolidated permit application and review team shall be established and shall consist of the members of the interagency group established pursuant to section -6(a). The applicant shall designate its representative to be available to the review team, as it may require, for purposes of processing the applicant's consolidated permit application.
 - (5) The department and each agency whose permitting functions are not transferred by section -10 to the department for the purposes of the project, and each federal agency shall issue its own permit or approval based upon its own jurisdiction. The consolidated permit application and review process shall not affect or invalidate the jurisdiction or authority of any agency under existing law, except to the extent that the permitting functions of any agency are transferred by section -10 to the department for the purposes of the project.
 - (6) The applicant shall apply directly to each federal agency that does not participate in the consolidated permit application and review process.
 - (7) The department shall review for completeness and thereafter shall process the consolidated permit application submitted by an applicant for the project, and shall monitor the processing of permit application by those agencies whose permitting functions are not transferred by section -10 to the department for the purposes of the project. The department shall coordinate, and seek to consolidate where possible, the permitting functions and shall monitor and assist in the permitting functions conducted by all of these agencies, and to the fullest extent possible the federal agencies, in accordance with the consolidated permit application and review process.
 - (8) Once the processing of the consolidated permit application has been completed and the permits requested have been issued to the applicant, the department shall monitor the applicant's work undertaken pursuant to the permits to ensure the applicant's compliance with the terms and conditions of the permits.
- (d) Where the contested case provisions under chapter 91 apply to any one or more of the permits to be issued by the agency for the purposes of the project, the agency may, if there is a contested case involving any of the permits, be required to conduct only one contested case hearing on the permit or permits within its jurisdiction. Any appeal from a decision made by the agency pursuant to a public hearing or hearings required in connection with a permit shall be made directly on the record to the supreme court for final decision subject to chapter 602.

§ -6 Interagency group. (a) The department shall establish an interagency group comprised of those agencies whose permitting functions are not transferred by section -10 to the department for the purposes of the project and which have jurisdiction over any aspect of the project. Each of these agencies shall designate an appropriate representative to serve on the interagency group as part of the representative's official responsibilities. The interagency group shall perform liaison and assisting functions as required by this chapter and the department. The department shall invite and encourage the appropriate federal agencies having jurisdiction over any aspect of the project to participate in the interagency group.

(b) The department and agencies shall cooperate with the federal agencies to the fullest extent possible to minimize duplication between and, where possible, promote consolidation of federal and state requirements. To the fullest extent possible, this cooperation shall include, among other things, joint environmental impact statements with concurrent public review and processing at both levels of govern-

ACT 301

ment. Where federal law has requirements that are in addition to but not in conflict with state law requirements, the department and the agencies shall cooperate to the fullest extent possible in fulfilling their requirements so that all documents shall comply with all applicable laws.

(c) If the legislature establishes any public corporation or authority for the purposes of the project, then upon its establishment, the public corporation or authority shall be a member of the interagency group.

§ -7 **Streamlining activities.** In administering the consolidated permit application and review process, the department shall:

- (1) Monitor all permit applications submitted under this chapter and the processing thereof on an ongoing basis to determine the source of any inefficiencies, delays, and duplications encountered and the status of all permits in process;
- (2) Adopt and implement needed streamlining measures identified by the interagency group, in consultation with those agencies whose permitting functions are not transferred by section -10 to the department for the purposes of the project and with members of the public;
- (3) Design, in addition to the consolidated permit application form, other applications, checklists, and forms essential to the implementation of the consolidated permit application and review process;
- (4) Recommend to the legislature, as appropriate, suggested changes to existing laws to eliminate any duplicative or redundant permit requirements;
- (5) Coordinate with agencies to ensure that all standards used in any agency decision-making for any required permits are clear, explicit, and precise; and
- (6) Incorporate, where possible, rebuttable presumptions based upon requirements met for permits issued previously under the consolidated permit application and review process.

§ -8 **Information services.** The department shall:

- (1) Operate a permit information and coordination center during normal working hours, which will provide guidance to potential applicants for the project with regard to the permits and procedures that may apply to the project; and
- (2) Maintain and update a repository of the laws, rules, procedures, permit requirements, and criteria of agencies whose permitting functions are not transferred by section -10 to the department for the purposes of the project and which have control or regulatory power over any aspect of the project and of federal agencies having jurisdiction over any aspect of the project.

§ -9 **Construction of the Act; rules.** This chapter shall be construed liberally to effectuate its purposes, and the department shall have all powers which may be necessary to carry out the purposes of this chapter, including the authority to make, amend, and repeal rules to implement this chapter; provided that all procedures for public information and review under chapter 91 shall be preserved; and provided further that the consolidated permit application and review process shall not affect or invalidate the jurisdiction or authority of any agency under existing law. The adoption, amendment, and repeal of all rules shall be subject to chapter 91.

