# BEFORE THE LAND USE COMMISSION OF THE STATE OF HAWAII

In the Matter of the Petition for Special Permit of DEPARTMENT OF PLANNING AND ECONOMIC DEVELOPMENT SP78-307

DEPARTMENT OF PLANNING AND ECONOMIC DEVELOPMENT

This is to certify that this is a true and correct copy of the Decision and Order on file in the office of the State Land Use Commission, Honolulu, Hawaii.

FB 9 1979

Date

Executive Officer

DECISION AND ORDER

## BEFORE THE LAND USE COMMISSION OF THE STATE OF HAWAII

In the Matter of the Petition for Special Permit of DEPARTMENT OF PLANNING AND ECONOMIC DEVELOPMENT SP78-307

FINDINGS OF FACT, CONCLUSIONS OF LAW AND DECISION AND ORDER

The Land Use Commission of the State of Hawaii, having duly considered the entire record in the above entitled matter, makes the following findings of fact and conclusions of law.

#### FINDINGS OF FACT

- 1. The Petition for Special Permit was filed by the DEPARTMENT OF PLANNING AND ECONOMIC DEVELOPMENT, to allow the establishment of a geothermal research facility and to conduct flow tests on approximately 4.1 acres of land situated within the State Land Use Agricultural District at Kapoho, Puna, Hawaii, Tax Map Key 1-4-1: portion of 2.
- 2. The subject property is located along the east-side of Pohoiki Road, approximately one (1) mile makai of Lava Tree State Park.
- 3. The geothermal research facility, identified as the Hawaii Geothermal Research Station, would include: a power generation system and associated equipment; a research facility to test electric and non-electric applications of geothermal resources; and a visitor information center facility.
- 4. The flow tests are intended to provide more information about the characteristics of the geothermal well identified as HGP-A and the Kapoho geothermal reservoir.

- 5. The subject 4.1 acre area is a portion of a larger 353 acre parcel which is owned by the Kapoho Land and Development Company. The Department of Planning and Economic Development has received authorization from the landowner to apply for the Special Permit.
- 6. The County of Hawaii's General Plan Land Use
  Pattern Allocation Guide Map designates the subject area as
  Orchards. Present County Zoning is Agricultural 1-acre (A-la).
- 7. The Land Study Bureau's overall master productivity soil rating for agricultural use is Class "E" or "Very Poor" for the subject site.
- 8. Surrounding land uses include scattered residences, diversified agriculture such as papaya and foliage, and vacant lands. Leilani Estates subdivision is located approximately 1,000 feet south of the subject area at the subdivision's closest boundary. Lanipuna Gardens is less than 1,000 feet from the area under consideration in an easterly direction. The closest dwelling is approximately 2,500 feet west of the subject property.
- 9. Access to the subject area is directly off of Pohoiki Road.
- 10. An environmental impact statement for the project has been prepared and accepted by the Governor.
- 11. The State Department of Agriculture has stated its support of the Special Permit application. The department believes that the potential benefits of the project to agriculture would greatly outweigh the potential cost.
- 12. The State Department of Health has recommended to the applicant that nearby residents be informed of future plans and precautions at the project site.

- 13. The County Department of Research and Development has in part noted that the environmental impact of the project appears to be minimal and that hopefully a viable alternate energy source may be developed.
- 14. The County Fire Department, Department of Water Supply, Police Department, Department of Public Works, Hawaii Electric Light Co., Inc., and State Department of Transportation had no objections to the application for Special Permit.
- 15. The County Planning Department has recommended approval of the Special Permit application.
- 16. The Hawaii County Planning Commission conducted a public hearing on the application for Special Permit on February 23 and April 27, 1978. At that time, several representatives of the Petitioner testified in support of the request, while four (4) persons testified in opposition. One person questioned the impact and benefits to be derived from the geothermal project.

