



# IRA APPRENTICESHIP REQUIREMENTS FOR 1MW+ PROJECTS



SOLAR ENERGY INTERNATIONAL

Renewable Energy Education for a Sustainable Future

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# Who is SEI?

Solar Energy International (SEI) empowers students, alumni, and partners to expand a diverse, inclusive, well-trained and educated solar workforce and spread the knowledge of how to safely deploy industry-leading technology.

Our training offers an engaging and balanced solar education through both theoretical and practical learning.



**30+ YEARS**  
OF HANDS-ON, SAFETY,  
AND TECHNICAL  
SKILLS TRAINING



**100,000+**  
STUDENTS & ALUMNI  
TRAINED WORLDWIDE



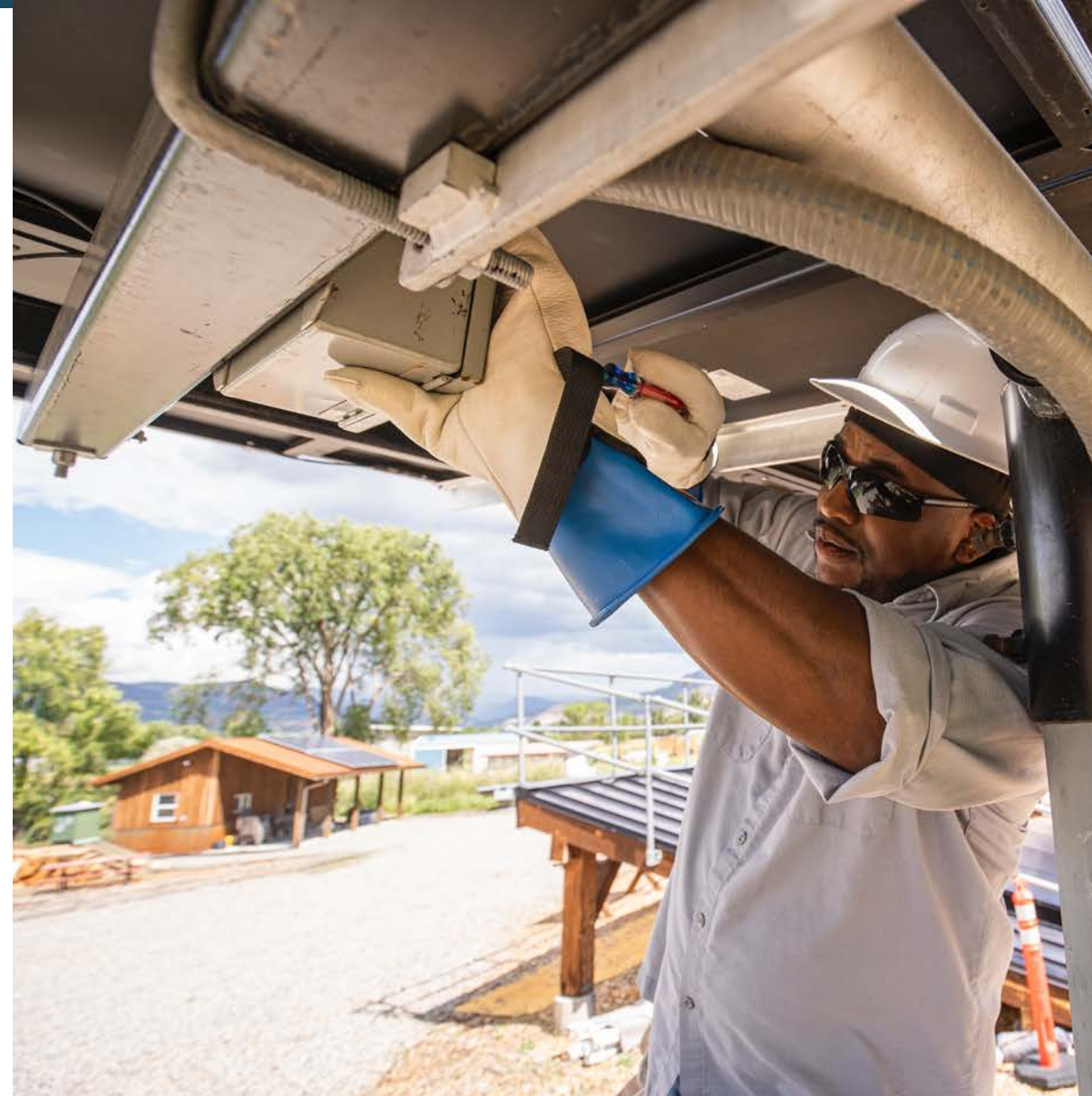
**10%+**  
OF THE WORLD'S SOLAR  
CAPACITY INVOLVED  
SEI ALUMNI



# Who is Subject to Apprenticeships?

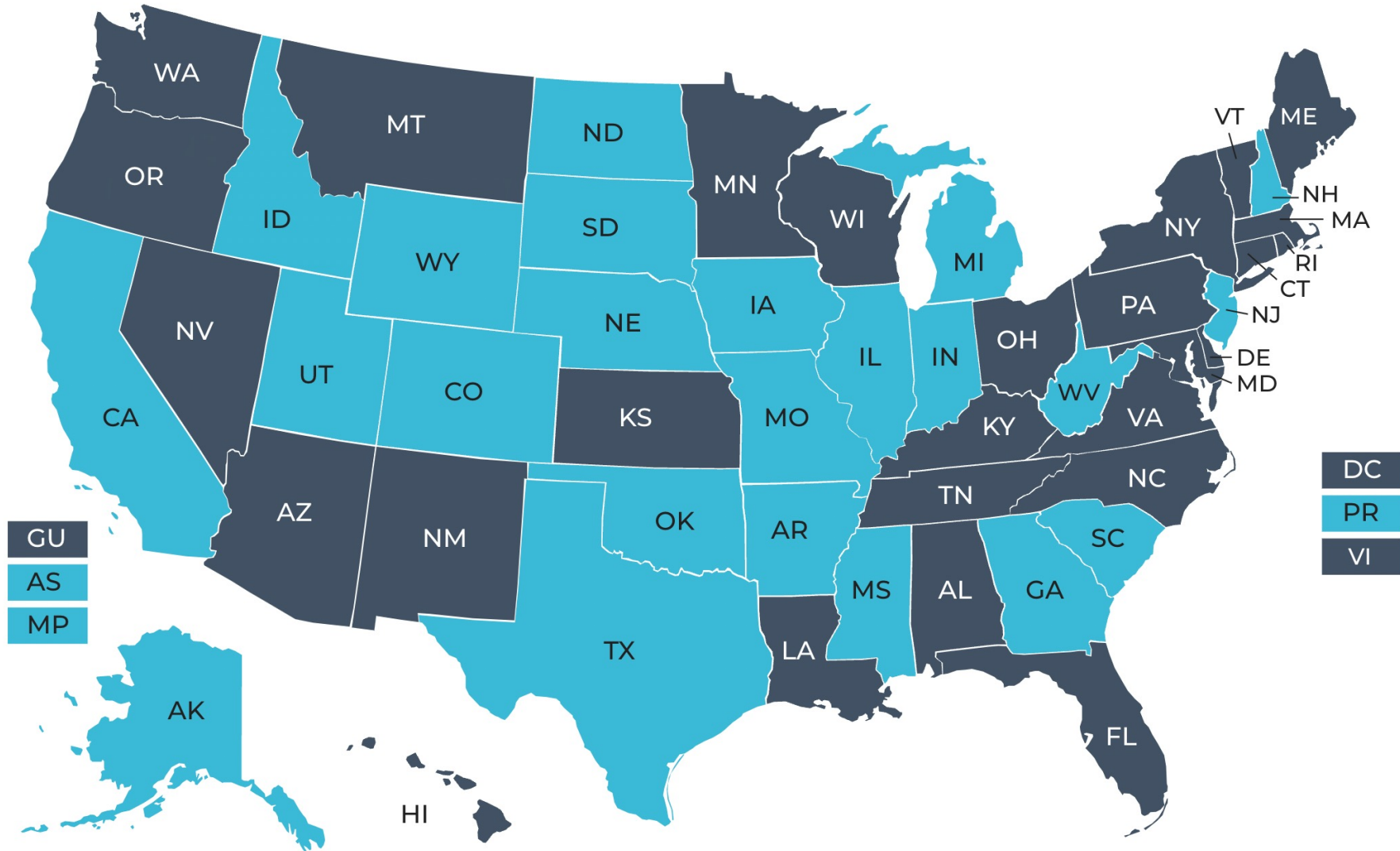
## The IRA Requirement for apprenticeships applies to:

- Projects of 1 MW+ that include construction, alteration, and / or repair are required to follow IRA guidance.
- IRA requirements will be applied to 12.5% of total construction hours in 2023 and increasing to 15% in following years for all projects of 1MW+.
- If an employer has 4 or more workers working on a projects of 1MW+, at least 1 worker needs to be an apprentice.



# Federal Office of Apprenticeship or State Agency?

Office of Apprenticeship (OA)    Recognized State Apprenticeship Agencies (SAA)



# Apprenticeship Sponsor Options

- Employer Based
- Multi-employer / Employer Association
- Employer / Union Partnerships

SEI's program in Colorado is a multi-employer based apprenticeship model. The related instruction and on-the-job learning rubric can be used to sponsor your own program!



