Public Comment No. 1649-NFPA 70-2024 [Global Input]

This Global Public Comment is for CMP-9 to review the use of the terms "overcurrent", "overcurrent protective devices" and "overcurrent protection".

Additional Proposed Changes

File Name	Description	Approved
CMP-9_OCPD_TG-4_CMP-10.pdf	CMP-9_OCPD_TG-4 CMP-10	
All_CMP_Comments_Files_from_CMP-10_TG-4.pdf	All CMP Comments Files from CMP-10 TG-4	

Statement of Problem and Substantiation for Public Comment

This Public Comment is submitted on behalf of a Task Group formed under the purview of Code Making Panel 10 consisting of Randy Dollar, Thomas Domitrovich, Jason Doty, Diane Lynch, Alan Manche, Nathan Philips, David Williams, and Danish Zia. This Public Comment, along with other Public Comments, was developed with the goal of improving usability and accuracy on requirements associated with overcurrent protective devices.

The Task Group reviewed all instances of the term "overcurrent", "overcurrent protective devices" and "overcurrent protection" and provided recommended changes to align proposed and current defined terms.

For consistency, the task group chose to use the full defined term "overcurrent protective device" in the title of all sections or subdivisions and the acronym "OCPD" or "OCPDs" when used in the body of each code section.

The term overcurrent protection applies to the application of an overcurrent protective device OCPD, to protect conductors and equipment.

Two documents are attached: One for your specific code panel and the other is a comprehensive document illustrating all of the code-wide comments made by this task group.

The current term "Overcurrent Protective Device, Branch-Circuit" is being deleted and the new defined term "Overcurrent Protective Device (OCPD)" will be used instead.

The following are the proposed terms being submitted to CMP-10.

PC 1639 Overcurrent Protection.
Automatic interruption of an overcurrent

PC 1636 Overcurrent Protective Device (OCPD).
A device capable of providing protection over the full range of overcurrent between its rated current and its interrupting rating. (CMP-10)

Informational Note 1: Prior editions of NFPA 70 included the defined term "branch circuit overcurrent protective device" for overcurrent protective devices suitable for providing protection for service, feeder and branch circuits. This term has been revised to a generalized term of "overcurrent protective device" (OCPD). The specific requirements using this term may include modifiers (such as branch OCPD, feeder OCPD, service OCPD) to specify location or application of the OCPD, or to specify variations (such as supplementary OCPD).

Informational Note 2: See 240.7 for a list of overcurrent protective devices suitable for providing protection for service, feeder, branch circuits and equipment.

Related Item

• Global PI 4050 • PC 1636 • PC 1639

Submitter Information Verification

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Submittal Date: Sun Aug 25 21:47:19 EDT 2024
Committee: NEC-P09

CMP-10 TG-4 Review of Overcurrent Language for the Articles undeer the purview of CMP-9			
CMP	NEC Section (using First Draft of 2026 NEC)	Current Language	"New" Language
9	**Article 265**		
	265.18	Overcurrent Device	OCPD
	265.20.	Overcurrent Protection	Fine as is
	265.20.	Overcurrent protective devices	OCPDs
	265.20.	Overcurrent Devices	OCPDs
9	**Article 266**		
	266.1	Overcurrent Protection	Fine as is
	266.5	Overcurrent Protection	Fine as is
	266.5	Protected against overcurrent	shall be provided with overcurrent protection
	266.5	Overcurrent Device	OCPD
9	**Article 268**		
	268.2. (X2)	Overcurrent Protection	Fine as is
	268.70(F)	Overcurrent Devices	OCPDs
	268.82. (X4)	Overcurrent Protection	Fine as is
	Art. 268 Part VII	Overcurrent Protection	Fine as is
	268.90.	Overcurrent Device	OCPD
	268.90.	Overcurrent Devices	OCPDs
	268.91	Overcurrent Device	OCPD
	268.92	Overcurrent Devices	OCPDs
	268.93	Overcurrent Device	OCPD
9	**Article 450**		
	450.5 (previously 450.3). (X3)	overcurrent protection	Fine As Is
	450.5(A) and Table. (X3)	overcurrent protection	Fine As Is
	Table 450.5(A) Footnote 2. (X4)	overcurrent device	OCPD
	450.5(B)	overcurrent protection	Fine As Is
	Table 450.5(B) and Table (X2)	overcurrent protection	OCPD
	Table 450.5(B) Footnote 2. (X3)	overcurrent device	OCPD
	Table 450.5(B) Footnote 3	overcurrent protection	OCPD
	450.6(A) Title	overcurrent protection	Fine As Is
	450.6(A) (X3)	overcurrent device	OCPD
	450.6(A) Exception	overcurrent device	OCPD
	450.7(A)(1). (X2)	overcurrent protection	OCPD
	450.7(A)(2). Title	overcurrent protection	Fine As Is

	450.7(A)(2)	overcurrent sensing device	Fine As Is
		overcurrent protection	OCPD
		overcurrent device	OCPD
		branch or feeder protective devices	branch or feeder OCPDs
	450.7(A)(3)	overcurrent device	OCPD
	450.7(B)(2)	overcurrent protection	Fine As Is
	450.7(B)(2)(a)	overcurrent protective device	OCPD
	450.7(B)(2)(b)	overcurrent protection	OCPD
	450.7(B)(2)(b)	overcurrents	Fine As Is
	450.7(B)(2)(b) Exception	overcurrent device	OCPD
	450.8(A). (X2)	overcurrent protection	Fine As Is
	450.8(A)(1)	overcurrent protection	Fine As Is
	450.8(A)(2)	overcurrent protection	Fine As Is
	450.8(A)(3)	protective device	OCPD
	450.8(A)(4)(a)	protective device	OCPD
	450.8(B). Title	Overcurrent Protection	Fine As Is
	450.8(B)	overcurrent device	OCPD
	450.9	overcurrent protection	Fine As Is
	450.9	protective devices (2x)	OCPDs
	450.23(A)(1)(d) Informational Note	overcurrent protection	OCPD
	450.23(B)(1) Informational Note 2	overcurrent protection	OCPD
9	**Article 495**		
	495.62. Title	Overcurrent Protection	Fine As Is
	495.72	Overcurrent Relay	Fine As Is

CMP-10 TG-4 Review of Overcurrent Language for the Articles undeer the purview of CMP-1			
CMP	**NEC Section (using First Draft of 2026 NEC)**	**Current Language**	**"New" Language**
1	**Article 110**		
	110.10.	overcurrent protective devices	OCPDs
	110.10.	circuit protective devices	Fine as is
	110.26(C)(2)	overcurrent devices	OCPD
	110.26(C)(3)	overcurrent devices	OCPD
	110.52	Overcurrent protection	Fine as is
	110.52	Overcurrent	Motor-operated Equipment shall be provided with overcurrent protection
	110.52	Overcurrent	Transformers shall be provided with overcurrent protection

CMP-10 TG-4 Review of Overcurrent Language for the Articles undeer the purview of CMP-2			
CMP	**NEC Section (using First Draft of 2026 NEC)**	**Current Language**	**"New" Language**
2	**Article 100**		
	Branch Circuit (Branch-Circuit)	overcurrent device	overcurrent protective device (OCPD)
2	**Article 120**		
	120.5(E)	overcurrent device	OCPD
	120.7(B)	overcurrent protective device	OCPD
	120.87(3)	Overcurrent protection	Fine as is
2	**Article 210**		
	210.4(A)	branch-circuit overcurrent protective device, OCPD	Fine as is
	210.4(C)	branch-circuit OCPD	Fine as is
	210.11(B)	branch-circuit OCPD	Fine as is
	210.12(A)	branch-circuit OCPD (X-8)	Fine as is
	210.18	~~overcurrent device~~ OCPD (X-2)	Fine as is
	210.19(A)(1)EX	branch-circuit OCPD	Fine as is
	210.20.	Overcurrent protection	Fine as is
	210.20.	branch-circuit OCPD	Fine as is
	210.20(A)	branch-circuit OCPD	Fine as is
	210.20(C)	branch-circuit OCPD	Fine as is
	T-210.24	Overcurrent protection	Fine as is
2	**Annex D**		
	D3. (X2)	Overcurrent Protection	CMP-2 To review references to OCPD and the revised terms.
	D3a. (X8)	Branch-Circuit OCPD	CMP-2 to Review
	D3a.	Overcurrent Protection	CMP-2 to Review
	D3a. (X2)	Branch-Circuit OCPD	CMP-2 to Review

