

## INTRODUCTION

This contested case hearing involves a Conservation District Use Application (the "CDUA") submitted by the University of Hawai'i at Hilo for the Thirty Meter Telescope Project (the "Project" or "TMT Project") to be located in the Mauna Kea Science Reserve ("MKSR"), District of Hamakua, Island and County of Hawai'i.

The following Findings of Fact ("FOF"), Conclusions of Law ("COL"), and Decision and Order are based on the records maintained by the Department of Land and Natural Resources ("DLNR") in CDUA HA-3568 and the witness testimonies and exhibits presented during the evidentiary hearing for this contested case. The hearing was held from October 20, 2016 through March 2, 2017. Exhibits were received into evidence after the hearing.

If any statement denominated a COL is more properly considered an FOF, then it should be treated as an FOF. Conversely, if any statement denominated as an FOF is more properly considered a COL, then it should be treated as a COL.

Any proposed finding of fact submitted by the parties which is not specifically incorporated is rejected for one or more of the following reasons:

- They are repetitious or similar to the Board of Land and Natural Resources ("BLNR") or the Hearing Officer's own findings of fact or conclusions of law or decision and order, and/or
- They are not supported by reliable and/or probative evidence, and/or
- They are in whole or in part not supported by and/or are contrary to the facts or law, and/or
- They are immaterial, superfluous, and/or irrelevant to the material facts, issues, and/or law of this case.

Certain facts set forth within specified criteria addressed below may apply to one or more criteria, issue, or legal standard. To the extent such facts or findings are addressed within a particular heading or section below does not limit it to that heading or section, but instead all such facts or findings are incorporated by reference for each applicable criteria section, as if specifically set forth within that heading or section.

The Hearing Officer and the BLNR considered the testimony of all witnesses at the evidentiary hearings and all exhibits received into evidence. The mere fact that a particular witness testimony or exhibit may not be specifically referred to below does not and shall not be construed to mean that said testimony or exhibit was not considered. Rather, specific reference to said witness testimony or exhibit was excluded because, after due consideration of said testimony or exhibit, it was determined to be: (i) immaterial, (ii) irrelevant, (iii) contrary to law, (iv) less credible or persuasive, and/or (v) cumulative of other testimonies or exhibits specifically referred to below.

## I. THE PARTIES

1. The University of Hawai'i ("**University**") was originally established as the state university of the State of Hawai'i and constitutes a body corporate under Hawai'i law. The University of Hawai'i has ten campuses statewide, one of which is the University of Hawai'i at Hilo ("**UH Hilo**" or "**UHH**"). The UH Hilo, on behalf of the University, is the Applicant of the CDUA for the TMT Project. The University of Hawai'i and UH Hilo may be referred to interchangeably, and sometimes collectively, as the "University" herein. During the contested case proceeding, the University was represented by Carlsmith Ball LLP.
2. Mauna Kea Anaina Hou ("**MKAH**") is an organization of native Hawaiian cultural practitioners who have genealogical ties and/or who engage in traditional and customary practices related to Mauna Kea. It is also an unincorporated association that participated in the prior contested case proceeding involving the UH Hilo's CDUA for the TMT Project under DLNR Docket No. HA-11-05 ("**Prior Contested Case**"). From the beginning of this contested case until October 10, 2016, MKAH was represented by Richard Wurdeman, Esq. ("**Wurdeman**"). From October 11, 2016 through the present, MKAH was represented by non-lawyer Kimberly "Kealoha" Pisciotta ("**Pisciotta**"), who is the current president of MKAH. Tr. Vol. viii, 10/17/16 at 4:16-17; WDT of Ms. K. Kealoha Pisciotta, Exh. B.01a.
3. In addition to representing MKAH, Pisciotta represented herself in her individual capacity in this proceeding. She is a native Hawaiian practitioner of traditional and customary cultural and religious practices relating to Mauna Kea. Her other cultural practices include those relating to la`au lapa`au (medicinal practices) with ocean and some land plants and also Palaoa (Marine Mammals). WDT of Ms. K. Kealoha Pisciotta, Exh. B.01a. from the beginning of the contested case until October 10, 2016, Pisciotta was represented by Wurdeman. From October 11, 2016 through the present, Pisciotta represented herself *pro se*.
4. Clarence Kukauakahi Ching ("**Ching**") is a native Hawaiian cultural, spiritual and religious practitioner on Mauna Kea. WDT for Clarence Kukauakahi Ching, Ex. B.19a. Ching participated in the Prior Contested Case. From the beginning of the contested case until October 10, 2016, Ching was represented by Wurdeman. From October 11, 2016, until the present, Ching represented himself *pro se*.
5. The Flores-Case 'Ohana is an unincorporated, family association consisting of E. Kalani Flores ("**Flores**"), B. Pualani Case ("**Case**"), and their two children. They reside in Pu'ukapu, Waimea, Kohala Waho, Mokupuni o Hawai'i. Flores is a Kanaka Maoli (also identified as a Native Hawaiian, he hoa'aina o Moku o Keawe, he 'oiwi o ka pae 'aina Hawai'i, an indigenous person of the archipelago of Hawai'i) and a descendent of native Hawaiians who inhabited the Hawaiian Islands prior to 1778 as established through his genealogical lineage of Hukiku and Keulua. He is a cultural practitioner with substantial interest in Mauna a Wäkea (also referred to as Mauna Kea), who continues to exercise his traditional and customary Native Hawaiian cultural, spiritual, and religious practices and who continues to engage in cultural practices, protocols, and ceremony gatherings

connected to and on Mauna a Wākea. WDT of E. Kalani Case, Ex. B.02a. Case is a Kanaka Maoli (also identified as a Native Hawaiian, he hoa‘āina o Moku o Keawe, he ‘ōiwi o ka pae ‘āina Hawai‘i, an indigenous person of the archipelago of Hawai‘i) and a cultural practitioner with connections to Mauna a Wākea, Kumu Hula, chanter, and most importantly a parent of two daughters who are passionately connected to their culture and traditions. WDT of B. Pualani Case, Ex. B.21a. The Flores-Case ‘Ohana participated in the Prior Contested Case. From the beginning of the contested case until October 10, 2016, the Flores-Case ‘Ohana was represented by Wurdeman. From October 11, 2016 until the present, the Flores-Case ‘Ohana was represented by Flores and Case.