### CONCLUSIONS OF LAW

- 1. "Unusual and reasonable" uses other than those which are permitted in an Agricultural District may be permitted by Special Permit pursuant to HRS Chapter 205-6, and the State Land Use Commission District Regulation, Part V.
- 2. The approval of the subject request would be consistent with the State Land Use Law and Regulations. The Land Use Law and Regulations are intended to preserve, protect, and encourage the development of lands in the State for those uses to which these lands are best suited in the interest of public health and welfare of the people. The Agricultural

District category, within which the subject area is situated, includes those lands with a high capacity or potential for agricultural uses. It also includes lands surrounded by or contiquous to agricultural lands and which are not suited to agricultural and ancillary activities by reason of topography, soils and other related characteristics. The subject area is largely covered by 'a'a lava from the 1955 flow, and is classified as Class VIII by the U.S.D.A. Soil Conservation Service. This class of soils is the lowest in the Soil Conservation Service's rating system. The Land Study Bureau's overall master productivity rating for these soils is Class "E" or "Very Poor". Although it is possible for some form of agricultural activity to be conducted on these soils, as evidence by the surrounding agricultural uses, it is determined that the use of this parcel for the proposed activities will not adversely affect the agricultural potential of the region, the island, and the State.

change the essential character of the land and its present use since the land has been established as a geothermal development site as a result of the test drilling which was conducted in 1976. Therefore, effects on agricultural production of the subject 4.1 acre site would be further mitigated. Should the proposed project prove to be successful, geothermal energy and its by-products could possibly have a positive impact on agricultural activities, and possibly even be able to service some urban-related needs. The geothermal water could be used for agricultural irrigation, and the by-products of the geothermal water could also be used for other agricultural

purposes. It is therefore determined that the granting of this particular request also would not be in conflict with the State and County's agricultural policies. In fact, it may even further foster agricultural development in the general area.

- 4. As a result of the 1974 oil crisis, there has been concern over Hawaii's dependence on imported petroleum. Prior to 1974, the Hawaii Geothermal Project (HGP), which is a cooperative project involving Federal, State, County and private funds, was organized to investigate the development of geothermal energy. The subject property was selected as a test site. In April 1976, a successful well was drilled and completed, and as a result, HGP has proposed the installation of a research power plant to demonstrate that geothermal energy is an economically viable natural energy alternative.
- encourage the development of alternative energy sources.

  Both levels of government, as well as the Federal Government, have provided substantial funding and services for energy resource research and development to reduce the State's dependence on imported fuels. The island of Hawaii is believed to possess a vast resource base of geothermal heat. The test drilling at this site demonstrated the existence of a valuable geothermal energy source. However, the extent and magnitude of geothermal resources in Hawaii must still be determined. There is no way of knowing if the island actually has a geothermal resource of economic importance further testing is conducted. As a potential power source, geothermal may either prove to be of major importance or no importance at all. Only by further testing can this uncertainty be resolved.

- 6. Although the proposed use may have some adverse effects, such as problems of noise and fumes, to the surrounding property and the residents in the immediate area, stringent controls and conditions are attached to this Special Permit in order that the concerns may be alleviated. The Petitioner will be required to comply with all applicable requirements of the State of Hawaii Department of Health.
- 7. The use described in the Petition is an unusual and reasonable use pursuant to HRS Chapter 205-6 and State Land Use Commission District Regulation, Part V.

#### DECISION AND ORDER

IT IS HEREBY ORDERED that Special Permit Number 78-307 for the establishment of a geothermal research facility and to conduct flow tests on approximately 4.1 acres of land situated within the State Land Use Agricultural District at Kapoho, Puna, Hawaii, Tax Map Key 1-4-1: portion of 2, be approved subject to the following conditions:

- 1. That the landowner, Kapoho Land Development Co., or its authorized representative shall submit a subdivision plan and receive tentative approval within one (1) year from the effective date of the Special Permit. The landowner/representative shall also be responsible for securing final subdivision approval.
- 2. That plans for Plan Approval be submitted within two (2) years from the effective date of approval of the Special Permit.
- 3. That construction of the proposed facility commence within one (1) year from the effective date of receipt of final Plan Approval and be completed within three (3) years thereafter.

- 4. That a landscaping buffer or screening zone be provided along the main highway fronting the subject property.

