

BEFORE THE LAND USE COMMISSION

OF THE STATE OF HAWAII

In the Matter of the Petition of)
)
MOLOKAI ELECTRIC COMPANY, LIMITED) DOCKET NO. A82-532
a Hawaii Public Utility Corporation,)
)
To Amend the Agricultural Land Use)
District Boundary to Reclassify)
Approximately 50.099 acres, Tax Map)
Key 5-2-11: 31, at Naiwa and Kahanui,)
Island of Molokai, County of Maui,)
State of Hawaii, into the Urban Land)
Use District)
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DECISION AND ORDER

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FINDINGS OF FACT, CONCLUSIONS OF LAW,
DECISION AND ORDER

This proceeding was initiated by the petition of Molokai Electric Company, Limited, pursuant to Chapter 205, Hawaii Revised Statutes, and the Rules of Practice and Procedure of the Land Use Commission, State of Hawaii, to amend the Land Use District Boundary and reclassify the above-captioned lands (hereinafter referred to as "subject property") situate at Naiwa and Kahanui, Island of Molokai, County of Maui, from the Agricultural Land Use District to the Urban Land Use District and the Land Use Commission, having heard the testimony and examined the evidence presented during the hearing held on October 19, 1982, in Hoolehua, Molokai, Hawaii, hereby makes the following Findings of Fact and Conclusions of Law.

FINDINGS OF FACT

PROCEDURAL MATTERS

1. Molokai Electric Company, Limited (hereinafter referred to as "Petitioner") filed its petition to reclassify approximately 50.099 acres from the Agricultural Land Use District into the Urban District at Naiwa and Kahanui, Molokai on May 26, 1982.

2. The Land Use Commission (hereinafter the Commission)

held a public hearing on the petition on October 19, 1982, at the Hoolehua Community Center, Hoolehua, Molokai, pursuant to notice published in the Maui News and the Honolulu Advertiser on September 17, 1982.

3. The Commission considered and denied an untimely petition for intervention filed by Elizabeth Ann Stone, who was not present at the hearing.

4. The Commission allowed testimony by two public witnesses: Glenn Nanod presented testimony concerning potential adverse environmental impacts and Walter Ritte testified in favor of the petition as a representative of the Molokai Citizens for Lower Electric Rates.

DESCRIPTION OF THE SUBJECT PROPERTY

5. The subject property consists of approximately 50.099 acres of land situated at Naiwa and Kahanui, Molokai, Hawaii, being more particularly described as Lot 32, as shown on Map 11 of Land Court Application No. 1861, and the land described in Transfer Certificate of Title No. 233,532 issued to Petitioner as the fee simple owner thereof. The subject property is identified by Second Division Tax Map Key 5-2-11: 31.

6. The property is bounded by Palaau Road to the south, by Lot 31 (Map 11) to the east and north, and by Lot 27 (Map 10) to the west. Access to the property from Maunaloa Highway located approximately 4,000 feet to the east is afforded by Easement 26, a 56 feet wide connecting roadway easement as shown on said Map 11. The subject property is located approximately three miles west of Kaunakakai and four miles south of Molokai Airport.

7. The subject property slopes approximately four to five percent (4-5%) and ranges in elevation from 94 to 20 feet above mean sea level. Surface waters drain in a southerly direction toward the sea.

8. The USDA Soil Conservation Service, Soil Survey, classifies the soils of a major portion of the subject property

as very stony land with large areas of severely eroded soils. For most areas of the property the soil is less than 24 inches deep to bedrock. A small portion of the subject property (approximately 2.75 acres) is classified as Mala Silty Clay, 0 to 3% slopes (MmA).

9. The U. S. Army Corps of Engineers and County Flood Maps (Ordinance 1145/1981), classifies the subject property within an area of minimal flooding (Zone C), and is outside of the tsunami and flood hazard zones.

10. The subject property receives an annual rainfall of 15 inches or less.

PROPOSAL FOR DEVELOPMENT

11. The subject property comprises the total project area for the development of an electric power generating facility. Pursuant to Special Permit (SP80-350) previously approved by the Commission in Decision and Order dated February 10, 1981, Petitioner developed the facility on approximately 40 acres of the subject property. Petitioner has set aside the remaining 10 acres for a proposed 250-KW solar thermal facility for which facility Petitioner has sought a development grant from the U. S. Department of Energy. The generating facility utilizes new biomass-steam and gas turbine equipment, combined with the use of old diesel generators from Petitioner's Kaunakakai plant. The gas turbine and diesel generators serve as back-up units to provide additional electrical power.

