

BEFORE THE LAND USE COMMISSION
OF THE STATE OF HAWAII

In the Matter of the Petition of the)
)
NATURAL ENERGY LABORATORY OF HAWAII)
AUTHORITY, STATE OF HAWAII)
)
To Amend the Conservation Land Use)
District Boundary into the Urban)
Land Use District for Approximately)
83 Acres at Keahole, North Kona,)
Island and County of Hawaii, Tax)
Map Key No.: 7-3-09: 23)
_____)

Docket No. A91-669
FINDINGS OF FACT,
CONCLUSIONS OF LAW,
AND DECISION AND
ORDER

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LAND USE COMMISSION
STATE OF HAWAII

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CONCLUSIONS OF LAW, AND DECISION AND ORDER

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In the Matter of the Petition of the)	Docket No. A91-669
NATURAL ENERGY LABORATORY OF HAWAII)	FINDINGS OF FACT,
AUTHORITY, STATE OF HAWAII)	CONCLUSIONS OF LAW,
To Amend the Conservation Land Use)	AND DECISION AND
District Boundary into the Urban)	ORDER
Land Use District for Approximately)	
83 Acres at Keahole, North Kona,)	
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Map Key No.: 7-3-09: 23)	
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FINDINGS OF FACT,
CONCLUSIONS OF LAW, AND DECISION AND ORDER

The Natural Energy Laboratory of Hawaii Authority ("Petitioner" or "NELHA"), a public body corporate and politic of the State of Hawaii duly organized and existing pursuant to Chapter 227D, Hawaii Revised Statutes ("HRS"), filed a Petition for a Land Use District Boundary Amendment on July 22, 1991, pursuant to Section 205-4, HRS, and Chapter 15-15, Hawaii Administrative Rules ("H.A.R."), to amend the State land use district boundary by reclassifying approximately 83 acres of land situated at Keahole, North Kona, Island and County of Hawaii, identified as Tax Map Key No.: 7-3-09: 23 ("Property"), from the State Land Use Conservation District to the State Land Use Urban District to permit the development of ocean-related high technology industry uses.

The Land Use Commission ("Commission"), having heard and examined the testimony, evidence and arguments presented

during the hearings, and Petitioner's proposed findings of fact, conclusions of law, and decision and order, does hereby make the following findings of fact and conclusions of law:

FINDINGS OF FACT

PROCEDURAL MATTERS

1. Petitioner filed a Petition for a Land Use District Boundary Amendment on July 22, 1991 ("Petition").
2. Petitioner NELHA is a public body corporate and politic of the State of Hawaii duly organized and existing pursuant to Chapter 227D, HRS, whose business and mailing address is P.O. Box 1749, Kailua-Kona, Hawaii 96745.
3. On August 22, 1991, a hearing was held before the Commission to consider Petitioner's request for approval of previously prepared Environmental Impact Statements ("EIS") for the proposed reclassification of the Property. The Commission orally ruled that Petitioner be required to prepare and file a Supplemental Environmental Impact Statement ("SEIS").
4. On August 27, 1991, Petitioner filed a Motion for Reconsideration of Land Use Commission's Oral Determination of August 22, 1991 ("Motion") that required Petitioner to prepare an SEIS.
5. On September 18, 1991, Petitioner filed a written request to withdraw its Motion.
6. On September 19, 1991, the Commission granted, without objection, Petitioner's request to withdraw its Motion.

7. On October 29, 1991, the Commission issued a written Order Requiring Petitioner To Prepare a Supplemental Environmental Impact Statement, pursuant to Chapter 343, HRS.

8. A Final Supplemental Environmental Impact Statement ("FSEIS") was prepared by Petitioner and submitted to the Commission on September 9, 1992. The FSEIS was accepted by Governor John Waihee by letter dated September 22, 1992.

9. On October 29, 1992, the Commission issued its Findings of Fact, Conclusions of Law, and Decision and Order Accepting a Final Supplemental Environmental Impact Statement For A State Land Use District Boundary in this matter.

10. On January 12, 1993, a prehearing conference was held at which time lists of exhibits and witness lists were exchanged among the parties.

11. No petitions for intervention were received by the Commission.

12. On January 20, 1993, the Commission received a letter in support of the Petition from State Representative Virginia Isbell. The letter was admitted into the record without objection.

