Actions
June 21 to Aug 5

(Sked for Aug 5)

SP76-243 - MAUI ELECTRIC COMPANY, LTD. (MAUI)

LAND USE COMMISSION
STATE OF HAWAII
AUG 31 11 14 AM '81

August 27, 1981

Mr. Arden G. Henderson
Maui Electric Co., Ltd.
Kahului, HI 96732

Dear Mr. Henderson:

Subject: SMA Permit, MECO, Maalaea, Maui, TMK 3-8-05: parcel 25

The Maui Planning Commission at its August 25, 1981 meeting voted unanimously to approve your SMA Permit request to construct 1) a spare parts warehouse, 2) waste oil and sludge storage tank, 3) covered parts cleaning station, and 4) flammable storage shed facilities at the power generating station at Maalaea.

The Commission approved the subject request with the following conditions:

1. That appropriate measures shall be taken to mitigate short and long term impacts relative to air, water and noise pollution.
2. That County approved fire protection measures shall be implemented for the proposed structures and uses.
3. That full compliance with the Standard Comments of the Urban Design Review Board shall be rendered.
4. That the applicant, its successors and assigns, shall save and hold the County of Maui harmless from and against any loss, liability, claim or demand arising out of this permit.
5. That all other Federal, State, and County requirements shall be met.

Please contact this office at any time should there be any questions.

Very truly yours,

TOSH ISHIKAWA
Planning Director

JC:hk
cc: LUCA
T. Sato, MECO
✓Gordon Furutani SP 76-243

MAALAEA BAY

POR. FIELD M Pasture

Kealia Pond

FIELD M PASTURE

KIHEI ROAD

(1) Maui Elec. Co., Ltd. 12.589 Ac.

25

26

(2) 11.203 Acs.

TRACT 1

TRACT 2

FIELD M

GRANT 3152

A

I

W

A

POR. 24

KAHEE PAR. 1-C (1.711 Acs.)

Access Permitted

No. 3-0380(7)

23

KUIHELANI

DITCH

Access Permitted

FIELD L PASTURE

352.400 Acs.

Access Permitted

HIGHWAY

Access Permitted for Agricultural Purposes only

Access Permitted for Agricultural Purposes only

4

To Kahului Airport

STREAM

WAIKAPU

FIELD L

4419.564 Acs.

(4412.057 Acs.)

SOUTH BASE

19 (Maui Hardwoods, Inc.)

22 (Maui Hardwoods, Inc.) (Honolulu Wood Treating Co., Ltd.) Sub-le.

C-18 OUTER MARKER SITE 0.07 Ac.

PLAT 07

PLAT 06

Field H

WAIKO ROAD

Field J

Field K

Field L

Field M

MEHAMEHA LOOP

FIELD K-M

MOKULELE HIGHWAY

388 Right 1.2 Acs.

(388 Right) 19.50 Acs. (12.0 Acs.)

(1.200 Acs.)

DITCH Esmt.

FIELD K

PLAT 08

ULEHUNA

L. C. AN. 5230

494.01 Acs.

HAIKU DITCH

Field 14

PLAT 04

Field 2

PLAT 03

PLAT 05

Pond 2

Pond 1a

Pond 1

(Hawn. Foliage & Landscaping, Inc.) 1a. 2.929 Acs.

2.000 Acs.

(Hawn. Foliage & Landscaping, Inc.) 1a. 3.739 Acs.

3.00 Acs.

2.028 Ac.

(0.157 Ac.)

(K-NUI Broadcasting Co.) 1a.

PAR. -1 (4.617 Acs.)

PAR. -2 (1.612 Acs.)

PAR. -3 (1.612 Acs.)

PAR. No. RP-031-1(2)

20

21

24.341 Acs. (20.182 Acs.)

29

27

28

30

31

TRUE NORTH 1" = 1000'

UNLOCATED KULEANAS IN KEALIA-WAIKAPU				
LC. Alv	Ap.	Owner	Area	Par.
5285	1 & 3	Kiwa Soong	7.733 acs.	27
3397	3		16.5 acs.	29
3397	4	Florence K. Allen-½	1.28 acs.	31
		Afoon L. Komaucha-½		½
		Soong & Alwin-½		

SUBJECT TO CHANGE

Note: All parcels owned by Alexander & Baldwin, Inc. unless otherwise noted.

Dropped par: 12, 1, 5, 3, 10, 11, 13, 14, 7, 8, 9, 16

W 2 424

TAXATION MAPS BUREAU
TERRITORY OF HAWAII
TAX MAP

SECOND DIVISION		
ZONE	SEC.	PLAT
3	8	05

CONTAINING PARCELS

SCALE: 1in.=AS NOTED

LAND USE COMMISSION
STATE OF HAWAII
JUN 29 11 53 AM '81

June 26, 1981

Mr. Arden G. Henderson
Maui Electric Company, Ltd.
P. O. Box 398
Kahului, HI 96788

Dear Mr. Henderson:

Subject: Land Use Commission Special Use and County Special Management Area Permit extensions, Maalaea, Maui, TMK 3-8-05:por.26.

The Maui Planning Commission, at its regular meeting on June 23, 1981, voted unanimously to grant five-year extensions for the subject permits initially approved on June 2, 1976 by the Planning Commission and August 5, 1976 by the Land Use Commission.

After discussion and due deliberation, the Planning approved the extensions with following conditions:

1. That all previous conditions shall apply to the subject extension approval.
2. That an up dated landscaping plan and implementation and maintenance program shall be submitted within 90 days for approval by the Planning Department.
3. That a report shall be submitted to the Planning Department regarding MEMO programs and improvements in complying with State Ambient Air Quality Standards.
4. That all other Federal, State and County requirements shall be met.

Attached for your information and files, please find a copy of the staff report with attachments to the Commission.

Thank you for your cooperation. If additional clarification is required, please contact Mr. Jeff Chang of this office.

Very truly yours,

TOSH ISHIKAWA
Planning Director

JC:hk
Attachment
cc: LUCA
✓ LUC
T. Ishikawa

76-243

STAFF REPORT June 23, 1981

TO: Maui Planning Commission

FROM: Planning Department Staff

SUBJECT: County SMA and LUC Special Permit Extensions

APPLICANT: Mr. Arden G. Henderson, President, Maui Electric Company, Ltd.

LOCATION: Maalaea, Maui

TMK: 3-8-05:portion 26

AREA: 2.5 acres

ZONING: State Agricultural District

GENERAL PLAN: Open Space designation

REQUEST: The applicant requests an extension of Land Use Commission Special Use and County Special Management Area permits in perpetuity in order to continue use of the subject property for electric power generation purposes.

COMMENTS:

1. The subject property is located on the mauka side of North Kihei Road one mile south-east of the Honoapiilani Highway junction. The property is a portion of a 7.5 acre power generation facility. The facility is basically improved with 11 diesel-electric generating units with cooling radiators and exhaust stacks, 6 fuel oil storage tanks, shops and warehouse buildings, and a switching station.

2. The Planning and Land Use Commissions on June 2, 1976 and August 5, 1976 respectively approved a 15.0 acre addition to the original 5.0 acre facility. However, approval for expansion of the physical plant was limited to 2.5 acres. The remaining 12.5 acres was approved only for landscaping and visual enhancement of the complex.

3. Aside from 5-year time limits, both permits were also approved with the following conditions:

   a. That the expanded generation facilities shall be accommodated on an additional land area limited to two and one-half (2.5) acres immediately south of the existing five (5) acre site, and that the remaining twelve and one-half (12.5) acres of the fifteen acre request shall be utilized for landscape planting and visual enhancement of the power generating facility.

   b. That additional research shall be initiated in order to provide alternatives to the total use of fossil fuels.

   c. That alternate inland sites shall be serously inventigated with regard to future needs.

d. That the proposed project expansion shall be developed in accordance with the requirements of the Maui County Subdivison Ordinance.

e. That appropriate measures shall be taken to protect the project from flood and tsunami inundation.

f. That a detailed grading, and erosion control plan shall be executed.

g. That full compliance with the standard comments of the informal Urban Design Review Board shall be rendered.

h. That the proposed fuel storage tank shall not exceed the height of the existing tanks.

i. That significant additional landscape planting subject to approval by the Planning Department staff shall be provided along the northerly boundary of the existing development as a visual and sound buffer along the master-planned highway when said highway is constructed.

j. That additional landscape planting subject to approval by the Planning Department staff shall be provided along the southerly boundary of the project as a visual and sound buffer along Kihei Road.

k. That significant shade tree plantings shall be added within the existing fenced enclosure in order to soften the industrial character.

l. That the exterior of all existing facilities shall be repainted a darker green when said facilities are in need of repainting, and that the color sample shall be subject to approval by the Urban Design Review Board.

m. That the emission of smoke, gas or liquid discharges from the facility shall be in strict compliance with State of Hawaii air and water quality standards.

n. That a time limit of five (5) years from the date of the issuance of the Special Management Area Permit shall be established, subject to extension "for good cause".

o. That full compliance with all Federal, State and County requirements shall be rendered.

4. A review of Department files and a field check of the facility reveals that all conditions have been met except for conditions No. 10, 11 and 13. Our comments:

a. Condition No. 10 -- The landscaping provided in the denuded area along a portion of Kihei Road is inadequate in its function as a visual barrier and landscaping enhancement. Additional landscaping plantings and an intensive maintenance program is necessary.

b. Condition No. 11 -- No shade trees or any other types of landscaping plantings have been provided within the fenced area of the facility. A strong effort to meet this condition is required as both the Department staff and Urban Design Review Board originally recommended the need for interior landscaping.

c. Condition No. 13 -- According to the State Department of Health, the Maalaea facility is in violation of State Ambient Air Quality Standards as contained in Chapter 42, Public Health Regulations. The State also reports that MECO has applied for a 10 year variance to the standards. No action on the variance request has not been taken as of May 4, 1981. Further response by the applicant on the situation and efforts to comply with the standards is necessary at this time.

5. With regard to the extension of both permits, staff has no objections. We do believe, however, that a time limit should again be imposed inasmuch as some of the conditions have not been met since approval was granted in 1976. Also, periodic on-going follow-up attention is required for several of the other conditions. And lastly, expansion of the facility is not complete as generating units No. 12 & 13, approved by the Planning Commission on March 25, 1980, have not been constructed yet.

6. Response letters from the State Departments of Transportation and Health and County Departments of Public Works and Water Supply are attached for yor review. Except for the Department of Health comments, the other agencies have no comments or objections to the subject request.

RECOMMENDATIONS:

Staff recommends approval of the LUC Special Permit and County SMA Permit extensions with the following conditions:

1. That all previous conditions shall apply to the subject extension approval.

2. That an up-dated landscaping plan and implementation and maintenance program shall be submitted within 90 days for approval by the Planning Department.

3. That a report shall be submitted to the Planning Department regarding MECO programs and improvements in complying with State Ambient Air Quality Standards.

4. That all other Federal, State and County requirements shall be met.

GEORGE R. ARIYOSHI
GOVERNOR

RECEIVED
APR 14 2 14 PM '81
PLANNING
COUNTY OF MAUI

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
869 PUNCHBOWL STREET
HONOLULU, HAWAII 96813
650 PALAPALA DRIVE
KAHULUI, HAWAII 96732

RYOKICHI HIGASHIONNA, Ph.D.
DIRECTOR

DEPUTY DIRECTORS
JACK K. SUWA
JAMES R. CARRAS
JAMES B. McCORMICK
JONATHAN K. SHIMADA, Ph.D.

IN REPLY REFER TO:

HWY-M 2.412-81

April 13, 1981

Mr. Toshio Ishikawa
Director
Department of Planning
County of Maui
200 S. High Street
Wailuku, Hawaii 96793

Dear Mr. Ishikawa:

Subject: Maui Electric Company, Limited
Maalaea Diesel Electric Plant
Extension of Special Use and
SMA Permit, TMK 3-8-05:25

The parcel is located beyond the jurisdiction of the State Highways Division. We have no objections to the permits.

Very truly yours,

Harris S. Suyama

HARRIS S. SUYAMA
District Engineer, Maui

HSS:f

GEORGE A. L. YUEN
DIRECTOR OF HEALTH

SIDNEY B. CLARK, M.D.
DISTRICT HEALTH OFFICER

RECEIVED
MAY 7 1 35 PM '81
COUNTY OF MAUI

STATE OF HAWAII
DEPARTMENT OF HEALTH
MAUI DISTRICT HEALTH OFFICE
STATE OFFICE BUILDING
WAILUKU, MAUI, HAWAII 96793

May 4, 1981

TO: County Planning Department
Attn: Jeff Chang
FROM: Chief Sanitarian, Maui

SUBJECT: LUC Special Permit and County Special Management Area Permit Extension - Maui Electric Co., Maalaea, TMK: 3-8-05: 25

Thank you for permitting us to review and comment on the above subject matter.

The Maalaea Generating Station is in violation of the State Ambient Air Quality Standards for sulfur dioxide, oxides of nitrogen and total suspended particulates as contained in Chapter 42, Public Health Regulation. Maui Electric Company has submitted an application for variance for ten years or until such time as the State Ambient Air Quality Standards have been changed to conform with National Ambient Air Quality Standards, whichever occurs first. Action on this variance request has not been taken yet.

David H Nakagawa
DAVID H. NAKAGAWA

DHN:pn

HANNIBAL TAVARES
Mayor

RALPH HAYASHI
Director of Public Works

SAMUEL MATSUO, Ph.D.
Deputy Director of Public Works

DIVISIONS
Engineering
Highway Construction and Maintenance
Land Use and Codes Enforcement
Waste Management

COUNTY OF MAUI
DEPARTMENT OF PUBLIC WORKS
200 SOUTH HIGH STREET
WAILUKU, MAUI, HAWAII 96793

April 13, 1981

TO: Toshio Ishikawa, Planning Director

FROM: Ralph Hayashi, Director of Public Works

SUBJECT: Land Use Commission Special Permit and County Special Management Area Permit Extension -- Maui Electric Company, TMK: 3-8-05:25.

We have reviewed the above request and have no comments to offer at this time.

RECEIVED
Apr 8 2 45 PM
PLANNING
COUNTY OF MAUI

DEPARTMENT OF WATER SUPPLY
COUNTY OF MAUI
P. O. BOX 1109
WAILUKU, MAUI, HAWAII 96793

April 7, 1981

Mr. Tosh Ishikawa, Director
Planning Department
County of Maui
Wailuku, HI 96793

Subject: LUC Special Permit and County Special Management Area Permit Extension - Maui Electric Co., Maalaea, TMK 3-8-05:25

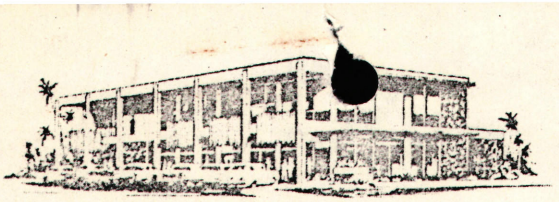
Dear Mr. Ishikawa:

Please be advised that the department does not have any objections if the LUC Special Permit is issued and the County SMA Permit is extended.

Sincerely,

William S. Haines, Director

"By Water All Things Find Life"



MAUI ELECTRIC COMPANY, LIMITED
210 KAMEHAMEHA AVENUE • KAHULUI, MAUI, HAWAII 96732 • TELEPHONE 877-3374

LAND USE COMMISSION
STATE OF HAWAII
AUG 25 1 21 PM '76

August 24, 1976

PLANNING DEPARTMENT
County of Maui
200 South High Street
Wailuku, Maui 96793

Attention: Mr. Toshio Ishikawa, Director

Subject: Maui Electric Company Maalaea Special Use Permit

Pursuant to the Land Use Commission's approval for a Special Use Permit subject to the condition that Maui Electric and the County agree upon site configuration of the 2.5 acres, enclosed is drawing titled "Maui Electric Company Generating Station Subdivision" revised August 23, 1976.