CMP-10 TG-4 Review of Overcurrent Language for the Articles undeer the purview of CMP-3			
CMP	**NEC Section (using First Draft of 2026 NEC)**	**Current Language**	**"New" Language**
3	**Article 100**		
	Fault Managed Power.	Overcurrent protection	Fine as is
	Fire Alarm Circuit	Overcurrent device	overcurrent protective device (OCPD)
3	**Article 300**		
	300.5-T	Overcurrent Protection	Fine as is
	300.17(I)	Overcurrent Device	OCPD
	300.28(C)(3). (X5)	Overcurrent Protection	Fine as is
3	**Article 590**		
	590.6(A)	Overcurrent Protection	Fine as is
	590.6(B)	be protected from Overcurrent	shall be provided with overcurrent protection
	590.9. Title	Overcurrent protective device	Fine as is
	590.9(A)	Overcurrent protective devices	OCPDs
	590.9(B) Title	Service Overcurrent protective devices	Fine as is
	590.9(B)	Overcurrent protective devices	OCPDs
3	**Article 721**		
	721.50(A)	Overcurrent	Fine as is
3	**Article 722**		
	722.1	Overcurrent Protection	Fine as is
3	**Article 724**	Class 1	
	724.40(B). (X3)	Overcurrent Devices	OCPDs
	724.40(B). (X2)	Overcurrent Device	OCPD
	724.40(B). (X2)	Overcurrent Protection	Fine as is
	724.43. (X4)	Overcurrent Protection	Fine as is
	724.45	Overcurrent Device	OCPD
	724.45. (X3)	Overcurrent Devices	OCPDs
	724.45(A)	Overcurrent Devices	OCPDs
	724.45(B)	Overcurrent Protection	Fine as is
	724.45(B)	Overcurrent Device	OCPD
	724.45(C). (X2)	Overcurrent protective devices	OCPDs
	724.45(D)	Overcurrent Protection	Fine as is
	724.45(E)	Overcurrent Protection	Fine as is
3	**Article 725**		
	725.1 In	Overcurrent Protection	Fine as is

	725.127	Overcurrent Device	OCPD
3	**Article 760**		
	760.41(B)	Overcurrent protective device	OCPD
	760.41(B)	Overcurrent protection devices	OCPDs
	760.43. (X3)	Overcurrent Protection	Fine as is
	760.45. Title	Overcurrent device	Overcurrent protective device
	760.45	Overcurrent protection devices	OCPDs
	760.45 Ex 1 & 2	Overcurrent Protection	Fine as is
	760.121(B)	Branch-Circuit Overcurrent protective device	OCPD
	760.121(B)	Overcurrent protection devices	OCPDs
	760.127	Overcurrent Protection	Fine as is
	760.127	Overcurrent Device	OCPD
3	**Article 794**		
	794.1	Overcurrent Protection	Fine as is

CMP-10 TG-4 Review of Overcurrent Language for the Articles undeer the purview of CMP-4			
CMP	**NEC Section (using First Draft of 2026 NEC)**	**Current Language**	**"New" Language**
4	**Article 690**		
	690.2	PV dc Overcurrent protective devices	PV dc OCPDs
	690.8	Overcurrent Device	OCPD and OCPDs
	690.9. Title	Overcurrent Protection	Fine as is
	690.9(A). (X2)	be protected from Overcurrent	shall be provided with overcurrent protection
	690.9(A)(1). Title	Overcurrent Protection	Fine as is
	690.9(A)(1).	Overcurrent protective devices	OCPDs
	690.9(A)(2). Title	Overcurrent Protection	Fine as is
	690.9(A) (2)	be protected from Overcurrent	shall be provided with overcurrent protection
	690.9(A) (2) In	Overcurrent protection	Fine as is
	690.9(A) (2) In	Overcurrent device	OCPD
	690.9(A)(3)	Overcurrent	Fine as is
	690.9(B)	shall be permitted to prevent overcurrent of conductors	Fine as is
	690.9(B)	Overcurrent device	OCPD and OCPDs
	690.9(C)	Overcurrent protective device and Devices	OCPD and OCPDs
	690.31(E)	Overcurrent protective devices	OCPDs
	690.45	Overcurrent protective device	OCPD
	690.45	Overcurrent Device	OCPD
4	**Article 692**		
	692.8. Title	Overcurrent Device	Overcurrent Protective Devices
	692.8	Overcurrent protective device	OCPDs
	692.9	Overcurrent Protection	Fine as is
	692.9	Overcurrent Devices	OCPDs
4	**Article 694**		
	694.7(D)	Overcurrent Device	OCPD
	694.12(B). Title	Overcurrent Device	Overcurrent Protective Device
	694.12(B)(2). Title	Overcurrent Devices	Overcurrent Protective Devices
	694.12(B)(2)	Overcurrent Devices	OCPDs
	694.15	Overcurrent Protection	Fine as is
	694.15	Overcurrent Devices	OCPDs
	694.15 In	Overcurrent Protection	Fine as is
	694.15(B)(1)	Overcurrent Protection	Fine as is
	694.15(C)	Overcurrent Devices	OCPDs

4	Article 705		
	705.11(C). Title	Overcurrent Protection	Fine as is
	705.11(C)	be protected from overcurrent	have overcurrent protection
	705.11(C)(1). (1) (2) (3)	Overcurrent protective device	OCPD
	705.11(C)(2)	Overcurrent protection devices	OCPDs
	705.12(A)(2). (X4)	Overcurrent Device	OCPD
	705.12(A)(3)	Overcurrent Devices	OCPDs
	705.12(B)	(Multiple) Overcurrent Device and (s)	OCPD. And OCPDs
	705.12(B)	(Warning labels) Overcurrent Device and (s)	Overcurrent Protective Device and Devices
	705.28(B)Ex.1	Overcurrent Devices	OCPDs
	705.28(B)Ex.3	Overcurrent Device	OCPD
	705.30. Title	Overcurrent Protection	Fine as is
	705.30(A). (X2)	Overcurrent Protection	Fine as is
	705.30(A)	Overcurrent Devices	OCPDs
	705.30.(C)	Overcurrent Devices	OCPDs
	705.30.(F)	Overcurrent Protection	Fine as is
	705.70.	Overcurrent Devices	OCPDs
	705.70.	Overcurrent Protection	Fine as is

CMP-10 TG-4 Review of Overcurrent Language for the Articles undeer the purview of CMP-5			
CMP	**NEC Section (using First Draft of 2026 NEC)**	**Current Language**	**"New" Language**
5	**Article 100**		
	Ground-Fault Current Path, Effective	overcurrent protective device	overcurrent protective device (OCPD)
	Ground-Fault Protection of Equipment	overcurrent device	overcurrent protective device (OCPD)
5	**Article 200**		
	200.10(E)	overcurrent device	OCPD
5	**Article 250**		
	250.4(A)(5). Title	Overcurrent protective Device	Fine as is
	250.4(A)(5)	Overcurrent Device	OCPD
	250.4(B)(4)	Overcurrent Devices	OCPDs
	250.30(A)(1)	Overcurrent Device	OCPD
	250.30(A)(1)	Overcurrent Devices	OCPDs
	250.32(B)(2). (X4)	Overcurrent Protection	Fine as is
	250.32(C)(2). (X4)	Overcurrent Protection	Fine as is
	250.35(B)	Overcurrent Protection	Fine as is
	250.36(D)	Overcurrent Device	Fine as is
	250.36(E)(1)	Overcurrent Device	OCPD
	250.102(B)(2)	Overcurrent Protection	Fine as is
	250.102(D). (X3)	Overcurrent Devices	OCPDs
	250.118(A)(5)	Overcurrent Devices	OCPDs
	250.118(A)(6)	Overcurrent Devices	OCPDs
	250.118(A)(7)	Overcurrent Devices	OCPDs
	250.122(C)	Overcurrent Device	OCPD
	250.122(F)(1). (X3)	Overcurrent protective device	OCPD
	250.122(G)	Overcurrent Device	OCPD
	250.142. (X2)	Overcurrent Device	OCPD
	250.148	Overcurrent Device	OCPD
	250.164	Overcurrent Device	OCPD
	250.166	Overcurrent Protection	Fine as is
	250.169	Overcurrent Devices	OCPD
5	**Article 270**		
	270.4(A)(5)	Overcurrent Device	OCPD
	270.4(B)(4)	Overcurrent Devices	OCPDs
	270.30(A)(1)	Overcurrent Devices	OCPDs

