Of Counsel:
ASHFORD & WRISTON
A LIMITED LIABILITY LAW PARTNERSHIP

BENJAMIN A. KUDO 2262-0
SARAH M. SIMMONS 10228-0
999 Bishop Street, Suite 1400
Honolulu, Hawaii 96813
Telephone: (808) 539-0400

Attorneys for Applicant
WAIPIO PV, LLC

2017 JUN 20 PM 2:04
DEPT OF PLANNING AND PERMITTING
CITY & COUNTY OF HONOLULU

BEFORE THE PLANNING COMMISSION
OF THE CITY AND COUNTY OF HONOLULU
STATE OF HAWAII

In the Matter of the Application of WAIPIO PV, LLC For a New Special Use Permit to Allow Development of a 47-megawatt photovoltaic (PV) Energy Generation Facility and Accessory Uses and Structures on Lands Rated Class B by the Land Study Bureau, Waipio, Ewa, Oahu, Hawai'i Tax Map Key No.: (1) 9-5-003:017	FILE NO. 2014/SUP-3(RY) APPLICANT'S FIRST SUPPLEMENTAL LIST OF EXHIBITS; EXHIBIT "12"; CERTIFICATE OF SERVICE

APPLICANT'S FIRST SUPPLEMENTAL LIST OF EXHIBITS

Applicant WAIPIO PV, LLC ("Waipio PV" or "Applicant"), by and through its attorneys Ashford & Wriston, LLLP, hereby submits its First Supplemental List of Exhibits; Exhibit "12", in support of the State Special Use Permit modification prepared and submitted and to be heard by the Planning Commission of the City and County of Honolulu on June 21, 2017. Exhibit "12" contains corrected page 3 of the Application for Modification of Special Use Permit Materials, dated May 5, 2017, previously submitted as Applicant's Exhibit "5". Hereinafter, Exhibit "12" supersedes Exhibit "5".

These exhibits may be used in support of Applicant's request to modify the existing State Special Use Permit. Applicant reserves all rights to identify additional exhibits, and hereby incorporates all previous submittals and filings in this matter.

LIST OF EXHIBITS

Exhibit No.	DESCRIPTION
1	Resume of Aarty Joshi
2	NRG Energy Financial Summary
3	Resume of Wren Wescoatt
4	Resume of Jeff Overton
5	Application for Modification of Special Use Permit Materials, dated May 5, 2017
6	Information Addendum to Application for Modification of Special Use Permit Materials, dated May 10, 2017
7	Aerial Map
8	Overall Site Plan
9	Project Plan Overlay
10	Letter from Tin Roof Ranch, dated June 16, 2017
11	Letter from NRG Energy, dated June 16, 2017
12	Corrected Application for Modification of Special Use Permit Materials, dated May 5, 2017

DATED: Honolulu, Hawaii, June 20, 2017.

BENJAMIN A. KUDO
SARAH M. SIMMONS
Attorneys for Applicant
WAIPIO PV, LLC

May 5, 2017

Ms. Kathy Sokugawa, Acting Director
Department of Planning and Permitting
City and County of Honolulu
650 S. King Street, 7th Floor
Honolulu, HI 96813

Re: Modification of Waipio Solar Project (2014/SUP-3; SP15-405)

Dear Acting Director Sokugawa:

On behalf of Waipio PV, LLC ("Permittee"), we are submitting a request for modification of the Special Use Permit granted for the Waipio Solar Project (2014/SUP-3; SP15-405) ("Project"), to accommodate certain updates, time extensions, and minor technical changes to the Project. This application explains the planned changes in reference to the existing permit and identifies, for the Department's consideration, suggested revisions to the previous Findings of Fact and Decision and Order. Updated exhibits are provided on the Project which include updated drawings of the Solar Energy Facility ("SEF"). None of the proposed changes are expected to materially affect the potential impacts of the Project as evaluated and described in the existing SUP.

This request for modification includes the following proposed changes:

1. Change of Ownership, Change of Property Owner

In March of 2015, the Permittee's ultimate parent company, SunEdison filed for bankruptcy. NRG Renew LLC ("NRG") purchased three of the subsidiary companies that were developing solar projects on Oahu: Waipio PV, LLC, Kawailoa Solar, LLC and Lanikuhana Solar, LLC, through a court-approved acquisition in October 2016. The Permittee for this project remains Waipio PV, LLC, though it is now owned by NRG. Additionally, the property owner of the project site, Waipio Land Holdings LLC was also acquired in the transaction. Permittee provided notice of these changes in ownership in an Annual Compliance Report, which was submitted in December 2016 to DPP with copies to the State Land Use Commission and State Office of Planning. These changes in ownership will not alter the Project but may require updates to the Findings of Fact to document this change in ownership.

2. Extension of Time to Establish Project, Term of Permit

Previously, the Project had executed a Power Purchase Agreement ("PPA") with Hawaiian Electric Company ("HECO") which was approved by the Public Utilities Commission ("PUC") and started construction in October 2015, with completion scheduled in late 2016. The SUP required that the SEF be established no later than March 31, 2017 (2014/SUP-3, condition #2; SP15-405, condition #5), two years

EXHIBIT 12

after the permit approval date. Construction on the Project was halted in February 2015, as a result of the termination of the Power Purchase Agreement ("PPA") by Hawaiian Electric Company ("HECO") and the subsequent bankruptcy of SunEdison, which were circumstances beyond the control of the Permittee.

The Permittee has resumed work on the development of substantially the same Project, but requires the previous deadline to be extended in order to complete the SEF. NRG has re-negotiated the PPA with HECO, which has been filed with the PUC for approval, and will proceed with engineering, permitting and financing, to be followed by construction in 2018 and completion in 2019. To enable NRG to pick up where the previous developer left off, and complete essentially the same Project that was previously approved, and provide the same benefit of Hawaii residents, the Permittee is requesting a modification of the time to establish the SEF, from March 31, 2015 to December 31, 2019. This would require revisions to the Findings of Fact and to condition #2 of the Planning Commission Decision and Order.

The term of the SUP was previously 35 years from the date of approval. Modern solar photovoltaic projects are typically designed to operate for a period of 35 years. In conjunction with this request to extend the time to construct the Project, the Permittee is also seeking to maintain the SUP's term of 35 years, to begin at the approval date of this modification. Since the Project will begin operation 2-3 years later than previously anticipated, updating the start date of the SUP would maintain the same 35-year period that was authorized in the existing permit and would not alter the impacts of the Project. This modification would require revising the Findings of Fact and condition #2 of the Planning Commission Decision and Order.

3. Project Technical Changes

The Permittee also plans to make the following minor technical changes to the design of the Project, none of which materially alter the description or potential impacts that were previously considered.

A. Change in the number of solar panels. Previously, the Project planned to utilize solar panels or "modules" manufactured by SunEdison. Since the bankruptcy of SunEdison, those modules are no longer available or financeable, and the Permittee is evaluating alternative solar modules from other manufacturers and will not make a final determination for several months. Modules vary in size, and while the aggregate energy generated and area covered by the panels would be approximately the same, the number of modules will vary depending on the final module selected. For example, a larger-dimension 370w QCells panel would require approximately 163,000 modules and cover approximately 88 acres to produce the same amount of energy as a smaller 122w First Solar panel which would require 504,000 modules and cover approximately 99 acres. Specifications of these two potential modules types are included in this application. The following table illustrates the number of modules that was planned in 2015 in the previous design and indicates the range in number of modules planned in the proposed modification. While the number of modules would vary depending on the size of the panel selected,the aggregate area covered and potential impacts of the project would be approximately the same as was previously evaluated in 2015.

B. Change from fixed-tilt racks to tracking racks. Previously the Project planned to employ fixed-tilt racks to which modules are mounted and remain static throughout the day. In order to improve productivity of the Project and lower the cost of energy produced, the Permittee is now proposing to mount modules to single-axis tracking racks which pivot horizontally to move the panels throughout the day to track the sun. The proposed tracking equipment is identical to

what was approved and still planned at the Kawailoa Solar Project. Tracking racks do not significantly alter the footprint or the impacts of the Project.

C. Change in perimeter fencing material. Previously, the Solar arrays were to be enclosed by a perimeter fence approximately 4 feet high composed of steel "hog wire" mesh. In order to conform to industry standards for safety, the project now will use steel chain-link mash approximately 6 feet high. Chain-link is commonly used in ground mounted solar projects to restrict access to the medium-voltage electrical equipment. This change in Fencing will improve the safety of the project but will not otherwise alter the footprint or potential impacts previously considered. As specified previously, the perimeter fence will not include barbed wire.

The table below illustrates the project specifications approved in 2015, and as proposed in 2017, including the changes listed above to module count, racks and perimeter fencing:

Waipio Solar Project Specifications

	2015	***2017***	***Net Change***
Gross Capacity	*47 MW*	*47 MW*	*No change*
Module Count	*207,228*	**163,000 to 504,000*	*-56,000 to +208,000 modules*
Covered Area (acres)	*99*	**88-99*	*Decrease up to 11 acres*
Lot Coverage	*9%*	**8-9%*	*Decrease up to 1%*
Permitted Area (acres)	*308.8*	*308.8*	*No change*
Racks	*Fixed*	*Tracking*	*Equipment change*
Max Module Height (ft)	*9.5*	*9.5*	*No change*
Latest Completion Date	*3/31/17*	*12/31/19*	*2.5 years*
Perimeter Fencing	***4' hog-wire***	***6' chain link***	***Up to 2'***

* *Module count, covered area and lot coverage will vary slightly depending on final module selected.*

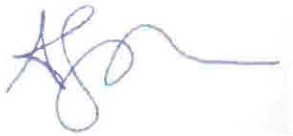
To facilitate the Department's review of this application, the following exhibits are included:

- Exhibit A: DPP Master Application Form
- Exhibit B: Overall Site Layout Drawing (E200)
- Exhibit C: Tracker Detail Drawing (E300)
- Exhibit D: Module Specifications (QCells, First Solar)
- Exhibit E: Letter of Intent for Sheep Grazing
- Exhibit F: Reflectivity Report for Tracking Racks
- Exhibit G: Suggested revisions to the Findings of Fact and Decision and Order

Since the original permit fee that was paid ($15,000) based on a permitted area of 308 acres, the Permittee requests that the permit fee for this modification be based on the additional acreage being requested. This modification contemplates no additional acreage in permit area. Also, given the relatively minor scope of changes, Permittee respectfully requests that this SUP modification be accepted and processed as expeditiously as possible. During prior meetings with the Department of Planning and Permitting, the parties discussed and agreed to an expedited timeline within the parameters of the rules and the simultaneous review of both the Kawailoa Solar and Waipio Solar SUPs by the Planning Commission. NRG must have the modifications approved in order to meet financing deadlines.

For questions or further information about this application, please contact Aarty Joshi at NRG (aarty.joshi@nrg.com; 415-627-4656) or Wren Wescoatt (wren.wescoatt@nrg.com; 808-780-1000).

Best regards,



Aarty Joshi
Senior Manager, Environmental Permitting

CC:
Wren Wescoatt, Director of Project Development
Raymond Young, Planning Division
Ben Kudo, Ashford & Wriston, LLC

Attached Exhibits:

A	DPP Master Application Form
B	Overall Site Plan
C	Tracker Detail Drawing (E300)
D	Module Specifications (QCells, First Solar)
E	Letter of Intent for Sheep Grazing
F	Reflectivity Report for Tracking Racks
G	Suggested Revisions to the Findings of Fact and Decision and Order

EXHIBIT A

DPP MASTER APPLICATION FORM

City and County of Honolulu
DEPARTMENT OF PLANNING AND PERMITTING
650 South King Street, 7th Floor
Honolulu, Hawaii 96813

2017 MAY -8 PM 3:46

DEPT OF PLANNING
CITY & COUNTY OF HONOLULU

PLANNING DIVISION MASTER APPLICATION FORM

Additional data, drawings/plans, and fee requirements are listed on a separate sheet title "Instructions for Filing". *PLEASE ASK FOR THESE INSTRUCTIONS.*

All specified materials described in the "Instructions for Filing" and required fees must accompany this form; incomplete applications will delay processing. You are encouraged to consult with Planning Division staff in completing the application. Please call appropriate phone number given in the "Instructions for Filing".