§ -10 **Transfer of functions.** (a) Those functions identified in paragraphs (1) and (2) insofar as they relate to the permit application, review, processing,

ACT 301

issuance, and monitoring of laws, and rules and to the enforcement of terms, conditions, and stipulations of permits and other authorizations issued by agencies with respect to the development, construction, installation, operation, maintenance, repair, and replacement of the project, or any portion or portions thereof, are transferred to the department. With respect to each of the statutory authorities cited in paragraphs (1) and (2), the transferred functions include all enforcement functions of the agencies or their officials under the statute cited as may be related to the enforcement of the terms, conditions, and stipulations of permits, including but not limited to the specific sections of the statute cited. "Enforcement", for purposes of this transfer of functions, includes monitoring and any other compliance or oversight activities reasonably related to the enforcement process. These transferred functions include:

- (1) Such functions of the land use commission related to: district boundary amendments as set forth in section 205-3.1 et seq.; and changes in zoning as set forth in section 205-5; and
- (2) The permit approval and enforcement functions of the director of transportation or other appropriate official or entity in the department of transportation related to permits or approvals issued for the use of or commercial activities in or affecting the ocean waters and shores of the state under chapter 266.

(b) Nothing in this section shall be construed to relieve an applicant from the laws, ordinances, and rules of any agency whose functions are not transferred by this section to the department for the purposes of the project.

(c) This section shall not apply to any permit issued by the public utilities commission under chapter 269.

(d) Notwithstanding any other provision of this chapter, this section shall take effect on a date that is one year after the effective date of this chapter.

§ -11 **Annual report.** The department shall submit an annual report to the governor and the legislature on its work during the preceding year, the development status of the project, any problems encountered, and any legislative actions that may be needed further to improve the consolidated permit application and review process and implement the intent of this chapter.

§ -12 **Severability.** If any provision of this chapter or the application thereof to any person or circumstances is held invalid, the invalidity shall not affect other provisions or applications of this chapter that can be given effect without the invalid provision or application, and to this end the provisions of this chapter are declared severable.

§ -13 **Exemptions from certain state laws.** In order to promote the purposes of this chapter, all persons hired by the department to effectuate this chapter are excepted from chapters 76, 77, and 89.

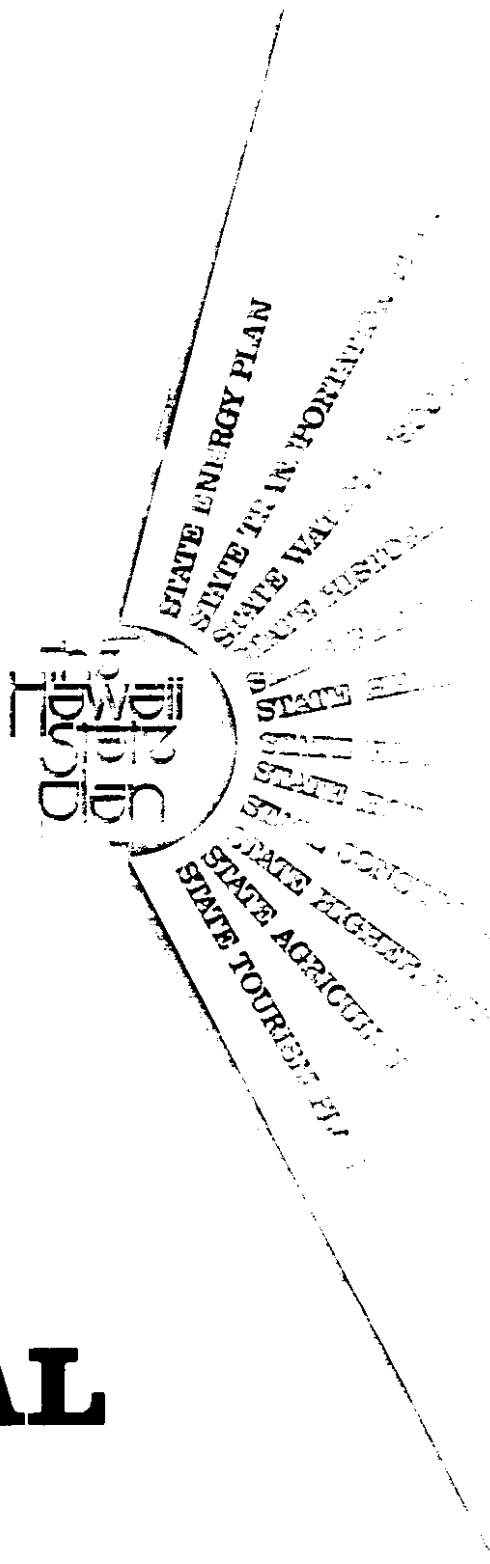
§ -14 **Development of geothermal resources on Maui.** To the extent an applicant's proposed project includes the development of geothermal resources on the island of Maui and the delivery of electric energy generated from these resources to the island of Oahu through the cable system, this chapter shall apply to that proposed project."

SECTION 2. There is appropriated out of the general revenues of the State of Hawaii the sum of \$275,000, or so much thereof as may be necessary for fiscal year 1988-1989, to carry out the purposes of this chapter. The sum appropriated shall be expended by the department of land and natural resources for the purposes of this Act.

SECTION 3. This chapter shall take effect on July 1, 1988, but shall not apply to any applications filed prior to the effective date.

(Approved June 13, 1988.)

HD
9502
H3
H364
1984



STATE ENERGY FUNCTIONAL PLAN



**DEPARTMENT OF PLANNING
AND ECONOMIC DEVELOPMENT**