	270.32(B)(2). (X4)	Overcurrent Protection	Fine as is
	270.32(C)(2). (X4)	Overcurrent Protection	Fine as is
	270.35(B)	Overcurrent Protection	Fine as is
	270.35(B)	Overcurrent protective device	OCPD
	270.36(D)	Overcurrent Device	OCPD
	270.36(E)	Overcurrent Devices	OCPDs
	270.102(C)(2)	Overcurrent Protection	Fine as is
	270.102(D)	Overcurrent Device	OCPDs
	270.114(C)(3)	Overcurrent setting	CMP to review Language based on new terms
	270.118	Overcurrent Devices	OCPDs
	270.142	Overcurrent Devices	OCPDs
	270.148(B)	Overcurrent Device	OCPD
	270.164(B)	Overcurrent Device	OCPD
	270.166(A)	Overcurrent Protection	Fine as is
	270.169	Overcurrent Devices	OCPDs

CMP-10 TG-4 Review of Overcurrent Language for the Articles undeer the purview of CMP-6			
CMP	**NEC Section (using First Draft of 2026 NEC)**	**Current Language**	**"New" Language**
6	**Article 310**		
	310.10(G).	Overcurrent Protection	Fine as is
	310.15(A)	Overcurrent Protection	Fine as is
	310.16-T	Overcurrent Protection	Fine as is
	310.17-T	Overcurrent Protection	Fine as is
6	**Article 335**		
	335.90.	Overcurrent Protection	Fine as is
6	**Article 382**		
	382.4	Supplementary Overcurrent Protection	Supplementary Overcurrent Protective Device
6	**Article 400**		
	400.16	Overcurrent Protection	Fine as is
	400.16	protected against Overcurrent	shall be provided with overcurrent protection
6	**Article 402**		
	402.14 (X2)	Overcurrent Protection	Fine as is

CMP-10 TG-4 Review of Overcurrent Language for the Articles undeer the purview of CMP-7			
CMP	**NEC Section (using First Draft of 2026 NEC)**	**Current Language**	**"New" Language**
7	**Article 100**		
	Service Equipment, Mobile Home	overcurrent protective devices	overcurrent protective devices (OCPDs)
7	**Article 545**		
	545.24	Branch-circuit overcurrent protective device	Branch-circuit OCPD
	545.24(B) Title	Branch Circuit Overcurrent Protection Device	Overcurrent protective devices
	545.24(B)	a Branch Circuit Overcurrent Protective Device	an OCPD
7	**Article 547**		
	547.41(A)(6). (X2)	Overcurrent Protection	Fine as is
	547.41(B)	Overcurrent Protection	Fine as is
	547.42	Overcurrent Protection	Fine as is
7	**Article 550**		
	550.11(B). Title	Branch-Circuit protective equipment	Branch-Circuit Overcurrent Protection
	550.11(B)	Overcurrent Protection	Fine as is
	550.11(B)	Branch-Circuit Overcurrent Devices	OCPDs
	550.11(B)	Overcurrent protection size	OCPD rating
	550.15(E)	Branch-circuit overcurrent protective device	OCPD
	550.32	Overcurrent Protection	Fine as is
7	**Article 551**		
	551.31(A)	Overcurrent protective device	OCPD
	551.31(C)	Overcurrent protective device	OCPD
	551.31(D)	Overcurrent Protection	Fine as is
	551.42	Overcurrent Protection	Fine as is
	551.43. Title	Branch-Circuit protection	Branch-Circuit Overcurrent Protection
	551.43(A)	Branch Circuit Overcurrent Devices	Branch-Circuit OCPDs
	551.43(A)(3)	Overcurrent Protection	Fine as is
	551.45(C)	Overcurrent protective device	OCPD
	551.47(Q)	Overcurrent protective device	OCPD
	551.47(R)	Overcurrent Protection	Fine as is
	551.47(S)	Overcurrent Protection	Fine as is
	551.74	Overcurrent Protection	Fine as is
7	**Article 552**		
	552.10.(E) Title	Overcurrent Protection	Fine as is
	552.10(E)(1)	Overcurrent protective devices	OCPDs

	T-552.10(E)(1)	Overcurrent Protection	Fine as is
	552.10(E)(4). (X2)	Overcurrent protective device	OCPD
	552.42(A)	Branch Circuit Overcurrent Devices	OCPDs
	552.42(A)	Overcurrent Protection	Fine as is
	552.45(C)	Overcurrent protective device	OCPD
	552.46(A) IN	Overcurrent Protection	Fine as is
	552.47(P)	Overcurrent protective device	OCPD
	552.47(Q)	Overcurrent Protection	Fine as is
7	**Article 555**		
	555.53	Overcurrent protective device	OCPD
7	**Article 675**		
	675.6	Branch Circuit Overcurrent Protective Device	OCPD
	675.7	Branch Circuit Overcurrent Protective Devices	OCPDs
	675.8	Overcurrent Protection	Fine as is
7	**Article 682**		
	682.15(B)	Feeder Overcurrent protective device	Feeder OCPD

CMP-10 TG-4 Review of Overcurrent Language for the Articles undeer the purview of CMP-8			
CMP	**NEC Section (using First Draft of 2026 NEC)**	**Current Language**	**"New" Language**
8	**Article 312**		
	312.11. Title	Overcurrent Devices	Overcurrent Protective Device
	312.11	Overcurrent Devices	OCPDs
	312.11(A). (X3)	Overcurrent Device	OCPDs
	312.11(B)	Overcurrent Devices	OCPDs
	312.11(B)(1)	Overcurrent Device	OCPD
8	**Article 366**		
	366.12	Overcurrent Devices	OCPDs
	366.56(D)	Overcurrent Protection	Fine as is
8	**Article 368**		
	368.17(A). Title	Overcurrent Protection	Fine as is
	368.17	Overcurrent Protection	Fine as is
	368.17(A)	Protected against Overcurrent	shall be provided with overcurrent protection
	368.17(B). (X2)	Overcurrent Protection	Fine as is
	368.17(B)	Overcurrent Device	OCPD
	368.17(C)	Overcurrent Devices	OCPDs
	368.17(C)Ex.2	Branch-Circuit Overcurrent Device	Branch-Circuit OCPD
	368.17(C)Ex.3	Overcurrent Device	OCPD
	368.17(C)Ex.4	Branch-Circuit overcurrent plug-in device	CMP to review Language based on new terms
	368.17(D). Title	Overcurrent Protection	Fine as is
	368.17(D)	Protected against Overcurrent	shall be provided with overcurrent protection
8	**Article 370**		
	370.23. Title	Overcurrent Protection	Fine as is
	370.23	Protected against Overcurrent	shall be provided with overcurrent protection
8	**Article 371**		
	371.17. Title	Overcurrent Protection	Fine as is
	371.17	Overcurrent Protection	Fine as is
	371.17 (A)-(C). Titles	Overcurrent Protection	Fine as is
	371.17(A)-(C)	Protected against Overcurrent	shall be provided with overcurrent protection
	371.17(D)	Protected against Overcurrent	shall be provided with overcurrent protection
	371.17(F)	Overcurrent	shall be provided with overcurrent protection
	371.17(G)	Overcurrent Protection	
	371.17(G)Ex	Overcurrent Protection	Fine as is
	371.17(G)Ex	Overcurrent Device	OCPD

