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NADINE Y. ANDO
DIRECTOR | KA LUNA HOʻOKELE

DEAN I HAZAMA
DEPUTY DIRECTOR | KA HOPE LUNA HOʻOKELE

December 17, 2025

TRANSMITTED VIA LEGISLATIVE WEBSITE

Dear President Kouchi, Speaker Nakamura, and Members of the Legislature:

Enclosed is a copy of the 2025 Report Pursuant to Act 060, Session Laws of Hawaii 2018.

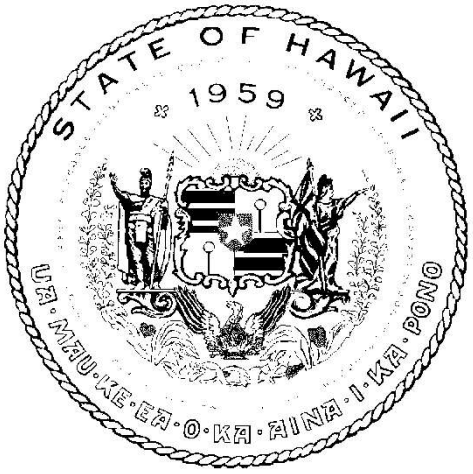
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Sincerely,

NADINE Y. ANDO
Director

Enclosure

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State Publications Distribution Center (2 hard copies, 1 electronic copy)
University of Hawaii (1 hard copy)



THIRTY-FIRST LEGISLATURE
REGULAR SESSION OF 2026

Report Pursuant to Act 060, Session Laws of Hawaii 2018

PROFESSIONAL AND VOCATIONAL LICENSING DIVISION
DEPARTMENT OF COMMERCE AND CONSUMER AFFAIRS
STATE OF HAWAII

Submitted December 2025

This report is filed pursuant to Act 060, Session Laws of Hawaii (SLH) 2018, which requires the Board of Electricians and Plumbers (Board) to submit reports to the Legislature that shall include:

(1) Any programs in the State that offer vocational training for licensed electricians to perform high voltage electrical work;
(2) Availability of continuing education, training, or both, necessary for licensed electricians to acquire or keep current those skills related to performing high voltage work;
(3) The number of licensed electricians in the State qualified to perform high voltage work; and
(4) Opportunities for growth in the high voltage work subspecialty.

To address a need for individuals qualified to work with high voltage power lines, the Legislature enacted Act 065, SLH 2013, which provided a limited exemption from electrician licensing requirements for individuals employed by electrical contractors who are: (1) retained by a public utility within the State to perform high voltage work for that public utility; and (2) deemed qualified by the public utility. As the sunset date for Act 065, SLH 2013, was June 30, 2018, and the Legislature found a shortage of electricians, splicers, and linemen in the State who are qualified to work with high voltage, the passage of Act 060, SLH 2018, extended the sunset date of Act 065, SLH 2013 for an additional five years, until 2023.

As the sunset date for Act 065, SLH 2013, was June 30, 2023, as extended by the passage of Act 060, SLH 2018, and the Legislature found a shortage of electricians, splicers, and linemen in the State who are qualified to work with high voltage, the Legislature enacted the passage of ACT 068, SLH 2022, which provided an amended limited exemption from electrician licensing requirements for individuals employed by electrical contractors who are:

(1) retained by a public utility within the State to perform high voltage work for that public utility provided that
    (A) After solicitation of a request for proposal to licensed contractors specifying the high voltage work requested, the public utility certifies to the board that no electricians, including electricians employed by C-62 pole and line or C-63 high voltage electrical contractors, responded to the request for proposal who were:
        (i) Sufficiently qualified and licensed in the State; and
        (ii) Available and able to perform or timely complete the high voltage electrical work or task,

        before the contractor hired by the public utility recruited qualified electricians outside the State; provided further that the public utility shall make its request for proposals available through its website in an electronic format to C-62 pole and line and C-63 high voltage electrical contractors;
    (B) The public utility submits an annual report to the board covering the preceding calendar year that identifies, at a minimum:
        (i) The number of qualified contractors the public utility employed to perform high voltage electrical work; and

(ii) The number of requests for proposals solicited for high voltage work; and
(2) deemed qualified by the public utility.