13. On January 28 and 29, 1993, the Commission held hearings on the Petition pursuant to a public notice published on December 21, 1992 in the Honolulu Advertiser, the Hawaii Tribune Herald, and West Hawaii Today.

14. On January 28, 1993, the Commission received into evidence, without objection, the written and oral testimony in

support of the Petition of Robert D. Van Dorpe, Trustee and Chairman of the Kahala Capital Corporation. The Commission also received into evidence, without objection, the written and oral testimony in support of the Petition of Barbara McLean, Chairperson of the West Hawaii Sierra Club.

15. On January 29, 1993, the Commission received into evidence, without objection, a letter in support of the Petition from State Representative Mike O'Kieffe.

16. On April 29, 1993, the matter was presented for decision-making before the Commission. At that time, Petitioner orally moved to defer consideration of the Petition. The Commission granted, without objection, Petitioner's oral motion.

17. On May 12, 1993, the Commission granted, without objection, Petitioner's request by letter dated May 5, 1993 to again defer consideration of the Petition to a later date.

18. On May 14, 1993, Petitioner filed a Motion to Reopen Hearing, which was granted, without objection, by the Commission on May 21, 1993 and by a written Order issued on June 14, 1993.

19. On August 18, 1993, the Commission issued its "Order Re: Submission of Exhibits and Identification of Witnesses" for this docket.

20. On November 3, 1993, the Commission held a reopened hearing on the Petition pursuant to a public notice

published on September 29, 1993 in the Honolulu Advertiser, the Hawaii Tribune Herald, and West Hawaii Today.

21. On November 3, 1993, the Commission received into evidence, without objection, a letter in support of the Petition dated August 27, 1993 from Hawaii County Councilman Jim Rath.

22. On November 3, 1993, the Commission received into evidence, without objection, a letter from Dr. John Lewin addressed to Mr. Dandee L.L. Hauanio dated September 2, 1993 as well as the oral testimony of public witnesses, Mr. Dandee Lunakanawai Hauanio and Mr. Alena Kaiokekoa.

DESCRIPTION OF THE PROPERTY

23. The Property is located at Keahole, North Kona, Island and County of Hawaii and is identified as Tax Map Key No.: 7-3-09: 23.

24. Surveys of the Property were prepared by the State of Hawaii, Department of Accounting and General Services, Survey Division, Raymond Nakamura, Land Surveyor dated November 27, 1991, March 15, 1993, and October 14, 1993. Said surveys indicate that the Property contains an area of approximately 82.21 acres and that Part A, makai of an approximate 340-foot setback,¹ contains an area of

¹ The actual setback ranges from approximately 300 feet at the northern boundary of the Property to approximately 340 feet at the southern boundary of the Property as shown on Petitioner's Exhibit 32.

approximately 11.509 acres and that Part B, mauka of the approximate 340-foot setback, contains an area of approximately 70.701 acres.

25. The Property was obtained by the State of Hawaii in a 1986 land exchange with Kahala Capital Corporation and became part of the 870 acres of State-owned Natural Energy Laboratory of Hawaii ("NELH") and Hawaii Ocean Science Technology ("HOST") Park properties consolidated under the control of Petitioner NELHA.

26. Most of the NELHA lands are situated within the State Land Use Urban District. The approximate 82.21-acre Property that is the subject of this Petition and approximately 33 acres of shoreline below the access road within HOST Park are in the State Land Use Conservation District. To the south of the Property is a parcel owned by Kahala Capital Corporation that is currently in the State Land Use Conservation District.

27. Topography of the Property is characterized by less than five percent average slopes sloping downward from Queen Kaahumanu Highway (elevation approximately 120 feet) toward the ocean. The predominant land type is pahoehoe lava with smaller acres of a'a lava and beaches. The KAD Partners' site is on a westerly facing slope from sea level to elevation 50 feet. The ground is relatively flat, with no significant soil cover present.

28. Average annual rainfall on the Property is between 13 inches at the site and approximately 25 inches at Kailua-Kona.

29. The Land Study Bureau's Detailed Land Classification study for the Island of Hawaii designates the Property as class "E" lands. Class "E" lands are very poor or least suited for agricultural uses.

