BEFORE THE LAND USE COMMISSION

OF THE STATE OF HAWAI'I

In the Matter of the Petition of

TOM GENTRY AND GENTRY-PACIFIC, LTD

To Amend the Agricultural Land Use District Boundary into the Urban Land Use District for Approximately 1,395 Acres at Waiawa, Ewa, Oahu, State of Hawaii, Tax Map Key Nos.: 9-4-06: Portion of 26; 9-6-04: Portion of 1 and Portion of 16; and 9-6-05: Portion of 1, Portion of 7 and Portion of 14 DOCKET NO. A87-610

PETITIONER'S PROPOSED ORDER GRANTING PETITIONER'S MOTION FOR MODIFICATION, TIME EXTENSION, AND RELEASE AND MODIFICATION OF CONDITIONS

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Successor Petitioner LANCE KEAWE WILHELM, ROBERT K.W.H. NOBRIGA, ELLIOT K. MILLS, and CRYSTAL KAUILANI ROSE, as TRUSTEES OF THE ESTATE OF BERNICE PAUAHI BISHOP, dba KAMEHAMEHA SCHOOLS ("**KS**" or "**Petitioner**"), by and through its counsel Carlsmith Ball LLP, on December 10, 2021, filed a Motion for Modification, Time Extension, and Release and Modification of Conditions; Memorandum in Support of Motion; Affidavit of Kamuela Cobb-Adams; Affidavit of Derek B. Simon; Exhibits 1 – 12 (collectively, the "**2021 Motion**"). The 2021 Motion to Amend was filed under Chapter 205, Hawai'i Revised Statutes ("**HRS**") and §§ 15-15-70 and 15-15-94 of Title 15, Subtitle 3, Chapter 15 of the Hawai'i Administrative Rules ("**HAR**").

Through the 2021 Motion, KS sought an order modifying the State Land Use Commission's ("LUC") Order Granting Motion for Order Amending Findings of Fact, Conclusions of Law and Decision and Order dated May 17, 1988, filed on November 26, 2014 ("2014 Order"), as amended by that certain Findings of Fact, Conclusions of Law, and *Decision and Order Granting With Modification Motion for Modification And Time Extension,* issued by the Commission on February 11, 2020 as to the Phase 2 solar farm ("**2020 Order**").

KS served the 2021 Motion on the State of Hawai'i Office of Planning and Sustainable Development ("**OP**"); the Department of Planning and Permitting of the City and County of Honolulu ("**DPP**"), and all persons with a recorded interest in the 1,395-acre Urban District property that was reclassified under this Docket (the "**KS Property**" or the "**Petition Area**"). In total, 18 individuals/entities were served with a copy of the 2021 Motion.

On December 15, 2021, Deputy Attorney General Alison S. Kato, counsel for the State Office of Planning and Sustainable Development ("**OP**") filed a request to allow OP a 53-day extension in which to file its response to KS's 2021 Motion.

On December 20, 2021, Jennifer A. Lim, counsel for KS, filed a letter confirming that Petitioner had no objection to the requested time extension.

On December 21, 2021, Executive Officer to the LUC Daniel Orodenker sent a letter to Ms. Kato, and copied to Ms. Lim, Franz Kraintz of the Department of Planning and Permitting of the City and County of Honolulu ("**DPP**"), Deputy Corporation Counsel Duane Pang, and Director of OP Mary Alice Evans granting OP's request to extend its filing deadline to February 8, 2022, and stating that the Commission would like to schedule a prehearing conference via Zoom.

On December 22, 2021, DPP Director Dean Uchida filed a request to allow DPP a 53-day extension in which to file its response to KS's 2021 Motion.

On January 20, 2022, Jennifer A. Lim filed a Notice of Appearance of Co-Counsel, informing the LUC and the parties that she was now representing KS through her own law firm as co-counsel with Carlsmith Ball LLP.

Also on January 20, 2022, Ms. Lim filed a letter requesting confirmation that the hearing on the 2021 Motion would be held on March 23, 2022, that KS's proposed filing date for its

reply materials of February 25, 2022 was acceptable, and that no prehearing conference was required.

On February 3, 2022, DPP emailed the parties its response to the KS 2021 Motion.

On February 8, 2022, OP filed its Response to the KS 2021 Motion.

On February 25, 2022, KS filed Petitioner's First List of Witnesses; Petitioner's First List of Exhibits; Exhibits 13 - 41; Certificate of Service.

On February 25, 2022, OP and KS filed Stipulated Proposed Conditions of Approval.

On _____, 2022, the Commission mailed notice of its scheduled March 23, 2022 Zoom webinar meeting and agenda to the Statewide and Oʻahu mailing and email lists.

Between ______ and March 23, 2022, the Commission received written testimony from ______.

On March 23, 2022, the Commission met in Honolulu, Hawai'i using the Zoom webinar platform, to consider the KS 2021 Motion. Jennifer A. Lim, Esq., Puananionaona P. Thoene, Esq., and Derek B. Simon, Esq. appeared on behalf of Petitioner KS. Deputy Attorney General Bryan C. Yee appeared on behalf of OP. Deputy Corporation Counsel Brianna L. Weaver appeared on behalf of DPP.

At the meeting, the Commission entered into evidence without objections from the parties KS's Exhibits 1 - 41, which included written direct testimony from Dana K. N. Sato and Jason Alapaki Jeremiah of KS, Nicholas Molinari of Waiawa Phase 2 Solar, LLC, Lisa Kettley of Tetra Tech, Sohrab Rashid of Fehr & Peers, and Christopher Monahan of TCP Hawai'i, LLC. The Commission also entered into evidence without objections from the parties OPSD Exhibits 1 - 3.

The LUC heard public testimony in support of the 2021 Motion from ______.

As part of KS' presentation on the 2021 Motion, the Commission heard from KS witnesses Dana Sato, Jason Jeremiah, Nick Molinari, and Lisa Kettley. _____ appeared on behalf of OP; _____ appeared on behalf of DPP.

On March 23, 2022, following the completion of the parties' respective cases-in-chief, the LUC closed the evidentiary portion of the proceedings. A motion was made and seconded to grant the 2021 Motion and authorize the use of the identified portions of the KS Property, as hereinafter defined, as a solar farm, to include all related utility and other infrastructure, until December 31, 2044 as to the area identified as Parcel A, and until December 31, 2054 as to the area identified as Parcel B, and subject to the conditions imposed herein.

There being a vote tally of ______, the motion carried.

The Commission, having examined the testimony, evidence and arguments of counsel presented during the hearings, along with the pleadings filed herein, hereby makes the following findings of fact, conclusions of law, and decision and order:

A. <u>BACKGROUND & PROCEDURAL MATTERS</u>

1. The LUC reclassified approximately 1,395 acres of land situate at Waiawa, 'Ewa, O'ahu (the "**KS Property**" or the "**Petition Area**"), into the Urban District subject to ten conditions of approval under its *Findings of Fact, Conclusions of Law and Decision and Order* filed May 17, 1988 (the "**1988 Order**"; as amended in 1990,¹ the "**Waiawa Order**").

2. KS owned the Petition Area at the time of the 1988 Order and continues to own the Petition Area now. At the time of the reclassification proceedings, Tom Gentry and Gentry-Pacific, LTD (together, "Gentry") had a development agreement with KS and Gentry sought the reclassification. Gentry intended to develop the Petition Area as Waiawa Ridge, with up to

¹ By Order dated November 30, 1990, the LUC amended Condition No. 6 of the 1988 Order and reaffirmed all other conditions.

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7,906 residential dwellings, half of which were to be retirement/leisure housing units for those 55 and older.

3. In its 2008 Annual Report to the LUC in this Docket, Gentry indicated that Waiawa Ridge Development LLC had secured construction financing for the Waiawa Ridge Project and groundbreaking was scheduled for fall 2009.

4. Satisfaction of financing conditions proved difficult in the wake of the September 2008 worldwide financial crisis, and the process of returning the KS Property to KS's sole control began shortly thereafter. Full control returned to KS late in 2012.

5. In 2014, KS sought LUC approval to use the Petition Area on an interim basis for two utility scale solar farms.

6. By its Order Granting Motion for Order Amending Findings of Fact, Conclusions of Law and Decision and Order Dated May 17, 1988, filed November 26, 2014 ("**2014 Order**"), the LUC approved two specific areas within the KS Property to be used for two utility-scale solar farm projects.

7. The solar areas are depicted on Exhibit A to the 2014 Order, and are comprised of: (1) the Phase 1 Site, consisting of approximately 387 acres in the northwestern portion of the Petition Area; and (2) the Phase 2 Site, consisting of approximately 268 acres in the eastern portion of the Petition Area and is over the Waiawa Shaft Zone of Contribution.