The exemption is further limited to the use by a public utility for high voltage electrical workers who perform electric transmission and distribution line construction, maintenance, and connection to substation work.

In addition, the passage of ACT 068, SLH 2022, extended the sunset date of Act 065, SLH 2013, for an additional four years, until June 30, 2027.

The Board is required to submit reports to the Legislature no later than twenty days prior to the convening of the regular sessions of 2023, 2024, 2025, 2026, and 2027. Accordingly, the Board submits the following report for the regular session of 2026:

(1) Programs in the State that offer vocational training for licensed electricians to perform high voltage electrical work.

The Department of Labor and Industrial Relations (DLIR) provides information on the six currently registered lineman apprenticeship programs. The table below shows the number of active/registered apprentices in each of the lineman apprenticeship programs, as well as new registered apprentices, cancelled apprentices, and completed apprentices, as of August 25, 2025, covering the period of September 26, 2024, to August 25, 2025:

Sponsor/Company	Active/ Registered Apprentices	New Apprentices Registered	Cancelled Apprentices	Completed Apprentices
IBEW Local 1186	0	0	0	0
IBEW Local 1260	0	0	0	0
Hawaiian Electric Company	28	5	1	0
Maui Electric Company	12	3	0	6
Hawaii Electric Light Company	14	3	0	0
Kauai Island Utility Cooperative	6	1	1	0

Other than the public utilities and union programs (IBEW Local 1186 and IBEW Local 1260), no other lineman apprenticeship programs are offered in the State.

The Hawaii Electricians Training Fund's (HETF) assistant training director states that the organization trains its Inside Wireperson Apprentices and licensed journey workers in all voltages (up to 600 volts and above 600 volts), in the installation of all electrical conductors, equipment, and raceways covered in the National Electrical Code (NEC). A few examples of high voltage electrical work that its licensed journey workers are trained and qualified to perform include substation construction, photovoltaic (PV) power station construction, transformer installations/repair, electrical switchgear, and runway lighting.

The HETF's Lineman Apprenticeship Program and Cable Splicer Program provide training in the interaction of equipment, materials, and devices dealing with National

Electrical Code (NEC) systems operating up to 138,000 volts. According to the HETF assistant training director, it may be "faster" for a journey worker electrician to complete the Lineman Apprentice Program, as the journey worker electrician will already possess many of the core skills and theories of working with electricity that may be taught in the Lineman Apprenticeship Program. Programs could evaluate a credit system for the journey worker electrician applicant(s) as a means of shortening the time of the program.

The HETF states that its Cable Splicer Program requires 350 hours of related instruction and 1000 hours of on-the-job training with a cable splicer, as well as maintaining and including additional safety training pertaining to the transmission and distribution systems. However, this training is available only to licensed journey worker electricians who are IBEW members.

Beyond the public utility and union programs, there are only online correspondence courses provided by training providers such as Penn Foster Career School, Northwest Lineman College, and T&D Power Skills, as well as new or recurring manufacturers that offer training specific to their products.

(2) Availability of continuing education and/or training necessary for licensed electricians to acquire or keep current those skills related to performing high voltage work.

The HETF assistant training director states that training in the operation of Transformers, Motor Control, Photovoltaic (PV), Variable Frequency Drives (VFD), Branch Circuit Feeders, and Single Phase & Three Phase Power Quality, are some of the topics that are incorporated into the Inside Wireperson Apprenticeship Training and licensed journey worker skill training that are available to their members. Training also includes any new and/or re-occurring manufacturer training or technologies, a few of these are the Energy Storage Systems (ESS) and the Battery Energy Storage Systems (BESS), which they are currently developing with their international training office.

Other than the HETF's cable splicer program that is available only to journey worker electricians who are IBEW members, in-house training for electrical utility employees, and new or recurring manufacturers training specific to their products, there does not appear to be continuing education or training available to other licensed electricians to acquire or keep current skills relating to high voltage work. The Board does not track continuing education for high voltage work, as that is not a requirement to maintain a journey worker electrician license.

(3) The number of licensed electricians in the State qualified to perform high voltage electrical work.

There are currently contractors in the State who are licensed to perform high voltage electrical work and they employ licensed electricians who perform transmission and distribution line work. Electricians are licensed to perform work under the NEC, which

covers voltages over 600 volts, and are qualified to perform any electrical work, including overhead and underground high voltage electrical work with additional training.

