

# **Power Generation Maintenance Electrician** PGME50

Updated November 2024

#### **Focus Statement**

A Power Generation Maintenance Electrician must be able to safely use hand, power, and electrical tools, as well as electrical test equipment and PPE according to regulatory and industry standards; interpret job specifications and industrial drawings; install, connect, troubleshoot and maintain power generation, distribution, and utilization systems and components; install raceway and cable distribution systems; and install and connect transformers and troubleshoot PLCs.

#### Overview

- Two-hour closed-book examination
- May use a basic function, non-printing calculator
- No extra papers, books, notes or study materials are allowed

#### Minimum passing score is 75.

#### **Performance Verification**

A corresponding hands-on Performance Verification is available.

#### NCCER Curriculum

All NCCER knowledge assessments are referenced to NCCER's curriculum modules as listed on this specification sheet. This assessment is referenced to NCCER's 1st edition of the Power Generation Maintenance Electrician curriculum. You may order books and modules from Pearson by visiting <u>www.nccer.org/order-books-modules/</u>

#### Assessment Development

All questions are developed and approved by subject matter experts under the direction of NCCER.

#### Credentials

Upon successful completion of the knowledge assessment or performance verification, credentials can be viewed and printed by the individual or assessment program through their NCCER Account.

#### **Score Report and Training Prescription**

Each candidate will have online access to their assessment results including their overall score and recommended training through their NCCER Account.

### Written Assessment Contents:

| Module ID                                 | Content Domain/Module Title | Number of Items |
|---|-----------------------------|-----------------|
| 40212<br>40213<br>40307<br>40311<br>40312 | Conductors                  | 10              |
| 40106<br>40203<br>40204<br>40205          | Electrical Theory           | 12              |



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### Written Assessment Contents:

| Module ID | Content Domain/Module Title  | Number of Items |
|-----------|------------------------------|-----------------|
| 26501     | Personnel Safety             | 10              |
| 40201     |                              |                 |
| 40208     |                              | 10              |
| 40308     |                              |                 |
| 26410     |                              | 9               |
| 32401     | System Maintenance           |                 |
| 40113     | System Maintenance           |                 |
| 50401     |                              |                 |
| 26209     | System Safety                | 7               |
| 26210     |                              |                 |
| 26211     |                              |                 |
| 32401     |                              |                 |
| 40301     |                              |                 |
| 26211     |                              |                 |
| 40312     | Controls                     | 4               |
| 40409     |                              |                 |
| 40401     |                              | 6               |
| 50301     | Power Plant Systems          |                 |
| 40305     |                              | 11              |
| 40306     | Power Plant Equipment        |                 |
| 50402     |                              |                 |
| 26411     |                              | _               |
| 40103     | Wiring Methods and Materials | 5               |
| 26202     |                              |                 |
| 26407     | Motor Maintenance            | 8               |
| 40313     |                              |                 |



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| Module ID                        | Content Domain/Module Title | Number of Items |
|----------------------------------|-----------------------------|-----------------|
| 26303<br>40105<br>40301<br>40303 | Troubleshooting             | 6               |

Total Number of Items

88