30. The U.S. Department of Agriculture Soil Conservation Service Survey report for the area designates the Property's soil types as A'a (rLV) and Pahoehoe (rLW) lava flows. These lava flows typically have no soil covering and are bare of vegetation except for mosses, lichens, ferns, and a few small ohia trees.

31. The Federal Emergency Management Agency's Flood Insurance Rate Map indicates that coastal areas of the Property are located within the following zones: Zone VE (areas inundated by the 100-year flood with velocity hazards and a base flood elevation of nine feet above mean sea level) and Zone AE (areas inundated by the 100-year flood with a base flood elevation of nine feet above mean sea level). Inland areas are within Zone X (areas determined to be outside the 500-year floodplain).

32. The State of Hawaii owns the Property in fee. The Property is held by NELHA under General Lease No. S-5157 from the State of Hawaii, Board of Land and Natural Resources.

33. General Lease No. S-5157 between the State Department of Land and Natural Resources and the High Technology Development Corporation covering 421.120 acres of land at Keahole Airport, Kona, Hawaii, Item No. 15, Character of use, states that "the Premises shall only be used to develop, maintain, and operate an ocean-related high technology industrial park in accordance with provisions of Chapter 206M, Hawaii Revised Statutes. Such uses shall include, but not be limited to, research, development, or production of aquaculture, oceanography, marine biology, alternate energy applications, education, and other compatible, scientific and technological investigations, applications, and commercial developments that relate to or utilize the surface and deep, cold sea water resources. In addition, service and support activities that directly support the ocean-related activities present in the park and are agreeable to all parties shall be permitted."

34. KAD Partners is a Hawaii general partnership consisting of two general partners: WGK Development Corporation and Kona Cold Lobsters, Ltd. ("KCL"), formerly known as Aquaculture Enterprises.

35. WGK Development Corporation is a privately held family company based in Oregon with operational interests in oil, real property, and agribusiness.

36. KCL is a Hawaii "S" corporation headquartered in Hawaii and registered on July 1, 1993. The general partners,

sole stockholders and officers, Philip and Joseph Wilson have 25 years experience in the aquaculture industry. KCL Ltd. has operated a lobster research facility at NELH since mid-1987.

37. Forty acres of the Property are included in a 66-acre lease held by KAD Partners. The lease describes an integrated project including a one megawatt Ocean Thermal Energy Conversion ("OTEC") plant, a lobster farm, NELHA Visitor Center, and an education/research-oriented Ocean Center. The remainder of the Property would be available to aquaculture and other ocean-related companies.

PROPOSAL FOR RECLASSIFICATION

38. Petitioner proposes to subdivide the Property and lease parcels to tenants for aquaculture, energy, and other uses in conformance with the HOST Park Master plan.

39. Petitioner proposes to reserve approximately 11.509 acres of the Property, located along the shoreline, as a "Shoreline Conservation Public Recreation" area centering around the proposed Wawaloli Beach extension.

40. At present, the only identified tenant for a portion of the Property is KAD Partners and, therefore, the only identified uses for the Property are those associated with KAD Partners.

41. The uses of the Property were originally identified in an Ocean Science Center plan that included an integrated ocean science and technology center featuring six

components including marine education and research, ocean engineering, and aquaculture components on 40 acres of the Property and 26 acres of HOST Park lands currently classified in the urban land use category. The Ocean Science Center plan was based on multiple usage of the available ocean resources and included a provision for an OTEC plant, lobster farm, a Visitor Center for NELHA, an extension of Wawaloli Beach, and an archaeological preserve. The Ocean Science Center was intended to be a world class, profitable, state-of-the-art facility designed to educate, entertain, and inform visitors about the terrestrial and marine environment of the Pacific region. The facility would be designed to accommodate an annual attendance of 500,000. The original plan was to build almost every component concurrently. Both the preserve and beach improvements would be required of NELHA, regardless of the specific developments proposed for the Property.

42. The current California and Japan economic downturn has affected the KAD Partners' plans as originally proposed and accepted by the High Technology Development Corporation in 1990. The uncertainty of near future economic conditions and the inability to accurately forecast a positive upward trend has caused KAD Partners to reevaluate their Ocean Science Center plan and defer the ground-breaking timetable for the Center which was originally projected to begin in July 1994. KAD Partners intends to continue this reevaluation

process and explore a phased design without altering the design concept and world-class standard of the Ocean Science Center. The final design phase of the Ocean Science Center, which is estimated to cost \$600,000, will also be deferred and not commence until a stable trend in the economy and visitor industry has been established. Formal evaluation of all economic trend data is expected to be done on a biannual basis.