According to the HETF assistant training director, while a licensed journey worker electrician is able to work on voltages above 600 volts, it is somewhat unusual for a licensed journey worker electrician to want to strictly become a lineman to work primarily on transmission and distribution line construction. They state that they have a sufficient number of EJs able to perform the underground high voltage work, and they continue to recruit and train to build a workforce that meets the ongoing and fluctuating demands.

Honolulu Community College supports two electrician apprenticeship programs: Hawaii Electricians (IBEW 1186) and Associated Builders and Contractors. Neither program includes notable coverage of voltages above 600 volts. However, the NEC, under which electricians are licensed, has articles addressing over 1,000 volt installations, including, but not limited to, the following sections:

- Article 100 General, Part II
- Article 110 Requirements for Electrical Installations, Part III
- Article 225 Outside Branch Circuits and Feeders, Part III
- Article 230 Services, Part VIII
- Article 240 Overcurrent Protection, Part IX
- Article 250 Grounding and Bonding, Part X
- Article 280 Surge Arresters over 1,000 volts
- Article 399 Outdoor Overhead Conductors over 1,000 volts

“High voltage” is defined in Hawaii Revised Statutes section 448E-13(c):

> §448E-13. Exemption of public utility and community antennae television company personnel; annual reports.
>
> (a) The following persons shall be exempt from this chapter:
> (1) All employees of a public utility within the State under a franchise or charter granted by the State that is regulated by the public utilities commission and community antennae television company, while so employed; and
> (2) Employees of an electrical contractor duly licensed under chapter 444; provided that:
> (A) The contractor is retained by a public utility within the State under a franchise or charter granted by the State that is regulated by the public utilities commission to perform high voltage electrical work for the public utility; and
> (B) After solicitation of a request for proposal to licensed contractors specifying the high voltage work requested, the public utility certifies to the board that no electricians, including electricians employed by C-62 pole and line or C-63 high

voltage electrical contractors, responded to the request for proposal who were:

(i) Sufficiently qualified and licensed in the State; and

(ii) Available and able to perform or timely complete the high voltage electrical work or task, before the contractor hired by the public utility recruited qualified electricians outside the State; provided further that the public utility shall make its request for proposals available through its website in an electronic format to C-62 pole and line and C-63 high voltage electrical contractors;

(C) The public utility submits an annual report to the board covering the preceding calendar year that identifies, at a minimum:

(i) The number of qualified contractors the public utility employed to perform high voltage electrical work; and

(ii) The number of requests for proposals solicited for high voltage work;

(D) The employees are deemed qualified by the public utility to perform high voltage electrical work; and

(E) The exemption is limited to the use by a public utility for high voltage electrical workers who perform electric transmission and distribution line construction, maintenance, and connection to substation work; provided further that in no circumstance shall the persons be less qualified than the public utility's own employees who perform high voltage electrical work.

(b) Persons retained by a public utility pursuant to subsection (a)(2) shall be exempt from the provisions of section 444-9.5.

(c) For purposes of this section, "high voltage" means six hundred volts or higher.

Section 448E-13(c) describes high voltage for public utility electrical work as 600 volts or higher. Therefore, a licensed electrician can perform high voltage work above 600 volts, provided that the electrician has additional training.

Under Hawaii Administrative Rules (HAR) section 16-80-3, "electrical wiring" means "any electrical conductor, material, device, fitting, apparatus, appliance, fixture, or equipment, constituting a part of or connected to any electrical installation attached or fastened to any building, structure, or premises and which installation or portion thereof is designed, intended[,] or used to generate, transmit, transform, or utilize electrical energy within the scope and purpose of the National Electrical Code, as adopted by each county." "Electrical work" means "the installation, alteration, reconstruction, or repair of electrical wiring."

