

# ARIZONA REGISTRAR OF CONTRACTORS

## A-17 ELECTRICAL AND TRANSMISSION LINES (COMMERCIAL)

### SCOPE OF WORK

Installation, alteration, and repair of transmission lines on public right-of-ways, including erection of poles, guying systems, tower line erection, street lighting of all voltages, and all underground systems including ducts for signal, communication, and similar installations. Installing transformers, circuit breakers, capacitors, primary metering devices and other related equipment of all electrical construction is included. All systems of less than 600 volts on or inside a building are excluded.

Examination	# of Questions	Minimum Passing Score	Time Allowed
A-17	90	70%	225 Minutes

### CONTENT OUTLINE

Subject Area	# of Items
General Electrical Knowledge	10
Transformers	10
Conductors	10
Grounding Methods	8
Poles and Structures	8
Underground Lines	6
Overhead Lines	6
Equipment over 600 Volts	7
Electrical Supply Stations	5
Equipment and Safety	10
Photovoltaics	10

### REFERENCE LIST

To find reference materials, you may use the link provided or search for the material online via a search engine such as Google. You may also go to PSI's online store at [www.psionlinestore.com](http://www.psionlinestore.com).

The reference material listed below was used to prepare the questions for this examination. The examination may also contain questions based on trade knowledge or general industry practices. **Except for Code books**, you can base your answers on later editions of references as they become available. For Code questions, the examinations will be based **only** on the edition of the Code book that is listed.

Candidates may use a silent, nonprinting, non-programmable calculator in the examination center.

*The following reference material is allowed in the examination center:*

*Code of Federal Regulations - 29 CFR Part 1926 (OSHA)*, with latest available amendments, U.S. Government Printing Office, (866) 512-1800 or <http://www.access.gpo.gov/nara/cfr/cfr-table-search.html>

OR

*Code of Federal Regulations - 29 CFR Part 1926 Selections by PSI*, with latest available amendments, 3210 E Tropicana, Las Vegas, NV 89121, (800) 733-9267, [www.psionlinestore.com](http://www.psionlinestore.com) (See order form at the end of the Candidate Information Bulletin.)

*NFPA 70: National Electrical Code, 2017*, National Fire Protection Association, [www.nfpa.org](http://www.nfpa.org)

*National Electrical Safety Code, 2017*, Institute of Electrical and Electronics Engineers, Inc., [www.ieee.org](http://www.ieee.org)

*The following reference material is not allowed in the examination center:*

*American Electricians' Handbook*, 2002 or 2013, McGraw-Hill, ISBN: 0-07-137735

*Lineman's and Cableman's Handbook*, Shoemaker and Mack, 12<sup>th</sup> or 13<sup>th</sup> Edition, McGraw Hill, [shop.mheducation.com](http://shop.mheducation.com)

*Photovoltaic Systems*, 2nd edition, 2010 or 2012, James Dunlap, American Technical Publishers, [www.atplearning.com](http://www.atplearning.com)

Candidates are responsible for bringing their own references to the examination center. Reference materials may be highlighted, underlined, annotated and/or indexed prior to the examination session. However, references may not be written in during the examination session. Any candidate caught writing, highlighting, underlining and/or indexing in the references during the examination will be reported to the Arizona Registrar of Contractors. Furthermore, candidates are not permitted to bring in any additional papers (loose or attached) with their approved references. References may be tabbed/indexed with permanent tabs only. (permanent tabs are defined as tabs that would tear the page if removed). Temporary tabs, (defined as Post-It notes, or other tabs that may be removed without tearing the page) are not allowed and must be removed from the reference before the exam will begin. If you are downloading from the Internet, you may bring this reference into the testing center with you as long as it is bound. You can have it spiral bound or you may hole-punch it and put it in a binder.