# Types of RAPs



- Competency based
- Time based
- Hybrid based

SEI's program is a 2 year /  
timed based program  
working with employers to  
track OJL hours aligned with  
the Work Process Schedule.

# Related Instruction Requirements

All registered apprenticeships will need to have a 144 contact hours per year of related instruction as part of any program.

Related instruction is the classroom portion of any apprenticeship. It can be accomplished online or in-person.



# Tracking On-the-Job Learning

On-the-job learning is categorized by job task and observable learning outcomes are required in the apprenticeship outline.

SEI's time based program uses monthly pay stubs to document the hours of OJL aligned with the categories of tasks as found in the work process schedule. Monthly documentation is sent to SEI as the sponsor.





# Tracking On-the-Job Learning



**Appendix A**  
**ON-THE-JOB LEARNING OUTLINE**  
**SOLAR TECHNICIAN (USDOL Existing Title: Residential Wireman)**  
**O\*NET-SOC CODE: 47-2111.00      RAPIDS CODE: 1022**

Description	Approximate Hours
<p>Mounting Structures</p> <ul style="list-style-type: none"> <li>• Explain the process for installing mounting structures.</li> <li>• Explain the process for installing mounting structure attachments and foundations.</li> <li>• Explain the process for grounding and bonding mounting structures.</li> <li>• Describe the methods used to properly torque mechanical connections on mounting structures.</li> </ul>	1000
<p>PV Modules</p> <ul style="list-style-type: none"> <li>• Explain the process for determining the physical layout for PV modules.</li> <li>• Describe the process for installing a PV module.</li> <li>• Explain the process for connecting and wiring PV module circuits.</li> <li>• Explain the process for grounding and bonding PV modules.</li> <li>• Identify appropriate wire management techniques for PV modules.</li> </ul>	1125
<p>Conduit</p> <ul style="list-style-type: none"> <li>• Identify applications and techniques for conduit bending.</li> <li>• Describe common techniques for conduit cutting.</li> <li>• Summarize applications and techniques for conduit mounting and burial.</li> <li>• Explain the process of trenching for conduit burial.</li> <li>• Identify commonly used fittings and their appropriate applications.</li> <li>• Explain best practices for wire pulling.</li> <li>• Identify alternative methods for protecting, supporting and securing conductors.</li> </ul>	500
<p>Installation of Electrical Equipment</p> <ul style="list-style-type: none"> <li>• Identify commonly used electrical terminations and their appropriate applications.</li> </ul>	

# Apprenticeship Mentorship Requirements

A journey worker mentor is required for every apprentice and needs to be a 1:1 ratio.

With that said, you can have mentors oversee apprentices around defined areas of work. The same mentor doesn't need to be the same journeywork for each apprentice.

**Note: Your licensing authority ratio may be different allowing up to 1:10 ratio, but the DOL apprenticeship mentor requirement will still be required.**



# Who Can Do the Work and Wage Considerations?

- The guidance we have been given is the DOL Wage and Hour Division determines the occupation that will need to be doing the work.
- Every apprenticeship needs a progressive wage scale, but will also be subject to Prevailing Wage which may exceed your documented wage progression in your approved program. Basically all IRA compliant projects will function like a Davis Bacon prevailing wage job site.
- This will also determine the prevailing wage differences between Electricians (Wireman) or Construction Craft Laborer



## The Official U.S. Government System for:

### Contract Opportunities

(was fbo.gov)

### Contract Data

(Reports ONLY from fpds.gov)

### Wage Determinations

(was wdol.gov)

### Federal Hierarchy

Departments and Subtiers

### Assistance Listings

(was cfda.gov)

### Entity Information

Entities, Disaster Response Registry, Exclusions, and Responsibility/Qualification (was fapiis.gov) **NEW**

### Entity Reporting

SCR and Bio-Preferred Reporting

## Already know what you want to find?

Select Domain...

