OFFICE OF POLICY AND LEGAL ANALYSIS

Date: March 8, 2021

To: Committee on Innovation, Development, Economic Advancement and Commerce

From: Rachel Olson, Legislative Analyst

LD 126 "An Act To Allow a Journeyman Electrician to Supervise Three Helper

Electricians" (Pouliot)

SUMMARY

This bill changes the number of helper electricians who may be supervised by a journeyman electrician. Under current law, a journeyman electrician may supervise one helper electrician or 2 helper electricians if they are enrolled in or have completed a certain educational program. This bill eliminates this distinction and allows a journeyman electrician to supervise 3 helper electricians.

TESTIMONY

Proponents: Senator Matt Pouliot, sponsor; Matthew Brackley; Chip Eastman; Jonathan McKane; David Gibson;

- Expanding number of helpers available will help ensure more employment opportunities; open to conversations around the best way to do that
- Increased supervisory capacity will still lead to safe and quality installation while also training the next generation of electricians
- Could help meet demand and keep costs down
- Help alleviate shortages

Opponents: Richard K. Reardon, PE; Adam Goode, Maine AFL-CIO; Zachary Stoler; Michael Varney; James Valente, IBEW local 567; Alan Kenney; Chuck Fraser, IBEW local 1253; Nick Paquet;

- Proposal increases hazards associated with electrical installations and places citizens and workers at unnecessary risk
- Could explore other alternatives such as wage increases, tuition refunds through income tax refunds, training initiatives, additional limited licenses, etc.
- A helper electrician not enrolled in an educational program does not learn Code and may be unable to do the math associated with electrical work; creates a safety issue
- Important to support quality educational programs
- Reducing the supervision of helpers will lead to an increase in electrical issues
- Should instead create better incentives to enter the field
- May lead to less work for Journeyman
- The real question to answer is how to get more people interested in the trades

Neither for nor against: Commissioner Anne Head, OPOR;

• A similar change was proposed during the 129th as LD 1746. The section related to helper electricians was not enacted.

INFORMATION REQUESTS:

• <u>Electrician Supervising Requirements by State from Laura Shields, Energy Policy</u> Associate, NCSL

- National Center for Construction Education & Research interactive map of state licensing requirements (submitted by Chip Eastman)
- Maine Apprenticeship Program: Current Sponsors by Occupation (pgs. 3-5, Construction and Extraction)
- Definitions for "apprentice electrician," "helper electrician," and a helper with training:

§1101. Definitions

- 1. Apprentice electrician. "Apprentice electrician" means an apprentice who is engaged in a written agreement to work at and learn the trade of an electrician under the direct supervision of a licensed master, journeyman or limited electrician in an apprenticeship program registered pursuant to 29 Code of Federal Regulations, Section 29.3 (2016) with the United States Department of Labor, Office of Apprenticeship or a state apprenticeship agency recognized by the Office of Apprenticeship.
- **3. Helper electrician.** "Helper electrician" means a person licensed to make electrical installations in the employment of a licensed master electrician, limited electrician or electrical company and under the direct supervision of a licensed master, journeyman or limited electrician but who does not qualify under subsection 1.

§1202-A. Issuance of licenses, sub-§ 2:

- (1) Two helper electricians who are enrolled in, or have completed, a program of study consisting of 576 hours of education as approved by the board or from an accredited institution;
- The following classification of electrician exist in current statute:
 - Helper
 - Helper enrolled in, or having completed, a program of study consisting of 576 hours of education
 - o Apprentice
 - o Journeyman-in-training
 - o Journeyman
 - Master
 - Limited electricians are licensed for a narrow/specific scope of work including; water pumps, outdoor signs, gasoline dispensing, traffic signals, house wiring, refrigeration, low-energy electronics, crane wiring
- Electricians' Examining Board Licensing: Description of requirements for each type of license
 - According to the website, in order to be a license helper electrician, one must pay
 the license fee of \$25 and submit to a criminal background check for \$21. The
 license is valid for two years based on first licensure date.
- Please find below information regarding injuries and fatalities related to electrical work, as well as data related to fires as a result of electrical installations.

