

**Approved Minutes of the
Electrical & Instrumentation
State Apprenticeship Advisory Committee**

May 22, 2019
Moraine Park Technical College
Fond du Lac, WI

Members Present	Employer / Organization
Butt, Nate	Quad Graphics
Cannestra, Anthony	GE Healthcare
Cestkowksi, Jim	MPI
Lundey, Dave	MMSD
Lane, Steve	Sargento Foods, Inc.
Randall, Bob	Brakebush Brothers
Roach, Mike	Trane Co.
Woehlke, Scott	Mercury Marine
Members Absent	Employer / Organization
Hafeman, Brian	PCA
Hankwitz, Dan	Kimberly Clark Corp
Consultants & Guests	Employer / Organization
Bishop, Matt	Fox Valley Technical College
Buroker, Wayne	Waukesha County Technical College
Hafner, Brian	Trane
Haka, Stephanie	Bureau of Apprenticeship Standards
Johnson, Joshua	Bureau of Apprenticeship Standards
Mayek, Mandy	Mid-State Technical College
Metko, Katie	Northcentral Technical College
Montgomery, Mark	Waukesha County Technical College
Nakkoul, Nancy	Wisconsin Technical College System
O'Bryan, David	GE
Radomski, Matt	GE
Severson, Chris	Northcentral Technical College

Smith, Owen	Bureau of Apprenticeship Standards
Wildenberg, Kathy	Fox Valley Technical College
Winkler, Mike	Horicon Works

1. The meeting was called to order at 10:05 a.m. by Tony Cannestra, Committee Co-Chair, in conformance with the Wisconsin Open Meeting Law.
2. A roll call was conducted. A sign-in sheet was circulated. A quorum was present.
3. The committee reviewed the current roster. The committee welcomed Steve Lane from Sargento's. He replaced Sonia Otte.

4. **Old Business**

a. Review the follow-up items from the previous meeting:

i. For action: approve the minutes

The committee approved the minutes as written.

ii. For action: review and revise Electronic & Instrumentation registered apprenticeship

Owen reviewed that the state committee asked the Bureau to survey current sponsors of the Electronic & Instrumentation Technician registered apprenticeship for input on the current program, the Industrial Electrician registered apprenticeship, and the suggested revisions of the initial focus group. He reported that he surveyed 105 active sponsors and received eight responses.

Owen summarized the following key points:

- The response rate is insufficient to make decisions. More responses are needed.
- The limited responses do, however, support that automation should be added to the program.
- He will extend the survey for two weeks and remind sponsors to take it.
- He asked attendees for help in encouraging sponsors to take the survey.

Attendees shared the following:

- Nate Butt suggested the Bureau send the survey to Industrial Electrician sponsors, too, and ask all recipients whether they want to join the state committee.
- Chris Severson, Apprenticeship Dean at Northcentral Technical College (NTC), stated his college will share the survey with its sponsors.
- Nancy Nakkoul asked whether E&I is shifting or automation is becoming its own thing. The committee replied automation is increasingly important, so it needs to be added in E&I.
- Nate Butt shared the best training begins with electrical work and adds automation. Quad Graphics added a fifth year to its Industrial Electrician apprenticeship to teach automation.
- Bob Randall shared that E&I was a correct title when the program began, but the scope has transformed to E&A. His journey workers do electrical and automation technician work.
- Josh Johnson asked the state committee if Wisconsin apprenticeship is ahead or behind the curve in offering automation. The committee unanimously agreed the state is behind.

- Katy Metko, Apprenticeship Coordinator at NTC, shared the hosted three listening sessions with their sponsors to learn what has changed and what sponsors need. The college is curious how potential revisions to the related instruction for E&I Tech might affect related instruction for Maintenance Technician. Some classes overlap.
- The committee agreed that the Industrial Electrician registered apprenticeship, which is the foundation of the other programs, does not need to be revised further.

b. Implementing revisions to CFR 29.30 (AA/EEO requirements)

Josh Johnson reported that the Bureau projects the revisions will be fully implemented by January 2020. Some minor revisions have been implemented under an emergency administrative rule; other revisions and the final version are being finalized by the state legislature and the Governor's Office.

Josh clarified that the minor revisions that have been implemented, such as the non-discrimination pledge, will not have a substantial state or local effect because sponsors already have the same or very similar policies in place. Other minor revisions will continue to be implemented through the year. The Bureau will have further guidance on specific changes and their effects at the fall meeting.

Attendees did not have questions or comments.

c. Federal grants to expand "registered apprenticeship"

Josh reported that the Bureau is proceeding very well on its three federal grants: the WAGE\$ grant, the state expansion grant, and the state accelerator grant.

The WAGE\$ grant is nearing completion. It has successfully met nearly all its targets. For example, it helped increase the enrollment of minority apprentices by 10%, which is very good, and developed new apprenticeships in information technology, healthcare, and advanced manufacturing.

Information technology may be a very successful endeavor because its occupations work across all other sectors; the Bureau will conduct outreach efforts to recruit IT sponsors and apprentices soon.

Two targets have proved difficult to meet: enrolling apprentices in the first apprenticeships in new industries; and enrolling female apprentices. The first apprenticeships in an industry commonly grow very slowly because employers are either unfamiliar with apprenticeship or need more time to adapt their administrative operations. Recruiting women apprentices has proven historically challenging.

Attendees did not have questions or comments.

d. 27th Biennial Apprenticeship Conference Follow-Up

Josh reported that the 27th Biennial Apprenticeship Conference was an overall success: it drew 375 attendees; included 30 workshops; and received positive feedback on the variety of topics and workshops, especially on career pathway programs such as youth apprenticeship and pre apprenticeship. Many attendees reported, though, that they did not like the venue. The Bureau is planning the 28th Biennial Conference for early 2021. The location and venue are pending.

Attendees did not have questions or comments.

e. Updates to www.WisconsinApprenticeship.org

Josh reviewed many historic updates the Bureau made to its webpage. Foremost, for the first time in its history, the Bureau website features sponsors. The update was made at the request of sponsors because they continue having trouble recruiting qualified applicants. Prior to this, sponsors preferred not to be featured because so they would not receive public inquiries outside of their hiring windows.

Additional updates include the following: three quick search functions on the homepage—by key word, by occupation, and by industry; three distinct navigation boxes based on user group—career seeker, employer, and current apprentices and sponsors; and apprenticeship-specific webpages that feature visual representations of the training information, employment projections, and salary.

Josh encouraged attendees to review their organizations' information, submit updates, and test the site for any potential improvements.

Attendees did not have questions or comments.

f. Department of Corrections registered apprenticeships

Josh explained that the Bureau is enhancing registered apprenticeship opportunities within the state's correctional system after an inspiring tour of Ohio's correctional facilities. Wisconsin has 42 apprentices in correctional facilities; Ohio has 2,400.

Josh introduced Liz Pusch, a former Apprenticeship Training Representative now working as the Bureau's Program and Policy Analyst in charge of developing programs with Wisconsin's Department of Corrections (DOC).

Liz summarized several key facts about registered apprenticeships within correctional facilities. First, 90% of offenders are released, so the correctional population is a large talent pool that is worth training and employing. Most programs are offered through minimum security facilities, provide up to 60% of the training in the facility, and then release participants to complete the rest. Many companies currently employ offenders on work release. The Bureau's role is to facilitate partnerships between the DOC and sponsors so the training meets industries' needs and industries see the value of training and employing offenders.

Second, registered apprenticeships are selective opportunities within the facilities; individuals are selected based on aptitude, interest, and parameters of offense.

Third, DOC has trained registered apprenticeships for a while, and this initiative expands on that base. DOC has offered correctional officers, carpenters, horticulturalists, and cooks; DOC then added machining, masonry, and welding; and now it is expanding further into building maintenance and construction, and considering pre-apprenticeships, too. Much of the training is provided through the Wisconsin Technical College System and is the same instruction as apprentices receive.

The state committee shared the following:

- Will this effort include reform schools, such as the ones involved with youth apprenticeships? Josh replied that it will not; youth apprenticeship has different components that make it a better fit.
- Unfortunately, some employers may be concerned about hiring ex-offenders. Josh acknowledged the concern. He reiterated that many employment opportunities for offenders are available and the candidates for the apprenticeships met many qualifications to participate. Employers can discriminate if the offense was directly related to the job.

h. Other

Attendees did not have additional topics.

5. New Business

a. 2019 National Apprenticeship Week

Josh announced that 2019 National Apprenticeship Week will be held November 10-16. November 11 will be Veterans Day, so the Bureau is planning an event to recognize veterans in apprenticeship. Overall, the Bureau is planning and outreaching the event six months in advance to increase the likelihood that high schools and other partners can attend.

Attendees did not have questions or comments.

b. BAS personnel changes

Josh reported the following changes:

- Deb Schanke, Madison Apprenticeship Training Representative (ATR), retired.
- Mary Harrington, federal ATR, retired.
- Mary Pierce, policy analyst, retired.
- Long Vang was hired as the new ATR for Eau Claire.
- Dominique Robinson, former ATR for Racine, was hired as a policy analyst in the Madison office.

