

R-2

GEORGE R. ARIYOSHI  
GOVERNOR OF HAWAII



- DIVISIONS:
- CONVEYANCES
  - FISH AND GAME
  - FORESTRY
  - LAND MANAGEMENT
  - STATE PARKS
  - WATER AND LAND DEVELOPMENT

STATE OF HAWAII

DEPARTMENT OF LAND AND NATURAL RESOURCES  
DIVISION OF LAND MANAGEMENT  
P. O. BOX 621  
HONOLULU, HAWAII 96809

December 19, 1980

Board of Land and  
Natural Resources  
Honolulu, Hawaii

Gentlemen: HAWAII  
Resubmittal  
Subject: Direct Lease of Geothermal Resources on Reserved  
Lands to Assignee of Occupier's Rights, Kapoho,  
Puna, Hawaii

STATUTE: Chapter 182, Hawaii Revised Statutes, and  
Regulation No. 8 of the Department of Land and  
Natural Resources

APPLICANT: Kapoho Land Partnership, a Hawaii Limited  
Partnership, assignee of Kapoho Land and  
Development Company, Limited's rights as  
occupier, pursuant to Section 182-5, Hawaii  
Revised Statutes

FOR: Direct issuance of a geothermal lease on reserved  
lands at Kapoho, Puna, Hawaii, being all of those  
certain parcels of land (portion of the land  
described in and covered by Royal Patent 4497,  
Land Commission Award No. 8559, Apana 5, To C.  
Kanaina) designated by Tax Map Key as follows:

<u>TMK</u>	<u>Area</u>
1-4-01:1	247.0000 acres
1-4-01:2 (portion)	349.0587 acres
1-4-01:3	3.7410 acres
1-4-01:19	215.2420 acres
1-4-01:58	0.7580 acres
TOTAL	815.7997 acres

ZONING: State Land Use Commission: agriculture  
County of Hawaii: agriculture

LAND OWNERSHIP: Kapoho Land and Development Company, Limited

MINERAL RIGHTS: Reserved to the State of Hawaii by Royal Patent  
No. 4497 on Land Commission Award No. 8559

MINERAL TO BE  
MINED: Geothermal resources, classified as a mineral  
by Section 182-1, Hawaii Revised Statutes

APPROVED BY THE BOARD OF  
LAND AND NATURAL RESOURCES  
AT ITS MEETING HELD ON  
December 19, 1980

*Amended to not allow any deduction  
of royalties for treating, processing  
and transportation costs.* **ITEM F-3**

December 19, 1980

TERM:

The lease shall have a maximum term of sixty-five (65) years; provided that there shall be a primary period of ten (10) years from the effective date of the lease (and if during this primary period, geothermal resources are being produced or utilized in commercial quantities, the lease term shall continue for so long thereafter as geothermal resources are produced or utilized in commercial quantities, subject, however, to the sixty-five (65)-year limitations).

Continuation or termination of the lease after the primary ten (10) year period shall be in accordance with (Rule No. 3.11 of) Regulation No. 8 of the Department of Land and Natural Resources.

COMMENCEMENT AND  
COMPLETION DATES  
OF DRILLING  
OPERATION:

The Lessee shall covenant and agree that Geothermal Resources mining and drilling operations on the reserved lands shall commence within three (3) years from the effective date of the lease, and that at least one geothermal resources well for production shall be completed within four (4) years of the effective date of the lease.

PAYMENT FOR THE  
RIGHT TO EXPLOIT  
GEOTHERMAL  
RESOURCES:

The Lessee shall pay to the State of Hawaii the amount of \$816.00 per annum for the right to exploit Geothermal Resources reserved to the State. Such payment shall be credited against production royalties due and accrued during any one given year, if there be any. The annual rental due a given year shall not be credited against production royalties due in future years.

ROYALTY:

- a. Ten percent (10%) of the gross amount or value of the geothermal resources produced under the lease as measured at the wellhead and sold or utilized by the lessee for the first 35 years of the lease. Rate readjustments as specified by Rule No. 3.13 of Regulation No. 8 of the Department of Land and Natural Resources.
- b. Five percent (5%) of the gross proceeds received by the lessee from the sale of any geothermal by-product contained in and extracted from the effluence produced under the lease as measured at the wellhead and as specified by Rule No. 3.13 of Regulation No. 8 of the Department of Land and Natural Resources.

December 19, 1980

PAYMENT:

The Lessee shall make payments of royalties to the Board at its Honolulu office within thirty (30) days after the end of each month and accompany such payment with a written statement by the lessee, showing the volume of each geothermal resources and its by-products sold, used, or otherwise disposed of. The Lessee shall furnish such other data as may be necessary for the Board to audit and verify all royalty payments.

REOPENING OF  
ROYALTY RATE:

Royalty rates shall be subject to reopening at the end of the 35th and 50th years of the lease term. Royalty rates for the new period shall be determined by independent appraisal but shall be no less than the royalty rates at the time of reopening, nor shall it be higher than the maximum rate allowable under Regulation No. 8.

ROYALTIES ON  
OTHER MINERALS:

In the event the Lessee desires to mine minerals other than Geothermal Resources, the Lessee shall before mining such other minerals, so notify the Board in writing, and the Lessee shall negotiate and fix the royalty rates for such other minerals, as may be allowed to be mined by the Board.

METERING:

Metering equipment shall be maintained and operated by lessee in such a manner as to meet acceptable standards of accuracy consistent with geothermal industry practices.

TESTING OF  
MINERALS:

The Lessee shall on a calendar semi-annual basis furnish the Board the results of periodic tests showing the content of by-products in the produced geothermal resources. Such tests shall be consistent with acceptable method of testing practices by the industry.

ASSIGNMENT AND  
SUBLETTING:

The Lessee shall not assign and/or sublet the whole or any portion of the rights herein leased, without the prior approval of the Board of Land and Natural Resources, provided, that any assignment and/or sublease so made shall be to persons or persons, partnerships, corporations, etc., who has obtained from the owner of the lands the right to occupy and conduct geothermal resources mining operation thereon.

BOND:

The Lessee shall within thirty (30) days of receipt of the completed lease document, file with the Board, and keep in force for the term of the lease, a PERFORMANCE BOND, in the amount of \$10,000.00, conditioned upon faithful observance and performance of all requirements of the lease. Said Bond shall name the Department of Land and Natural Resources, State of Hawaii, as obligee.



December 19, 1980

LIABILITY  
INSURANCE:

The Lessee shall secure and maintain in force during the term of the lease, Comprehensive General liability and property damage insurance and products liability insurance naming the State of Hawaii, Department of Land and Natural Resources as additional insured in the following minimum amounts:

- a. Comprehensive General Bodily Injury Liability \$300,000 each occurrence, \$300,000 aggregate.
- b. Comprehensive General Property Damage \$50,000 each occurrence, \$100,000 aggregate.
- c. Products liability in the single-minimum limit of \$250,000.

RULES AND  
REGULATIONS:

The lease shall include other applicable provisions required by law and as contained in Regulation No. 8.

ENVIRONMENTAL  
CONCERN:

The Lessee shall comply with all water and air pollution control laws, rules and regulations of the State or its political subdivision. The Lessee shall also comply with all applicable State and County laws relative to Environmental Impact Statements.

REMARKS:

Kapoho Land Partnership, assignee of the landowner, Kapoho Land Development Company, Limited, has made application as occupier for a geothermal lease on land in Puna which is subject to reservation of mineral rights in favor of the State of Hawaii. Application was made in accordance with Section 182-5, Hawaii Revised Statutes (mining leases on reserved lands).

Under Section 182-5, Hawaii Revised Statutes, the Board may by vote of two-thirds of its members, without public auction, grant a mining lease on reserved land to the occupier thereof.

RECOMMENDATION:

That the Board approve a direct grant of a geothermal resources mining lease on reserved lands to the assignee covering the reserved lands listed above, subject to the approval of a special use permit by the County of Hawaii and State Land Use Commission and to the terms and conditions above mentioned, which are by reference incorporated herein, in addition to

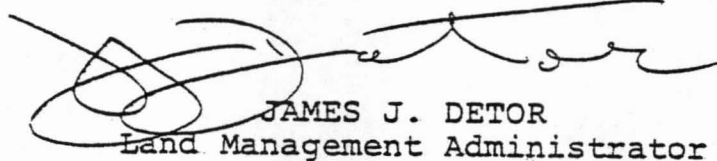


Board of Land and  
Natural Resources

December 19, 1980


such other terms and conditions required by  
law, Department of Land and Natural Resources  
Regulation No. 8, and as may be prescribed by  
the Chairman.

Respectfully submitted,



JAMES J. DETOR  
Land Management Administrator

APPROVED FOR SUBMITTAL:



SUSUMU ONO, Chairman

ITEM F-2

STAFF RECOMMENDATION FOR ADOPTION OF CRITERIA FOR DIRECT AWARD OF GEOTHERMAL LEASES.