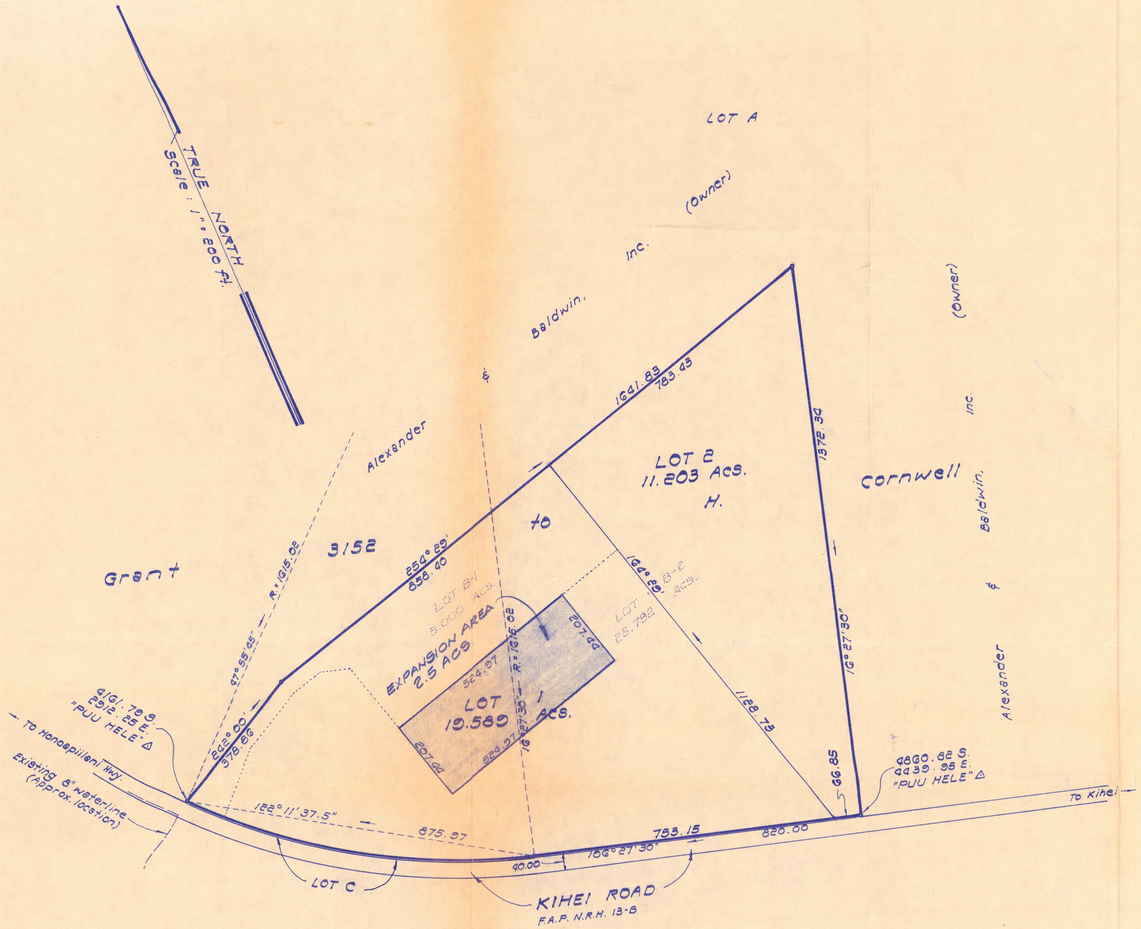
The 2.5 acres configuration, as shown shaded on the drawing, is the area that was discussed and agreed upon by the County Planning Department and Maui Electric on August 23rd.

Your assistance and cooperation in this matter is very much appreciated.

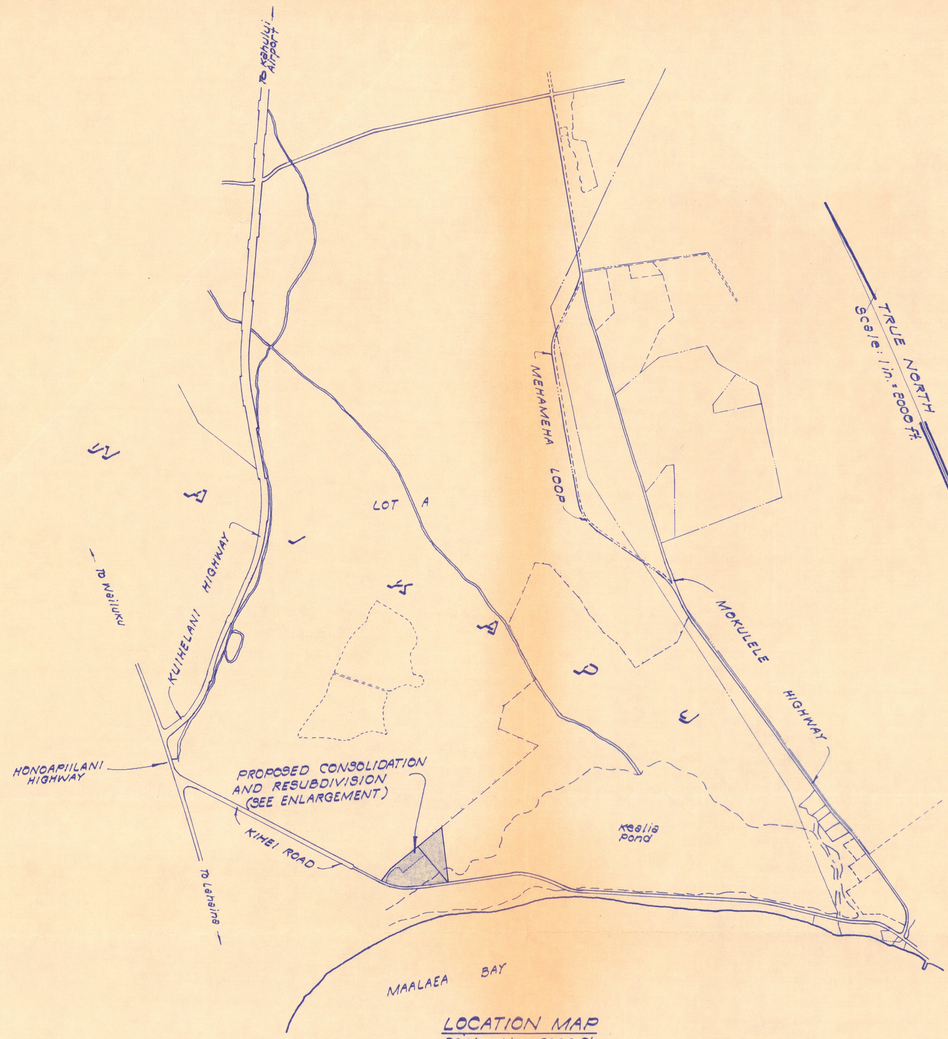
T. M. Sato

T. M. SATO
Manager, Engineering

TMS/bb
cc w/enc: State Land Use Commission ✓
County Land Use & Codes Adm.
Department of Taxation, Maui



ENLARGEMENT
Scale: 1 in. = 200 ft.



LOCATION MAP
Scale: 1 in. = 2000 ft.

NOTES:
1. All corners marked with pipe unless otherwise noted.
2. Lot C is an existing 2 ft. wide dedication strip.

MAUI ELECTRIC CO.
GENERATING STATION SUBDIVISION

CONSOLIDATION OF LOTS B-1 AND B-2 INTO ONE LOT AND RESUBDIVIDED INTO LOTS 1 AND 2

Being a portion of Grant 3152 to H. Cornwell

WAIKAPU, MAUI, HAWAII

OWNER: Maui Electric Co., Ltd. (Lot B-1)
ADDRESS: Kahului, Maui, Hawaii
OWNER: Alexander & Baldwin, Inc. (Lot B-2)
ADDRESS: Kahului, Maui, Hawaii

SCALE: 1 in. = 200 ft. DATE: Aug. 5, 1976

Prepared by: NORMAN SAITO
ENGINEERING CONSULTANTS, INC.
KAHULUI, MAUI, HAWAII

This work was prepared by me or under my supervision. Norman M. Saito 8/6/76
Registered Professional Land Surveyor No. 803-S

Revised Date: Aug. 23, 1976
Revised Date: Aug. 10, 1976
Revised Date: Aug. 6, 1976

LAND USE COMMISSION
STATE OF HAWAII
AUG 25 1 32 PM '76

Tax Map Key: 3-8-05: 25 and 26

7444

21" x 32"

202-10-F

LAND USE COMMISSION
STATE OF HAWAII
Aug 25 1 32 PM '76

7445

August 10, 1976

Maui Electric Company, Limited
P. O. Box 398
Kahului, Maui, Hawaii 96732

Attention: Mr. Colin C. Murdoch, President

Gentlemen:

The original of the attached letter is on file in the office of the Maui Planning Department, 200 South High Street, Wailuku, Maui.

Very truly yours,

AH SUNG LEONG
Acting Executive Officer

ASL:yk
Encls.

RECEIVED
by
FOX RIVER

August 10, 1976

Maui Planning Commission
200 South High Street
Wailuku, Maui, Hawaii 96793

Attention: Mr. Tosh Ishikawa, Planning Director

Gentlemen:

At its meeting on August 5, 1976, the Land Use Commission voted to approve a Special Permit to the Maui Electric Company, Limited (SP76-243) to allow the construction and operation of an electric generation plant together with plant maintenance office, fuel storage tanks and other necessary accessory facilities including switchyard and transmission lines within the Agricultural District, located at Maalaea, Maui, identified by Tax Map Key 3-8-5: 26; subject to the 15 conditions imposed by the Maui County Planning Commission, and subject further to the condition that the petitioner and the County shall agree upon the site configuration of the 2½-acre area.

A copy of the staff memorandum is enclosed for your information.

Very truly yours,

AH SUNG LEONG
Acting Executive Officer

ASL:yk
Encls.
cc: Maui Electric Company, Limited
Department of Taxation, Maui
Tax Maps Recorder, Dept. of Taxation
Property Tech. Office, Dept. of Taxation
Real Property Tax Assessor, Dept. of Taxation
Dept. of Plan. & Econ. Development
Office of Environmental Quality Control

EXISTING LANDSCAPED AREA

STACK (20'AGL) TYP.

EXISTING BOUNDARY

LAND MANAGE
EXTENDS TO THIS

EXISTING TRUCK TURN AROUND

D.O. TANKS

DIESEL UNITS #1 #2 #3

STACK (33'AGL) TYP.

EXISTING CHAIN LINK FENCE

69 KV SWITCHING STATION (45'AGL)

69 KV SWITCHING STATION (45'AGL)

DIESEL UNITS #4 #5 #6 #7 #8 #9

RADIATORS

BLDG (25'AGL)

TRANSFORMERS

GRD. EL. 15'-0"

8060 BBL (36'AGL)

8060 BBL

GRD. EL. 9'-6"

25,000 BBL (36'AGL)

Approx. 2.9 Acres

DIESEL UNIT

BLDG. (30'AGL)

STACK (38'AGL)

COMBUSTION TURBINE

STACK (30'AGL)

RADIATOR

160 FT.

700 FT.

BOUNDARY ADDED BY MAUI PLANNING DEPARTMENT

OPEN CULVERT

FUTURE UNITS

OPEN CULVERT ALTERNATE ROUTE

STATE OF HAWAII
LAND USE COMMISSION

Minutes of Meeting

Kahului Library
Kahului, Maui

August 5, 1976 - 9:30 a.m.

Approved
SEP 24 1976

COMMISSIONERS PRESENT: Eddie Tangen, Chairman
Stanley Sakahashi, Vice Chairman
James Carras
Charles Duke
Shinsei Miyasato
Mitsuo Oura
Carol Whitesell
Edward Yanai

COMMISSIONER ABSENT: Colette Machado

STAFF PRESENT: Ah Sung Leong, Acting Executive Officer
Michael Marsh, Deputy Attorney General
Benjamin Matsubara, Consultant
Dora Horikawa, Clerk Reporter

Ray Russell, Court Reporter

Chairman Tangen called the meeting to order and announced that the agenda will be rearranged to take action on the three Special Permits before the hearing on Docket A75-405.

ACTION

SP76-243 - MAUI ELECTRIC COMPANY, LTD.
APPLICATION FOR A SPECIAL PERMIT TO ALLOW CONSTRUCTION AND OPERATION OF AN ELECTRIC GENERATION PLANT TOGETHER WITH ACCESSORY FACILITIES IN THE AGRICULTURAL DISTRICT AT MAALAEA, MAUI

The staff memo was presented by Mr. Ah Sung Leong (see copy on file) and the location of the property was described on the various maps and drawings.

To clarify a point which had been raised by Chairman Tangen regarding the exact location of the 2½-acre area, delineated in orange on the map, in which the proposed facility is to be accommodated, Mr. Colin Murdoch, President of Maui Electric, advised that the location had not been clearly defined by the Maui Planning Commission. However, he added that he would prefer the area not be exactly delineated to allow for more flexibility in locating the facility in an area not to exceed 2½ acres.

Mr. Toshi Ishikawa, Maui Planning Director, explained that the boundary had been delineated as shown by the orange colored area, based on the application which showed that the facility would be constructed in such a manner.

The following information was provided by Mr. Murdoch in response to various questions that were posed by the Commissioners:

1. The discrepancy in the acreage of 25.7 as indicated by the colored cross-hatched area on the map and the 39.5 acres referred to in the staff memo was reflected by the section which had been added to accommodate future needs beyond 1980.

2. The future capacity was based primarily on the company's own premise of growth and on known projects which will occur in the future.

3. The company will continue to look at additional sites, keeping in mind those areas with existing transmission lines, substations, personnel, etc.

4. The new building to accommodate the diesel units will be built to accommodate future growth.

5. The project will be protected from flood and tsunami inundation by raising the level of the land 15' above the tsunami zone.

In response to a question raised by Commissioner Whitesell, Mr. Ishikawa advised that in the normal process of obtaining a building permit, the builder would be required to take appropriate measures to minimize and alleviate flooding through grading and soil programs, and meet all federal, state and county requirements.

Concerning any studies of damage to wildlife, etc. since the original permit was granted in 1971, Mr. Dick Bell, Environmental Manager for Maui Electric, submitted that no damage to wildlife or plant had been identified in the Maalaea plant area.

Commissioner Duke again raised the question of the exact configuration of the 2½-acre site. Chairman Tangen felt that this was a matter that should be worked out between the county and the petitioner at the appropriate time and could be added as a condition for approval.

In view of the evidence presented today, Commissioner Duke moved to approve the Special Permit, subject to the conditions imposed by the Maui County Planning Commission and the two additional conditions imposed by the Maui Planning Department; further that the precise 2½-acre area be determined by the county and the petitioner at the time of construction. The motion was seconded by Commissioner Miyasato.

Deputy Attorney General Marsh advised Vice Chairman Sakahashi that the Commission was empowered to impose a condition with respect to clarification of the 2½-acre area within the 25 acres.

The motion was carried with the following votes:

Ayes: Commissioners Sakahashi, Oura, Miyasato, Carras, Duke, Yanai, Whitesell, Chairman Tangen

Absent: Commissioner Machado

SP76-244 - EDWIN T. OKUBO FOR COUNTY OF MAUI
APPLICATION FOR A SPECIAL PERMIT TO ALLOW CONSTRUCTION OF APPROXIMATELY 80 RENTAL UNITS FOR THE ELDERLY, TOGETHER WITH ACCESSORY FACILITIES IN THE AGRICULTURAL DISTRICT AT KAUNAKAKAI, MOLOKAI

Mr. Leong read the staff report and pointed to the location of the subject property on the various maps and drawings.

Responding to Commissioner Duke's query, it was explained by Mr. Okubo, petitioner, that the Special Permit route had been employed rather than a boundary amendment petition primarily for the sake of expediency, due to the critical need for elderly housing on Molokai.

Mr. Toshi Ishikawa, Maui Planning Director, confirmed that there were future plans for a general plan study for Molokai; however, he could not say whether this specific area would be recommended for urban designation.

The following information was elicited from Mr. Okubo in response to questions posed by the Commission:

1. Basically studios and 1-bedroom units are being considered. Applicants with children requesting 2/3-bedroom units will be accommodated in the subdivision where these are available.

2. Under the FHA program a maximum rent is permitted for each type of dwelling, and the tenant will pay approximately 25% of his income towards the rent, any difference being subsidized through the federal program.

3. A boundary amendment request would have required a general plan amendment involving a much longer process.

Mr. Ishikawa agreed that the general plan study was time consuming and would delay the housing project for which there was an urgent need.

It was brought out by Commissioner Whitesell that the subject request did not meet one of the Special Permit tests, i.e.

STATE OF HAWAII
LAND USE COMMISSION

VOTE RECORD

ITEM SP76-243 - MAUI ELECTRIC CO., LTD. DATE August 5, 1976
(Reconsidered Action)
PLACE Kahului Library TIME 9:30 a.m.
Kahului, Maui

	NAME	YES	NO	ABSTAIN	ABSENT
M	DUKE, CHARLES	X			
S	WHITESELL, CAROL	X			
	OURA, MITSUO	X			
	MACHADO, COLETTE				X
	MIYASATO, SHINSEI	X			
	SAKAHASHI, STANLEY	X			
	CARRAS, JAMES	X			
	YANAI, EDWARD	X			
	TANGEN, EDDIE	X			

Comments: I move that we approve the application of Maui Electric Co., subject to the 15 conditions imposed by the Maui County Planning Commission; and to exclude the 2 conditions recommended by the Maui Planning Department. In addition to the inclusion of the 15 conditions and the exclusion of the 2 conditions, I propose that we include another condition that the petitioner and the county shall agree upon the site configuration of the 2½-acres.

STATE OF HAWAII
LAND USE COMMISSION

VOTE RECORD

ITEM SP76-243 - MAUI ELECTRIC CO., LTD. DATE August 5, 1976

PLACE Kahului Library
Kahului, Maui

TIME 9:30 a.m.

	NAME	YES	NO	ABSTAIN	ABSENT
	YANAI, EDWARD	X			
	CARRAS, JAMES	X			
M	DUKE, CHARLES	X			
	WHITESELL, CAROL	X			
S	SAKAHASHI, STANLEY	X			
	OURA, MITSUO	X			
	MIYASATO, SHINSEI	X			
	MACHADO, COLETTE				X
	TANGEN, EDDIE	X			

Comments: I move that we reconsider the action taken on SP76-243, Maui Electric Co., Ltd.

