

ARTICLE 700 – EMERGENCY SYSTEMS

03. Section 700.3(A) Commissioning witness test. The AHJ shall conduct or witness the commissioning of the complete system upon installation and periodically afterward. Equipment approval in the 2008 edition has been deleted and replaced with the above. Potential issues with the words “AHJ”; “conduct”; & “commissioning”.
Suggest to amend as follows: “Acceptance witness test. Upon completion of the installation, the Building Official and Fire Official shall be notified a minimum of 3 days in advance of a scheduled acceptance test.”
Recommend a change. Estimated fiscal savings of \$569,800 (.55/sqft. – “I” occupancy).
21. Section 700.8 Surge Protection. New section added in the 2014 edition requiring a SPD be installed in or on all emergency system switchgear, switchboards and panelboards.
Yes substantial change. Yes, an estimated fiscal impact, varies with size of load. 480/277Volt @ \$5,100 x 85 and 240Volt @ \$2,500 x 86 = 171 units @ \$648,500
34. Section 700.12 General Requirements. (E) Stored-Energy Power Supply Systems. (2) Fire Protection, Suppression, Ventilation, and Separation. New section added in the 2023 edition requiring various fire protection systems for all 5 energy power supply systems, specifically for Fuel Cell and ESS, referencing NFPA 855.
Yes substantial change. No estimated fiscal impact, IBC does not explicitly require them.
42. Section 700.19 Multiwire Branch Circuits. New section added in the 2014 edition which prohibits emergency lighting and power circuits being part of a multiwire branch circuit.
Yes substantial change. Yes an estimated fiscal impact.
47. Section 700.24 Directly Controlled Emergency Luminaires. New section added in the 2014 edition. Effects the use of LED dimming luminaires in design to use the same luminaire for both normal and emergency power.
Yes substantial change. Maybe estimated fiscal impact.
48. Section 700.25 Branch Circuit Emergency Lighting Transfer Switch. New section added in the 2017 edition. Lighting loads supplied by circuits less than 20 amps are not required to be mechanically held as required by Section 700.5(C).
Yes substantial change. Yes estimated fiscal savings.
49. Section 700.26 Automatic Load Control Relay. New section added in the 2014 edition. These devices are allowed to be used to automatically energize a lighting load when normal power is lost but cannot be used as transfer equipment.
Yes substantial change. Yes an estimated fiscal savings.
53. Section 700.32 Selective Coordination. (A) General. First paragraph reads the same in the 2023 & 2008 editions. However, second paragraph requires “selective coordination” be completed by a licensed professional engineer or other qualified person.
Yes substantial change. No fiscal impact, should be included in the cost of installation.
54. Section 700.32 Selective Coordination. (B) Replacements. New section added in the 2023 edition. Requires replacement OCPDs be reevaluated to ensure selective coordination is maintained.
Yes substantial change. Yes estimated fiscal impact. Licensed commercial electrician (\$100 per/hr. +\$70tripChrg.) x 85 panels = \$14,450.

55. Section 700.32 Selective Coordination. (C) Modifications. New section added in the 2023 edition. Requires any modifications to the emergency system(s) that “selective coordination” of the system(s) and the OCODs be reevaluated.
Yes substantial change. Yes estimated fiscal impact.
Licensed commercial electrician (\$100 per/hr. +\$70tripChrg.) x 85 panels = \$14,450.