43. It is uncertain when or if the Ocean Science Center, including the Wawaloli Beach extension, archaeological preserve, visitor center, and the OTEC plant will be developed.

44. At this time, KAD Partners will concentrate their efforts on constructing only the 16-acre lobster farm ("Project") planned to produce approximately 500,000 pounds of American Lobster per year. Most of the Project will be located on HOST Park lands that are already in the Urban District. This includes the distribution of aquaculture farm-grown hybrid blue lobsters, half-pound appetizer lobsters, and 2 to 4-inch aquarium lobsters. Additionally, the farm will support a pound operation for fishery lobsters supplying large size lobsters locally and to be marketed to Southeast Asian destinations, which are unreachable via a non-stop flight from Maine or Massachusetts.

45. KAD Partners has no experience developing and operating an aquaculture commercial facility at NELHA the size and scope contemplated for the Project.

46. Petitioner did not submit a market study to substantiate the need for the Project and the Ocean Science Center or the sensitivity analysis to substantiate the projected revenues from the Project.

47. Petitioner anticipates that the Project would be operational in 1994.

PETITIONER'S FINANCIAL CAPABILITY
TO UNDERTAKE THE PROPOSED DEVELOPMENT

48. NELHA is a state agency intended to provide infrastructure and other support services to research and commercial businesses locating at the facility. To date, over \$25 million has been invested in NELHA infrastructure by the State of Hawaii.

49. The HOST Park Master Plan estimated the total costs for infrastructure development at full buildout to be \$83,009,884. A pro rata share for the 82.21-acre parcel will represent approximately \$12,600,000 of investment. Due to the deferral of the Ocean Science Center, it is not clear whether the State would absorb the costs associated with the visitor center, Wawaloli Beach extension, and the archaeology preserve, all of which would have been absorbed by KAD Partners.

50. The sources of funds for development of the Property are as follows:

A. Funding for permit processing has been budgeted by Petitioner NELHA.

B. Planning, design, and construction funds have been appropriated from the 1989 and 1991 Hawaii State Legislature Capital Improvement Project ("CIP") budget. The breakdown of CIP appropriations include:

OTEC piping system (1989)	\$5,000,000
Infrastructure, planning/design (1991)	313,000
OTEC piping system (1991)	<u>3,600,000</u>
TOTAL	\$8,913,000

Those monies appropriated by the Hawaii State Legislature for the improvement of the existing NELHA facility include:

Infrastructure, construction	\$ 383,000
Deep seawater piping, completion	394,000
Surface seawater piping	930,000
On-site building, construction	<u>650,000</u>
TOTAL	\$2,357,000

51. Under the lease agreement, KAD Partners is required to spend \$33 million in capital expenditures within five years of the time that all permit conditions have been met. Approximately \$6 million of that total would be spent for the Project.

52. KAD Partners did not provide sufficient information on the financial capability of the general partnership to carry out the proposed Project.

STATE AND COUNTY PLANS AND PROGRAMS

53. The Property is situated within the State Land Use Conservation District as reflected on State Land Use District Map H-2 (Keahole Point).

54. The County of Hawaii General Plan Land Use Pattern Allocation Guide Map designates the Property and the existing HOST Park for Industrial uses.

55. The County of Hawaii's zoning for the Property is "Open."

56. The County of Hawaii's Keahole to Kailua Development Plan ("K to K Plan") adopted by the County Council in 1991 by Resolution No. 296 recognizes the Host Park, including the Property, for ocean research, commercial, and industrial uses.

57. The Property is situated within the County of Hawaii's Special Management Area.

NEED FOR THE PROPOSED RECLASSIFICATION

58. Petitioner has represented that NELHA has sufficient urbanized land to expand at this time for probably the next 8 to 10 years. Petitioner has also represented that the primary constraint in attracting tenants is a lack of available seawater, not a lack of available property. Petitioner has represented that the primary reason for reclassifying the Property to the Urban District is to bring the Property into conformance with Petitioner's other urbanized lands.