6. Deborah J. Ward ("**Ward**") is a graduate of the University of Hawai‘i at Manoa, with Bachelor and Master of Science degrees. She served for twenty-three years as a faculty member of the University of Hawai‘i Department of Natural Resources and Environmental Management. She has been a member, and has served in leadership positions within Sierra Club (SC), Conservation Council of Hawai‘i (CCH), and Big Island Invasive Species Committee for many years. She has administered grants and served as Quality Control Officer for the Hawai‘i Organic Farmers Association. She has been growing and marketing organic fruit and foliage in upper Puna for fifteen years, and has lived in Hawai‘i for more than fifty years. Much of her adult life has been directed to protection and conservation of natural habitats unique to Hawai‘i. Her involvement in issues regarding the management of Mauna Kea began in the early 1970’s. As a recreational hiker, she visited Mauna Kea with her father, a physicist and astronomer. She is a recreational user of Mauna Kea lands and participated in the Prior Contested Case. WDT of Deborah J. Ward, Ex. B.17a. From the beginning of the contested case until October 10, 2016, Ward was represented by Wurdeman. From October 11, 2016 until the present, Ward represented herself *pro se*.
7. Paul Neves ("**Neves**") is a Kumu Hula since October 23, 1999 and a member of the Royal Order of Kamehameha I. His position in the Order is Ali‘i Noeau Loa, which is a position given to one that has previously served as Ka Lai Moku (or one who has held the 2<sup>nd</sup> highest position). He can now consult at the highest level. WDT of Mr. Paul K. Neves, Ex. B.18a. He is a native Hawaiian Cultural Practitioner who participated in the Prior Contested Case. From the beginning of the contested case until October 10, 2016, Neves was represented by Wurdeman. From October 11, 2016 until the present, Neves was represented by Pisciotta without objection. Notwithstanding the BLNR's determination in Minute Order No. 52, [Doc. 650] filed May 26, 2017, at page 1, footnote 1, the Hearing Officer acknowledges that no objections were made to Pisciotta's representations for and on behalf of Neves throughout this contested case hearing and therefore, accepted said representation throughout this hearing.
8. KAHEA: The Hawaiian Environmental Alliance ("**KAHEA**") is a domestic nonprofit organization, incorporated in Hawai‘i in 2001, that participated in the Prior Contested Case. KAHEA’s mission is to advocate for the protection of environmentally significant and culturally sacred places in Hawai‘i. From the beginning of the contested case until October 10, 2016, KAHEA was represented by Wurdeman. From October 11, 2016 until the present, KAHEA was represented by Yuklin Aluli, Esq. ("**Aluli**") and Dexter Kaiama, Esq. ("**Kaiama**").

9. TMT International Observatory, LLC ("**TIO**") is a nonprofit organization comprised of the Regents of the University of California, the California Institute of Technology ("**Caltech**"), the National Institutes of Natural Sciences of Japan, the National Astronomical Observatories of the Chinese Academy of Sciences, the Department of Science and Technology of India, and the National Research Council of Canada. TIO is a different entity from the TMT Observatory Corporation ("**TMT Corporation**"). During the contested case proceeding, TIO was represented by Watanabe Ing LLP. [Doc. 2].
10. Perpetuating Unique Educational Opportunities, Inc. ("**PUEO**") is a nonprofit organization formed by native Hawaiians that support the pursuit of educational opportunities for children of Hawai'i. PUEO was formed to, *inter alia*, share the interaction of Hawaiian culture and science and to research and educate the public on the interaction of Hawaiian culture and science and to inspire exploration. PUEO's purposes include furthering educational opportunities for the children of Hawai'i in the fields of science, technology, engineering and mathematics. Its board members and beneficiaries include native Hawaiians that reside in the Keaukaha-Pana'ewa Hawaiian Homesteads located in Hilo, Hawai'i. PUEO's board members include native Hawaiians who seek knowledge and understanding and exercise customary and traditional native Hawaiian rights on Mauna Kea. During the contested case proceeding, PUEO was represented by Torkildson, Katz, Moore, Hetherington & Harris. [Doc. 33].
11. Mehana Kihoi ("**Kihoi**") is "a Native Hawaiian cultural and spiritual practitioner. I am a Native Hawaiian beneficiary as defined by the Hawaiian Homes Commission Act of 1921, and a beneficiary of the Ceded Lands Trust under Section 5(f) of the Admissions Act. I am a descendant of Native Hawaiians who inhabited the Hawaiian Islands prior to 1778 as established through my genealogical lines of Pa'ao and Hewa Hewa Nui. My ancestors and subsequent generations, gathered adze only found on Mauna Kea, to build their voyaging canoes. My ancestors honored Mauna Kea as a place of spiritual worship, where they would offer their deepest prayers to our creators Papa and Wakea." Pre-Hearing Statement of Mehana Kihoi, Ex. F-1. During the contested case proceeding, Kihoi represented herself *pro se*.
12. Chase Michael Kaho'okahi Kanuha ("**Kanuha**") is a native Hawaiian practitioner. In his words: "I lived on Mauna a Wakea for four months in 2015 just as my ancestor had done over 400 years ago. Mauna a Wakea is my kuleana. I am a descendent of 'Umialiloa, ke ali'i noho mauna, and I have been given the sacred responsibility to protect the sacred lands of my ancestors." [Doc. 24] During the contested case proceeding, Kanuha represented himself *pro se*.
13. Harry Fergerstrom ("**Fergerstrom**") is a native Hawaiian practitioner. He is a "fully trained practitioner in Hawaiian Religion, Trained by Tahuna Nui Sam Hoopi Lono." [Doc. 20] During the contested case proceeding, Fergerstrom represented himself *pro se*.
14. Joseph Kualii Lindsey Camara ("**Camara**") resides with his ohana in the wao maukele of Kaumana on the slopes of Mauna Kea. In his words, "Our wai is Wailuku Stream. I am a lineal descendant of Kukahauula of Mauna Kea (Exhibit H-8). This ancestor lived

as a Kanaka (man), and also remains with us today on Mauna Kea as a Puu, an elemental deity or akua, and a vessels for the Wai Kapu A Kane. The remains, the iwi of Kukahauula and many more of my kupuna (ancestors) rest on Mauna Kea and need vigilant care to prevent desecration. I, like many Hawaiians am a descendant of Umi a Liloa. Umi placed a kapu on Mauna Kea and part of his vast legacy was to protect the sacred Mauna Kea from desecration. This legacy and kuleana are now mine to uphold. I am a Native Hawaiian and my family's history is woven into the landscape of Mauna Kea. My ancestry documents the un-severable bond that I have with this sacred mountain."[sic] WDT of Joseph Kualii Lindsey Camara, Witness Statement 1 filed 10/10/16. During the contested case proceeding, Camara represented himself *pro se*.

15. Jennifer Leina'ala Sleightholm ("**Sleightholm**") is a native Hawaiian practitioner. In her words: "I come from the 'ohana Keli'ipio, and Kuamo'o. I am a kanaka 'oiwi and can trace my genealogy back to the Battle of Kuamo'o in 1819. I am a 42 year old wife, and mother of 6 children of which I birthed 5. I was born in Wahiawa, O'ahu and moved to Pahoa, Moku o Keawe in 1978 with my parents, and younger sister. At the age of five, we moved to the wahi of Keahuolu where my father was the caretaker. In 1988 we moved to Ka'awaloa, Kona Hema where my parents remain today. I currently reside in Waikoloa, Kohala Hema, Moku o Keawe." WDT of Leina'ala Sleightholm, Ex. F-3. During the contested case proceeding, Sleightholm represented herself *pro se*.
16. Maelani Lee ("**Maelani Lee**") is a native Hawaiian, descended of the native inhabitants of Hawai'i prior to 1778 (King Kamehameha the Great and Queen Ka'ahumanu) and has lived in Hawai'i for 37 years. She supports and conducts traditional and customary practices consisting of chants and spiritual connection. [Doc. 39]. During the contested case proceeding, Lee represented herself *pro se*. On December 7, 2016, Lee filed a Notice of Withdrawal from this contested case. [Doc. 421].
17. Richard Maele DeLeon ("**DeLeon**") is a kahu, "ordained my practices of spiritual healing of enlightenment, I am a Ho'opa'a a chanter of prayers that log back to 1553, I am also a Olapa, a dancer of ancient Hula, TMT will impact my spiritual enlightenment for being in a scared grounds of alignment with Akua, I am also a lineal decedents of 7 generation of the house of Keawe of Liloa of Kamehameha, which holds title to Mauna A Wakea." [Doc. 22] During the contested case proceeding, DeLeon represented himself *pro se*. On August 30, 2016, prior to the start of the evidentiary portion of the contested case hearing on October 20, 2016, DeLeon filed a Motion to Withdraw from Contested Case. [Doc. 249]. On September 1, 2016, DeLeon also filed a Motion to Withdraw Richard Maele DeLeon as a Party to the Contested Case and Witness Under my Name. [Doc. 251].
18. Cindy Freitas ("**C. Freitas**") is a native Hawaiian practitioner. In her words: "I am a Native Hawaiian, descended of the native inhabitants of Hawai'i prior to 1778 and born and raised in Hawai'i my entire life. I learned my cultural religion practices though [sic] my families Lineage. My grandmother and grandfather is the strongest mentor for me in my growing up and raised me in a traditional cultural way. We would go to the mountain and do prayers ("Pule") for many different things." Cindy Freitas Amended Written Direct Testimony, Ex. S-2. During the contested case proceeding, C. Freitas represented herself *pro se*.