Please print legibly or type the required information.

SUBMITTED FEE: $ $15,000

PERMIT/APPROVAL REQUESTED (Check one or more as appropriate): (2014/SUP-3; SP15-405)

☐ GENERAL PLAN AMENDMENT	☒ SPECIAL USE PERMIT ____ New _X_ Modify Existing
☐ STATE LAND USE BOUNDARY AMENDMENT (<15 acres) From _____ (District) To _____ (District)	☐ ZONING DISTRICT BOUNDARY ADJUSTMENT, ADMINISTRATIVE
☐ DEVELOPMENT PLAN (DP)/SUSTAINABLE COMMUNITIES PLAN (SCP) AMENDMENT Indicate DP/SCP area _____	☐ ZONE CHANGE From _____ (District) To _____ (District) ☐ AMEND UNILATERAL AGREEMENT TO ORDINANCE NO. _____

☐ PUBLIC INFRASTRUCTURE MAP REVISION (Indicate Map Symbol Request): ☐CY (Corporation Yard) ☐DSP (Desalination Plant) ☐D (Drainage Way (Open Channel) ☐TS (Transit Station) ☐FS (Fire Station) ☐GB (Government Building) ☐GC (Golf Course) ☐P (Parks) ☐PS (Police Station) ☐PKG (Parking Facility/Transit Center) ☐RES (Water Reservoir) ☐SPS (Sewage Pump Station) ☐STP (Sewage Treatment Plant) ☐SW (Solid Waste Facility) ☐RTC (Rapid Transit Corridor) ☐R (Arterial & Collector Roadway) ☐W (Potable Well)

(Project/Parcel specific information should be provided for General Plan and Development Plan amendments only if appropriate.)

TAX MAP KEY(S): 9-5-003:017
STREET ADDRESS/LOCATION OF PROPERTY: 94-1202 Ka Uka Blvd, Waipio, 96797
APPLICATION/SUBJECT AREA *(Acres/sq.ft.)*: 308.8 acres
THE PROPOSED PROJECT IS LOCATED ☐ **INSIDE** ☒ **OUTSIDE THE:**

☐Urban Growth Boundary ☐Community Growth Boundary
☒Urban Community Boundary ☐Rural Community Boundary

OF THE Central Oahu **DEVELOPMENT PLAN/SUSTAINABLE COMMUNITY PLAN**
ZONING DISTRICT(S): AG-1 **STATE LAND USE DISTRICT:** Agriculture

RECORDED FEE OWNER:
Name (& title, if any) Craig Cornelius, President
Organization Waipio Land Holdings LLC
Mailing Address 100 California St., #400, San Francisco, CA 94111
Phone Number 415-627-1646
Signature _____

APPLICANT:
Name Craig Cornelius, President
Organization Waipio PV LLC
Mailing Address 100 California St., #400 San Francisco, CA 94111
Phone Number 415-627-1646
Signature _____

PRESENT USE(S) OF PROPERTY/BUILDING:
Cattle ranching

AUTHORIZED AGENT/CONTACT PERSON:
Name Wren Wescoatt
Mailing Address 3662 Woodlawn Terrace Pl. Honolulu, HI. 96822
Phone Number 808-780-1000
Signature _____

PROJECT NAME (if any): Waipio Solar Project

REQUEST/PROPOSAL (Briefly describe the nature of the request, proposed activity or project):
Modification of permit #2014/SUP-3; SP15-405 project dates and minor changes to equipment.

DPP/ELOG NO. _____ **DPP/POSSE NO.** _____

Waipio Land Holdings, LLC
100 California St, Suite 400
San Francisco, CA 94111

May 2, 2017

Department of Planning and Permitting
City and County of Honolulu
650 S. King Street, 7th Floor
Honolulu, Hawaii 96813

Re: Waipio PV LLC (2014/SUP-03; SP15-405)
Landowner Authorization

To Whom It May Concern:

Waipio Land Holdings, LLC is the owner of the land at Tax Map Key (1) 9-5-003-017. In 2015, a related entity, Waipio PV, LLC, applied for and was granted the above-referenced Special Use Permit. Waipio PV, LLC now seeks to modify the above-referenced Special Use Permit. Accordingly, Waipio Land Holdings, LLC authorizes and approves Waipio PV, LLC to act in its stead to process the modification of the Special Use Permit.

Waipio Land Holdings, LLC hereby acknowledges that Waipio Land Holdings, LLC and its successors shall be bound and subject to the Special Use Permit and its conditions.

If you have any questions or concerns, please do not hesitate to contact me.

Best regards,

Craig Cornelius,
President
Waipio Land Holdings, LLC

Waipio PV, LLC
100 California St, Suite 400
San Francisco, CA 94111

May 2, 2017

Department of Planning and Permitting
City and County of Honolulu
650 S. King Street, 7th Floor
Honolulu, Hawaii 96813

Re: Waipio PV LLC (2014/SUP-03; SP15-405)
Applicant Authorization for Consultant

To Whom It May Concern:

Waipio PV, LLC is the applicant and permittee involved in the above-referenced Special Use Permit (SUP). Waipio PV, LLC now seeks to modify the SUP. Accordingly, Waipio PV, LLC hereby authorizes its consultant, Group 70 International, Inc., to act as its agent on the application to modify the above-referenced SUP.

Waipio PV, LLC hereby acknowledges that Waipio PV, LLC and its successors shall be bound and subject to the SUP and its conditions.

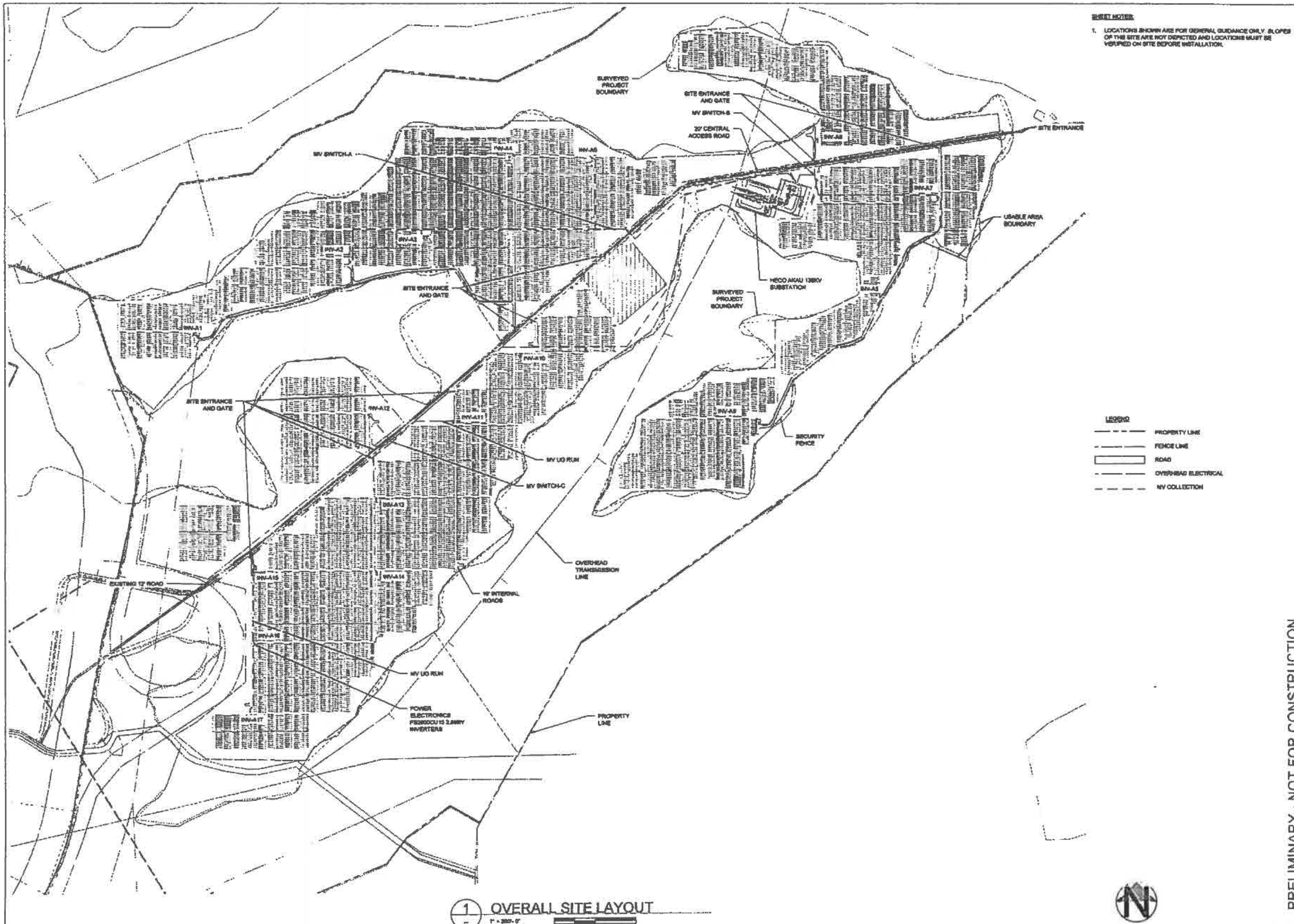
If you have any questions or concerns, please do not hesitate to contact me.

Best regards,

Craig Cornelius,
President
Waipio PV, LLC

EXHIBIT B

OVERALL SITE LAYOUT DRAWING (E200)



1 OVERALL SITE LAYOUT
1" = 200'-0"

SHEET NOTES:

1. LOCATIONS SHOWN ARE FOR GENERAL GUIDANCE ONLY. SLOPES OF THE SITE ARE NOT DEPICTED AND LOCATIONS MUST BE VERIFIED ON SITE BEFORE INSTALLATION.

PRELIMINARY - NOT FOR CONSTRUCTION

REVAMP ENGINEERING, INC.

CLIENT: nrg

PROJECT NAME: WAIPIO SOLAR

SITE LOCATION: MILILANI, HI
21°27'15.94"N, 157°59'4.25"W

DRAWING ISSUE

1	PRELIMINARY
10	SURVEYED BOUNDARY
11	NEW SITE BOUNDARY

REVISION ISSUE

DRAWN BY: CB CHECKED BY: KS

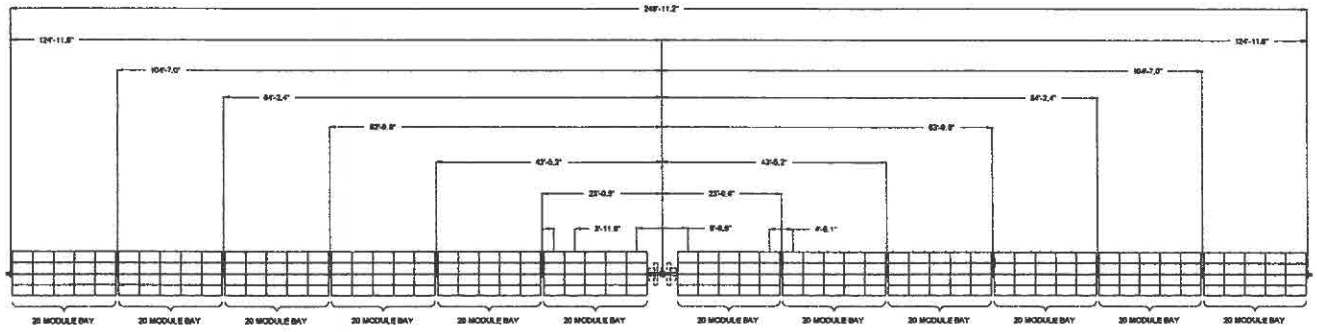
PROJECT NO.: 16029

DRAWING TITLE: OVERALL SITE LAYOUT

DRAWING NUMBER: E200

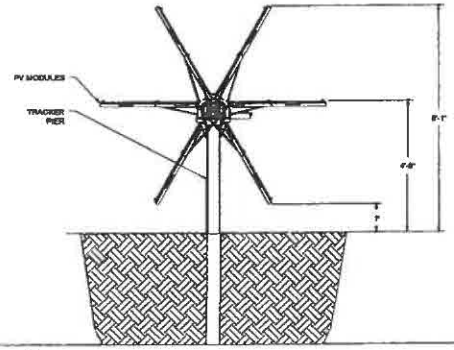
EXHIBIT C

TRACKER DETAIL DRAWING (E300)

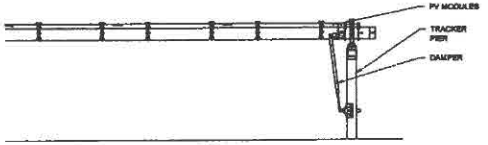


1 240 MODULE TRACKING UNIT - PLAN VIEW
3/32" = 1'-0"

2 TYPICAL 2X10 RACKING UNIT - FRONT ELEVATION
3/32" = 1'-0"



3 TRACKING UNIT - SOUTH ELEVATION
1/2" = 1'-0"



4 TRACKING UNIT - EAST ELEVATION
1/2" = 1'-0"

PRELIMINARY - NOT FOR CONSTRUCTION

REVAMP
ENGINEERING, INC.
360 Lily Street, #5
San Francisco, CA 94102
www.revamp-eng.com

THIS DOCUMENT IS THE PROPERTY OF REVAMP ENGINEERING, INC., AND CONTAINS CONFIDENTIAL INFORMATION. ITS RECEIPT OR POSSESSION DOES NOT CONVEY ANY RIGHTS TO REPRODUCE, MANUFACTURE, USE, OR SELL ANYTHING IT MAY DESCRIBE, NO PART IS TO BE DISCLOSED WITHOUT WRITTEN PERMISSION FROM REVAMP ENGINEERING, INC.