Attendees did not have questions or comments.

c. Other

Mark Montgomery from Waukesha County Technical College reported the college has been approved to begin providing related instruction for Electrical & Instrumentation Technician in 2020. The college will offer 1,152 hours, which is 256 hours more than the 896 minimum hours required. The extra hours are distributed across two additional semesters that occur after the seven semesters for the Industrial Electrician program. The apprentices go to school every week for two semesters, 128 hours per semester. The college's local advisory committee does not want to drop the hours. Some employers want apprentices that started in the E&I Tech apprenticeship to go the route of Industrial Electrician and complete after the minimum hours of 896. The instructors stated that the only difference in the hours between the college and other colleges is primarily lab time.

Josh replied that he believes the matter is a local level matter because all sponsors must meet the minimum hours and companies that add additional hours at their own discretion. Dave Lundey replied that the fundamental objective of the Industrial Electrician related instruction is to prepare the apprentice for the licensing exam; after that, the employer can choose additional hours.

6. WTCS Update

Nancy Nakoul discussed the WTCS Apprenticeship Completer report and items detailed on the written report.

7. Participants included 679 apprentices and 246 sponsors with a contract in active or unassigned status on May 1, 2019.
8. The committee asked to hold its fall meeting at Northcentral Technical College and schedule the date via electronic survey.
9. The meeting adjourned at 12:35 p.m.

*Submitted by Owen Smith,
Bureau of Apprenticeship Standards*

May 17, 2019

TO: State E&I Apprenticeship Advisory Committee Members and Consultants

FROM: Owen Smith, Bureau of Apprenticeship Standards
(608) 266-2491; Owen.Smith@dwd.wisconsin.gov

SUBJECT: State Electrical & Instrumentation Apprenticeship Advisory Committee meeting

DATE: Wednesday, May 22, 2019

TIME: 10:00 AM

PLACE: Moraine Park Technical College, Room O-102
235 N. National Ave.
Fond Du Lac, 54936-1940.
Park in Lot O.

TENTATIVE AGENDA

1. Call the meeting to order.
2. Introduce the attendees.
3. Review the roster.
4. **Old Business**
 - a. Review the follow-up items from the previous meeting:
 - i. **For action:** approve the minutes
 - ii. **For action:** review Electronic & Instrumentation registered apprenticeship
 - b. Implementing revisions to CFR 29.30 (AA/EEO requirements)
 - c. Federal grants to expand "registered apprenticeship"
 - d. 27th Biennial Apprenticeship Conference Follow--Up
 - f. Updates to www.WisconsinApprenticeship.org
 - g. Department of Corrections registered apprenticeships
 - h. Other
5. **New Business**
 - a. 2019 National Apprenticeship Week
 - b. BAS personnel changes
 - c. Other
6. WTCS Update
7. Review the program participants.
8. Schedule the next meeting.
9. Adjourn.

DWD 296: Sponsor Obligations

All sponsors

Do not discriminate based on race, color, religion, sex, national origin, disability, age (over 40), sexual orientation or genetic information

Designate an individual to oversee equal opportunity functions, maintain records, and submit reports to the Department

Perform universal apprentice outreach and recruitment, maintain a list of recruitment outlets, and provide those outlets 30-day advance notice of apprenticeship postings

Publish, post and disseminate an equal opportunity pledge, policy and complaint instructions

Ensure apprenticeship activities and facilities are free from discrimination and establish an internal process for reviewing harassment and intimidation complaints—disseminated in writing

Hold information sessions to conduct anti-harassment training, introduce apprentices program staff to equal opportunity policy, and instruct them how to file a discrimination complaint with the Department

Keep records of apprentice demographics, selection, assignment, layoff, accommodation requests, etc., for at least five years

Select apprentices through any non-discriminatory methods, so long as they are outlined in the sponsor's written standards and applied uniformly. Selection methods must also comply with the Uniform Guidelines on Employee Selection Procedures (UGESP) and not violate the Americans with Disabilities Act (ADA)

Five or more Apprentices

Maintain a written affirmative action program which includes:

1. utilization analysis to compare race, sex and ethnicity of apprentices to recruitment area
2. establishment of utilization goals for race, sex and ethnicity, if appropriate
3. establishment of utilization analyses and goals for individuals with disabilities
4. targeted outreach, recruitment and retention activities, if necessary, to meet utilization goals
5. Perform annual review of personnel processes for potential discrimination

Invite applicants and apprentices to confidentially disclose a disability, at two times during hiring process and annually

DWD 296: Implementation Timeline 2019

January 18	Emergency rule enacted
January 22	Economic impact analysis period ended. Rule draft filed with Legislative Rules Clearinghouse. Public Comment begins.
February 20	Public hearing for DWD 296 and 295
March 15	Submit to Governor's Office for approval
April 1	Rule filed with Senate and Assembly
April 15	Legislature refers rule to appropriate assembly and senate committees
May 15	Review period ends for senate and assembly committees
May 20	Rule referred to Joint Committee for Review of Administrative Rules (JCRAR)
June 18	JCRAR completes review of rule
June	First phase of sponsor requirements
July/August	Publication date of permanent rule DWD 296 and 295
January 2020	Second phase of sponsor requirements

DWD 296: Recurring Obligations

<u>Annually</u>	<u>At Compliance Review</u>	<u>As Needed</u>
<p>Update list of recruitment sources</p> <p>Review of personnel processes for selection criteria, wages, assignments, discipline, etc.</p> <p>Notice to apprentices they may update disability self-identification</p>	<p>Update written affirmative action plan</p> <p>Conduct workforce analysis for disability</p> <p>Undertake targeted outreach and action-oriented programs, if necessary</p> <p>Conduct workforce analysis for race, sex and ethnicity</p> <p>Conduct utilization analysis for race, sex and ethnicity</p> <p>Establish utilization goals for race, sex and ethnicity and conduct targeted outreach and action-oriented programs, if necessary</p>	<p>Conduct anti-harassment training and share EEO policy at orientation and periodically</p> <p>Invite prospective and new apprentices to self-identify disability status:</p> <ol style="list-style-type: none"> 1. During apprenticeship application process 2. After acceptance into program, but before start date

WAGE\$ Apprentices Spring Committee Update March 2019

The Wisconsin Apprenticeship Growth and Expansion Strategies (WAGE\$) grant is a 5-year, \$5 million grant from the US Department of Labor. The purpose is to expand Registered Apprenticeship in Advanced Manufacturing and develop new programs in Information Technology and Health Care. The grant started October 1, 2015, and will conclude September 30, 2020.

WAGE\$ Apprentices by Trade

Current Count

Entered Active Status 10/1/15 - 3/13/19 from data pull 3/14/19

This report includes apprentice contract records which, during the selected report period, match the following criteria: CONTRACT TRADE=Industrial Manufacturing Technician;Maintenance Technician;Mechatronics Technician;Welder - Fabricator;Welder / Automated Welding;Software Developer;IT Service Desk Technician;Data Analyst;Medical Assistant,

		Current Count	Female	Minority & Race / Ethnicity*
All WAGE\$ Occupations		427	16 (4%)	60 (14%)
		Current Count	Female	Minority & Race / Ethnicity*
Industrial Manufacturing Technician 18 Completed 19 Cancelled (18%)		106	10 (9%)	32 (30%)
IT Service Desk Technician		2	0 (0%)	0 (0%)
Maintenance Technician 9 Completed 35 Cancelled (15%)		231	3 (1%)	22 (10%)
Mechatronics Technician 12 Cancelled (19%)		63	1 (2%)	5 (8%)
Software Developer		2	2 (100%)	0 (0%)
Welder / Automated Welding & Fabricator 2 Completed 4 Cancelled (34%)		23	0 (0%)	1 (5%)

All ACAP Reimbursement Requests Processed (Time Period) - Summary

Apprenticeship Completion Award Program (ACAP)

Bureau of Apprenticeship Standards

Division of Employment and Training

4/1/19 02:19 PM

Filters Applied: Determination Date between 7/1/18 and 4/1/19, Fiscal Year(s)= FY19

Type	Fiscal Year	# of RRs	\$Approved	\$Denied
Year One	19		\$110,520.09	\$558,356.80
Year One Totals		528	\$110,520.09	\$558,356.80
Completion	19		\$199,208.76	\$1,148,242.04
Completion Totals		441	\$199,208.76	\$1,148,242.04
Report Totals		969	\$309,728.85	\$1,706,598.84



WTCS System-Wide Activity Update March 2019

Wisconsin Fast Forward Awards \$250,000 to the WTCS to Support Apprenticeship Instruction

In recognition of the rapid expansion of apprenticeship programs in Wisconsin, the WTCS will administer Wisconsin Fast Forward grant funds as sub-grants to WTCS Colleges to supplement instructional costs where need has outpaced projected growth. Funds will be available from January 2019-December 2020.

WTCS-BAS 2019 Apprenticeship Completion Report

The 2019 WTCS-BAS Apprenticeship Completer Report is now available online. The report contains employment, wage and training satisfaction outcomes for apprentices completing their programs in 2016-17. It can be found here: <https://www.wtcsystem.edu/about-us/resources-publications> Or via direct link here: <https://www.wtcsystem.edu/wtcsexternal/cmspages/getdocumentfile.aspx?nodeguid=b3153b83-19ff-41d4-8527-39fe0e9c845c>

- Of the 847 completers surveyed, 330 (39%) responded.
- Respondents reported a 96% satisfaction rate for both on-the-job training and classroom instruction.
- Median salary across all trades increased to \$77,753 from \$71,624 in the prior year.
- Respondents indicating an interest in continuing education beyond apprenticeship rose to 46%, up from 43% and 34% in the two preceding years.