SOCIO-ECONOMIC IMPACTS

59. The Project and other aquaculture development on the Property would provide temporary construction employment and long-term employment in facilities operation and

management. The Project would employ 13 people. The Project would also generate tax revenues and lease rents for the State.

IMPACT UPON RESOURCES OF THE AREA

60. The cumulative impacts of long-term operation and expansion of NELHA operations were evaluated in three previously-accepted EISS:

Environmental Impact Statement for the Natural Energy Laboratory of Hawaii at Keahole Point, Hawaii (Phase I) (RCUH EIS), Research Corporation of the University of Hawaii, 1976

Final Environmental Impact Statement, Development Plan for the Hawaii Ocean Science and Technology Park and Expansion of the Natural Energy Laboratory of Hawaii, Keahole, North Kona, Hawaii, (HTDC FEIS), High Technology Development Corporation, 1985.

Final Environmental Impact Statement, Alternative Methods of Seawater Return Flow Disposal, Keahole, North Kona, Hawaii, (NELH FSEIS), Natural Energy Laboratory of Hawaii, 1987.

61. The following accepted EISS addressed the impacts of land development and proposed aquaculture uses on the Property obtained by NELHA in the 1986 land exchange:

Final Environmental Statement, 'O'oma II, North Kona, Hawaii ('O'oma II FEIS), prepared for Kahala Capital Corporation by Helber, Hastert, Van Horn & Kimura, Planners, 1986. Submitted to the Planning Department, County of Hawaii.

Final Supplemental Environmental Impact Statement, Development of Land Exchange Parcel, (NELHA FSEIS), Natural Energy Laboratory of Hawaii Authority, 1992.

Agricultural Resources

62. The Land Study Bureau's overall master productivity rating of the Property for agricultural use is Class "E", which is very poor or the least suited for

agricultural uses. As such, the reclassification of the Property will have no significant impact upon agricultural resources.

Flora and Fauna

63. Two types of vegetation are found within the Property: strand vegetation composed primarily of beach naupaka and scrub vegetation consisting of a mixture of various grass and shrub species on pahoehoe lava flows.

64. Two major faunal habitats are present within the Property. The predominant habitat is an arid plain of scattered fountaingrass on pahoehoe lava with occasional native and alien shrub species. Bird densities in this habitat are low. Birds are much more abundant in the coastal strand habitat immediately inland of the high water line.

65. No endemic Hawaiian birds are known to nest on the Property and no rare, threatened, or endangered plant species have been recorded in the area.

66. The proposed Project would result in the loss of some scrub vegetation and some associated faunal habitat. This is expected to have only a minimal impact on the total island populations of the species involved. The strand community would not be impacted except where improvements associated with the beach park are required.

Archaeological/Historical Resources

67. NELHA lands, including the Property, have been thoroughly surveyed for archaeological resources. The

investigations concluded that a total of 28 archaeological sites have been identified, mostly in the coastal portion of the Property. These sites include habitation complexes, cave shelters, platforms, and mounds. Six sites are recommended for data recovery, and four sites are recommended for preservation and protection.

68. It is unclear how the deferral of the Ocean Science Center will affect the preservation and protection of the significant archaeological sites and the establishment of the archaeological preserve.

Groundwater Resources

69. The groundwater lens in the Keahole vicinity is brackish, probably less than 125 feet thick and discharges freely along the coast in a narrow band of a few feet wide in the intertidal zone. The basal lens water does not meet the U.S. Drinking Water Standards even at the top of the lens and at a distance of three miles from the shoreline.

70. The various activities at NELHA utilize warm and cold seawater, and in some instances, brackish groundwater. The majority of these waters are returned to the ocean through gravity seepage from shallow trenches. The NELHA Comprehensive Environmental Monitoring Program ("CEMP") includes monthly groundwater quality monitoring from 16 wells at six locations and has a major focus of documenting the effects and impacts of these discharges on groundwater, anchialine ponds, and the

coastal marine waters. The results of this monitoring program indicate that there are no negative impacts from the discharges.

71. Mitigation of potential impacts of seawater disposal would take two forms, one proactive and one reactive. To reduce any possible impact, NELHA would use a decentralized disposal method for future discharges utilizing strategically located smaller disposal trenches, rather than a few, very large disposal trenches.