8. The 2014 Order was issued with 16 conditions (the "2014 Conditions"), including a time condition that allowed the Phase 1 Site and the Phase 2 Site to be used for solar farm purposes for 35 years–*i.e.*, the two projects had to be decommissioned no later than November 26, 2049.²

² Condition No. 8 of the 2014 Order provides:

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9. Sun Edison, the originally proposed solar farm developer, was not able to secure approval from the Hawai'i Public Utilities Commission ("**PUC**") and subsequently went bankrupt.

10. Due to the change in circumstances, KS entered into agreements with another solar farm developer, Waiawa Solar Power, LLC, a wholly owned indirect subsidiary of Clearway Energy Group LLC ("WSP"). On July 24, 2019, KS filed a Motion for Modification and Time Extension, seeking certain amendments to the 2014 Order so that the Phase 2 Site could be developed under an updated schedule pursuant to WSP's plans for the Phase 2 Site.

11. The LUC granted KS' 2019 Motion and issued its Findings of Fact, Conclusions of Law, and Decision and Order Granting With Modification Motion for Modification And Time Extension, filed February 11, 2020, with 18 conditions, which are applicable only to the Phase 2 Site, and which replaced all other conditions imposed under the 2014 Order as to the Phase 2 Site ("2020 Order").

12. Under the 2021 Motion, KS seeks approval for minor modifications to the solar farm previously approved for the Phase 1 Site, so that it can be developed as a 30 megawatt ("MW") alternating current (AC)/60 MW direct current (DC) solar farm ("2021 Phase 1 Project") with related infrastructure.

13. Under the 2021 Motion, KS also requests that the LUC release two conditions imposed under the 2014 Order that have been fully satisfied, and modify eight conditions imposed under the 2014 Order to reflect updated information.

The interim use of the Petition Area for the proposed solar farm, including any and all permitting, construction, operation, and decommissioning activities associated with the solar farm, shall not exceed a period of 35 years from the date of this Decision and Order without the prior written approval of the Commission.

B. <u>DESCRIPTION OF THE SUBJECT PROPERTY</u>

14. The KS Property is located at Waiawa and Waipi'o, 'Ewa, O'ahu, Hawai'i, and is designated by Tax Map Key Nos. (1) 9-4-006:034, 035(por.), 036(por.), 037(por.); 9-6-004:024 (por.); 025, 026; 9-6-005:003 (por.). It is east of the H-2 Freeway/Ka Uka Boulevard interchange and west of Pearl City. Primary access to the Petition Area is from a driveway located on Waiawa Prison Road, which is along the northern edge of the Petition Area, with regional connections to the H-2 Freeway via Ka Uka Boulevard and Mililani Cemetery Road.

15. Elevation of the KS Property ranges from approximately 100 feet to 600 feet above sea level.

16. Based on available topographic information, the Phase 1 Site generally slopes from mauka to makai. Elevations range from 650 feet to 370 feet above mean sea level.

17. Access within the KS Property to the Phase 1 Site is largely over existing roads and access into the Phase 1 Site itself is planned for the northern end of the Site.

18. In the past, the KS Property was used for sugar cane cultivation and for cattle grazing. The land has been fallow at least since 1983.

19. There is no residential community of significant size in close proximity to the KS Property.

20. The KS Property is partially surrounded Urban District land and Agricultural District land. No Conservation District lands are adjacent to the Petition Area. The nearest Conservation District land is approximately 0.9 miles east of the KS Property.

21. The Petition Area is designated primarily for urban type uses on the Central Oahu Sustainable Communities Plan land use map, including Residential and Low Density Apartment,

Major Community Commercial Center, and Industrial, as well as Agriculture and Preservation Areas.

22. There is a mixture of City and County zoning districts within the Petition Area. These include Neighborhood Business District (B-1), Community Business District (B-2), Low Density Apartment District (A-1), Medium Density Apartment District (A-2), Industrial-Commercial Mixed Use District (IMX1), Residential District (R-5), General Preservation (P-2), AG-1 (Restricted Agriculture) and AG-2 (General Agriculture).

23. Within the Phase 1 Site, the zoning is Community Business District (B-2), Low Density Apartment District (A-1), Industrial-Commercial Mixed Use District (IMX1), Residential District (R-5). There are some slivers of land zoned General Preservation (P-2).

24. The KS Property is not located within the City and County of Honolulu's Special Management Area.

25. The 2021 Phase 1 Project is a "utility installation" as defined under the Honolulu Land Use Ordinance, Revised Ordinances of Honolulu, Chapter 21 ("**LUO**"). Under LUO § 21-10.1, a "utility installation" is defined as "uses or structures, including all facilities, devices, equipment, or transmission lines, used directly in the distribution of utility services, such as water, gas, electricity, telecommunications other than broadcasting antennas, and refuse collection other than facilities included under waste disposal and processing." Utility installations also include accessory uses and structures directly associated with the distribution of the utility service. *Id*.

26. Under the LUO, utility installations are permitted uses in all zoning districts. A Conditional Use Permit/minor ("CUP Minor"), granted administratively by the Director of the DPP, is required for the 2021 Phase 1 Project.

C. <u>DESCRIPTION OF THE SOLAR FARM</u>

27. The 2021 Phase 1 Project will be developed by Waiawa Phase 2 Solar, LLC ("**WP2S**"). WS2S is a wholly-owned indirect subsidiary of The AES Corporation. AES is a publicly-traded (NYSE: AES) Fortune 500 global energy company accelerating the future of energy. AES's revenues in 2020 were \$9.7 billion, and AES owns and manages \$34 billion in total assets.

28. AES regularly develops renewable energy projects through wholly owned subsidiaries. Under those arrangements, AES has three gigawatts of operating renewable projects across the United States, with another 2.6 gigawatts in the construction pipeline.

29. AES and its subsidiaries have several solar projects built and under construction in Hawai'i, on Kaua'i, O'ahu, Maui, and Hawai'i Island.

30. The 2021 Phase 1 Project is a 30 MW alternating current (AC)/60 MW direct current (DC) solar photovoltaic system, coupled with a 240 MW-hour battery energy storage station ("**BESS**").

31. The 2021 Phase 1 Project includes a series of solar modules mounted on singleaxis trackers that rotate on a fixed axis from east to west as the sun moves across the sky. The highest point of the panels will be approximately 15 feet above ground. They will be constructed in accordance with all building permit structural requirements, including the requirement to withstand hurricane-type winds. The project components will be enclosed by fencing that will be about 7 feet high.

32. The BESS includes a series of battery units that will be housed in containers distributed throughout the site. The battery units will be installed on concrete pads (also referred to as "power conversion stations" or "PCS pads"), along with other equipment including inverters, transformers and communication equipment.

33. The BESS consists of containerized lithium-ion battery units distributed throughout the solar arrays. The containerized units will be set on the concrete PCS pads. It is expected that each pad will contain two to four 45-foot (approx.) containers. Each container is a fully integrated system and incorporates multiple layers of protection to avoid failures and to contain potential hazardous substances.

34. Specific features include integrated monitoring and circuit protection, a selfcontained heating ventilation air cooling system, and a fire detection and suppression system specifically designed for lithium-ion battery energy storage systems. The fire detection and suppression system incorporates specific controls with automatic safety responses in response to conditions including high battery temperature, high air temperature, and the presence of smoke. The system also has emergency stop buttons that isolate the battery units from the solar arrays and electrical grid.

35. The batteries will be stored in completely contained, leak-proof containers. Each battery container will have temperature/smoke/fire sensors, alarms, and aerosol fire extinguishing systems, and will be controlled by remote power disconnect switches. Additionally, each battery system will undergo qualification testing prior to commercial operation.

36. The battery energy storage containers, as well as inverters, transformers, and other electrical and communications equipment, will be set on PCS pads that are distributed throughout the solar array. The primary purpose of the equipment on each PCS pad is to collect and monitor the energy produced by the solar modules and convert the energy to a higher voltage alternating-current before routing it to a substation.

37. The 2021 Phase 1 Project also includes a substation. There will be 46 kV steel structures to hold overhead conductors, foundations for equipment, circuit breakers, disconnect switches, fuse switches, lightning arrestors, generator step-up transformers, two outdoor steel or CMU control cabinets, and an operations and maintenance structure. An additional fence will be installed around the substation area.

38. Two 46 kV overhead lines will deliver power from the substation to the existing Waiau-Mililani and Wahiawa-Waimano 46 kV sub-transmission lines, which are generally parallel to the H-2 Freeway.

39. The interconnection study for the 2021 Phase 1 Project was completed in July2021.

40. The 2021 Phase 1 Project will be contained within the same 387 acres in the northwestern portion of the Petition Area that the Commission approved for solar development under the 2014 Order (the "**Phase 1 Site**").

41. The solar developer, WP2S, has entered into a power purchase agreement ("**PPA**") with Hawaiian Electric Company, Inc. ("**HECO**") for the 2021 Phase 1 Project.

42. The term of the PPA is 20 years, and the commercial operations date is October 30, 2023.

43. In December of 2020 the Public Utilities Commission ("**PUC**") approved the PPA between WP2S and HECO.

44. For the purposes of this project, KS has designated one portion of the Phase 1 Site as Parcel A, and the other portion as Parcel B.