WTCS Apprenticeship Enrollment Trend

WTCS enrollments across all apprenticeship programs increased from 6528 to 6903 unduplicated, and 7124 to 7450 duplicated, students by the end of 2017-2018 academic year. That is a 5.7% and 4.6% increase, respectively, in one year. A current mid-year snapshot for 2018-19 is showing 7058 and 7154 enrollees. Confirmed actual enrollment for the 2018-19 academic year will not be available until August 2019.

Great Lakes Higher Education Corporation (under new corporate name Ascendium Education Group) Tools of the Trade Scholarships

As in the prior year, Ascendium Education Group again awarded 200, \$1500 scholarships for industrial and construction sector apprentices in Spring 2019.

Active WTCS-BAS Apprenticeship Programs, By Sector, Occupation, and College as of January 2019

The master chart of all apprenticeship programs with related instruction offered through the WTCS colleges can be found here via the following link. "Active" is defined as approved programs with enrollments in the past two years. The color-coded chart can be found on the MyWTCS website here:

<https://mywtcs.wtcsystem.edu/wtcsinternal/cmspages/getdocumentfile.aspx?nodeguid=2b3fe9c1-681d-4ceb-a612-f474b04aaa8b>

Apprentice Related Instruction



Active WTCS/BAS Programs by Sector and Occupation - January 2019

	BLACKHAWK	CHIPPEWA VALLEY	FOX VALLEY	GATEWAY	LAKESHORE	MADISON AREA	MID-STATE	MILWAUKEE AREA	MORAINES PARK	NICOLET AREA	NORTH CENTRAL	NORTHEAST WI	SOUTHWEST WI	WAUKESHA	WESTERN	WI INDIANHEAD
Construction Sector Apprentice Related Instruction																
Bricklaying/Masonry																
Carpentry																
Concrete Finishing																
Electrical																
Electronic Systems Tech/Voice-Data-Video																
Glazing																
HVAC/Environmental Service																
Ironworking																
Operating Engineer/Heavy Equipment																
Painting & Decorating																
Plumbing																
Roofing																
Sheet Metal																
Sprinkler Fitting																
Steamfitting Service/Refrigeration																
Steamfitting Construction																
Industrial Sector Apprentice Related Instruction																
Automated Packaging Technician																
Electrical & Instrumentation/Instrumentation Tech																
Industrial Electrician																
Industrial Manufacturing Technician																
Injection Mold Set-Up (Plastic)																
Machinist/Tool & Die/Patternmaker/Moldmaker																
Maint Mech/Machine Repair/Millwright / Lube Tech																
Maintenance Technician																
Mechatronics																
Metal Fabricator/Welder																
Pipe Fabricator																
Pipefitter																
Service Sector Apprentice Related Instruction																
Arborist																
Barber/Cosmetologist																
Cook/Chef																
Dairy Grazier																
Electrical Line Worker																
Funeral Director																
Metering Technician																
Substation Electrician																
Wastewater Treatment Operator																

State Committee Report

State Electrical & Instrumentation Comm

This summary counts employers and apprentices with a contract active or unassigned on 5/1/2019 in trade(s) associated with this committee.

Report is based on apprentice contracts where:

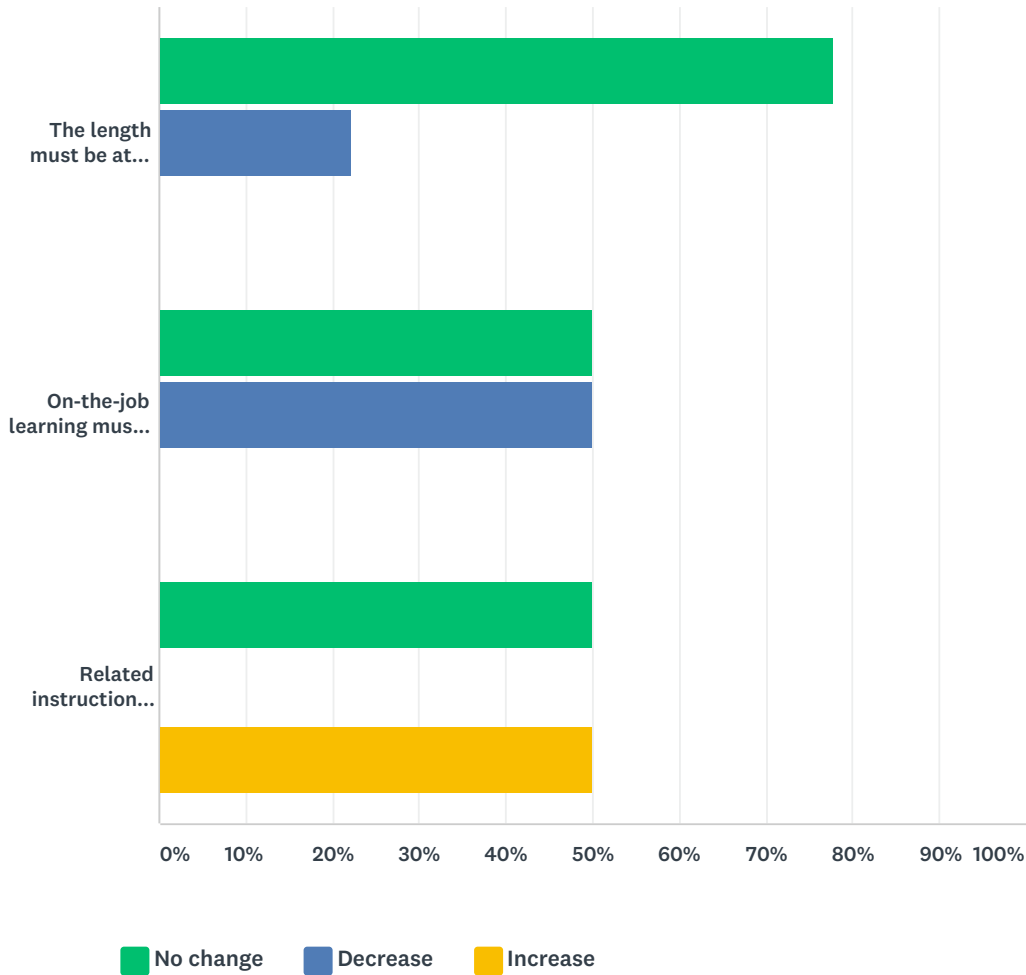
- Status is 'Active' or 'Unassigned'.
- Contract sector is 'Industrial' or 'Service'.
- Contract trade code matches a trade code assigned to committee.
- Contract sponsor is the employer.

Note: Employers with contracts in more than one trade or committee can cause Column #3 totals at the Committee or State level to deviate from the summed total of the individual trade or committee rows.

Trade	Total # of Sponsors	Total # of Apprentices	Of Total Apprentices in Column 3, # who are...			
			Minority		Females	
			#	%	#	%
1	2	3	4	5	6	7
Report Total	246	679	36	5.3	11	1.6
Electrical and Instrumentation (E & I) Technician (271028101801)	47	161	5	3.1	4	2.5
Industrial Electrician (282926101801)	136	283	18	6.4	3	1.1
Maintenance Electrician (282926101802)	4	11	1	9.1	0	
Maintenance Technician (282926101805)	95	224	16	7.1	4	1.8

Q4 Please tell us whether each standard should not change, decrease, or increase.

Answered: 10 Skipped: 0



	NO CHANGE	DECREASE	INCREASE	TOTAL
The length must be at least 5 years of not less than 10,400 hours.	77.78% 7	22.22% 2	0.00% 0	9
On-the-job learning must be at least 9,392 hours.	50.00% 1	50.00% 1	0.00% 0	2
Related instruction must be at least 1,008 hours.	50.00% 2	0.00% 0	50.00% 2	4

#	PLEASE EXPLAIN.	DATE
1	We desire to keep the length of this apprenticeship the same, this length provides the apprentice with proper training and does not burden the company with excessive cost and manpower requirements.	5/21/2019 2:07 PM
2	A lot of out technicians are finishing in 4.5 years or less	5/13/2019 9:22 AM
3	I think there should be more hands on school training.	5/9/2019 11:53 AM

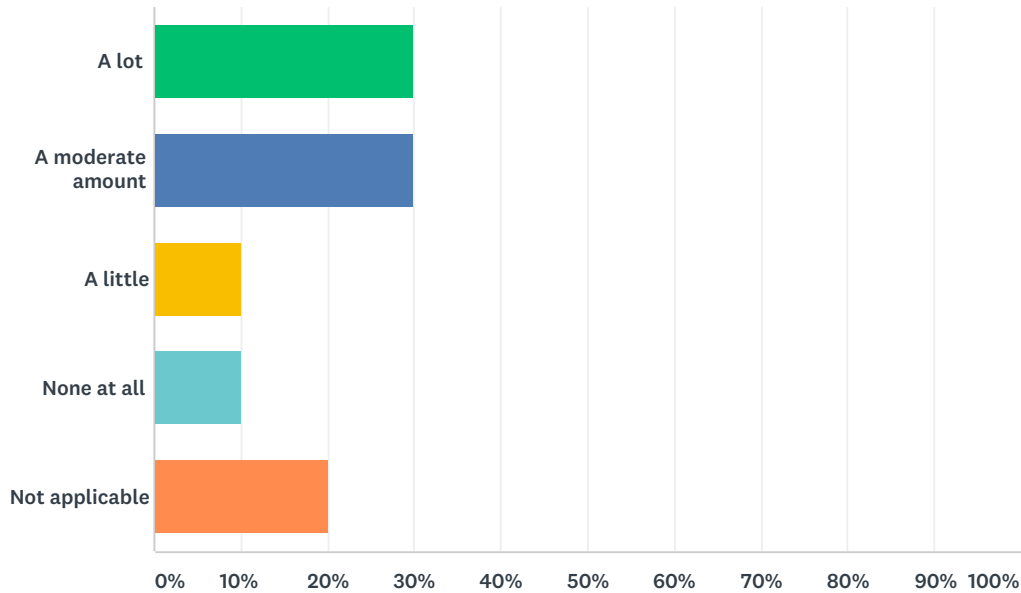
Q9 Please provide any additional feedback on the current program.