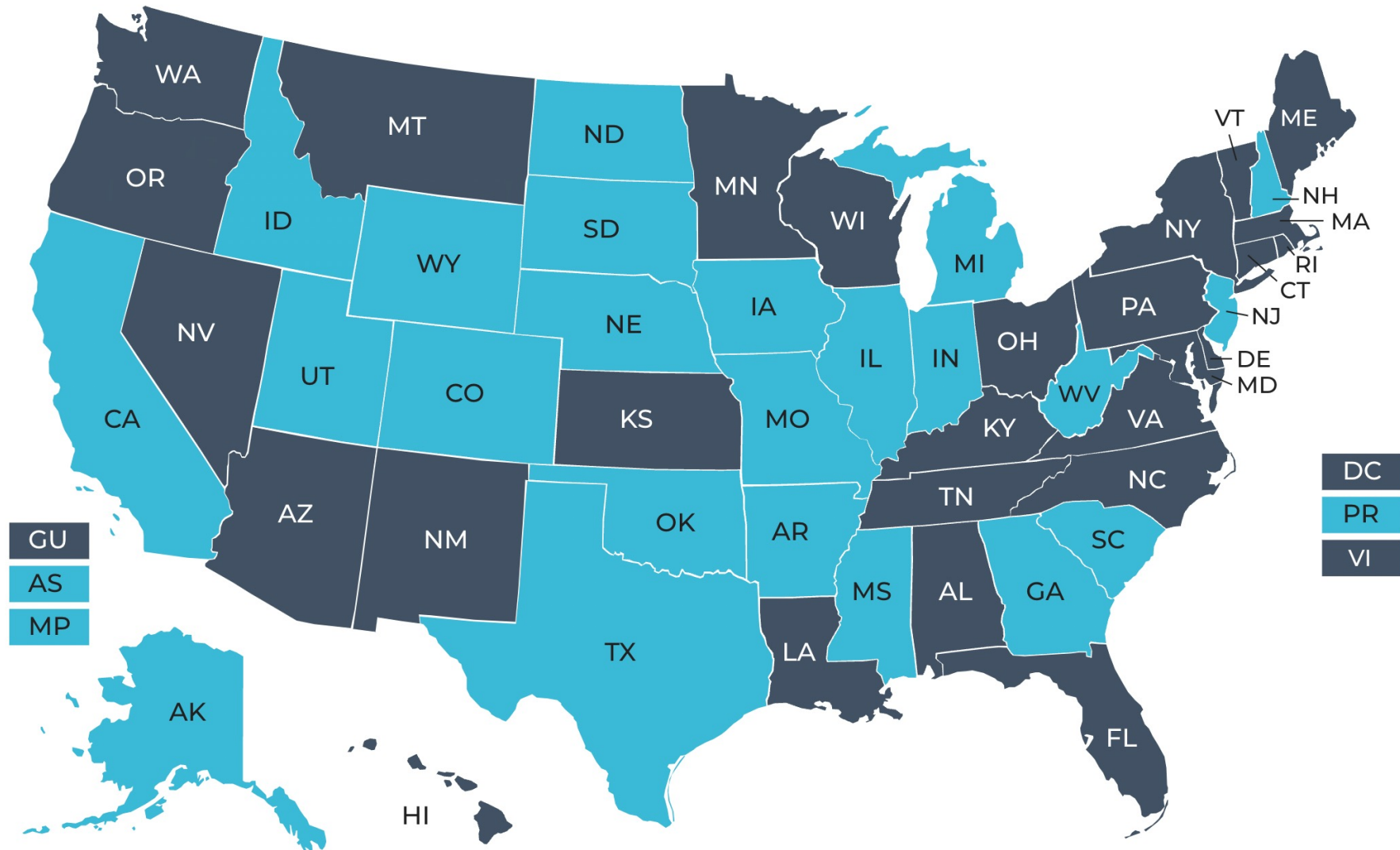


e.g. 1606N020Q02



# Apprentices Across State Lines

■ Office of Apprenticeship (OA) ■ Recognized State Apprenticeship Agencies (SAA)



# SEI Solar Professionals Certificate Program



# Registered Apprenticeship Program Requirements

## 2 Year Program Options:

- Electrician Wireman
- Construction Craft Laborer

## 2 Year Related Instruction (Classroom based learning)

- 288 Contact Hours / 144 Contact Hours Per Year

## 2 Year On-the-job Learning

- 4000 Hours / 2000 hours per year



# More Training Options with SEI



## Online Training

Easily access online technical training from anywhere in the world, anytime, with SEI's Online Campus. Our online training consists of theory-based courses that are 6 weeks each in length. All full online courses have a specific start and end date.



## Hands-on Lab Training

Take what you have learned in SEI's online training and put it into practice with hands-on lab training. By working together in small groups with a very low student to instructor ratio, you will fully install and commission a wide variety of system types before testing the system, then de-commissioning and breaking down.

# Accreditation & Certification



# NABCEP<sup>®</sup>

Raising Standards. Promoting Confidence.

SEI is an accredited U.S. educational institution and a Registered Training Provider with the North American Board of Certified Energy Practitioners (NABCEP). We work with governments and international solar certifying authorities to approve our curriculum.

[Learn more at solarenergy.org](https://solarenergy.org)



# Questions and Discussion

**THANK YOU!**