45. Parcel A will be decommissioned no later than December 31, 2044. This is sooner than the decommissioning deadline that the Commission imposed under the 2014 Order, which was November 2049.

46. Should WP2S enter into a new PPA or extended PPA, Parcel B will be decommissioned by December 31, 2054, which is five years later than the time frame approved by the Commission in 2014.

47. Because Parcel A must be decommissioned by December 31, 2044, that substation will not be available to support Parcel B, should the required PPA extension be obtained for Parcel B.

48. A new or extended PPA for Parcel B would take into account some area for a substation and interconnection facilities, and that would be factored into the Parcel B concept at that time.

49. Construction of the 2021 Phase 1 Project is projected to take between 12 to 18 months.

50. Decommissioning activities are projected to take approximately one year. That estimate covers the decommissioning of both Parcel A and Parcel B, or if the decommissioning of each Parcel is done separately

51. When decommissioning, under its agreement with KS, WP2S must remove all above-ground and below-ground structures from the property such as photovoltaic panels, transformers, substation infrastructure, energy storage facilities and foundations. Any materials then known to be harmful to the environment or health must be completely removed from the property in their entirety. Decommissioning shall also include all road reclamation, re-seeding and re-planting, as applicable and appropriate at the time of decommissioning.

52. WP2S also committed to decommissioning in accordance with all laws and rules in effect at the time, including the Department of Health Hawai'i Administrative Rules Chapter 11-273.1.

53. WP2S is also required to provide KS with decommissioning security in the amount of 100% of the estimated costs of the decommissioning work.

54. The operation of the solar farm is consistent with the prior conditions of approval imposed under the Waiawa Order. The development and operation of the solar farm does not violate any of the existing conditions of approval under the Waiawa Order.

D. KS' REVISED MASTER PLAN FOR WAIAWA

55. KS is the sole landowner of the Petition Area.

56. Because KS plans in perpetuity and not based on quick financial returns or demands of shareholders, KS can take the time to properly plan and see the Petition Area developed in a way that is truly beneficial to the community.

57. Renewable energy provides KS an opportunity to generate a degree of financial return on the land while it pursues long-term development goals. It also offers a low impact use of the property that has a beneficial impact to the State's renewable energy goals.

58. Renewable energy provides a secure and growing revenue source for KS so that future generations can have at least the same educational benefits as are provided to today's generation.

59. According to KS' 2021 Annual Report, KS provided 42,599 learner experiences through its campuses, preschools, community education, community investing and scholarships between July 1, 2020 and June 30, 2021, all during the height of the pandemic. KS invested \$438 million in education, which included \$191.9 million on K-12 learners, \$39.4 million on preschools, \$27.4 million on financial aid, and \$28.2 million on scholarships.

60. KS' vision for its Waiawa Master Plan covers approximately 2,010 acres, which includes the 1,395-acre Petition Area, and additional lands adjacent thereto.

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61. KS' Waiawa Master Plan envisions development taking place in five phases, A through E. It is anticipated that development will start from the south of the property, at phase A, and move north eventually reaching Phase E.

62. A portion of the 2021 Phase 1 Project is within Phase C. That is the portion of the project that KS designated as Parcel A.

63. Under KS' Waiawa Master Plan, solar uses in that area must be gone by the end of 2044 so that Phase C of the Master Plan can go forward.

64. The other portion of the 2021 Phase 1 Project, the portion designated as Parcel B, is within Phases D and E of the KS' Waiawa Master Plan.

65. Under KS' Waiawa Master Plan, solar uses may remain in that Parcel B area until the end of 2054 without impeding KS' Waiawa Master Plan efforts.

66. Infrastructure development for Phase D of the Master Plan is planned for 2060, and 2066 for Phase E.

67. Under a Stipulation with OP, KS volunteered to accept a condition of approval for this 2021 Phase 1 Project that requires KS to complete construction of the backbone infrastructure for the proposed Waiawa Master Plan Phase A, consisting of the primary roadways and access points, internal roadways, on-and offsite water and electrical system improvements, and storm water/drainage and other utility system improvements, by December 31, 2030.

68. KS submitted its Revised Master Plan and Schedule for Development as required under Condition 1 of the 2014 Order, on October 7, 2019.

69. KS presented the Revised Master Plan and development schedule to the Commission at a meeting held in Honolulu on January 9, 2020.

70. The Commission finds that KS has satisfied Condition 1 of the 2014 Order.

71. Under a Stipulation with OP, KS volunteered to accept a condition of approval for this 2021 Phase 1 Project that requires KS to either provide an updated master plan and development schedule by February 11, 2025, or have a published Draft Environmental Impact Statement that addresses the Petition Area by February 11, 2025.

E. <u>ENERGY & SOCIAL IMPACTS</u>

72. The 2021 Phase 1 Project is anticipated to generate approximately 107,595 MW hours per year. According to HECO, this is enough energy to power the equivalent of approximately 18,000 homes a year.

73. The net greenhouse gas ("GHG") emissions reduction over the project lifecycle is 1,078,948 metric tons of GHG (MT CO2e), based on a third-party analysis commissioned by HECO. The term lifecycle refers to emissions from the start to the finish of the project, i.e., emissions that occur during the upstream stage (emissions from raw material extraction, manufacturing, project construction. Over the course of 20 years, the net reduction in GHG emissions is 1,078,948 metric tons of GHG.

74. Over the life of the PPA, the 2021 Phase 1 Project is estimated to avoid fuel consumption to the tune of 2,908,097 barrels of fossil fuel, comprised of Low Sulfur Fuel Oil, Diesel Fuel, and Ultra-Low Sulfur Diesel.

75. Construction of the 2021 Phase 1 Project is anticipated to require up to 200 workers during the construction phase.

76. Once construction is complete, the 2021 Phase 1 Project is estimated to require approximately 4 full-time employees for operations and maintenance, including remote monitoring, preventative maintenance activities, and equipment servicing and troubleshooting.

77. WP2S estimated that the 2021 Phase 1 Project overall, including development, construction, operations, and decommissioning, will generate some 565 jobs (accounting for direct, indirect, and induced jobs).

78. WP2S estimated that the 2021 Phase 1 Project will generate economic output of approximately \$131 Million (including direct, indirect, and induced economic effects).

79. Allowing the use of portions of the KS Property for the solar project will allow KS to receive a financial return on the KS Property, which is essential for promoting KS' education mission. Between July 1, 2020 and June 30, 2021, KS invested \$438 million in education, which included \$191.9 million on K-12 learners, \$39.4 million on preschools, \$27.4 million on financial aid, and \$28.2 million on scholarships.

80. Imported oil supplies nearly all of Hawai'i's energy, making it the most oildependent state in the U.S. According to the Hawaii State Energy Office, Hawai'i imports its crude oil primarily from Russia, Libya, Argentina, and South Sudan. That makes Hawai'i vulnerable to disruptions in the energy markets.

81. The 2021 Phase 1 Project will reduce Hawai'i's dependence on imported oil. It is estimated to avoid the need for 2,908,097 barrels of oil over the term of the PPA.

82. Act 97, passed in 2015, set a goal of Hawai'i achieving the nation's first-ever 100% renewable portfolio standards by the year 2045.

83. Act 15, passed in 2018, set a goal for Hawai'i to become carbon neutral as quickly as practicable, and no later than 2045.

84. In 2020, only 30.5% of O'ahu's electricity was generated by renewable energy.

85. Consistent with KS' educational mission, KS' agreement with WP2S requires WP2S to work with KS to establish educational programs for Hawai'i students and teachers.

WP2S is obligated to provide up to \$200,000 in funding for these educational programs. These programs will be designed to foster academic achievement and practical skills by working directly with students and teachers through mentorship, engagement exploration, and curriculum, with the overall goal of supporting the stewardship of the local environment through the advancement of green jobs, sustainability, and conservation. Actual program activities will be jointly agreed upon between KS and WP2S.

86. WP2S conducted extensive public outreach to raise awareness and gather input about the 2021 Phase 1 Project. WP2S began the outreach process with preliminary engagement with local officials, community leaders, and interested stakeholder organizations.

87. Project representatives presented the project details at three of the four adjacent Neighborhood Boards (Mililani Mauka/Launani Valley Neighborhood Board #35, Pearl City Neighborhood Board #21, and Waipahu Neighborhood Board #22). All three boards adopted resolutions in support of the 2021 Phase 1 Project with near unanimous votes (only one abstention, no opposition).

88. WP2S has been working to schedule a presentation to the Mililani-Waipio Neighborhood Board #25 but has not been placed on the agenda as of the time of this Motion.

89. WP2S represented that it will continue to listen to communities, address feedback, and continue outreach efforts as project development progresses.