19. William Freitas ("**W. Freitas**") is a native Hawaiian practitioner. In his words: "I William Freitas, a practitioner of many Cultural Hawaiian Religious Traditions of the practices of our Hawaiian people that I have engage in and are taught to me by my Kupuna, Uncles' Aunties and my Mother and Hawaiian family's that live these traditions and shared hands on knowledge passed to them from beyond 1778. I am a Pohaku Kane (stone missionary). My experience started at a young age of 5 years old with my mother as we were picking kukui nuts to make Ina Mona. I found a stone under the kukui leaves in the dirt. My mother said it was a special stone use for food and medicine. Then she chanted with prayers for protection and permission to malama (care for). This special Stone which is still in my possession, is the connection to my heritage as a Kanaka Maoli Ko Pae Aina and the journey that directs me to protect my birth right for the future of myself and family." [sic] William Freitas WDT, Ex. T-3. During the contested case proceeding, W. Freitas represented himself *pro se*.
20. The Temple of Lono ("**Temple**") is an unincorporated association. It is "a traditional faith in the Hawaiian Civilization with an unbroken practice extending to this time..." [Doc. 50] Lanny Alan Sinkin ("**Sinkin**") was a lay representative for the Temple. He is "an attorney admitted to the Federal Bar in the State of Hawai'i" but is not licensed to practice law in the State of Hawai'i. [Doc. 74] During this contested case proceeding, the Temple was represented by Sinkin.
21. Kalikolehua Kanaele ("**Kanaele**") is a native Hawaiian practitioner. He is a cultural practitioner who practices and will continue to practice/ exercise his traditional and customary cultural and religious practices on and around the summit and slopes of Mauna Kea, Hawai'i. He is a ranking Chief of the Royal Order of Kamehameha I, Heiau Mamalahoa, Helu 'Elua and a Kanekoa, Priest of I'o Kalanainuiilamamao of Mauna Kea, and a descendant of Kamehameha I. Petition For A Contested Case Hearing filed 2/26/17 (WDT of Kalikolehua Kanaele in Documents Library). During the contested case proceeding, Kanaele represented himself *pro se*.
22. Stephanie-Malia:Tabbada ("**Tabbada**") is a native Hawaiian practitioner. During the contested case proceeding, Tabbada represented herself *pro se*. Despite being admitted as a party, Tabbada's last appearance in this case was on October 17, 2016 [Tr. Vol. viii, 10/17/16]; she did not physically appear during the evidentiary portion of the contested case hearing which commenced on October 20, 2016 and ended on March 2, 2017.
23. Tiffnie Kakalia ("**Kakalia**"), in her own words: "Ka mauna a Wākea has been the piko of my existence throughout many lifetimes. My kupuna hail from the cardinal points of moku o Keawe, North Kohala, KailuaKona, Pahala-Ka'u and Hilopaliku. Like many others from this island, I know this mountain intimately. I was raised on the slopes of Maunakea in the same community as my mother, her father and paternal grandparents. I have raised my children to know her as family and now raise 'ohana keiki (nieces and nephews) and mo'opuna (grandchildren) in the same manner. We are kalo keiki o ka 'āina, Natives of this land for generations back." [Pre-hearing Statement filed 10/11/2016] During the contested case proceeding, Kakalia represented herself *pro se*.
24. Glen Kila ("**Kila**") is a worshiper and kahu, priest of Kanenuiakea, a Hawaiian

indigenous religion recognized by the United Nation's NGO, the International Association for Religious Freedom (IARF). He worships Mauna Kea as an Akua, God and he and other members of Kanenuiakea, go to their akua Mauna Kea, to also worship our ancestral goddesses Poliahu, Lilinoe and Waiiau. [Doc. 56] During the contested case proceeding, Kila represented himself *pro se*. Despite being admitted as a party, his last appearance in this case was on August 5, 2016 [Tr. Vol. iv, 8/5/16]. Kila never appeared during the evidentiary portion of the contested case hearing which commenced on October 20, 2016 and ended on March 2, 2017.

25. Dwight Vicente ("**Dwight Vicente**") is a native Hawaiian and holds himself out to be representing the Hawaiian Kingdom. In his words: "I have the a right and a duty to protect the crown and government lands." [Doc. 57] During the contested case proceeding, Vicente represented himself *pro se*.
26. Brannon Kamahana Kealoha ("**Kealoha**") is a native Hawaiian practitioner. In his words: "I am a lineal descendant to Lilinoe and Kūkahau'ula (explicitly delineated herein) and have a living custom which requires I be buried in my traditional burial grounds (also delineated explicitly herein). My "credibility" and experience as a traditional Hawaiian practitioner and contemporary living cultural steward also relies on how I operate and live that culture in this western world." Kamahana Pre-hearing Statement, filed 10/11/2016. During the contested case proceeding, Kealoha represented himself *pro se*.
27. MKAH, Pisciotta, Ching, the Flores-Case 'Ohana, Neves, Ward, and KAHEA are referred to collectively herein as "**Petitioners**."
28. Kihoi, Kanuha, Fergerstrom, Camara, Sleightholm, Maelani Lee, C. Freitas, W. Freitas, Temple, Kanaele, Tabbada, Kakalia, Kila, Dwight Vicente, and Kealoha are referred to collectively herein as the "**Opposing Intervenors**."

## II. PROCEDURAL HISTORY: PRE-HEARING

### A. PRIOR CONTESTED CASE, REMAND, AND APPOINTMENT OF HEARING OFFICER

29. Unless otherwise explicitly indicated or clear from the context, "**Board**" and "**BLNR**" shall mean the Board of Land and Natural Resources; "**Chairperson**" shall mean the Chairperson of the Board of Land and Natural Resources; and "**Department**" or "**DLNR**" shall mean the Department of Land and Natural Resources.
30. This contested case is before the BLNR pursuant to the Hawai'i Supreme Court's ("**Supreme Court**") December 2, 2015 opinion in *Mauna Kea Anaina Hou v. Board of Land and Natural Resources*, 136 Hawai'i 376, 363 P.3d 224 (2015) ("*MKAH I*") and the Circuit Court of the Third Circuit, State of Hawai'i's Order for Remand filed February 22, 2016, in Civil No. 13-1-0349.
31. On September 2, 2010, UH Hilo submitted its CDUA for the TMT Project to the DLNR. The CDUA was designated CDUA HA-3568. Ex. A-1/R-1.