Answered: 4 Skipped: 6

#	RESPONSES	DATE
1	As industry advances E&I Technicians will migrate to more process control	5/21/2019 2:07 PM
2	While I am a bit new to NWTC's program, and the on-the-job training is a key portion of this, my limited exposure suggests that the program seems to be lagging the changing landscape of today in regards to automation and controls. Technology is becoming more prevalent in industry, and being able to understand this to a greater level must be a priority going forward.	5/20/2019 11:25 AM
3	The more automation and process control that can be incorporated would help for current and future needs.	5/16/2019 1:38 PM
4	When you are talking about industrial electricians most of the time they are supporting the production floor and small project. Major construction is handle by outside help. As the new technologies advance and companies struggle to find qualified help it has become vital for E&I to have the skills to handle the new technologies	5/16/2019 9:56 AM

Q10 How related are the Electrical & Instrumentation Technician and Industrial Electrician apprenticeships in your company, if at all?

Answered: 10 Skipped: 0



ANSWER CHOICES	RESPONSES	
A lot	30.00%	3
A moderate amount	30.00%	3
A little	10.00%	1
None at all	10.00%	1
Not applicable	20.00%	2
TOTAL		10

Q13 Please provide any additional guidance the Bureau should consider when revising the Electrical & Instrumentation Technician apprenticeship.

Answered: 3 Skipped: 7

#	RESPONSES	DATE
1	Apprentices ask for more process control with up to date equipment	5/21/2019 2:13 PM
2	More focus on automation and process control	5/16/2019 1:48 PM
3	Troubleshooting should be a focus in the last year of the program	5/9/2019 11:58 AM

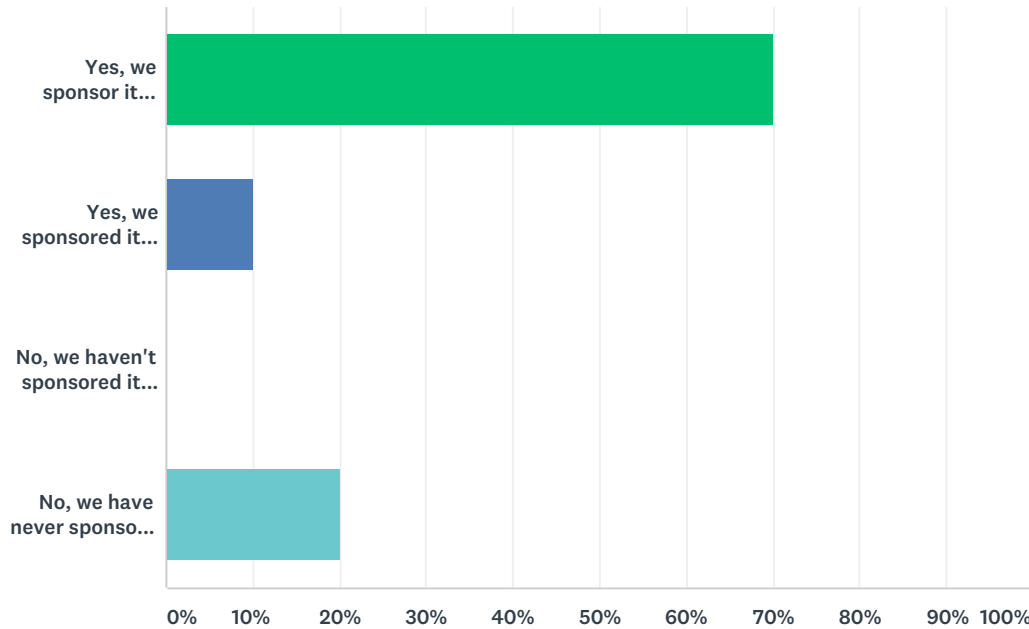
Q1 Please provide your contact information.

Answered: 10 Skipped: 0

ANSWER CHOICES	RESPONSES	
Company	100.00%	10
Last Name	100.00%	10
First Name	100.00%	10
Title	100.00%	10
Email	100.00%	10

Q2 Does your company sponsor the Electrical & Instrumentation Technician registered apprenticeship?

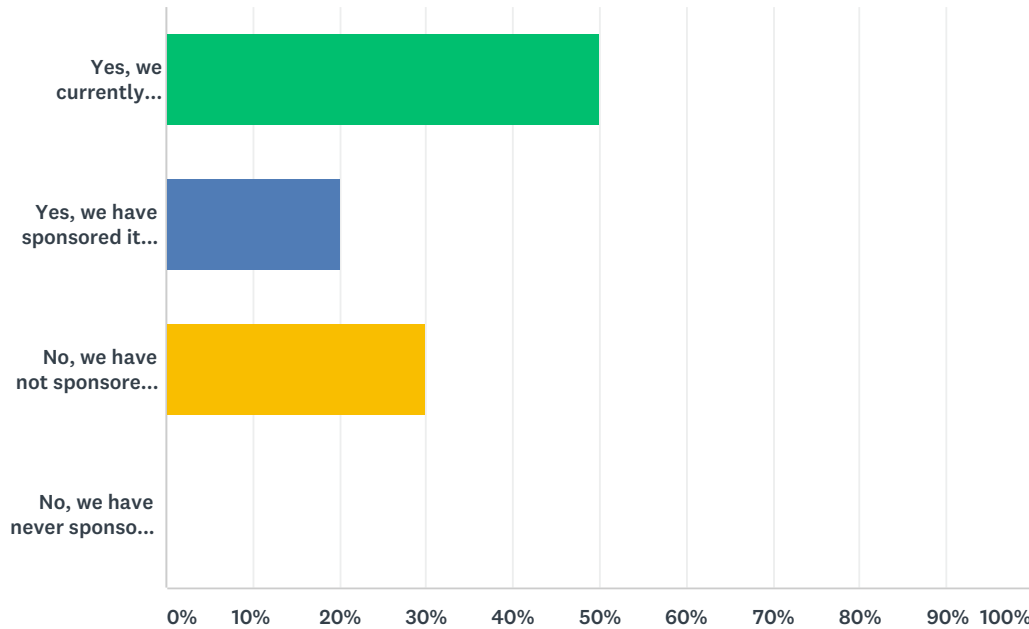
Answered: 10 Skipped: 0



ANSWER CHOICES	RESPONSES	
Yes, we sponsor it currently.	70.00%	7
Yes, we sponsored it within the past five years.	10.00%	1
No, we haven't sponsored it for at least five years.	0.00%	0
No, we have never sponsored it.	20.00%	2
TOTAL		10

Q3 Does your company sponsor the Industrial Electrician registered apprenticeship?