ENGINEER'S STAMP

CLIENT
nrg

PROJECT NAME
WAIPIO SOLAR

SITE LOCATION
MILILANI, HI
21°27'15.94"N, 157°594.25"W

DRAWING ISSUE	
0	03/02/16 PRELIMINARY
A	03/07/2017 ADDITIONAL USABLE AREA
7	03/08/2017 SINGLE LINE
B	03/16/2017 AVOIDING SLOPE
C	03/21/2017 NEDO SUBMISSION

REVISION ISSUE

DRAWN BY: CB CHECKED BY: KS
PROJECT NO.: 16029

DRAWING TITLE
TRACKER DETAILS

DRAWING NUMBER
E300

EXHIBIT D

MODULE SPECIFICATIONS (QCELLS, FIRST SOLAR)

powered by Q.ANTUM

Q.PEAK L-G4.2 365-370

Q.ANTUM SOLAR MODULE

The new solar module Q.PEAK L-G4.2 with power classes up to 370 Wp is the strongest module of its type on the market globally. Powered by 72 Q.ANTUM solar cells Q.PEAK L-G4.2 was specially designed for large solar power plants to reduce BOS costs. Only Q CELLS offers German engineering quality with our unique Q CELLS Yield Security.

LOW ELECTRICITY GENERATION COSTS

Higher yield per surface area and lower BOS costs thanks to higher power classes and an efficiency rate of up to 18.8%.

INNOVATIVE ALL-WEATHER TECHNOLOGY

Optimal yields, whatever the weather with excellent low-light and temperature behavior.

ENDURING HIGH PERFORMANCE

Long-term yield security with Anti PID Technology[1], Hot-Spot Protect and Traceable Quality Tra.Q™.

EXTREME WEATHER RATING

High-tech aluminum alloy frame, certified for high snow (5400 Pa) and wind loads (2400 Pa).

A RELIABLE INVESTMENT

Inclusive 12-year product warranty and 25-year linear performance guarantee[2].

EUPD RESEARCH TOP BRAND PV MODULES DNA 2016

Q CELLS YIELD SECURITY

Photon Q CELLS Best polycrystalline solar module 2014

[1] APT test conditions: Cells at -1500 V against grounded, with conductive metal foil covered module surface, 25 °C, 168 h

[2] See data sheet on rear for further information.

THE IDEAL SOLUTION FOR:

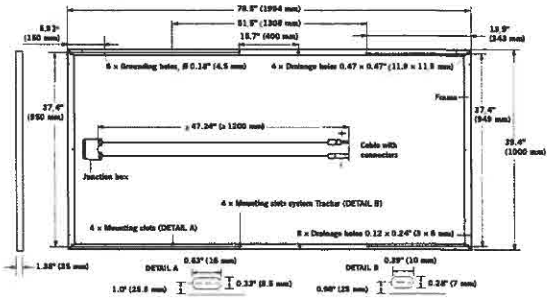
Ground-mounted solar power plants

Engineered in **Germany**

Q CELLS

MECHANICAL SPECIFICATION

Format	78.5 in × 39.4 in × 1.38 in (including frame) (1994 mm × 1000 mm × 35 mm)
Weight	52.9 lbs (24 kg)
Front Cover	0.13 in (3.2 mm) thermally pre-stressed glass with anti-reflection technology
Back Cover	Composite film
Frame	Anodized aluminum
Cell	6 × 12 monocrystalline Q.ANTUM solar cells
Junction box	3.35-4.37 in × 2.36-3.15 in × 0.59-0.75 in (85-111 × 60-80 × 15-19 mm), Protection class IP67, with bypass diodes
Cable	4 mm² Solar cable; (+) ≥ 47.24 in (1200 mm), (-) ≥ 47.24 in (1200 mm)
Connector	Amphenol UTX, IP68

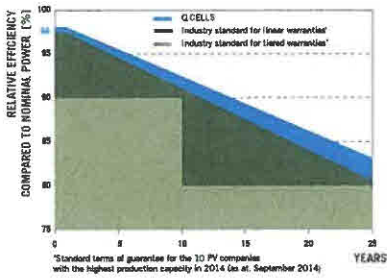


ELECTRICAL CHARACTERISTICS

POWER CLASS				365	370
MINIMUM PERFORMANCE AT STANDARD TEST CONDITIONS, STC[1] (POWER TOLERANCE +5 W / -0 W)					
Minimum	Power at MPP[2]	P_{MPP}	[W]	365	370
	Short Circuit Current*	I_{SC}	[A]	9.83	9.89
	Open Circuit Voltage*	V_{OC}	[V]	48.00	48.28
	Current at MPP*	I_{MPP}	[A]	9.33	9.41
	Voltage at MPP*	V_{MPP}	[V]	39.10	39.32
	Efficiency[2]	η	[%]	≥ 18.3	≥ 18.6
MINIMUM PERFORMANCE AT NORMAL OPERATING CONDITIONS, NOC[3]					
Minimum	Power at MPP[2]	P_{MPP}	[W]	269.8	273.5
	Short Circuit Current*	I_{SC}	[A]	7.93	7.97
	Open Circuit Voltage*	V_{OC}	[V]	44.90	45.17
	Current at MPP*	I_{MPP}	[A]	7.34	7.40
	Voltage at MPP*	V_{MPP}	[V]	36.77	36.94

[1] 1000 W/m², 25 °C, spectrum AM 1.5 G [2] Measurement tolerances STC ± 3%; NOC ± 5% [3] 800 W/m², NOCT, spectrum AM 1.5 G * typical values, actual values may differ

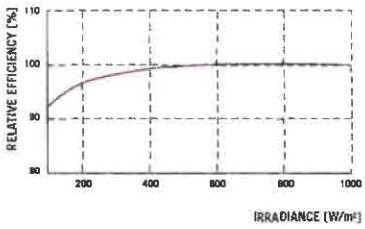
Q CELLS PERFORMANCE WARRANTY



At least 98 % of nominal power during first year. Thereafter max. 0.6 % degradation per year.
At least 92.6 % of nominal power up to 10 years.
At least 83.6 % of nominal power up to 25 years.

All data within measurement tolerances. Full warranties in accordance with the warranty terms of the Q CELLS sales organization of your respective country.

PERFORMANCE AT LOW IRRADIANCE



Typical module performance under low irradiance conditions in comparison to STC conditions (25 °C, 1000 W/m²).

TEMPERATURE COEFFICIENTS

Temperature Coefficient of I_{SC}	α	[%/K]	+0.04	Temperature Coefficient of V_{OC}	β	[%/K]	-0.28
Temperature Coefficient of P_{MPP}	γ	[%/K]	-0.39	Normal Operating Cell Temperature	NOCT	[°F]	113 ± 5.4 (45 ± 3 °C)

PROPERTIES FOR SYSTEM DESIGN

Maximum System Voltage V_{SYS}	[V]	1500 (IEC) / 1500 (UL)	Safety Class	II
Maximum Series Fuse Rating	[A DC]	15	Fire Rating	C (IEC) / TYPE 1 (UL)
Design load, push (UL)[2]	[lbs/ft²]	75 (3600 Pa)	Permitted module temperature on continuous duty	-40 °F up to +185 °F (-40 °C up to +85 °C)
Design load, pull (UL)[2]	[lbs/ft²]	33 (1600 Pa)	[2] see installation manual	

QUALIFICATIONS AND CERTIFICATES

IEC 61215 (Ed. 2); IEC 61730 (Ed. 1), Application class A
This data sheet complies with DIN EN 50380.

PACKAGING INFORMATION

Number of Modules per Pallet	29
Number of Pallets per 40' Container	22
Number of Pallets per 53' Container	26
Pallet Dimensions (L × W × H)	81.3 × 45.3 × 46.9 in (2065 × 1150 × 1190 mm)
Pallet Weight	1671 lbs (758 kg)

NOTE: Installation instructions must be followed. See the installation and operating manual or contact our technical service department for further information on approved installation and use of this product.

Hanwha Q CELLS America Inc.
300 Spectrum Center Drive, Suite 1250, Irvine, CA 92618, USA | TEL +1 949 748 59 96 | EMAIL inquiry@us.q-cells.com | WEB www.q-cells.us

Engineered in **Germany**

Specifications subject to technical changes © Hanwha Q CELLS Q.PEAK L-G4.2_365-370_2016-09_Rev03_NA

First Solar Series 4™ PV Module

ADVANCED THIN FILM SOLAR TECHNOLOGY

122.5 WATT MODULE EFFICIENCY OF 17.0%

INDUSTRY BENCHMARK SOLAR MODULES

As a global leader in PV energy, First Solar's advanced thin film solar modules have set the industry benchmark with over 10 gigawatts (GW) installed worldwide and a proven performance advantage over conventional crystalline silicon solar modules. Generating more energy than competing modules with the same power rating, First Solar's Series 4™ and Series 4A™ PV Modules deliver superior performance and reliability to our customers.

PROVEN ENERGY YIELD ADVANTAGE

- Generates more energy than conventional crystalline silicon solar modules with the same power due to superior temperature coefficient and superior spectral response
- Anti-reflective coated glass (Series 4A™) enhances energy production

ADVANCED PERFORMANCE & RELIABILITY

- Compatible with advanced 1500V plant architectures
- Highly predictable energy in all climates and applications
- Independently certified for reliable performance in high temperature, high humidity, extreme desert and coastal environments

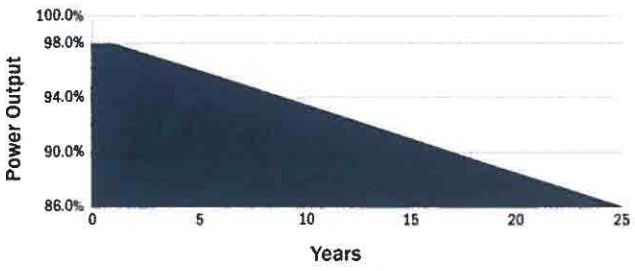
CERTIFICATIONS & TESTS

- PID-Free, Thresher Test[1], Long-Term Sequential Test[1], and ATLAS 25+[1]
- IEC 61646 1500V, IEC 61730 1500V, CE
- IEC 61701 Salt Mist Corrosion, IEC 60068-2-68 Dust and Sand Resistance
- ISO 9001:2008 and ISO 14001:2004
- UL 1703 Listed Fire Performance PV Module Type 10[2]
- CSI Eligible, FSEC, MCS, CEC Listed (Australia), SII[1], InMetro

END-OF-LIFE RECYCLING

- Recycling services available through First Solar's industry-leading recycling program or customer-selected third party.