12. In addition to generating equipment, the facility includes the following related structures and improvements: water and fuel storage facilities; pole line shop; administrative office building; switchyard; on-site road and parking; overhead power lines; boundary fencing; wells and water distribution system; on-site sewage disposal system; cooling tower; base yard; truck scale; and a settling pond to collect and retain runoff from storm water and washing procedures.

13. The Petitioner commenced construction of the power plant facility in mid-1981, and the plant is currently in operation. The Petitioner has designed the facility to meet current and future electricity demands for the Island of Molokai until 1995.

14. Molokai Ranch, Limited provides biomass fuel to Petitioner under a Biomass Requirements Contract.

15. The Petitioner estimates the total construction cost of the generating facility at \$10 million (in 1982 dollars).

STATE AND COUNTY PLANS

16. The subject property is situate within the State Land Use Agricultural District, as shown on Land Use District Boundary Map MO-3 (Kaunakakai). The Commission recently reclassified approximately 67 acres of contiguous land to the east owned by Cooke Land Company, Inc. from the Agricultural District to the Urban District for a proposed industrial park (Docket No. A81-520 - Cooke Land Company, Inc.). Areas to the north and west are within the Agricultural District. The area to the south, along the shoreline, is within the Conservation District.

17. Maui County's Molokai General Land Use Plan adopted on July 22, 1969 (Ordinance No. 622) designates the subject property for "Agriculture Use". The County's current zoning requires a 2-acre minimum lot size in the State Land Use Agricultural District. The County is presently updating its land use plans in accordance with its General Plan adopted on June 24, 1980 (Ordinance No. 1052); the General Plan provides for the preparation, review and adoption of community plans for specific geographical regions, including Molokai (among others), to implement the objectives and policies of the Plan.

18. The Molokai Community Plan, which is currently being reviewed by the County Council, designates the subject property for "Heavy Industrial Use". The Plan proposes to relocate heavy industrial uses away from Kaunakakai Town.

19. A 5.2-acre portion along the southerly boundary of

the subject property is located within the County's Special Management Area (SMA). The Maui County Planning Department issued a Special Management Area Assessment/Minor Permit, on January 7, 1981, approving construction of two overhead powerlines, a boundary fence, and settling pond located in this area. All other major plant facilities and improvements have been developed outside of the SMA.

20. Development of the new generating facility on the subject property was part of an overall plan involving the Petitioner, the County of Maui, the State of Hawaii, the Hawaii Natural Energy Institute and the U. S. Department of Energy to reduce Molokai's dependence on diesel fuel, and to enable some measure of energy self-sufficiency for the Island. Providing electricity through the use of conventional and alternate energy resources is consistent with Objective B of the Interim State Energy Plan to "Accelerate the transition to an indigenous renewable energy economy by facilitating private sector activities to explore supply options and achieve local commercialization and application of appropriate alternate energy technologies." By using biomass fuel resources on the Island, the power plant operation also promotes Objective G of the Interim State Agriculture Plan, to wit: "Achievement of optimal contribution by agriculture to the State's energy needs."

NEED FOR THE DEVELOPMENT

21. Petitioner is the only public utility furnishing electrical power on the Island of Molokai. Petitioner was required to replace its diesel generating equipment and facilities at the Kaunaakakai power plant in order to fulfill its mandate to provide electricity to the people of Molokai. The old Kaunakakai power generating facility was incapable of meeting the current and future electrical demands for Molokai. Petitioner was required to develop a new generating facility to meet its public utility obligation to provide electricity service to Molokai.

22. Molokai's population increased from 4,740 in 1960 to 5,089 in 1970; then to 5,905 in 1980. The population increase for the 10 year period 1960 to 1970 was approximately 7%; and from 1970 to 1980, approximately 16%. Assuming a growth rate of 7-10% over the next decade, Molokai's resident population would range from about 6,318 to 6,495 persons in 1990.

23. Petitioner estimates that the electrical service demand on Molokai increases at the average annual rate of 200 customers per year. Residential demand accounts for 80-85% of the service demand.

24. The limited land area of the Kaunakakai plant site did not allow for physical expansion, and the noise problem from diesel generators at that location has been eliminated by phasing out the plant operation. The size of the subject property will meet land requirements for new generating facilities for the next 10 years or more.