STATE OF HAWAII
LAND USE COMMISSION

VOTE RECORD

ITEM SP76-243 - MAUI ELECTRIC CO., LTD. DATE August 5, 1976

PLACE Kahului Library
Kahului, Maui

TIME 9:30 a.m.

	NAME	YES	NO	ABSTAIN	ABSENT
	SAKAHASHI, STANLEY	X			
	OURA, MITSUO	X			
S	MIYASATO, SHINSEI	X			
	CARRAS, JAMES	X			
M	DUKE, CHARLES	X			
	YANAI, EDWARD	X			
	WHITESELL, CAROL	X			
	MACHADO, COLETTE				X
	TANGEN, EDDIE	X			

Comments: I move that we approve this petition, subject to the conditions imposed by the Maui Planning Commission and the 2 additional conditions imposed by the Maui Planning Department; and also subject to the further condition that the 2½-acre area not necessarily coincide with the pink coloring on the map but to be determined by the County and the petitioner.

STATE OF HAWAII
LAND USE COMMISSION

MEMORANDUM

August 5, 1976
9:30 a.m.

TO: Land Use Commission

FROM: Staff

SUBJECT: SP76-243 - MAUI ELECTRIC COMPANY, LIMITED

A Special Permit request to allow the construction and operation of an electric generation plant together with plant maintenance office, fuel storage tanks and other necessary accessory facilities including switchyard and transmission lines within the Agricultural District at Maalaea, Maui has been submitted by the Maui Electric Company, Limited.

The property in question is identified as Tax Map Key 3-8-5: 26, comprises a lot area of 39.5 acres, and is owned by Alexander and Baldwin, Inc.. Maui Electric Company has a right of entry to and a purchase option for the property. The land under consideration is situated on the mauka side of Kihei Road about 1 mile south of the Honoapiilani Highway junction. Kealia Pond, which is designated Conservation, lies to the east. An extension of the Kealia Pond Conservation District abuts the south boundary of the proposed site which contains a large expanse of salt marsh shrub growth. Lands to the north and west are in cane cultivation. The nearby Maalaea Urban District contains a small boat harbor and single-family residences. Maui Electric Company presently operates diesel generating units on 5 acres of land immediately abutting the mauka portion of the subject area under a Special Permit approved by the Land Use Commission on July 16, 1971.

The 39.5 acre site is vacant and overgrown with kiawe and salt marsh vegetation. It has relatively flat topography and is about 10 to 12 feet above sea level. It lies entirely within a potential tsunami inundation area and partially within the Pohakea Stream flood plain. The nearby Kealia Pond is a State of Hawaii wildlife refuge and acts as a desilting basin. Water, telephone and electricity are available.

Petitioner indicates that the expansion of the electrical generation facility is needed to meet the continued demand for additional electrical energy on Maui, and that the proposed site is "technically, economically and environmentally the best suited of any on Maui."

At the public hearing on the matter held by the Maui County Planning Commission on May 5, 1976, Mr. Colin C. Murdoch, President of Maui Electric Company (MECO) presented testimony indicating that:

1. The present facilities of MECO can produce about 73 MW, or megawatts of electricity - 40 MW by the Kahului facility and 33 MW by the Maalaea facility. MECO has contracts with

Pioneer Mill Company and Hawaiian Commercial and Sugar Company for a total of 13 MW. The 13 MW are not available as spinning reserve on a continuous firm basis, but on a standby basis are available in the event a MECO generator is out. The earliest termination of these contracts occurs in 1980 prior to the December peak. Good planning must consider that this standby power will be unavailable during the 1980 peak.

2. It is estimated that with present facilities, MECO can meet Maui's power demands until 1977. Beyond that, additional capacity is required.

3. From 1969 to 1975, the average annual compound rate of energy used in Maui increased about 13% - about 3 times the growth rate of systems on Oahu and Hawaii. To meet anticipated demands, it is estimated that a minimum of 30 MW of additional capacity is needed by 1980.

4. It is planned that new generation will be added yearly from 1977 to 1980 and that the total capacity at the end of 1980 will be 112 MW. This will allow the system to suffer loss of the largest unit in the 1980 peak with a margin of 4.5 MW.

Mr. Tom Sato, Manager of Engineering of MECO testified that:

1. In view of the recent rise in oil prices, the proper selection and location of new energy sources which would be more economical is a very complex task. The plan which has been adopted adds diesel units and a combustion turbine in the years through 1980 which would result in the lowest consumer costs.

2. Since site requirements differ for different types of generation, the site selected must be flexible enough to accommodate both current and future methods of generation. The Maalaea site provides the only site on Maui with the required flexibility in both size and location.

3. The Maalaea site is already established as a generating station with transmission lines already connected to the overall system. It is therefore the most economical site for the addition of new energy sources.

4. Expansion of the Maalaea facility will be done in increments. The increment now under discussion includes the addition of:

    a. 2 new 6.16 MW diesel units to be added by October 1979 and to be housed in an extension of an existing building;

    b. 1 new 9.68 MW diesel unit to be added by October 1979 and to be housed in a new building which will be designed to accommodate four diesel units;

c. 1 new combustion turbine unit to be added in December 1980;

d. if required, the facility will have six 70 foot high stacks;

e. 1 additional diesel oil storage tank 70 feet in diameter and 38 feet high will be constructed. A concrete berm will encircle the 2 existing storage tanks and the new addition and will be able to contain 110% of the storage capacity;

f. the existing switchyard will be expanded and 2 new transformers will be added.

Mr. Richard E. Bell, Manager of the Environmental Department of the Hawaiian Electric Company, testified that:

1. MECO has expended more than $200,000 to investigate the environmental impact of the Maalaea facility and no one who participated in the effort has cause to believe that the site is not environmentally suited for the purpose.

2. The plant will neither use nor discharge water into Maalaea Bay and thus would not adversely affect the marine environment. Construction and operation of the plant will not endanger plant species nor adversely affect Kealia Pond as a federal bird sanctuary. Some nesting areas of the night heron will be disrupted. Flood protection will be accomplished as required. Two new transmission lines will be added to the existing poles. Mathematical analysis indicates that the plant stack design would meet all short and long-term regulatory limits relating to air quality. Noise levels caused by plant operation and construction are 54 dBA and 64 dBA, respectively. This compares with normal conversation which is about 60 dBA and the maximum level of 90 dBA established by the Occupational Safety and Health Act for an 8 hour day. Mitigating measures for visual impact of the facility include:

    1. Maintaining natural surroundings.

    2. Painting of structures to blend with the surroundings.

    3. Landscaping where necessary.

    4. Designing stacks for minimum height necessary to maintain air quality standards.

    5. Inclusion of exhaust stack ducting where possible to reduce number and height of stacks.

Mr. John Bose, President of the Maui Chapter, Conservation Council for Hawaii and resident of Haiku, indicated that the Kealia

site is located in a flood plain, and if so, the proposed use is not permitted. He requested that the Planning Commission obtain written clearance with respect to construction within a flood plain from the Department of Housing and Urban Development - Flood Insurance Section, the Maui Department of Public Works, and the Maui County Attorney. Without this clearance, the Commission and the County would be liable for damages caused by floodwaters.

Records transmitted by the Maui County Planning Department include:

1. Letter dated April 30, 1976 from John A. Maciolek, Unit Leader and Associate Professor of Zoology with the United States Department of the Interior Hawaii Cooperative Fishery Research Unit opposing further development in the Kealia flood plain.

2. Letter dated May 4, 1976 from Maurice H. Taylor, Area Supervisor, United States Department of the Interior Division of Ecological Services requested additional information on the project and indicated that the environmental effects of the entire area can be most effectively examined when the ultimate design of the project is known.

Minutes of the May 5, 1976 hearing of the Maui Planning Commission indicate the following:

> Questioned as to why such a large area is requested under this Special Permit when the generating plant requires only a small area, Mr. Murdoch clarified that the additional area would be used for a buffer zone to provide landscaping and that ownership by MECO would preclude the area from being sold for other purposes. He acknowledged that steam generation is still under study by MECO but that "steam is not in the picture right now long beyond 1980." He noted that to establish a steam plant, a 5 year lead time is required. Testimony against the Special Permit was presented by Charles Morris, Dick Mayer, Les Skillings, and David Blean. Since a diesel facility can be located in areas other than the shoreline, they questioned whether the additional acreage requested by the petitioner is really for expansion of the diesel generating plant or is it ultimately intended for the future establishment of a steam or nuclear facility.

COUNTY RECOMMENDATIONS:

At its meeting on June 2, 1976, the Maui County Planning Commission unanimously approved the Special Permit, in part, as follows:

> "Said approval shall be limited to the fifteen (15) acres designated as additional land required to 1980 on the attached plan entitled "Proposed Power Plant Expansion...", dated July 21, 1975, and subject to the following conditions:

1. That the expanded generation facilities shall be accommodated on an additional land area limited to two and one-half (2.5) acres immediately south of the existing five (5) acre site, and that the remaining twelve and one-half (12.5) acres of the fifteen acre request shall be utilized for landscape planting and visual enhancement of the power generating facility.

2. That additional research shall be initiated in order to provide alternatives to the total use of fossil fuels.

3. That alternate inland sites shall be seriously investigated with regard to future needs.

4. That the proposed project expansion shall be developed in accordance with the requirements of the Maui County Subdivision Ordinance.

5. That appropriate measures shall be taken to protect the project from flood and tsunami inundation.

6. That a detailed grading, and erosion control plan shall be executed.

7. That full compliance with the standard comments of the informal Urban Design Review Board shall be rendered.

8. That the proposed fuel storage tank shall not exceed the height of the existing tanks.

9. That significant additional landscape planting subject to approval by the Planning Department staff shall be provided along the northerly boundary of the existing development as a visual and sound buffer along the master-planned highway when said highway is constructed.

10. That additional landscape planting subject to approval by the Planning Department staff shall be provided along the southerly boundary of the project as a visual and sound buffer along Kihei Road.

11. That significant shade tree plantings shall be added within the existing fenced enclosure in order to soften the industrial character.

12. That the exterior of all existing facilities shall be repainted a darker green when said facilities are in need of repainting, and that the color sample shall be subject to approval by the Urban Design Review Board.

13. That the emission of smoke, gas or liquid discharges from the facility shall be in strict compliance with State of Hawaii air and water quality standards.

14. That a time limit of five (5) years from the date of the issuance of the Special Management Area Permit shall be established, subject to extension "for good cause".

15. That full compliance with all Federal, State and County requirements shall be rendered."

It is noted that at the June 2 meeting, the Maui Planning Department indicated that:

"1. The proposed expansion of the existing 5 acre electric power generation facility by an additional 39.5 acres in this geographic location may be contrary to the intended general purpose of the Land Use Commission Rules and Regulations to preserve, protect and encourage the development of lands in the State for those uses to which these lands are best suited in the interest of public health and welfare of the people of the State of Hawaii.

2. The establishment of a 44.5 acre site for electric power generation within the Kealia Flood Plain in close proximity to the State wildlife refuge will have a substantial adverse effect on the surrounding property which is also within the Special Management Area of Maui County, and may result in the foreclosure of future planning options.

In addition, the applicant has not provided sufficient clarification relative to the ultimate form and scale of the development after 1980 as well as the following:

1. There is no conclusive evidence that the applicant is or is not contemplating development of a steam generation plant on this site which was the original purpose for such a substantial site. In addition, there is no conclusive evidence that this site is environmentally suitable for such a facility.

2. There is strong concern that the applicant is initiating commitments to the use of fossil fuels, in order to accommodate immediate energy demands and provide public economic benefits, which may be short term at best.

3. There is also no conclusive evidence that the type of generation facility being proposed could not be accommodated further mauka out of the environmentally sensitive Kealia drainage and wildlife area."

The Maui Planning Department recommended approval of 2.5 acres subject to 15 conditions. These conditions are substantially identical with the conditions imposed by the Maui County Planning Commission with the following exceptions:

The Maui County Planning Commission omitted the following conditions recommended by its staff:

"1. That no additional expansion in land area shall be considered in the future beyond the resultant seven and one half (7.5) ares site.

2. That the resultant 7.5 acre Kealia site shall not be considered for future use as a site for steam generation or other higher use."

Instead of the above 2 conditions, the Maui Planning Commission imposed its own Conditions numbers 1 and 14.

STATE OF HAWAII
LAND USE COMMISSION
Suite 1795
Pacific Trade Center
190 S. King Street
Honolulu, Hawaii 96813

July 26, 1976

Mr. Tosh Ishikawa
Planning Director
Planning Department
County of Maui
200 South High Street
Wailuku, Maui 96793

Dear Mr. Ishikawa:

Enclosed is a Notice of Land Use Commission meeting and the Agenda for the meeting.

Please note that petition

SP76-243 Maui Electric Company, Ltd.

---

will be Acted on at that time.

Should you have any questions on this matter, please contact this office.

Very truly yours,

Ah Sung Leong

AH SUNG LEONG
Acting Executive Officer

Enclosure - Agenda

STATE OF HAWAII
LAND USE COMMISSION
Suite 1795
Pacific Trade Center
190 S. King Street
Honolulu, Hawaii 96813

July 26, 1976

Mr. Hideto Kono, Director
Dept. of Planning & Economic
Development
State of Hawaii
Kamamalu Building
250 South King Street
Honolulu, Hawaii 96813

Att: Mr. Tatsuo Fujimoto, Head

Dear Mr. Kono:

Enclosed is a Notice of Land Use Commission meeting and the Agenda for the meeting.

Please note that petition

SP76-243 - Maui Electric Company, Ltd.

---

will be Acted on at that time.

Should you have any questions on this matter, please contact this office.

Very truly yours,

AH SUNG LEONG
Acting Executive Officer

Enclosure - Agenda

STATE OF HAWAII
LAND USE COMMISSION
Suite 1795
Pacific Trade Center
190 S. King Street
Honolulu, Hawaii 96813

July 26, 1976

Mr. Gilbert Lee
Deputy Attorney General
Department of Attorney General
State Capitol
Honolulu, Hawaii 96813

Dear Mr. Lee:

Enclosed is a Notice of Land Use Commission meeting and the Agenda for the meeting.

Please note that petition

SP76-243 - Maui Electric Company, Ltd.

will be Acted on at that time.

Should you have any questions on this matter, please contact this office.

Very truly yours,

Ah Sung Leong

AH SUNG LEONG
Acting Executive Officer

Enclosure - Agenda

STATE OF HAWAII
LAND USE COMMISSION
Suite 1795
Pacific Trade Center
190 S. King Street
Honolulu, Hawaii 96813

July 26, 1976

Mr. Arthur Ueoka
County Attorney
Office of County Attorney
County of Maui
200 South High Street
Wailuku, Maui 96793

Dear Mr. Ueoka:

Enclosed is a Notice of Land Use Commission meeting and the Agenda for the meeting.

Please note that petition

SP76-243 - Maui Electric Company, Ltd.

---

will be Acted on at that time.

Should you have any questions on this matter, please contact this office.

Very truly yours,

AH SUNG LEONG
Acting Executive Officer

Enclosure - Agenda

STATE OF HAWAII
LAND USE COMMISSION
Suite 1795
Pacific Trade Center
190 S. King Street
Honolulu, Hawaii 96813

July 26, 1976

Mr. Maurice H. Taylor
Area Supervisor
United States Department of the Interior
Fish and Wildlife Service
Division of Ecological Service
821 Mililani Street
Honolulu, Hawaii 96813

Dear Mr. Taylor:

Enclosed is a Notice of Land Use Commission meeting and the Agenda for the meeting.

Please note that petition

SP76-243 - MAUI ELECTRIC COMPANY, LTD.

will be Acted on at that time.

Should you have any questions on this matter, please contact this office.

Very truly yours,

Ah Sung Leong

AH SUNG LEONG
Acting Executive Officer

Enclosure - Agenda

STATE OF HAWAII
LAND USE COMMISSION
Suite 1795
Pacific Trade Center
190 S. King Street
Honolulu, Hawaii 96813

July 26, 1976

Mr. John A. Maciolek
Unit Leader and Associate
Professor of Zoology
Hawaii Cooperative Fishery Research Unit
University of Hawaii
2538 The Mall
Honolulu, Hawaii 96822

Dear Mr. Maciolek:

Enclosed is a Notice of Land Use Commission meeting and the Agenda for the meeting.

Please note that petition

SP76-243 - MAUI ELECTRIC COMPANY, LTD.

will be Acted on at that time.

Should you have any questions on this matter, please contact this office.

Very truly yours,

Ah Sung Leong

AH SUNG LEONG
Acting Executive Officer

Enclosure - Agenda

STATE OF HAWAII
LAND USE COMMISSION
Suite 1795
Pacific Trade Center
190 S. King Street
Honolulu, Hawaii 96813

July 26, 1976

Mr. R. K. Sasaki
Vice President
Alexander & Baldwin, Inc.
P. O. Box 3440
Honolulu, Hawaii 96801

Dear Mr. Sasaki:

Enclosed is a Notice of Land Use Commission meeting and the Agenda for the meeting.

Please note that petition

SP76-243 - MAUI ELECTRIC COMPANY, LTD.

will be Acted on at that time.

Should you have any questions on this matter, please contact this office.