72. The reactive component of the mitigation plan is the expansion of the CEMP to include the Property.

Recreational/Scenic Resources

73. It is unclear how the deferral of the Ocean Science Center will impact the development of the Wawaloli Beach extension.

74. The proposed development of the Property would be visible from the Queen Kaahumanu Highway. However, in keeping with the general HOST Park Master Plan design concept, improvements would be low-rise structures. Existing features and unique characteristics of the area would be retained through open spaces and landscaping.

Coastal/Aquatic Resources

75. Coastal waters off Keahole Point are classified AA by the State Department of Health. Waters classified AA are intended to remain as nearly as possible in their natural pristine state with a minimum alteration of water quality from any human-caused source or action.

76. In their natural pristine state, both deep ocean water and groundwaters violate State water quality standards for nitrogen and phosphorous; however, because the ambient concentrations of these nutrients are quite predictable, the best indication of potential alteration of water quality from any human-caused source or action is the CEMP. Evidence of discharge waters has been detected within the groundwater and immediately at the shoreline, but no impacts to the biota have been documented.

77. NELHA proposes numerous mitigation measures to any possible impacts to water quality in the FSEIS including, but not limited to, the use of smaller disposal trenches situated at appropriate locations to serve the needs of tenants as they arise; expansion of the ongoing CEMP which includes monthly groundwater and near-shore monitoring; and the warming of aquaculture wastewater before returning it to the ocean to avoid impacts to corals and other biota.

78. There are no anchialine ponds located within the 82.21-acre Property. However, two clusters of anchialine ponds have been identified on other NELHA lands. One set of ponds to the north of the NELHA complex is well away from the Property. The southern set of ponds is relatively close to the Property.

79. Disposal of seawater return flows into trenches could impact water quality and consequently the biota in the southern ponds nearest the Property, if the plume extends that far without sinking below the brackish water lens. Water

quality and biota have been monitored regularly under the CEMP program and to date, no significant changes have been observed in biotic parameters or water quality.

ENVIRONMENTAL QUALITY

Noise and Air Quality

80. NELH is an industrial facility adjacent to a busy regional airport. The major source of man-made noise affecting the Property originates from air traffic operations at the Keahole Airport. Land uses being proposed are compatible with projected aircraft noise levels.

81. The added noise due to elevated traffic levels would be insignificant.

82. Petitioner has represented that operational noises such as those from the air conditioning system, pumps, fans, trash compactors, and any other stationary equipment would not exceed noise levels established as guidelines by the State Department of Health.

83. Potential impacts on the area's air quality could occur during Project construction. These would consist of dust and exhaust emissions. Strict compliance with State of Hawaii Air Pollution Control Regulations will reduce total emissions.

84. Impacts as a result of projected increase in vehicular traffic within the NELHA grounds are not expected to have any negative impact on the air quality of the area.

85. Both active and passive mitigation measures including strict compliance with air pollution control

regulations, design controls, and operational regulations would be implemented by Petitioner and/or lessee to reduce exposures to motor vehicle emissions. In addition, NELHA would participate in an air quality monitoring program as specified by the State Department of Health.

ADEQUACY OF PUBLIC SERVICES AND FACILITIES

Highway and Roadway Services

86. A Traffic Impact Study was prepared by Barton-Aschman Associates, Inc., in June 1992 to determine the impact of the current level of activity at NELHA plus the KAD project as originally proposed. The results of that study indicate that the level of service ("LOS") on Queen Kaahumanu Highway would remain at LOS "B" ("A"(best) to "F"(worst)), but that there will be delays in left turns into and out of NELHA and operate at LOS "F" unless the intersection is signalized. The intersection, as a whole, however, would continue to operate at LOS "B."

87. The State currently plans to improve Queen Kaahumanu Highway to an access controlled, 4-lane divided highway with access to NELHA via a frontage roadway with an interchange at the airport. This improvement will alleviate the left turn delays.

Water Service

88. Freshwater for domestic use and fire protection is supplied by the Department of Water Supply, County of Hawaii. The County has allocated NELHA 500,000 gpd. The

current freshwater usage at NELHA is approximately 110,000 gpd. Due to the deferral of the Ocean Science Center and the lack of information regarding future uses of the Property, the future demand for freshwater is unknown at this time.

89. It is unclear as to how the Project will obtain warm and cold seawater in light of the deferral of the construction of the OTEC plant.