25. Petitioner's selection of the subject property for the new generating facility was based on several factors, including the following: (a) sufficient land area at reasonable cost for a biomass generating facility and solar thermal field; (b) location close to biomass sources, and within an area having excellent potential for solar thermal development (low rainfall and high solar radiation of the area); (c) location at electrical load center for the Island; (d) presence of existing high voltage (34.5 kv) power line; (e) close proximity (3 miles) to Kaunakakai plant allowing dual site operation until the Kaunakakai plant operation is phased out; (f) solid rock base underlying the property provides ideal foundation for the new facility; (g) location outside of flood and tsunami zones; (h) distance from residential areas (over 4,600 feet), and absence of plans or interest in residential development in the immediate vicinity; and (i) no detrimental effect on agricultural-industrial uses of the surrounding area. Over the long-term, the new facility may induce more of such uses, particularly industrial growth as envisioned in the Molokai

Community Plan.

IMPACTS UPON RESOURCES OF THE AREA

Agriculture

26. Approximately 47.349 acres of the subject property is not classified on the ALISH Map and is rated "E" in the Land Study Bureau's Detailed Land Classification - Island of Molokai (1968), indicating very low agricultural productive capacity.

27. Corn cultivation on approximately 15 acres of the subject property was displaced in 1981 by Petitioner's development. However, no net loss in acreage of corn production is expected because corn has been replanted in the general vicinity. The overall agricultural productivity is expected to be similar to existing productivity; and reclassification of the subject property to an Urban District will not impair actual or potential agricultural production in the vicinity of the property.

28. Petitioner's new generating facility creates a demand for biomass as a local resource of energy. The Petitioner estimates that 67% energy self-sufficiency based on biomass will result in additional revenues remaining on Molokai of \$800,000 in 1983, and \$1,000,000 in 1984.

Wetlands

29. Two ponds, Kaluaapuhi Fishpond and Ooia Pond, are located in the vicinity of the subject property. Kaluaapuhi Fishpond, a State Historic Site, is located approximately 200 feet from the southern boundary of the subject property and approximately 600 feet from the plant operations. Ooia Pond is located approximately 1,400 feet southwest of the subject property. Both are heavily overgrown by mangrove. As a result, Kaluaapuhi Fishpond has shrunk in size to less than 4 acres, and Ooia Pond is barely visible from the air.

30. In a study of wetlands conducted by the U. S. Army Corps of Engineers, Kaluaapuhi Fishpond was classified as a part of Molokai's largest wetland area, which extends for a distance of

6 miles along the coastline makai of the subject property.

31. Kaluaapuhi Fishpond has a well-developed fresh water spring, and is presently used for harvesting rock crab and mullet. However, a Department of Planning and Economic Development study concludes that the pond has relatively low potential for expanded aquaculture. Petitioner's development is not expected to affect the water quality of the pond or near shore water.

32. The plant has been designed to avoid potential adverse impact to the surrounding areas, including the wetland area. A settling or siltation pond on the subject property at its lower end provides for the efficient collection and retention of storm water runoff; only small volumes of water are generated on the property, thus allowing for rapid evaporation. No major drainage improvements are otherwise planned for the plant since drainage patterns and volumes are expected to remain the same as before.

33. The Coastal Zone Management Program of the Department of Planning and Economic Development expressed concern over the possibility that pollutants from surface runoff, erosion, and accidental spillage of fuel oil or other chemicals from Petitioner's power plant could enter the wetland area; and recommends that Petitioner should ensure that necessary measures are taken to mitigate such possibilities. Petitioner is willing to undertake appropriate measures to prevent the degradation of coastal wetlands and natural habitat areas from sewage seepage, runoff of non-domestic wastewater, soil erosion, air pollution and excessive noise arising at the subject property.

Archaeological and Historical Resources

34. Two features of archaeological interest located on the subject property will be left in their undisturbed state. The first is a petroglyph on a boulder near Palaau Road, and the second is a large rock enclosure, approximately 32 meters long and 28 meters wide, located on a small rise over-looking the property and nearby fishpond. No adverse impact upon these features has occurred, inasmuch as Petitioner's construction activity avoided

this area.

Flora and Fauna

35. Flora of the subject property consist primarily of exotic species common to arid, lowland coastal areas: Koahaole, Kiawe, Spiny Amaranth, and several species of grasses. No rare or endangered species of flora are present. Avifauna at the subject property include the house sparrow, barred dove, Japanese white-eye, and Brazilian cardinal. Other avian species which may frequent the area include the gray francolin and the endemic Hawaiian owl. Existing vegetation suggests the presence of mongoose, rats, mice, and axis deer.