Very truly yours,

Ah Sung Leong

AH SUNG LEONG
Acting Executive Officer

Enclosure - Agenda

STATE OF HAWAII
LAND USE COMMISSION
Suite 1795
Pacific Trade Center
190 S. King Street
Honolulu, Hawaii 96813

July 26, 1976

Mr. Colin C. Murdoch, President
Maui Electric Company
P. O. BOX 398
Kahului, Maui 96732

Dear Mr. Murdoch:

Enclosed is a Notice of Land Use Commission meeting and the Agenda for the meeting.

Please note that petition

SP76-243 - MAUI ELECTRIC COMPANY, LTD.

will be Acted on at that time.

Should you have any questions on this matter, please contact this office.

Very truly yours,

Ah Sung Leong

AH SUNG LEONG
Acting Executive Officer

Enclosure - Agenda

A COPY OF THIS AGENDA WAS ALSO MAILED TO THE FOLLOWING PERSONS AND ORGANIZATIONS ON 7/26/76.

1. Kula Alii, Ltd.
2. ✓ Maui Electric Company, Ltd.
3. Edwin T. Okubo for County of Maui
4. Hawaiian Cable Vision Corporation
5.
6.

STATE OF HAWAII
LAND USE COMMISSION

NOTIFICATION OF LAND USE COMMISSION MEETING

DATE, TIME, & PLACE

August 5, 1976 - 9:30 a.m.
Kahului Library
Kahului, Maui 96732

A G E N D A

I. CONTINUATION OF HEARING

1. A75-405 - Kula Alii, Ltd. (as amended)

To incorporate approximately 26.7 acres presently in the Agricultural District into the Rural District at Kula, Maui for low density residential use. The property lies 1 mile north of Keokea town.

II. ACTION ON SPECIAL PERMIT

1. SP76-243 - Maui Electric Company, Ltd.

Special Permit to allow construction and operation of an electric generation plant together with accessory facilities on approximately 39.5 acres of land in the Agricultural District at Maalaea, Maui. The property lies approximately 4,000 feet east of the Maalaea Urban District.

2. SP76-244 - Edwin T. Okubo for County of Maui

Special Permit to allow construction of approximately 80 rental units for the elderly, together with accessory facilities on approximately 10 acres of land in the Agricultural District at Kaunakakai, Molokai. The property lies to the east of Kaunakakai School.

3. SP76-245 - Hawaiian Cable Vision Corporation

Special permit to construct a T.V. reception station on approximately 600 square feet of land in the Agricultural District at Kaanapali, Lahaina, Maui. The property is located approximately 4,000 feet mauka of Honoapiilani Highway in the Kaanapali resort area.

III. MISCELLANEOUS

1. Adoption of Minutes

2. Meeting Schedule

*** A COPY OF THIS AGENDA WAS MAILED TO ALL PERSONS AND ORGANIZATIONS ON THE ATTACHED MAILING LISTS. 7/26/76**

1. All islands 2. Maui 3. Molokai

PLANNING COMMISSION
Kazuo Kage, Chairman
George Murashige, Vice-Chairman
Shiro Hokama
Patrick Kawano
Charles Ota
Leo Polo, Jr.
Harlow Wright
Wayne Uemae, Ex-Officio
Shigeto Murayama, Ex-Officio

LAND USE COMMISSION
STATE OF HAWAII
JUN 21 8 42 AM '76

Elmer F. Cravalho
Mayor

Tosh Ishikawa
Planning Director

Yoshikazu "Zuke" Matsui
Deputy Planning Director

7473

COUNTY OF MAUI
PLANNING DEPARTMENT
200 S. HIGH STREET
WAILUKU, MAUI, HAWAII 96793

June 14, 1976

Mr. Ah Sung Leong
Executive Officer
Land Use Commission
State of Hawaii
P. O. Box 2359
Honolulu, Hawaii 96804

SP76-243

Dear Mr. Leong:

Pursuant to Part IX, Special Use Permit Procedures of the State Land Use Commission Rules of Practice and Procedure and District Regulations, the Maui Planning Commission conducted a public hearing on May 5, 1976, to consider the Special Use Permit request by Mr. Colin C. Murdoch for an additional thirty-nine and one-half (39.5) acres of land classified as agriculture for construction and operation of an electric generation plant, together with maintenance office, fuel storage tanks and other necessary accessory facilities, including switchyard and transmission lines at TMK 3-8-05:26, Maalaea, Maui. (The permit application, attachments, staff report, minutes and other related information are transmitted herewith.)

At the regular meeting of the Maui Planning Commission on June 2, 1976, the subject request for a Special Use Permit was unanimously approved, in part, as follows:

Said approval shall be limited to the fifteen (15) acres designated as additional land required to 1980 on the attached plan entitled "Proposed Power Plant Expansion...", dated July 21, 1975, and subject to the following conditions:

1. That the expanded generation facilities shall be accommodated on an additional land area limited to two and one-half (2.5) acres immediately south of the existing five (5) acre site, and that the remaining twelve and one-half (12.5) acres of the fifteen acre request shall be utilized for landscape planting and visual enhancement of the power generating facility.

2. That additional research shall be initiated in order to provide alternatives to the total use of fossil fuels.

3. That alternate inland sites shall be seriously investigated with regard to future needs.

4. That the proposed project expansion shall be developed in accordance with the requirements of the Maui County Subdivision Ordinance.

5. That appropriate measures shall be taken to protect the project from flood and tsunami inundation.

6. That a detailed grading, and erosion control plan shall be executed.

7. That full compliance with the standard comments of the informal Urban Design Review Board shall be rendered.

8. That the proposed fuel storage tank shall not exceed the height of the existing tanks.

9. That significant additional landscape planting subject to approval by the Planning Department staff shall be provided along the northerly boundary of the existing development as a visual and sound buffer along the master-planned highway when said highway is constructed.

10. That additional landscape planting subject to approval by the Planning Department staff shall be provided along the southerly boundary of the project as a visual and sound buffer along Kihei Road.

11. That significant shade tree plantings shall be added within the existing fenced enclosure in order to soften the industrial character.

12. That the exterior of all existing facilities shall be repainted a darker green when said facilities are in need of repainting, and that the color sample shall be subject to approval by the Urban Design Review Board.

13. That the emission of smoke, gas or liquid discharges from the facility shall be in strict compliance with State of Hawaii air and water quality standards.

14. That a time limit of five (5) years from the date of the issuance of the Special Management Area Permit shall be established, subject to extension "for good cause".

15. That full compliance with all Federal, State and County requirements shall be rendered.

If additional information or clarification is required, please contact this office.

Very truly yours,

TOSHIO ISHIKAWA
Planning Director

Encls.

cc: Mr. Colin C. Murdoch, Maui Electric Co.

INSTRUCTIONS:

1. To be filed in triplicate.
2. Use black ink or typewriter with black ribbon.
3. Use additional sheets if necessary.

MAUI PLANNING COMMISSION
P.O. BOX 1487, KAHULUI, HAWAII

APPLICATION FOR SPECIAL PERMIT
Special Permit is hereby requested:

DO NOT WRITE IN THIS SPACE

Appl. & fee received _____

Notice published _____

Public hearing _____

Recommendation to LUC _____

Action by State LUC _____

County & Appl. notified _____

A. Description of Property: (1) Tax Map Key No. 3-8-05:26

(2) Lot Area 39.5 (3) Location Maalaea, Maui, Hawaii

B. Ownership: (1) Owner's name Alexander & Baldwin, Inc. (with right of entry to MECo and purchase option)

(2) Lessee's name _____ (3) Unexpired term ___ years

C. Request: (1) State request briefly and exactly:

Construction and operation of an electric generation plant together with plant maintenance office, fuel storage tanks and other necessary accessory facilities including switchyard and transmission lines.

LAND USE COMMISSION STATE OF HAWAII JUN 21 8 43 AM '79

(2) Reasons justifying granting of request: To meet the continuing demand for additional electrical energy on Maui, new electrical generation must be added to the Maui Electric system. The location of this additional generation adjacent to the existing Maalaea Generating Station is planned as the site is technically, economically and environmentally the best suited of any on Maui.

D. Applicant: (1) Name Maui Electric Company, Limited

(2) Address Box 398, Kahului, Hawaii 96732 (3) Telephone 877-3374

(4) Signature A. E. Lippold for C. A. Murdock

E. Planning Commission action: _____ Date _____ Vote: ___ ___ (ayes noes)

Reasons: _____

F. State Land Use Commission's action: _____ Date: _____

G. Copies to: State LUC ___ Supervisors ___ Applicant ___ Owner & Lessee ___

EXISTING LANDSCAPED AREA

STACK (20'AGL) TYP.

EXISTING BOUNDARY

LAND MANAGEME
EXTENDS TO THIS E

EXISTING TRUCK TURN AROUND

STACK (33'AGL) TYP.

EXISTING CHAIN LINK FENCE

#1
#2
#3
DIESEL UNITS

D.O. TANKS

69 KV SWITCHING STATION (45'AGL)

69 KV SWITCHING STATION (45'AGL)

DIESEL UNITS #4 #5 #6 #7

BLDG (25'AGL)

TRANSFORMERS

RADIATORS

8060 BBL

8060 BBL

36'AGL

GRD. EL. 9'-6"

GRD. EL. 15'-0"

#8
#9

DIESEL UNIT

BLDG. (30'AGL)

25,000 BBL

36'AGL

Approx. 2.5 Acres

160 FT.

COMBUSTION TURBINE

STACK (38'AGL)

STACK (30'AGL)

RADIATOR

700 FT.

BOUNDARY ADDED BY MAUI PLANNING DEPARTMENT

OPEN CULVERT

FUTURE UNITS

OPEN CULVERT ALTERNATE ROUTE

160'
x 700'
112000 ft
(ac) 2.57 AC

NOTICE OF PUBLIC HEARING
LUC SPECIAL USE PERMIT

NOTICE IS HEREBY given of a public hearing to be held by the Maui Planning Commission on May 5, 1976 at the County Building, 6th Floor, Room 614, Wailuku, Maui, at 1:30 p.m. or as soon thereafter as those interested may be heard to consider the following request for SPECIAL USE PERMIT under provisions of SECTION 205-6 of the HAWAII REVISED STATUTES:

MR. COLIN C. MURDOCH, President, Maui Electric Co., Ltd., requesting a Special Use Permit, in order to expand an existing facility for construction and operation of an electric generation plant, to include, maintenance office, fuel storage tanks and other accessory facilities including switchyard and transmission lines in the vicinity of Kealia Pond, TMK 3-8-05:26, Kihei, Maui. The total area of the request is 39.5 acres.

Information pertaining to the above request is on file in the office of the County of Maui Planning Department, 200 S. High Street, Wailuku, Maui, Hawaii, and is open to the public for inspection during office hours.

All testimony regarding the SPECIAL USE PERMIT should be filed in writing to the Planning Department, County of Maui, 200 S. High Street, Wailuku, Maui 96793, before the date of the Hearing or presented in person at the time of the hearing.

MAUI PLANNING COMMISSION
By Toshio Ishikawa
County Planning Director

(MN: April 14, 1976)

ALEXANDER & BALDWIN, INC.
822 BISHOP STREET • P.O. BOX 3440
HONOLULU, HAWAII 96801

January 20, 1976

County of Maui
Planning Commission
Wailuku, Maui, HI 96793

Gentlemen:

Re: Maui Electric Company, Limited Option to Purchase Lands Owned by Alexander & Baldwin, Inc. at Maalaea, Maui (por. TMK 3-8-05)

This shall authorize Maui Electric Company, Limited to file for any permits required by existing statute or ordinance for the purpose of expansion of its existing power plant in Maalaea, Maui. Said existing power plant site was purchased from Alexander & Baldwin, Inc. by Maui Electric Company in 1971 and Maui Electric Company holds an option to purchase lands adjacent to this site from this corporation subject to obtaining appropriate governmental approvals.

Thank you for your consideration.

Sincerely,

ALEXANDER & BALDWIN, INC.

By _____
Its Vice President

FMO:stt

TELEPHONE (808) 525-6611 • TELEGRAPH ALEXBALD

RIGHT OF ENTRY

ALEXANDER & BALDWIN, INC., hereinafter referred to as "Grantor", does hereby grant unto MAUI ELECTRIC COMPANY, LIMITED, hereinafter referred to as "Grantee", its employees and agents, the non-exclusive right to enter upon the Property, as described in Exhibit "A" attached hereto, in a reasonable manner and at reasonable times for the purpose of reasonably conducting surveys, appraisals, soil tests, or other exploratory work directly related to the proposed development of the property by the Grantee as an electric power generating plant site. The Grantee hereby agrees to hold harmless and indemnify the Grantor from and against all claims and demands for loss or damage, including, witho limitation, property damage, personal injury and wrongful death, arisin out of or in connection with the Grantee's exercise of its right to enter upon the property, unless such damage or injury is the fault of Grantor or its agents, and will reimburse the Grantor for all costs and expenses, including reasonable attorney's fees, incurred in the defense of any such claims and demands. The Grantee hereby agrees to assume all risk of loss in connection with the exercise of this right of entry and activities undertaken on the property. Nothing in this paragraph shall entitle the Grantee to any rights whatsoever in respect of the property except as explicitly stated herein.

This right of entry shall teminate at midnight on December 31, 197 or when the property described in Exhibit "A" has been acquired in fee by the Grantee, whichever is sooner.

Dated this 13th day of November, 1975.

MAUI ELECTRIC COMPANY, LIMITED

By _____
Its President

By _____
Its Asst. Treas.

Grantee

ALEXANDER & BALDWIN, INC.

By _____
Its VICE PRESIDENT

By _____
Its ASSISTANT SECRETARY

Grantor

APPROVED
Case, Stack, Kay,
Clause & Lynch
Form _____

DESCRIPTION OF LOT 2

All of that certain parcel of land being a portion of Grant 3152 to H. Cornwell, situate Waikapu, Pulehunui, Maui, Hawaii.

Beginning at a 1/2-inch pipe on the westerly corner of this parcel of land, 2.00 feet from the edge of Kihei Road, the coordinates of said point of beginning referred to Government Survey Triangulation Station "Puuhele" being:

4,860.82 feet South

4,439.95 feet East

and running by azimuths measured clockwise from true south:

1.	196° 27' 30"	1,372.34	feet along remainder of Grant 3152 to H. Cornwell to a 1/2-inch pipe;
2.	254° 29'	5.73	feet along remainder of Grant 3152 to H. Cornwell to a 1/2-inch pipe;
3.	344° 29'	1,621.37	feet along remainder of Grant 3152 to H. Cornwell to a 1/2-inch pipe;
4.	106° 27' 30"	863.46	feet along remainder of Grant 3152 to H. Cornwell to the point of beginning and containing an area of 13.708 acres.

This work was prepared by me
or under my supervision.

NORMAN R. SAITO
REGISTERED
PROFESSIONAL
LAND
SURVEYOR
No. 803-S
HAWAII, U.S.A.

9/19/75

EXHIBIT A

DESCRIPTION OF LOT 3

(ROAD WIDENING STRIP)

All of that certain parcel of land being a portion of Grant 3152 to H. Cornwell, situate Waikapu, Pulehunui, Maui, Hawaii.

Beginning at a 1/2-inch pipe on the northwesterly corner of this parcel of land, the coordinates of said point of beginning referred to Government Survey Triangulation Station "Puuhele" being:

4,860.82 feet South

4,439.95 feet East

and running by azimuths measured clockwise from true south:

1.	286° 27' 30"	863.46	feet along remainder of Grant 3152 to H. Cornwell to a 1/2-inch pipe;
2.	16° 27' 30"	2.00	feet along same to the northerly side of Kihei Road;
3.	106° 27' 30"	863.46	feet along the northerly side of Kihei Road (F.A.P. N.R.H. 13-B);
4.	196° 27' 30"	2.00	feet to the point of beginning and containing an area of 1,727 square feet.

This work was prepared by me
or under my supervision.

NORMAN H. SAITO
REGISTERED
PROFESSIONAL
LAND
SURVEYOR
No. 803-S
HAWAII, U.S.A.

9/19/75

Maui Electric Co.
Maalaea Plant Site

Description of Lot B-2

All of that certain parcel of land being a portion of Grant 3152 to H. Cornwell, situate Kaikapu, Maui, Hawaii.

Beginning at a pipe on the southerly corner of this parcel of land, being the northeasterly corner of Lot "C" the coordinate of said point of beginning referred to Government Survey Triangulation Station "Puu Nele" being

4850.82 feet South

4430.95 feet East

and running by azimuths measured clockwise from true south:

1. 106° 27' 30" 820.00 feet along the northerly side of Lot C and along remainder of said Grant 3152 to a pipe;

   thence along same and along a curve to the right with a radius of 1615.02 feet, the chord azimuth and distance being:

2. 120° 25' 37.5" 779.71 feet to a pipe;

3. 224° 23' 45" 184.50 feet along remainder of said Grant 3152 and along Lot G-1 to a pipe;

4. 242° 00' 171.45 feet along same to a pipe;

5. 254° 29' 83.24 feet along same to a pipe;

6. 285° 30' 77.63 feet along same to a pipe;

7. 344° 29' 190.00 feet along same to a pipe;

8. 254° 29' 704.26 feet along same to a pipe;

9. 164° 29' 270.00 feet along same to a pipe;

10. 254° 29' 783.43 feet along remainder of said Grant 3152 to a pipe;

11. 16° 27' 30" 1372.34 feet along same to the point of beginning and containing an area of 25.792 acres.