F. IMPACTS UPON RESOURCES AND INFRASTRUCTURE

90. Development of the 2021 Phase 1 Project does not trigger the requirements to prepare an environmental assessment under Chapter 343, HRS.

91. KS anticipates that development of the KS Waiawa Master Plan will be preceded by the preparation of an environmental impact statement ("**EIS**") under Chapter 343, HRS. 92. In anticipation of the KS Waiawa Master Plan EIS, the Commission cannot determine in advance whether a supplement to that EIS will or will not be required.

93. In the future, as the KS Master Plan gets developed after the preparation of an initial EIS, if there is a trigger and a proposed action, the agency asked to make a decision on that proposed action will have to determine whether a supplemental EIS is required.

94. A jurisdictional waters survey was submitted to the U.S. Army Corps of Engineers for the 2021 Phase 1 Project. In July 2021, the U.S. Army Corps of Engineers concurred that no Army Corps permits were needed for the 2021 Phase 1 Project.

95. Overhead interconnection lines will cross Panakauahi Gulch, a tributary to Waiawa Stream. Panakauahi Gulch has intermittent flow and is generally subject to regulation by the Army Corps. However, because the interconnection lines will only span across the gulch and no fill will be placed below the high-water mark, no impacts to jurisdictional waters will occur and no permits are required for the 2021 Phase 1 Project.

96. Should WP2S's construction plans change, (which is not expected), such that there would be the discharge of dredged or fill material into Panakauahi Gulch, or otherwise require the issuance of permits, authorization from the U. S. Army Corps of Engineers would be obtained prior to that construction.

1. <u>FLORA AND FAUNA</u>

97. The Commission previously determined that the development of the Waiawa Ridge Project would have no adverse effect on any endemic Hawaiian animal or ecosystem within the KS Property.

98. The development of the solar project is not anticipated to generate any significant hazards to fauna.

99. Tetra Tech conducted a biological survey for the project, which is summarized in the Biological Resources Survey Report.

100. No federally or state listed plant or animal species were observed within or in the immediate vicinity of the Phase 1 Site during recent biological surveys. The Biological Survey found that the study area has been heavily modified by previous agricultural activities associated with sugar cultivation. The land is dominated by non-native plant and wildlife species.

101. No federally or State listed plant or animal species were observed within or in the immediate vicinity of the study area during the survey, and no portion of the study area is designated as critical habitat.

102. Although not observed, it is assumed that several federally or state listed wildlife species may occasionally occur in or fly over the Phase 1 Site, including Hawaiian hoary bat or 'ōpe'ape'a (*Lasiurus cinereus semotus*), pueo or Hawaiian short-eared owl (*Asio flammeus sandwichensis*), Hawaiian seabirds (Hawaiian petrel or 'ua'u [*Pterodroma sandwichensis*] and Newell's shearwater or a'o [*Puffinus newelli*]), and Hawaiian waterbirds (ae'o or Hawaiian stilt [*Himantopus mexicanus knudseni*], 'alea kea or Hawaiian coot [*Fulica alai*], and 'alae 'ula or Hawaiian common gallinule [*Gallinula galeata sandvicensis*]).

103. The Biological Survey offered avoidance and minimization measures that could be employed in connection with the development of the 2021 Phase 1 Project.

104. OP consulted with the Department of Land and Natural Resources Division of Fish and Wildlife ("**DOFAW**").

105. Based on that consultation, OP presented a proposed condition of approval to address landscaping vegetation and the protection of endangered Hawaiian hoary bat, Hawaiian short-eared owl, and endangered and threatened Hawaiian water bird and shorebird species at the Phase 1 Site.

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106. Under a Stipulation with OP, KS agreed to the OP wildlife protection condition, with some minor modifications to the language for the purposes of clarity.

2. ARCHAEOLOGICAL AND HISTORICAL RESOURCES

107. As set forth in Hawai'i Administrative Rules § 13-276-1, an "archaeological inventory survey" is "the process of identifying and documenting the archaeological historic properties and burial sites in a delineated area, gathering sufficient information to evaluate significance of the historic properties and burial sites, and compiling the information into a written report for review and acceptance by the department."

108. As used in HAR § 13-276-1, the "department" is the State Department of Land and Natural Resources.

109. An archaeological inventory survey is required when SHPD says one is required. An archaeological inventory survey cannot be done on a voluntary basis, just because a landowner wants to do an archaeological inventory survey. There are specific informational and process requirements that must be followed for an archaeological inventory survey and only the DLNR-SHPD can make an acceptance determination. Without SHPD's involvement, the document is not an archaeological inventory survey.

110. Under HRS § 6E-42, the formal historic review process can be started only in the context of when a State or County agency is asked to approve a project involving a permit, license, certificate, land use change, subdivision, or other entitlement for use, which may affect historic property.

111. The preparation of an environmental assessment or environmental impact statement is not a trigger under HRS Chapter 6E.

112. SHPD's reviewing authority is agency to agency. SHPD does not review archaeological inventory surveys submitted by private landowners and in the absence of a permit

application. Thus, County or State agencies that receive permit applications for work that "may affect a historic property" must submit the archaeological inventory survey to SHPD.

113. An archaeological reconnaissance and inventory survey of a 3,600-acre area, which included the KS Property, was approved by SHPD July 7, 1992.

114. In April 2014, in connection with the initial solar development proposal put forth by KS, SHPD determined that an archaeological inventory survey was required for the entire Petition Area.

115. In 2014 TCP Hawai'i LLC ("**TCP**") completed the fieldwork for an archaeological inventory survey of the entire KS Property, as well as the two existing access roads into the KS Property and two linear transects representing utility tie-ins for the proposed solar farm.

116. TCP prepared a report titled Archaeological Inventory Survey of 1,395 Acres of Kamehameha Schools' Land in Waiawa and Waipi'o Ahupua'a, 'Ewa District, O'ahu Island, Hawai'i, dated March 2015 (Revised) ("AIS"). The AIS covers the entire 1,395-acre KS Property. TCP consulted with KS, SHPD, and the Office of Hawaiian Affairs in preparing the AIS.

117. SHPD approved that AIS in April 2015.

118. As documented in the AIS, the entire KS Property had been completely altered by plantation-era activities and construction. The KS Property was in commercial agricultural operations for approximately 100 years. There was evidence of extensive bulldozing and road construction in all three gulches, whose drainage bottoms have also experienced major flooding damage.

119. No sites that qualified under significance criterion E were identified.

120. No Hawaiian sites or artifacts, human skeletal remains, heiau, or habitation sites were found on the KS Property. No petroglyph sites were found within the KS Property.

121. The AIS documents three historic properties, all plantation-era sites dating from the early to middle 20th century, consisting of 55 component features: (a) SIHP # 50-80-09-2270, a network of roads and railroad rights-of-way consisting of 28 features; (b) SIHP # 50-80-09-2271, the remains of workers' camps consisting of two features; and (c) SIHP # 50-80-09-2273, an irrigation system consisting of 25 features.

122. Site 2273 provides important data on the geospatial location, extent and character of the plantation irrigation infrastructure in Waiawa Uka built around or shortly after 1916 by the O'ahu Sugar Company; and, excluding the interruption of World War II, continued to be used into the 1970s.

123. SHPD determined that no further work was appropriate for sites 2270 or 2271.

124. For site 2273, the effect determination was "effect, with agreed upon mitigation commitments." Those mitigation commitments are preservation for four features of site 2273.

125. Two of the features are in proximity to the 2021 Phase 1 Project site. Feature 14, a very long irrigation ditch built with cut basalt and mortar, and SHPD called for preservation of a 100-foot portion of this feature), and Feature 19, a large dam-like retention structure in the west end of Gulch B.

126. TCP also prepared an Archaeological Preservation Plan, called Archaeological Preservation Plan State Site No. 50-80-09-2273 Features 14 (Portion), 19, 22 & 23 (Portion) Kamehameha Schools' Land in Waiawa and Waipi'o Ahupua'a, 'Ewa District, O'ahu Island, Hawai'i, dated May 2015 ("**APP**"). SHPD accepted the APP in September 2015.

127. The APP provides short-term/interim protection measures, and long-term measures.

128. The short-term measures call for a buffer of 10 feet from the structural edge of the features is recommended. Those buffers are to be established with construction fencing or similar temporary barriers. Additionally, avoidance instructions must be added to construction plans and specifications, and the developer must conduct a pre-construction briefing of the hired construction firms to make them aware of the preservation buffer.

129. Interim (short-term) preservation buffers have been installed for both features (100-foot portion of feature 14, and all of feature 19). These buffers have also been surveyed and marked by a certified land surveyor.

130. The permanent measures call for installation of permanent fencing that is consistent in appearance with the early 20th century features it surrounds. No cultural practices are associated with these features, and no signage is needed because public access to these sites is not appropriate. The landowner or its designee is required to periodically inspect the fencing marking the permanent buffers. If any damage or impacts to the preservation features are noted, that will be reported to SHPD and, in consultation with SHPD, corrective measures may be taken.