The Board, at its November 7, 1980 meeting had asked the staff to work with prospective lessees of State geothermal resources to develop criteria on which the Board can base evaluations of applications for direct award of geothermal leases covering reserved lands.

ACTION

The Board, upon motion by Mr. Higashi and a second by Mr. Hong, unanimously adopted the criteria presented by the staff with the following amendments:

- .Paragraph 4.d to read Paragraph 4 and the rest of former Paragraph 4 to read Paragraph 5. In doing so the Board expanded upon new Paragraph 4 to read "philosophy and effect on consumer rates on both shortand long term basis."

The board also authorized the Chairman to implement appropriate procedures.

ITEM F-3

RESUBMITTAL - KAPOHO LAND PARTNERSHIP APPLICATION FOR GEOTHERMAL LEASE RESERVED LANDS AT KAPOHO, PUNA, HAWAII.

Kapoho Land Partnership, assignee of the landowner, Kapoho Land Development Company, Limited, has made application as occupier for a geothermal lease on land in Puna which is subject to reservation of mineral rights in favor of the State of Hawaii. Under Section 182-5, HRS (mining leases on reserved lands), the Board may by vote of two-thirds of its members, without public auction, grant a mining lease on reserved land to the occupier thereof.

Mr. Albert Lyman said that he wanted it noted for the record that the principals of Kapoho and the related company holding fee ownership to the subject land have actively supported geothermal development in the Puna District for many years and that this is demonstrated in part by the Lyman family allowing free access to their land by the University of Hawaii in 1974 and by transferring to the State the 4-acre HGP-A well site in May, 1978.

Mr. Lyman stated that Kapoho Land Partnership had reached an agreement in principal with a joint venture of Thermal Power Company and the Dillingham Corporation (Thermal-Dillingham) for exploration and development of geothermal resources on the 815 acres which is the subject of the State Lease application. Kapoho had chosen Thermal-Dillingham after having been contacted by practically every company that either is engaged or proposes to engage in geothermal development in Hawaii. Kapoho's agreement in principal was reached with Thermal-Dillingham after over a year of detailed and costly negotiations and their selection of Thermal-Dillingham was based on their assessment that Thermal-Dillingham share Kapoho's concern for responsible development of Hawaii's geothermal resources in a manner that benefits the public and that Thermal-Dillingham has the financial and technical resources and capabilities necessary to expeditiously undertake geothermal exploration and development in Puna.

Mr. Lyman believed that geothermal pricing should be on a basis that benefits the public and should not be priced at the level of oil. The pricing, however, is a matter to be determined by negotiations between the developer, Thermal-Dillingham and Hilo Electric, subject to review by the State Public Utilities Commission.

Mr. Burbank of Thermal Power Company summarized their response to the criteria requested by the Board as follows:

Financial Resources and Capabilities

Burbank stated that, together, the two companies have an annual expenditure of \$350,000,000 per year and the exploration and development of this project would never exceed 10% of the annual capital budget of the companies. Also, that they are well within their annual appropriation capability.

Technical Experience and Expertise

Both companies have broad experience in the area of geothermal and development of above-ground facilities. He explained that their experimental plans for exploration and development were summarized in the submittal.

Preliminary Plan for Exploration and Development

Burbank explained that their experimental plans for exploration and development were summarized in their submittal to the board.

Public Benefit of Direct Lease

Because they have the cooperation of the occupiers of the land in question, Burbank felt that it would allow for the exploration to take place without delay.

Effect of Geothermal on Local Economy and Employment

Experience has shown that much of the money used for geothermal development is recycled in the local community. This multiplier effort, Burbank explained, could provide significant benefit to the local economy and employment opportunities.

Statewide Energy Benefits

Mr. Burbank believes that their project is in line with the State's call of energy self-sufficiency but that it also provides a resource that is indigenous to the state, is secure, and will remove the island's dependency on imported fuels and energy sources.

Effect on Energy Rates

Burbank stated that they have generally tried to respond in detail to the complexity of the full scope of the issue. However, he asked Mr. Tiedeman of Dillingham Corporation to clarify their philosophy more distinctly.

Mr. Tiedeman said that they do not advocate pricing geothermal energy at OPEC levels and are committed to do everything possible to help provide the people of Hawaii with electricity which not only will be cheaper than oil, but, equally important, is that it will be secure and not subject to disruption by events over which there is no control.

Regarding the applicant's proposal where they say that they do not and have never advocated pricing geothermal energy at the OPEC levels, Mr. Higashi asked if he could take this as an indication that the applicant's plan to disregard this as a vehicle for pricing of energy. In answer, Mr. Tiedeman stated: We understand that the utility and other entities believe that the energy situation in Hawaii is unique and that the "avoided cost" provisions of the Public Utilities Regulatory Act "PURPA" should be modified. We agree to negotiate a geothermal pricing methodology that will be independent of PURPA's "avoided cost" provision.



Realizing fully that the Board is not a pricing agency, Mr. Higashi, nevertheless said that they have long asked for a philosophy which indicates the applicant's willingness to cooperate with the Board in making sure that the consumer, in the end, will benefit from the State's resources.

Mr. Higashi voiced his concerns regarding DILCO's study of the under-water cable inasmuch as he would like to see that the needs of the Big Island are met before anything is exported to Oahu. Mr. Tiedeman said that their first goal is to achieve the 25 megawatt, which definitely would pay for the island of Hawaii. Anything above that, he could make no comment with any degree of certainty.

Mr. Ono asked if there would be any problems because of the time restriction on the drilling operation — especially with today's high interest rates. Tiedeman said no and assured the board that they will start drilling as soon as all necessary permits are secured.

ACTION

The Board unanimously approved a direct grant of a geothermal resources mining lease on reserved lands to the assignee covering the reserved lands listed in the submittal, subject to the approval of a special use permit by the County of Hawaii and State Land Use Commission and also to the terms and conditions listed in the submittal which have been amended to not allow any deductions of royalties for treating, processing and transportation costs, in addition to such other terms and conditions required by law, Department of Land and Natural Resources Regulation No. 8, and as may be prescribed by the Chairman. Also, the Board asked that the applicant's proposal, together with all correspondence and testimonies relating thereto, be submitted to the Public Utilities Commission as evidence of the applicant's good faith in negotiating with the Board. (Higashi/Yagi)

ADDED  
ITEM F-24

REQUEST FOR PERMISSION TO CONTRACT FOR CONSULTATION SERVICES ON GEOTHERMAL LEASES.

The California State Land Commission Executive Officer, William E. Northrop, in response to our inquiry, has indicated willingness to make available the services of one or more members of his staff to assist us in the processing of geothermal leases as well as the conduct of other aspects of our geothermal leasing program on actual expense basis (travel and related expenses). No charge for time or salaries will be made.

ACTION

The Board, upon motion by Mr. Hong and a second by Mr. Yagi, unanimously authorized the chairman to contract with the California Land Commission for consultation services on geothermal leases as described in the submittal.

ITEM I-1

OUT-OF-STATE TRAVEL FOR NOAH PEKELO

This is a request for Mr. Pekelo to attend the 1981 Western Association of Fish and Wildlife Agencies Law Enforcement Workshop, scheduled to be held in Phoenix, Arizona on January 27, 28, and 29, 1981. Funds for this trip are budgeted.

ACTION

Unanimously approved, as submitted. (Kealoha/Yamamoto)



DIVISIONS:  
CONVEYANCES  
FISH AND GAME  
FORESTRY  
LAND MANAGEMENT  
STATE PARKS  
WATER AND LAND DEVELOPMENT

STATE OF HAWAII

DEPARTMENT OF LAND AND NATURAL RESOURCES

DIVISION OF LAND MANAGEMENT

P. O. BOX 621

HONOLULU, HAWAII 96809

December 19, 1980

Board of Land and  
Natural Resources  
Honolulu, Hawaii

Gentlemen:

HAWAII

Resubmittal

Subject: Direct Lease of Geothermal Resources on Reserved  
Lands to Assignee of Occupier's Rights, Kapoho,  
Puna, Hawaii

STATUTE: Chapter 182, Hawaii Revised Statutes, and  
Regulation No. 8 of the Department of Land and  
Natural Resources

APPLICANT: Kapoho Land Partnership, a Hawaii Limited  
Partnership, assignee of Kapoho Land and  
Development Company, Limited's rights as  
occupier, pursuant to Section 182-5, Hawaii  
Revised Statutes

FOR: Direct issuance of a geothermal lease on reserved  
lands at Kapoho, Puna, Hawaii, being all of those  
certain parcels of land (portion of the land  
described in and covered by Royal Patent 4497,  
Land Commission Award No. 8559, Apana 5, To C.  
Kanaina) designated by Tax Map Key as follows:

<u>TMK</u>	<u>Area</u>
1-4-01:1	247.0000 acres
1-4-01:2 (portion)	349.0587 acres
1-4-01:3	3.7410 acres
1-4-01:19	215.2420 acres
1-4-01:58	<u>0.7580 acres</u>

TOTAL 815.7997 acres

ZONING: State Land Use Commission: agriculture  
County of Hawaii: agriculture

LAND OWNERSHIP: Kapoho Land and Development Company, Limited

MINERAL RIGHTS: Reserved to the State of Hawaii by Royal Patent  
No. 4497 on Land Commission Award No. 8559

MINERAL TO BE  
MINED: Geothermal resources, classified as a mineral  
by Section 182-1, Hawaii Revised Statutes

APPROVED BY THE BOARD OF  
LAND AND NATURAL RESOURCES  
AT ITS MEETING HELD ON

December 19, 1980

*Amended to not allow any deduction  
of royalties for treating, processing  
and transportation costs.*

ITEM F-3

December 19, 1980

TERM:

The lease shall have a maximum term of sixty-five (65) years; provided that there shall be a primary period of ten (10) years from the effective date of the lease (and if during this primary period, geothermal resources are being produced or utilized in commercial quantities, the lease term shall continue for so long thereafter as geothermal resources are produced or utilized in commercial quantities, subject, however, to the sixty-five (65)-year limitations).