Wastewater Treatment and Disposal

90. Continuous seawater return flows from the Project would be disposed of in the disposal trench. Effluents and wastewater would be collected in lined settling ponds, evaporated and the residue trucked to a landfill or sewage treatment plant.

Drainage

91. No significant drainage patterns have been established in the region due to the relatively young age of the lava, its permeability, and the characteristic light rainfall. There are no surface streams in the area and overland flows are negligible, except during severe storms when gulches may have heavy discharges.

92. Due to the porous nature of the substratum, surface water flows rarely develop. It is anticipated that runoff water from the buildings, and other major structures would be allowed to percolate into the ground. Where necessary, swales, culverts, drains, catch basins and other

drainage improvements would be provided to accommodate storm runoff.

Solid Waste Disposal

93. The Project will generate several solid waste streams, including sludge from the sewage treatment plant, settled solids from the Lobster Farm, food wastes from the food service facility, green waste from the landscaping and miscellaneous wood, paper, plastic and metallic wastes. Petitioner has represented that the Project on the Property would institute waste management and waste reduction plans conforming to State and County policies.

Police and Fire Protection

94. Police services are provided from the police station at Kealakehe situated adjacent to the existing landfill site. The County fire station is located at Kailua-Kona, approximately seven miles from the Property.

95. Facility design criteria would be employed to deter the common problems of souvenir collecting and vandalism. A full-time, on-site security system would be utilized.

96. Fire protection planning for the proposed Project would utilize appropriate provisions of the Uniform Fire Code as required by the Hawaii County Fire Department.

Electrical and Utility Services

97. Electrical power to the area is supplied by the Hawaii Electric Light Company, Inc. via an existing HOST Park

distribution substation that was sized to serve the Park. The OTEC Plant would supply power for the seawater pumps eliminating the need to purchase approximately 800 kilowatts from the utility. Cold water pumped for power generation would also be used for air conditioning.

98. Hawaiian Telephone Company has an existing 3-inch conduit serving the NELHA facilities. The existing capacity is adequate for the proposed Project.

99. The proposed reclassification is not in accordance with the Urban District standards set forth in section 15-15-18, H.A.R., in that:

a. Petitioner has not satisfactorily shown that the proposed reclassification of the Property is reasonably necessary to accommodate growth and development.

b. Petitioner did not adequately support and substantiate the need to reclassify the entire approximately 82.21 acres for the Project and the Ocean Science Center, which has been deferred to a future date.

c. Petitioner did not adequately support and substantiate the economic feasibility of the Project and the Ocean Science Center.

CONFORMANCE WITH THE GOALS, OBJECTIVES AND POLICIES OF THE HAWAII STATE PLAN; RELATIONSHIP WITH APPLICABLE PRIORITY GUIDELINES

100. The proposed reclassification is not consistent with the applicable goals, objectives, and policies of the Hawaii State Plan under HRS §226-10(b)(1).

Petitioner has failed to sufficiently demonstrate that the reclassification of the Property at this time will facilitate opportunities for investment and employment in potential growth activities or for research and development of ocean-related high technology industry uses.

CONFORMANCE WITH COASTAL ZONE MANAGEMENT OBJECTIVES AND POLICIES

101. The proposed reclassification is not consistent with the following policies and objectives of the Coastal Zone Management Program:

a. Objective for Recreational Resources - The Project will not provide nor enhance recreational opportunities for the Property. Both the Ocean Science Center and the Wawaloli Beach extension, which would have provided additional and improved recreational resources for the public, have been deferred indefinitely. There is no current provision in their place to address the recreational needs of the public.

b. Objective for Historic Resources - The archaeological preserve, which would have provided protection for the sites of greatest significance, has been deferred indefinitely.

RULINGS ON PROPOSED FINDINGS OF FACT

Any of the stipulated or proposed findings of fact submitted by Petitioner or other parties not already ruled upon by the Commission by adoption herein, or rejected by clearly contrary findings of fact herein, are hereby denied and rejected.

Any conclusion of law herein improperly designated as a finding of fact shall be deemed or construed as a conclusion of law; any finding of fact herein improperly designated as a conclusion of law shall be deemed or construed as a finding of fact.