131. WP2S represented that once the 2021 Phase 1 Project is fully constructed, and prior to operations, it will install the permanent preservation fencing.

3. <u>CULTURAL RESOURCES</u>

132. A Cultural Impact Assessment ("**CIA**") for 3,600 acres of land, which included the KS Property, was prepared by Cultural Surveys Hawai'i, Inc. in 2003 in anticipation of the Waiawa Ridge Project.

133. The CIA included interviews with 66 individuals, including kupuna and kama'aina of the area, and gathered information from them and assessed the potential impacts of the Waiawa Ridge Project to cultural resources, traditions, and practices within the Petition Area and the remainder of the 3,600 acres.

134. In preparing this CIA, feedback and information was gathered from various people, including people that were associated with the plantation, and people that grew up specifically in Waiawa, and also included consultation with Wahiawa Hawaiian Civic Club also.

135. A Cultural Resources Preservation Plan was prepared in 2005 by Aki Sinoto Consulting. The sites identified for preservation are not within the KS Property.

136. SHPD approved the Cultural Resources Preservation Plan in 2007.

137. The Cultural Resources Preservation Plan did not identify any cultural sites or practices within the Petition Area. It identified a large concentration of petroglyphs down in a gulch well outside of the Petition Area, but nothing within the Petition Area.

138. In 2010 KS initiated an ethno-historical study for KS' lands within the region of 'Ewa. That study included the Petition Area, but covered a much larger land area of approximately 3,600 acres.

139. KS prepared that study as a proactive measure. KS wanted to talk to community members and people knowledgeable about the KS 'Ewa lands to determine what sort of traditional and customary resources or practices were within its lands.

140. The ethno-historical study concluded that there were no traditional or customary practices that occurred within the Petition Area.

141. There are no identified ongoing traditional cultural resources or practices being exercised at the Petition Area. The Petition Area was used for commercial agricultural operations for approximately one hundred years through 1983 and has not been used for traditional cultural purposes within recent times.

142. The Petition Area is part of the large ahupua'a that was awarded to Victoria Kamamalu. The land was subsequently passed to Ruth Ke'elikolani, who then passed the land to Princess Bernice Pauahi Bishop. The lands ultimately became a part of the Bishop Estate. There are no kuleana land claims for lands within the Petition Area.

143. Development and operation of the 2021 Phase 1 Project will not have significant adverse effects on any significant archaeological, historical, or cultural resources or practices. Because no cultural resources or practices have been identified within the Petition Area, development of the solar farm will not have any adverse effect upon Native Hawaiian traditional and customary rights or practices.

4. <u>RECREATIONAL AND SCENIC RESOURCES</u>

144. The solar farm, as an almost entirely passive use of land, will not generate or increase the demand on existing recreational facilities or resources; no residences will be installed within the solar project.

145. There will be a security fence around the 2021 Phase 1 Project site. There will also be a second fence around the substation.

146. The solar farm will not prevent any existing recreational uses of the KS Property. There is no current recreational use of the KS Property. There are no hiking or hunting areas that require public access across the KS Property.

147. The only feasible means of accessing nearby State Land Use Conservation District lands is via the Waiawa Correctional Facility.

148. Tetra Tech prepared Visual Simulations to determine the effects of the 2021 Phase 1 Project on scenic resources and view corridors. The existing views from the communities surrounding the Phase 1 Site will remain intact. The solar arrays have a low profile and will conform to the existing topography to the extent practicable. Additionally, seen in the context of existing man-made modifications, including the H-1 Freeway, electrical transmission lines, and similar structures, the visual impacts are expected to be minimal. 149. The Visual Simulations used six vantage points: (1) viewpoint 1 from H-2 South, approximately 0.75 miles northwest of the project; (2) viewpoint 2 from Ka Uka Offramp Southbound, approximately 0.4 miles northwest of the project; (3) viewpoint 3 from H-2 Onramp Southbound, approximately 2,000 feet to the west of the project; (4) viewpoint 4 from Aaniu Loop, approximately 1 mile southwest of the project; (5) viewpoint 5 from Waipio Uka Street, approximately 3,000 feet southwest of the project; and (6) viewpoint 6 from the Ka Uka Overpass, approximately 1,600 feet west of the project.

150. From the six vantage points studied, the project will be slightly visible from viewpoint 2, will be somewhat more visible from viewpoints 3 and 6, and will not be visible from viewpoints 1, 4, and 5. As shown in the simulations, existing vegetation helps to screen views of the project and will be left in place to the extent practicable.

151. A study titled Glare Analysis Report for the Waiawa Phase 2 Plus Storage Project, dated August 2021 was prepared to assess the potential for glare from the 2021 Phase 1 Project.

152. The analysis was conducted using the Solar Glare Hazard Analysis Tool (SGHAT) software through an online tool (GlareGauge) developed by Sandia National Laboratories and hosted by ForgeSolar. ForgeSolar defines "glare" as a continuous source of bright light. Glare is generally associated with stationary objects, which, due to the slow relative movement of the sun, reflect sunlight for a longer duration.

153. After running three analyses, using 11 observation points, six roadway segments, 16 final approach flight paths, and two air traffic control towers, the Glare Analysis Report concluded that the 2021 Phase 1 Project will not create glare.

154. WP2S obtained "Determination of No Hazard to Air Navigation" letters from the Federal Aviation Administration Obstruction Evaluation Group on July 7, 2021.

155. The State DOT determined that it did not have any concerns with the 2021 Phase1 Project.

156. WP2S represented that if glint or glare from the photovoltaic array creates a hazardous condition for pilots, it will be prepared to immediately mitigate the hazard upon notification by the DOT Airports Division or the Federal Aviation Administration.

157. WP2S also represented that if the PV systems emit RFI to aviation dedicated radio signals, disrupting the reliability of air-to-ground communications, it will be prepared to immediately mitigate the hazard upon notification by the DOT, Airports Division, or the Federal Aviation Administration.

5. <u>NOISE</u>

158. The 2021 Phase 1 Project is a relatively passive operation. Although the racking systems are a tracking-type system, motors are small and will not generate noise that exceeds acceptable noise levels as limited in HAR Chapter 11-46. The electrical equipment does not include any mechanical or motorized equipment that will generate noise. There will be some minimal corona noise coming from the electrical equipment and battery storage equipment. Operation and maintenance activities may result in minimal vehicular noise from maintenance staff.

159. It is not anticipated that operations at the Phase 1 Site would generate noise that exceeds acceptable noise levels.

160. During construction, noise levels are likely to increase. Noise generated from construction activities will comply with the regulations for community noise control in HAR Chapter 11-46. Due to the remote location of the 2021 Phase 1 Project and distance from communities, it is anticipated that any impacts would be minimal.

161. If necessary, noise permits will be obtained through DOH.

6. <u>AIR QUALITY</u>

162. There are no direct air emissions from the operations of a solar farm.

163. During construction of the solar farm there will be short-term impacts to air quality due to the emission of fugitive dust and an increase in exhaust emissions from construction vehicles.

164. Temporary Best Management Practices ("**BMPs**") will be used to mitigate impact from fugitive dust during construction, such as dust fences, windbreaks, watering of disturbed areas and other soil management measures. BMPs will be identified and included on the erosion and sediment control plans that are required for both C&C and State grading and erosion control permit approvals.

165. Construction activities will comply with the regulations for fugitive dust control in HAR, Section 11-60.1.

7. <u>HIGHWAY AND ROADWAY FACILITIES</u>

166. A report titled *Mobility Assessment for the Proposed Waiawa Phase 2 Solar Plus Storage Project (Oahu, HI)*, dated August 11, 2021 was prepared to assess the impacts of the 2021 Phase 1 Project on local and regional traffic near the Petition Area ("**Traffic Assessment**").

167. The Traffic Assessment analyzed the potential for both the construction and operation of the 2021 Phase 1 Project to adversely impact traffic and alternate modes of access (e.g., bicycle and pedestrian travel, and public transit).

168. The Traffic Assessment analyzed the potential for traffic-related impacts at three regional intersections during peak hours (between 7 - 9 a.m. and 4 - 6 p.m.) under four different scenarios.

169. The intersections studied are: (1) Ka Uka Boulevard/H-2 Southbound Off-Ramp/Moaniani Street; (2) Ka Uka Boulevard/H-2 Southbound On-Ramp; and (3) Ka Uka Boulevard/H-2 Northbound Ramps. 170. The four traffic scenarios analyzed were: (1) Existing Conditions; (2) 2023 No Project Conditions; (3) 2023 Plus Project Construction Conditions; and (4) 2023 Plus Project Typical Operating Conditions.

171. Existing traffic volumes were based on 2019 traffic volumes, which were then increased by a growth factor of one percent per year to estimate typical volumes for 2021. The Traffic Assessment did not use 2020 or 2021 traffic volumes because the COVID 19 pandemic created shifts in travel patterns that could skew the results.