Continuation or termination of the lease after the primary ten (10) year period shall be in accordance with (Rule No. 3.11 of) Regulation No. 8 of the Department of Land and Natural Resources.

COMMENCEMENT AND  
COMPLETION DATES  
OF DRILLING  
OPERATION:

The Lessee shall covenant and agree that Geothermal Resources mining and drilling operations on the reserved lands shall commence within three (3) years from the effective date of the lease, and that at least one geothermal resources well for production shall be completed within four (4) years of the effective date of the lease.

PAYMENT FOR THE  
RIGHT TO EXPLOIT  
GEOTHERMAL  
RESOURCES:

The Lessee shall pay to the State of Hawaii the amount of \$816.00 per annum for the right to exploit Geothermal Resources reserved to the State. Such payment shall be credited against production royalties due and accrued during any one given year, if there be any. The annual rental due a given year shall not be credited against production royalties due in future years.

ROYALTY:

- a. Ten percent (10%) of the gross amount or value of the geothermal resources produced under the lease as measured at the wellhead and sold or utilized by the lessee for the first 35 years of the lease. Rate readjustments as specified by Rule No. 3.13 of Regulation No. 8 of the Department of Land and Natural Resources.
- b. Five percent (5%) of the gross proceeds received by the lessee from the sale of any geothermal by-product contained in and extracted from the effluence produced under the lease as measured at the wellhead and as specified by Rule No. 3.13 of Regulation No. 8 of the Department of Land and Natural Resources.



December 19, 1980

PAYMENT:

The Lessee shall make payments of royalties to the Board at its Honolulu office within thirty (30) days after the end of each month and accompany such payment with a written statement by the lessee, showing the volume of each geothermal resources and its by-products sold, used, or otherwise disposed of. The Lessee shall furnish such other data as may be necessary for the Board to audit and verify all royalty payments.

REOPENING OF  
ROYALTY RATE:

Royalty rates shall be subject to reopening at the end of the 35th and 50th years of the lease term. Royalty rates for the new period shall be determined by independent appraisal but shall be no less than the royalty rates at the time of reopening, nor shall it be higher than the maximum rate allowable under Regulation No. 8.

ROYALTIES ON  
OTHER MINERALS:

In the event the Lessee desires to mine minerals other than Geothermal Resources, the Lessee shall before mining such other minerals, so notify the Board in writing, and the Lessee shall negotiate and fix the royalty rates for such other minerals, as may be allowed to be mined by the Board.

METERING:

Metering equipment shall be maintained and operated by lessee in such a manner as to meet acceptable standards of accuracy consistent with geothermal industry practices.

TESTING OF  
MINERALS:

The Lessee shall on a calendar semi-annual basis furnish the Board the results of periodic tests showing the content of by-products in the produced geothermal resources. Such tests shall be consistent with acceptable method of testing practices by the industry.

ASSIGNMENT AND  
SUBLETTING:

The Lessee shall not assign and/or sublet the whole or any portion of the rights herein leased, without the prior approval of the Board of Land and Natural Resources, provided, that any assignment and/or sublease so made shall be to persons or persons, partnerships, corporations, etc., who has obtained from the owner of the lands the right to occupy and conduct geothermal resources mining operation thereon.

BOND:

The Lessee shall within thirty (30) days of receipt of the completed lease document, file with the Board, and keep in force for the term of the lease, a PERFORMANCE BOND, in the amount of \$10,000.00, conditioned upon faithful observance and performance of all requirements of the lease. Said Bond shall name the Department of Land and Natural Resources, State of Hawaii, as obligee.

December 19, 1980

LIABILITY  
INSURANCE:

The Lessee shall secure and maintain in force during the term of the lease, Comprehensive General liability and property damage insurance and products liability insurance naming the State of Hawaii, Department of Land and Natural Resources as additional insured in the following minimum amounts:

- a. Comprehensive General Bodily Injury Liability \$300,000 each occurrence, \$300,000 aggregate.
- b. Comprehensive General Property Damage \$50,000 each occurrence, \$100,000 aggregate.
- c. Products liability in the single-minimum limit of \$250,000.

RULES AND  
REGULATIONS:

The lease shall include other applicable provisions required by law and as contained in Regulation No. 8.

ENVIRONMENTAL  
CONCERN:

The Lessee shall comply with all water and air pollution control laws, rules and regulations of the State or its political subdivision. The Lessee shall also comply with all applicable State and County laws relative to Environmental Impact Statements.

REMARKS:

Kapoho Land Partnership, assignee of the landowner, Kapoho Land Development Company, Limited, has made application as occupier for a geothermal lease on land in Puna which is subject to reservation of mineral rights in favor of the State of Hawaii. Application was made in accordance with Section 182-5, Hawaii Revised Statutes (mining leases on reserved lands).

Under Section 182-5, Hawaii Revised Statutes, the Board may by vote of two-thirds of its members, without public auction, grant a mining lease on reserved land to the occupier thereof.

RECOMMENDATION:

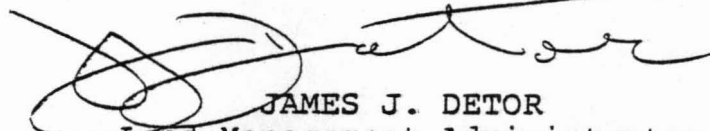
That the Board approve a direct grant of a geothermal resources mining lease on reserved lands to the assignee covering the reserved lands listed above, subject to the approval of a special use permit by the County of Hawaii and State Land Use Commission and to the terms and conditions above mentioned, which are by reference incorporated herein, in addition to

Board of Land and  
Natural Resources

December 19, 1980

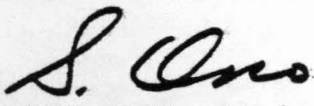
such other terms and conditions required by  
law, Department of Land and Natural Resources  
Regulation No. 8, and as may be prescribed by  
the Chairman.

Respectfully submitted,



JAMES J. DETOR  
Land Management Administrator

APPROVED FOR SUBMITTAL:



SUSUMU ONO, Chairman



ITEM F-2

STAFF RECOMMENDATION FOR ADOPTION OF CRITERIA FOR DIRECT AWARD OF GEOTHERMAL LEASES.

The Board, at its November 7, 1980 meeting had asked the staff to work with prospective lessees of State geothermal resources to develop criteria on which the Board can base evaluations of applications for direct award of geothermal leases covering reserved lands.

ACTION

The Board, upon motion by Mr. Higashi and a second by Mr. Hong, unanimously adopted the criteria presented by the staff with the following amendments:

- .Paragraph 4.d to read Paragraph 4 and the rest of former Paragraph 4 to read Paragraph 5. In doing so the Board expanded upon new Paragraph 4 to read "philosophy and effect on consumer rates on both shortand long term basis."

The board also authorized the Chairman to implement appropriate procedures.

ITEM F-3

RESUBMITTAL - KAPOHO LAND PARTNERSHIP APPLICATION FOR GEOTHERMAL LEASE RESERVED LANDS AT KAPOHO, PUNA, HAWAII.

Kapoho Land Partnership, assignee of the landowner, Kapoho Land Development Company, Limited, has made application as occupier for a geothermal lease on land in Puna which is subject to reservation of mineral rights in favor of the State of Hawaii. Under Section 182-5, HRS (mining leases on reserved lands), the Board may by vote of two-thirds of its members, without public auction, grant a mining lease on reserved land to the occupier thereof.

Mr. Albert Lyman said that he wanted it noted for the record that the principals of Kapoho and the related company holding fee ownership to the subject land have actively supported geothermal development in the Puna District for many years and that this is demonstrated in part by the Lyman family allowing free access to their land by the University of Hawaii in 1974 and by transferring to the State the 4-acre HGP-A well site in May, 1978.