ARTICLE 701 – LEGALLY REQUIRED STANDBY SYSTEMS

03. Section 701.3 Commissioning and Maintenance. (A) Commissioning Witness Test. The AHJ shall conduct or witness the commissioning of the complete system upon installation. Application of Other Articles in the 2008 edition has been deleted and replaced with the above. Also, equipment approval and test and maintenance in Sections 701.4 & 701.5 – 2008 edition are now in Section 701.3 – 2023 edition. Issue with words “AHJ”; “conduct”; & “commissioning.”
Suggest to amend as follows: “Acceptance witness test. Upon completion of the installation, the Building Official and Fire Official shall be notified a minimum of 3 days in advance of a scheduled acceptance test.”
Recommend a change. Estimated fiscal savings, see Section 700.3(A).
11. Section 701.5 Transfer Equipment. (D) Documentation. This is a new section added in the 2017 edition. Requires informational field marking on the exterior of the transfer equipment.
Yes substantial change. Yes a small estimated fiscal impact possible.
13. Section 701.6 Signals. (D) Ground Fault. This is a new section added in the 2011 edition. For legally required standby systems of more than 150 volts to ground and CPDs rated 1000amps or more.
Yes substantial change. Yes estimated fiscal impact.
16. Section 701.10 Wiring Legally Required Standby Systems. (B) Wiring. This is a new section added in the 2023 edition. Addresses legally required and non-legally required loads.
Yes substantial change. Yes estimated fiscal savings to the contractor.
20. Section 701.12 General Requirements. (C) Supply Duration. This subsection is “revised” in the 2023 edition where in the 2008 edition it addressed storage batteries. It now requires all “Emergency Power Supply Systems” have a 2-hour duration instead of the previous 1.5 hour duration.
Yes substantial change. Maybe estimated fiscal impact.
34. Section 701.12 General Requirements. (I) Battery-Equipped Emergency Luminaires, Used for Legally Required Standby Systems. The 2023 “revised” edition reads totally different from the 2008 edition. One, title change from “Unit Equipment” to “Battery-Equipped Emergency Luminaires”. Two, makes reference to Section 701.12(H) Microgrid Systems.
Maybe a Substantial change. Maybe an estimated fiscal impact.
36. Section 701.31 Ground-Fault Protection of Equipment. Reads basically the same in the 2023 & 2008 editions. However, prior to the 2017 edition Ground-fault Indication at the legally required standby source is required in accordance with Section 701.6(D).
Small substantial change. Small estimated fiscal impact.
37. Section 701.32 Selective Coordination. (A) General. Reads the same in the 2023 edition and in the 2008 edition. However, prior to the 2017 edition “selective coordination” shall be accomplished by a licensed professional engineer.
Maybe a substantial change. Small estimated fiscal impact, engineering cost.

38. Section 701.32 Selective Coordination. (B) Replacements. This is a new section added in the 2023 edition. Requires when OCPDs are replaced that they shall be reevaluated to ensure selective coordination is maintained.
Yes substantial change. Yes estimated fiscal impact, engineering cost.
39. Section 701.32 Selective Coordination. (C) Modifications. This is a new section added in the 2023 edition. When any modifications, additions, deletions to a required standby system is made, required selective coordination shall be reevaluated.
Yes substantial change. Yes estimated fiscal impact, engineering cost.

ARTICLE 702 – OPTIONAL STANDBY SYSTEMS

Optional provisions. No installation mandate. No estimated fiscal impact.

ARTICLE 705 – INTERCONNECTED ELECTRIC POWER PRODUCTION SOURCES

Optional provisions. No installation mandate. No estimated fiscal impact.

ARTICLE 706 – ENERGY STORAGE SYSTEMS

This Article is new, added in the 2017 edition. References Energy Storage Systems have a capacity greater than 3.6MJ (1kWH).

Optional provisions. No installation mandate. No estimated fiscal impact.

ARTICLE 708 – CRITICAL OPERATIONS POWER SYSTEMS (COPS)

06. Section 708.7 Cybersecurity. New section added in the 2023 edition. Requires security for those systems and their software operating on a network. Also requires assessment when configuration changes are made and max 5 year intervals.
Yes substantial change. Yes estimated fiscal impact.
13. Section 708.10(C)(2) Fire Protection for Feeders. Revised in the 2011 edition, requiring fire protection from 1 hour to 2 hour. Informational Notes reference UL Standards.
Yes substantial change. Maybe estimated fiscal impact.
20. Section 708.20 Sources of Power. (B) Fire Protection. Basically reads the same in the 2023 & 20008 editions. However, in the 2011 edition the fire rating in spaces with no fire protection has changed from 1 hour to 2 hour.
Yes substantial change. Maybe estimated fiscal impact, construction increase.
27. Section 708.21 Ventilation. New section added in the 2011 edition. Requiring adequate ventilation be provided and referencing NFPA 110 Standard.
Yes substantial change. Yes estimated fiscal impact, construction increase.
34. Section 708.24 Transfer Equipment. (D) Redundant Transfer Equipment. New section added in the 2020 edition, revised in the 2023 edition. Requires redundant transfer equipment if COPS is supplied by a single feeder.
Yes substantial change. Yes estimated fiscal impact.
36. Section 708.24 Transfer Equipment. (F) Documentation. New section added in the 2017 edition. Requiring the OCPDs and their settings be field marked on the exterior of transfer equipment.
Yes substantial change. Small estimated fiscal impact.

