

Advanced Photovoltaic Systems
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Quiz #4-May 2, 2009

- 1. The article in the National Electric Code that is dedicated to PV is
  - a. Article 720 Sections A, B&D
  - b. Article 520
  - c. Every Article
  - d. Article 690
- 2. Everything else being the same, if you increase the voltage
  - a. You increase the voltage drop percentage
  - b. You decrease the voltage drop percentage
  - c. You have to increase the wire size
  - d. You should increase the amperage by 120%
- 3. This would require the greatest ampacity derating
  - a. A PV system in Antarctica
  - b. Wire in conduit on a roof in Palm Springs with 3 other current carrying conductors
  - c. Wire not in conduit on a roof in Palm Springs
  - d. Ampacity is not derated for temperature
- 4. The 120% rule means
  - a. You can have 2 sources feeding the panel busbar that exceed the busbar rating
  - b. Your busbar fuses should be 120% derated for ampacity
  - c. The sum of the solar breaker and the main breaker must be 120% less than the busbar rating.
  - d. Your parallel sources of AC power can never exceed the busbar rating
- 5. 90C rated wire is
  - a. Wire that should never get hotter than 90C if you did everything right
  - b. Has the same ampacity for all temperatures under 90C
  - c. Not used in PV systems
  - d. Always black