32. On December 2 and 3, 2010, the BLNR held public hearings on the CDUA in Hilo and Kailua-Kona, respectively. *MKAHI*, 136 Hawai‘i at 381, 363 P.3d at 229.
33. On February 25, 2011, at its regular meeting, the Board approved the CDUA. Exs. A-7/R-7, A-8/R-8, A-24, A-25. At that same meeting, the Board ordered that a contested case hearing be held on the CDUA. *See* Ex. A-27.
34. On February 25, 2011, the Board, at its regular sunshine meeting held pursuant to HRS chapter 92, voted unanimously to grant the CDUA on the condition that, "If a contested case proceeding is initiated, no construction shall occur until a final decision is rendered by the Board in favor of the applicant or the proceeding is otherwise dismissed." At the same meeting, the Board voted unanimously to hold a contested case hearing. *MKAHI*, 136 Hawai‘i at 383, 363 P.3d at 231.
35. Beginning in August 2011, a hearing officer appointed by the Board, presided over a contested case, during which written direct testimony was admitted, and twenty-six witnesses testified and were cross-examined. *MKAHI*, 136 Hawai‘i at 385, 363 P.3d at 233.
36. On November 30, 2012, the hearing officer issued a 124-page Findings of Fact, Conclusions of Law, and Decision and Order granting the CDUA. *MKAHI*, 136 Hawai‘i at 387, 363 P.3d at 235.
37. The Board issued its 126-page Findings of Fact, Conclusions of Law and Decision and Order (hereinafter, the "Board's Order") on April 12, 2013, granting the CDUA and issuing a Conservation District Use Permit ("CDUP"). *Id.*
38. The *MKAHI*, Ching, the Flores-Case ‘Ohana, Ward, Neves and KAHEA: The Hawaiian Environmental Alliance, appealed the Board's Order to the circuit court. On May 4, 2014, the circuit court entered a decision and order affirming the Board's Order and entered final judgment. *MKAHI*, 136 Hawai‘i at 388, 363 P.3d at 236.
39. The *MKAHI* Petitioners appealed the circuit court's order and final judgment and sought a transfer to the Hawai‘i Supreme Court, which was granted. *Id.*
40. On December 2, 2015, the Hawai‘i Supreme Court vacated the circuit court's order and final judgment because the Board acted improperly when it issued the CDUP before holding the contested case hearing. *MKAHI*, 136 Hawai‘i at 399, 363 P.3d at 247. The matter was remanded to the circuit court to further remand to the Board "so that a contested case hearing can be conducted before the board or a new hearing officer, or for other proceedings consistent with this opinion." *Id.*
41. On February 22, 2016, the Third Circuit Court issued its remand order, remanding this matter to the Board. Doc. 3 (Minute Order No. 2).
42. On February 26, 2016, the Board delegated the conduct of the contested case hearing to a Hearing Officer, pursuant to Hawai‘i Administrative Rules ("**HAR**") § 13-1-32(b). Minute Order No. 2. [Doc. 3].



43. On March 31, 2016, the Board issued Minute Order No. 1, providing notice that Judge (Ret.) Riki May Amano ("**Judge Amano**" or "**Hearing Officer**") had been selected to serve as the Hearing Officer of this contested case proceeding. This contested case proceeding was designated as BLNR-CC-16-002. Minute Order No. 1 set a deadline of April 15, 2016 for any comments and objections to Judge Amano's appointment. Minute Order No. 1. [Doc. 1].
44. On April 8, 2016, TIO filed a Motion to have TMT International Observatory, LLC Admitted As A Party In The Contested Case Hearing. [Doc. 2].
45. As summarized in Appendices A and B, several motions were filed objecting to the Hearing Officer selection process and seeking to disqualify the Hearing Officer. These motions were denied for the reasons stated in Minute Order Nos. 4 [Doc. 14]; 9 [Doc. 63]; 14 [Doc. 124]; 17 [Doc. 245]; and 39 [Doc. 406].

B. FIRST PRE-HEARING CONFERENCE, RECORD ON REMAND, SCHEDULING MOTIONS TO INTERVENE

46. On May 9, 2016, Minute Order No. 5 was issued to UHH and the MKAH Petitioners, setting a pre-hearing conference on May 16, 2016. [Doc. 16]. The purpose of the pre-hearing conference was to discuss the record, parties, anticipated pre-hearing motions, a motions hearing(s) schedule, and other procedural and logistical matters.
47. UHH and the MKAH Petitioners were parties to the first contested case in 2011. *MKAH I*, 136 Hawai'i at 376, 363 P.3d at 224.
48. Counsels for the UHH, Tim Lui-Kwan, Esq. and Gary Takeuchi, Esq. and MKAH Petitioners, Wurdeman, participated in the May 16, 2016 pre-hearing conference, held at the DLNR office in the Kalanimoku Board Room located on the first floor, Makai side, of the Kalanimoku Building at 1151 Punchbowl Street, Honolulu, Hawai'i. Items discussed included continuing the conference to a future date in Hilo, the record on remand, location of future conferences and the contested case hearing, and setting motions to intervene. No objections to the pre-hearing conference or timeliness of notice were raised. Vol. i, Tr. 5/16/16.
49. A deadline of May 31, 2016 was set for applications, motions, or requests to intervene. A hearing on the applications, motions, or requests was set for June 17, 2016. Minute Order No. 7 [Doc. 44].
50. From April 8, 2016 through June 13, 2016, requests to intervene as a party in this contested case proceeding were filed by the following parties/entities: TIO, Edward Akiona, Waiala Ahn, Fergerstrom, Ana Nawahine-Kahoopii, DeLeon, Kihoi, Kanuha, Camara, Halonaikaiopuna Mikala-Jiro Fukutomi, Crystal West ("**West**"), Ivy McIntosh ("**McIntosh**"), Wilma Holi ("**Holi**"), Moses Kealamakia, Jr. ("**Kealamakia**"), Michael Kumukauoha Lee ("**Michael Lee**"), PUEO, Ricky Cassiday, Keahi Tajon ("**Tajon**"), Eric Hansen ("**Hansen**"), Patricia Ikeda ("**Ikeda**"), Sleightholm, Lee, Michelle Cabalse, Linda Namauu, Dr. Maile Taulii ("**Dr. Taulii**"), Danelle Cooper ("**Cooper**"), Temple,