This work was prepared by me or under my supervision.

NORMAN M. SAITO
REGISTERED PROFESSIONAL LAND SURVEYOR
No. 6015
HAWAII, U.S.A.

UNITED STATES
DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE
~~BUREAU OF SPORT FISHERIES AND WILDLIFE~~

RECEIVED
MAY 3 1976

Hawaii Cooperative Fishery Research Unit
2538 The Mall, University of Hawaii
Honolulu, Hawaii 96822

DEPT. OF PLANNING
COUNTY OF MAUI

April 30, 1976

Mr. T. Ishikawa, Planning Director
County of Maui
County Building
Wailuku, Maui, Hawaii 96793

Dear Mr. Ishikawa:

According to a recent news article (Honolulu Advertiser, 21 April), your Commission is holding hearings 5 May on Maui Electric requests for expansion in the Kealia area. I am keenly interested in this matter, having participated in 1971 hearings and related environmental assessments. As evidence of my familiarity with and attitude towards the Kealia-Maalaea environment, I enclose a copy of a report published in 1971. I am writing you now in opposition to further development on the Kealia floodplain because I will be unable to attend your hearing next week.

Kealia should be protected from further development in accordance with your Kihei Civic Development Plan for reasons given in my report: it is the last coastal lowland open space of significance in the Kihei area; it is a valuable waterfowl habitat; further development will surely degrade the valuable marine ecosystem of Maalaea Bay.

Unfortunately, I have not seen a copy of Maui Electric Company's request and cannot make specific comments or challenges. However, there is no apparent need for areal expansion of their facilities or shoreline permit unless steam generation is imminent. The present request seems to be an attempt to bypass the 1971 decisions which required reapplication for steam generation on the basis of an environmental assessment (which has been done but never released to my knowledge). The existing 5-acre generating site seems sufficiently large for additional diesel generating units. It is the areal expansion of ME facilities that looms ominously as the first stage toward the commercialization and degredation of Kealia-Maalaea. Initially (1970), ME planned on 28.5 acres for their steam plant site. By 1971, the permit request had expanded to 33 acres. Now, according to the newspaper, it is 40 acres. It seems to be growing with time.

The alternate Ukumehame site for power generation was recommended in 1971. It remains a much better choice from an environmental standpoint. I urge your Commission to halt the industrial-commercial encroachment on Kealia for the long-term benefit of Mauians and visitors alike. I would like to review Maui Electric's requests in detail and would appreciate copies if they are available.

Sincerely,

John A. Maciolek
Unit Leader and
Associate Professor of Zoology

JAM/ssh

Enclosure

xc: Ed Bartholomew and Glen Shepherd, MCC
Director, University of Hawaii Environmental Center
Director and Regional Director, U. S. Fish and Wildlife Service
Director, OEQC

United States Department of the Interior
FISH AND WILDLIFE SERVICE
Division of Ecological Services
821 Mililani Street
Honolulu, Hawaii 96813

Reference: ES

May 4, 1976

RECEIVED
5
MAY 6 1976
DEPT. OF PLANNING
COUNTY OF MAUI

Mr. T. Ishikawa, Planning Director
County of Maui
County Building
Wailuku, Maui, Hawaii 96793

Dear Mr. Ishikawa:

This provides comments concerning the request by Maui Electric Company to utilize 40 acres of agricultural land adjacent to Kealia Pond to expand their power generating capacity.

Within just this week we became aware of the subject public hearing when the news article "Maui Electric Hearings Slated" (21 April 1976 island edition of the Advertiser) was called to our attention. Inquiries made to several resource agencies in Honolulu similarly indicated little or no knowledge of the proposed project. However, some information was obtained to indicate that 15 of the 40 acre parcel would be used to locate three diesel units and one combustion turbine unit to meet energy requirements projected for 1980. The remaining acreage, we understand, would be used for power demands beyond 1980. In addition, it is not currently known whether the later expansion would be for diesel, gas turbine or steam generating units! We have further learned that although the applicant has requested a special use and special management area permit, the County has ruled that it does not fall under the jurisdiction of Chapter 343, Hawaii Revised Statutes.

With present project information it appears to be impossible for us to adequately evaluate the entire project presently under consideration. Although the specific 15 acre parcel designated for diesel and gas turbine units may be adequately evaluated, it appears that approval of significant acreage, 40 acres, for such use now, would likely commit the applicant to locate future County generating needs in this area. This may or may not be desirable. It is felt that the

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environmental effects of the area under consideration can be most effectively examined when the ultimate design of the project is known. For example, should steam units be selected for the remaining 25 acres, would there be sufficient space for pollution abatement facilities? If more space is required in the future would it encroach on Kealia Pond or other sensitive areas? If intakes and outfalls are required, where would they be located? What would be their impact if any on the marine environment? These are some of the questions that appear to remain unanswered.

In view of these concerns and prior to your final commitment for land use changes, could you please provide us with additional information regarding the intended design and operation of this facility. Perhaps our concerns are uncalled for, but lacking information on the project design and its potential long range impact on the adjoining environment has caused us concern.

We would appreciate any information you can provide.

Sincerely yours,

Maurice H. Taylor

Maurice H. Taylor
Area Supervisor

cc: RD (ES), Portland
OEQC
Sekora
Maciolek

MAUI PLANNING COMMISSION
PUBLIC HEARING
May 5, 1976

The public hearing on the following request was called to order by Chairman Leo Polo on Wednesday, May 5, 1976, in Room 614, 6th Floor, County Building, Wailuku, Maui, Hawaii.

MR. COLIN MURDOCH, President, Maui Electric Co., Ltd., requesting a special use permit, in order to expand an existing facility for construction and operation of an electric generation plant, to include, maintenance office, fuel storage tanks and other accessory facilities including switchyard and transmission lines in the vicinity of Kealia Pond, TMK 3-8-05: 26, Kihei, Maui, Hawaii. The total area of the request is 39.5 acres.

Mr. Hart explained the request from the staff report.

Mr. Ota: If there is no additional information we shouldn't have to go through the whole thing. If there is any additional information please call me because I am going to have a smoke.

Mr. Polo: Anyone here for the granting of the SUP? Against?

Mr. Charles Morris: I still feel we should find another site. This is an additional insult and dangerous to our health.

Hearing no other testimony the Chair closed the public hearing.

JEAN A. UEMAE
Private Secretary

STAFF REPORT May 5, 1976

TO: Maui Planning Commission

FROM: Planning Department Staff

SUBJECT: MR COLIN MURDOCH, President, Maui Electric Co., Ltd., requesting a special use permit, in order to expand an existing facility for construction and operation of an electric generation plant, to include maintenance office, fuel storage tanks and other accessory facilities including switchyard and transmission lines in the vicinity of Kealia Pond (The total area of the request is 39.5 acres).

A. PHYSICAL CHARACTERISTICS:

1. Location: TMK 3-8-05:26, Kihei, Maui (The proposed expansion is defined beyond the existing 5-acre site identified as TMK 3-8-05:26) The sites are located mauka of Kihei Road approximately 4,000 ft. west of Kealia Pond between Maalaea Bay and Kihei.

2. Land Use Designation of the project sites:

a. State Land Use Classification - Agriculture

b. Kihei General Plan & Zoning - Open Zone

3. Project Area:

a. Existing project area: - 5 acres (by Special Permit granted July 16, 1971)

b. Additional land required to 1980: - 15 acres

c. Ultimate site area: - 44.5 acres

4. Site Description:

Except for the 5 acres now occupied by Maui Electric's diesel generating units, the ultimate 44.5 acre site is vacant. The vegetative cover consists of approximately 75% Kiawe growth and 25% salt marsh shrub growth. The site slopes toward Kealia Pond and the ocean at 1 to 3 per cent and is approximately 10 to 12 feet above sea level.

The site is located 100 per cent within the potential tsunami inundation line and approximately 80 per cent within the 100-year flood plain of Pohakea Stream, as defined by the Drainage Master Plan for the County of Maui, 1971, prepared by R. M. Towill Corporation (Kealia Pond acts, in essence, as a desilting basin for the Kealia Flood plain).

The Kealia Pond area, approximately 4,000 ft. east of the site is classified Conservation by the State Land Use Commission and is designated by the State of Hawaii as a wildlife refuge.

The site is physically defined by the following land use characteristics:

North - sugar cane cultivation

South - (between Kihei Road and the shoreline) a large open expanse of natural area with salt-marsh shrub growth.

East - Kealia Pond conservation district

West - Sugar cane cultivation

5. Existing Services:

Sewer	-	(None)
Water	-	8 in. cast iron line at the access drive to the existing 5-acre site.
Electric & Telephone	-	Available

B. BACKGROUND

1. June 1, 1971 - A public hearing was held by the Maui Planning Commission relative to a Special Permit request, SP71-104-Maui Electric Company, Ltd., to allow the construction and operation of an electric generation plant and accessory facilities within the Agricultural District at Maalaea, Maui. The proposed site was a 33-acre portion of TMK 3-8-05:parcel 2.

2. July 6, 1971 - The Maui Planning Commission acted on the request, and approved the following recommendation by the Planning Director subject to conditions:

   Since there was insufficient evidence submitted by the applicant to justify the approval of the request, and since the need for steam units was not projected until 1975, the Planning Director recommended that the request relating to the approval of the steam plant be denied. However, since the problems which are unresolved relate to the steam plant and are not necessarily applicable to the proposed diesel generators and gas turbine facilities, and since the applicant faces a problem involving both time and area, the Planning Director recommended that the diesel generators and a gas turbine together with accessory facilities to provide for interim power generation through 1975 be approved.

3. July 16, 1971 - The State Land Use Commission concurred with the recommendation of the Planning Commission.

C. ANALYSIS

Relative to Part V, Special Permits, Section 5-2 of the State Land Use Commission Rules of Practice and Procedure:

The proposed ultimate development, which would include an additional 39.5 acres of land being designated for future use as a generation facility is not entirely compatible with the criteria for establishing unusual and reasonable uses within the agricultural district, because there is no commitment to the form or scale of development after 1980.

D. CONCLUSION: This concludes the staff report.

June 2, 1976

MEMORANDUM

TO: Maui Planning Commission
FROM: Planning Department Staff
SUBJECT: LUC SUP for Maui Electric Company

RECOMMENDATION: The Planning Department feels that, in accordance with Part V, Special Permits, Section 5-2 of the State Land Use Commission Rules of Practice and Procedure, the proposed ultimate use of an additional 39.5 acres of land in the agricultural district for a generation facility is not entirely compatible with the criteria for establishing "unusual and reasonable use" for the following reasons:

1. The proposed expansion of the existing 5 acre electric power generation facility by an additional 39.5 acres in this geographic location may be contrary to the intended general purpose of the LUC Rules and Regulations to preserve, protect and encourage the development of lands in the State for those uses to which these lands are best suited in the interest of public health and welfare of the people of the State of Hawaii.

2. The establishment of a 44.5 acre site for electric power generation within the Kealia Flood Plain in close proximity to the State wildlife refuge will have a substantial adverse effect on the surrounding property which is also within the Special Management Area of Maui County, and may result in the foreclosure of future planning options.

In addition, the applicant has not provided sufficient clarification relative to the ultimate form and scale of the development after 1980 as well as the following:

1. There is no conclusive evidence that the applicant is or is not contemplating development of a steam generation plant on this site which was the original purpose for such a substantial site. In addition, there is no conclusive evidence that this site is environmentally suitable for such a facility.

2. There is strong concern that the applicant is initiating commitments to the use of fossil fuels, in order to accommodate immediate energy demands and provide public economic benefits, which may be short term at best.

3. There is also no conclusive evidence that the type of generation facility being proposed could not be accommodated further mauka out of the environmentally sensitive Kealia drainage and wildlife area.

Therefore, the Maui Planning Department staff hereby recommends approval of a portion of the request. Said approval shall be limited to an additional two and one half (2.5) acres immediately south of the existing five (5) acre site, in order to meet the energy requirements of Maui through 1980 subject to the following conditions:

MCPC

OMITTED

1. That no additional expansion in land area shall be considered in the future beyond the resultant seven and one half (7.5) acres site.

OMITTED

2. That the resultant 7.5 acre Kealia site shall not be considered for future use as a site for steam generation or other higher use.

#2 3. That additional research shall be initiated in order to provide alternatives to the total use of fossil fuels.

#3 4. That alternate inland sites shall be seriously investigated with regard to future needs.

#4 5. That the proposed project expansion shall be developed in accordance with the requirements of the Maui County Subdivision Ordinance.

#5 6. That appropriate measures shall be taken to protect the project from flood and tsunami inundation.

#6 7. That a detailed grading, and erosion control plan shall be executed.

#7 8. That full compliance with the standard comments of the informal Urban Design Review Board shall be rendered.

#8 9. That the proposed fuel storage tank shall not exceed the height of the existing tanks.

#9 (added) 10. That significant additional landscape planting subject to approval by the Planning Department staff shall be provided along northerly boundary of the existing development, as a visual and sound buffer along the master planned highway. when said hwy is constructed

#10 11. That additional landscape planting, subject to approval by the Planning Department staff shall be provided along the southerly boundary of the project as a visual and sound buffer along Kihei Road.

#11 12. That significant shade tree plantings shall be added within the existing fenced enclosure, in order to soften the industrial character.

when such fac. are in need of repainting

#12 (added) 13. That the exterior of all existing facilities shall be repainted a darker green and that the color sample shall be subject to approval by the Urban Design Review Board.

#13 14. That the emission of smoke, gas or liquid discharges from the facility shall be in strict compliance with State of Hawaii air and water quality standards.

#15 15. That full compliance with all Federal, State, and County requirements shall be rendered.

MAUI PLANNING COMMISSION
PUBLIC HEARING
May 5, 1976

The public hearing on the following request was called to order by Chairman Leo Polo on Wednesday, May 5, 1976, in Room 614, 6th Floor, County Building Wailuku, Maui, Hawaii.

MR. COLIN MURDOCH, President, Maui Electric Co., Ltd., requesting a Special Management Area Permit for construction and operation of additional diesel engine generators and combustion turbines with accessory facilities including switchyard and transmission lines to provide increased electric generating capacity through 1980 at the site in the vicinity of Kealia Pond, TMK 3-8-05:26, Kihei, Maui. (The proposed expansion is defined beyond the existing 5-acre site identified as TMK 3-8-05:25).

Mr. Ishikawa read the notice of public hearing which was published in the Maui News on April 16, 1976, and in the Honolulu Advertiser on April 15, 1976.

Mr. Hart explained the request from the staff report.

Mr. Polo: Does the Commission have any questions?

Mr. Ishikawa: Does the application or the applicant explain the reason why the 10 acre site is necessary or does it show what the development proposed for the rest of the area that is not for any....

Mr. Hart: It does not have at this time. Only indication was given at the Urban Design Review Board there was concern that there was a need to enhance the area.

Mr. Ishikawa: No diesel generators or facilities are contemplated in that area between the lower and proposed facility.

Mr. Hart: It isn't defined on this particular drawing.

Mr. Ishikawa: Therefore, the only apparent purpose of this site is for landscaping.

Mr. Hart: This was a verbal indication.

Mr. Polo: Anyother questions?

Mr. Hokama: They are talking about future expansion. Which way are they planning to go - future expansion?

Mr. Hart: It is our understanding from the standpoint of the direction being proposed to meet needs of 1980 there would be some expansion south and also requiring 39.5 acres and remaining area which is defined beyond the 1980 - 10 acre or 15 acres will be used. It would actually be towards Kealia Pond. There would be some expansion makai and some expansion east.

Mr. Polo: Any letters?

Mr. Hart: There were no letters of approval. There was one letter from Mr. Maurice H. Taylor, Area Supervisor, U.S. Department of Interior, Fish and Wildlife Service indicating that he was unable to comment specifically on the project because of lack of information. He is requesting additional information. That is the only letter that would be between approval or denial.

Mr. Ishikawa: Did the applicant meet the conditions specified by LUC approval of July 16, 1970.

Mr. Hart: Yes, they have.

Mr. Hart: There was one letter of protest.

Mr. Polo: I would like to open hearing to the public. Is the applicant here. Is there anything else you would like to add?

Mr. Colin Murdoch presented written testimony (copy of which is attached hereto and made a part hereof).

Mr. Ishikawa: Mr. Murodch, from what you have indicated, it seems as extensive studies were made for seeking alternative sites and that the results of these studies seem to show that the Maalaea site is the best site. Does that mean that any further search of an alternate site is closed at this time?

Mr. Murdoch: No we will continue to look for sites but we can't keep spending money on continued search.... We certainly will keep looking.

Mr. Ishikawa: Isn't it reasonable to assume that changing technology and circumstances that evaluation of alternate sites to me is a part of the program you have at your company in order to keep up with the needs you will have to keep evaluating existing sites and its capabilities and different sites-

Mr. Murdoch: You are quite right...on the company level.

Mr. Ishikawa: So these special studies are relatively expensive because of the technology and expertise needed or necessary as part of the operation.

Mr. Murdoch: This is right and we do in our plans amend as conditions change-new technology--so far we project 4 to 5 years and for future plan for next 15 years. They are subject to year to year review....

