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Code/Section	2011 NEC Section 700.17
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Issue:

Section 700.17 of the NEC, prior to the 2011 edition, required the transfer of power serving emergency egress lighting fixtures to an emergency source when the normal supply is interrupted. When the emergency source is a generator; the transfer is accomplished using an automatic transfer switch (ATS) located upstream of the emergency panel. It was a common design practice to then serve an area requiring emergency egress lighting with one emergency branch circuit. Most areas would typically also be served by a branch circuit connected to the normal (utility) source of power. However, areas such as stairwells would commonly be served by only a single emergency branch circuit. This complied with the previous code; however, this design practice had the limitation that a failure of the emergency branch circuit breaker would leave the stairwell in total darkness.

The new language in 2011 NEC Section 700.17 now requires that the emergency lighting is transferred to an emergency source (complying with NEC 700.12) upon failure of the normal branch circuit; such as a faulty circuit breaker.

There has been some confusion regarding acceptable methods to comply with the new language in the 2011 NEC.

Interpretation:

The intent of 2011 NEC Section 700.17 is to provide the continuation of power to the emergency lighting when the normal source of power at the branch circuit level has been interrupted. This now includes an interruption at the branch circuit level as well as an interruption to the upstream normal power source. Below is a list of some examples of compliance with NEC 700.17.

1. Normal or emergency branch circuits feeding the area lighting fixtures with integral emergency ballasts.
2. Emergency battery packs (unit equipment), served by the normal or emergency branch circuit(s) serving the area lighting.
3. One or more normal branch circuits serving the normal area lighting, along with one or more emergency branch circuits serving the emergency lighting in the common area.
4. One normal branch circuit and one emergency branch circuit feeding an Automatic Load Control Relay, which would then feed the area lighting. The Automatic Load Control Relay would transfer to the emergency source of power upon interruption of the normal branch circuit occurring upstream of the relay.

References:

1. NEC 700.12 for sources of emergency power.
2. NEC 700.2 for the definition of an Automatic Load Control Relay. Note: the relay must be listed to UL 924 for use on emergency circuits.