- Kanaele, Tabbada, Kakalia, Kila, Dwight Vicente, Joy Keahipuakauikawekiu Mills--Ferren, Kealoha, C. Freitas, and W. Freitas. [Doc. 2, 18-30, 32-40, 46-48, 50-54, 56-59, 64, 68].
51. On June 13, 2016, Dr. Tualii and Cooper filed a request to be withdrawn as a party. [Doc. 67].
  52. On June 13, 2016, Petitioners filed a Memorandum in Opposition to PUEO's Motion to Intervene. [Doc. 69].
  53. On June 17, 2016, a hearing was held on the pending motions, applications and/or requests for admission or intervention as a party or parties. The following applicants were not present at the hearing, and their applications were thus dismissed for lack of prosecution: Ana Nawahine-Kaho'opi'i, Edward Akiona, Wai'ala Ahn, Holonaikaipuna Mikala-Jiro Fukutomi, Michael Lee, Tajon, Hansen, Rick Cassidy, Linda Namauu, Joy Keahipuakauikawekiu Mills-Ferren, and Michelle Cabalse (collectively, the "**Non-Appearing Applicants**"). Minute Order No. 13. [Doc. 115].
  54. At the June 17, 2016 hearing, a deadline of August 1, 2016 was set for the Non-Appearing Applicants to file a motion for reconsideration of the dismissal of the motions/requests for intervention. Minute Order No. 13. [Doc. 115]. None of the Non-Appearing Applicants filed a motion for reconsideration of the dismissal of their motions/requests to intervene or otherwise requested to participate in the contested case hearing.
  55. At the June 17, 2016 hearing, the following individuals voluntarily decided to be Hearing Officer witnesses, rather than parties, in the contested case hearing: West; McIntosh; Holi; Kealamakia; and Ikeda. Minute Order No. 13. [Doc. 115].
  56. All remaining applicants for intervention had standing to participate in the contested case as parties and their motions to intervene were granted. Minute Order No. 13. [Doc. 115].
  57. On August 17, 2016, Shelley Stephens ("**Stephens**") filed a request to intervene. [Doc. 213]. Her request came on for hearing on August 29, 2016. Stephens failed to appear at the hearing. On October 10 and 13, 2016, Minute Order Nos. 21 and 35, respectively, were issued denying Stephens' Request. Minute Order Nos. 21 and 35. [Docs. 344 and 365].
  58. On August 29, 2016, Ikeda withdrew as a Hearing Officer Witness. Tr. 08/29/16 at 6:15-7:4. Ikeda re-confirmed her withdrawal as a Hearing Officer Witness on October 17, 2016. Tr. 10/17/16 at 8:3-6.
  59. On November 14, 2016, Maelani Lee informed BLNR in writing that she would not be attending any of the evidentiary hearings. On November 25, 2016, Maelani Lee further requested that she no longer receive service of the pleadings and orders in this proceeding. [Doc. 421].
  60. On December 7, 2016, Stephens again filed a Motion to be a Party. [Doc. 420]. The

hearing on Stephens' second request to be a party was held on December 12, 2016. Stephens was present at the hearing and her motion was orally denied because it was untimely and she failed to meet the criteria for intervention set out in HAR § 13-1-31(c). Tr. Vol. 15 12-12-16, 8:10-16:25. On June 4, 2017, the Hearing Officer issued Minute Order No. 64 (Order Denying Motion to be a Party to the TMT Case by Shelley Stephens (Mahi-Hanai) (Doc. 420)). Stephens was given five business days to file a motion for reconsideration. She failed to file any motion to reconsider. [Doc. 687]

61. Although intervenors Tabbada, Maelani Lee, DeLeon, and Kila's respective motions to intervene were granted, these individuals did not physically appear at the evidentiary portion of the contested case hearing as parties or otherwise participate in the proceedings.

C. STANDING

62. Following the Second Pre-Hearing Conference on June 17, 2016, the Hearing Officer found that the following people and entities had standing to participate as parties in the contested case hearing:

University of Hawai'i-Hilo  
Mauna Kea Anaina Hou, Kealoha Pisciotta  
Clarence Kukauakahi Ching  
Flores-Case `Ohana  
Deborah J. Ward  
Paul K. Neves  
Kahea: The Hawaiian Environmental Alliance  
TMT International Observatory, LLC  
Perpetuating Unique Educational Opportunities, Inc.  
Mehana Kihoi  
C.M. Kaho'okahi Kanuha  
Harry Fergerstrom  
Joseph Kualii Lindsey Camara  
Jennifer Leina'ala Sleightholm  
Maelani Lee  
Cindy Freitas  
William K. Freitas  
Richard Maele Deleon  
Temple of Lono by Lanny Sinkin  
Kalikolehua Kanaele

Stephanie-Malia Tabbada  
Tiffnie Kakalia  
Glen Kila  
Dwight J. Vicente  
Brannon Kamahana Kealoha  
Doc. 115 (Minute Order No. 13).

D. PRE-HEARING PLEADINGS

63. During the June 17, 2016 hearing, July 18, 2016 was set as the deadline for filing pre-hearing motions and witness lists. August 1, 2016 was set as the deadline for filing responses to pre-hearing motions, objections to witness lists, and motions to reconsider dismissal. A hearing on pre-hearing motions was scheduled for August 5, 2016. Minute Order No. 13. [Doc. 115].
64. *See* Appendix A for a summary of all pre-hearing motions filed by July 18, 2016.
65. *See* Appendix B for a summary of all pre-hearing motions filed between July 19, 2016 and October 20, 2016.
66. On August 5, 2016, a second pre-hearing conference was held. Minute Order No. 16. [Doc. 238]. Represented were the following parties: UH Hilo, Petitioners, TIO, Fergerstrom, DeLeon, Kihoi, Kanuha, Camara, PUEO, Sleightholm, Maelani Lee, the Temple, Kanaele, Kakalia, Dwight Vicente, Kealoha, C. Freitas, and W. Freitas. Argument was held on the timely pre-hearing motions filed by the Temple, the Petitioners, Lee, Kihoi, Tabbada, Kanaele, Fergerstrom, and Dwight Vicente.
67. Certain pre-hearing motions could not be heard during the August 5, 2016 hearing so it was continued to August 12, 2016. Minute Order 15 [Doc. 185].
68. On August 12, 2016, following a hearing on several timely pre-hearing motions filed by Petitioners, the Temple and Fergerstrom, a third pre-hearing conference was held. Represented were the following parties: UH Hilo, Petitioners, TIO, Kihoi, Kanuha, Fergerstrom, Camara, Sleightholm, PUEO, C. Freitas, W. Freitas, Kanaele, Tabbada, Kakalia, Dwight Vicente, Kealoha, and the Temple.
69. Certain timely pre-hearing motions could not be heard during the August 12, 2016 hearing, so they were orally continued to August 29, 2016. Tr. 8/12/16 at 71:11-72:3.
70. On August 29, 2016, following a hearing on the timely pre-hearing motions filed by Kihoi, Fergerstrom, TIO, the Temple, and PUEO, a fourth pre-hearing conference was held. Represented were the following parties: UH Hilo, Petitioners, TIO, Fergerstrom, Kihoi, Kanuha, Camara, PUEO, Kanaele, Kakalia, Dwight Vicente, Sleightholm, the Temple, W. Freitas, and C. Freitas.