Mr. Lyman stated that Kapoho Land Partnership had reached an agreement in principal with a joint venture of Thermal Power Company and the Dillingham Corporation (Thermal-Dillingham) for exploration and development of geothermal resources on the 815 acres which is the subject of the State Lease application. Kapoho had chosen Thermal-Dillingham after having been contacted by practically every company that either is engaged or proposes to engage in geothermal development in Hawaii. Kapoho's agreement in principal was reached with Thermal-Dillingham after over a year of detailed and costly negotiations and their selection of Thermal-Dillingham was based on their assessment that Thermal-Dillingham share Kapoho's concern for responsible development of Hawaii's geothermal resources in a manner that benefits the public and that Thermal-Dillingham has the financial and technical resources and capabilities necessary to expeditiously undertake geothermal exploration and development in Puna.

Mr. Lyman believed that geothermal pricing should be on a basis that benefits the public and should not be priced at the level of oil. The pricing, however, is a matter to be determined by negotiations between the developer, Thermal-Dillingham and Hilo Electric, subject to review by the State Public Utilities Commission.

Mr. Burbank of Thermal Power Company summarized their response to the criteria requested by the Board as follows:

Financial Resources and Capabilities

Burbank stated that, together, the two companies have an annual expenditure of \$350,000,000 per year and the exploration and development of this project would never exceed 10% of the annual capital budget of the companies. Also, that they are well within their annual appropriation capability.

Technical Experience and Expertise

Both companies have broad experience in the area of geothermal and development of above-ground facilities. He explained that their experimental plans for exploration and development were summarized in the submittal.

Preliminary Plan for Exploration and Development

Burbank explained that their experimental plans for exploration and development were summarized in their submittal to the board.

Public Benefit of Direct Lease

Because they have the cooperation of the occupiers of the land in question, Burbank felt that it would allow for the exploration to take place without delay.

Effect of Geothermal on Local Economy and Employment

Experience has shown that much of the money used for geothermal development is recycled in the local community. This multiplier effort, Burbank explained, could provide significant benefit to the local economy and employment opportunities.

Statewide Energy Benefits

Mr. Burbank believes that their project is in line with the State's call of energy self-sufficiency but that it also provides a resource that is indigenous to the state, is secure, and will remove the island's dependency on imported fuels and energy sources.

Effect on Energy Rates

Burbank stated that they have generally tried to respond in detail to the complexity of the full scope of the issue. However, he asked Mr. Tiedeman of Dillingham Corporation to clarify their philosophy more distinctly.

Mr. Tiedeman said that they do not advocate pricing geothermal energy at OPEC levels and are committed to do everything possible to help provide the people of Hawaii with electricity which not only will be cheaper than oil, but, equally important, is that it will be secure and not subject to disruption by events over which there is no control.

Regarding the applicant's proposal where they say that they do not and have never advocated pricing geothermal energy at the OPEC levels, Mr. Higashi asked if he could take this as an indication that the applicant's plan to disregard this as a vehicle for pricing of energy. In answer, Mr. Tiedeman stated: We understand that the utility and other entities believe that the energy situation in Hawaii is unique and that the "avoided cost" provisions of the Public Utilities Regulatory Act "PURPA" should be modified. We agree to negotiate a geothermal pricing methodology that will be independent of PURPA's "avoided cost" provision.



Realizing fully that the Board is not a pricing agency, Mr. Higashi, nevertheless said that they have long asked for a philosophy which indicates the applicant's willingness to cooperate with the Board in making sure that the consumer, in the end, will benefit from the State's resources.

Mr. Higashi voiced his concerns regarding DILCO's study of the underwater cable inasmuch as he would like to see that the needs of the Big Island are met before anything is exported to Oahu. Mr. Tiedeman said that their first goal is to achieve the 25 megawatt, which definitely would pay for the island of Hawaii. Anything above that, he could make no comment with any degree of certainty.

Mr. Ono asked if there would be any problems because of the time restriction on the drilling operation -- especially with today's high interest rates. Tiedeman said no and assured the board that they will start drilling as soon as all necessary permits are secured.

ACTION

The Board unanimously approved a direct grant of a geothermal resources mining lease on reserved lands to the assignee covering the reserved lands listed in the submittal, subject to the approval of a special use permit by the County of Hawaii and State Land Use Commission and also to the terms and conditions listed in the submittal which have been amended to not allow any deductions of royalties for treating, processing and transportation costs, in addition to such other terms and conditions required by law, Department of Land and Natural Resources Regulation No. 8, and as may be prescribed by the Chairman. Also, the Board asked that the applicant's proposal, together with all correspondence and testimonies relating thereto, be submitted to the Public Utilities Commission as evidence of the applicant's good faith in negotiating with the Board. (Higashi/Yagi)

ADDED  
ITEM F-24

REQUEST FOR PERMISSION TO CONTRACT FOR CONSULTATION SERVICES ON GEOTHERMAL LEASES.

The California State Land Commission Executive Officer, William E. Northrop, in response to our inquiry, has indicated willingness to make available the services of one or more members of his staff to assist us in the processing of geothermal leases as well as the conduct of other aspects of our geothermal leasing program on actual expense basis (travel and related expenses). No charge for time or salaries will be made.

ACTION

The Board, upon motion by Mr. Hong and a second by Mr. Yagi, unanimously authorized the chairman to contract with the California Land Commission for consultation services on geothermal leases as described in the submittal.

ITEM I-1

OUT-OF-STATE TRAVEL FOR NOAH PEKELO

This is a request for Mr. Pekelo to attend the 1981 Western Association of Fish and Wildlife Agencies Law Enforcement Workshop, scheduled to be held in Phoenix, Arizona on January 27, 28, and 29, 1981. Funds for this trip are budgeted.

ACTION

Unanimously approved, as submitted. (Kealoha/Yamamoto)



DOCUMENT FOR APPROVAL BY THE BOARD OF LAND AND NATURAL RESOURCES

August 27, 1982

CONSENT

ASSIGNMENT OF SUBLEASE

HAWAII

THERMAL POWER COMPANY AND DILLINGHAM CORPORATION, Assignors,  
to PUNA GEOTHERMAL VENTURE, A JOINT VENTURE FORMED UNDER  
THE LAWS OF THE STATE OF HAWAII, Assignee

Geothermal Resources Mining Lease No. R-2 on reserved lands  
demised to Kapoho Land Partnership, a Hawaii Limited  
Partnership, Assignee of Kapoho Land Development Company,  
Limited's rights as occupier, pursuant to Section 182-5,  
Hawaii Revised Statutes, for a maximum term of sixty-five  
(65) years commencing February 20, 1981.

Lease rental: \$816.00 per annum base (to be credited against  
production royalties) and royalties of 10  
percent of the gross amount or value of the  
geothermal resources produced and 5 percent  
of gross proceeds from the sale of geothermal  
by-products.

LOCATION AND AREA

Reserved lands at Kapoho, Puna, Hawaii, being all those  
certain parcels of land (portion of the land described in  
and covered by Royal Patent 4497, Land Commission Award  
No. 8559, Apana 5, to C. Kanaina) designated by Tax Map  
Key as follows:

<u>TMK</u>	<u>AREA</u>
1-4-01:1	247.0000 ac.
1-4-01:2 (portion)	349.0587 ac.
1-4-01:3	3.7410 ac.
1-4-01:19	215.2420 ac.
1-4-01:58	<u>0.7580 ac.</u>
TOTAL	815.7997 ac.

LAND CLASS TITLE

Private land (Kapoho Land and Development Co., Ltd. - owner)

CHARACTER OF USE

Geothermal exploration, operation, development, and marketing

SUBLEASE TERMS AND CONDITIONS (NO CHANGE)

Term: Cotermious with lease term of 65 years.

Rent: Advance rent of \$30.00 per acre per annum for 1st  
three years; \$60.00 per acre per annum for 4th and  
5th years; \$95.00 per acre per annum for 6th through  
10th years; each following successive 5-year periods  
to be annual rental for the last lease year preceding  
such period plus an increase equal to the percentage

ITEM F-1-b

APPROVED BY THE BOARD OF  
LAND AND NATURAL RESOURCES  
AT ITS MEETING HELD ON  
AUG 27 1982

Board of Land and  
Natural Resources

August 27, 1982

increase, rounded to the nearest 1/10 percent, registered in the Honolulu Consumer Price Index. Royalty rates ranging from 2 percent to 4 percent of gross proceeds, depending upon megawatts generated. Royalty for non-electric uses and for sale or use of extractable minerals, 5 percent of gross proceeds.

Note: Sublessee, in addition to the foregoing, shall also pay the State of Hawaii the amount of the rents and royalties provided for in the State lease.

REMARKS

The issuance of G.R.M.L. No. R-2 to Kapoho Land Partnership was authorized by the Board of Land and Natural Resources under amended agenda Item F-3 on December 19, 1980. Subsequent sublease to Thermal Power Company and Dillingham Corporation was consented to by the Land Board under amended agenda Item F-1-b, on January 23, 1981.

RECOMMENDATION

That the Board pursuant to Section 183-25, Hawaii Revised Statutes, consent to the foregoing assignment of sublease subject to:

- A. Review and approval of assignment of sublease documents by the State Attorney General.
- B. Such other terms and conditions as may be prescribed by the Chairman.
- C. No adjustment of basic lease rental per annum.
- D. Formal written concurrence of the Sublessor.