37. Section 708.30 Branch Circuits Supplied by COPS. New section added in the 2011 edition. Yes substantial change. Small estimated fiscal impact.
43. Section 708.54 Selective Coordination. (A) General. This section has been revised in the 2023 edition to include coordination with both the supply side and “load” side OCPDs. Yes substantial change. Yes estimated fiscal impact, engineering & equipment cost.
44. Section 708.54 Selective Coordination. (B) Replacements. New section added in the 2023 edition. Requires where OCPDs are replaced that they shall be reevaluated for selective coordination. Yes substantial change. Small estimated fiscal impact, engineering cost.
45. Section 708.54 Selective Coordination. (C) Modifications. New section added in the 2023 edition. Requires where modifications, additions, or deletions to COPSs occur, that the selective coordination with the OCPDs be reevaluated. Yes substantial change. Small estimated fiscal impact, engineering cost.

ARTICLE 710 – STAND-ALONE SYSTEMS

The 2008, 2011, & 2014 editions were covered in Articles 690, 692, & 694. The 2017 edition relocated all of the requirements into one new article 710 to address all of them. Yes substantial change. No fiscal impact.

ARTICLE 720 – CIRCUITS & EQUIPMENT OPERATING at LESS THAN 50 VOLTS.

The 2008 edition was removed in the 2023 edition. It was considered outdated. Yes substantial change. No estimated fiscal impact.

ARTICLE 722 CABLES for POWER-LIMITED CIRCUITS & FAULT-MANAGED POWER CIRCUITS

This is a new article for the 2023 edition. It combines cable requirements that were previously detailed throughout Articles 725, 760, & 770 into one Article. Also has a number of references to Article 300 which are found in the 2008 & 2023. Yes substantial change. No estimated fiscal impact.

ARTICLE 724 CLASS 1 POWER-LIMITED CIRCUITS & CLASS 1 POWER-LIMITED REMOTE-CONTROL & SIGNALING CIRCUITS

This is a new article for the 2023 edition. The sections addressing the above circuits were previously found throughout Article 725, 2008 edition. The sections basically read the same. Yes substantial change. No estimated fiscal impact.

ARTICLE 725 CLASS 2 and CLASS 3 POWER-LIMITED CIRCUITS

This article has been totally revised by relocating all Class 1 Power-Limited Circuits to new Article 724. The sections basically read the same. Yes substantial change. No fiscal impact.

ARTICLE 726 CLASS 4 FAULT-MANAGED POWER SYSTEMS

This article covers the installation of wiring systems and equipment referred to as Packet Energy Transfer (PET), Digital Electricity (DE), Pulsed Power, Smart Transfer Systems, or Simply Class 4 Circuits. Makes references to Article 722, 2023 edition which combined Articles 725, 760, & 770, 2008 edition into one article. Also makes reference to Articles 300, 500 thru 516 which can be found in both the 2008 & 2023 editions. These new technology systems are optional, not a required mandate. Yes substantial change. No estimated fiscal impact

ARTICLE 728 – FIRE-RESISTIVE CABLE SYSTEMS

This is a new article added in the 2014 edition. Covers the installation of fire-resistive cables and conductors and associated components used for survivability of critical circuits for fire alarm and other emergency systems such as fire pumps, smoke control, and elevators. The 2012 IBC Sections 508, 911 & 913 does not mandate fire-resistive cables for buildings with Fire Command Centers or Fire Pump Rooms typically found in high-rises, hospitals, detention centers, or F-1/S-1 occupancies over 500,000 sqft. However, the 2024 IBC & IFC Section 913.2.2 requires at least 1 hour rated cable. Optional provisions. No installation mandate. No estimated fiscal impact.

ARTICLE 750 – ENERGY MANAGEMENT SYSTEMS

This is a new article added in the 2014 edition. These systems refer to a computer-based control system that can be installed within a building to monitor and regulate a building's electrical, and mechanical equipment to provide sustainability purposes. They can also reduce the required size of an electrical service or reduce the size of a generator. Optional provisions. No installation mandate. No estimated fiscal impact.

ARTICLE 760 – FIRE ALARM SYSTEMS

10. Section 760.33 Supply-Side Overvoltage Protection. New section added in the 2023 edition. Requires a listed surge-protective device be installed. Also references Article 242 which is a new in the 2020 edition.
Yes substantial change. Yes estimated fiscal impact.

ARTICLE 770 – OPTICAL FIBER CABLES

05. Section 770.24 Mechanical Execution of Work. (B) Circuit Integrity (CI) Cable. New section added in the 2023 edition. The 2008 edition does not address supporting and securing intervals.
Yes a substantial change. Maybe estimated fiscal impact.
10. Section 770.47 Underground Optical Fiber Cables Entering Buildings. New section added in the 2014 edition.
(A) Underground Systems w/Electric Light, Power, Class 1, or NPLFA Circuit Conductors.
(B) Direct-Buried Cables and Raceways.
Yes substantial change. Small estimated fiscal impact.