MODULE WARRANTY[3]



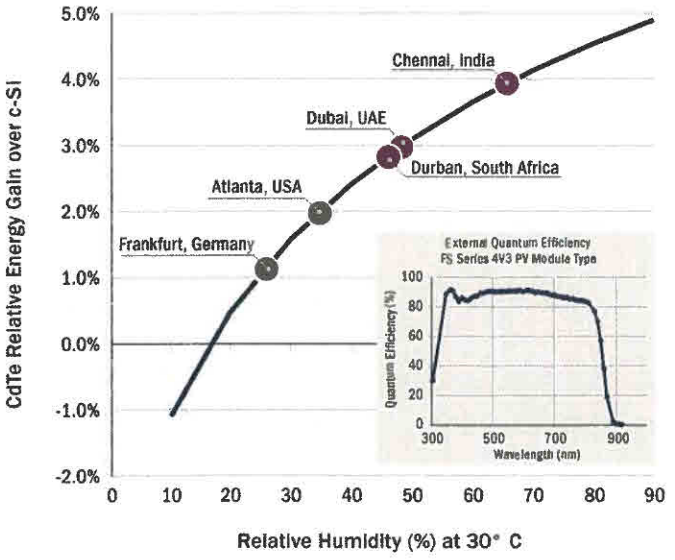
- 25-Year Linear Performance Warranty[4]
- 10-Year Limited Product Warranty

FIRST SOLAR SERIES 4™ PV MODULE

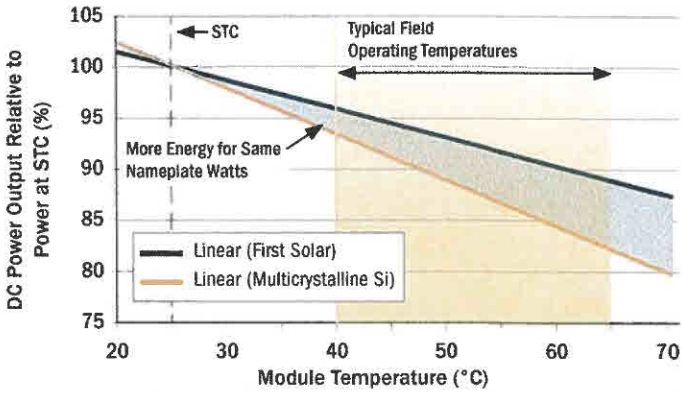
MECHANICAL DESCRIPTION	
Length	1200mm
Width	600mm
Weight	12kg
Thickness	6.8mm
Area	0.72m²
Leadwire	2.5mm², 610mm
Connectors	MC4[9]
Bypass Diode	None
Cell Type	Thin-film CdTe semiconductor, up to 216 cells
Frame Material	None
Front Glass	3.2mm heat strengthened Series 4A™ includes anti-reflective coating
Back Glass	3.2mm tempered
Encapsulation	Laminate material with edge seal
Load Rating	2400Pa[10]

MODULE NUMBERS AND RATINGS AT STANDARD TEST CONDITIONS (1000W/m², AM 1.5, 25°C)[5]							
NOMINAL VALUES		**FS-4110-3 FS-4110A-3**	**FS-4112-3 FS-4112A-3**	**FS-4115-3 FS-4115A-3**	**FS-4117-3 FS-4117A-3**	**FS-4120-3 FS-4120A-3**	**FS-4122-3 FS-4122A-3**
Nominal Power[6] (-0/+5W)	P_{MPP} (W)	110.0	112.5	115.0	117.5	120.0	122.5
Voltage at P_{MAX}	V_{MPP} (V)	67.8	68.5	69.3	70.1	70.8	71.5
Current at P_{MAX}	I_{MPP} (A)	1.62	1.64	1.66	1.68	1.70	1.71
Open Circuit Voltage	V_{OC} (V)	86.4	87.0	87.6	88.1	88.7	88.7
Short Circuit Current	I_{SC} (A)	1.82	1.83	1.83	1.83	1.84	1.85
Module Efficiency	%	15.3	15.6	16.0	16.3	16.7	17.0
Maximum System Voltage	V_{SYS} (V)	1500 [7,8]					
Limiting Reverse Current	I_R (A)	4.0					
Maximum Series Fuse	I_{CF} (A)	4.0					
RATINGS AT NOMINAL OPERATING CELL TEMPERATURE OF 45°C (800W/m², 20°C air temperature, AM 1.5, 1m/s wind speed)[5]							
Nominal Power	P_{MPP} (W)	83.2	85.1	87.0	89.0	90.8	92.7
Voltage at P_{MAX}	V_{MPP} (V)	63.5	64.5	64.9	65.9	66.3	67.2
Current at P_{MAX}	I_{MPP} (A)	1.31	1.32	1.34	1.35	1.37	1.38
Open Circuit Voltage	V_{OC} (V)	81.6	82.1	82.7	83.2	83.7	83.7
Short Circuit Current	I_{SC} (A)	1.47	1.47	1.48	1.48	1.48	1.49
TEMPERATURE CHARACTERISTICS							
Module Operating Temperature Range	(°C)	-40 to +85					
Temperature Coefficient of P_{MPP}	T_K (P_{MPP})	-0.28%/°C (Temperature Range: 25°C to 75°C)					
Temperature Coefficient of V_{OC}	T_K (V_{OC})	-0.28%/°C					
Temperature Coefficient of I_{SC}	T_K (I_{SC})	+0.04%/°C					

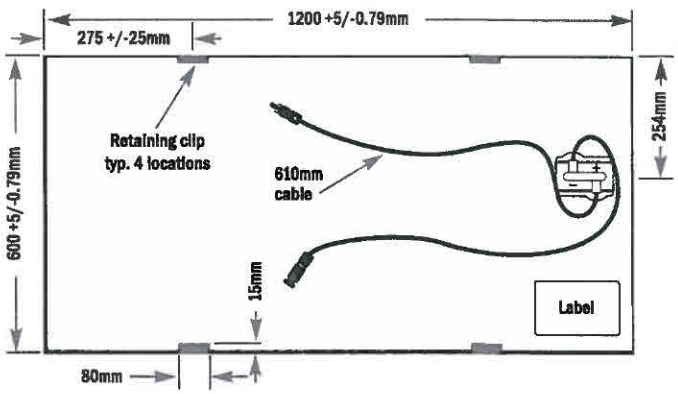
SUPERIOR SPECTRAL RESPONSE



SUPERIOR TEMPERATURE COEFFICIENT



MECHANICAL DRAWING



1 Testing Certifications/Listings pending
2 Class A Spread of Flame / Class B Burning Brand. Roof mounted fire rating is established by assessing rack and solar module as a unit
3 Limited power output and product warranties subject to warranty terms and conditions
4 Ensures 98% rated power in first year, -0.5%/year through year 25
5 All ratings ± 10%, unless specified otherwise. Specifications are subject to change
6 Measurement uncertainty applies
7 UL 1703 1500V Listed / ULC 1703 1000V Listed
8 Application Class A for 1000V (class II), Application Class B for 1500V (class 0)
9 Multi-Contact MC4 (PV-KST4/PV-KBT4)
10 Higher load ratings can be met with additional clips or wider clips, subject to testing

Disclaimer
The information included in this Module Datasheet is subject to change without notice and is provided for informational purposes only. No contractual rights are established or should be inferred because of user's reliance on the information contained in this Module Datasheet. Please refer to the appropriate Module User Guide and Module Product Specification document for more detailed technical information regarding module performance, installation and use.

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EXHIBIT E

LETTER OF INTENT FOR SHEEP GRAZING

NRG Renew LLC
100 California St, Ste 400
San Francisco, CA 94111

April 17, 2017

Luann and Gary Gunder
Tin Roof Ranch
61-470 Kamehameha Hwy
Haleiwa, HI 96712

Re: Letter of Intent for Pasture License

Dear Mr. & Mrs. Gunder:

Introduction. Waipio PV, LLC, a Delaware limited liability company (***"Licensor"***), an affiliate of NRG Renew LLC, is pleased to provide this letter of intent (***"Letter of Intent"***) to confirm its agreement to negotiate the terms of a definitive license agreement with Tin Roof Ranch (***"Licensee,"*** Licensor and Licensee each referred to herein as a ***"Party"*** and collectively referred to herein as, the ***"Parties"***) for a license to use land in Waipio, Hawaii, collectively, the ***"Property"***), which is currently being leased by the Licensor.

License. From the date of this Letter of Intent until December 31, 2018 (the ***"LOI Term"***), Licensor and Licensee shall negotiate in good faith regarding the terms and provisions of a license to pasture sheep on the Property (the ***"License"***), at a rate of $10 per acre per year, not to exceed $2,000 per year in the aggregate, and which shall also contain such other reasonable terms and provisions as the Parties may agree. The Parties recognize that successful negotiation of the License will also entail substantial definition and refinement of the concepts expressed in this LOI and final mutual agreement on all of the terms and conditions set forth herein. The LOI Term may be extended by mutual agreement of the Parties in writing.

Negotiation in Good Faith; Exclusivity. During the LOI Term, the Parties agree to negotiate exclusively with each other and in good faith to develop mutually acceptable terms and documentation for the transactions described above. Upon expiration of the LOI Term (as it may be extended by mutual agreement), these commitments of exclusivity and good faith negotiations shall terminate.

Non-Binding Letter of Intent. The above terms and conditions are provided for discussion purposes and are not intended to represent a commitment. Except with respect to the paragraphs entitled "Negotiation in Good Faith; Exclusivity" and "Non-Binding Letter of Intent," this Letter of Intent does not constitute a legally binding obligation of either Party and will not give rise to any right or obligation based on any legal or equitable theory (including any right to continue negotiations beyond the LOI Term). The terms and conditions set forth herein are intended to be an outline of terms that may be incorporated into the License. No binding obligation will be created unless, and until, the Parties execute the License.

EXHIBIT F

REFLECTIVITY REPORT FOR TRACKING RACKS

AVIATION SYSTEMS INC.
Aviation Consultants

April 18, 2017

Mr. Daniel von Allmen
NRG
100 California Street., Suite 400
San Francisco, CA 94111

Re: Waipio Solar Glare Project, ASI# 17-S-0921.001

Dear Mr. von Allmen:

Thank you for the opportunity to conduct a Solar Glare Study on your Waipio Solar Project. We have attached the study Report, developed in collaboration with Spohnheimer Consulting, our experts in this technical area.

We have concluded that the proposed Waipio PV Project, using a ± 60° single-axis tracking array, produces no glare at the nine selected observation points and the two approach paths to Wheeler Army Airfield.

Please contact us, if you have any questions.

Sincerely,

Jerry Chavkin

Jerry Chavkin
Vice President, Airspace Operations

Attachments: As stated

2510 West 237th Street • Suite 210 • Torrance, CA 90505
Tel: 310.530.3188 • Fax: 310.530.3850 • Email: asi@aviationsystems.com • www.aviationsystems.com

AVIATION SYSTEMS INC.
Aviation Consultants

Visual Reflectivity/Glare Study
Proposed Waipio PV Project,
Oahu, Hawaii

April 18, 2017

Issue: A photovoltaic (PV) or solar panel power generation project is proposed near Interstate Highway H2 and south of Wheeler Army Airfield on Oahu, HI. Glare from the panels may affect air crews and/or controllers at the airfield, residents of nearby areas, and motorists on H2.

Project Area: Figure 1 illustrates the proposed project area (PV1 through PV4, a white irregular polygon at lower right) and nine selected observation points near it. Wheeler airfield is at upper left. The analysis points for the airfield include a point at the center of the airfield 100' above local ground level (approximating an Airport Control Tower) and the last two miles of standard approaches to Runways 06 and 24.

