**Electrical Technical Advisory Committee - Comments**

**7th Edition (2020) Florida Building Code, Building**

**E**-B-Ch. 27- Comment #1

**Bryan P. Holland, MCP, AStd.**

**Southern Region Field Representative**

**Revise Chapter 27 Electrical**

**SECTION 2701**

**GENERAL**

**2701.1 Scope.** The provisions of this chapter and NFPA 70 shall govern the design, construction, erection, and installation of the electrical components, appliances, equipment and systems used in buildings and structures covered by this code. The *Florida Fire Prevention Code* and NFPA 70 shall govern the use and maintenance of electrical components, appliances, equipment and systems. The *Florida Building Code, Existing Building* and NFPA 70 shall govern the alteration, repair, relocation, replacement, and addition of electrical components, appliances, equipment and systems.

**SECTION 2702**

**EMERGENCY AND STANDBY POWER SYSTEMS**

**[F] 2702.1 ~~Installation~~ General.** Emergency power systems and standby power systems shall comply with Sections 2702.1.1 through ~~2702.1.7~~ 2702.1.8.

**[F] 2702.1.1 Stationary generators.** Stationary emergency and standby power generators required by this code shall be listed in accordance with UL 2200.

**[F] ~~2702.1.8~~  2702.1.2 Fuel line piping protection.** Fuel lines supplying a generator set inside a high-rise building shall be separated from areas of the building other than the room the generator is located in by an approved method, or an assembly that has a fire-resistance rating of not less than 2 hours. Where the building is protected throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1, the required fire-resistance rating shall be reduced to 1 hour.

 **[F] ~~2702.1.2 Electrical~~ 2702.1.3 Installation.** Emergency power systems and standby power systems required by this code or the *Florida Fire Prevention Code* shall be installed in accordance with the *Florida Fire Prevention Code*, NFPA 70, NFPA 110 and NFPA 111.

**[F] ~~2702.1.3~~ 2702.1.4 Load transfer.** Emergency power systems shall automatically provide secondary power within 10 seconds after primary power is lost, unless specified otherwise in this code. Standby power systems shall automatically provide secondary power within 60 seconds after primary power is lost, unless specified otherwise in this code.

**[F] ~~2702.1.4~~ 2702.1.5 Load duration.** Emergency power systems and standby power systems shall be designed to provide the required power for a minimum duration of 2 hours without being refueled or recharged, unless specified otherwise in this code.

**[F] ~~2702.1.5~~ 2702.1.6 Uninterruptable power source.** An uninterrupted source of power shall be provided for equipment when required by the manufacturer’s instructions, the listing, this code or applicable referenced standards.

**[F] ~~2702.1.6~~ 2702.1.7 Interchangeability.** Emergency power systems shall be an acceptable alternative for installations that require standby power systems.

**[F] ~~2702.1.7~~ 2702.1.8 Group I-2 occupancies.** In Group I-2 occupancies~~,~~ located in flood hazard areas established in Section 1612.3, where new ~~or~~ essential electrical systems ~~generators~~ are installed, and where new essential electrical system generators are installed, the systems and generators shall be located and installed in accordance with ASCE 24. Where connections for hookup of temporary generators are provided, the connections shall be located at or above the elevation required in ASCE 24.

**[F] 2702.2 Where required.** Emergency and standby power systems shall be provided where required by Sections 2702.2.1 through ~~2702.2.16~~ 2702.2.18.

**~~[F] 2702.2.1 Emergency alarm systems.~~**

**~~2702.2.18~~ [F] 2702.2.1 Ambulatory care facilities**. Essential electrical systems for ambulatory care facilities shall comply with Section 422.6.

 **[F] 2702.2.2 Elevators and platform lifts.** Standby power shall be provided for elevators and platform lifts as

required in Sections 1009.4, 1009.5, 3003.1, 3007.8 and 3008.8.

**[F] 2702.2.3 Emergency responder radio coverage systems.** Standby power shall be provided for emergency

responder radio coverage systems required in Section 916 and the *Florida Fire Prevention Code*. The standby power supply shall be capable of operating the emergency responder radio coverage system for a duration of not less than 12 hours at 100 percent system operation capacity.

**[F] 2702.2.4 Emergency voice/alarm communication systems.** Emergency power shall be provided for emergency voice/alarm communication systems as required in Section 907.5.2.2.5. The system shall be capable of powering the required load for a duration of not less than 24 hours, as required in NFPA 72.

**[F] ~~2702.2.17~~ 2702.2.5 Exhaust systems.** Standby power shall be provided for common exhaust systems for domestic kitchens located in multistory structures as required in Section 505.3 of the *Florida Building Code, Mechanical*. Standby power shall be provided for common exhaust systems for clothes dryers located in multistory structures as required in Section 504.10 of the *Florida Building Code, Mechanical* and Section 614.10 of the *Florida Building Code, Fuel Gas*.

**[F] ~~2702.2.5~~ 2702.6 Exit signs.** Emergency power shall be provided for exit signs as required in Section 1013.6.3. The system shall be capable of powering the required load for a duration of not less than 90 minutes.