Mr. Ishikawa: Relative to the 10 acre site under consideration I asked the staff whether the application contained any information as to the reason why it is 10 acres when the facilities are confined to the 5 acre site. What is the reason for this 10 acres?

Mr. Murdoch: I might clarify one point. Staff report in the beginning says additional acreage is 15. It is my...that we did ask for additional 15 acres totalling 20 acres so there is a conflict in that report.

Mr. Ishikawa: Could you explain that. This apparent discrepancy.

Mr. Hart: According to their Map, five acres are existing and request is for 15 acres.

Mr. Ishikawa: Oh I see. Where would that be?

Mr. Murdoch showed the location on the map.

Mr. Ishikawa: And that is the 20 acre site, and the five acres were previously approved.

Mr. Murdoch: That is right. We have also agreed to keep a heavy buffer zone to provide some sort of landscape. That was before the finalizing of that new highway would come and went in back here along with the Design Review Board recommendation. We will do our best to build up a solid cover in this matter of the CZM. We are outside of the 300 feet but since the highway will be looking toward the ocean, we are included in this zone. However, this is tree to here so you must keep in mind that you do not look at the ocean, you look at Kiawe trees if we weren't there, so it is a little different with the intention...That is my feeling with what the CZM had in mind.

Mr. Ishikawa: Relative to the question it seems then the reason for this additional acreage makai of the facility proposed would be for landscaping purposes.

Mr. Murdoch: We would. Natural growth is kind of like that. We would like to have that land so we could foster additional kiawe growth. Eventually fill in here. Now, it came out in the report that we are in the flood plain. Now that is 100 years deal and we are in the tsunami area. The highest level for tsunami was 11 feet. We propose for this area, 15 feet. We would fill from 11 to 15. So we are supposedly higher than any tidal wave that could come. The banks along the ocean are about 7 feet and I cannot see water piling back to 11 feet here and even 15 feet without pulling down to the ocean...Mr. Bruce testified to that in 1971.

Mr. Ishikawa: If the reason for this large area makai of the proposed facility is for landscaping purposes and for actual flood protection, can't it be done without including it as part of the facility requirements? Can't it be done without being part of the generating facility?

Mr. Murdoch: You are quite right. If we are going to use it only for a buffer zone or landscaping we don't have to own it but then we won't do anything with it.

Mr. Ishikawa: I don't understand. If you are planning to do the landscaping why won't you do it irrespective of whether it is part of the generating facility SMA permit or not.

Mr. Murdoch: My point is, if we don't own the land how can we be required to improve it.

Mr. Ishikawa: So its basically on ownership. Is it possible to work other arrangements?

Mr. Murdoch: There could be possibilities, but how firm are they. Lease terminates sometimes. Once you establish power plant it doesn't move. It is too expensive.

Mr. Ishikawa: Could it all be that you could lease it and landscape it and assume that the landscape will remain....

Mr. Murdoch: It is an assumption that it would remain. If we don't own it it could be sold and used for some other purposes.

Mr. Ota: I am not going to be as courteous as the Director, but as far as I am concerned when the applicant asked for 40 acres eventually you want your main baseyard down there. Don't give me this beating around the bush stuff. Let me put it this way. There is no question your permanent baseyard you are sitting on $10 sq. ft. parcel. I don't think you want to store your poles and equipment over there because it is not economically feasible. The impression I had - I went to the public hearing in 1971 - It was a temporary booster station. Of course you didn't know how much Maui was going to develop. Let's face it, I think if I were in your position I would put it point blank...if you want the 40 acres I think you want to use the whole area for storage.

Mr. Murodch? No, we will not do that. Let's face the other fact. We only pay 10¢ an acre where we are in Kahului. That is all we can earn from our customers and it is a low cost for that land. Therefore, it is better for our customers to keep the company land. If we sold it for $10 we will have to pay out the heavy capital gain and nobody gains.

Mr. Ota: Maybe your company is owned by Hawaiian Electric. They are not the best company in PR as far as I am concerned. They want to develop a condominium on a property for 10 cents a square foot. Your present baseyard is an ideal site for a commercial or development of what they are proposing on Oahu.

Mr. Murdoch: You notice they are having lots of trouble.

Mr. Ota: Obviously purely from logistics should be located in a less

congested area that for your baseyard purposes then where you are presently. I am not trying to tell you how to run your electric company but it is just common sense. May be this area might be an ideal place, but when you come and tell us you want 40 acres and main generating plant on five acres and tell us you are not going to do anything on the remainding land. I'm not going to buy that. Maybe the other boys can. I ain't going to buy it. I think Planning Director is very concerned because the moment we give you 40 acres the application is worded, you can do anything on the land. You are permitted to do it...with proper landscape.

Mr. Murdoch: We say we will have to come back for units in addition to those that are approved to 1980.

Mr. Matsui: Mr. Murdoch, is Maui Electric still in the process of looking into steam generating?

Mr. Murdoch: Yes, it is being studied all the time. Our generating plants are being reviewed 3 to 4 times a year. Updating the cost of present conditions, etc.

Mr. Matsui: Do you know with this advance technology do you still think you can't determine one way or the other steam or diesel.

Mr. Murdoch: We say our plans are firm through 1980 with possible changes with something of major note. Beyond that it is subject to change every year and steam is not in the picture right now long beyond 1980. The price of diesel oil has been going up steadily. If diesel keeps going up and gets a lot more expensive, steam may come back in the picture..but the lead time on a steam plant is five years. So to put a steam plant in, if we decide this year, it is 1981 or later.

Mr. Matsui: What's the cost factor to the consumer? Is steam cheaper than the diesel.?

Me. Murdoch: In what way. In the cost of the oil alone. Mr. Luppold will you answer that.

Mr. Luppold: Steam and diesel are about a stand off....

Mr. Murdoch: Your answer includes operation and maintenance?

Mr. Luppold: That is full cost. Capital investment with the steam would run much more expensive than diesel. My first statement was relative to fuel cost only.

Mr. Murdoch: Total cost to the customer, diesel is cheaper.

Mr. Polo: Any other questions. Anyone else in favor of the granting of this special management area permit. Is there anyone against the granting?

Mr. John Bose presented written testimony, copy of which is attached.

Mr. Charles Morris: Kihei. I would like to point out that EIS made a point that this emission goes out to sea which is true but they failed to note that it swings back towards Kihei. We are very aware of the sugar cane smoke and ashes come right back in our homes. This is a growing area - diesel smoke is rather objectional. I am afraid that it will cut into our tourist industry. I think the location of the plant should be reviewed and possibly site further north should be selected. I notice that cement discharge from Maui Aggregates tends to follow West Maui Mountains and goes out to sea. I believe plant would be better located further north. I am sure the Council is well aware of the detrimental effect of emission from internal combustion engines. (Mr. Morris further pointed out the dangers of the emission to health and plant life). I wonder if a site could not be nearer the West Maui Mountains or at least have investigation to see for wind patterns from such a site.... whether emissions would swing back to Kihei. I feel they should do everything in their power to assure cleanliness of the area.

Mr. Ishikawa: You mentioned EIS.

Mr. Morris: Yes I understand that EIS implied that the emission went out to sea.

Mr. Ishikawa: Are your referring to the documents submitted as part of the application. It is not an EIS as such.

Mr. Morris: I stand corrected.

Mr. Ishikawa: There is definite and clear distinction between EIS and an analysis. Although there are many areas that over laps or similar and areas that are not. Just for clarity of the record.

Mr. Morris: I stand corrected.

Mr. Tony DeGama: I speak for myself. I would like to address this question to Mr. Murdoch. In the steam generating plant, I would feel is is more efficient than a diesel power plant. For simple reason, endurability is more with the steam generating plant than combustion. They were forced out all different times. In the long plan for Maui Electric I don't see why they have all these satellite generators in this area where they could have 2-3 larger turbine for the future. This way they keep on building small plants and expanding the area. Pretty soon you will be using the whole 40 acres. I would feel strongly - I worked with steam. The steam generating plant is more efficient because the output is more efficient because maintenance wise you take a diesel plant and it doesn't have the working hours and endurability as a steam plant.

Mrs. Nakasone: Just for clarification, the LUCA comments with regard to area being agricultural and it requires special permit from the State LUC and also the proposed building straddles the propety and we will require consolidation and the area is prone to flood inundation and flood proofing measures are necessary. Director asked the staff if the applicants had complied. Staff answered yes they have.

Mr. Ishikawa: I think the question I asked was when the 1971 acres was granted if they met all the conditions. Doesn't refer to your conditions.

Mr. Dick Mayer: Instructor in geography. The site here is asking for diesel. Presumption is it cannot be decided whether next stage would be diesel or steam. Is it the proper site for this facility or are there alternate sites. If we can decide right now if diesel is going to be in the future then there is no reason to stick to this site because there are other sites okay for diesel. For example, near the old airport in Puunene. Wasn't an alternate site the only site of rejection was because of the lack of cool water. It was discussed, only reason was because of lack of access to cool waters. If on the other hand it is decided that steam is the way to go there will be a tremendous need for cooling water. In terms of granting the 40 acres site would mean that we would have to consider at this stage where we are going to get the cooling water and whats going to happen after it comes through the plant where it will be dispersed - that the water be taken to the ocean and easement will have to be used to go through Conservation District land through with access problems when the wildlife in that area will be affected....two alternatives 1) send it into Kealia Pond 2) send it back out into the ocean. These are two possibilites....It will be warm water. Before this approval is going, we will have to find where the water is going, and what affect it will have. If it were sent into Kealia Pond the water would change the whole aquatic system. We should forget this as a conservation district. Alternative is it is sent out to the ocean. We want to know the effect. We have a community that is building up in Maalaea. We have a small share in here. What will be the effect on the aquatic system. I think that question will have to be addressed to this application. Presumption in having that plan authorized is that they are going to have a steam plant there. Different question is one of the location here is opposition to Puunene is to centralize this plant between.....by doing so,

does that mean all the fuel will have to be brought from Kahului Harbor to the site. Is much more expensive to put the poles than to build plant here. There is no need to be located extra 5 miles closer to the consumers. Another thing is who owns this parcel that is being asked for now? What type of arrangement do you have?

Mr. Murdoch: A & B. We have a written agreement in letter form to purchase which is being put into legal document.

Mr. Mayer: You are making application on other peoples land. I don't think it is legal.

Mr. Hart: It is. They have a letter of authorization from the owner of the land.

Mr. Ishikawa: Just so that we are clear again, I do appreciate your comments for the potential plant. The request is for diesel generators. Some of your questions relative to the steam plant facility would not be appropriate at this time although I can understand the relation and the need to have some concern as to the possibility so some of the questions on steam plant we cannot answer.

Mr. Mayer: Their main reason for rejecting other site was water was not available. Mr. Cameron's comments he said there were two sites.

Mr. Ishikawa: Not to prolong the discussions but your comments to the diesel aspect would be relevant and proper but getting into the steam plant as far as cooling water, I think that is a matter that should be discussed there and when.

Mr. Mayer: There are a number of alternative sites on the island where diesel could be put in. If we are not talking about diesel then it would open up all the possibilities.

Mr. Less Skillings: I read a good portion of this plan and I think Dick's points are well taken so I ask the Commission as Mr. Bose has already brought up, you gentlemen are faced with the condition that the applicant is asking for 44.5 acres. What is he going to do. If we are talking about diesel maybe they really need additional 5 acres. This impact analysis is clearly written for steam although it doesn't talk directly about steam. It talks simultaneously about two things. It talks about good aspect for this site for diesel and bad aspect of the other site for steam. Gentlemen that is comparing apples and oranges. You can't restrict comments on steam.. the reason for it being turned down...as they pointed out, because they don't have water. Applicant can only project by their own admission, Chapter 3, page 1, rapid changes in the world energy. Fuel oil situation will have further low growth rate for Maui as well as technical advances of equipment toward the addition of specific generation equipment more than a few years in advance. They can't tell us whats going on but they can ask for 39.5 acres. It is your responsibility, as I see it and as it was the responsibility of the Planning Commission that preceded you in 1971. This technique was tried at that time and that Commission allowed only 5 acres because at that time that was all they were prepared to produce. Again, we are faced with a lack of information and yet you are asked to decide on a 1999 plant, with information only to 1980. You are blinding it for the next 20 years. It is very poor planning if you accept this. Some other things that this plan does which I would like to point out to the Commission. There is a very definite commitment to growth.....
Don Graydon, Maui Sun, May 14, 1975. I am not picking on the Maui Sun but Don Graydon ...reports on people's dreams. George Mikan had a dream. But we can plan for George Mikan's dream when it went on the auction block April 1 some 11½ million that he was sort of heart broken. So, we are talking about Seibu's vision of the world. There doesn't seem to be any analysis in here of whether there are any possibility that this vision or possibility will take place. We are going to build to be prepared for dreams. Questionable planning.

Mr. Ota: Could you tell the speaker to come to the point because we are not in his class at Baldwin High School right now.

Mr. Skillings: The other way of seeing this and the criteria which is given in Chapter 4, page 3 of ...that is a steam criteria it says so. If you figure back from the projected day of 1999 they are planning on having somewhere to 198,000 people and capability of producing 240 MW of power. That would mean our population would have to triple in the next 25 years. Is that reasonable? Thank you gentlemen.

Mr. Bob Bruce: I was Chairman of the Conservation Council in the 1971 meeting and it was the most lively meeting. I just would like to pose a few questions. First they mentioned the foundation of Ukumehame. I would like to know where this site was picked. Just have a few questions. My main concern on this thing at this stage is for other alternate energy sources being spelled by Maui Electric. For instance they were drilling on the island of Hawaii....To me there are all kinds of other possibilities. In 1933 I was Civil Engineer for Wailuku Sugar Company. At that time I received from the Federal Government questionnaire about wind power. Maalaea Bay was one of them and a good possibility for wind power generation. You probably saw this in the Advertiser, this new kind of wind mill developed. It looks like an egg beater. So there is wind power, geothermo power possibility on this island. There is also hydro electric power sites. I am supposed to be retired but we did investigate some of them. They weren't economically feasible, but cost of fuel today I think they should be reviewed and maybe economic feasibility that brings to mind another thing. Last year there was an advertisement several publications...was picture of past with details running with the present....either the price will be so astronomical or won't be diesel oil available. To me this is the Planning Commission... we should consider this long range planning...also power developed between different temperature of the earth. I don't know if any of the stories have been incorporated in this because I haven't read the report.

Mr. David Blean: I would like to ask Mr. Murdoch - Do you need water front land for diesel generation. Is it natural for shoreline area for the plant expansion you are proposing now.

Mr. Murdoch: Diesel can be located anywhere...but I made a point that we have an existing plant and to establish a new area would require duplication of expensive equipment.

Mr. Blean: If we in the future, we investigate nuclear generation would that be suitable as far as water needed for cooling?

Mr. Murdoch: Hawaiian Electric has...and Mr. Bell could give you a better answer.

Mr. Bell: I am quite sure that this site has not been considered as a nuclear site. Would not qualify for any...

Mr. Blean: You haven't mentioned any adverse impact on existing plant ... What if you go to the next expansion then you discover an adverse impact. What then? Do you have to stop? Do you plan to stop? Would you continue to expand?

Mr. Bell: There is one fundamental point that is we can't build any plant that doesn't meet all environmental laws and that goes for these four units through 1980. If we can't qualify environmentally, we can't operate. If we find as we get into the next expansion of the plant there is no way we can qualify in the next increment environmentally, we can't break the law. We are expected to qualify on any further increases with the existing environmental laws. We can't break the law.

Mr. Blean: What I think this hearing as presented 1) for the immediate expansion they do not need to use this water front area. If they converted to steam they will have to find another site. If they convert to nuclear

they will need new site. If there is an adverse effect they will have to find new site. As far as planning, looking into the future, they will have to find a new site...now is the time to require them to do that.

Mr. Ota: Would the electric company be able to live with a SUP for minimum acreage yet required to generate enough power up till 1980 strictly on diesel generating plant. If so, then perhaps you arrange with the Department and staff to work this out. In spite of what I said to Mr. Skillings I think they brought out some pertinent points...generally in diesel oil could be located anywhere else if according to the application....
I would assume it is a steam plant. If we can confine this special use permit for a limited acreage to produce this capacity up till 1980.

Mr. Murdoch: We feel strongly that we should acquire the full amount to protect it from encroachment. You asked a question. Could we live with the additional 15 acres. Yes we could live with it for a time being and hope that the future will take care of itself. I have been with Maui Electric for almost 40 years, so I am not worried about it.

Mr. Bruce questioned the location of the site studied for Ukumehame.

Hearing no further testimony the Chair closed the public hearing.

JEAN A. UEMAE
Private Secretary

TESTIMONY PREPARED FOR MAUI COUNTY PLANNING COMMISSION

MAY 5, 1976

My name is Colin C. Murdoch, I am President of Maui Electric Company. This testimony is given in support of the Maui Electric request for a Special Use Permit and a Special Management Area Permit both of which are required before needed expansion can be undertaken at the site of the Company's generating station located near Maalaea Bay. Specifically, this testimony supports the Maui Electric Company request for a Special Use Permit which will permit electrical generation development, as required, on an additional 39.5 acres adjoining the current 5 acre site of the Maalaea Generating Station. Further, since the requested additional land is in the Special Management Area designated by the Interim Coastal Management Rules and Regulations for Maui County, this testimony supports our application for a Special Management Area Permit.