Based on these definitions, the Board concludes that all currently licensed electricians, i.e., journey worker electricians, supervising electricians, journey worker industrial electricians, and supervising industrial electricians, all of which total 3,357 as of June 30, 2025, are qualified to perform high voltage work under the scope of the NEC, provided they have additional training. Of that total, 101 individuals in the State are licensed as journey worker industrial electricians and supervising industrial electricians, who have been licensed by the Board to perform and maintain electrical work **related to substations**, switchgears, automatic controls and all other industrial electrical work in existing industrial buildings and work places. The HETF assistant training director stated that both the Cable Splicer Program and the Lineman Apprenticeship Program provide training in the interaction of equipment, materials, and devices dealing with NEC systems operating up to 138,000 volts. Accordingly, there is no shortage of electricians qualified to perform high voltage work with additional training. However, there may be a shortage of electricians specifically trained as linemen for public utilities.

(4) Opportunities for growth in the high voltage work subspecialty.

Contractors in Hawaii are licensed to perform high voltage work. HAR, title 16, chapter 77, Exhibit A sets forth the scope of work of each specialty contractor classification:

C-62: Pole and line contractor. To dress, ground, anchor, and erect poles that will carry high voltage (600 volts phase to phase or more) electrical wires; and to connect and string electrical wires, fixtures, and apparatus to and between the poles, including installation of pole-mounted transformers. Work shall include street and highway lighting and traffic signal systems, and the work of the C-63 high voltage electrical contractor[.]

C-63: High voltage electrical contractor. To place, install, erect, or connect any electrical wires, fixtures, appliances, apparatus, conduits, raceways, and to do trenching, backfilling, patching, and surface restoration in connection with the installation of conduits and lines which transmit, transform, or utilize electrical energy of more than 600 volts phase to phase[.]

Both the C-62 and C-63 licenses allow contractors to perform work over 600 volts, and contractors must use licensed electricians to perform any electrical work. Contractors on the Contractors License Board indicated that at a minimum, they will hire licensed journey worker electricians and send them to additional training (usually with manufacturers), the HETF's cable splicer program, and online correspondence courses provided by training providers such as Penn Foster Career School, Northwest Lineman College, and T&D Power Skills. Electricians can perform electrical work over 600 volts but require additional training to perform lineman work that is usually done by a utility. The Board of Electricians and Plumbers considers qualified licensed journey worker electricians able to perform lineman work with additional training.

Opportunities for growth in the high voltage work specialty is typically an industry issue. With newer technologies such as photovoltaic and solar wind farms, the potential for growth exists. However, because this is not a board issue, the Board has asked for the industry's input regarding this topic. According to the HETF, no apprentices are currently

enrolled in the lineman apprenticeship program and there are no requests for lineman apprentices, as the lack of pole and line work available to their signatory electrical contractors from the Hawaiian Electric Company has diminished the need for lineman apprentices. The lineman apprentices that have completed the program are currently working in the industry. The HETF maintains that it can enroll lineman apprentices at any time when the need for pole and line work is prevalent, and states that they have a sufficient number of EJs able to perform the underground high voltage work, and they continue to recruit and train to build a workforce that meets the ongoing and fluctuating demands.

Annual Reports

ACT 068, SLH 2022, which provided an amended limited exemption from electrician licensing requirements for individuals employed by electrical contractors who are retained by a public utility within the State to perform high voltage work for that public utility, also included a provision for annual reports, whereby the public utility submits an annual report to the Board covering the preceding calendar year that identifies, at a minimum:

(i) The number of qualified contractors the public utility employed to perform high voltage electrical work; and
(ii) The number of requests for proposals solicited for high voltage work;

The reported data from the public utilities is as follows:

(i) The number of qualified contractors the public utility employed to perform high voltage electrical work:

Hawaiian Electric Company, Inc. – 1
Kaua‘i Island Utility Cooperative – 5

(ii) The number of requests for proposals solicited for high voltage work:

Hawaiian Electric Company, Inc. – 1
Kaua‘i Island Utility Cooperative – 1

Hawaiian Electric Company, Inc.

Hawaiian Electric Company, Inc submitted its annual report covering the previous calendar year to the board. It reported that during the preceding calendar year of 2024, Hawaiian Electric employed ONE qualified contractor to perform high voltage electrical transmission and distribution line construction, maintenance, and connection to substation work and that the number of requests for proposals solicited for this high voltage electrical work was also ONE.

A copy of the report is attached as Exhibit A.