36. The Kaluaapuhi and Ooia Ponds provide a habitat for the Hawaiian coot and other migratory waterfowl.

Air Quality

37. Emissions from Petitioner's electrical generating equipment, and from trucks hauling biomass fuel to the plant site will have an adverse impact on air quality. The Petitioner has obtained a Permit to construct the generating station from the Department of Health. In operating the generating station, Petitioner must comply with Hawaii Air Pollution Regulations and Ambient Air Quality Standards and U. S. Environmental Protection Agency Regulations and Ambient Air Quality Standards. The State Department of Health is obligated to monitor operations to assure that federal and state ambient air quality standards are not breached. A stack emission study conducted by the Hawaiiin Sugar Planters' Association shows that emissions from the power plant are within existing state ambient air quality standards.

Noise

38. Ambient noise levels at the subject property increased as a result of the development of the power plant. The noise from plant operations is not expected to result in significant adverse impacts on any residential areas or on the endangered Hawaiian stilts and coots at Kaluaapuhi Fishpond.

Scenic Resources

39. Since the power plant is located on the higher portion of the subject property, it is visible from Maunaloa Highway, Kaunakakai landfill, and the end of the Kaunakakai Wharf. The stack, which is the tallest structure (approximately 80 feet high) of the plant, will intrude into the view plane from Maunaloa Highway toward the ocean.

Recreational Resources

40. The power plant will have no significant impact upon recreational resources.

Ground Water

41. Ground water underlying the subject property is brackish, and preliminary investigation indicated sufficient water quality and volume to satisfy the needs of the plant cooling tower and other industrial uses.

42. On-site wells on the subject property are not expected to affect the overall ground water condition of the property or of nearby lands.

ADEQUACY OF PUBLIC SERVICES AND FACILITIES

Highways

43. The subject property has direct access to Maunaloa Highway, a public highway 4,000 feet to the east, over and across Roadway Easement 26, as shown on Map 11 of Land Court Application No. 1861. Approximate transit time from the property to Kaunakakai Town is 6 to 7 minutes.

Harbor

44. Delivery of any fuel oil required for the plant is taken at Kaunakakai Harbor, a medium draft barge harbor.

Police and Fire Protection

45. Police services are centralized at the new civic center in Kaunakakai. The County of Maui operates two fire protection facilities: one in Kaunakakai and the other in Hoolehua. The Airports Division of the State Department of Transportation operates a third at the Molokai Airport. With construction of the access

over Easement 26, response time to the subject property for police and fire protection services will be 4 to 5 minutes.

Drainage

46. The Petitioner collects and retains surface runoff from storm waters on-site in a settling pond at the lower end of the subject property. Petitioner's diesel tank storage is located in a pit and the storage area is surrounded by a berm wall to contain potential spillage of diesel fuel. No other major drainage improvements are otherwise planned for the power plant.

Solid Waste Disposal

47. At average capacity, the power plant in its biomass incineration process will generate approximately 8,750 pounds of ash per day which will be disposed of at a County-operated landfill or the rock quarry; or may otherwise be used as fertilizer and for asphalt paving material.

Sewage Treatment and Disposal

48. Sewage generated by the plant facilities is disposed of on-site by the use of septic tanks and associated leaching fields.

Water

49. Molokai Ranch provides industrial water of up to 1,000 gallons per day to the generating facility. An existing well on the subject property is capable of producing 8,700 to 9,000 gallons of industrial water per hour. The water from these sources is used for the plant cooling towers, sanitary facilities (toilets), irrigation and fire protection. The two water sources are adequate to meet all industrial water needs of the plant.

50. Potable (drinking) water for plant personnel is provided by the Hawaiian Homes Commission pursuant to its agreement to furnish up to 9,000 gallons per month (300 gallons per day) from its water system. This amount is considered sufficient for the 15 to 20 people at the power plant site.

51. The Petitioner's water system will be replaced by the subdivision water system planned for the adjoining industrial park

upon completion of the subdivision development.

Telephone and Electricity

52. Hawaiian Telephone Company provides telephone service to the subject property. Petitioner generates its own electricity for plant operations.

CONFORMITY TO URBAN DISTRICT BOUNDARY STANDARDS

53. Development of the power plant on the subject property pursuant to the Special Permit has changed the character of the property to an urban type.

54. The subject property is proximate in location to the center of trading and employment at Kaunakakai.

55. The subject property is proximate in location to basic public and other services, such as police and fire protection.

56. The subject property has sufficient reserve area for expansion of the power plant for the next 10 years or more, and is not adjacent to developed areas.