He specifically referred to today's board actions on the hiring of a young man (Item C-2) and a young woman (Item C-3). They both have participated in the Forestry's YACC programs. Mr. Landgraf said it has given the young unemployed adults an opportunity to do on-the-job training to qualify and to enter into the adult professional employment ranks.

ITEM D-1      APPOINTMENT OF SOIL & WATER CONSERVATION DISTRICT DIRECTOR

ACTION      The board, on Mr. Yagi's motion and seconded by Mr. Hong, unanimously appointed Mike O'Keefe as a Director of the Molokai-Lanai Soil and Water Conservation District for a term ending on June 30, 1983.

ITEM D-2      PERMISSION TO ENGAGE THE SERVICES OF BISHOP MUSEUM TO PROVIDE  
ARCHAEOLOGICAL SERVICES FOR THE LALAMILO AGRICULTURAL PARK  
SITE

ACTION      Unanimously approved as submitted. (Higashi/Yagi)

The board deviated from the printed agenda and took up the items in the following order to accommodate those people in the audience.

ITEM F-3      BARNWELL GEOTHERMAL CORP. APPLICATION FOR GEOTHERMAL MINING  
LEASE ON RESERVED LANDS AT KAPOHO, KANIAHIKU, POHOIKI AND KEA-  
HIALAKA, PUNA, HAWAII

This was an application for a direct lease of geothermal resources on reserved lands in the Puna area. The applicant, Barnwell Geothermal Corporation, has been assigned the occupier's rights by the land owners who were listed in the submittal. The terms and conditions of the proposed lease were the same as the other two geothermal leases which the board acted on previously.

Mr. Detor said the applicant has submitted a criteria, which were circulated to the board members, under which they propose to operate.

Mr. Higashi questioned whether the applicant shouldn't be J. T. Trading Company, Ltd., Auto Imports of Hawaii, Inc. and Promised Land Corporation, instead of Barnwell Geothermal Corporation as indicated in the submittal, and mentioned the subleases that came up at the last board meeting on the Lyman's properties.

Mr. Detor explained that since Barnwell Geothermal Corporation has been assigned the occupier's rights by the land owner, they are the applicant. In the case of the Lyman property, Mr. Detor said the land owner is not Kapoho Land Partnership. The owner assigned the occupier's rights to Kapoho Land Partnership, who in turn are subleasing it to the Dillingham-Thermal joint venture.

The board was not clear in this area and suggested that the staff check this out. While waiting for the answer, the board took up the next item.

(See pages 5 to 7 for further discussion and action on Item F-3.)

ITEM F-7      W. A. LAVALLEE REQUEST FOR REVIEW OF VALUE ESTABLISHED FOR  
ABANDONED RAILROAD RIGHT-OF-WAY SEGMENTS RUNNING ACROSS  
LOT 721, WAIAKEA HOMESTEADS, 2ND SERIES, WAIAKEA, SOUTH HILO,  
HAWAII

This was a request for reconsideration of the price set on the sale of an



Mr. Hong said their logic is that the value should be lower because they are nothing but a detriment to the parcel. However, without those remnants, the applicant won't be able to consolidate and subdivide, so the value should be greater, Mr. Hong said.

Mr. Lum said that is true, except that in May 1978, the highest and best use of that area was Ag-3.

ACTION

Mr. Higashi had no objection to the request for deferral for sixty days, and so moved. Mr. Hong seconded, and the motion was unanimously carried.

ITEM F-3

(Continued from Page 3)

The board was prepared to discuss Item F-3.

Mr. Detor said the question was whether people who have been assigned the occupier's rights can be considered the applicant. He said the statutes and the rules and regulations bear that, so they can be the applicant.

Mr. Higashi asked whether the applicant is prepared to follow the guidelines set up by the board, and also whether they are aware that we have a criteria set up in which they have to show justification why we should issue a direct lease, rather than to go through public auction.

Mr. E. C. Craddick, representing the applicant, said they have outlined those areas in their application. He also referred to page 4 under Summary of Public Benefits and highlighted some of the benefits.

Mr. Ono asked how long it will take to get locally-trained crews to work independently. Mr. Craddick said they have a crew of four on each shift. They have all Hawaiian crews. He said it took them about five years to train the real well qualified, eager men. Mr. Craddick said it is anticipated that this training program will ultimately provide experienced local trained contractors and eliminate the need of hiring mainland employees.

Mr. Hong asked what would they say is the net worth of that partnership today, and referred to the Financial Resources Section. Mr. Craddick said the net worth is the same. When you drill a well it becomes a capitalized item, so it becomes a net worth item. Barnwell Geothermal Program, Hawaii limited partnership, was initially capitalized in excess of \$3 million, Mr. Craddick said.

Mr. Hong said on the commencement and completion dates of the well, they have three years to begin drilling. He asked what their time schedule was.

Mr. Craddick said they already started on the first well on Monday. He said it takes them about a month or two to test it.

Mr. Ono asked to comment on the consumer benefits on page 5.

Mr. Craddick said they paid a lot of attention to this. They realize the importance of not only developing an alternate energy source, but developing this in an economical manner so it would have a favorable impact on the price of energy in the state, particularly on the Big Island. Their policy is that they don't consider it a success unless they do provide it at a price

under the fossil fuel rates. At the present time, he said there is a Federal law that requires the utility to buy an alternate energy source at the available cost. Mr. Craddick said one stipulation they have on this is whatever savings that are realized is passed on to the public. That describes their policy.

Mr. Higashi asked whether they are going to use Public Utility Regulatory Policy Act (PURPA) as a vehicle for pricing. Mr. Craddick said they don't intend to use that in the methodology or structure in their pricing.

Mr. Higashi said when he met with Mr. Craddick, they discussed the methodology. He said he had assumed that a copy of the methodology of figuring the price would be submitted with their proposal.

Mr. Craddick said the problem is they don't want to disclose too much of the precise methodology that they used. He said there are other competitors.

Mr. Higashi realized that, but he said the prior applicant did supply the board with some formula, based on cost and on a very complicated process. They also submitted to the board a pricing methodology as a philosophical point as to how they are going to sell energy.

Mr. Higashi said if he had something in writing, which was promised some-time ago, he was going to introduce that today. He would feel more comfortable, he said, in issuing a direct lease if he had something like that. He realized that the prior applicant discussed the same feeling that it is complicated, but they cooperated.

A Mr. Eisenstat said they have taken the position from the outset that they would not key their price to the price of fossil fuel. He said the record will indicate that they did this on their own initiative. They will initially start it out low, and then they will escalate it in a manner that is not keyed to fossil fuel, and they are prepared to put that in writing. With reference to the question of PURPA, he said Mr. Craddick set forth their position very clearly. Their biggest problem is in dealing with the utility. They will not rely on PURPA, but the presence of PURPA hopefully will remove the utility towards coming together with them and the other developers in the area.

Mr. Higashi said he would like to ask for deferral of this item until such time as we have some methodology as to the way of arriving at the price.

Mr. Eisenstat promised the board that they can submit this information within twenty-four hours, and asked the board to consider this request, subject to them submitting this information within twenty-four hours.

Mr. Higashi said according to the county permits, there is no setback as to boundaries. Mr. Eisenstat said no. They will go out of their way to insure that any inconvenience caused to the local residents will be kept to the minimum. They have established their own monitoring equipment at their own expense to monitor the level of the well. He said it is their feeling that they have to live in a community and they have to have the local people understand them and be happy with them.

#### ACTION

Mr. Higashi moved to approve this request, subject to the applicant submitting additional information on the methodology of pricing, and subject further to review and approval by the chairman and a board member of such material;



and forwarding the material with a transmittal from the chairman to the PUC for possible use by PUC for their decision-making process. Mr. Hong seconded, and the motion was unanimously carried.

ITEM F-10

JUDITH FORSTER REQUEST FOR PERMISSION TO CONSTRUCT AN ADDITIONAL DWELLING ON LOT 21 OF THE LALAMILO FARM LOTS, WAIMEA, SOUTH KOHALA, HAWAII

This was deferred at the last board meeting. Under the provisions of the original conveyance of the Lalamilo Farm Lots, only one dwelling is allowed on the land, provided, however, the board may, at its discretion, authorize additional dwellings. The particular conveyance also states that the land shall be used for agricultural purposes only and cannot be put to some other use unless that use is authorized by the board. Agricultural use is defined and limited to the growing of orchard and truck crops.

Mr. Detor stated that Mrs. Kawasaki, owner of Lot 21, has subdivided the lot and she is in the process of selling 20.103 acres of the 26 acres to Judith Forster, who has asked the board for permission to erect a dwelling on the 20-acre portion of Lot 21. There is already a dwelling on that part of the lot that Mrs. Kawasaki is going to retain. Mrs. Kawasaki is in her 70's and is retired.

In addition to that, Ms. Forster wants to raise protea. Mr. Detor said technically that is not an agriculture use within the framework of the provisions covered in the patent.