CONCLUSIONS OF LAW

Pursuant to chapter 205, HRS, and the Hawaii Land Use Commission Rules under chapter 15-15, H.A.R., and upon consideration of the Land Use Commission decision-making criteria under section 205-17, HRS, this Commission finds and concludes that the Petitioner has failed to satisfy its burden of proving by a clear preponderance of the evidence that the reclassification of the Property consisting of approximately 82.21 acres of land located at Keahole, North Kona, Hawaii, identified as Tax Map Key No.: 7-3-09: 23, from the State Land Use Conservation District to the State Land Use Urban District, is reasonable, conforms to the standards for establishing the urban district boundaries, is not violative of section 205-2, HRS, and is consistent with the policy and criteria established pursuant to sections 205-16, 205A-2, and the Hawaii State Plan as set forth in chapter 226, HRS, and this Commission's decision-making criteria under section 205-17, HRS.

ORDER

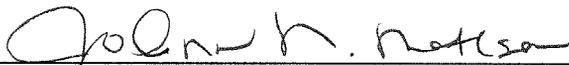
IT IS HEREBY ORDERED that the Petition for reclassification is DENIED, and that the Property, which is the subject of this Docket No. A91-669 filed by Petitioner Natural

Energy Laboratory of Hawaii Authority, State of Hawaii,
consisting of approximately 82.21 acres of land located at
Keahole, North Kona, Hawaii, and identified as Tax Map Key No.:
7-3-09: 23, shall hereby remain in the State Land Use
Conservation District.

DOCKET NO. A91-669 - NATURAL ENERGY LABORATORY OF HAWAII AUTHORITY

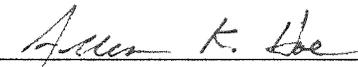
Done at Honolulu, Hawaii, this 1st day of February 1994,
per motion on January 27, 1994.

LAND USE COMMISSION
STATE OF HAWAII

By 
JOANN N. MATTSON
Chairperson and Commissioner

By (absent)
KAREN S. AHN
Vice Chairperson and Commissioner

By 
TRUDY K. SENDA
Vice Chairperson and Commissioner

By 
ALLEN K. HOE
Commissioner

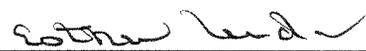
By 
LLOYD F. KAWAKAMI
Commissioner

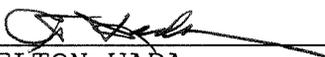
By (absent)
EUSEBIO LAPENIA, JR.
Commissioner

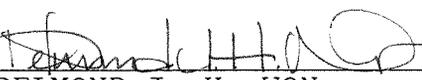
By (absent)
RENTON L. K. NIP
Commissioner

Filed and effective on
February 1, 1994

Certified by:


Executive Officer

By 
ELTON WADA
Commissioner

By 
DELMOND J. H. WON
Commissioner

BEFORE THE LAND USE COMMISSION
OF THE STATE OF HAWAII

In the Matter of the Petition of the)
)
NATURAL ENERGY LABORATORY OF HAWAII)
AUTHORITY, STATE OF HAWAII)
)
To Amend the Conservation Land Use)
District Boundary into the Urban)
Land Use District for Approximately)
83 Acres at Keahole, North Kona,)
Island and County of Hawaii, Tax)
Map Key No.: 7-3-09: 23)
)

Docket No. A91-669
CERTIFICATE OF SERVICE

CERTIFICATE OF SERVICE

I hereby certify that a copy of the Findings of Fact, Conclusions of Law, and Decision and Order was served upon the following by either hand delivery or depositing the same in the U. S. Postal Service by certified mail:

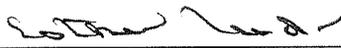
HAROLD S. MASUMOTO, Director
Office of State Planning
P. O. Box 3540
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CERT. VIRGINIA GOLDSTEIN, Planning Director
Planning Department, County of Hawaii
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CERT. MICHAEL L. MEANEY, ESQ., Attorney for Petitioner
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Hale Auhau, 3rd Floor
425 Queen Street
Honolulu, Hawaii 96813

CERT. CLARE HACHMUTH, Executive Director
Natural Energy Laboratory of Hawaii Authority
P. O. Box 1749
Kailua-Kona, Hawaii 96745

DATED: Honolulu, Hawaii, this 1st day of February 1994.


ESTHER UEDA
Executive Officer