CMP-10 TG-4 Review of Overcurrent Language for the Articles undeer the purview of CMP-9			
CMP	NEC Section (using First Draft of 2026 NEC)	Current Language	"New" Language
9	**Article 265**		
	265.18	Overcurrent Device	OCPD
	265.20.	Overcurrent Protection	Fine as is
	265.20.	Overcurrent protective devices	OCPDs
	265.20.	Overcurrent Devices	OCPDs
9	**Article 266**		
	266.1	Overcurrent Protection	Fine as is
	266.5	Overcurrent Protection	Fine as is
	266.5	Protected against overcurrent	shall be provided with overcurrent protection
	266.5	Overcurrent Device	OCPD
9	**Article 268**		
	268.2. (X2)	Overcurrent Protection	Fine as is
	268.70(F)	Overcurrent Devices	OCPDs
	268.82. (X4)	Overcurrent Protection	Fine as is
	Art. 268 Part VII	Overcurrent Protection	Fine as is
	268.90.	Overcurrent Device	OCPD
	268.90.	Overcurrent Devices	OCPDs
	268.91	Overcurrent Device	OCPD
	268.92	Overcurrent Devices	OCPDs
	268.93	Overcurrent Device	OCPD
9	**Article 450**		
	450.5 (previously 450.3). (X3)	overcurrent protection	Fine As Is
	450.5(A) and Table. (X3)	overcurrent protection	Fine As Is
	Table 450.5(A) Footnote 2. (X4)	overcurrent device	OCPD
	450.5(B)	overcurrent protection	Fine As Is
	Table 450.5(B) and Table (X2)	overcurrent protection	OCPD
	Table 450.5(B) Footnote 2. (X3)	overcurrent device	OCPD
	Table 450.5(B) Footnote 3	overcurrent protection	OCPD
	450.6(A) Title	overcurrent protection	Fine As Is
	450.6(A) (X3)	overcurrent device	OCPD
	450.6(A) Exception	overcurrent device	OCPD
	450.7(A)(1). (X2)	overcurrent protection	OCPD
	450.7(A)(2). Title	overcurrent protection	Fine As Is

	450.7(A)(2)	overcurrent sensing device	Fine As Is
		overcurrent protection	OCPD
		overcurrent device	OCPD
		branch or feeder protective devices	branch or feeder OCPDs
	450.7(A)(3)	overcurrent device	OCPD
	450.7(B)(2)	overcurrent protection	Fine As Is
	450.7(B)(2)(a)	overcurrent protective device	OCPD
	450.7(B)(2)(b)	overcurrent protection	OCPD
	450.7(B)(2)(b)	overcurrents	Fine As Is
	450.7(B)(2)(b) Exception	overcurrent device	OCPD
	450.8(A). (X2)	overcurrent protection	Fine As Is
	450.8(A)(1)	overcurrent protection	Fine As Is
	450.8(A)(2)	overcurrent protection	Fine As Is
	450.8(A)(3)	protective device	OCPD
	450.8(A)(4)(a)	protective device	OCPD
	450.8(B). Title	Overcurrent Protection	Fine As Is
	450.8(B)	overcurrent device	OCPD
	450.9	overcurrent protection	Fine As Is
	450.9	protective devices (2x)	OCPDs
	450.23(A)(1)(d) Informational Note	overcurrent protection	OCPD
	450.23(B)(1) Informational Note 2	overcurrent protection	OCPD
9	**Article 495**		
	495.62. Title	Overcurrent Protection	Fine As Is
	495.72	Overcurrent Relay	Fine As Is

CMP-10 TG-4 Review of Overcurrent Language for the Articles undeer the purview of CMP-10			
CMP	**NEC Section (using First Draft of 2026 NEC)**	**Current Language**	**"New" Language**
10	**Article 100**		
	Circuit Breaker	Overcurrent	Fine as is
	Coordination, Selective. (Selective Coordination)	Overcurrent condition	Fine as is
	Coordination, Selective. (Selective Coordination)	overcurrent protective devices	overcurrent protective devices (OCPDs)
	Coordination, Selective. (Selective Coordination)	overcurrents	Fine as is
	Coordination, Selective. (Selective Coordination)	overcurrent protective device	overcurrent protective device (OCPD)
	Current Limiting (as applied to overcurrent protection devices)	overcurrent protection devices	overcurrent protective devices (OCPDs)
	Feeder	final branch-circuit overcurrent protective device	overcurrent protective device (OCPD)
	Fuse	overcurrent protective device	overcurrent protective device (OCPD)
	Fuse	overcurrent	Fine as is
	Fuse, Electronically Actuated	overcurrent protective device	overcurrent protective device (OCPD)
	Fuse, Electronically Actuated	overcurrent	Fine as is
	Overcurrent	Overcurrent protection	Fine as is
	Overcurrent Protective Device, Branch-Circuit	Revise with the term Overcurrent Protective Device. (OCPD)	
	Overcurrent **Protective** Device, Supplementary (need to Revise term with acronym)	overcurrent protective device	overcurrent protective device (OCPD)
	Panelboard	overcurrent devices	overcurrent protective devices (OCPDs)
	Surge-Protective Device (SPD). (X2)	overcurrent device. (X2)	overcurrent protective device (OCPD)
	Switchboard	overcurrent	overcurrent protective devices (OCPDs)
	Tap Conductor	Overcurrent protection	Fine as is
10	**Article 215**		
	215.1	Overcurrent protection	Fine as is
	215.4(A)(1)Ex.1	overcurrent devices protecting the feeders	feeder OCPD
	215.4(A)(1)Ex.3	overcurrent device	OCPD
	215.5 Title	Overcurrent protection	Fine as is
	215.5	Feeders shall be protected against overcurrent	Feeders shall be provided with overcurrent protection in accordance with Article 240, Parts I
	215.5	overcurrent device	OCPD
	215.5Ex	overcurrent device protecting the feeders	feeder OCPDs
	215.5Ex	overcurrent device	OCPD

	215.18(B)	branch circuit overcurrent devices	OCPDs
10	**Article 225**		
	225.40. Title	Overcurrent protective devices	Fine as is
	225.40.	feeder overcurrent device (x2)	feeder OCPD
	225.40.	branch circuit overcurrent devices	Branch circuit OCPDs
	225.42(B)	branch circuit overcurrent devices	OCPDs
10	**Article 230**		
	230.7 Ex.2	Overcurrent protection	Fine as is
	230.42(A)(1)	overcurrent device (X3)	OCPD
	230.82(6)	Overcurrent protection	Fine as is
	230.82(7)	Overcurrent protection	Fine as is
	230.82(8)	Overcurrent protection	Fine as is
	230.82(9)	Overcurrent protection	Fine as is
	230.82(10)	Overcurrent protection	Fine as is
	230 Part VII	Overcurrent protection	Fine as is
	230.90(A)	overcurrent device	OCPD
	230.90(A)Ex.3	overcurrent device	OCPD
	230.90(B)	overcurrent device	OCPD
	230.91	overcurrent device (X2)	OCPD
	230.92	overcurrent device (X4)	OCPDs and OCPD
	230.93	overcurrent device	OCPD
	230.94	overcurrent device (X3)	OCPD
	230.94	Overcurrent protection (X2)	Fine as is
	230.95(A)	overcurrent device	OCPD
	230.95(B)	overcurrent device	OCPD
10	**Article 240**		
	240	Overcurrent Protection	Fine as is
	240.1 (X3)	Overcurrent protection	Fine as is
	240.2	branch-circuit Overcurrent protective devices	~~branch-circuit~~ Overcurrent protective devices
	240.4. Title	Protection of Conductors	Overcurrent Protection of Conductors
	240.4	Protected against overcurrent	shall be provided with overcurrent protection in accordance with
	240.4(B). Title	Overcurrent devices	Overcurrent protective Devices
	240.4(B)	Overcurrent device	OCPD
	240.4(B)	Overcurrent protective device	OCPD