  The landscaping plans shall be submitted to the Planning

  Department for review and approval at the time of Plan Approval.
- 5. That the rules, regulations, and requirements of the State Department of Health shall be complied with.
- 6. That the Petitioner or its authorized representative shall be responsible in assuring that every precaution is taken to reduce any nuisances, whether it be noise or fumes, which may affect the residents and properties in the immediate area. Should it be determined by the Planning Director that these precautionary measures are not being applied, he will prepare and present a written report to the Planning Commission for its appropriate action which may involve the termination of the Special Permit.
- 7. That the requirements of the County Grading Ordinance shall be complied with.
- 8. That should any unanticipated archaeological or historical sites be found on the subject property, the Petitioner/representative shall immediately notify the Planning Department and cease operation until a clearance to recommence work is given by the Department.
- 9. That upon termination of the operation or if the Petitioner determined that the project is not feasible, all structures erected shall be dismantled and removed from the site.
- 10. That only a maximum of two (2) accesses shall be permitted from the main highway meeting with the approval of the Chief Engineer of the County Department of Public Works.

- 11. That all other applicable rules and regulations shall be complied with.
- 12. That failure to comply with any of the delineated conditions of approval, particularly those relating to time commencement and expiration, shall be reason for termination of the Special Permit. Also, requests for any time extension filed after the stipulated commencement or expiration dates shall not be approved.

DATED: Smilyla, Hawaii, Jelimmy 7, 1979.

LAND USE COMMISSION

By C. W. DUKE
Chairman and Commissioner

By SHINICHI NAKAGAWA

Vice Chairman and Commissioner

JAMES R. CARRAS

Commissioner

By Shinser My weats

Commissioner

MITSUO OURA

Commissioner

GEORGE R. PASCUA Commissioner



CERTIFIED MAIL

November 8, 1989

Mr. William R. Coops
Managing Director
The Natural Energy Laboratory
of Hawaii
220 S. King Street, Suite 1280
Honolulu, HI 96813

Dear Mr. Coops:

Special Permit No. 392 HGP-A Geothermal Research Station TMK: 1-4-01: 82 (formerly por. of 2)

At its duly held meeting on November 7, 1989, the Planning Commission considered the Planning Director's report to the Planning Commission Pursuant to Condition No. 6, of Special Permit No. 392 (HGP-A) dated October 23, 1989. The Planning Commission voted to accept the Planning Director's report and to approve the Planning Director's recommendations.

The Planning Director recommended the following actions pursuant to the provisions of Special Permit No. 392, Condition No. 6:

- 1. That the NELH and HELCO submit documentation to the Planning Director and the Planning Commission for the provision of backup electrical needs to replace the 2 megawatts of power presently generated by the HGP-A facility within ten (10) days upon the receipt of this notification.
  - 2. That the NELH submit documentation to the Planning Director and Planning Commission on the feasibility of immediately terminating the HGP-A facility with respect to public safety considerations (i.e. well casing failure during

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shutdown or potential startup, emergency procedures during shutdown, etc ) within ten (10) days upon receipt of this notification.

- 3. During the interim period pending receipt of the requested documentation for items 1 and 2, the HGP-A facility shall be manned on a 24-hour basis and monitored for any unusual or elevated release of H2S or other related emissions.
- 4. A communication and notification network approved by the Civil Defense Administrator and the Planning Director shall be immediately implemented. This network shall include provisions and protocol for notification of emergency services personnel and local residents when a potentially high nuisance situation has or is planned to occur.
- 5. The Planning Director shall be authorized to act upon the findings submitted under 1 and 2 above to cause the shut down of the HGP-A well along with those activities and/or operations authorized under the Special Permit which are directly related thereto. Notice of the Planning Director's action shall be provided in writing or orally with subsequent written confirmation within three (3) days to the Permittee and the Planning Commission, and shall set forth any conditions attendant to the termination of operations
- Pending any further hearing as may be required by the 6. Planning Commission, the Planning Director may immediately and temporarily suspend the permit and/or operations allowed thereunder. Notice of a temporary suspension shall be provided in writing or orally with subsequent written confirmation within three (3) days to the permittee and the Planning Commission, and shall set forth the reasons for the temporary suspension. The Planning Director may reactivate the permit or operations suspended thereunder upon a subsequent finding of the permittee's compliance with the reasons for the temporary suspension. Subject to the Planning Commission's 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 or operations suspended thereunder. 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

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Commission's next meeting when the matter can be placed on the Commission's agenda.

Please feel free to contact the Planning Department if there are any questions on this matter.

Sincerely,

Gary Mizuno, Chairman Planning Commission

cc: HELCO

DBED

Mayor's Office

bcc: Susumu Ono

R & D