172. The construction year traffic was evaluated by taking the volumes determined above and increasing them by an average growth factor of one percent per year to represent 2023 volumes. To this, we also added anticipated traffic from the first phase of the Koa Ridge development.

173. During project construction all the studied intersections are projected to continue to operate at existing levels of service. None of the studied intersections are projected to operate at a level of service of E or F.

174. During project operations after completion of construction, traffic impacts will be entirely negligible because so few employees (up to five at the most) will be on-site at any given time.

175. The potential for conflict between project construction related traffic and nonautomobile modes of transportation, such as walking and biking, is low.

176. To minimize any potential conflicts and to maintain adequate traffic operations, the Traffic Assessment recommended certain measures be employed during construction:

(a) Signage between the Ka Uka Boulevard interchange and the staging area off Waiawa Prison Road that trucks are travelling and entering/exiting the roadway.

(b) Measures to ensure that adequate sight distance is provided for drivers on Waiawa Prison Road approaching and departing the staging area. For example, traffic control signage (*e.g.*, stop or yield signs) and removal of vegetation that impedes standard approach, departure, and height sight distances.

(c) Coordination with the City and County of Honolulu if needed to prune or remove vegetation in the public right of way that might impede large construction vehicles on both Mililani Cemetery Road and Waiawa Prison Road.

(d) Use of manual traffic control on Waiawa Prison Road to manage construction and prison traffic and to minimize conflicts. This could include the use of radios, flag persons, and/or temporary signals and lighting to assist with the control of vehicles and the provision of adequate sight distance (as needed).

(e) Maintenance of access to the Waiawa Correctional Facility.

177. The Traffic Assessment determined that neither construction nor operations of the 2021 Phase 1 Project will adversely impact traffic conditions in the vicinity of the Petition Area. The Traffic Assessment also determined that the Phase 1 Site has adequate access and will not require the construction of any new access roads.

178. The State DOT-HWY concurred with the findings and recommendations of the Traffic Assessment.

179. In its Motion, KS suggested a condition that prior to the start of construction of the Phase 1 solar farm, KS shall cause the solar farm operator to submit a traffic construction management plan for review and acceptance by the State DOT. DOT confirmed that it has no concerns with the imposition of that condition.

8. DRAINAGE AND STORMWATER

180. G70 prepared a preliminary civil engineering assessment for the 2021 Phase 1Project.

181. Clearing, grubbing and grading will be needed for placement of the solar panels, equipment, facilities, access driveways, and fence. The road improvements will occur for roads within the solar boundary. There will be no planned improvements for haul roads outside the solar array fence line.

182. In general, the project will avoid steep areas and focus solar racking systems, roads, BESS, and substation in areas with gradual slopes.

183. The initial rough estimates of potential earthwork volumes contemplate roughly 100,000-200,000 cubic yards of balanced cut/fill. The design anticipates minimizing earthwork volumes and related construction costs by optimal placement of the PV racks following the existing grades and elevations.

184. Grading will be done in accordance with the Revised Ordinances of Honolulu (ROH) Chapter 14, Articles 13-16. Pursuant to the grading ordinance, a geotechnical engineer will provide cut and fill recommendations prior to design and testing/observation during construction.

185. Prior to grading and grubbing of the KS Property, permits and approvals will be required from the State of Hawai'i Department of Health and the City and County of Honolulu (NPDES General Permit for Construction Activities, Notice of Intent, and a City and County of Honolulu Grading, Grubbing and Stockpiling Permit).

186. Issuance of these permits requires agency review of grading, erosion, and sediment control plans, with temporary BMPs, a Storm Water Pollution Prevention Plan, and Drainage Reports that discuss permanent BMPs.

187. The Phase 1 Site is not generally subject to runoff from mauka offsite areas. Existing runoff at the Phase 1 Site currently flows overland toward adjacent downstream areas or directly into the adjacent gulches. Current drainage patterns are intended to remain for the 2021 Phase 1 Project.

188. The 2021 Phase 1 Project will add minimal new impervious areas. Due to the even distribution of the impervious regions throughout the Phase 1 Site, slight leveling of access road areas, and the use of gravel roads, there is no anticipated increase in runoff rates. As a result, there will not be a significant pre-development to post-development increase in stormwater flows due to the 2021 Phase 1 Project.

189. Any increase in stormwater generated from the Phase 1 Site will be detained therein. If required, diversion channels will be constructed with check dams, drop structures, or different velocity reducing controls before discharge back into the natural drainage features. Any crossing of a drainage way within the solar array will be designed to City & County standards.

190. BMPs will be implemented to address stormwater quality. Erosion control BMPs are required on-site, and may include measures such as preservation of natural vegetation, minimizing of areas of clearing and grubbing, use of vegetated buffers, temporary soil stabilization with grass, mulch, or both, silt fences/fiber filtration tubes, gravel bag berms/check dams, stabilized construction entrances, sediment traps and basins, temporary diversion swales and ditches, and dust control through water application, dust screens, or both.

191. The permanent BMPs that may be employed include: permanent soil stabilization (through landscaping or installing pervious surfaces like gravel or impervious surfaces).

G. <u>CONFORMANCE WITH THE GOALS, OBJECTIVES AND POLICIES OF THE</u> <u>HAWAI'I STATE PLAN</u>

192. HRS §205-16 provides that "No amendment to any land use district boundary *nor any other action by the land use commission* shall be adopted unless such amendment or other

action conforms to the Hawaii state plan." (emphasis added). The interim use of portions of the KS Property as a solar farm is consistent with applicable goals, objectives and policies of the Hawai'i State Plan, HRS Chapter 226.

193. OP opined that the 2021 Phase 1 Project is reasonable and is consistent with the Urban District classification and Commission rules for Urban District standards and permissible uses under Hawai'i Administrative Rules §§ 15-15-18 and 15-15-24.

194. Unlike other proposals for utility-scale solar energy facilities in the Agricultural District, this use is fully permissible in the Urban District.

195. Solar energy production is a clean renewable energy resource strongly supported by the State to promote energy self-sufficiency and reduce our reliance on imported fossil fuels.

196. The 2021 Phase 1 Project is consistent with the following objectives and policies of the Hawai'i State Plan:

HRS §226-18: Objectives and Policies for Facility Systems - Energy

(a) Planning for the State's facility systems with regard to energy shall be directed toward the achievement of the following objectives, giving due consideration to all:

(1) Dependable, efficient, and economical statewide energy systems capable of supporting the needs of the people;

(2) Increased energy security and self-sufficiency through the reduction and ultimate elimination of Hawaii's dependence on imported fuels for electrical generation and ground transportation;

(3) Greater diversification of energy generation in the face of threats to Hawaii's energy supplies and systems;

(4) Reduction, avoidance, or sequestration of greenhouse gas emissions from energy supply and use;

(b) To achieve the energy objectives, it shall be the policy of this State to ensure the short- and long-term provision of adequate,

reasonably priced, and dependable energy services to accommodate demand.

(c) To further achieve the energy objectives, it shall be the policy of this State to:

(1) Support research and development as well as promote the use of renewable energy sources;

(2) Ensure that the combination of energy supplies and energysaving systems is sufficient to support the demands of growth;

(3) Base decisions of least-cost supply-side and demand-side energy resource options on a comparison of their total costs and benefits when a least-cost is determined by a reasonably comprehensive, quantitative, and qualitative accounting of their long-term, direct and indirect economic, environmental, social, cultural, and public health costs and benefits;

(4) Promote all cost-effective conservation of power and fuel supplies through measures, including:

(A) Development of cost-effective demand-side management programs;

(B) Education;

(C) Adoption of energy-efficient practices and technologies; and

(D) Increasing energy efficiency and decreasing energy use in public infrastructure;

(5) Ensure, to the extent that new supply-side resources are needed, that the development or expansion of energy systems uses the least-cost energy supply option and maximizes efficient technologies;

(8) Support actions that reduce, avoid, or sequester greenhouse gases in utility, transportation, and industrial sector applications;

(10) Provide priority handling and processing for all state and county permits required for renewable energy projects.

197. The 2021 Phase 1 Project is consistent with the following State priority guidelines under HRS §226-103 with respect to encouraging the development of clean industries.

• Hawai'i State Plan Priority Guidelines; HRS § 226-103 - Economic Priority

Guidelines

HRS §226-103(f)(1): Priority guidelines for energy use and development: (1) Encourage the development, demonstration, and commercialization of renewable energy sources.

198. The 2021 Phase 1 Project supports the State's goal of having 100% of Hawai'i's electricity produced from renewable energy sources by the year 2045.

199. The 2021 Phase 1 Project supports the State's goal to become carbon neutral as quickly as practicable, and no later than 2045.

H. <u>COMMISSION CRITERIA FOR A MOTION TO AMEND</u>

200. For the modification or deletion of conditions or orders, HAR § 15-15-94 provides in part as follows:

(a) If a petitioner, pursuant to this section, desires to have a . . . modification of the commission's order, the petitioner shall file a motion in accordance with section 15-15-70 and serve a copy on all parties to the boundary amendment proceeding . . . in which the order was issued, and to any person that may have a property interest in the subject property as recorded in the county's real property tax records at the time that the motion is filed.