**[F] ~~2702.2.6~~ 2702.2.7 Gas detection systems.** Emergency or standby power shall be provided for *gas detection systems* in accordance with the *Florida Fire Prevention Code*.

**[F] ~~2702.2.7~~ 2702.2.8 Group I-2 occupancies.** Essential electrical systems for Group I-2 occupancies shall be in accordance with Section 407.10.

**[F] ~~2702.2.8~~ 2702.2.9 Group I-3 occupancies.** Emergency power shall be provided for power-operated doors and locks in Group I-3 occupancies as required in Section 408.4.2.

**[F] ~~2702.2.9~~ 2702.2.10 Hazardous materials.** Emergency or standby power shall be provided in occupancies with hazardous materials where required by the *Florida Fire Prevention Code*.

**[F] ~~2702.2.10~~ 2702.2.11 High-rise buildings.** Emergency and standby power shall be provided in high-rise buildings as required in Sections 403.4.8.

**[F] 2702.2.12 Means of egress illumination.** Emergency power shall be provided for means of egress illumination as required in Section 1008.3. The system shall be capable of powering the required load for a duration of not less than 90 minutes.

**[F] 2702.2.13 Membrane structures.** Standby power shall be provided for auxiliary inflation systems in permanent membrane structures as required in Section 3102.8.2. Standby power shall be provided for a duration of not less than 4 hours. Auxiliary inflation systems in temporary air-supported and air-inflated membrane structures shall be provided in accordance with the *Florida Fire Prevention Code.*

**[F] 2702.2.14 Pyrophoric materials.** Emergency power shall be provided for occupancies with silane gas in accordance with the *Florida Fire Prevention Code.*

**[F] 2702.2.15 Semiconductor fabrication facilities.** Emergency power shall be provided for semiconductor

fabrication facilities as required in Section 415.11.10.

**[F] 2702.2.16 Smoke control systems.** Standby power shall be provided for smoke control systems as required in Sections 404.7, 909.11, 909.20.6.2 and 909.21.5.

**[F] ~~2702.2.11~~ 2702.2.17 Special purpose horizontal sliding, accordion, or folding doors.** Standby power shall be provided for special purpose horizontal sliding, accordion or folding doors as required in Section 1010.1.4.3. The standby power supply shall have a capacity to operate not fewer than 50 closing cycles of the door.

**[F] ~~2702.2.17~~ 2702.2.18 Underground buildings.** Emergency and standby power shall be provided in underground buildings as required in Section 405.

**~~[F] 2702.3 Critical circuits.~~** ~~Cables used for survivability of required critical circuits shall be listed in accordance with UL 2196. Electrical circuit protective systems shall be installed in accordance with their listing requirements.~~

**[F] 2702.3~~.1~~ Critical circuits.** Required critical circuits shall be protected using one of the following methods:

1. Cables, used for survivability of required critical circuits, that are listed in accordance with UL 2196 and have a fire-resistance rating of not less than 1 hour.

2. Electrical circuit protective systems having a fire-resistance rating of not less than 1 hour. Electrical

circuit protective systems are installed in accordance with their listing requirements.

3. Construction having a fire-resistance rating of not less than 1 hour.

**[F] 2702.4 Maintenance.** Emergency and standby power systems shall be maintained and tested in accordance with the *Florida Fire Prevention Code*.

**REASON FOR COMMENT AND RECOMMENDED CHANGES:**

* The titles to 2702.1 and 2702.1.3 have been changed to align with the 2018 IBC.
* 2702.1.8 Group I-2 occupancies has been revised to accurately reflect G35-16 AMPC1 as approved by the Commission.
* “High-Rise” has been added to 2702.1.2 Fuel line piping protection to accurately reflect F79-16 AMPC2 as approved by the Commission.
* 2702.1.1 through 2702.1.8 sections have been realigned and renumbered to align with the 2018 IBC.
* 2702.2.1 Emergency alarm systems has been deleted to accurately reflect F75016 AMPC1 as approved by the Commission.
* The 2702.2.5 Exhaust systems referenced codes have been corrected to name the Florida Building Codes.
* 2702.2.1 through 2702.2.18 sections have been realigned and renumbered to align with the 2018 IBC.
* The original 2702.3 is deleted and replaced with the new 2702.3 to accurately reflect G117-15 as approved by the Commission.

**TAC Recommendation:**

**Commission Action:**

**E**-General- Comment #1

**From:** Neil Burning [mailto:nburning@ICCSafe.ORG]
**Sent:** Thursday, January 02, 2020 1:50 PM
**To:** Madani, Mo
**Cc:** Campbell, Thomas
**Subject:** Floridians for Safe Communities Coalition Comments regarding Draft 7th Edition of Florida Building Code

Mo,

I have attached our coalition’s comments regarding the draft 7th edition of the Florida Building Code.

Thank you,

**Neil Burning, CBO**

Vice President, Technical Resources

Government Relations (Florida)

International Code Council

(See attachment)

**TAC Recommendation:**

**Commission Action:**