

ARTICLE 705

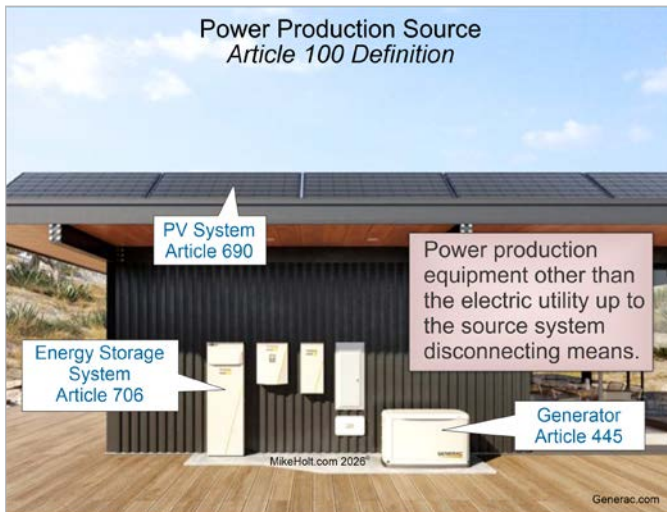
Interconnected Electric Power Production Sources

Introduction to Article 705—Interconnected Electric Power Production Sources

This article contains the requirements for interconnecting electric *power production sources* with a primary power source, such as a utility grid. It includes systems like solar panels, energy storage, and generators that can operate in parallel with the main power supply. The article outlines specific rules for installation, safety, and operation to ensure compatibility and prevent problems when different power sources are connected together.

Power Production Source. Power production equipment other than the electric utility up to the source system disconnecting means.

►Figure 705-1

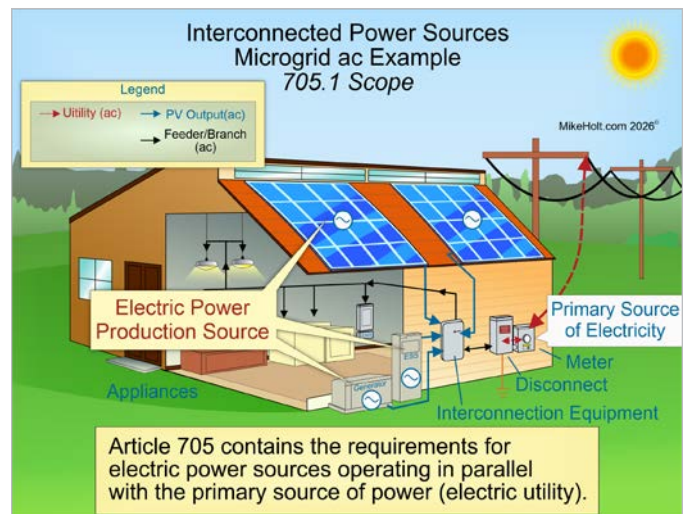


►Figure 705-1

Part I. General

705.1 Scope

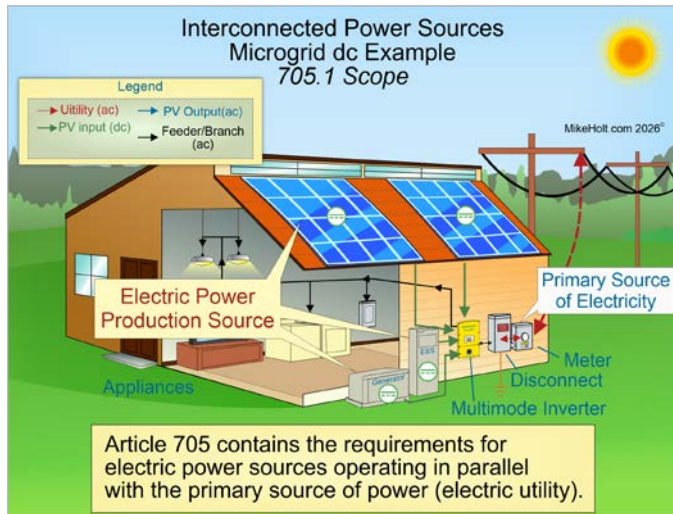
This article contains the requirements for electric power sources (PV, ESS, generator) operating in parallel with the *primary source of power* (electric utility). ►Figure 705-2 and ►Figure 705-3



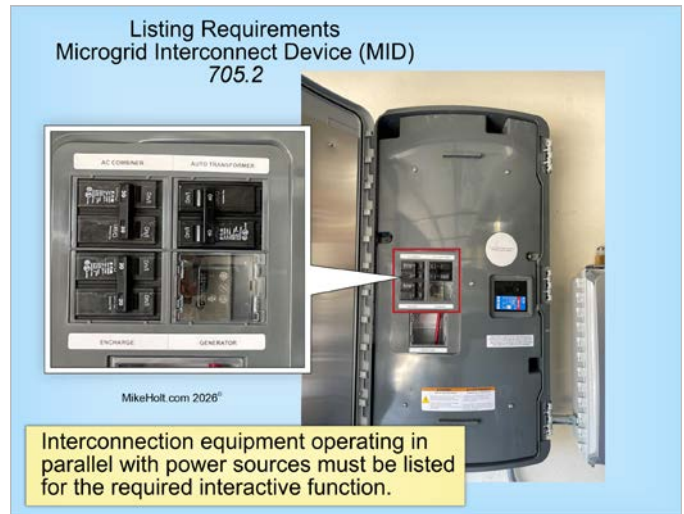
Primary Source. The main source of power in an electric power system, typically the electric utility.