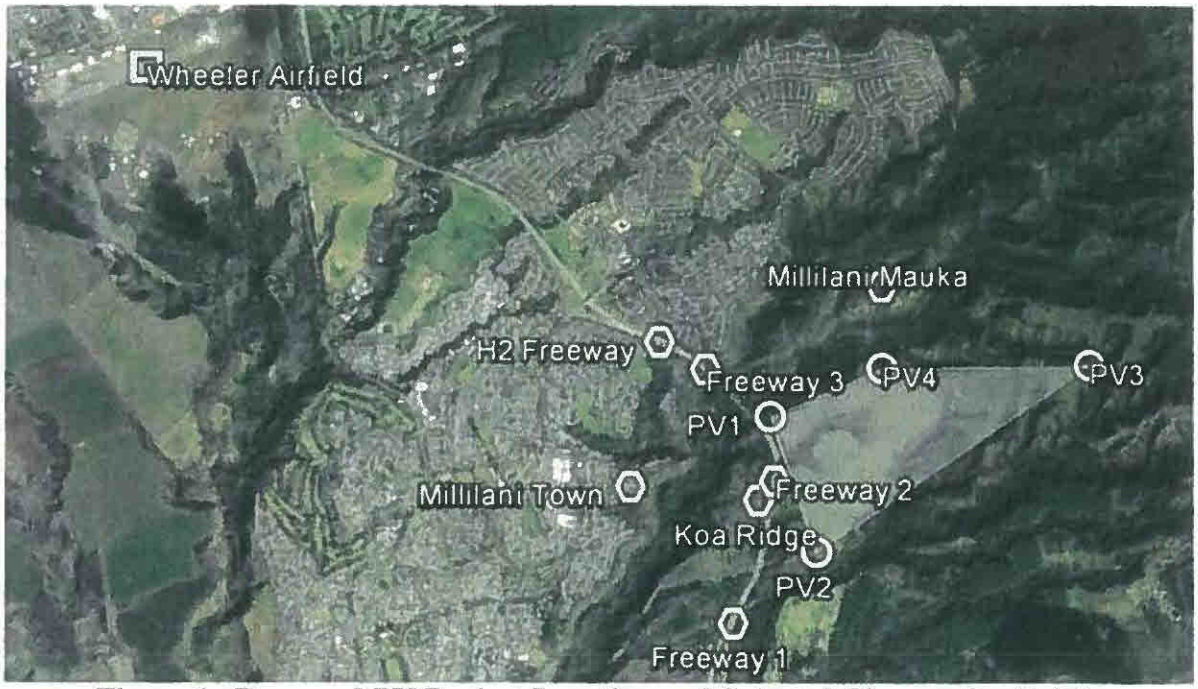

Figure 1. Proposed PV Project Location and Selected Observation Points

Glare Analysis

Description. To assess the glare hazard, the Solar Glare Hazard Analysis Tool (SGHAT), developed by Sandia National Laboratories and currently licensed by Sims Industries (ForgeSolar.com), was used. The software checks various user-specified viewing points, labeled Observation Points (OP) and Flight Paths (FP), for reflections from defined surfaces as the sun

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moves through the sky in one minute increments throughout the solar year. The tool has been validated against several on-airport installations of solar panels that initially resulted in glare, matching glare predicted by the software. The following brief description of the tool is provided in the User's Manual:

With growing numbers of solar energy installations throughout the United States, glare from photovoltaic (PV) arrays and concentrating solar systems has received increased attention as a real hazard for pilots, air-traffic control personnel, motorists, and others. Sandia has developed a web-based interactive tool that provides a quantified assessment of (1) when and where glare will occur throughout the year for a prescribed solar installation, and (2) potential effects on the human eye at locations where glare occurs. . . . . Additional information regarding the orientation and tilt of the PV panels, reflectance, environment, and ocular factors are entered by the user.

SGHAT Example Graphical Outputs.

In addition to various tabulations of input and resulting glare/glint data, the SGHAT provides graphical results. For each, up to four levels of glare/glint are shown by color:

- Light Green (for flight paths only) - low potential for temporary after image from more than 50° either side of pilot's line of sight to the runway [From the SGHAT Release Notes: "Recent research and flight simulator testing has concluded that glare that occurs beyond 50° azimuthally from the line of sight of the pilot will not pose a safety hazard to pilots."
- Dark Green - low potential for temporary after image [for flight paths, from within 50° of pilot's line of sight]
- Yellow - potential for temporary after image
- Red - potential for permanent eye damage

For a given FP or OP, the graphic in Figure 2 (left) shows the glare results vs. time-of-day (vertical axis) and time-of-year (horizontal axis). For a FP, the graphic in Figure 2 (right) shows the glare results vs location along the flight path (vertical axis) and time-of-year (horizontal axis).

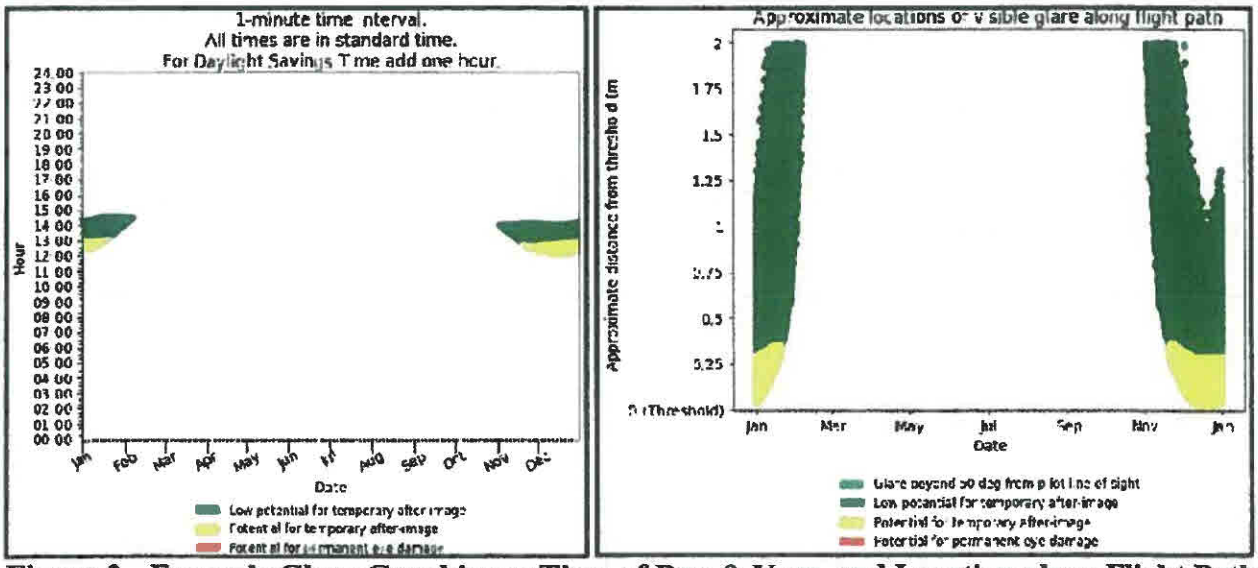


Figure 2 - Example Glare Graphics vs Time of Day & Year, and Location along Flight Path

For a Flight Path or Observation Point, the intensity of any computed glare is shown in a graphic similar to Figure 3, with 3 color regions and with both axes plotted on logarithmic scales (i.e., factor of 10 between adjacent axis tick marks). Here, the intensity ("retinal irradiance" in milliwatts per square centimeter, vertical axis) is plotted against the angular width or apparent size ("subtended source angle") of the glare source. [SGHAT Technical Reference: "The subtended source angle represents the size of the glare viewed by the observer, while the retinal irradiance determines the amount of energy impacting the retina of the observer. Larger source angles can result in glare of high intensity, even if the retinal irradiance is low."]

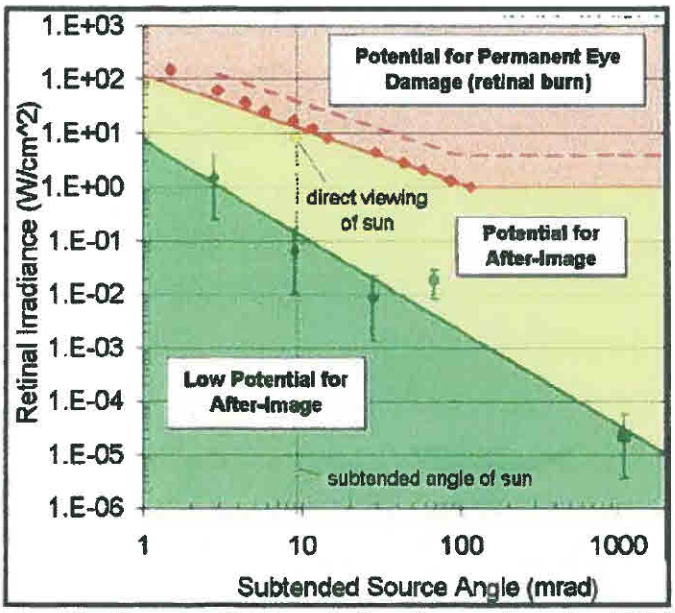


Figure 3. Example Graph of Glare Intensity vs Angular Width of Source

Modeling Results: The SGHAT output reports for both tracking and non-tracking PV arrays are included as Attachments 1 and 2 respectively. **With single axis tracking of ± 60°, there was no glare produced.** For reference, the results without PV array tracking are summarized in Table 1.

Table 1. Glare Results for NON-TRACKING Array

Analysis Point	Description	Height Ft, AGL	Green Glare (minutes)	Yellow Glare (minutes)
OP 1	District Park	6		
OP 2	Freeway 1	6		
OP 3	Freeway 2	6	12	4994
OP 4	Freeway 3	6	0	22
OP 5	H2 (Interstate Highway)	6	0	50
OP 6	Koa Ridge	6	12	3863
OP 7	Millilani Mauka	6		
OP 8	Millilani Town	6	69	4042
OP 9	Wheeler Army Airfield (center, 100' AGL)	100		
FP 1	2 mile Approach to Runway 24, 3° descent	N/A		

FP 2	2 mile Approach to Runway 06, 3° descent	N/A	22	

As a simplified statement, the number of minutes of predicted glare in any results table are primarily an indication of how long a valid reflection geometry exists between the sun, the PV array, and the specified observation point - without regard to the intensity of the resulting glare. The apparent viewed size of the surface, the time of day, and the angles of reflection determine the intensity of the glare.

Summary

The proposed Waipio PV Project, using a ± 60° single-axis tracking array, produces no glare at the nine selected observation points and the two approach paths to Wheeler Army Airfield.

References

1. SGHAT Release Notes (as of 08/16)
2. SGHAT User's Manual, Version 2H, 07/15
3. SGHAT Technical Reference Manual, Version 6, 03/15