	240.4(C). Title	Overcurrent devices	Overcurrent protective Devices
	240.4(C). (X2)	Overcurrent device.	OCPD
	240.4(D)	Overcurrent Protection	Fine as is
	240.4(D)(1)	Overcurrent protection	Fine as is
	240.4(D)(1)(2)		(a) OCPDs in accordance with 240.7 shall be marked for use with 18 AWG copper conductor (b) Delete (c) change to (b)
	240.4(D)(2)	Overcurrent protection	Fine as is
	240.4(D)(2)(2)		(a) OCPDs in accordance with 240.7 shall be marked for use with 16 AWG copper conductor (b) Delete (c) change to (b)
	240.4(D)(3)	Overcurrent protection	Fine as is
	240.4(D)(3)(2)		~~(a) Fuses and circuit breakers in accordance with 240.7 marked for use with 14 AWG copper-clad aluminum conductor~~ ~~(b) Delete~~
	240.4(D)(3)(2)		OCPDs in accordance with 240.7 shall be marked for use with 14 AWG copper-clad aluminum conductor
	240.4(E)	Protected against overcurrent	shall be permitted to have overcurrent protection in accordance with the following
	240.4(F)	Overcurrent protection	Fine as is
	240.4(F)	Overcurrent protective device	OCPD
	240.4(G). (X2)	Overcurrent protection	Fine as is
	240.4(H)	Protected against overcurrent	shall be provided with overcurrent protection in accordance with
	240.5	Protected against overcurrent	shall be provided with overcurrent protection in accordance with
	240.5(A)	Overcurrent device	OCPD
	240.5(A)	Protected against overcurrent	Fixture wires shall be provided with overcurrent protection in accordance with
	240.5(A)	Supplementary overcurrent protection	Fine as is
	240.5(B) Title	Branch-circuit overcurrent device.	Branch-Circuit Overcurrent protective Devices

	240.9	Protection of conductors against overcurrent	Fine as is
	240.10. Title	Supplementary Overcurrent protection	Fine as is
	240.10.	Supplementary overcurrent protection	Fine as is
	240.10.	Branch-Circuit overcurrent devices	OCPDs
	240.10.	Supplementary overcurrent devices	Supplementary OCPDs
	240.11. (X2)	Feeder overcurrent protective devices.	Feeder OCPDs
	240.11. (X2)	Service overcurrent protective device.	Service OCPD
	240.15(A). Title	Overcurrent device	Overcurrent protective device required
	240.15(A)	Overcurrent device	OCPD
	240.15(A)	Overcurrent trip. Overcurrent relay	Fine as is
	240.15(B) Title	Overcurrent device	Circuit breaker as Overcurrent protective device
	240.16	Branch circuit overcurrent protective devices	OCPDs
	240.21	Overcurrent Protection	Fine as is
	240.21	overcurrent protective device	OCPD
	240.21 (A)	Overcurrent Protection	Fine as is
	240.21 (B)	Overcurrent Protection	Fine as is
	240.21 (B) (1) (1) (b)	Overcurrent device(s)	OCPDs
	240.21 (B) (1) (1) (b)	overcurrent protective device	OCPD
	240.21 (B)(1) (1) (4)	Overcurrent device	OCPD
	240.21 (B) (1)(1) (4) In	Overcurrent Protection	Fine as is
	240.21 (B) (2) (1)	Overcurrent device	OCPD
	240.21 (B) (2) (2)	Overcurrent devices	OCPDs
	240.21 (B) (3) (1)	Overcurrent device	OCPD
	240.21 (B) (3) (2)	Overcurrent device	OCPD
	240.21 (B) (4) (3)	Overcurrent device	OCPD
	240.21 (B) (4) (4)	Overcurrent device	OCPD
	240.21 (B) (4) (4)	Overcurrent devices	OCPDs
	240.21 (B) (5) (2)	Overcurrent device	OCPD
	240.21 (B) (5) (2)	Overcurrent devices	OCPDs
	240.21 (B) (5) (3)	Overcurrent device	OCPD
	240.21 (C). (X2)	Overcurrent Protection	Fine As Is
	240.21 (C) (1). Title	Title change	Overcurrent Protective Device
	240.21 (C) (1)	"…protected by overcurrent protection…"	Fine As Is
	240.21 (C) (1)	Overcurrent protective device	OCPD
	240.21 (C) (2) (1) (b)	Overcurrent device(s)	OCPDs

	240.21 (C) (2) (1) (b)	Overcurrent device	OCPD
	240.21 (C) (2) (4)	Overcurrent device	OCPD
	240.21 (C) (2) (4)	Overcurrent device	OCPD
	240.21 (C) (2) (4)	Overcurrent protection	Fine as is
	240.21 (C) (3) (2)	Overcurrent devices	OCPDs
	240.21 (C) (3) (3)	Overcurrent devices	OCPDs
	240.21 (C) (4) (2)	Overcurrent device	OCPD
	240.21 (C) (4) (2)	Overcurrent devices	OCPDs
	240.21 (C) (4) (3)	Overcurrent device	OCPD
	240.21 (C) (5)	Overcurrent Protection	Fine As Is
	240.21 (C) (6) (1)	Overcurrent device	OCPD
	240.21 (D)	Overcurrent devices	OCPDs
	240.21 (E)	.shall be permitted to be protected against overcurrent.	"..shall be permitted to have overcurrent protection.."
	240.21 (F)	.shall be permitted to be protected against overcurrent.	"..shall be permitted to have overcurrent protection.."
	240.21 (H). (X2)	Overcurrent Protection	Fine As Is
	240.22. (X2)	Overcurrent device	OCPD
	240.24(A)	Supplementary overcurrent protection	Fine as is
	240.24(A). (X4)	Overcurrent protective devices	OCPDs
	240.24(B)	Overcurrent devices	OCPDs
	240.24(B)(1). Title	Feeder overcurrent protective devices	Feeder OCPDs
	240.24(B)(1)	Service overcurrent protective devices	Service OCPDs
	240.24(B)(2). TITLE	Branch-circuit overcurrent protective device	Fine as is
	240.24(B)(2).	Branch-circuit overcurrent protective device	Branch-Circuit OCPD
	240.24(C)	Overcurrent protective devices	OCPDs
	240.24(D)	Overcurrent protective devices	OCPDs
	240.24(E)	Overcurrent protective devices	OCPDs
	240.24(E)	Supplementary overcurrent protection	Fine as is
	240.24(E) (X2)	Overcurrent protective devices	OCPDs
	240.24(F)	Overcurrent protective devices	OCPDs
	240.30(A)	Overcurrent devices	OCPDs
	240.32	Overcurrent devices	OCPDs
	240.33	Overcurrent devices	OCPDs
	240.86	Overcurrent device	OCPD
	240.86(B)	Overcurrent device	OCPD
	240.86(C)	Overcurrent device	OCPD

	240.87	Overcurrent device	OCPD
	240.90.	Overcurrent protection	Fine as is
	240.91(B). (X2)	Overcurrent device	OCPD
	240.92	Overcurrent device	OCPD
	240.92(A)	~~be protected~~	shall be provided with overcurrent protection
	240.92(C)	Overcurrent protection	Fine as is
	240.92(C)(1)(1)	Overcurrent device	OCPD
	240.92(C)(1)(2)	protective devices	Fine as is
	240.92(C)(1)(3)	Overcurrent devices	OCPDs
	240.92(C)(2)(1)	Overcurrent device	OCPD
	240.92(C)(2)(2) (X3)	Overcurrent devices	OCPDs
	240.92(C)(2)(3)	Overcurrent relaying	Fine as is
	240.92(C)(2)(4)	Overcurrent device	OCPD
	240.92(D)	Overcurrent protection	Fine as is
	240.92(D)(2). (X3)	Overcurrent devices	OCPDs
	240.92(D)(4)	Overcurrent device	OCPD
	240.92(E)	Overcurrent device	OCPD
	240.92(E)	Overcurrent protection	Fine as is
10	**Article 242**		
	242.14(ABC)	Overcurrent device	OCPD
	242.16	Overcurrent protection	Branch-circuit OCPD
10	**Article 404**		
	404.5	Overcurrent Devices	OCPDs
10	**Article 408**		
	408.4(A)	Overcurrent device	OCPD
	408.6 (X2)	Overcurrent protection devices	OCPDs
	408.36. Title	Overcurrent protection	Fine as is
	408.36. (X2)	Overcurrent protective device	OCPD
	408.36. (X3)	Overcurrent devices	OCPDs
	408.36(A)	Overcurrent protection	Fine as is
	408.36(B)	Overcurrent protection	Fine as is
	408.36(C)	Overcurrent device	OCPD
	408.36(D)	Overcurrent protection devices	OCPDs
	408.52	Overcurrent devices	OCPDs
	408.54	Overcurrent devices	OCPDs