My comments will be directed at the motivating reasons behind our desire to expand the Maalaea Generating facility. Following me will be Tom Sato, Manager of Engineering for Maui Electric who will discuss the nature of the planned future expansion at Maalaea. Richard Bell, Manager of the Environmental Department of Hawaiian Electric will conclude the Maui Electric testimony with a description of the environmental impact of the proposed expansion.

Current facilities of Maui Electric Company can produce about 73 MW: 40 MW by the major facility on Kahului Bay and 33 MW by the existing diesel unit installation at Maalaea Bay. In addition, MECO has contracts with Pioneer Mill Company and Hawaiian Commercial and Sugar Company for a total of 13.0 MW. These 13 megawatts are not available as spinning reserve on a continuous firm basis but on a standby basis are available in the event of an outage of a MECO generator. The earliest possible termination of these power contracts occurs in 1980 prior to the December peak. Accordingly, good planning must consider that this standby power will not be available at the time of the 1980 peak.

In addition to the required additional 13 MW generating capability, is the need for additional energy capacity. Maui Electric Company estimates that with currently installed capacity it can meet the island's power demands until 1977. After that time, additional capacity will be required, primarily because of the anticipated growth in Maui's main industry, tourism, and the accompanying expansion of service industries and employee housing.

Progressively increasing amounts of energy sold by Maui Electric Company in recent years reflect increases in hotel rooms, condominiums and business activity. Over the period 1969 through 1975 the average annual compound rate of energy consumed on Maui increased about 13 percent. This rate, incidentally is more than three times the rate of growth experienced by the electrical systems on Oahu and Hawaii.

Further, a projection of future requirements shows more than a twofold increase in sales every 6 years. Although the needed power is not expected to increase at this rate indefinitely, and a decreasing rate of increase that is currently being experienced makes long-term projections difficult, it is apparent that the present capacity of Maui Electric is insufficient to meet requirements expected in the near future.

To meet the growing demand of an expanding economy by supplying an adequate amount of reliable energy whenever and wherever it is required, Maui Electric Company estimates that a minimum of 30 MW of additional capacity will be required by 1980. Maui Electric is the sole electric utility on the island, and obvious geographical constraints prevent the purchase and transport of power from neighboring electric utilities. Consequently, the Maui Electric Company must expand its generating capacity to provide this increase in power demand.

The generation expansion plan that we propose to follow adds new generation each year from 1977 through 1980. This increase in generating capacity will bring the total Maui Electric capacity to about 112 megawatts by the end of 1980. The planned installed capacity in 1980 is thus sufficient for the system to suffer the loss of the largest unit during the anticipated 1980 peak with a margin of capacity remaining of 4.5 megawatts. Thus the proposed plant additions are sufficient to meet the anticipated peak with a high standard of reliability.

We can say with certainty, that by 1977 we must be able to provide more electrical energy for Maui. However, a number of factors are present which complicate the solution of the specific type of energy source we must install. This fact in turn makes much more complex the location of the new source and even the size of the site required at the new location.

I will now ask Tom Sato to describe the process that led us to the site which is at the heart of this hearing.

TESTIMONY PREPARED FOR MAUI COUNTY PLANNING COMMISSION

MAY 5, 1976

My name is Tom Sato, I am Manager of Engineering of the Maui Electric Company, Ltd.

Recognizing a future need for new generating capacity is only part of the solution to the overall problem facing a growing electric utility in the late seventies. A particularly difficult part of the solution is the selection and location of the most economical source of the required additional generating capacity. The recent rise in oil prices with which we are all familiar--a rise that cannot be related easily to the demand for oil coupled with increases in costs of new generation facilities has made the proper selection of new energy sources a very complex task.

We have examined the costs and benefits of those types of generation which are now technologically proven and available. We have considered additions consisting of combined-cycle units, combustion turbine units, and diesel units. The plan which we have adopted adds diesel units and a combustion turbine in the years through 1980. This pattern of generation additions results in the lowest cost to the consumers.

Plans for additional energy sources must constantly be

reviewed and re-evaluated as fuel prices and equipment costs change and as improvements in technology are made. Flexibility in generation planning and additions is an absolute requirement if the consumers are to be provided with energy at the lowest possible cost. Because site requirements differ for different types of generation, this need for flexibility must be reflected in the site selected. In order to provide the flexibility needed to make the correct choice for future generation possible, the site for current and future expansion must not be such as to rule out any reasonable form of future expansion. The proposed Maalaea expansion possesses the requisite flexibility both in size and location. Further, we have located no other site on Maui that has the requisite flexibility as far as future generation is concerned.

The question of alternative sites deserves some amplification because it is complicated by the fact that future energy sources dictate the suitability of current sites. Without belaboring the point, alternative sites to Maalaea which can be considered suitable must be capable of handling any reasonable future combination of energy sources -- not just diesel units and combustion turbines. Thus, while diesels and combustion turbines don't require large quantities of water, future energy sources may require cooling water. Accordingly, a suitable alternative site must have water in appropriate quantities available.

We are not aware, from our extensive studies spreading over the past five years, of any condition that would preclude future location at Maalaea of any type of electrical generation

which we can reasonably foresee. Also, we are aware of no other site on Maui about which this statement can be made. That is, if the proposed site were smaller, or located elsewhere, it is likely that we could not make the optimum choice of future generation for Maui.

Finally, the site at Maalaea has received approval in the past from the Maui Planning Department, Planning Commission, and Land Use Commission for use as a generating station. That is, our proposal doesn't introduce an electrical generating station into an area completely foreign to such an activity. Further, the Maalaea site is compatible with the general features of the Maui 701 plan. In addition, transmission lines already connect the site to the overall electrical system. For this reason, and an important reason during this period of high energy costs, the Maalaea site is the most economical site for the location of additional new energy sources on Maui.

The Maalaea Generating Station and the proposed expansion of it all lie in the Special Management Area specified by the Maui Interim Coastal Zone Regulation. It has been pointed out to us that while the current regulations don't preclude the proposed expansion, the final regulations to be promulgated in the next year or two may prohibit further expansion beyond the four units under discussion. We recognize this as a possibility. However, the next least costly site for the four units, a site near the intersection of Hana Highway and Dairy Road, would cost a total of more than $1 million more, not including

costs of the land, or increased costs of operation. In view of this increased cost and the lack of certainty that future expansion at Maalaea would be prohibited by the final Coastal Zone ordinance, the best choice is the site proposed.

Thus, to meet the long-term requirements for power on Maui, MECO proposes to expand the Maalaea Bay generating facility. The proposed expansion will be accomplished in increments, each increment beyond those which I will describe, will be covered, as required, by additional environmental reports.

As we have noted, the combination of rapid changes in the world energy (fuel oil) situation and technological advances in equipment to produce electricity make impractical the planning for the addition of specific electric generating equipment more than a few years in advance. For this reason, the increment that is the subject of this testimony includes only three medium-speed diesel units plus one combustion turbine unit. Under the proposed expansion plan at Maalaea, the number of diesel units would be increased to ten with the addition of the three medium-speed units by October 1979; the one combustion turbine unit will be added in December 1980. The proposed expansion plan that I will now describe has assumed that the fuel oil to be burned is a distillate of the type currently used at Maalaea. However, we are carefully investigating the feasibility of using a less expensive, heavier oil of higher sulfur content. Should we

find that this was a technically and economically viable concept we would explore the environmental implications. However, based on the air quality studies done to date, it appears that no significant modifications in stack heights or ducting would be required if the heavier fuel were used.

The two new 6.16 MW diesel units (Units 8 and 9) will be housed in an extension of the existing diesel facility building that is constructed of concrete and masonry materials. The overall building dimensions for Units 4 through 9 will be approximately 175 feet long by 80 feet wide by 25 feet high. The existing building housing diesels Units 4 through 7 has a reinforced concrete floor, concrete foundations, concrete block walls and a ribbed aluminum roof. There are no permanent openings except those required for ventilation. Diesel intakes are located vertically below the diesel exhausts at a distance of about 4 feet above grade level. The exhausts are located near the top of the building.

If required, the facility will have six 70-foot-high stacks. One stack will exhaust the combined outputs of Units 1, 2 and 3, and five other stacks will exhaust Units 4 and 5, Units 6 and 7, Units 8 and 9, Unit 10 and Unit 11 and the combustion turbine. This stack configuration was dictated by air quality considerations that will be discussed later.

A new diesel plant building will be constructed to house the first 9.68MW diesel unit (Unit 10). This building will be designed to accommodate four diesel units.

The initial building which will house Units 10 and 11 will be approximately 80 feet long by 80 feet wide by 30 feet high, and construction will be of concrete and masonry structure similar to the existing diesel unit building.

One additional diesel oil storage tank, 70 feet in diameter and 38 feet high with a storage capacity of 25,000 barrels, will be constructed. This tank together with the two existing 8060-barrel storage tanks will be encircled in a common concrete berm. The berm will be high enough to contain 110 percent of the oil storage capacity.

Fuel oil will be transported to the plant by tank trucks from the fuel unloading facility at Kahului.

The existing 69kv switchyard will be expanded to the east for the required switchyard equipment. Two new transformers will be added (one for Unit 10 and one for the combustion turbine) and located just east of the existing transformers.

Mr. Bell will now discuss the environmental aspects of the proposed development.

TESTIMONY PREPARED FOR MAUI COUNTY PLANNING COMMISSION

MAY 5, 1976

My name is Richard E. Bell, I am Manager of the Environmental Department of Hawaiian Electric Company. My department, aided by consultants, has the responsibility for the environmental activities of Hawaiian Electric and its subsidiaries.

Since approval by the Land Use Commission in July, 1971 of the Special Use Permit for the current Maalaea Generating Station site, Maui Electric has expended more than $200,000 to investigate the nature of the environmental impact of electrical generation at Maalaea. To date, no consultant or scientist who participated in this effort has found cause to believe that the site is not environmentally suited for the purpose we propose. The studies upon which this statement is based cover every aspect of environmental impact, were conducted by local as well as mainland experts, and are part of the public record, having been provided to the Maui County Planning Department. I will summarize the nature and the extent of environmental impact as it has been identified in the various studies. Since the proposed project under discussion consists of a generating station comprised of 10 diesel electric generators and 1 combustion turbine, I will restrict my comments to the anticipated impact of this facility although some of the studies mentioned went far beyond the proposed plant configuration.

The proposed plant will neither use nor discharge water into the waters of Maalaea Bay. Thus, the project is expected to have no adverse effect on the marine environment.

Site clearance and plant construction are not expected to affect the survival of any native species of plants or animals. Neither of the two native plants found on the site (kiawe trees and pickelweed) is rare, and clearing will endanger neither species, thus no rare or endangered species of plants will be affected. Some nesting areas of the black-crowned night heron will be disrupted. Although as many as eighty of these birds have been reported in the Kealia area, the remaining 180 acres of the kiawe forest should provide sufficient habitat for birds whose nesting areas are affected. No vegetation of value to the coot or stilt would be adversely affected.

Noise created during construction or operation of the proposed plant should have no adverse effects on the birds living around Kealia Pond. Further, at meetings with representatives of the U. S. Department of the Interior, it has been indicated that power plant operations will not adversely affect the use of Kealia Pond as a federal bird sanctuary.

Gaseous and liquid effluents from the plant will not cause adverse impacts to plants or animals. Limits imposed by State regulations are well below those known to affect plants that are highly sensitive to gaseous effluents.

Mammals at the site are considered nuisances, but while their survival is not of concern, it is not expected to be influenced by plant construction or operation.

At the Public Hearing in June of 1971 the Maui Planning Director recommended that additional study be given to the proper function of Kealia Pond. While this is clearly beyond the

scope of concern of Maui Electric, the proposed design has been developed to minimize impact on the pond. In the past, during periods of peak flow, Pohakea Gulch has overflowed its banks and discharged large volumes of water into the cane fields. To ensure that the water does not flood the Maalaea Bay site, it will be necessary to build berms and channels between the cane fields and the plant to drain the water back into the main channel. Flood protection will be accomplished as required for site development by channeling the gulch through the site, including the kiawe forest, to the eastern boundary or, alternatively, south according to the Maui Master Drainage Plan. This will result in a slight increase in the water and silt load to Kealia floodplain and Kealia Pond over that presently occurring.

No significant ecological damage is expected, as a consequence of the transmission lines serving the project and the principal impact from transmission line construction will be related to aesthetics which will be discussed later. Two new transmission lines will be required. They will be added to the existing poles in the transmission line corridor which currently extends about 2.5 miles north from the project site to the Kahului-Lahaina line.

The diesel units and combustion turbine will burn fuel

of no more than .5% sulfur content. However, even with this low sulfur content, there will be some impact on the air quality in the area.

Key environmental concerns associated with air quality are based on adherence to the state and federal air quality requirements for NO_2, SO_2 and particulate matter. The calculated annual average concentrations based on maximum expected operating conditions for 1980 are 42 $\mu g/m^3$ for NO_2, 7 $\mu g/m^3$ for SO_2 and 0.6 $\mu g/m^3$ for particulate matter. These values are only 60 percent, 35 percent and 1.1 percent of state standards for NO_2, SO_2 and particulate matter, respectively.

Similar comparisons can be made for the short-term ($\leq$ 24-hour) concentrations. Based on full capacity operation (i.e., all units operating at full power), the maximum average 24-hour and 3-hour concentrations are below maximum allowable values.

From the foregoing mathematical analysis it appears that the plant stack design discussed would meet all short- and long-term regulatory limits relating to air quality.

All of the above calculations were based on a 70-foot stack height with ducting. The ducting arrangement provides for six stacks on the eleven units, as follows: (1) the three 2.75 MW units are ducted to one stack, (2) each pair of the six 6.16 MW units is ducted to a stack (three stacks total), (3) the 9.68 MW unit is exhausted through an individual stack

and (4) the combustion turbine unit is exhausted through a sixth stack. Following the planned plant construction we propose to monitor air quality in the vicinity. If it is the judgment of regulatory authorities, based on the monitoring data, that the 70-foot stack arrangement is required to meet State air quality standards it will be provided.

No major noise impacts on people or wildlife are expected to result from plant construction or operation. Under normal conditions, the noise associated with plant operation (61 dBA) or construction (71 dBA) is expected to be the dominant source of sound on the beach at a point (1,400 feet) closest to the plant site. These levels can be compared with residual noise caused by the wind and surf, which typically is in the range of 50 to 60 dBA. Noise levels caused by plant operation at other locations around Maalaea Bay are calculated to be considerably less (42 to 49 dBA), comparable to sound levels in residential areas in a small town, and are not expected to be noticeable in the town of Maalaea and in Kihei Junction during the daytime or to exceed the normal noise levels produced by nearby boats or vehicular traffic. On Maalaea Bay, the expected noise levels caused by operation and construction are 49 dBA, and 59 dBA, respectively. During periods with very quiet conditions on the bay, it is possible that the plant operating noise may be noticeable. For comparison purposes, the sound intensity of normal conversations is about 60 dBA.

The calculated noise levels in the sugarcane field 1,400 feet north of the plant of 61 dBA and 71 dBA for plant operation and construction, respectively, are considerably

less than the maximum levels of 90 dBA set by the Occupational Safety and Health Act (OSHA) for an 8-hour workday. The principal effect of these noise levels on nearby agricultural personnel should be sufficient only to make communication more difficult.

Calculated noise levels at Kealia Pond caused by plant operation and construction are 54 dBA and 64 dBA, respectively. Although the effect of noise on birds is of concern, birds at Kealia Pond are not expected to be affected. This is the conclusion of Dr. Andrew J. Berger, Professor of Zoology at the University of Hawaii, and an acknowledged expert on Hawaiian birds, who was retained by Maui Electric to do a special study of birds at Kealia Pond.

Developing a consensus about aesthetic impact, how something looks, is difficult if not impossible. Further, regardless of how bad something actually looks, if it is only seen by a few people, its aesthetic impact is much less than is the impact of something that may look nicer but is seen by everyone on Maui. That is to say, location as well as design are important elements in an aesthetic evaluation.

A quantitative evaluation of the visibility of the Maalaea Bay Generating Facility showed that the expanded plant will have a much lower visibility to both automobile travelers and nearby residents than for example does the Puunene Sugar Mill that is already in existence. The formu-

lation used in evaluating visibility includes two factors, man-hours viewed and solid angle subtended, combined to produce an Aesthetic Guide Index (AGI). Maalaea Bay Generating Facility was found in this evaluation to have a visibility five to six times lower than that of the Puunene Sugar Mill. However, because of the sensitive location of the Maalaea Bay site relative to present and planned tourist areas, a major effort is planned for reducing adverse visual impact. Mitigating measures for visual impact include: (1) maintaining natural surroundings, (2) painting buildings and structures in a color chosen to blend with natural surroundings, (3) landscaping where necessary, (4) designing stacks for minimum height consistent with maintaining air quality standards and (5) including exhaust stack ducting in plant design wherever possible to reduce the number and the height of stacks. The overall design features noted above will significantly reduce the visual impact such that, from most locations, the plant will have low visibility in relation to surrounding landscape. A number of Maui residents have reported that they are virtually unaware of the current Maalaea Generating Station. It is not our intention that our actions will change this condition.