(b) For good cause shown, the commission may act to modify or delete any of the conditions imposed or modify the commission's order.

(c) Any modification or deletion of conditions or modifications to the commission's order shall follow the procedures set forth in subchapter 11.

1. SERVICE OF MOTION, HAR § 15-15-94(A)

201. KS served copies of the 2021 Motion to Amend on all persons with a recorded interest in the KS Property. In total, KS served copies of the Motion to Amend on 19 individuals or entities.

202. Other than DPP and OP, which are parties to this proceeding, none of the other recipients of the 2021 Motion to Amend sought to become parties to this proceeding.

2. <u>GOOD CAUSE SHOWN TO MODIFY THE WAIAWA ORDER,</u> <u>HAR § 15-15-94(B)</u>

203. KS has presented the Commission with good cause to modify the 2014 Order.

204. The Commission already approved the Phase 1 Site for solar development under the 2014 Order. Due to no fault of KS, the original solar developer, SunEdision, was not able to move forward with the two solar farms approved in 2014.

205. In addition to the renewable energy benefits, the 2021 Phase 1 Project is consistent with the Urban District classification and the Commission rules for Urban District standards and permissible uses.

206. Using the Petition Area for solar farm development is permitted under City and County of Honolulu law and under the State Land Use Urban District.

207. WP2S engaged in extensive community outreach to inform the community and area law makers about the 2021 Phase 1 Project and the responses were positive.

208. Under its agreement with KS, WP2S is required to cooperate with KS in establishing educational programs for Hawai'i students and teachers.

209. Development of the solar farm will help the State of Hawai'i achieve its clean energy goals.

210. Under HECO's estimates, the 2021 Phase 1 Project will provide equivalent to what is needed to power approximately 18,000 homes a year for each year that it is in operations. Over the course of just 20 years, the net reduction in GHG emissions is 1,078,948 metric tons of GHG, and the avoided fuel consumption is 2,908,097 barrels of fossil fuel.

211. The 2021 Phase 1 Project is projected to generate economic output of approximately \$131 Million (including direct, indirect, and induced economic effects).

212. The interim use of the Phase 1 Site prior to development of the KS Waiawa Master Plan provides a means for KS to achieve a financial return on this property, which contributes to KS' ultimate goal of providing education to native Hawaiians and others.

RULINGS ON PROPOSED FINDINGS OF FACT

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

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

CONCLUSIONS OF LAW

1. Pursuant to HRS Chapter 205, and the Commission Rules under HAR chapter 15-15, and upon consideration of the Commission decision-making criteria under HRS section 205-16 the Commission concludes, upon the clear preponderance of the evidence, that the use of the Phase 1 Site as a solar farm, inclusive of development, operations, and decommissioning, to include all related utility and other infrastructure, to December 31, 2044 for the Parcel A site, and to December 31, 2054 for the Parcel B site, is reasonable, not violative of HRS § 205-2 and is consistent with the policies and criteria established pursuant to HRS §§ 205-16, 205-17 and 205A-2, is consistent with the Hawai'i State Plan as set forth in HRS Chapter 226, and that the development and operation of the solar farm would not violate any of the conditions imposed under the Waiawa Order.

2. Based on the record and files herein and the findings set forth above, and there being good cause shown, the Commission reaffirms its prior conclusions, based upon the clear preponderance of the evidence, that the development and operation of the solar farm would not violate any of the conditions imposed under the Waiawa Order.

3. Based on the record and files herein and the findings set forth above, the Commission concludes good cause has been shown to release conditions 1 and 9 of the 2014 Order, and to modify conditions 3-8, 10 and 11, and impose certain new conditions, all as set forth below, and the Commission concludes that the conditions imposed herein are appropriate to the Commission's granting KS's 2021 Motion.

4. Article XII, section 7, of the Hawai'i State Constitution requires the Commission to protect native Hawaiian traditional and customary rights. The State of Hawai'i reaffirms and shall protect all rights, customarily and traditionally exercised for subsistence, cultural and religious purposes and possessed by ahupua'a tenants who are descendants of native Hawaiians who inhabited the Hawaiian Islands prior to 1778, subject to the right of the State to regulate such rights. The State and its agencies are obligated to protect the reasonable exercise of customarily and traditionally exercised native Hawaiian rights to the extent feasible. *Public Access Shoreline Hawai'i v. Hawai'i Cnty. Planning Comm'n*, 79 Haw. 425, 450, n.43, *certiorari denied*, 517 U.S. 1163 (1996).

5. The Commission is empowered to preserve and protect customary and traditional rights of native Hawaiians. *Ka Pa'akai O Ka 'Aina v. Land Use Comm'n*, 94 Hawai'i 31, 7 P.3d 1068 (2000).

6. Article XI, Section 1, of the Hawai'i State Constitution requires the State to conserve and protect Hawai'i's natural beauty and all natural resources, including land, water, air minerals, and energy sources, and to promote the development and utilization of these resources in a manner consistent with their conservation and in furtherance of the self-sufficiency of the State.

7. Article XI, Section 3, of the Hawai'i State Constitution requires the State to conserve and protect agricultural lands, promote diversified agriculture, increase agricultural self-sufficiency, and assure the availability of agriculturally suitable lands.

8. The Petition Area is not classified as Important Agricultural Land under Part III of HRS chapter 205

9. Article XI, Section 7, of the Hawai'i State Constitution states that the State has an obligation to protect, control, and regulate the use of Hawai'i's water resources for the benefit of its people.

10. Article XI, Section 1, of the Hawai'i State Constitution states that all public natural resources are held in trust by the State for the public benefit.

11. The Commission concludes that it has observed and complied with its duties arising under Article XI, Section 1, Article XI, Section 3, Article XI, Section 7 and Article XII, Section 7 of the Hawai'i State Constitution.

DECISION AND ORDER

IT IS HEREBY ORDERED that the approximately 387-acre area of the KS Property, identified herein as the "Phase 1 Site", comprised of "Parcel A" consisting of approximately 151 acres, and "Parcel B" consisting of approximately 236 acres, may be used as a solar farm, inclusive of development, operations, and decommissioning, to include all related utility and other infrastructure, to December 31, 2044 for the Parcel A site, and to December 31, 2054 for

the Parcel B site, subject to the conditions imposed herein, which conditions shall replace the conditions imposed under the 2014 Order, filed on November 26, 2014:

- <u>Revised Master Plan</u>. Petitioner shall submit to the Commission a revised master plan and schedule for development for the approximately 1,395-acre Petition Area by February 11, 2025; provided, however, that this condition may be satisfied by publication of a Draft Environmental Impact Statement that addresses the Petition Area prior to February 11, 2025.
- 2. <u>Access to the Waiawa Correctional Facility</u>. Petitioner shall cause the solar farm operator to ensure that the construction and installation of the solar farm within the KS Property shall not prevent roadway access to the Waiawa Correctional Facility.
- 3. <u>Previously Unidentified Burials and Archaeological/Historic Sites</u>. Petitioner shall implement, or cause the solar farm operator to implement, the Preservation Plan approved by SHPD by letter dated September 14, 2015 within the vicinity of the Phase 1 Site prior to operation. In the event that historic resources, including human skeletal remains, are identified during construction activities, all work shall cease in the immediate vicinity of the find, the find shall be protected from additional disturbance, and the SHPD, shall be contacted immediately. Without any limitation to any other condition found herein, if any burials or archaeological or historic sites, such as artifacts, marine shell concentrations, charcoal deposits, stone platforms, paving, and walls not previously identified in studies referred to herein, are discovered during the course of construction of the solar farm project, all construction activity in the vicinity of the discovery shall stop until the issuance of an archaeological clearance from the SHPD that mitigative measures have been implemented to its satisfaction.
- 4. <u>Aircraft Hazard</u>. If glint or glare from the photovoltaic array creates a hazardous condition for pilots, Petitioner shall cause the solar farm facility operator to be prepared to immediately mitigate the hazard upon notification by the Department of Transportation Airports Division or the Federal Aviation Administration. If the PV systems emit RFI to aviation dedicated radio signals, disrupting the reliability of air-to-ground communications, Petitioner shall cause the solar farm facility operator to be prepared to immediately mitigate the hazard upon notification by the DOT, Airports Division, or the FAA.
- 5. <u>Traffic Impacts</u>. Prior to the start of construction of the Phase 1 solar farm, Petitioner shall cause the solar farm operator to submit a traffic construction management plan for review and acceptance by the State Department of Transportation.