	408.55	Overcurrent devices	OCPDs

CMP-10 TG-4 Review of Overcurrent Language for the Articles undeer the purview of CMP-11			
CMP	**NEC Section (using First Draft of 2026 NEC)**	**Current Language**	**"New" Language**
11	**Article 409**		
	409.21. TITLE	Overcurrent Protection	Fine as is
	409.21(A)	Overcurrent Protection	Fine as is
	409.21(B)	Protection	Overcurrent protection
	409.21(B)	overcurrent protective device	OCPD
	409.21(B)	Overcurrent Protection	Fine as is
	409.21(C). (X2)	overcurrent protective device	OCPD
	409.104	Overcurrent Devices	OCPDs
11	**Article 430**		
	430.10(A) In.	Overcurrent Device	OCPD
	430.22(G)(1)(1)	Overcurrent Protection	Fine as is
	430.22(G)(1)(2)	Overcurrent Protection	Fine as is
	430.22(G)(2)(1)	Overcurrent Protection	Fine as is
	430.22(G)(2)(2)	Overcurrent Protection	Fine as is
	430.28	Branc-Circuit protective device	OCPD
	430.28	Overcurrent Device	OCPD
	430.51	Overcurrent	Fine as is
	430.53(C)(5)	Overcurrent Protection	Fine as is
	430.55	Overcurrent Protection	Fine as is
	430.61	Overcurrents	Fine as is
	430.62(A)Ex.2	Feeder Overcurrent protective device	Feeder OCDP
	430.62(A)Ex.2	Overcurrent Protection	Fine as is
	430.62(B)	Feeder Overcurrent protective device	Feeder OCDP
	430.63Ex.	Feeder Overcurrent device	Feeder OCDP
	430.63Ex.	Overcurrent Protection	Fine as is
	430.72. Title	Overcurrent Protection	Fine as is
	430.72(A)	protected against overcurrent	shall be provided with overcurrent protection in accordance with
	430.72(A)	Branch-circuit overcurrent protective devices	OCPDs
	430.72(A)	protected against overcurrent	shall be provided with overcurrent protection in accordance with
	430.72(B). (X2)	Overcurrent Protection	Fine as is
	430.72(B)	Overcurrent Device	OCPD

	430.72(B)	Overcurrent Protection	Fine as is
	430.72(B)(1) (X3)	Overcurrent Protection	Fine as is
	430.72(B)(2) Title	Branch-circuit overcurrent protective device	Fine as is
	430.72(B)(2) (X2)	protective devices	OCPDs
	430.72(C)Ex.	Overcurrent Protection	Fine as is
	430.72(C)(3)	Overcurrent Devices	OCPDs
	430.72(C)(4)	Overcurrent Device	OCPD
	430.72(C)(5)	Protection	Overcurrent protection
	430.87	Overcurrent Device	OCPD
	430.94. (X2)	Overcurrent Protection	Fine as is
	430.94. (X3)	Overcurrent protective device	OCPD
	430.109(A)(7)	Overcurrent protection	Fine as is
	430.109(B)	Branch-circuit overcurrent device	branch-circuit OCPD
	430.111(A). (X2)	Overcurrent Device	Fine as is
	430.112 Ex.	Branch circuit protective device	Suggest CMP to Review
	430.206. Title	Overcurrent protection	Fine as is
	430.206(B)(2)	considered to have Overcurrent	Overload
	430.206(C)	Fault-Current protection	Suggest CMP to Review
	430.207	Overcurrent (overload)Relays	Fine as is
	430.207	Overcurrent Relays	Fine as is
11	**Article 440**		
	440.21	Overcurrent	Fine as is
	440.21	Overcurrent Protection	Fine as is
	440.22(B)(2)Ex.	Overcurrent device	OCPD
	440.52(B)	Overcurrent	shall be provided with overcurrent protection
11	**Article 460**		
	460.9. Title	Overcurrent Protection	Fine As Is
	460.9. (X3)	Overcurrent Device	OCPD
	460.25	Overcurrent Protection	Fine As Is
	460.28(B)	Overcurrent Device	OCPD

CMP-10 TG-4 Review of Overcurrent Language for the Articles undeer the purview of CMP-12			
CMP	**NEC Section (using First Draft of 2026 NEC)**	**Current Language**	**"New" Language**
12	**Article 610**		
	610. Part V	Overcurrent Protection	Fine as is
	610.41(A)	Overcurrent Devices	OCPDs
	610.43(A)(1)	Branch Circuit Overcurrent Device	OCPD
	610.53 Title	Overcurrent Protection	Fine as is
	610.53	be protected from Overcurrent	shall be provided with overcurrent protection
	610.53	Overcurrent Devices	OCPDs
	610.53(B)	Branch Circuit Overcurrent Devices	OCPDs
12	**Article 620**		
	620.12(A)(4)	Overcurrent Protection	Fine as is
	620.22(A)(2) Title	Overcurrent protective device	Fine as is
	620.22(A)(2)	Overcurrent Device protecting	branch-circuit OCPD
	620.22(A)(2)	Overcurrent Device	OCPD
	620.22(B)	Overcurrent Device protecting	branch-circuit OCPD
	620.22(B)	Overcurrent Device	OCPD
	620.25 Title	Overcurrent Devices	Overcurrent Protective Devices
	620.25. (X2)	Overcurrent Devices	OCPDs
	620.53	Overcurrent protective device	OCPD
	620.54	Overcurrent protective device	OCPD
	620.55	Overcurrent protective device	OCPD
	Art 620 Part VII	Overcurrent Protection	Fine as is
	620.61	Overcurrent Protection	Fine as is
	620.61(A). (X2)	be protected against Overcurrent	shall be provided with overcurrent protection
	620.62(A)	Overcurrent protective devices, (OCPD)	OCPDs
	620.62(B)	OCPDs	Fine as is
	620.62(C)	OCPDs. And. Overcurrent Devices	Fine as is. And. OCPDs
	620.62	Overcurrent protective devices	OCPDs
	620.65. (X3)	Overcurrent Devices	OCPDs
12	**Article 625**		
	625.60(C). (X4)	Overcurrent Protection	Fine as is
12	**Article 627**		
	627.41	Overcurrent Protection	Fine as is
	627.41(A)	Overcurrent Protection	Fine as is

	627.41(B)	Overcurrent Devices	OCPDs
12	**Article 630**		
	630.12	Overcurrent Protection	Fine as is
	630.12	Overcurrent Device	OCPD
	630.12(A). (X2)	Overcurrent Protection	Fine as is
	630.12(A). (X5)	Overcurrent Device	OCPD
	630.13	Overcurrent Protection	Fine as is
	630.32	Overcurrent Protection	Fine as is
	630.32	Overcurrent Device	OCPD
12	**Article 640**		
	640.9(C)	Overcurrent Protection	Fine as is
	640.22	Overcurrent protection devices	OCPDs
	640.22	Overcurrent Devices	OCPDs
	640.43	Overcurrent protection devices	OCPDs
12	**Article 645**		
	645.27	Overcurrent protective devices, (OCPD)	OCPDs
	645.27	Overcurrent protective devices	OCPDs
12	**Article 646**		
	646.7. (X11)	Overcurrent Protection	Fine as is
12	**Article 647**		
	647.5	Overcurrent Protection	Fine as is
12	**Article 650**		
	650.9	Overcurrent Protection	Fine as is
	650.9	Overcurrent Device	OCPD
12	**Article 660**		
	660.7	Overcurrent Protection	Fine as is
	660.7(A)	Overcurrent protective devices	OCPDs
	660.7(B)	Overcurrent Devices	OCPDs
	660.7(B)	Overcurrent Protection	Fine as is
	660.9	Overcurrent Devices	OCPDs
12	**Article 665**		
	665.24	Overcurrent Protection	Fine as is
12	**Article 668**		
	668.4(C)(2)	Overcurrent Protection	Fine as is
	668.21	Overcurrent Protection	Fine as is