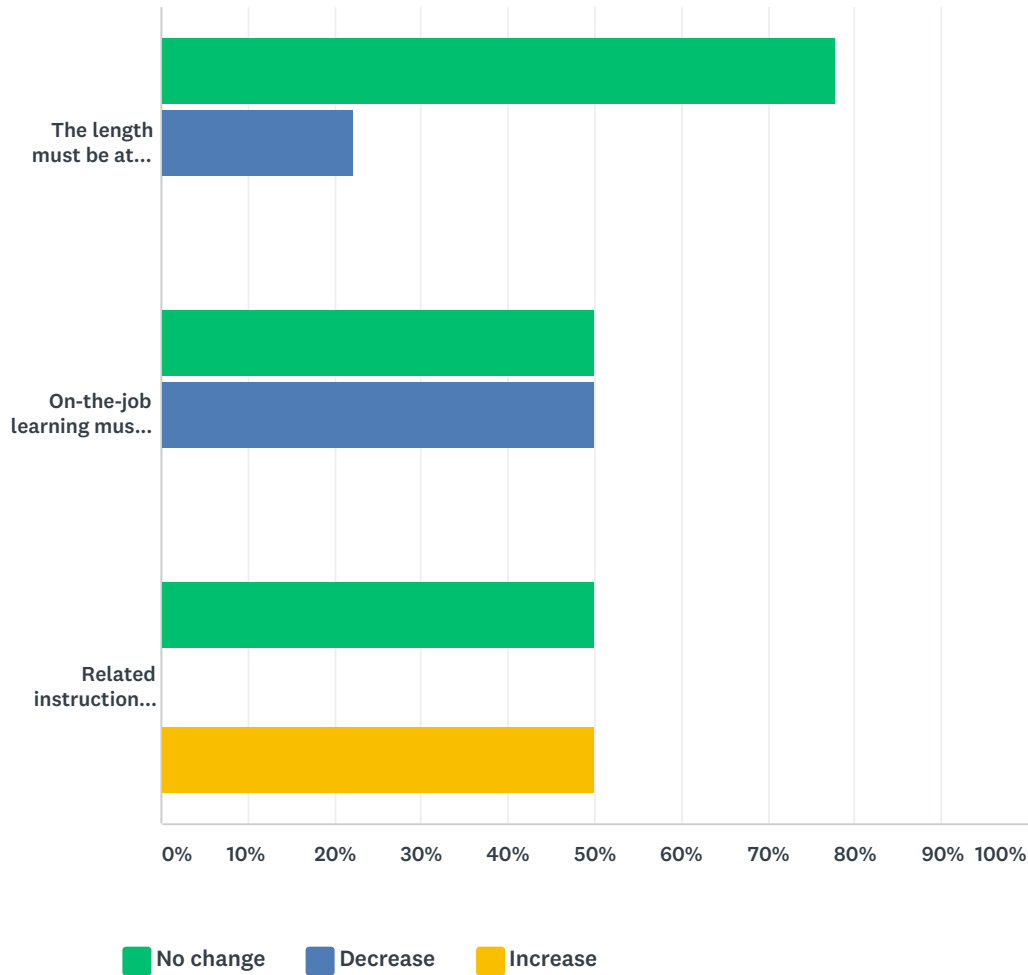
Answered: 10 Skipped: 0



ANSWER CHOICES	RESPONSES	
Yes, we currently sponsor it.	50.00%	5
Yes, we have sponsored it in the past five years.	20.00%	2
No, we have not sponsored it for at least five years.	30.00%	3
No, we have never sponsored it.	0.00%	0
TOTAL		10

Q4 Please tell us whether each standard should not change, decrease, or increase.

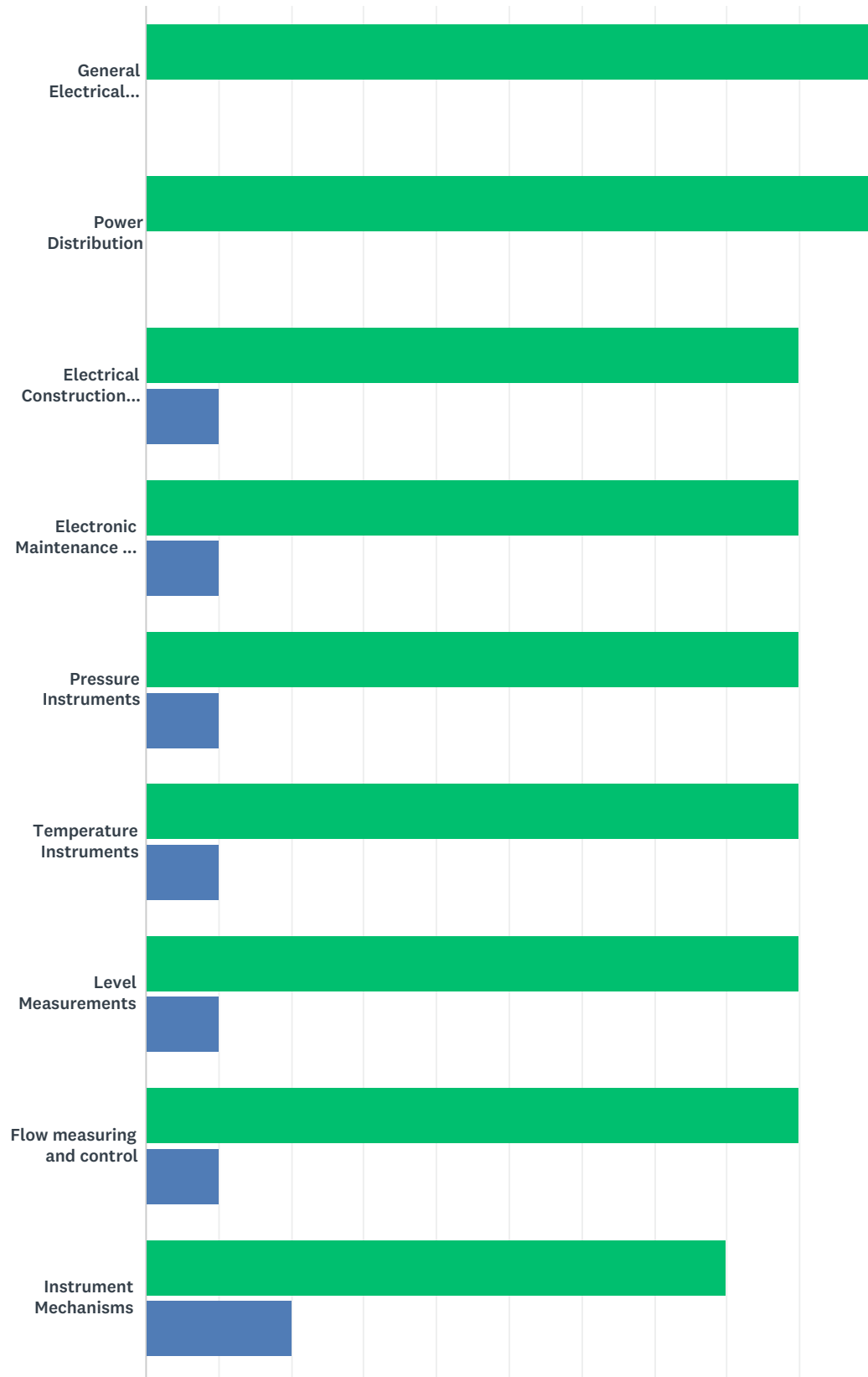
Answered: 10 Skipped: 0



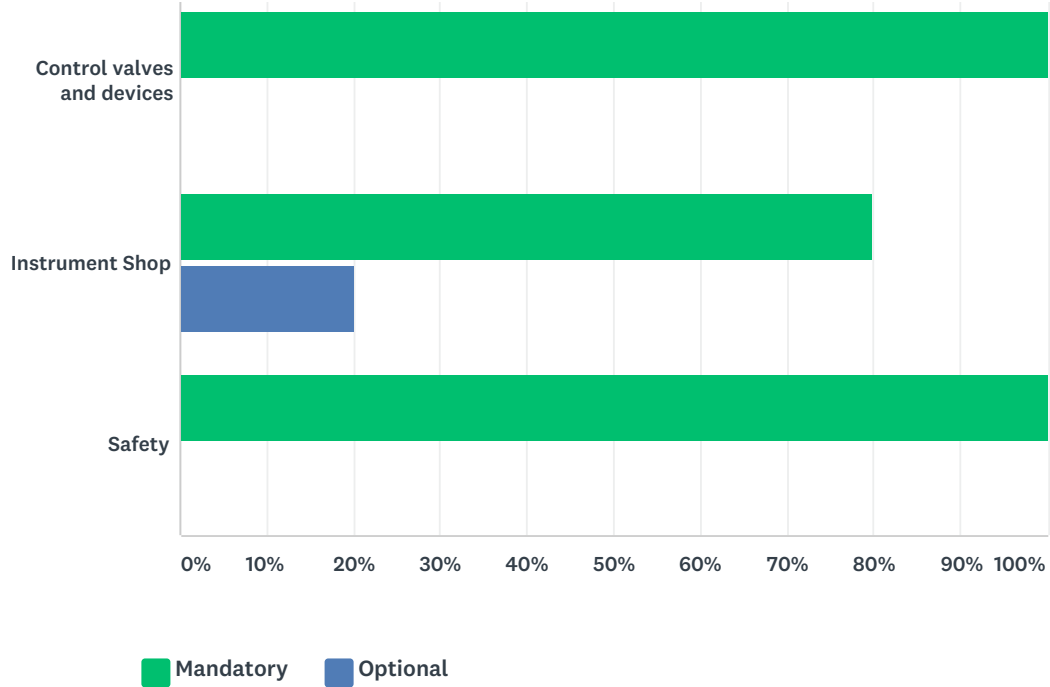
	NO CHANGE	DECREASE	INCREASE	TOTAL
The length must be at least 5 years of not less than 10,400 hours.	77.78% 7	22.22% 2	0.00% 0	9
On-the-job learning must be at least 9,392 hours.	50.00% 1	50.00% 1	0.00% 0	2
Related instruction must be at least 1,008 hours.	50.00% 2	0.00% 0	50.00% 2	4

Q5 Please tell us whether each work process for on-the-job learning should remain mandatory or made optional.