Kaua‘i Island Utility Cooperative

On September 16, 2025, Kaua‘i Island Utility Cooperative (“KIUC”) submitted its annual report to the Board, covering the preceding calendar year, and reported that for the preceding calendar year ended December 31, 2024, i) The number of qualified contractors the public utility employed to perform high voltage electrical work was “five (5)”, and (ii) The number of requests for proposals solicited for high voltage work was “one (1)”. A copy of the report is attached as Exhibit A.

___

When Act 065, SLH 2013, was enacted, there was an insufficient number of high voltage projects in the State to give licensed electricians the necessary on-the-job training that is required to be certified, which may have warranted the limited exemption from electrician licensing requirements. However, given that licensed electricians employed by contractors are currently performing high voltage electrical work, in addition to the current prevalence of high voltage projects being performed in the State, as well as the ongoing availability of training programs, the Board believes there is sufficient high voltage work available to train additional licensed electricians to perform specific high voltage work that the public utilities require.

As the number of high voltage projects in the State fluctuates, licensed electricians who are certified to perform high voltage work can adapt to market demands. If the number of high voltage projects decreases, licensed electricians are authorized to work on other electrical projects in the State.

HAWAIIAN ELECTRIC
ANNUAL REPORT TO THE BOARD OF ELECTRICIANS AND PLUMBERS REGARDING HIGH VOLTAGE ELECTRICAL WORK

To: **Sent via E-Mail to**: elect_plumb@dcca.hawaii.gov
David Kamakea, III, Chair
Board of Electricians and Plumbers
P.O. Box 3469
Honolulu, HI 96801

From: Hawaiian Electric

Date: November 24, 2025

Subject: 2024 Annual Report to Board of Electricians and Plumbers under HRS 448E-13

Hawaii Revised Statutes ("HRS") Section 448E-13 outlines exceptions to the requirement stated in HRS Section 444-9.5 that "[a]t least half of all individuals performing electrical or plumbing work employed on a construction job site by an electrical or plumbing contractor shall be licensed in accordance with [HRS] chapter 448E." Pursuant to Act 68 (2022), and to rely upon the exception noted in HRS 448-13(2), Hawaiian Electric as a public utility must submit "an annual report to the Board of Electricians and Plumbers ("Board") covering the preceding calendar year that identifies, at a minimum:

(i) The number of qualified contractors the public utility employed to perform high voltage electrical work; and

(ii) The number of requests for proposals solicited for high voltage work."

Hawaiian Electric hereby reports that during the preceding calendar year of 2024 Hawaiian Electric employed the following number contractors for each of our service territories:

- **Hawaiian Electric (Oahu), Maui Electric (Maui, Lanai and Molokai), and Hawaii Electric Light Company (Hawaii Island): 1**
- **Hawaiian Electric (Oahu) and Maui Electric (Maui, Lanai and Molokai): 1**

This report represents information for all service territories served by Hawaiian Electric as detailed above. Hawaiian Electric also advertised for three requests for proposals of high voltage work in 2024, one project covering all service territories and two projects for Oahu. Hawaiian Electric operates in service territories including Maui County (Maui, Molokai and Lanai), Oahu and Hawaii Island.

Should you have any questions regarding this Annual Report, please feel free to contact **Shannon Alivado, Director of Government Relations at (808) 543-4548.**

Kaua`i Island Utility Cooperative
Your Touchstone Energy® Cooperative

September 16, 2025

Ms. Lei Ana E. Green
Department of Commerce and Consumer Affairs
Professional and Vocational Licensing Division
Board of Electricians and Plumbers
P.O. Box 3469
Honolulu, HI 96801

Subject: Annual Report to the Board of Electricians and Plumbers pursuant to Act 68

Dear Ms. Green:

Pursuant to and in accordance with Hawaii Revised Statutes §448E-13(a)(2)(C), please see below for Kauai Island Utility Cooperative's annual report for the preceding calendar year ended December 31, 2024:

(i) The number of qualified contractors the public utility employed to perform high voltage electrical work	**5**
(ii) The number of requests for proposals solicited for high voltage work	**1**

If you have any questions, please call me at (808) 246-8289.

Very truly yours,

Brad W. Rockwell

Brad W. Rockwell, P.E.
Chief of Operations

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2024 Report to the Board of Electricians and Plumbers pursuant to Act 68

Final Audit Report 2025-09-16

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"2024 Report to the Board of Electricians and Plumbers pursuant to Act 68" History

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