ADDITIONAL INFORMATION:

• LD 1746 from the 129th proposed to allow a master, a journeyman, or a limited electrician to supervise up to two helper electricians not enrolled in a DOL Apprenticeship program or an electrical education proposal. The proposed change was not enacted.

• 2019 PL Chapter 261 (LD 1240 from the 129th) credits graduates of a secondary school career and technical education electrical program 1,000 hours of work experience and makes them eligible to sit for the journeyman examination.

POTENTIAL ISSUES:

• An apprentice electrician has more formal training and education related to electrical work than a licensed helper electrician. There is an inconsistency in allowing supervision of three helper electricians, but only two apprentice electricians.

POSSIBLE AMENDMENTS:

• Senator Pouliot submitted an amendment with <u>his testimony</u>.

FISCAL IMPACT:

- Fiscal Note Required: No
 - Additional costs to the Electricians' Examining Board within the Office of Professional and Occupational Regulation, Department of Professional and Financial Regulation to implement the requirements of this legislation can be absorbed within existing budgeted resources. Additional dedicated revenue from licensing fees due to an increase in the number of licenses issued for helper electricians as a result of the changes proposed in this legislation is expected to be minor.

LINKS:

- <u>LD 126</u> (original bill)
- Documents related to LD 1746 from the 129th Legislature

OPLA RESEARCH REQUEST MEMO

To: Rachel Olson, Legislative Analyst, IDEA Committee

From: Kristin Brawn, Legislative Researcher

Date: 3/8/21

RE: Statistics for Electrical Injuries/Fatalities and Fires Caused by Electrical Wiring in Maine

(LD 126)

Hi Rachel,

You asked me to find statistics for injuries and fatalities involving electrical work and fires caused by electrical wiring in Maine. Please see my findings below.

I. Electrical Injuries and Fatalities

The following tables display data obtained from the Bureau of Labor Statistics <u>Occupational Injuries/Illnesses and Fatal Injuries Profiles</u> regarding electricity-related occupational injuries and fatalities in Maine.

Electrical Injuries and Fatalities in Maine 2011-2019

	2011	2012	2013	2014	2015
Nonfatal occupational injuries –	20	0	0	0	0
Exposure to electricity					
Nonfatal occupational injuries –	50	30	30	60	60
Electricians					
Fatal injuries – Exposure to	1	2	0	0	0
electricity					
Fatal injuries - Electricians	0	0	0	0	0

	2016	2017	2018	2019
Nonfatal occupational injuries – exposure to electricity	0	0	0	0
Nonfatal occupational injuries - Electricians	80	30	30	90
Fatal injuries – Exposure to electricity	0	0	0	0
Fatal injuries – Electricians	0	0	0	0

As shown in the tables above, Maine's only incidents of nonfatal occupational injuries from exposure to electricity occurred in 2011, with 20 incidents reported. However, when the data were filtered to reflect nonfatal occupational injuries among electricians, injuries were reported in every year, with a high of 90 injuries reported in 2019. However, it important to note that most of the occupational injuries reported for electricians may not be injuries related to electricity, as the only injuries in Maine related to exposure to electricity occurred in 2011 and were not reported in any other year.

In regard to fatal injuries related to exposure to electricity, 1 fatality was reported in 2011, and 2 fatalities were reported in 2012. However, there were no occupational fatalities reported for electricians in 2011 and 2012, nor for any other year. Therefore, it is possible that these fatalities were related to another occupation and not electricians.

II. Fires for Which the Heat Source Was Electrical Arcing

The following table displays data compiled from the <u>Maine Office of State Fire Marshal Annual Reports</u> regarding fires in Maine for which the heat source was determined to be electrical arcing.

Fires in Maine – Electrical Arcing Determined to be Fire Heat Source 2008-2018

2008	2009	2010	2011	2012	2013
133	141	143	145	No report	164
2014	2015	2016	2017	2018	
171	200	202	208	248	

2008	2009	2010	2011	2012	2013
5.99%	5.39%	5.85%	6.12%	No report	6.10%
2014	2015	2016	2017	2018	
N/A	N/A	N/A	N/A	N/A	

As shown, from 2008-2013, electrical arcing was determined to be the heat source for 5% to 6% of the fires in Maine. Percentages for 2014-2018 were not available.

I hope you find this information helpful. If you have any questions, or would like me to do further research on these topics, please let me know.