Answered: 10 Skipped: 0



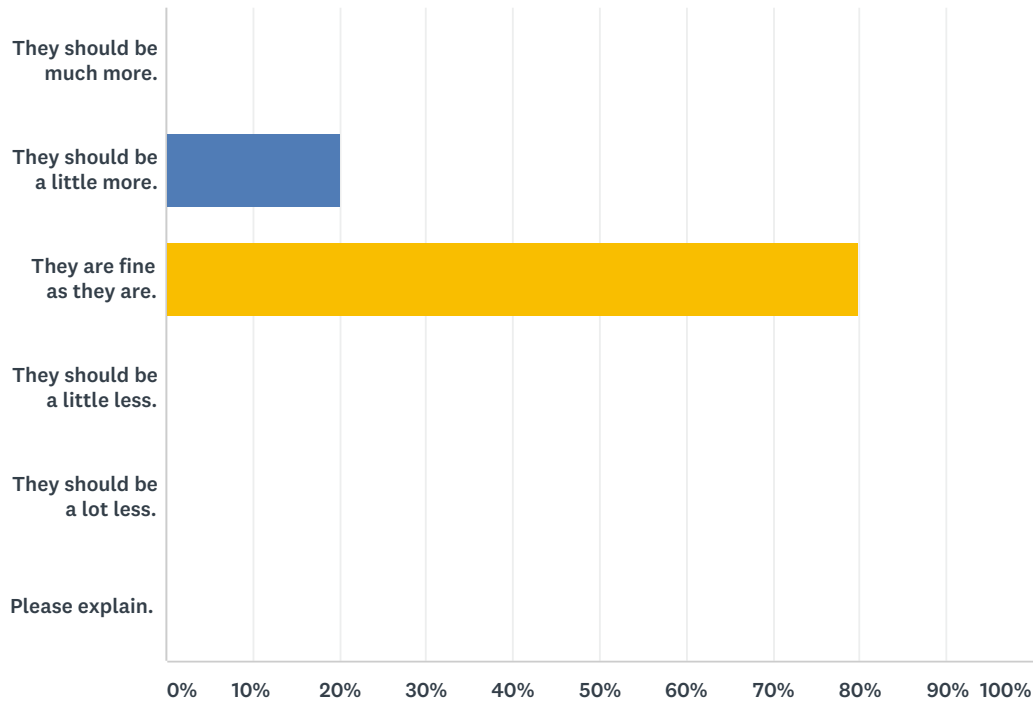
Review of Electrical & Instrumentation Technician Apprenticeship



	MANDATORY	OPTIONAL	TOTAL	WEIGHTED AVERAGE
General Electrical Maintenance	100.00% 10	0.00% 0	10	1.00
Power Distribution	100.00% 10	0.00% 0	10	1.00
Electrical Construction & Installation of Electrical Equipment	90.00% 9	10.00% 1	10	1.10
Electronic Maintenance and Troubleshooting	90.00% 9	10.00% 1	10	1.10
Pressure Instruments	90.00% 9	10.00% 1	10	1.10
Temperature Instruments	90.00% 9	10.00% 1	10	1.10
Level Measurements	90.00% 9	10.00% 1	10	1.10
Flow measuring and control	90.00% 9	10.00% 1	10	1.10
Instrument Mechanisms	80.00% 8	20.00% 2	10	1.20
Control valves and devices	100.00% 10	0.00% 0	10	1.00
Instrument Shop	80.00% 8	20.00% 2	10	1.20
Safety	100.00% 10	0.00% 0	10	1.00

Q6 The work processes include "Local Optional Work Processes," I.e. hours at the discretion of the sponsor. Please indicate whether the number of hours for Local Optional Work Processes should be revised.

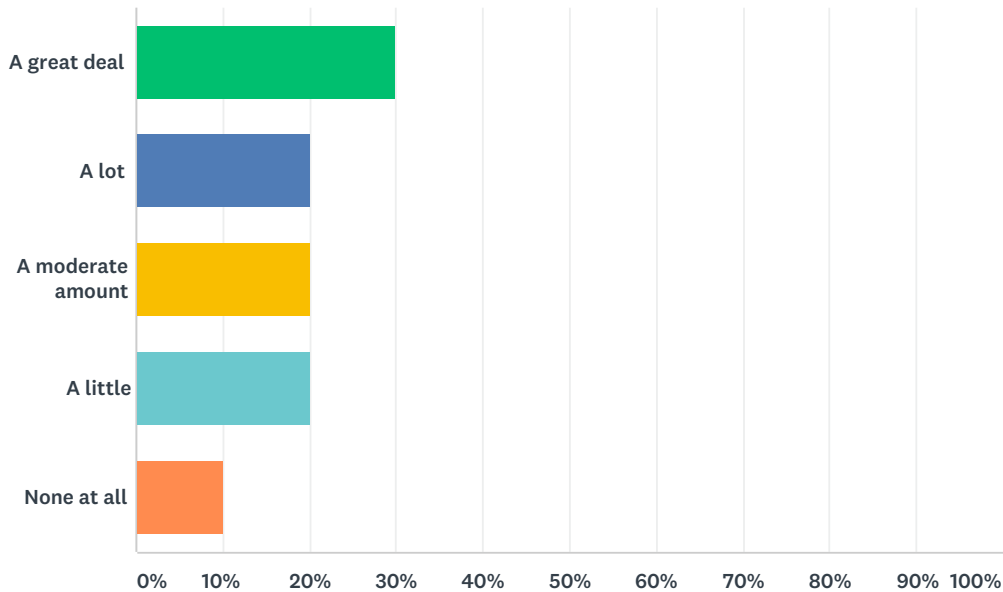
Answered: 10 Skipped: 0



ANSWER CHOICES	RESPONSES	
They should be much more.	0.00%	0
They should be a little more.	20.00%	2
They are fine as they are.	80.00%	8
They should be a little less.	0.00%	0
They should be a lot less.	0.00%	0
Please explain.	0.00%	0
TOTAL		10

Q7 Does your company have or foresee a need for greater skills with automation and control equipment, e.g. process controllers, robotics, HVAC systems, etc.?

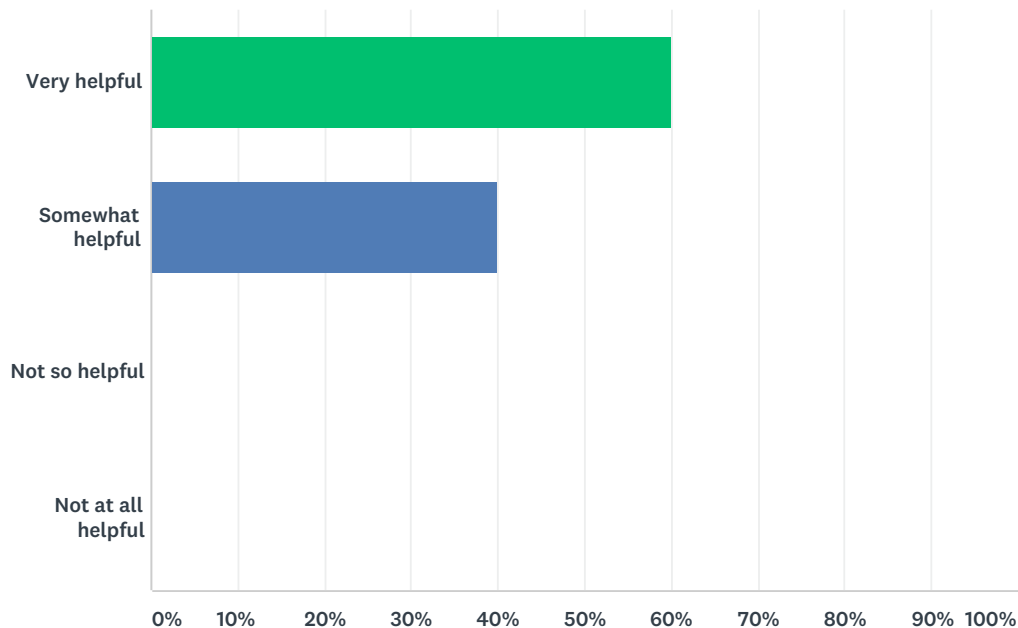
Answered: 10 Skipped: 0



ANSWER CHOICES	RESPONSES	
A great deal	30.00%	3
A lot	20.00%	2
A moderate amount	20.00%	2
A little	20.00%	2
None at all	10.00%	1
TOTAL		10

Q8 How helpful would it be for Electrical & Instrumentation Technicians to have more skill with control and automation equipment, e.g. process controllers, robotics, HVAC systems, etc?