- 6. <u>Development Schedule</u>. The Phase 1 solar farm shall be substantially completed within five (5) years from the date of the Commission's issuance of this Decision and Order.
- 7. <u>Interim Use of the Petition Area</u>. The interim use of the approximately 387-acre portion of the Petition Area as shown in Petitioner's Revised Master Plan and Schedule for Development filed on October 7, 2019, shall be limited to a utility-scale solar energy development, or solar farm. No other use shall be permitted without the prior written approval of the Commission, except for "compatible agricultural activities" as that term is used in section 205-4.5(a)(21)(A), HRS.
- 8. <u>Timeframe of Interim Use</u>. The interim use of Parcel A for the proposed solar farm, including any and all permitting, construction, operation, and decommissioning activities associated with the solar farm, shall not exceed December 31, 2044, without the prior written approval of the Commission. The interim use of Parcel B for the proposed solar farm, including any and all permitting, construction, operation, and decommissioning activities associated with the solar farm, shall not exceed December 31, 2054, without the prior written approval of the Commission; provided, however, that in the event the solar farm project owner fails to secure a PUC-approved extension to the PPA, or a new PPA, within 12 months after the expiration of the current PPA, the project owner will immediately commence with the decommissioning of the solar farm on Parcel B and complete decommissioning within two years after the expiration of the current PPA.
- 9. <u>Waiawa Master Plan Infrastructure Deadline</u>. Petitioner shall complete construction of the backbone infrastructure for the proposed Waiawa Master Plan Phase A, consisting of the primary roadways and access points, internal roadways, on-and offsite water and electrical system improvements, and storm water/drainage and other utility system improvements, by December 31, 2030.
- 10. Decommissioning of the Solar Farm. Both portions of the solar farm (Parcel A and Parcel B) shall be decommissioned following their respective operational timeframes. The decommissioning activities shall include, but not be limited to, the complete removal of the foundational piers and modules and all associated components. The decommissioning shall be in accordance with all laws and rules in effect at the time, potentially including the Department of Health Hawai'i Administrative Rules Chapter 11-273.6.2. Any future use of the Petition Area, including future uses of the solar farm sites following the decommissioning of the solar farms, shall be subject to the environmental review process promulgated under HRS chapter 343, as applicable. Provided that if the HRS chapter 343 environmental review process is completed for

the entire Petition Area, no separate or additional environmental review shall be required under this condition following the decommissioning of the solar farms. Any future use of the Petition Area, including future uses of the solar farm sites following the decommissioning of the solar farms, shall require the filing of a motion to amend the Decision and Order with the Commission. Such motion to amend shall include a revised master development plan of the proposed use and shall further include, but not be limited to, a revised Traffic Impact Analysis Report, Engineering Report, Socio-Economic Analysis Report, Environmental Report, and AIS (if required).

- 11. <u>Wildlife Protection</u>. The Petitioner shall cause the Phase 1 solar farm operator to implement the following measures regarding landscaping vegetation and the protection of endangered Hawaiian hoary bat, Hawaiian short-eared owl, and endangered and threatened Hawaiian water bird and shorebird species at the Phase 1 Site:
 - a. If landscaping is installed as part of the solar farm project, non-invasive plans and native plant species shall be utilized to the maximum extent practicable.
 - b. Invasive species minimization measures shall be implemented to avoid the unintentional introduction or transport of new invasive species to the area. This would include utilizing on-site gravel, rock, and soil (or purchasing from a local supplier) when practicable, utilizing certified, weed-free seed mixes; and washing construction equipment and/or visually inspecting for excessive debris, plant materials, and invasive or harmful non-native species.
 - c. To minimize the spread of the fungal pathogen responsible for Rapid Ohia Death (CTAHR 2020), the most recent Rapid Ohia Death decontamination protocols recommended by United States Fish and Wildlife Service ("USFWS") and the Department of Land and Natural Resources, Division of Forestry and Wildlife ("DOFAW") shall be implemented.
 - d. No trees or shrubs greater than 15 feet tall shall be disturbed, trimmed or removed during the Hawaiian hoary bat birthing and pupping season (June 1 through September 15).
 - e. Any fences that are erected as part of the Project shall not have barbed wire to prevent entanglements of the Hawaiian hoary bat.
 - f. A wildlife education and observation program (WEOP) shall be implemented for 42

all construction and regular on-site staff. Staff shall be trained to identify listed species that may be found on-site (including Hawaiian hoary bat, pueo, Hawaiian seabirds and waterbirds) and to take appropriate steps if these species are observed. If a federally or state-listed species is observed to be impacted by the project, the USFWS and DOFAW shall be notified, and a systematic post-construction monitoring program shall be developed and implemented.

- g. Construction activities shall be restricted to daylight hours as much as possible during the seabird peak fallout period (September 15-December 15) to avoid the use of nighttime lighting that could attract seabirds.
- h. Speed limits shall be established and enforced within the Phase 1 Site and along the access road to the Phase 1 Site within the Petition Area.
- i. Should nighttime construction be required during the seabird peak fallout period, a biological monitor shall be present in the construction area from approximately 0.5-hour before sunset to 0.5-hour after sunrise to watch for the presence of seabirds. Should a seabird (or other listed species) be observed and appear to be affected by the lighting, the monitor shall notify the construction manager to reduce or turn off construction lighting until the individual(s) move out of the area.
- j. Any on-site lighting shall be fully shielded, triggered by motion detector, and fitted with light bulbs having a correlated color temperature of four thousand Kelvin or less, to the extent possible. Lighting shall also be directed away from the solar arrays to minimize the potential for reflection and shall only be used when necessary.
- k. Construction of overhead lines shall be minimized to reduce the collision risk for seabird species.
- 1. Prior to clearing vegetation within the Phase 1 Site, pre-construction pueo surveys shall be conducted by a qualified biologist following the Pueo Project survey protocol.
- m. If a pueo is observed in the Phase 1 Site at any time (prior to construction, during construction, or during operation), all activities in the immediate area shall stop immediately. The location of the bird should be reported to a designated representative, and a qualified biologist should check the area for the presence of a pueo nest. If a ground nest or a pueo nesting on the ground is observed at any

time (prior to construction, during construction, or during operation), an approximately 100-foot buffer shall be established around the nest and marked in the field by a qualified biologist. DOFAW should be contacted immediately. If the nest is confirmed as a pueo nest, no work should occur in the buffer area until pueo nesting is complete. No vegetation clearing shall occur until pueo nesting ceases.

- n. No rodent baiting shall take place within the Phase 1 Site to prevent secondary poisoning from toxins in pueo prey.
- 12. <u>Compliance with Representations</u>. Petitioner shall cause the solar farm operator to develop and operate the 2021 Phase 1 Project, including the implementation of measures to mitigate potential impacts of the development, in substantial compliance with the representations made to the Commission as reflected in this Decision and Order. Such mitigation measures include, but are not limited to, the use of temporary and permanent BMPs to ensure that the development and operation of the solar farm do not result in an increase in stormwater runoff that adversely impacts downstream properties. Failure to do so may result in reversion of the Petition Area to its former classification, or change to a more appropriate classification.
- 13. <u>Notice of Change of Ownership</u>. Petitioner shall give notice to the Commission of any intent to sell, lease, assign, place in trust, or otherwise voluntarily alter the ownership interests in the Petition Area, prior to development of the Petition Area.
- 14. <u>Annual Reports</u>. Petitioner shall timely provide without any prior notice, annual reports to the Commission, Office of Planning and Sustainable Development, and the Department of Planning and Permitting in connection with the status of the subject project and Petitioner's progress in complying with the conditions imposed herein. The annual report shall be submitted in a form prescribed by the Executive Officer of the Commission.
- 15. <u>Release of Conditions</u>. The Commission may fully or partially release the conditions provided herein as to all or any portion of the Petition Area upon timely motion and upon the provision of adequate assurance of satisfaction of these conditions by Petitioner.
- 16. <u>Notice of Imposition of Conditions</u>. Within seven (7) days of the issuance of the Commission's Decision and Order granting the Motion to Amend, Petitioner shall: (a) record with the Bureau of Conveyances a statement that the Petition Area is subject to conditions imposed herein by the Commission in the granting of the Motion to

Amend; and (b) shall file a copy of such recorded statement with the Commission.

IT IS FURTHER ORDERED that the above conditions shall be in addition to the conditions imposed under the Waiawa Order, which are hereby reaffirmed and shall continue in full force and effect.

Petitioner Kamehameha Schools' Proposed Order Granting Motion for Modification, Time Extension, and Release and Modification of Conditions

ADOPTION OF ORDER

This ORDER shall take effect upon the date that this ORDER is certified and filed by this Commission.

DONE at	_, Hawaiʻi, this	day of, 2022, per motion on
, 2022.		
APPROVED AS TO FORM		LAND USE COMMISSION
		STATE OF HAWAI'I
Deputy Attorney General		
		JONATHAN LIKEKE SCHEUER
		Chairperson and Commissioner



DANIEL ORODENKER

Executive Officer

Petitioner Kamehameha Schools' Proposed Order Granting Motion for Modification, Time Extension, and Release and Modification of Conditions