E. SETTING THE ISSUES

71. On July 18, 2016, PUEO filed a Motion to Set the Issues, requesting that the Hearing Officer identify the specific issues to be addressed during the contested case hearing. [Doc. 99]. As summarized in Appendix A, multiple pleadings were filed both opposing and supporting PUEO's motion.
72. During the August 29, 2016 motion hearing, PUEO's Motion to Set the Issues was heard. Minute Order No. 21 [Doc. 344]. The Hearing Officer requested that PUEO submit a Proposed Minute Order Granting PUEO's Motion to Set Issues setting forth the issues to be addressed and issues not to be addressed in the contested case hearing, as ruled upon at the hearing. Tr. 8/29/16 at 83:5-19.
73. PUEO was given a deadline of September 9, 2016 by which to submit its Proposed Minute Order Granting PUEO's Motion to Set Issues. All other parties could submit responses or objections by September 19, 2016. Minute Order No. 21 [Doc. 344]. A summary of those pleadings is contained in Appendix A.
74. On September 23, 2016, Minute Order No. 19 was issued granting PUEO's Motion to Set Issues. [Doc. 281]. A summary of pleadings filed in response is contained in Appendix B.
75. Minute Order No. 19 limited the issues to be addressed in the contested hearing to the following inquiries:
  - a. Is the proposed land use, including the plans incorporated in the application, consistent with Chapter 183C of the Hawai'i Revised Statutes, the eight criteria in HAR § 13-5-30(c), and other applicable rules in HAR, Title 13, Chapter 5 Conservation District?
  - b. Is the proposed land use consistent with Article XII, Section 7 of the Hawai'i State Constitution and *Ka Pa 'akai O Ka 'aina v. Land Use Comm'n. State of Hawai'i*, 94 Hawai'i 31, 7 P.3d 1068 (2000)?
  - c. Is the proposed land use consistent with Article XI, Section 1 of the Hawai'i State Constitution and the public trust doctrine?
76. Minute Order No. 19 also specifically ruled that the following issues were not to be addressed in the contested case hearing because they were not germane to the CDUA and/or within the subject-matter jurisdiction of this contested case proceeding:
  - a. The sovereignty of the Kingdom of Hawai'i or any other issues relating to the purported existence of the Kingdom of Hawai'i;
  - b. Challenges to the legal status of the State of Hawai'i; and
  - c. Challenges to the State's ownership and title to the

lands related to this contested case hearing.

F. SITE VISIT

77. During the hearing on August 12, 2016, a site visit to Mauna Kea was scheduled for September 26, 2016. Minute Order No. 16. [Doc. 238]. Parties were given ten days from August 23, 2016 to respond to the proposed site visit.
78. On August 17, 2016, the following parties submitted site visit proposals and/or designations: W. Freitas, UH Hilo, Sleightholm, TIO, Petitioners, Fegerstrom, and C. Freitas. [Doc. 214-220]. On August 22, 2016, TIO filed Objections to the Petitioners' and C. Freitas' site visit recommendations. [Doc. 229 and 230]. On September 9, 2016, PUEO filed its site visit designation. [Doc. 255]. On September 14, 2016, Kihoi filed her site visit proposal. [Doc. 260].
79. At the August 29, 2016 pre-hearing conference, September 26, 2016 was set as the date for the Mauna Kea site visit. Minute Order No. 21 [Doc. 344].
80. On September 19, 2016, Minute Order No. 18 was issued which designated the individuals approved to attend the site visit to Mauna Kea, as well as the logistics for the site visit. Minute Order No. 18 [Doc. 274]. A summary of the multiple pleadings that were filed in response to Minute Order No. 18 is contained in Appendix B.
81. A site visit to Mauna Kea took place on September 26, 2016. Minute Order No. 16 [Doc. 238]. The site visit was conducted pursuant to an order regarding site visit. Minute Order No. 18 [Doc. 274]. The following sites were visited: the Batch Plant; the proposed Thirty-Meter Telescope site; and the Summit Loop road near the Keck Observatory. At the proposed Thirty Meter Telescope site, there was a demonstration of a red helium balloon attached to a 187-foot rope.
82. The Hearing Officer had a reasonable period of time and conditions for viewing the general landscape and areas proposed for the TMT Project, and the site visit is considered reasonable and appropriate for the purposes of the case.

G. THE PRIOR CDUP WAS VOIDED BY THE BLNR

83. On October 14, 2016, the Board issued Minute Order No. 36, formally voiding the previously issued CDUP. Minute Order No. 36 [Doc. 376].

H. SCHEDULING THE EVIDENTIARY HEARING

84. On July 21, 2016, Minute Order No. 13 was issued to inform the parties that the evidentiary hearing for this contested case proceeding would commence in October 2016. [Doc. 115].
85. During the August 5, 2016, August 12, 2016, and August 29, 2016 hearings, the parties were repeatedly informed by the Hearing Officer that the evidentiary hearing would likely be scheduled for several weekdays during October 2016. There were no objections

- raised at any time. Minute Order No. 16. [Doc. 238]. Tr. Vol. iv, 8/5/16 at 117:11-14; Tr. Vol. v, 8/12/16 at 118:25-119:1; Tr. Vol. vi, 8/29/16 at 99:21-100:6.
86. On September 8, 2016, Wurdeman filed a request to: (1) set a staggered briefing schedule for opening briefs, witness lists, written direct testimony, exhibit lists and exhibits; and (2) set the evidentiary hearing for some time after November 10, 2016, excluding certain dates for which Wurdeman represented that he had scheduling conflicts. [Doc. 254].
  87. On September 20, 2016, a Notice of Contested Case Hearing was issued, informing the parties that the hearing would commence on October 11, 2016. [Doc. 276].
  88. On September 23, 2016, Wurdeman submitted correspondence advising that he was unavailable on October 11, 2016. [Doc. 282]. Wurdeman represented that he would be out of state on matters for a client that was "set a number of months ago," and also to inquire whether the evidentiary portion of the hearing would begin as noticed on October 11, 2016. [Doc. 282].
  89. On October 3, 2016, a fifth pre-hearing conference was held – where all parties were verbally ordered to submit final witness lists, exhibit lists, prehearing statements ("PHS"), and any subpoena requests by October 11, 2016. Tr. 10/3/16 at 78:19-21.
  90. During the hearing on October 3, 2016, Wurdeman was advised by the Hearing Officer that "you were on notice, considerable notice that the hearing is going to be in October. You didn't say anything." Tr. 10/3/16 at 103:12-14. Nevertheless, the commencement of the evidentiary portion of the contested case hearing was moved from the originally-scheduled date of October 11, 2016 to October 18, 2016, to accommodate Wurdeman's schedule, including a trip to a conference in Las Vegas. *Id.* at 21:20-24:12.
  91. On October 6, 2016, an Amended Notice of Contested Case Hearing was issued, informing parties that the hearing would commence on October 18, 2016. [Doc. 325].
  92. On October 10, 2016, Wurdeman filed a Notice of Withdrawal of Counsel. [Doc. 341]. As such, also on October 10, 2016, Petitioners' filed a List of E-Mail Addresses for Service of Process. [Doc. 342]. On October 11, 2016, Yuklin Aluli, Esq. and Dexter Kaiama, Esq. filed a Notice of Appearance of Co-Counsel on behalf of KAHEA. [Doc. 362].
  93. On October 13, 2016, UH Hilo filed a Statement of Position. [Doc. 369]. On October 17, 2016, the Temple filed a Response to the UH Hilo's Statement of Position. [Doc. 386].
  94. On October 17, 2016, a sixth pre-hearing conference was held. Wurdeman was not present and the Petitioners entered their own appearance as *pro se* parties, except for KAHEA, which was represented by Ms. Yuklin Aluli. Tr. 10/17/16 at 4:6-5:11.
  95. Each of the Petitioners was questioned regarding Wurdeman's Notice of Withdrawal. Tr. 10/17/16 at 19:10-44:23. The Petitioners each confirmed that they had no objection to

Wurdeman's Notice of Withdrawal and that they were each prepared to proceed *pro se*. Tr. 10/17/16 at 19:10-45:3.

96. Given Wurdeman's last minute withdrawal, commencement of the evidentiary hearing was continued to October 20, 2016. Tr. 10/17/16 at 111:9-111:12.

### III. PROCEDURAL HISTORY: EVIDENTIARY HEARING

97. The evidentiary hearing for this contested case proceeding commenced on October 20, 2016. *See* Appendix C for a summary of all motions filed between October 20, 2016 and March 2, 2017.