Mr. Detor said the board in previous instances have approved additional dwellings for employee housing, but not for subdivision purposes.

Mr. Detor further stated that about a year or more ago the board adopted a policy of denying all requests for construction of additional dwellings on subdivided portions of these lots.

The applicant is asking for one because she is going to operate it as a farm, and she wants to have a place from which to operate. The land has been subdivided.

Mr. Detor pointed out that when the board adopted the policy of refusing to allow dwellings on subdivided portions, it was not in recognition of Ag-5 zoning. The department is trying to avoid a proliferation of 5-acre lots which would turn it into a residential-type subdivision. The idea was to keep the farm character of the subdivision as much as possible.

Ms. Judith Forster, who has been selling real estate for the last three years, briefly addressed the board. She has arranged to purchase the 20-acre portion of the 26-acre parcel. To go into this project, she said she needs to live there and manage it. She said the land is not being used now and the area has not been fully farmed.

Mr. Higashi said it really is not necessary to live on the land, and Ms. Forster agreed. He said the merit of the project should be based on production.

Ms. Forster said Mrs. Kawasaki lives on the property, so there is some degree to safeguard it. However, Ms. Forster said the land is very big and Mrs.



February 5, 1981

Mr. George T. H. Pai  
Attorney at Law  
33 South King Street  
Suite 223  
Honolulu, HI 96813

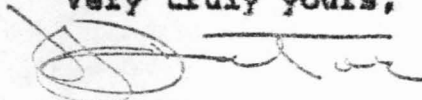
Dear Mr. Pai:

This is to inform you that at its meeting of January 23, 1981, the Board of Land and Natural Resources took the following actions:

1. Voted to confirm the Board's previous May 13, 1977, action under agenda Item F-2 granting a geothermal lease on reserved lands to the Bishop Estate and authorized the Chairman to make such changes in the terms and conditions therein as are necessary to conform it to Regulations 3 and 4 of the Department of Land and Natural Resources.
2. Voted to consent to the subleasing by the Bishop Estate (sublessor) to Thermal Power Company and Dillingham Corporation (sublessee) of the geothermal lease above discussed. A copy of the actions (agenda Item F-1-c) is attached. Note that the Board added an amendment to the consent action specifically denying your request for release from any liabilities or duties under the State lease.

We will get in touch with you when the lease itself is ready for review and execution and when the consent processing is completed.

Very truly yours,



JAMES J. DETOR  
Land Management Administrator

Enclosures

cc: Hawaii Board Member  
Hawaii District Land Office  
DOWALD  
JJD:yd

ACTION           The Board unanimously authorized the issuance of a permit to allow the use of Hapuna Beach State Recreation Area as an aid and weigh station and to permit commercial television filming activities associated with the bike race. (Yagi/Hong)

ITEM F-1                   DOCUMENTS FOR CONSIDERATION

HAWAII

CONSENT TO SUBLEASE

Item F-1-a       HAROLD T. TANOUYE, JR., Sublessor to MAKAI NURSERY, Sublessee - portion of Lots 12, 13 and 14 Panaewa Farm Lots, 2nd Series, Waiakea, So. Hilo, Hawaii - G. L. S-4445.

Item F-1-b       KAPOHO LAND PARTNERSHIP, Sublessor, to THERMAL POWER COMPANY AND DILLINGHAM CORPORATION, Sublessee - reserved lands at Kapoho, Puna, Hawaii, designated by Tax Map Key as follows:

TMK	AREA
1-4-01:1	247.0000 ac.
1-4-01:2 (portion)	349.0587 ac.
1-4-01:3	3.7410 ac.
1-4-01:19	215.2420 ac.
1-4-01:58	0.7580 ac.
TOTAL	<u>815.7997 ac.</u>

Item F-1-c       TRUSTEES OF THE ESTATE OF BERNICE PAUHI BISHOP, Sublessor, to THERMAL POWER COMPANY AND DILLINGHAM CORPORATION, Sublessee - reserved lands at Kapoho, Puna, Hawaii, designated by Tax Map Key as follows:

TMK	AREA
1-3-01:22	27.78 ac.
1-3-01:23	237.40 ac.
1-3-01:58	33.50 ac.
1-3-01:59	275.80 ac.
1-3-02:32	803.00 ac.
1-3-02:33	20.20 ac.
1-3-02:59	154.80 ac.
1-3-02:79	21.00 ac.
1-3-02:80	21.30 ac.
1-3-02:81	21.50 ac.
1-3-02:82	21.70 ac.
1-3-02:83	142.30 ac.
1-3-02:84	50.80 ac.
1-3-02:87	28.00 ac.
1-3-03:05	9.80 ac.
1-3-03:06	430.20 ac.
1-3-03:41	101.00 ac.
1-3-09:02	157.75 ac.
1-3-09:01	206.17 ac.
1-3-09:05	694.30 ac.
1-3-09:08	5.17 ac.
1-3-09:10	23.26 ac.
TOTAL	<u>3,486.70 ac.</u>

Mr. Kealoha questioned the sentence listed under "Remarks" of Items F-1-b and F-1-c which reads: "The partnership requests that, upon approval of the sublease, the Board release the partnership from any liabilities or duties under the State lease as provided by Rule 3.7B of Regulation 8. Mr. Detor said that the lessees had requested this but staff did not include this as a recommendation for approval. Mr. Kealoha asked that specific denial of the requested liability clause be added as a third condition under Recommendation for both Items F-1-b and F-1-c.

Amendment: ADD under Reserved Lands:

Include the approximately 400 acres zoned Conservation District within TMK: 1-3-09:05, subject to Conservation District Use Application (CDUA) approval if required as determined by the Office of the Attorney General.

Amendment: ADD under Payment for the Right to Exploit Geothermal Resources:

Payment shall be made commencing on the fourth (4th) year of the lease term. Payments for first three (3) years are waived.

Amendment: Royalty: Paragraph amended to read:

"For the Primary ten (10)-year period and first Fifteen (15) years of the continuation period (Twenty-five (25) years) of the lease term, Lessee shall pay to the Board of Land and Natural Resources the following royalties:"

Amendment: Amend first sentence of Reopening of Royalty Rate to read:

"Royalty rates shall be subject to reopening at the end of the twenty-fifth (25th), fortieth (40th) and fifty-fifty (55th) years of the lease term."

Amendment: ADD to Assignment and Subletting:

"Such approval may be refused if the Board feels that participation in revenues by Bishop Estate is inadequate."





DIVISIONS:  
CONVEYANCES  
FISH AND GAME  
FORESTRY  
LAND MANAGEMENT  
STATE PARKS  
WATER AND LAND DEVELOPMENT

STATE OF HAWAII

DEPARTMENT OF LAND AND NATURAL RESOURCES

DIVISION OF LAND MANAGEMENT

P. O. BOX 621

HONOLULU, HAWAII 96809

May 13, 1977

Board of Land and  
Natural Resources  
Honolulu, Hawaii

Gentlemen:

HAWAII

Subject: Direct Lease of Geothermal Resources  
Mining Rights on Reserved Lands, Puna,  
Hawaii

STATUTE: Chapter 182, HRS (Reservation and Disposition  
of Government Mineral Rights)

APPLICANT: Kamehameha Schools/Bernice Pauahi Bishop  
Estate

FOR: Direct lease of geothermal resources mining  
rights on reserved lands.

RESERVED LANDS: Situate at Puna, Island of Hawaii:

<u>Tax Map Key</u>	<u>Acreage</u>
a. 1-3-01:22, 23, 58, 59	574.00 ac.
b. 1-3-02:32, 59, 79, 80, 81, 82, 83, 84	1,261.00 ac.
c. 1-3-03:06, 41	531.00 ac.
d. 1-3-09:01, 02, 05, 08, 09	1,086.00 ac.
ACREAGE	3,452.00 ac.

Less Exclusion

Approx. 400 acres zoned Conservation District within TMK 1-3-09:05	400.00 ac.
NET ACREAGE	3,052.00 ac.

NOTE: The above acreage is within the  
maximum allowable under Section 182-8, HRS,  
and under the proposed DLNR rules and  
regulations on Geothermal Resources mining.

SLUC ZONING: All Agricultural Districts.

LAND OWNERSHIP: Kamehameha Schools/Bernice Pauahi Bishop Estate

ITEM F-2

Board of Land and  
Natural Resources

May 13, 1977

MINERAL RIGHTS: Reserved to State of Hawaii by Royal Patent Nos. 4475 and 6883 on L.C.Aws. 7713:13; and 7713:14, respectively.

MINERAL TO BE MINED: Geothermal Resources, classified as a mineral under Section 182-1, HRS, as amended by Act 241, SLH 1974.

TERM: The lease shall have a maximum term of sixty-five (65) years; provided that there shall be a primary period of ten (10) years from the effective date of the lease and if during this primary period, geothermal resources are being produced or utilized in commercial quantities, the lease term shall continue for so long thereafter as geothermal resources are produced or utilized in commercial quantities, subject, however, to the sixty-five (65)-year limitations.