	668.21	Overcurrent Device	OCPD
12	**Article 669**		
	669.9	Overcurrent Protection	Fine as is
	669.9	be protected from Overcurrent	shall be provided with overcurrent protection
12	**Article 670**		
	670.1	Overcurrent Protection	Fine as is
	670.4(B). (X3)	Overcurrent Protection	Fine as is
	670.5. (X4)	Overcurrent Protection	Fine as is
	670.5(C). (X2)	Overcurrent protective device	OCPD
12	**Article 685**		
	685.10.	Overcurrent Devices	OCPDs

CMP-10 TG-4 Review of Overcurrent Language for the Articles undeer the purview of CMP-13			
CMP	**NEC Section (using First Draft of 2026 NEC)**	**Current Language**	**"New" Language**
13	**Article 100**		
	Emerg.Power Supply Systems (EPSS)	overcurrent protection devices	overcurrent protective devices (OCPDs)
	Transfer-Switch B-C Emerg. Ltg.	branch-circuit overcurrent device	branch-circuit overcurrent protective device (OCPD)
13	**Article 130**		
	130.80(C)	overcurrent devices	OCPDs
	130.80(C)	branch-circuit overcurrent device	OCPD
13	**Article 445**		
	445.11	Overcurrent protective Relay	Fine as is
	445.12. Title	Overcurrent Protection	Fine as is
	445.12(A)	Overcurrent protective means	Overcurrent protection means
	445.12(B)	Overcurrent Protection	Fine as is
	445.12(B) (X2)	Overcurrent Device	OCPD
	445.12(C)	Overcurrent Device	OCPD
	445.12(D)	Overcurrent Devices	OCPDs
	445.12(E). (X3)	Overcurrent Devices	OCPDs
	445.13(A). (X2)	Overcurrent Protection	Fine as is
	445.13(B). Title	Overcurrent protection	Fine as is
	445.13(B).	Overcurrent protective device	OCPD
	445.13(B)	Overcurrent Relay	Fine as is
13	**Article 455**		
	455.7	Overcurrent Protection	Fine As Is
	455.7	protected from Overcurrent	shall be provided with overcurrent protection in accordance with
	455.7(A)	Overcurrent Protection	Fine As Is
	455.7(B)	Overcurrent Protection	Fine As Is
13	**Article 480**		
	480.4(B) IN.2	Overcurrent Protection	Fine As Is
	480.6. (X2)	Overcurrent Protection	Fine As Is
	480.7	Overcurrent Device	OCPD
13	**Article 695**		
	695.4(C)	Overcurrent protective devices	OCPDs
	695.4(H). Title	Overcurrent Device Selection	Overcurrent Protective Device Selection
	695.4(H)	Overcurrent Devices	OCPDs

	695.5	Overcurrent Device	OCPD
	695.5	Overcurrent protective devices	OCPDs
	695.5	Overcurrent Protection	Fine as is
	695.6	Overcurrent protective devices	OCPDs
	695.6	Overcurrent Devices	OCPD
	695.6	Overcurrent Protection	Fine as is
	695.7(A)(2)	Overcurrent Devices	OCPDs
	695.7	Overcurrent Protection	Fine as is
13	**Article 700**		
	700.4(F)(8)	Overcurrent protective devices, (OCPD)	OCPDs
	700.6(E)	Overcurrent protective device	OCPD
	700.10(B). (X6)	Overcurrent Protection	Fine as is
	700.10(B)(6)(b)(ii)	Overcurrent protective device	OCPD
	700.10(B)(6)(e)	Overcurrent protective devices	OCPDs
	Art. 700 Part VI	Overcurrent Protection	Fine as is
	700.30.	Branch-circuit overcurrent devices	OCPDs
	700.32(A)	Overcurrent protective devices, (OCPDs)	OCPDs
	700.32(A) In	Overcurrent Protection	Fine as is
	700.32(C)	Overcurrent Devices	OCPDs
13	**Article 701**		
	701.6(C)	Overcurrent protective device	OCPD
	701.10(B)(1). (X5)	Overcurrent Protection	Fine as is
	701.10(B)(1)	Overcurrent protective device	OCPD
	Art. 701. Part IV	Overcurrent Protection	OCPDs
	701.30.	Branch-Circuit Overcurrent devices	Branch-Circuit OCPDs
	701.32(A). (X2)	Overcurrent protective devices, OCPDs	OCPDs
	701.32(B). (X3)	OCPDs	Fine as is
	701.32(C). (X2)	OCPDs	Fine as is
	701.32(C)Ex	Overcurrent Devices	OCPDs
	701.32(C) In 2	OCPD and OCPDs	Fine as is
13	**Article 702**		
	702.5(C)	Overcurrent protective device	OCPD
13	**Article 706**		
	706.15(E)(1)	Overcurrent Device	OCPD
	706.30(B)	Overcurrent Devices	OCPDs

	706.31 Title	Overcurrent Protection	Fine as is
	706.31(A)	shall be protected at the source from overcurrent.	shall be provided with overcurrent protection at the source
	706.31(A)	shall be protected from overcurrent.	shall be provided with overcurrent protection
	706.31(A) In	Overcurrent Device	OCPD
	706.31(B). Title	Overcurrent Device	Overcurrent Protective Device
	706.31(B)	Overcurrent protective devices	OCPDs
	706.31(B)	Overcurrent devices	OCPDs
	706.31(C)	Overcurrent protective devices	OCPDs
	706.31(E)	Overcurrent Protection	Fine as is
	706.33(B)(2)	Overcurrent Device	OCPD
13	**Article 708**		
	708.10(B)	Overcurrent Protection	Fine as is
	708.24(E)	Overcurrent protective device	OCPD
	Art. 708. Part IV	Overcurrent Protection	Fine as is
	708.50.	Feeder- and Branch-circuit overcurrent devices	Feeder- and Branch-circuit OCPDs
	708.52(B)	Overcurrent Devices	OCPDs
	708.54(A)	Overcurrent protective devices, (OCPD)	OCPDs
	708.54(A). (B). (C)	OCPDs	Fine as is
	708.54	Overcurrent Devices	OCPDs

CMP-10 TG-4 Review of Overcurrent Language for the Articles undeer the purview of CMP-14			
CMP	**NEC Section (using First Draft of 2026 NEC)**	**Current Language**	**"New" Language**
14	**Article 500**		
	500.30(A)(2)	Branch Circuit Overcurrent Protection	OCPD
	500.30.	Overcurrent Protection	Fine as is
14	**Article 501**		
	501.105(B)(5)	Overcurrent Protection	Fine as is
	501.125(B)(2)	Motor Overcurrent	Fine as is
14	**Article 502**		
	502.120(A)	Overcurrent Devices	OCPDs
	502.120(B)(1)	Overcurrent Devices	OCPDs
	502.125	Motor Overcurrent	Fine as is
14	**Article 505**		
	505.30(A)(2)	Branch Circuit Overcurrent Protection	OCPD
	505.30.	Overcurrent Protection	Fine as is
14	**Article 506**		
	506.30.	Branch Circuit Overcurrent Protection	OCPD
	506.30.	Overcurrent Protection	Fine as is

CMP-10 TG-4 Review of Overcurrent Language for the Articles undeer the purview of CMP-15			
CMP	**NEC Section (using First Draft of 2026 NEC)**	**Current Language**	**"New" Language**
15	**Article 100**		
	Bull Switch	Overcurrent protection	Fine as is
15	**Article 517**		
	517.17(B)	Overcurrent protective devices	OCPDs
	517.31(G). (X5)	Overcurrent protective devices	OCPDs
	517.31(G)	Overcurrent	Fine as is
	517.33((C). (X5)	Overcurrent protective devices	OCPDs
	517.42(F)	Overcurrent protective devices	OCPDs
	517.42(F)	Overcurrent	Fine as is
	517.73	Overcurrent Protection	Fine as is
	517.73(A)	Overcurrent protective devices	OCPDs
	517.73(B)	Overcurrent protective devices	OCPDs
	517.73(B)	Overcurrent Protection	Fine as is
	517.74(B)	Overcurrent protective devices	OCPDs
	517.160(A)(2)	Overcurrent Protection	Fine as is
	517.160(A)(2)	Overcurrent protective device	OCPD
	517.160(A)(2)	be protected against Overcurrent	be provided with overcurrent protection
	517.160(A)(3)	Overcurrent protective devices	OCPDs
	517.160(B)(1)	Overcurrent protective devices	OCPDs
15	**Article 518**		
	518.7(A)(1)	Overcurrent Protection	Fine as is
	518.17(A)(1) and (2)	Overcurrent Devices	OCPDs
15	**Article 520**		
	520.9	Branch Circuit Overcurrent Device	OCPD
	520.21	Overcurrent protective devices	OCPDs
	520.25. (X3)	Overcurrent Protection	Fine as is
	520.26	Overcurrent protective devices	OCPD
	520.26. (X3)	Overcurrent Protection	Fine as is
	520.27. (X2)	Overcurrent Device	OCPD
	520.44-T	Overcurrent Devices	OCPD
	520.50(C)	Overcurrent Protection	Fine as is
	520.50.	Branch-circuit overcurrent protective device	OCPDs
	520.52	Overcurrent Protection	Fine as is