98. Testimony was taken during the following forty-four days:

October 20, 24, 25, 26, 27, 31, 2016;

November 2, 15, 16, 2016;

December 1, 2, 5, 6, 8, 12, 13, 16, 19, 20, 2016;

January 3, 4, 5, 9, 10, 11, 12, 19, 23, 24, 25, 26, 30, 31, 2017;

February 13, 14, 15, 16, 21, 22, 23, 27, 28, 2017; and

March 1, 2, 2017.

99. At an October 17, 2016 pre-hearing conference, the parties were advised that each witness would be allowed up to 10 minutes to summarize his or her written direct testimony at the commencement of testimony. The elective summary would be followed by any cross-examination and re-direct examination of the witness. Vol. viii, Tr. 10/17/16 at 64:12-64:23.
100. On October 20, 2016, UH Hilo offered Perry White as an expert in land use planning and analysis. Vol. 1, (White) Tr. 10/20/16 at 45:5-45:7. After hearing objections from Petitioners and Opposing Intervenors, the Hearing Officer determined that no parties or witnesses would be formally designated as experts and that the witness's credentials will simply go to the weight to be given his or her testimony. Vol. 1, (White) Tr. 10/20/16 at 52:24-53:21.
101. Based on the length of the cross-examinations conducted by the Petitioners and Opposing Intervenors over the first five days of the evidentiary hearing, and pursuant to HAR § 13-1-32(h), on October 31, 2016, a 30-minute time limit was imposed on cross-examinations, subject to extensions of time for good cause shown. Tr. 10/31/16 at 11:23-12:6. Throughout the proceeding, the Hearing Officer would warn parties when they had reached or exceeded the 30-minute limit. Upon a showing of good cause, the Hearing Officer would afford extensions of time for further cross-examination. *See, e.g.*, (Rechtman) Tr. 12/20/16 at 172:18-22 (giving W. Freitas approximately an hour and a half to cross-examine Rechtman); *see also* Tr. 11/16/16 at 209:13-209:14; Tr. 12/1/16 at 142:22-144:7, 150:21-150:25; Tr. 12/2/16 at 85:10-85:13, 89:5-89:11; (Nagata) Tr. 12/8/16 at 157:14-159:13, 221:18-221:24; (Nagata) Tr. 12/13/16 at 31:17-31:21, 39:15-



41:22.

102. UH Hilo presented its case-in-chief from October 20, 2016 through December 13, 2016. UH Hilo presented the following witnesses: Perry White ("**White**"), James Hayes ("**Hayes**"), Dr. Günther Hasinger ("**Dr. Hasinger**"), Chad Baybayan ("**Baybayan**"), Dr. Robert McLaren ("**Dr. McLaren**"), Wallace Ishibashi ("**Ishibashi**"), Dr. Clifford Smith ("**Dr. Smith**"), Hon. Walter Heen ("**Judge Heen**"), Fritz Klasner ("**Klasner**"), Richard Nees ("**Nees**"), Stephanie Nagata ("**Nagata**"), and Tom Nance ("**Nance**"). The written direct testimony of each of those witnesses was admitted into evidence and fully considered, as well as the curriculum vitae of White, Dr. Hasinger, Hayes, Dr. McLaren, Baybayan, Nees, Dr. Smith, and Nance. Minute Order No. 44; Exs. A-30, A-32, A-35, A-127, A-120, A-119, A-37, A-43.
103. On November 2, 2016, Fergerstrom requested that he be allowed to recall White as a witness, claiming that he was previously unable to effectively cross-examine White due to his purported lack of exhibits. Vol. 7, Tr. 11/2/16 at 242:10-243:13. *See* Fergerstrom's *Opposition to University of Hawai'i Confirmation of Exhibits and Direct Written Testimonies of Witnesses to be Entered into Evidence; Motion to Recall Mr. Perry White*.
104. On January 11, 2017, Fergerstrom withdrew his motion to recall White. He also noted that he was simultaneously withdrawing a prior oral request to recall Dr. Gary Sanders ("**Dr. Sanders**"). Tr. 1/11/17 at 13:22-14:2.
105. TIO presented its case from December 16, 2016 through January 5, 2017. TIO presented the following witnesses: Professor David Callies ("**Prof. Callies**"), Naea Stevens ("**N. Stevens**"), Dr. Ed Stone ("**Dr. Stone**"), Robert Rechtman ("**Rechtman**"), Dr. Sanders, Dr. Heather Kaluna ("**Dr. Kaluna**"), and Dr. Paul Coleman ("**Dr. Coleman**").
106. A deadline to submit notice of subpoenas was set for one week after the close of TIO's case ((Rechtman) Tr. 12/20/16 at 231:7-231:12).
107. On January 8, 2017, the Temple filed a Request to Subpoena David Lassner, President of the University of Hawai'i System ("**President Lassner**") and DLNR Employee, to Testify on Whether DLNR has a Form to Fill Out Requesting Permission to Build an Altar on Mauna Kea. [Doc. 438 and 439].
108. On January 12, 2017, the Flores-Case 'Ohana served a Request for Witness Subpoena for "John Doe" and for a Subpoena Duces Tecum to disclose unidentified Mauna Kea Observatories Support Services employee involved with the destruction of ahu (shrine) on Mauna Kea in August of 2015. [Doc. 447]. The Flores-Case 'Ohana also served a Request for Witness Subpoena for Samuel Lemmo ("**Lemmo**"), Administrator, Office of Conservation and Coastal Lands ("**OCCL**"), DLNR, State of Hawai'i. [Doc. 448]. The Flores-Case 'Ohana subsequently filed its Requests with OCCL on January 25, 2017.
109. On January 19, 2017, UH Hilo filed its Objections to the Requests for Subpoenas for "John Doe," Lemmo, and President Lassner. [Docs. 443, 444, 445].