57. The subject property has satisfactory topography and drainage, and is reasonably free from the danger of floods, tsunami, unstable soil conditions, and other adverse environmental effects.

58. The subject property is contiguous to existing urban-classified lands, although the power plant on the property is essentially a self-contained facility and will not unreasonably burden public services.

CONFORMITY TO INTERIM STATEWIDE LAND USE GUIDANCE POLICIES

59. The proposed boundary amendment to the Urban Land Use District is reasonably necessary to accommodate growth and development.

60. There will be no significant adverse effects upon agricultural, natural, environmental, recreational, scenic, historic, or other resources of the area.

61. Adequate public services and facilities are available to Petitioner.

62. Petitioner is making maximum use of existing services and facilities.

63. The subject property is contiguous to existing urban-classified lands of Cooke Land Company, Inc., and the proposed reclassification will not contribute to scattered urban development.

64. Construction of the new power plant created between 64 to 80 temporary construction positions, many of which positions were filled by Molokai residents. Completion of the plant added twelve (12) permanent employees to Petitioner's permanent work force of thirty (30) employees, resulting in a total of forty-two (42) permanent employees. Biomass production may create additional jobs and/or opportunities. The plant is in close proximity to the primary employment center of Kaunakakai.

65. The proposed reclassification conforms to the Molokai Community Plan designation of the subject property for heavy industrial use.

RULINGS ON PROPOSED FINDINGS

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

CONCLUSIONS OF LAW

Pursuant to Chapter 205, Hawaii Revised Statutes, and Rules of Practice and Procedure and District Regulations of the State Land Use Commission, the Commission finds upon the clear preponderance of the evidence that the proposed boundary amendment does conform to the standards established for the Urban District by the State Land Use District Regulations, is reasonable, and is not violative of Section 205-2 Hawaii Revised Statutes, as amended; and is consistent with the Hawaii State Plan, as set forth in Chapter 226, Hawaii Revised Statutes, as amended.

DECISION AND ORDER

IT IS HEREBY ORDERED that the lands which are the subject of the Petition of Molokai Electric Company, Limited in Docket No. A82-532, totaling approximately 50.099 acres situated at Naiwa and Kahanui, Island of Molokai, County of Maui, State of Hawaii, described as LOT 32, as shown on Map 11 of Land Court Application No. 1861, and identified by Tax Map Key (2d Div.) 5-2-11: 31, shall be and hereby is reclassified from the Agricultural Land Use District to the Urban Land Use District, and the land use district boundaries of said property are amended accordingly; subject, however, to the following condition:

The Petitioner shall undertake appropriate measures to prevent the degradation of the coastal wetlands and natural habitat areas from sewage seepage, runoff or non-domestic wastewater, soil erosion, air pollution and excessive noise arising at the subject property.

Done at Honolulu, Hawaii, this 3rd day of February, 1983, per motion on December 21, 1982 and January 27, 1983.


LAND USE COMMISSION
STATE OF HAWAII

By William W. Yuen
WILLIAM W. L. YUEN
Chairman and Commissioner

By Richard B. F. Choy
RICHARD B. F. CHOY
Vice Chairman and Commissioner

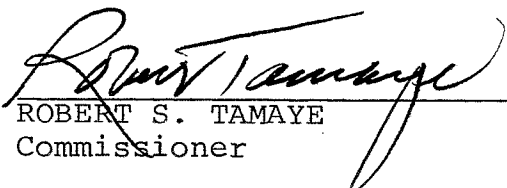
By Lawrence F. Chun
LAWRENCE F. CHUN
Commissioner


By 
EVERETT L. CUSKADEN
Commissioner

By 
SHINSEI MIYASATO
Commissioner

By 
WINONA E. RUBIN
Commissioner

By 
TEOFILO PHIL TACBIAN
Commissioner

By 
ROBERT S. TAMAYE
Commissioner

By 
FREDERICK P. WHITTEMORE
Commissioner

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CERTIFICATE OF SERVICE

I hereby certify that a copy of the 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:

HIDETO KONO, Director
Department of Planning and Economic Development
State of Hawaii
250 South King Street
Honolulu, Hawaii 96813

TOSH ISHIKAWA, Planning Director
Planning Department
County of Maui
200 South High Street
Wailuku, Hawaii 96793

FRANCIS M. IZUMI, Esquire
701 C. R. Kendall Building
888 Mililani Street
Honolulu, Hawaii 96813

DATED: Honolulu, Hawaii, this 4th day of February, 1983.


GORDON Y. FURUTANI
Executive Officer