705.2 Listing Requirements

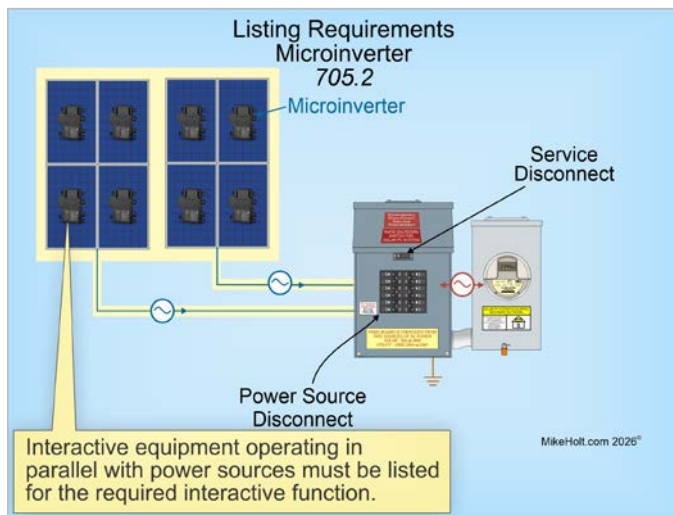
Interconnection and interactive equipment operating in parallel with power sources (utility, PV, ESS, and generator) must be listed for the required interactive function. ►Figure 705-4, ►Figure 705-5, and ►Figure 705-6



►Figure 705-3

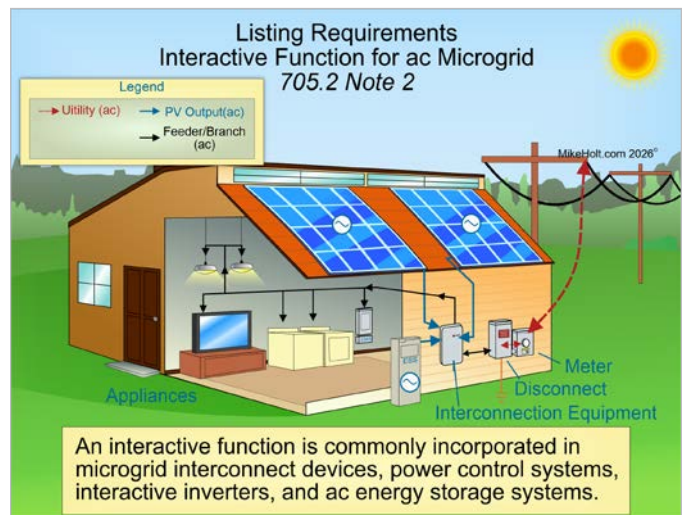


►Figure 705-6

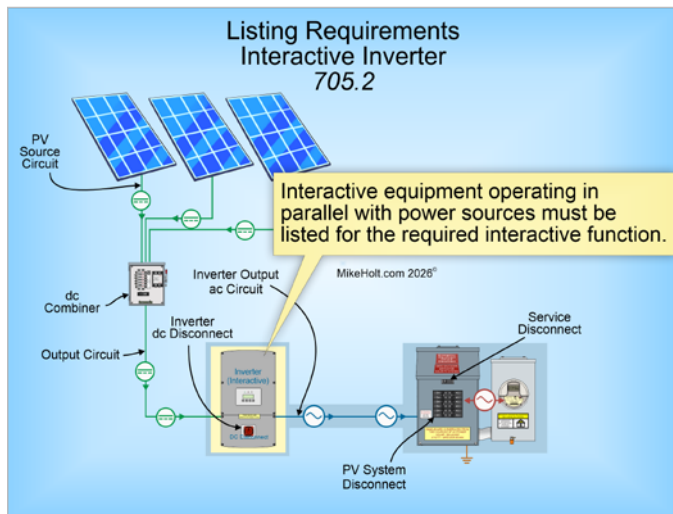


►Figure 705-4

Note 2: An interactive function is commonly incorporated in microgrid interconnect devices, power control systems, interactive inverters, and ac energy storage systems. ►Figure 705-7 and ►Figure 705-8



►Figure 705-7



►Figure 705-5

Author's Comment:

- An interactive function will automatically stop exporting power upon loss of electric utility voltage and cannot be reconnected until the voltage has been restored.

705.8 Qualified Persons

The installation of power sources (PV, ESS, generator) operating in parallel with the electric utility must be performed by a *qualified person*. ►Figure 705-9 and ►Figure 705-10