110. A hearing on the requests for subpoenas was held on January 25, 2017 (Tr. 1/25/17 at 215:22-243:10), on January 26, 2017 (Tr. 1/26/17 at 12:12-15:25), and on January 30, 2017 ((Flores) Tr. 1/30/17 at 14:21-29:11). The requests for subpoenas for President Lassner and "John Doe" were denied as the offers of proof for the proposed testimony of both witnesses were considered to be irrelevant and immaterial. Tr. 1/26/17 at 12:12-13:10. The Flores-Case 'Ohana's Request for Subpoena for Samuel Lemmo was granted for the reasons stated in Minute Order No. 42 [Doc. 464].
111. The Petitioners and Opposing Intervenors presented their combined case from January 9, 2017 through March 2, 2017. They presented the following witnesses: Dr. Ku Kahakalau ("**Dr. Kahakalau**"), Professor Candace Fujikane ("**Prof. Fujikane**"), Marti Townsend ("**Townsend**"), Laulani Teale ("**Teale**"), David Frankel ("**Frankel**"), Case, Professor Jonathan Osorio ("**Prof. Osorio**"), Narissa Spies ("**Spies**"), Dr. Kehaunani Abad ("**Dr. Dr. Abad**"), Hansen, Diana LaRose ("**LaRose**"), Michael Lee, Fergerstrom, Dr. Taulii, Ku'ulei Kanahale ("**Kanahale**"), Ching, Professor Peter Mills ("**Prof. Mills**"), Davin Vicente ("**Davin Vicente**"), Dr. Manulani Aluli Meyer ("**Dr. Aluli Meyer**"), Flores, Ward, Neves, Pisciotta, Sleightholm, Kihoi, Sara Kihoi ("**S. Kihoi**"), Ruth Aloua ("**Aloua**"), Hawane Rios ("**Rios**"), Professor Gregory Johnson ("**Prof. Johnson**"), Nanci Munroe ("**Munroe**"), Susan Rosier ("**Rosier**"), C. Freitas, Nelson Ho ("**N. Ho**"), N. KaopuaGoodyear ("**Prof. Kaopua-Goodyear**"), Professor Joseph Keaweaimoku Kaholokula ("**Prof. Kaholokula**"), Tammie Noelani Perreira ("**Perriera**"), Tajon, Kakalia, Lemmo, Brian Cruz ("**Cruz**"), Mililani Trask ("**Trask**"), Kahuna Frank Nobriga ("**Nobriga**"), Kanaele, Wiremu Carroll ("**Carroll**"), Ronald Fujiyoshi ("**Fujiyoshi**"), and W. Freitas.
112. On January 23, 2017, Fergerstrom called Professor Williamson Chang ("**Prof. Chang**") to testify regarding challenges to the State of Hawaii's title to Mauna Kea. Tr. 1/23/17 at 156:18-166:25. Based upon the offer of proof submitted by Fergerstrom, Prof. Chang's testimony was excluded on the grounds that it was irrelevant and immaterial to the issues in this proceeding. Tr. 1/23/17 at 167:1-11; Minute Order Nos. 14 [Doc. 124], 17 [Doc. 245], 19 [Doc. 281], 25 [Doc. 348], and 29 [Doc. 352].
113. PUEO presented its witnesses on February 15, 2017 and February 21, 2017. PUEO presented the following witnesses: Keahi Warfield ("**Warfield**"), Richard Ha ("**R. Ha**"), Elroy Osorio ("**E. Osorio**"), and William Brown ("**Brown**").
114. On February 23, 2017, Holi testified as a Hearing Officer witness.
115. No other witnesses were called or scheduled for testimony other than those set forth above.

#### IV. PROCEDURAL HISTORY: POST-HEARING

116. On March 1, 2017, a deadline of March 9, 2017 was set for parties to file written motions to move Written Direct Testimonies and exhibits into evidence that had already been introduced or referred to in the evidentiary portion of the contested case hearing. No new exhibits were to be included if not previously introduced or referred to before the close of

the evidentiary hearing on March 2, 2017. March 16, 2017 was set as the deadline for any objections if a party believed the exhibits sought to be moved into evidence were not "appropriate, or grounded, or relevant". Tr. 3/1/17 at 253:10-253:21. *See* Appendix D for a summary of all evidentiary motions and post-hearing filings.

117. On March 1, 2017, a discussion about the availability of copies of the transcripts of the proceedings in select libraries was held. In addition, the Hearing Officer advised that the parties would be required to submit any proposed findings of fact and conclusions of law within thirty days from when the transcripts were made available. Tr. 3/1/17 at 256:2-256:9.
118. On April 19, 2017, Minute Order No. 43 was issued informing parties that complete copies of the transcripts were available for reviewing at five locations. Minute Order No. 43 [Doc. 552]. Minute Order No. 43 established the deadline of May 30, 2017 for any proposed decision and order, findings of fact and conclusions of law. Minute Order No. 43 [Doc. 552].
119. Multiple motions for reconsideration of Minute Order No. 43 were filed and subsequently denied by Minute Order No. 50 [Doc. 646]. *See* Appendix D.
120. On April 20, 2017, Minute Order No. 44 was issued, ruling on all submitted motions to admit evidence. Minute Order No. 44 [Doc. 553].
121. Multiple motions for reconsideration of Minute Order No. 44 were filed and subsequently addressed by Minute Order No. 51 [Doc. 647]. *See* Appendix D. On May 26, 2017, Amended Minute Order No. 44 was issued. [Doc. 649].

## **V. PROPOSED FINDINGS OF FACT, CONCLUSIONS OF LAW, AND DECISION AND ORDER**

122. The Hearing Officer issued her Proposed Findings of Fact, Conclusions of Law, and Decision and Order ("FOF, COL, D&O") on July 26, 2017. [Doc. 783].
123. Exceptions to the Proposed FOF, COL, D&O were filed on August 21, 2017, and briefs responding to the exceptions were filed on September 11, 2017. *See* Appendix E. [Doc. 803, 805-831, 835-846, 848-857].
124. The BLNR heard oral arguments on the parties' exceptions to the Proposed FOF, COL, D&O on September 20, 2017.
125. During the oral arguments, several parties asked the BLNR to stay the CDUP, if granted, pending appeal. The Chairperson instructed the parties to submit their motions in writing.
126. On September 20 and 21, 2017, the Temple, the Flores-Case 'Ohana, C. Freitas, W. Freitas, Ching, MKAH, Pisciotta, Neves, and Fergerstrom, filed motions to stay the CDUP, if granted, pending appeal. [Doc. 866-867, 869-871, 873].

127. See Appendix D, starting at Doc. 785 filed on July 27, 2017, for a summary of all motions filed after the Proposed FOF, COL, D&O.

## FINDINGS OF FACT

### I. THE DEVELOPMENT OF MODERN ASTRONOMY ON MAUNA KEA

#### A. THE GENERAL LEASE, THE MAUNA KEA SCIENCE RESERVE AND THE UNIVERSITY MANAGEMENT AREA

128. In 1968, the State of Hawai‘i, through the BLNR, entered into a lease with the University of Hawai‘i for the Mauna Kea Science Reserve ("**MKSR**"), General Lease No. S-4191 (the "**General Lease**"). By its terms, the General Lease terminates on December 31, 2033. Written Direct Testimony ("**WDT**") Nagata at 1; Ex. B.17f; (Dr. McLaren) Tr. 11/02/16 at 179:20-23.
129. The General Lease allows the University to use the leased land as follows:
4. Specified Use. The land hereby leased shall be used by the Lessee as a scientific complex, including without limitation thereof an observatory, and as a scientific reserve being more specifically a buffer zone to prevent the intrusion of activities inimical to said scientific complex.  
  
Activities inimical to said scientific-complex shall include light and dust interference to observatory operation and certain types of electric or electronic installation on the demised lands, but shall not necessarily be limited to the foregoing.  
  
Ex. B.17f at 3-4.
130. The MKSR includes approximately all of the land on Mauna Kea above the 12,000-foot elevation, except for certain portions that lie within the Mauna Kea Ice Age Natural Area Reserve ("**NAR**"). WDT Nagata at 1; Ex. A-9 at 6-1.
131. The entire MKSR is designated as part of the State of Hawai‘i Conservation District Resource Subzone. Uses on the land are subject to the DLNR’s Conservation District Rules (HAR Chapter 13-5) and any associated permit conditions. WDT Nagata at 1; Ex. C-2 at 2 (WDT Dr. Sanders).
132. The MKSR is administered by the DLNR as State land under the authority and direction of the BLNR. The MKSR is comprised of 11,288 acres, which the University’s Master Plan describes as a 10,763-acre cultural and natural preserve and a 525-acre Astronomy Precinct. The University manages the MKSR, the Hale Pōhaku mid-level facilities, and the Summit Access Road (between Hale Pōhaku and the MKSR, including 400 yards on either side of the road, excluding the NAR). Collectively, those areas are referred to as the "**UH Management Area.**" WDT Nagata at 1, 4-5.