Answered: 10 Skipped: 0



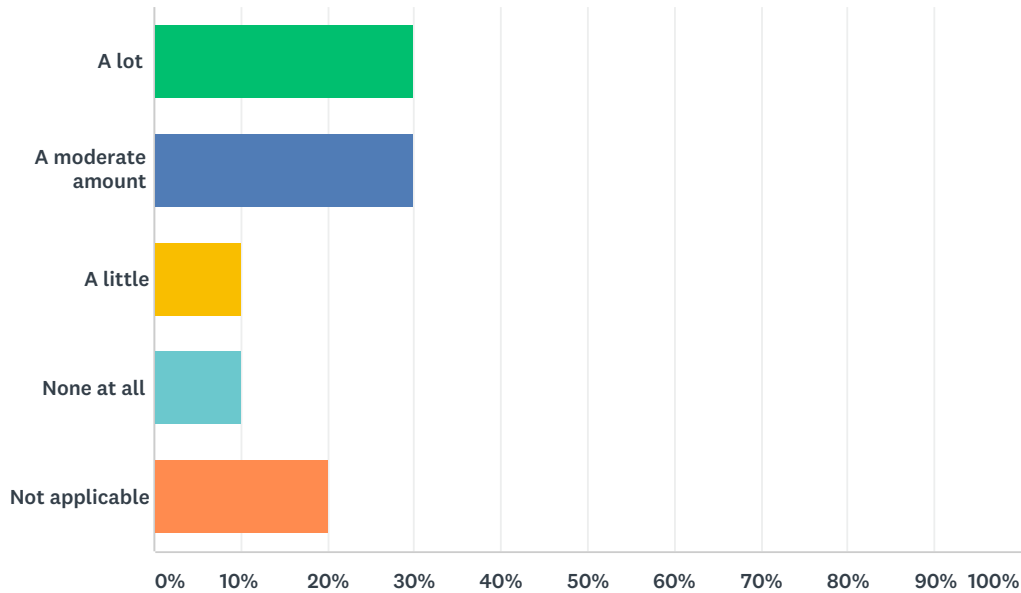
ANSWER CHOICES	RESPONSES	
Very helpful	60.00%	6
Somewhat helpful	40.00%	4
Not so helpful	0.00%	0
Not at all helpful	0.00%	0
TOTAL		10

Q9 Please provide any additional feedback on the current program.

Answered: 4 Skipped: 6

Q10 How related are the Electrical & Instrumentation Technician and Industrial Electrician apprenticeships in your company, if at all?

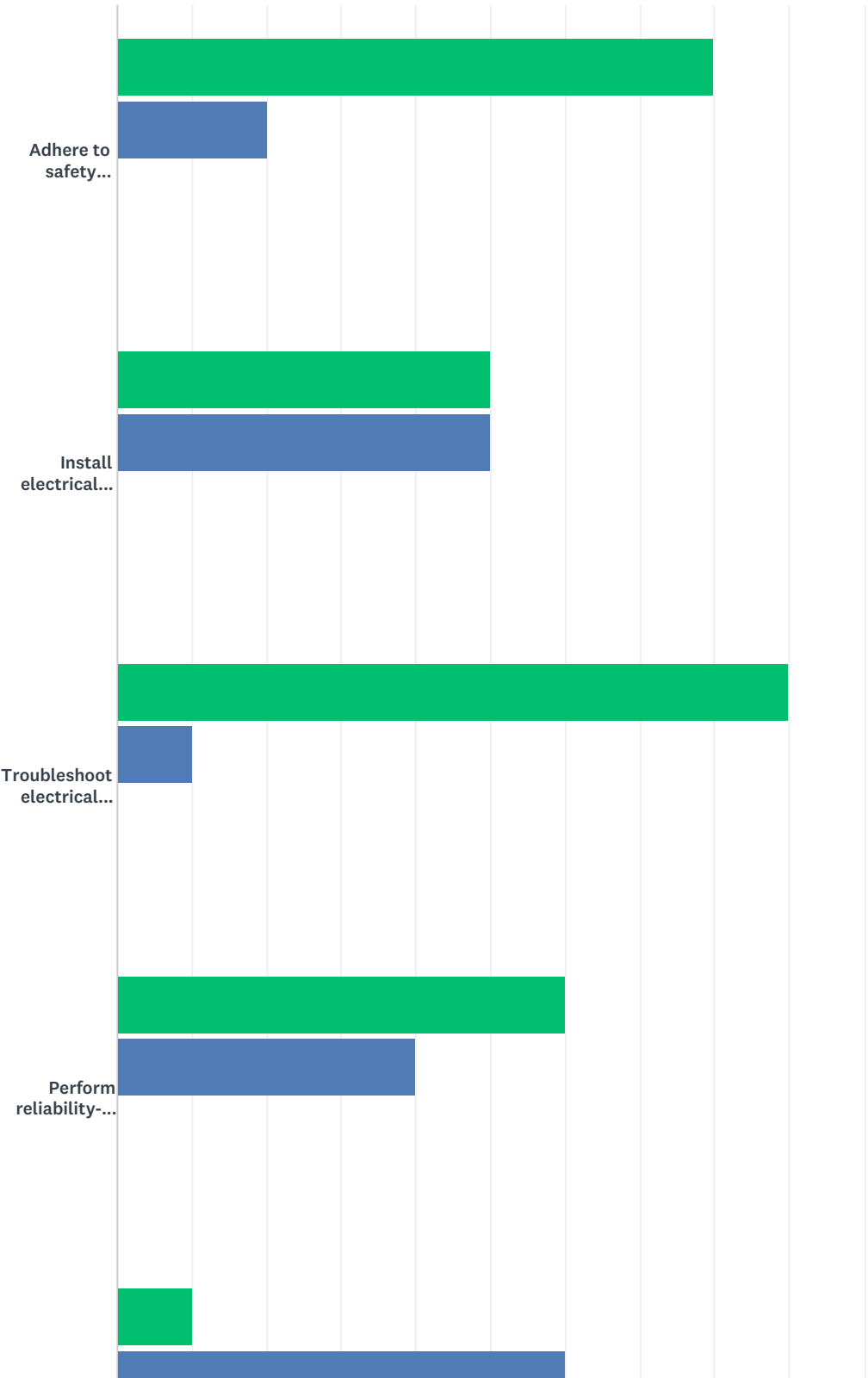
Answered: 10 Skipped: 0



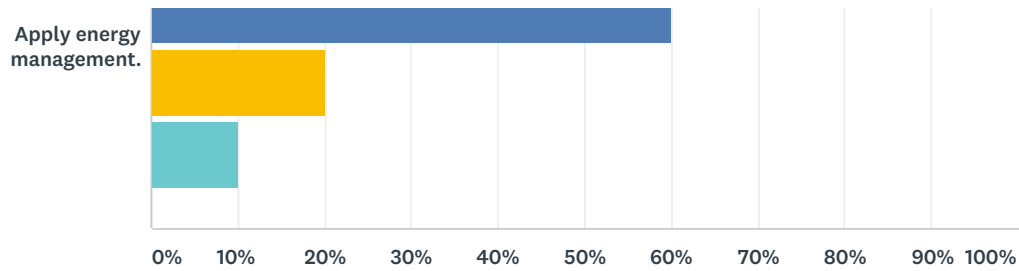
ANSWER CHOICES	RESPONSES	
A lot	30.00%	3
A moderate amount	30.00%	3
A little	10.00%	1
None at all	10.00%	1
Not applicable	20.00%	2
TOTAL		10

Q11 The revised work processes for the Industrial Electrician registered apprenticeship are below. Please indicate how helpful each may be in the Electrical & Instrumentation apprenticeship.