Continuation or termination of the lease after the primary ten (10)-year period shall be in accordance with Rule No. 3.11 of the DLNR Geothermal Rules (adoption pending).

COMMENCEMENT AND  
COMPLETION DATES  
OF DRILLING  
OPERATION:

The Lessee shall covenant and agree that Geothermal Resources mining and drilling operation on the reserved lands shall commence within three (3) years from the date of execution of the lease document by the Lessee; and that at least one geothermal resources well for production shall be completed within one (1) year from the commencement date of such drilling operation. Provided, that so long as the Lessee is actively and on a substantial scale engaged in mining and drilling operation of Geothermal Resources on at least one such lease, this requirement shall be suspended.

PAYMENT FOR THE  
RIGHT TO EXPLOIT  
GEOTHERMAL  
RESOURCES:

The Lessee shall pay to the State of Hawaii the amount of \$3,052.00 per annum for the right to exploit Geothermal Resources reserved to the State. Such payment shall be in addition to any royalty and shall be paid annually, in advance, for the term of the lease.

ROYALTY:

For the primary ten (10)-year period and first ten (10) years of the continuation period (twenty (20) years) of the lease term, lessee shall pay to the Board of Land and Natural Resources the following royalties:

May 13, 1977

- a. A royalty of fifteen percent (15%) of the gross revenue received from sale of steam, brines from which no other minerals have been extracted, and associated gases, at the point of delivery to the purchaser thereof.
- b. A royalty of ten percent (10%) of the gross revenue from the sale of mineral products or chemical compounds recovered from geothermal fluids in the first marketable form.
- c. Royalty payments shall be made pursuant to above items a. and b. for all geothermal resources and other minerals extracted therefrom, used by the lessee and not sold, with the gross revenue therefor to be determined as though said geothermal resources and other minerals extracted therefrom had been sold to a third party at the then prevailing market price in the same market area and under the same marketing conditions.

PAYMENT:

The lessee shall make payments of royalties to the Board at its Honolulu office within thirty (30) days after the end of each month and accompany such payment with a written statement by the lessee, showing the volume of each geothermal resources and its by-products sold, used, or otherwise disposed of. The lessee shall furnish such other data as may be necessary for the Board to audit and verify all royalty payments.

REOPENING OF  
ROYALTY RATE:

Royalty rates shall be subject to reopening at the end of the twentieth (20th), thirty-fifth (35th), and fiftieth (50th) years of the lease term. Royalty rates for the new period shall be determined by independent appraisal but shall be no less than the royalty rates at the time of reopening, nor shall it be higher than the maximum rate allowable under the DLNR Regulation on Leasing of Geothermal Resources in Hawaii.



May 13, 1977

ROYALTIES ON

OTHER MINERALS:

In the event the lessee desires to mine minerals other than Geothermal Resources, the lessee shall before mining such other minerals, so notify the Board in writing, and the lessee shall negotiate and fix the royalty rates for such other minerals, as may be allowed to be mined by the Board.

METERING:

Metering equipment shall be maintained and operated by lessee in such a manner as to meet acceptable standards of accuracy consistent with geothermal industry practices.

TESTING OF  
MINERALS:

The lessee shall on a calendar semi-annual basis furnish the Board the results of periodic tests showing the content of by-products in the produced geothermal resources. Such tests shall be consistent with acceptable method of testing practices by the industry.

ASSIGNMENT AND  
SUBLETTING:

The lessee shall not assign and/or sublet the whole or any portion of the rights herein leased, without the prior approval of the Board of Land and Natural Resources. Provided, that any assignment and/or sublease so made shall be to person or persons, partnerships, corporations, etc., who has obtained from the owner of the lands the right to occupy and conduct geothermal resources mining operation thereon.

BOND:

The lessee shall within thirty (30) days of receipt of the completed lease document, file with the Board, and keep in force for the term of the lease, a PERFORMANCE BOND, in the amount of \$50,000.00, conditioned upon faithful observance and performance of all requirements of the lease. Said Bond shall name the Department of Land and Natural Resources, State of Hawaii, as obligee.

LIABILITY  
INSURANCE:

The lessee shall secure and maintain in force during the term of the lease, Comprehensive General liability and property damage insurance and products liability insurance naming the State of Hawaii DLNR as additional insured in the following minimum amounts:

May 13, 1977

- a. Comprehensive General Bodily Injury Liability \$300,000.00 each occurrence, \$300,000.00 aggregate.
- b. Comprehensive General Property Damage \$50,000.00 each occurrence, \$100,000.00 aggregate.
- c. Products liability in the single minimum limit of \$250,000.00.

RULES AND  
REGULATIONS:

The lease shall include other applicable provision required by law and as contained in the DLNR REGULATIONS ON LEASING OF GEOTHERMAL RESOURCES AND DRILLING FOR GEOTHERMAL RESOURCES IN HAWAII when such regulations have been adopted in final form.

ENVIRONMENTAL  
CONCERN:

The lessee shall comply with all water and air pollution control laws, rules and regulations of the State or its political subdivision. The lessee shall also comply with all applicable State and County laws relative to Environmental Impact Statements.

REMARKS:

The Trustees of Kamehameha Schools/Bernice Pauahi Bishop Estate has made application as an occupier for geothermal resources mining lease on estate lands at Puna, Hawaii, which are subject to reservations of mineral rights in favor of the State of Hawaii. Application was made in accordance with Section 182-5, HRS (Mining leases on reserved lands), however, with the understanding that such application is not a waiver of whatever rights the applicant may have as to claim of ownership of the geothermal resources under the subject reserved lands.

Under Section 182-5, HRS, the Board may by vote of two-thirds of its voting members, without public auction, grant a mining lease on reserved land to the occupier thereof.

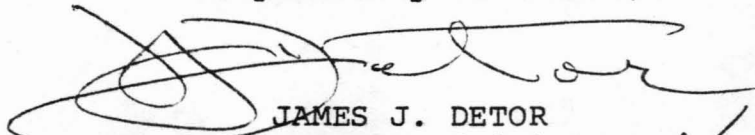
THE DLNR REGULATION ON LEASING OF GEOTHERMAL RESOURCES AND DRILLING FOR GEOTHERMAL RESOURCES IN HAWAII is in its final draft stage and is expected to be presented to the Board for adoption following public hearings to be held in the near future.

Board of Land and  
Natural Resources


May 13, 1977

RECOMMENDATION: That the Board approve a direct grant of a geothermal resources mining lease on reserved lands to the applicant covering the reserved lands listed above, subject to terms and conditions above mentioned which are by reference incorporated herein, in addition to such other terms and conditions required by law and as may be prescribed by the Chairman which will serve the best interest of the State.

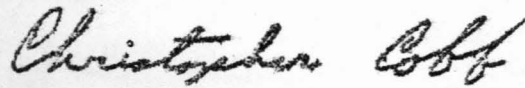
Respectfully submitted,



JAMES J. DETOR  
Land Management Administrator



APPROVED FOR SUBMITTAL:



CHRISTOPHER COBB, Chairman



DOCUMENT FOR APPROVAL BY THE BOARD OF LAND AND NATURAL RESOURCES

January 23, 1981

CONSENT

SUBLEASE

HAWAII

TRUSTEES OF THE ESTATE OF BERNICE PAUHI BISHOP, Sublessor, to  
THERMAL POWER COMPANY AND DILLINGHAM CORPORATION, Sublessee

Geothermal lease on reserved lands in Puna, Hawaii, authorized  
by the Board of Land and Natural Resources at its meeting of  
May 13, 1977 under agenda Item F-2.

Lease rental: \$3,487.00 per annum base (to be credited against  
production royalties) and royalties of 10 percent  
of the gross amount or value of the geothermal  
resources produced and 5 percent of gross proceeds  
from the sale of geothermal by-products.

LOCATION AND AREA

Reserved lands at Puna, Hawaii, being those certain parcels  
of land (portion of the lands described in and covered by  
Land Patent 8200, Royal Patents 4475 and 6883, Apana 14, to  
V. Kamamalu and Royal Patent 4475, Land Patent 8199, Land  
Commission Award 7713, Apana 13, to V. Kamamalu) designated  
by Tax Map Key as follows:

<u>TMK</u>	<u>AREA</u>
1-3-01:22	27.78 ac.
1-3-01:23	237.40 ac.
1-3-01:58	33.50 ac.
1-3-01:59	275.80 ac.
1-3-02:32	803.00 ac.
1-3-02:33	20.20 ac.
1-3-02:59	154.80 ac.
1-3-02:79	21.00 ac.
1-3-02:80	21.30 ac.
1-3-02:81	21.50 ac.
1-3-02:82	21.70 ac.
1-3-02:83	142.30 ac.
1-3-02:84	50.80 ac.
1-3-02:87	28.00 ac.
1-3-03:05	9.80 ac.
1-3-03:06	430.20 ac.
1-3-03:41	101.00 ac.
1-3-09:02	157.75 ac.
1-3-09:01	206.17 ac.
1-3-09:05	694.30 ac.
1-3-09:08	5.17 ac.
1-3-09:10	23.26 ac.