List of Attachments

1. SGHAT Output Report, Waipio with single-axis tracking
2. SGHAT Output Report, Waipio without tracking

--- end ---

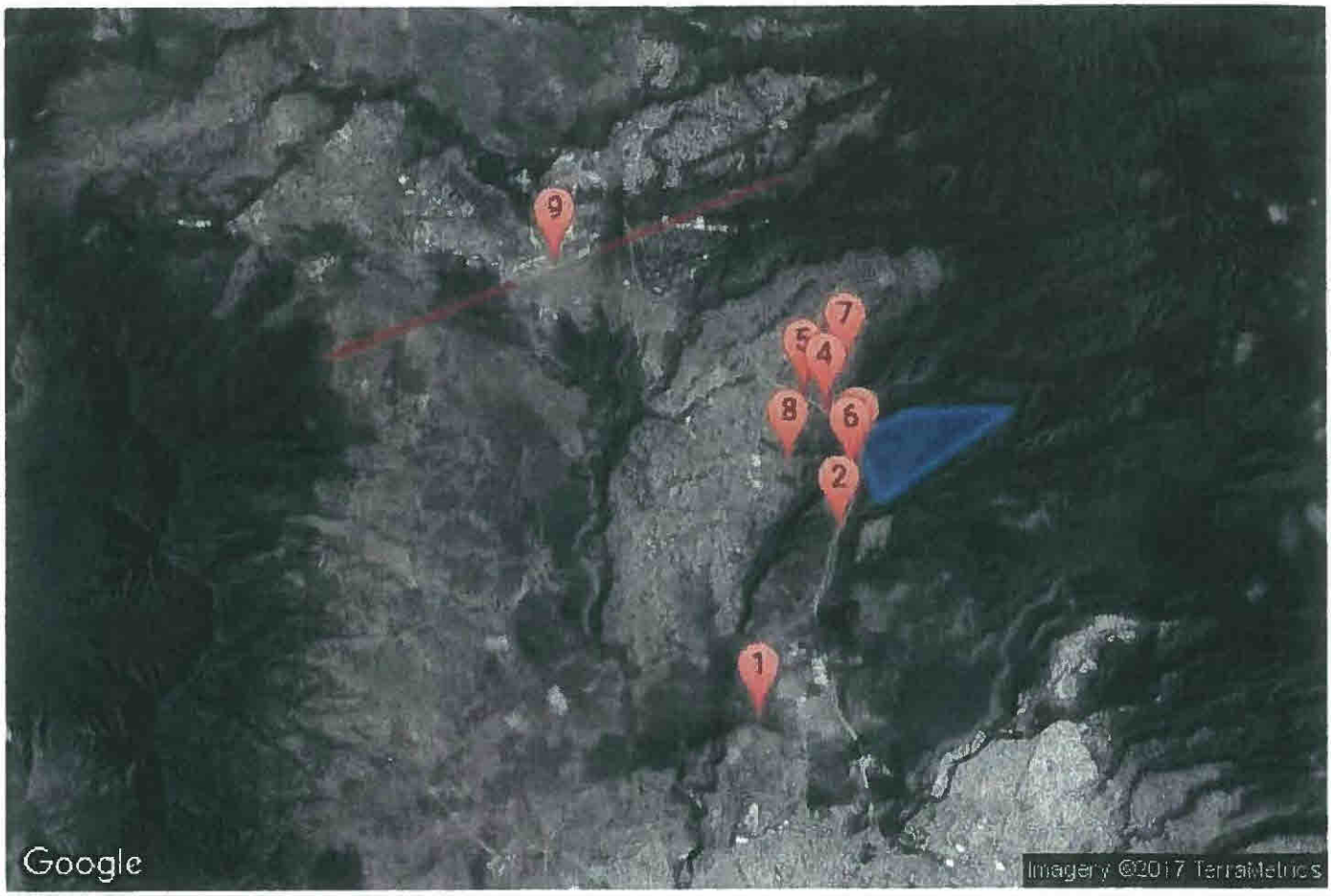
ATTACHMENT ONE

SGHAT Output Report
Waipio with single-axis tracking

Site config: Waipio 040717

Single Axis to 60 Deg

Created April 7, 2017 6:17 p.m.
DNI varies and peaks at 1,000.0 W/m^2
Analyze every 1 minute(s)
0.5 ocular transmission coefficient
0.0066 ft pupil diameter
0.056 ft eye focal length
9.3 mrad sun subtended angle



Summary of Results No glare predicted!

PV name	Tilt	Orientation	"Green" Glare	"Yellow" Glare	"Red" Glare	Energy Produced
	deg	deg	min	min	min	kWh
PV array 1	10.0	180.0	0	0	0	-

Component Data

Flight Paths

Name: FP 1 Wheeler RWY 24 Approach
Description:
Threshold height: 50 ft
Direction: 68.51 deg
Glide slope: 3.0 deg
Pilot view restricted? Yes
Vertical view restriction: 30.0 deg
Azimuthal view restriction: 180.0 deg

Point	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
Threshold	21.484308	-158.030152	836	50	886
2-mile point	21.494900	-158.001207	991	448	1440

Name: FP 2 Wheeler RWY 06 Approach
Description:
Threshold height: 50 ft
Direction: 248.49 deg
Glide slope: 3.0 deg
Pilot view restricted? Yes
Vertical view restriction: 30.0 deg
Azimuthal view restriction: 180.0 deg

Point	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
Threshold	21.479207	-158.043944	816	50	866
2-mile point	21.468605	-158.072884	1171	248	1419

Observation Points

Number	Latitude	Longitude	Ground elevation	Height above ground	Total Elevation
	deg	deg	ft	ft	ft
1	21.415620	-158.005810	364	6	370
2	21.442770	-157.993050	604	6	610
3	21.452750	-157.989960	738	6	744
4	21.460580	-157.995110	660	6	666
5	21.462500	-157.998590	724	6	730
6	21.451400	-157.991170	729	6	735
7	21.466410	-157.991940	767	6	773
8	21.452350	-158.000780	713	6	719
9	21.481720	-158.037190	827	100	927

PV array 1

Axis tracking: Single-axis rotation
Tracking axis orientation: 180.0 deg
Tracking axis tilt: 10.0 deg
Tracking axis panel offset: 0.0 deg
Limit tracking rotation? Yes
Maximum tracking angle: 60.0 deg
Rated power: -
Panel material: Smooth glass without AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? No
Slope error: 10.0 mrad

Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	21.457250	-157.990310	711	8	719
2	21.447750	-157.986870	690	8	698
3	21.460850	-157.966020	1017	8	1025
4	21.460850	-157.981940	786	8	794

No glare predicted!

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ATTACHMENT TWO

SGHAT Output Report
Waipio without tracking

Site config: Waipio 040717

No Tracking

Created April 7, 2017 6:17 p.m.
DNI varies and peaks at 1,000.0 W/m^2
Analyze every 1 minute(s)
0.5 ocular transmission coefficient
0.0066 ft pupil diameter
0.056 ft eye focal length
9.3 mrad sun subtended angle

Summary of Results

Glare with potential for temporary after-image predicted

PV name	Tilt	Orientation	"Green" Glare	"Yellow" Glare	"Red" Glare	Energy Produced
	deg	deg	min	min	min	kWh
PV array 1	10.0	180.0	115	12992	0	-

Component Data

Flight Paths

Name: FP 1 Wheeler RWY 24 Approach
Description:
Threshold height: 50 ft
Direction: 68.51 deg
Glide slope: 3.0 deg
Pilot view restricted? Yes
Vertical view restriction: 30.0 deg
Azimuthal view restriction: 180.0 deg

Point	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
Threshold	21.484308	-158.030152	836	50	886
2-mile point	21.494900	-158.001207	991	448	1440

Name: FP 2 Wheeler RWY 06 Approach
Description:
Threshold height: 50 ft
Direction: 248.49 deg
Glide slope: 3.0 deg
Pilot view restricted? Yes
Vertical view restriction: 30.0 deg
Azimuthal view restriction: 180.0 deg

Point	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
Threshold	21.479207	-158.043944	816	50	866
2-mile point	21.468605	-158.072884	1171	248	1419

Observation Points

Number	Latitude	Longitude	Ground elevation	Height above ground	Total Elevation
	deg	deg	ft	ft	ft
1	21.415620	-158.005810	364	6	370
2	21.442770	-157.993050	604	6	610
3	21.452750	-157.989960	738	6	744
4	21.460580	-157.995110	660	6	666
5	21.462500	-157.998590	724	6	730
6	21.451400	-157.991170	729	6	735
7	21.466410	-157.991940	767	6	773
8	21.452350	-158.000780	713	6	719
9	21.481720	-158.037190	827	100	927

PV array 1 potential temporary after-Image

Axis tracking: Fixed (no rotation)
Tilt: 10.0 deg
Orientation: 180.0 deg
Rated power: -
Panel material: Smooth glass without AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? No
Slope error: 10.0 mrad

Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	21.457250	-157.990310	711	8	719
2	21.447750	-157.986870	690	8	698
3	21.460850	-157.966020	1017	8	1025
4	21.460650	-157.981940	786	8	794

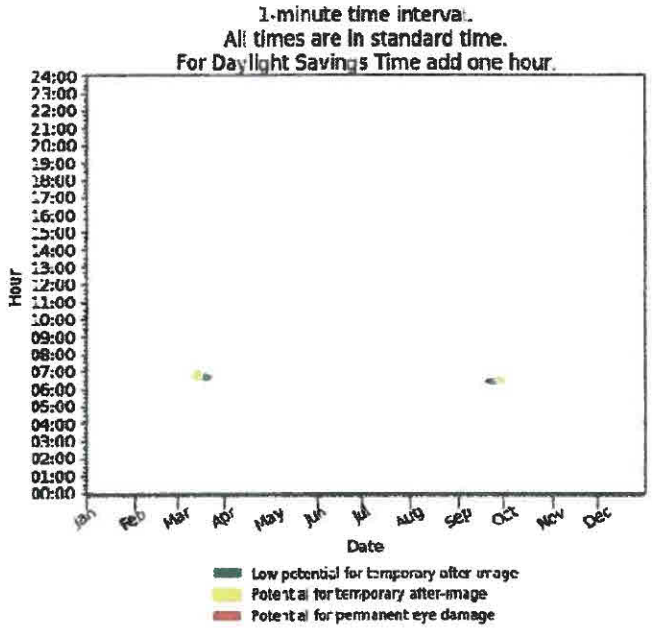
Summary of component results

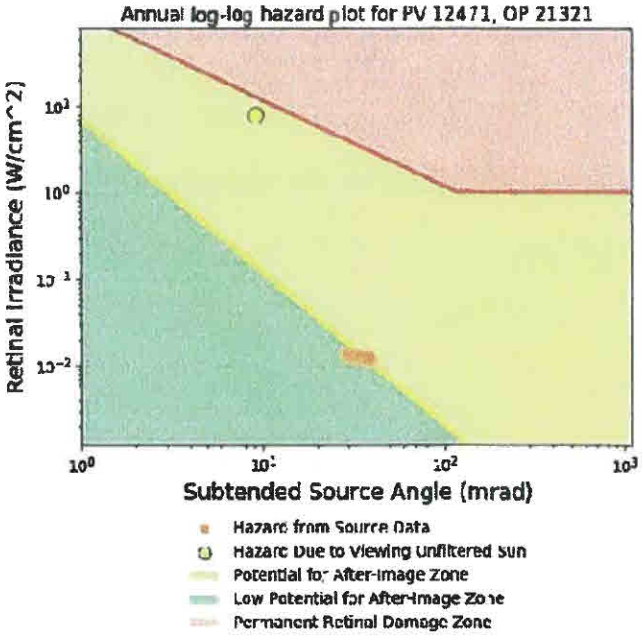
Component	Green glare (min)	Yellow glare (min)	Red glare (min)
FP: FP 1 Wheeler RWY 24 Approach	0	0	0
FP: FP 2 Wheeler RWY 06 Approach	22	21	0
OP: 1	0	0	0
OP: 2	0	0	0
OP: 3	12	4994	0
OP: 4	0	22	0
OP: 5	0	50	0
OP: 6	12	3863	0
OP: 7	0	0	0
OP: 8	69	4042	0
OP: 9	0	0	0

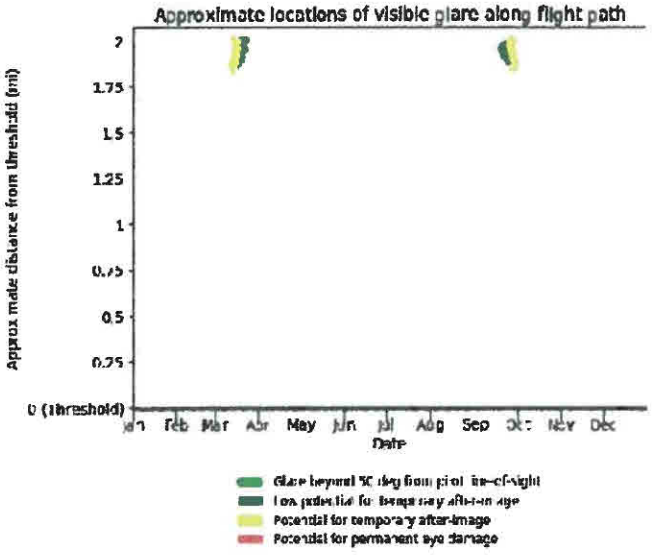
Flight path: FP 1 Wheeler RWY 24 Approach