Answered: 10 Skipped: 0



Review of Electrical & Instrumentation Technician Apprenticeship

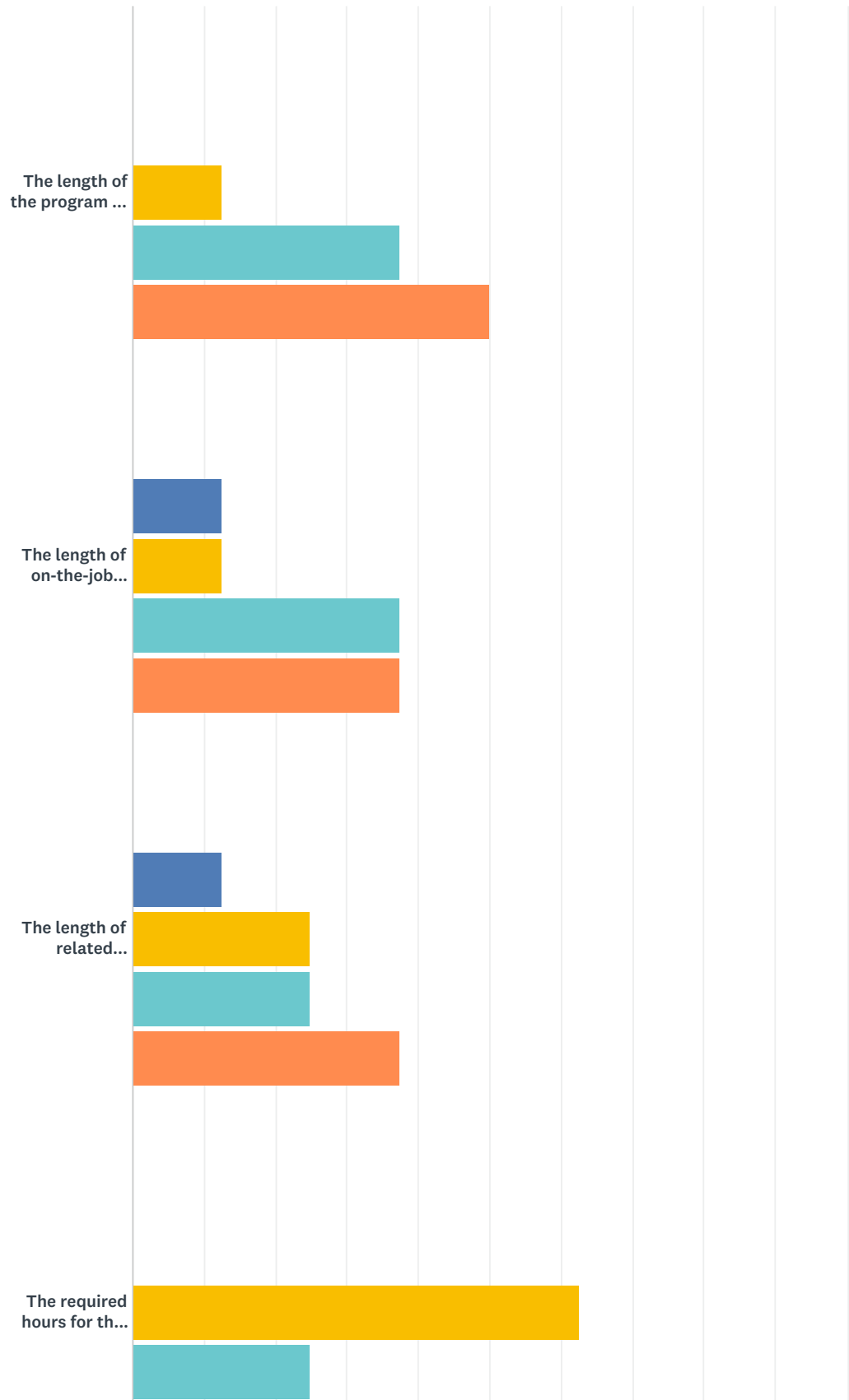


■ Very helpful
 ■ Helpful
 ■ Neutral
 ■ Not helpful

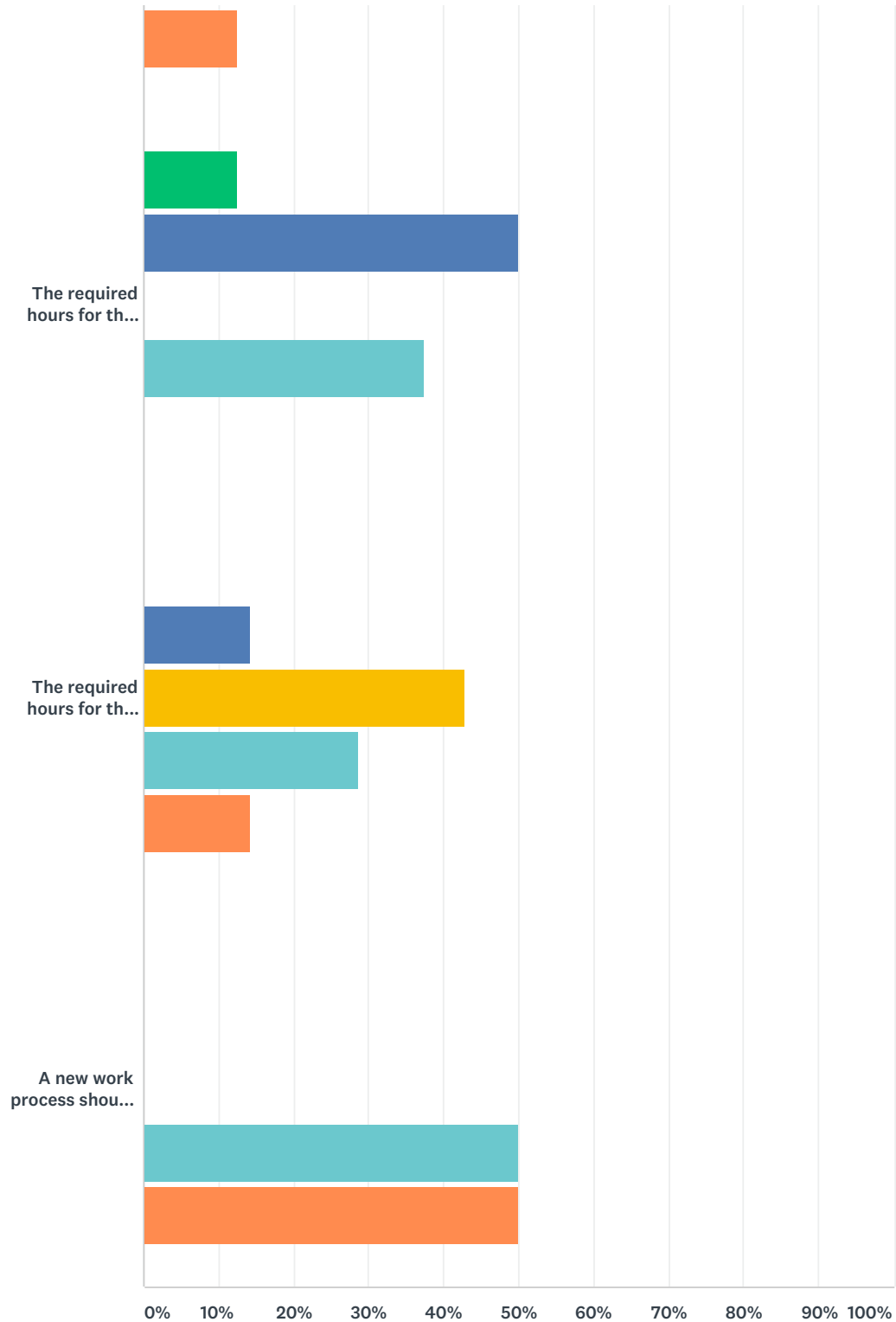
	VERY HELPFUL	HELPFUL	NEUTRAL	NOT HELPFUL	TOTAL
Adhere to safety requirements and hazard awareness procedures.	80.00% 8	20.00% 2	0.00% 0	0.00% 0	10
Install electrical equipment, components, and devices.	50.00% 5	50.00% 5	0.00% 0	0.00% 0	10
Troubleshoot electrical systems, industrial manufacturing equipment, and power distribution.	90.00% 9	10.00% 1	0.00% 0	0.00% 0	10
Perform reliability-centered maintenance on electrical systems, industrial manufacturing equipment, and power distribution.	60.00% 6	40.00% 4	0.00% 0	0.00% 0	10
Apply energy management.	10.00% 1	60.00% 6	20.00% 2	10.00% 1	10

Q12 Please indicate your level of agreement with each recommendation.

Answered: 8 Skipped: 2



Review of Electrical & Instrumentation Technician Apprenticeship



■ Disagree strongly
 ■ Disagree
 ■ Neutral
 ■ Agree
 ■ Agree strongly

	DISAGREE STRONGLY	DISAGREE	NEUTRAL	AGREE	AGREE STRONGLY	TOTAL
The length of the program (5 years of 10,400 hours) should stay the same.	0.00% 0	0.00% 0	12.50% 1	37.50% 3	50.00% 4	8
The length of on-the-job learning (9,382 hours) should stay the same.	0.00% 0	12.50% 1	12.50% 1	37.50% 3	37.50% 3	8

Review of Electrical & Instrumentation Technician Apprenticeship

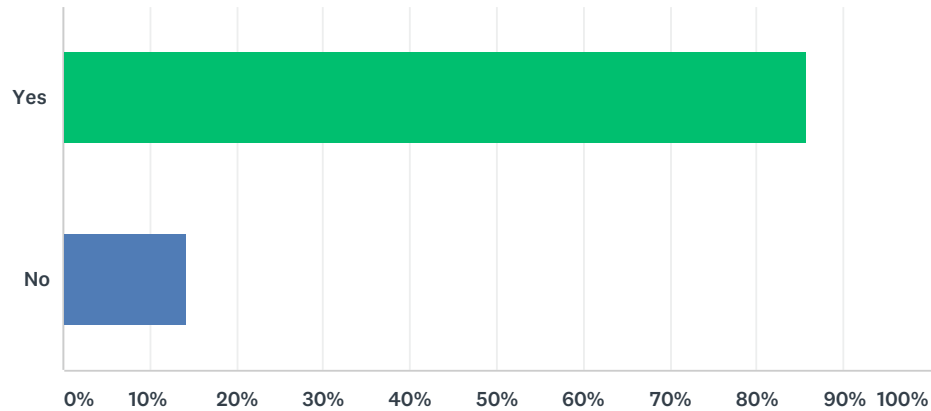
The length of related instruction (1,008 hours) should stay the same.	0.00% 0	12.50% 1	25.00% 2	25.00% 2	37.50% 3	8
The required hours for the work process, "Maintain general electrical equipment," should be reduced.	0.00% 0	0.00% 0	62.50% 5	25.00% 2	12.50% 1	8
The required hours for the work process, "Maintain and troubleshoot electronic equipment," should be reduced.	12.50% 1	50.00% 4	0.00% 0	37.50% 3	0.00% 0	8
The required hours for the work process, "Local Optional Work Processes," should be reduced.	0.00% 0	14.29% 1	42.86% 3	28.57% 2	14.29% 1	7
A new work process should be required of all apprentices: "Maintain and troubleshoot automation systems."	0.00% 0	0.00% 0	0.00% 0	50.00% 4	50.00% 4	8

Q13 Please provide any additional guidance the Bureau should consider when revising the Electrical & Instrumentation Technician apprenticeship.

Answered: 3 Skipped: 7

Q14 Would you like to receive additional communications about the revision project?

Answered: 7 Skipped: 3



ANSWER CHOICES	RESPONSES	
Yes	85.71%	6
No	14.29%	1
TOTAL		7