

## Attachment 5

### Approved Occupations & Trainings for SPARK Youth Workforce Pilot Program

#### Approved Occupations

The Virginia Department of Energy has authorized the following training programs and occupations for SPARK funding. Training initiatives aligned with these roles must correspond to the subsequent energy careers:

1. **Energy Transmission & Distribution:** Involves moving electricity from generation sources to end users through substations, lines, and smart grids.
  - i. Occupations:
    - Electrical Power-Line Installers and Repairers
    - Substation Technicians / Electricians
    - Power Distributors and Dispatchers
    - Relay Technicians
    - Utility Field Technicians
    - Transmission Engineers
    - SCADA Technicians
    - Cable Splicers
    - Meter Technicians
    - Grid Operators
1. **Power Generation:** Includes both traditional and renewable sources—Nuclear, Natural Gas, Solar, and Wind energy.
  - i. Nuclear Occupations:
    - Nuclear Engineers
    - Nuclear Technicians

- Nuclear Reactor Operators
- Radiation Protection Technicians
- Nuclear Maintenance Technicians
- Nuclear Welders

ii. Natural Gas-Specific Occupations:

- Gas Plant Operators
- Natural Gas Technicians
- Gas Utility Workers
- Compressor Station Operators

iii. Solar-Specific Occupations:

- Solar Photovoltaic (PV) Installers
- Solar Thermal Installers
- Solar Energy System Designers
- Renewable Energy Site Assessors

iv. General Generation Occupations:

- Power Plant Operators
- Instrumentation & Control Technicians
- Turbine Technicians
- Boiler Operators
- Generation Systems Engineers

2. **Grid Modernization:** focuses on digitization, efficiency, automation, and smart grid integration across the entire grid infrastructure.

i. Occupations:

- Smart Grid Technicians

- Electrical Engineers (Grid Systems)
  - Cybersecurity Analysts (Energy Sector)
  - Battery Energy Storage Technicians
  - Energy Systems Analysts
  - Controls and Automation Specialists
  - SCADA/EMS System Operators
  - Microgrid Designers / Engineers
3. **Energy Efficiency:** Improving building performance, reducing energy waste, and enhancing systems for cost and energy savings.
- i. Occupations:
- Energy Auditors
  - Building Performance Analysts
  - Weatherization Technicians
  - HVAC Energy Efficiency Technician
  - Insulation Installers
  - Residential Energy Retrofit Workers
  - Envelope and Air Sealing Specialists
  - Mechanical Systems Inspectors

#### Approved Trainings and Certifications

The Virginia Department of Energy has approved the following programs and occupations for SPARK funding. SPARK offers four training pathways aligned with in-demand, industry-recognized certifications. Eligible training and certification

include:

i. **Alphabetized Certifications & Trainings:**

- AEE Certified Building Commissioning Professional (CBCP), Measurement & Verification (CMVP), etc.
- AEE Certified Renewable Energy Professional (REP®)
- AEE REP® with energy storage focus
- Alternative Energy (NCCER Accredited Training)
- ASME N-Stamp certification
- ASME Section III Certification
- ASME Section IX Certification
- AWS D1.1 or D1.6 Certification
- BPI Accredited Training (Building Science Principles, RIT, BA-T, BA-P)
- Building Science Principles Knowledge Certification
- Career and Technical Education Energy Cluster
- Certified Nuclear Professional (CNP) – American Nuclear Society
- Electrical 1–4 (NCCER Accredited Training)
- Electronic Systems Technician (EST) (NCCER Accredited Training)
- Energy Efficiency Practitioner
- EPA Section 608 Certification
- ETA Certified Electronics Technician credentials
- ETA Electric Vehicle Technician (EVT) and related credentials
- ETA International: Certified Electronics Technician (CET, CETsr, etc.)

- ETA Microgrids & Smart Tech certifications (e.g., STS, STSmi)
- ETA Photovoltaic Installer (PVI) credentials
- ETA PVI credentials applicable for gas/diesel detection trainers
- Flux Core Arc Welding (FCAW)
- HVAC Excellence Accredited Training (Heat Pump Specialty)
- Introduction to Solar PV / Solar PV Installer Training (NCCER Accredited Training)
- Introduction to the Power Industry (NCCER Accredited Training)
- LEED Green Associate
- NABCEP PV Installation Professional (PVIP) & Associate certifications
- National Electrical Testing Association (NETA) Certified Electrical Testing Technician
- NATE Accredited Training (Heat Pump Specialty and HVAC Efficiency Analyst (HEA))
- Networked SCADA or ISO grid operator training (NICET/utility-specific programs)
- NFPA Certified Wind Turbine Technician-I (WTT-I) credential
- NICET certification in Electrical/Mechanical Systems
- NICET technician certifications in combustion or pipeline systems
- NICET-Electrical/Mechanical Systems cert.
- Non-Destructive Testing (NDT) certifications (ASNT)
- OSHA 10 and 30
- Professional Engineer (PE) license (relevant discipline)
- Ready-to-Work Certificate

- RESNET HERS Rater (with HVAC system analysis focus)
- U.S. Nuclear Regulatory Commission (NRC) Reactor Operator (RO) & Senior Reactor Operator (SRO) licenses \
- Weatherization Core – Level 1–2 (NCCER Accredited Training)
- Wind Turbine Maintenance Technician Certification (NCCER Accredited Training)
- Wind Turbine Technician-I (WTT-I)

Virginia Department of Energy reserves the right to consider additional training programs for approval based on their alignment with the SPARK Initiative's core objectives. All proposed training will be evaluated for relevance to high-demand energy sectors, workforce development goals, and industry-recognized standards.