No glare found

Flight path: FP 2 Wheeler RWY 06 Approach







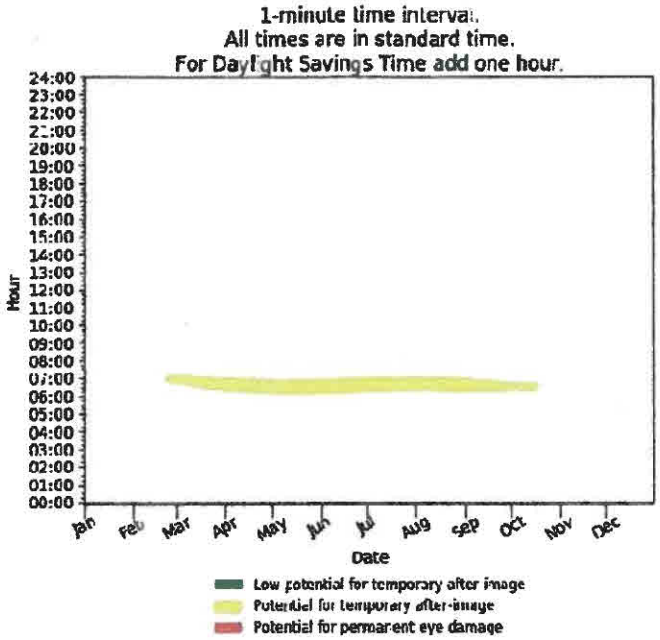
Observation point: 1

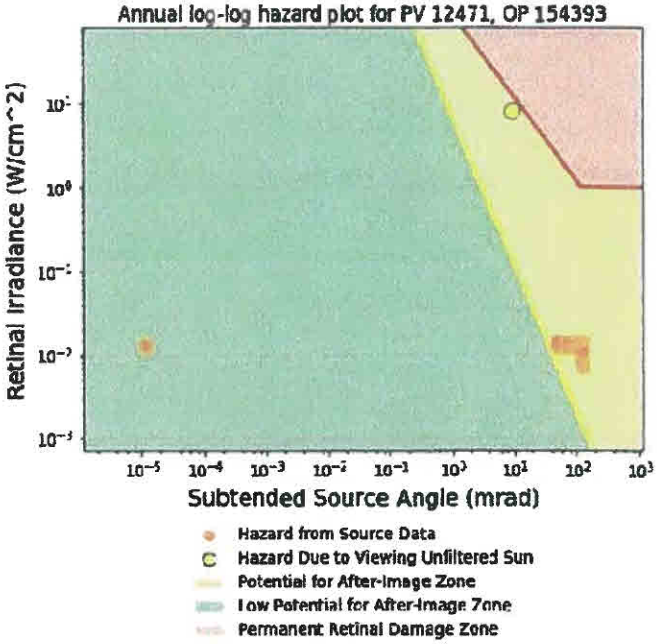
No glare found

Observation point: 2

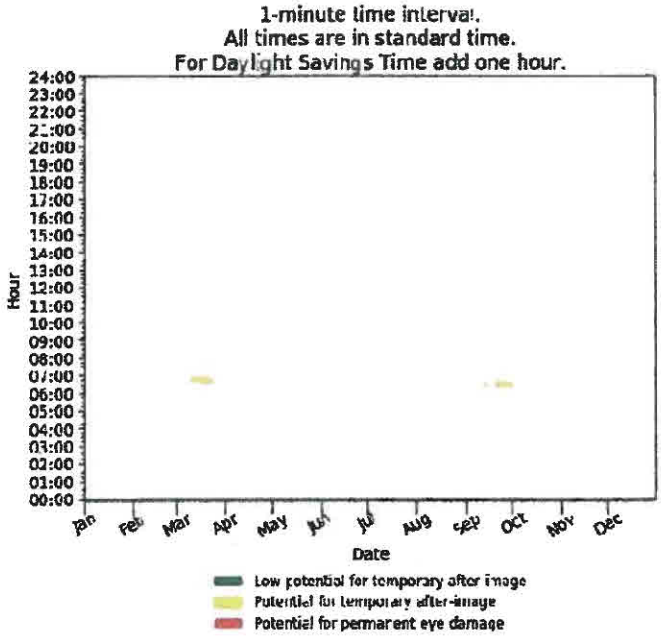
No glare found

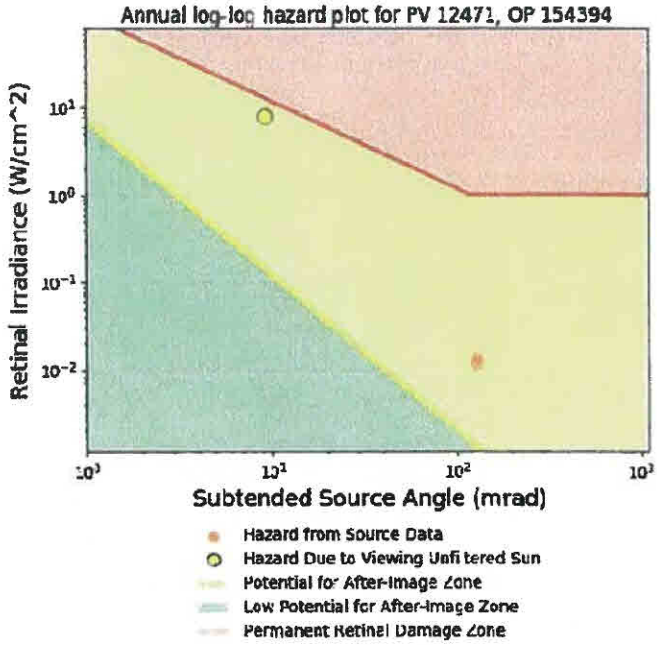
Observation point: 3





Observation point: 4





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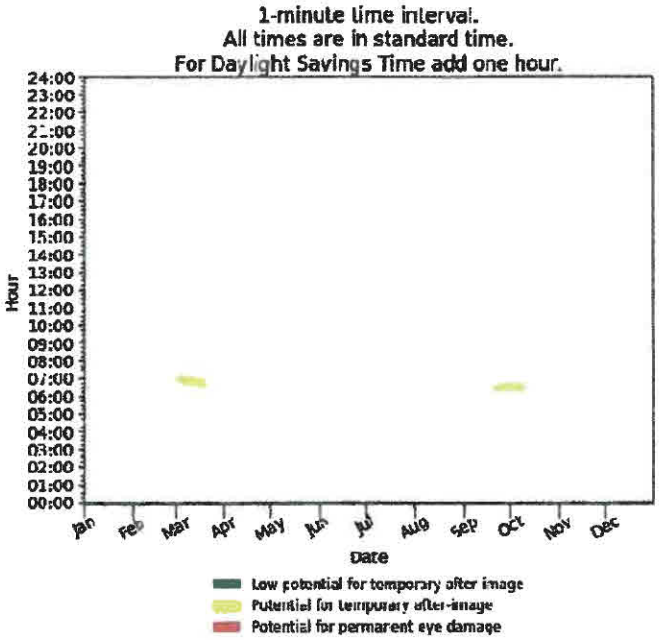

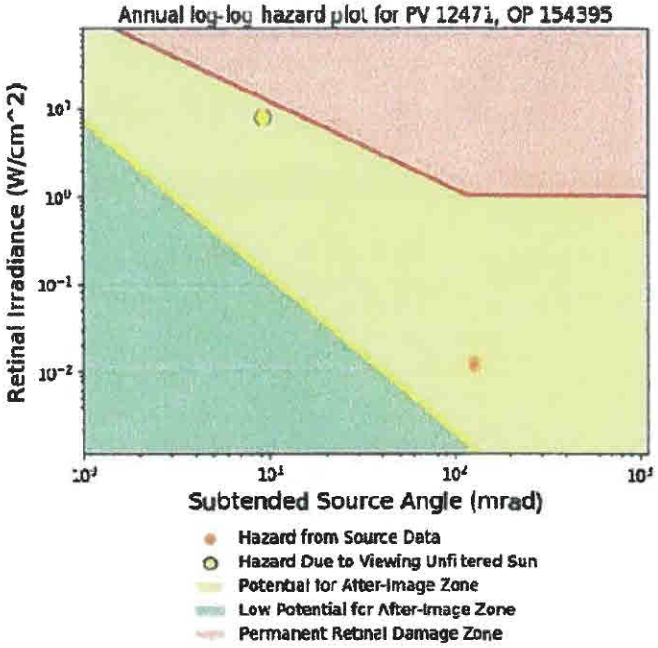

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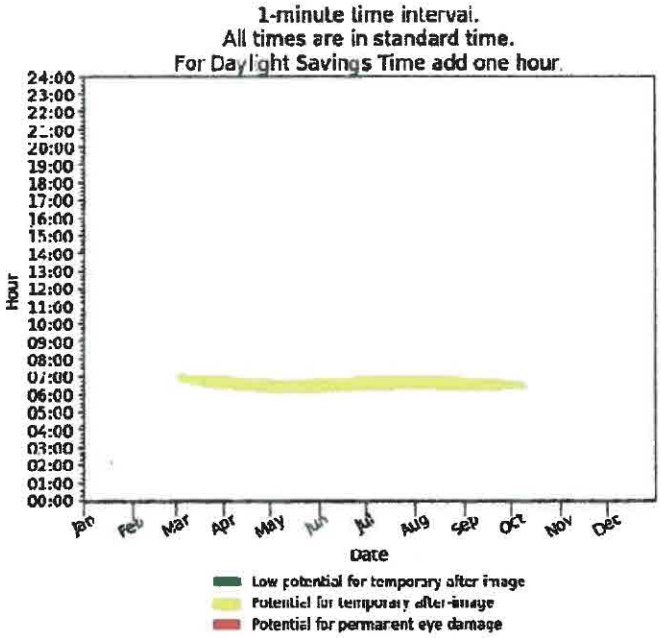
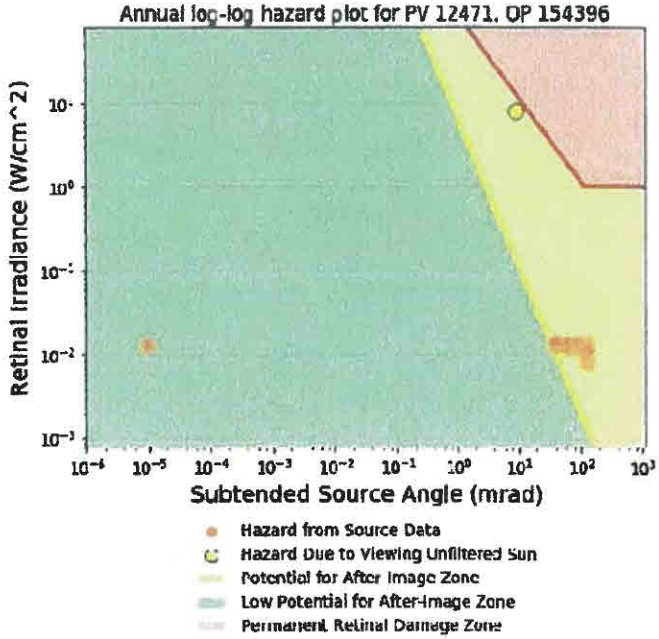
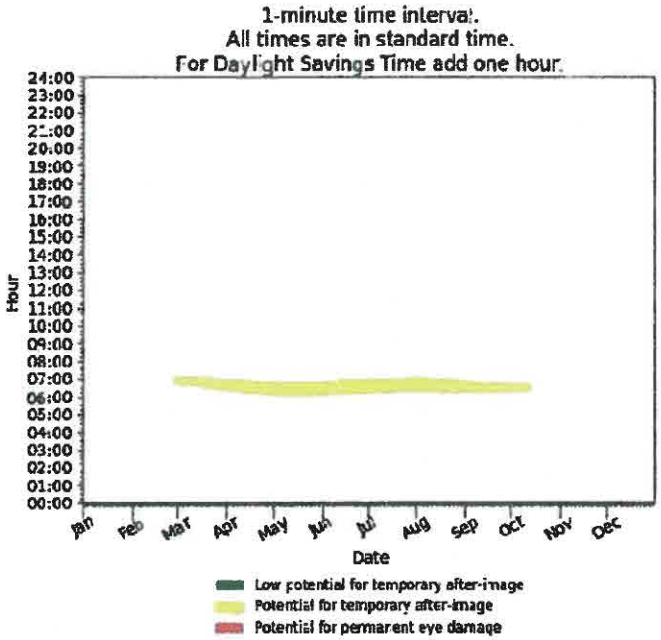