TOTAL 3,486.70 ac.

*Amended by adding  
specifically denying  
request for release of  
liabilities and duties.*

LAND CLASS TITLE

Private land (Bishop Estate - owner)

APPROVED BY THE BOARD OF  
LAND AND NATURAL RESOURCES  
AT ITS MEETING HELD ON

*January 23, 1981*  
**ITEM F-1-c**

*5/1*

January 23, 1981

CHARACTER OF USE

Geothermal exploration, operation, development, and marketing

PROPOSED SUBLEASE TERMS AND CONDITIONS

Sublease term: Maximum of 65 years

Sublease rent: Advance rent of \$10.00 per acre per annum for 1st three years; \$20.00 per acre per annum for the 4th and 5th years; \$25.00 per acre per annum for the 6th through 10th years; each following successive 5-year periods to be annual rental for the last lease year preceding such period plus an increase equal to the percentage increase, rounded to the nearest 1/10 percent, registered in the Honolulu Consumer Price Index. Royalty rates ranging from 2 percent to 4 percent of gross proceeds, depending upon megawatts generated. Royalty for non-electric uses and for sale or use of extractable minerals, 5 percent of gross proceeds.

Note: Sublessee, in addition to the foregoing, shall also pay the State of Hawaii the amount of rents and royalties provided for in the State lease.

REMARKS

At its meeting of May 13, 1977 under agenda Item F-2 the Board approved the issuance of a geothermal lease to the Bishop Estate as occupier of the lands in question. The Estate now wishes to enter into a sublease with Thermal Power Company and Dillingham Corporation to develop the geothermal resources and, pursuant to Rule 3.7 of Regulation 8, has submitted a copy of the proposed sublease for review and approval by the Board. The Estate requests that, upon approval of the sublease, the Board release the partnership from any liabilities or duties under the State lease as provided by Rule 3.7b of Regulation 8.

Also being submitted to the Board today is a request by Kapoho Land Partnership for consent to sublease the geothermal rights granted to Kapoho by the Board on December 19, 1980 under agenda Item F-3. The Kapoho sublease will also be to Thermal/Dillingham, and both subleases provide for pooling of Kapoho's and the Estate's lands.

It should be noted that the Board's action of May 13, 1977 approving the Bishop Estate lease took place prior to the adoption of Regulation 8 but with the provision that the lease be conformed to such regulation when adopted.

It should also be noted that an approximately 400-acre portion of TMK 1-3-9:05 is zoned conservation but was included in the Board's 1977 action with the proviso that it be subject to the filing of a Conservation District Use Application, if required.

January 23, 1981

RECOMMENDATION

That the Board:

- A. Confirm the action of May 13, 1977 under agenda Item F-2 granting a geothermal lease on reserved lands to the Bishop Estate and authorize the Chairman to make such changes in the terms and conditions therein as he deems necessary to conform it to Regulations 8 and 4 of the Department of Land and Natural Resources.
- B. Consent to the foregoing sublease subject to the following:
  1. Review and approval of the sublease terms and conditions by the Office of the Attorney General.
  2. Such other terms and conditions as may be prescribed by the Chairman.



OAHU

- (F-1-f) REVOCABLE PERMIT  
THOMAS L. NOA, SR. AND DAWSON MIURA - Waimanalo, Oahu - \$100.00 mo.
- (F-1-g) MORTGAGE  
SEA LIFE INCORPORATED, MORTGAGOR TO FIRST HAWAIIAN BANK, MORTGAGEE -  
G. L. S-3709 - Por. of Govt. land of Waimanalo, Oahu, TMK 4-1-14:por.  
parcels 4 & 13.
- (F-1-h) REVOCABLE PERMITS  
DALLAS E. ROWLEY, INC., dba Datsun of Waipahu/Wahiawa - Wahiawa, Oahu -  
\$536.50 mo.
- Mr. Kealoha asked why only 2¢ per sq. ft. was being charged for use of  
the above area when less comparable areas at Sand Island were being  
rented from 1-3/4¢ to 2-3/4¢ per sq. ft. Mr. Detor asked that this  
item be withdrawn while he checked on this.
- (F-1-i) MR. & MRS. ROBERT W. GUILD - Malaekahana State Park, Oahu - \$330.00 mo.  
(F-1-j) GROSVENOR INTERNATIONAL-HAWAII, LTD. - Malaekahana State Park, Oahu -  
\$84.00 mo.  
(F-1-k) ABIGAIL KEKAULIKE KAWANANAKOA - Malaekahana State Park, Oahu -  
\$302.00 mo.  
(F-1-l) MR. & MRS. CHARLES M. COOKE IV - Malaekahana State Park, Oahu -  
\$84.00 mo.

Mr. Detor asked that Items F-1-i, F-1-j, F-1-k and F-1-l be withdrawn.

- (F-1-m) YEE HEE & MARGARET HEE - 46-405 Kamehameha Highway, Heeia, Oahu -  
\$350.00 mo.  
(F-1-n) G & G METAL WORKS, INC., a Hawaii Corporation - Iwilei, Oahu -  
\$1,765.00 mo.

KAUAI

- (F-1-o) REVOCABLE PERMIT  
MRS. KATHY ASAI - Lot 26, Block J, Kapaa Town Lots, Kapaa, Kawaihau,  
Kauai - \$15.00 mo.
- (F-1-p) COLLATERAL AGREEMENT  
STATE OF HAWAII, ABELARDO R. ILORETA AND AMERICAN SAVINGS AND LOAN  
ASSOCIATION - S.S.A. S-5464 - Lot 14, Wailua House Lots, Kauai

ITEM F-2 KAMEHAMEHA SCHOOLS/BISHOP ESTATE APPLICATION FOR DIRECT LEASE OF GEOTHERMAL  
RESOURCES MINING RIGHTS ON RESERVED LANDS, PUNA, HAWAII

Bishop Estate Trustees Matsuo Takabuki and Myron Thompson, Ed Craddick of  
Geothermal Exploration and Development Corp., and W. L. D'Olier of the  
Thermal Co. of San Francisco described their plans to the Board.

Mr. Takabuki said that up to six wells will be drilled at a cost of about  
\$1 million each during a three-year period to explore and define the  
resources.

Mr. Mehau asked what the estimated cost would be once it was decided that  
there was merit to continue.

Mr. D'Olier said it is hoped to drive the dollars down on future wells needed for energy production. He said that an additional \$10 million could be spent to provide Hilo Electric Co. with expanded power production required by 1981. Depending on the exploratory wells, he said that it's possible that something like 10 to 20 productive wells could be sited in the subject area.

Mr. Takabuki asked the Board for several revisions in the proposed lease agreement.

Mr. Cobb stated that the terms of the lease still are subject to a State regulation on leasing and drilling of geothermal resources. The regulation is in final draft stage and will be presented to the Board for adoption after public hearings.

ACTION

The Board, upon motion by Mr. Mehau and a second by Mr. Kealoha, unanimously approved a direct grant of a geothermal resources mining lease to Bishop Estate covering the reserved lands listed in the submittal, subject to the terms and conditions also listed in the submittal, with the following revisions:

1. 400 acres zoned conservation to be included in the lease subject to filing of a CDUA (unless the Attorney General says that a CDUA is not necessary or that a CDUA must be processed first).
2. Flat rental to be waived for the first three years of the lease.
3. Royalty rates to be decreased to 10% and 5%, respectively.
4. Reopening of Royalty rates to be changed to the end of the 25th, 40th and 55th years.
5. Assignment and Subletting provision to be changed by adding the following words to the end of the paragraph: "such approval may be refused if the Board feels that participation by Bishop Estate is inadequate.

The above approval is also subject to such other terms and conditions required by law and as may be prescribed by the Chairman which will serve the best interest of the State.

STAFF RECOMMENDATION FOR AMENDMENT OF PREVIOUS BOARD ACTION (6/27/75, AGENDA ITEM F-5) AUTHORIZING WITHDRAWAL OF LAND FROM G. L. NO. S-3575 FOR HILO II HIGH SCHOOL SITE, WAIAKEA, SO. HILO, HAWAII.

ITEM F-3

Action

The Board, upon motion by Mr. Mehau and a second by Mr. Munechika, unanimously voted to further amend its action of June 27, 1975, by deleting the withdrawal authorized under "Recommendation B" of agenda Item F-5, and in its stead authorize the cancellation and termination of General Lease No. S-3575 to the Honpa Hongwanji Mission of Hawaii effective June 30, 1975 and authorize reimbursement of all lease rental paid for the periods thereafter.

MELVIN B. HEWETT AND ROBERT BEHRENS REQUEST FOR ACCESS EASEMENT ACROSS STATE LAND AT PUAKO, SO. KONA, HAWAII

ITEM F-4

ACTION

The Board, having found that the subject easement area is of minimum size relative to the intended use and constitutes an economic unit, unanimously authorized the sale of a 65-year, non-exclusive easement over and across the subject State land for roadway purposes; the Board to determine location of easement. Said sale shall be on a direct