I have given the foregoing brief summary of the environmental impact which is documented in detail in the documentation "Environmental Impact Analyses for the Proposed Diesel-Combustion Turbine Generation Facility," dated September, 1975.

Based on the content of this report and supporting material, it is my judgment that the proposed plant will operate well within all applicable environmental laws and regulations. Further, when balanced against the documented need for and known benefits of adequate and reliable electrical energy, the impact of the plant will be such that it can be absorbed by the environment in a manner compatible with the long- and short-term interests of the people of Maui.

Public Hearing - Special Use Permit for Keallia Pond Generating Station Expansion by Maui Electric Company, Maui Planning Commission, May 5, 1976.

My name is John Bose. I am president of the Maui Chapter, Conservation Council for Hawaii and a resident of Haiku.

In 1971 the Conservation Council was one of the leaders of the very wide opposition to the first installation of generating units at Kealia Pond. One of the major points in our opposition was the fact that the area is a flood plain which is at times called upon by nature to handle literally billions of gallons of floodwater.

In 1972 the County of Maui adopted a Flood Plain and Tsunami Inundation Area Ordinance, in part to qualify for Federal Flood Insurance. The Westinghouse Environmental Study, which Maui Electric has used as support for their present request, states very plainly that the Kealia site is within a flood plain. If so, it appears that this use is not permitted.

I hereby request that the Planning Commission obtain in writing a clearance from the following agencies with respect to construction within a flood plain:

The National Flood Insurance Section of the Department of Housing and Urban Development in Washington;

The Public Works Department of the County of Maui; and

The County Attorney of the County of Maui with respect to the above mentioned ordinance.

Without specific clearance from these agencies, the Planning Commission and the County of Maui would have to assume liability for any damages either to the Maui ?Electric facility or to adjacent areas upon which floodwaters are diverted by flood protection measures taken by the company.

Pages. 47 and 48 of the Drainage Master Plan for the County of Maui, adopted in 1971, describes the flood-plain function of this area.

EXISTING LANDSCAPED AREA

STACK (20'AGL) TYP.

EXISTING BOUNDARY

LAND MANAGE
EXTENDS TO THIS

STACK (33'AGL) TYP.

EXISTING CHAIN LINK FENCE

EXISTING TRUCK TURN AROUND

D.O. TANKS

DIESEL UNITS #1 #2 #3

69 KV SWITCHING STATION (45'AGL)

69 KV SWITCHING STATION (45'AGL)

DIESEL UNITS #4 #5 #6 #7 #8 #9

BLDG (25'AGL)

TRANSFORMERS

8060 BBL

8060 BBL

36'AGL

GRD. EL. 9'-6"

GRD. EL. 15'-0"

RADIATORS

25,000 BBL

36'AGL

160 FT.

Approx. 2.5 Acres

DIESEL UNIT #10

BLDG. (30'AGL)

STACK (38'AGL)

COMBUSTION TURBINE

STACK (30'AGL)

RADIATOR

700 FT.

BOUNDARY ADDED BY MAUI PLANNING DEPARTMENT

OPEN CULVERT

FUTURE UNITS

OPEN CULVERT ALTERNATE ROUT

EXISTING LANDSCAPED AREA

STACK (20' AGL) TYP.

EXISTING BOUNDARY

LAND MANAGE
EXTENDS TO THIS

STACK (33' AGL) TYP.

EXISTING CHAIN LINK FENCE

EXISTING TRUCK TURN AROUND

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STACK (38' AGL)

COMBUSTION TURBINE

RADIATOR

STACK (30' AGL)

160 FT.

700 FT.

BOUNDARY ADDED BY MAUI PLANNING DEPT

OPEN CULVERT

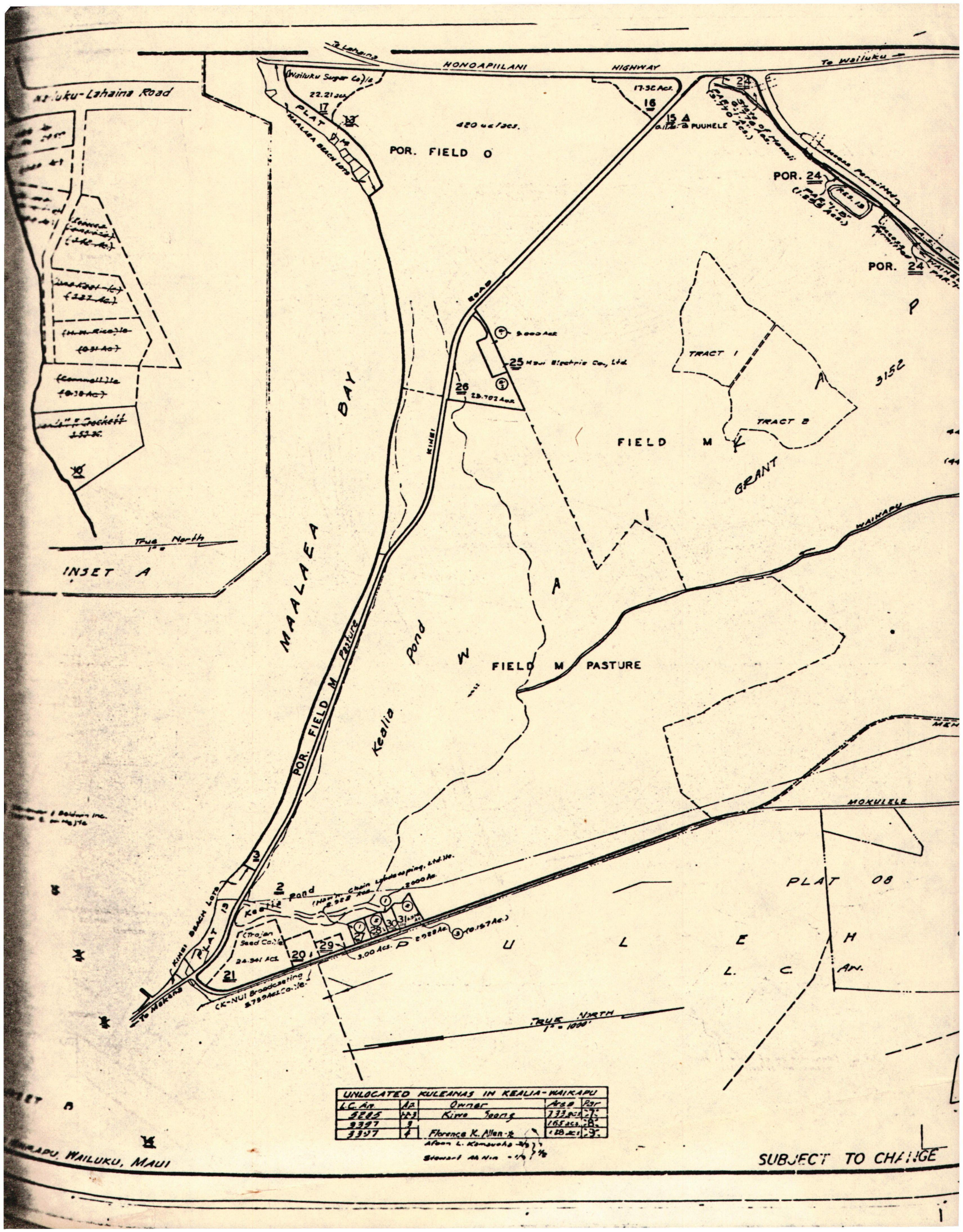
OPEN CULVERT ALTERNATE ROUT

KIHEI ROAD

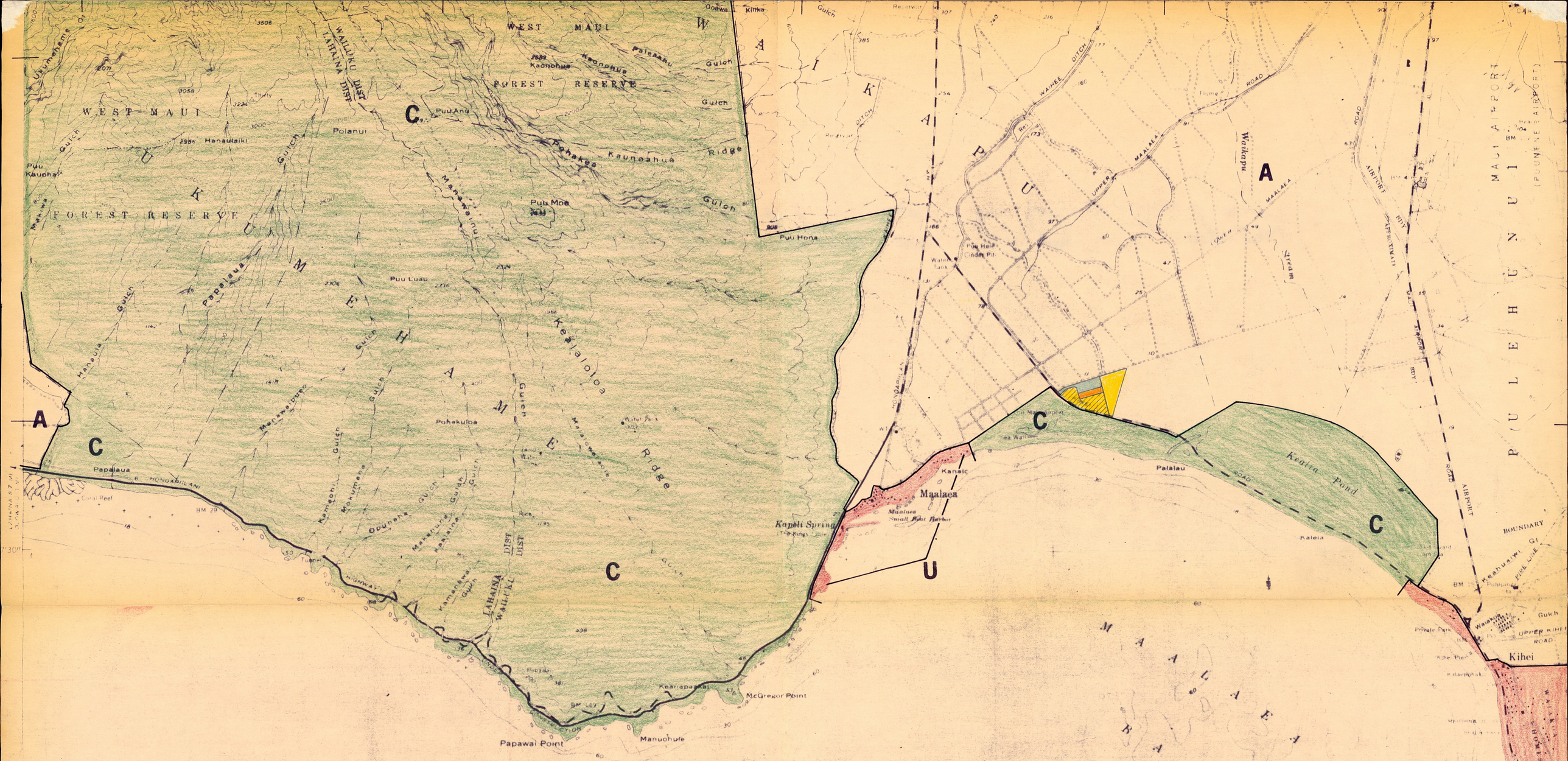
APPROXIMATE NORTH

SP76-243
MAUI ELECTRIC CO., LTD.

TMK 3-8-05:26



UNLOCATED KULEANAS IN KEALIA-WAIKAPU				
L.C. An.	Ap.	Owner	Area	Par
5285	1-2-3	Kiwo Soong	733 acs.	7
3397	3		165 acs.	8
3397	4	Florence K. Allen - ½	128 acs.	9
		Afoon L. Kamauoha - 2/3		
		Stewart Ah Nin - 1/3		


WEST MAUI
FOREST RESERVE
KAUPO
KAMAOLE
KAPUAIKINI
Puu Kaupha
Hanaulaiki
Polanui
Puu Anu
Puu Moe
Puu Hona
Puu Luau
Pohakuloa
Papalaua
Papalaua Gulch
Hanaula Gulch
Kealaloloa Ridge
Kauneahua Ridge
Kaonohua
Paleaaau Gulch
Kahakea
Manawainui Gulch
Waiakoa Gulch
Kamaomao Gulch
Opuneha Gulch
Kanaloa Gulch
Kamaiwa Gulch
Kanahena Gulch
Waiakoa Gulch
Kamaomao
Manawainui
Kealaloloa
Pohakuloa
Waiakoa
Kanahena
Kamaiwa
Opuneha
Makumaeha
Kamaomao
Papalaua
Hanaula
Waiakoa
Manawainui
Kealaloloa
Kauneahua
Kahakea
Paleaaau
Kaonohua
Onawa
Kimka
Ukumehame Gulch
Waiuku Gulch
Lahaina Wailuku Dist
Lahaina Wailuku Dist
Makawa
Thirty
Gulch
Ridge
Water Tank
Water Tank
Water Tank
Tunnel
Tunnel
Tunnel

3 8 05

SP76-243 MAUI ELECTRIC CO., LTD.

Wailuku-Lahaina Road

L.C. Aw. 2959

MAALAEA BAY

MAALAEA

INSET A

True North

To Lahaina

HONOAPIILANI HIGHWAY

To Wailuku

(Wailuku Sugar Co.)le

22.21 acs.

PLAT 17

MAALAEA BEACH LOTS

POR. FIELD O

County of Maui 28,320 sf

419.777 Acs.

ROAD

5.000 Acs.

25 Maui Electric Co., Ltd.

28 25.782 Acs.

KIHEI

17.32 Ac.

PUUHELE

STATE OF HAWAII (FAP 0-37(6) (1.270 Acs.)

ZONE 3 SEC. 6

RESERVOIR

"WAIKAPU"

POR. 24

(FAP "I-Ed" (1.295 Acs.)

Access Permitted

Reg. 19

Access Permitted

KEPAHEE FAP 1-C"(1.711 Acs.)

Access Permitted

POR. 24

318.530 Acs.

23 FIELD L PASTURE

KUIHELANI HIGHWAY

Access permitted

Access Permitted

DITCH

Access Permitted

Access permitted for Agricultural purposes only

Access permitted for Agricultural purposes only

4' ESMT. - 0" to 10' C.M. (15 Ft. Wid.)

PLAT 07

TRACT 1

TRACT 2

FIELD M

GRANT 3152

4454.393 Acs.

(4454.836 Acs.)

STREAM

WAIKAPU

FIELD L

To Kahului Airport

19 (Maui Hardwoods, Inc.) le

22 (Maui Hardwoods, Inc.) (Honolulu Wood Treating Co., Ltd.) Sub-le.

SOUTH BASE

WAIKO ROAD

Field 06

PLAT

Field H

Field M PASTURE

Kealia Pond

POR. FIELD M Pasture

18 OUTER MARKER SITE 0.07 ac.

MEHAMEHA LOOP

FIELD K-M

MOKULELE HIGHWAY

28 Alexander & Baldwin Inc. (Walter C. Witte)-le

KIHEI BEACH LOTS

PLAT 13

2 Pond (Hawn Chain Landscaping, Ltd)le

2.000 Acs.

Kealia

Hawaiian Pelagic Limestone, Inc.)le

24.341 Acs.

20 29 27 28 30 31

3.00 Acs. (2) 2.028 Ac. (3) 10.157 Ac.)

21

(Ceanui Broadcasting 8.739 Acs. Co.)le

To Makena

PLAT 08

L. C. AN. 5230

U L E H U N U 1

388 Right 1.2 Acs.±

(388 R (1.2 Ac.±) 10.50 Acs. 12.0 Acs.)

22 (7.00 Acs.)

Ditch Esmt.

FIELD K

Field 14

PLAT 04

PLAT 03

HAIKU DITCH

494.01 Acs.

UNLOCATED KUCEANAS IN KEALIA-WAIKAPU				
L.C. Aw.	Ap.	Owner	Area	Par.
5245	1-2-3	Kiwa Joong	7.33 acs.	7.
3337	3		1.65 acs.	8.
3337	4	Florence K. Allen-½	1.28 acs.	9.
		Afoon L. Kamauoha-3/8		
		Stenard Ah Nin-1/8		

INSET B

POR. WAIKAPU, WAILUKU, MAUI

SUBJECT TO CHANGE

JUN 28 1978

NOTICE: Owner's, lessee's and vendee's names recorded on this tax map print may/not be current. Administrative Directive 24-68 (Rev.) latest November 21, 1968

Note: All parcels owned by Alexander & Baldwin, Inc. unless otherwise noted.

Dropped par: 12, 4, 5, 6, 10, 11, 13, 14, 7, 8, 9.

TAXATION MAPS BUREAU
TERRITORY OF HAWAII
TAX MAP

SECOND DIVISION		
ZONE	SEC.	PLAT
3	8	05

CONTAINING PARCELS

SCALE: 1in.=AS NOTED

7443

Dwg. No. 3E8
By: H.N. May-'78
Source: H.C.&S. Co. Ltd. (Eng. Plan. Dept.)

PRINTED