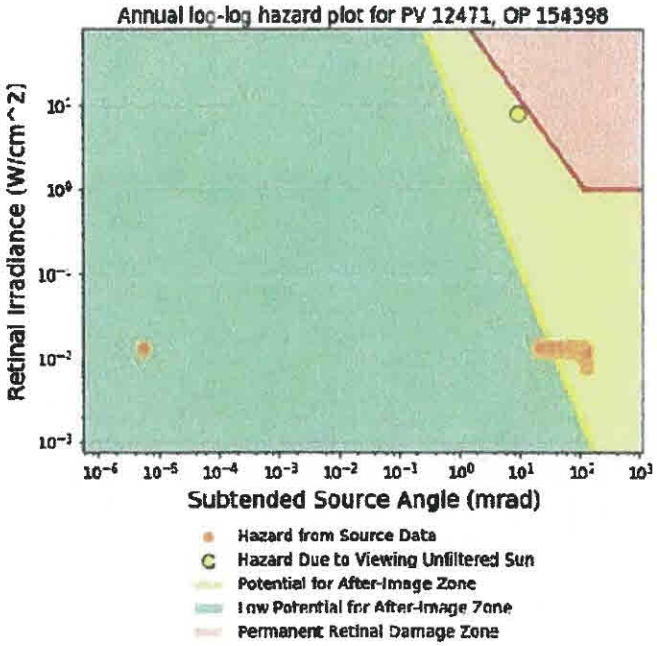


Observation point: 7

No glare found

Observation point: 8





Observation point: 9

No glare found

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EXHIBIT G

SUGGESTED REVISIONS TO THE FINDINGS OF FACT AND DECISION AND ORDER

As part of the request for modification of the Special Use Permit (SP15-405) for the Waipio Solar Project ("Project") and the associated Solar Energy Facility ("SEF"), below for consideration are suggested revisions to the existing Planning Commission Findings of Fact, Conclusions of Law and Decision and Order issued January 27, 2015:

FINDINGS OF FACT, CONCLUSIONS OF LAW,
AND DECISION AND ORDER

This matter came before the Planning Commission of the City and County of Honolulu (hereinafter the "Commission"), for public hearing on December 17, 2014 which was continued to January 7, 2015, at the Mission Memorial Conference Room in Honolulu, Hawaii. Based on the record in this matter, the Commission hereby finds as follows:

1. This matter involves ~~Waiawa~~ Waipio PV, LLC's ("Applicant") application of modification of Special Use Permit ("SUP") ~~application~~ to the Department of Planning and Permitting ("DPP") for the establishment of a solar energy facility ("SEF") within the State Land Use Agricultural District on Land Study Bureau Overall Master Productivity rating Class "B" lands. In March of 2015, the Applicant's parent company SunEdison filed for bankruptcy, and Applicant was subsequently purchased by NRG Renew LLC. The Applicant has applied for a modification of the SUP to extend the time to establish the SEF and make minor technical changes to the SEF.

2. The site of the proposed SEF ("Project") is located in Central Oahu, east of the H-2 Interstate Highway ("H-2") and approximately 1,000 feet north of Mililani Memorial Park. It consists of an approximate 308.8-acre portion of a 525-acre agricultural lot ("Petition Area") referred to as Tax Map Key 9-5-003: 004 ("Parcel 4").

3. The Petition Area is owned by ~~Renewable~~ Waipio Land Holdings, LLC ("Land Owner"). The Applicant filed Fee Owner's Letter of Authorization (Applicant's 'Exhibit No. 25) which shows that the Land Owner has given authorization to the Applicant to file the SUP application.

4. The Applicant seeks ~~a~~ to modify the approved SUP to establish a 47-megawatt SEF. The proposed SEF will include accessory uses and structures consisting of an electrical transformer station, an electrical switchyard, communications building, combiner boxes, below surface collector wiring, inverters, weather monitoring stations, switch gear, internal driveways, and perimeter chain-link fencing. Landscaping will be planted along certain sections of the H-2 to mitigate visual impacts.

5. The Applicant proposes to lease portion of the Petition Area to a local ranch to raise hair sheep in compliance with Section 205-4.5(a)(21), Hawaii Revised Statutes ("HRS") recently created under Act 55, 2014 Session Laws Hawaii ("Act 55"). The sheep ranching will provide on-site vegetation control and as a food source in compliance with the intent of Act 55.

6. The Petition Area is presently used as a pasture.

7. Access to the Petition Area is from Ka Uka Boulevard, west of H-2, via plantation roadways and a bridge across H-2 north of the Ka Uka/H-2 Interchange.

8. The Petition Area is designated by the Central Oahu Sustainable Communities Plan as Agriculture and Preservation. The existing zoning is AG-1 Restricted Agricultural District. Surrounding uses include agriculture, open space, highway, and cemetery uses.

9. The Petition Area is comprised of Class B soils according to the Land Study Bureau Overall Master Productivity Rating System. The Petition Area consists of Prime and Unique Agricultural Lands pursuant to the Agricultural Lands of Importance to the State of Hawaii Classification System. The Petition Area is not classified as Important Agricultural Land under Part III of Chapter 205, HRS.

10. The Project's solar panels will be south-facing and mounted on ~~fixed-tilt blocks~~ horizontal-axis tracking racks about 4 ½ to 9 ½ feet above existing grade. Power generated by the SEF would be connected via the switchyard and substation facilities to ~~an~~ existing Hawaiian Electric Company ("HECO"), overhead 138 kilovolt ("kV") transmission lines which traverse the Petition Area.

11. The energy generated by the SEF will be sold to HECO.

12. The Applicant offered, and the Commission received into record, Exhibits 1 through 26.

13. The Pearl City Neighborhood Board ("NB") No. 21 and the Mililani/Waipio/Melemanu NB No. 25 supported the Project.

14. The Project is not subject to environmental disclosure requirements of Chapter 343, HRS.

15. At the public hearing of December 17, 2014, the Commission heard testimony from Cruz Vina, Chairperson of the Pearl City NB No. 21, in support of the Project. In addition, the Applicant provided testimony from its staff and consultants on the Project. The DPP requested an extension of the Commission's public hearing to allow completion of the DPP's Report and Recommendation which was granted by the Commission and the public hearing was continued to January 7, 2015.

16. The Commission received a report from the Director of the DPP dated December 30, 2014, providing an analysis of the request and a recommendation for approval of the Application with conditions.

17. At its continued public hearing of January 7, 2015, the Commission received Applicant's Exceptions to the DPP's Findings of Fact, Conclusions of Law, and Recommendation dated December 30, 2014; and Certificate of Service.

CONCLUSIONS OF LAW

The Commission hereby concludes as follows:

1. The Commission has jurisdiction to permit unusual and reasonable uses within the agricultural districts, pursuant to Section 205-6, HRS.

2. The Project is an "unusual and reasonable" use as set forth in Section 205-6, HRS, and the five guidelines established by the Commission, pursuant to Section 2-45 of the Rules of the Commission.

3. The Project would make available portions of the site for compatible agriculture in accordance with Section 205-4.5(a)(21)(A), HRS.

4. The Project would not be contrary to the objectives sought to be accomplished by the State Land Use Law.

DECISION AND ORDER

Pursuant to the foregoing Findings of Fact and Conclusions of Law, the Commission hereby **APPROVES** the modification of the ~~application for a~~ State Special Use Permit, File No. 2014/SUP-3, for approximately 308.8 acres, Tax Map Key 9-5-003: Portion of 004, for the establishment of a solar energy facility, as shown on Exhibit 1, subject to the following conditions:

1. Usable lands of the Petition Area, including areas under PV panels, shall be made available for compatible agricultural use at a lease rate that is at least 50 percent below the fair market rent for comparable properties, as long as the Project is in operation. Compatible agricultural operations shall be established, or Applicant shall be actively seeking to have such operations established, within one year of the start of commercial power generation. Extensions to this deadline may be granted by the Director of the DPP for unforeseen extenuating circumstances.

2. The Applicant shall submit for review and obtain the approval of the following from the Director of the DPP, prior to the issuance of a grading or building permit:

a. A survey map accompanied by a metes and bounds description of the approved Petition Area.
b. A site plan showing the area required under Condition 1, above, relating to the minimum land area to be made available for compatible agricultural use.

3. Within one year of the completion of construction or prior to the closing of the building permit for the solar energy facility, the Applicant shall submit to the DPP proof of financial security, such as a posted letter of credit or similar mechanism from a creditworthy financial institution, in favor of the owner of the land subject to the SUP, in the amount of approxmately four million dollars ($4,000,000.00), which security shall remain in place for the duration of the operation of the Project, with evidence of same provided to the Director of the DPP on an annual basis, to decommission the Project and restore the Petition area to substantially the same physical condition as existed prior to the development of the SEF.

The Applicant shall decommission the SEF within twelve (12) months following the termination of operations of the SEF, with the exception of the HECO switchyard, which may remain within the Petition area after termination of the SUP. A change in Project ownership or a change in ownership of the land subject to the SUP, which warrants a new proof of financial security to decommission the Project, shall be submitted to the DPP for processing through the Planning Commission, within three months of the ownership change.

1. As needed, the Applicant shall work with the U. S. Fish & Wildlife Service regarding the protection of endangered or migratory bird activity at the Petition Area.

2. The Applicant shall establish the Project within ~~two (2) years~~ thirty (30) months of the date of the State Land Use Commission's (LUC) Decision and Order approving the

modification of the SUP, or within such extended time if approved as follows. Requests for extension of this deadline shall be submitted to the Director of the DPP prior to the expiration of the deadline. The Land Use Commission may grant an extension to the deadline to establish the Project due to unforeseen circumstances that were beyond the control of the Applicant. This SUP shall be valid for a period of thirty-five (35) years from the date of the State LUC's Decision and Order approving the modification of the SUP, subject to further extensions upon a timely request for extension filed with the Planning Commission at least one-hundred twenty (120) days prior to the SUP's expiration.

3. On or before December 31 of each year that the SUP is in effect, the Applicant or its successor shall file an annual report to the DPP that demonstrates the Applicant's compliance with conditions of the SUP.

4. Major modifications to: (1) the Project plans, including but not limited to significant increases in the ~~number of~~area covered by PV panels; (2) amendments to the conditions of approval; (3) significant expansions of the approved area; or (4) change in uses stated herein, shall be subject to the review and approval of the Planning Commission and the State LUC. Minor modifications including minor additions to accessory uses and structures, and new incidental uses and structures in the approved area are subject to review and approval by the Director of the DPP.

5. The Applicant and/or landowner shall notify the Director of the DPP of:

a. Any change or transfer of licensee on the property;

b. Any change in uses on the property;

c. Termination of any uses on the property; and/or

d. Transfer in ownership of the property.

The Planning Commission, in consultation with the Director of the DPP, shall determine the disposition of this SUP, and the facilities permitted herein.

1. Enforcement of the conditions of the SUP shall be pursuant to the Rules of the Planning Commission, including the issuance of an order to show cause as to the reason the SUP should not be revoked if the Commission has reason to believe that there has been a failure to perform the conditions imposed herein.

BEFORE THE PLANNING COMMISSION
OF THE CITY AND COUNTY OF HONOLULU
STATE OF HAWAII

In the Matter of the Application of WAIPIO PV, LLC For a New Special Use Permit to Allow Development of a 47-megawatt photovoltaic (PV) Energy Generation Facility and Accessory Uses and Structures on Lands Rated Class B by the Land Study Bureau, Waipio, Ewa, Oahu, Hawai'I Tax Map Key No.: (1) 9-5-003:17	FILE NO. 2014/SUP-3(RY) CERTIFICATE OF SERVICE

CERTIFICATE OF SERVICE

The undersigned hereby certifies that a true and correct file-marked copy of the foregoing shall be duly served upon the following person(s) by hand delivery:

PLANNING COMMISSION
Department of Planning and Permitting
City and County of Honolulu
650 S. King Street, 7th Floor
Honolulu, Hawaii 96813

DATED: Honolulu, Hawaii, June 20, 2017.

BENJAMIN A. KUDO
SARAH M. SIMMONS
Attorneys for Applicant
WAIPIO PV, LLC