



Safety Message of the Day for IMEA Members



Arc Flash Precautions: A Review

Self-Contained Meter Bases

NESC testing in 2005 and 2006, and EPRI testing prior to the 1910.269 updates in 2014, illustrated that self-contained meter base exposures are very similar to that of low-voltage switchgear. The arc-in-a-box type with five-sided contained equipment with an open front causes a frontal ejection of the arc. That is the worst-case scenario and can increase the effects of the arc immensely more than an open-air arc. The data from the testing reported that on a 240/277/480 self-contained meter base, the heat value from an arc could be as high as 18 to 20 cal/cm². The bus bar and lug spacing are very similar, and most single-phase arcs will certainly turn to three-phase arcs in either switchgear or self-contained meter bases. The available fault current at that location will determine the effect of the arc blast. Arc blast and arc flash are two different issues that must be dealt with. An arc flash may occur with low incident energy, but an arc blast can be significantly worse depending on the available fault current.

Wear Face Protection