	520.53(A)	Overcurrent protective devices	OCPDs
	520.53(D)	Overcurrent Protection	Fine as is
	520.54	Overcurrent Devices	OCPDs
	520.54(D)	Overcurrent Device	OCPD
	520.54(D)(1) and (2)	Overcurrent protective devices	OCPD
	520.54(E)	Overcurrent protective device	OCPD
	520.54(E). (X4)	Overcurrent protection device	OCPD
	520.54(E)	Overcurrent Devices	OCPDs
	520.54(K)	Overcurrent Device	OCPD
	520.68	Overcurrent protective device	OCPD
	520.68(3)	Overcurrent Device	OCPD
	520.68(4)	Overcurrent protective device	OCPD
	520.68(6)	Overcurrent Devices	OCPDs
	520.68(C)	Overcurrent Protection	Fine as is
15	**Article 522**		
	522.10(A)(2). (X3)	Overcurrent Devices	OCPDs
	522.10(A)(2	Overcurrent protective device	OCPD
	522.10(B). (X4)	Overcurrent Devices	OCPDs
	522.23. (X3)	Overcurrent Protection	Fine as is
15	**Article 525**		
	525.12	Overcurrent Device	OCPD
	525.23(B)	Overcurrent Device	OCPD
	525.23(C). (X2)	Overcurrent Protection	Fine as is
15	**Article 530**		
	530.9(A)	Branch-circuit overcurrent device	Branch-circuit OCPD
	530.10(C)	Overcurrent Protection	Fine as is
	530.23 and (A)	Overcurrent Protection	Fine as is
	530.23(B)	Overcurrent protective devices	OCPDs
	530.23(D)	Overcurrent Protection	Fine as is
	530.42	Overcurrent Protection	Fine as is
15	**Article 540**		
	540.11(B)	Overcurrent Devices	OCPDs

CMP-10 TG-4 Review of Overcurrent Language for the Articles undeer the purview of CMP-16			
CMP	**NEC Section (using First Draft of 2026 NEC)**	**Current Language**	**"New" Language**
16	**Article 830**		
	830.15. (X4)	Overcurrent Protection	Fine as is

CMP-10 TG-4 Review of Overcurrent Language for the Articles undeer the purview of CMP-17			
CMP	**NEC Section (using First Draft of 2026 NEC)**	**Current Language**	**"New" Language**
17	**Article 422**		
	422.5(C)	Branch-circuit overcurrent protective device	Branch-Circuit OCPD
	422.11. Title	Overcurrent Protection	Fine as is
	422.11	protected against overcurrent	shall be provided with overcurrent protection
	422.11(A)	Overcurrent Protection	Fine as is
	422.11(A)	Branch-circuit overcurrent protective device	Branch-Circuit OCPD
	422.11(B)	Overcurrent Protection	OCPDs
	422.11(C)	Overcurrent Protection	OCPDs
	422.11(D)	Overcurrent protective devices	OCPDs
	422.11(E)	Overcurrent Protection	Fine as is
	422.11(E)(1)	Overcurrent Protection	Fine as is
	422.11(E)(2)	Overcurrent Protection	Fine as is
	422.11(E)(3)	Overcurrent Protection	OCPD
	422.11(E)(3)	Overcurrent Device	OCPD
	422.11(F)(1)	Supplementary Overcurrent Protective Devices	Supplementary OCPDs
	422.11(F)(1)	Overcurrent Protective Devices	OCPDs
	422.11(G)	Overcurrent Protective Devices	OCPDs
	422.13	Overcurrent Protection	Fine as is
	422.31(A)	Branch-circuit overcurrent protective device	Branch-Circuit OCPD
	422.60(A)	Overcurrent Protection	Fine as is
	422.62(B)(1). (X2)	Overcurrent protective device	OCPD
17	**Article 424**		
	424.19	Supplementary Overcurrent Protective Devices	Supplementary OCPDs
	424.19(A)	Supplementary Overcurrent Protection	Fine as is
	424.19(A)	Supplementary Overcurrent Protection	Fine as is
	424.19(A)	Supplementary Overcurrent Protective Device(s)	Supplementary OCPDs
	424.19(B)	Supplementary Overcurrent Protection	Fine as is
	424.22	Overcurrent Protection	Fine as is
	424.22(A)	Overcurrent Protection	Fine as is
	424.22(A)	protected against overcurrent	"..shall be permitted to have overcurrent protection.."
	424.22(B)	Supplementary Overcurrent Protective Device	Supplementary OCPD
	424.22(C). Title	Overcurrent Protective Devices	Fine as is
	424.22(C)	Supplementary Overcurrent Protective Devices	Supplementary OCPDs

	424.22(C)	Overcurrent Protection	Fine as is
	424.22(C)	Supplementary Overcurrent Protection	Fine as is
	424.22(D) (X2)	Supplementary Overcurrent Protective Devices	Supplementary OCPDs
	424.22(E). (X3)	Supplementary Overcurrent Protective Devices	Supplementary OCPDs
	424.72	Overcurrent Protection	Fine as is
	424.72(A)	Overcurrent protective device	OCPD
	424.72(B)	Overcurrent protective device	OCPD
	424.72(C). Title	Supplementary Overcurrent Protective Devices	Fine as is
	424.72(C)	Supplementary Overcurrent Protective Devices	Supplementary OCPDs
	424.72(C)	Overcurrent Protection	Fine as is
	424.72(D). Title	Supplementary Overcurrent Protective Devices	Fine as is
	424.72(D).	Supplementary Overcurrent Protective Devices	Supplementary OCPDs
	424.72(D)	Overcurrent protective device	OCPD
	424.72(E)	Supplementary Overcurrent Protective Devices. (X3)	Supplementary OCPDs
	424.82	Overcurrent protective devices	OCPDs
17	**Article 425**		
	425.19	Supplementary Overcurrent Protective Devices	Supplementary OCPDs
	425.19(A). (X2)	Supplementary Overcurrent Protection	Fine as is
	425.19(A)	Supplementary Overcurrent Protective Devices	Supplementary OCPDs
	425.19(B)	Supplementary Overcurrent Protection	Fine as is
	425.22. Title	Overcurrent Protection	Fine as is
	425.22(A)	Overcurrent Protection	Fine as is
	425.22(A)	protected against overcurrent	"..shall be permitted to have overcurrent protection.."
	425.22(B)	Supplementary Overcurrent Protective Device	Supplementary OCPD
	425.22(C). Title	Overcurrent Protective Devices	Fine as is
	425.22(C)	Supplementary Overcurrent Protective Devices	Supplementary OCPDs
	425.22(C). (X2)	Supplementary Overcurrent Protection	Fine as is
	425.22(D). Title	Supplementary Overcurrent Protective Devices	Fine as is
	425.22(D). (X2)	Supplementary Overcurrent Protective Devices	Supplementary OCPDs
	425.22(E) (X3)	Supplementary Overcurrent Protective Devices	Supplementary OCPDs
	425.72	Overcurrent Protection	Fine as is
	425.72(A)	Overcurrent protective device	OCPD
	425.72(B)	Overcurrent protective device	OCPD
	425.72(C). Title	Supplementary Overcurrent Protective Devices	Fine as is
	425.72(C)	Supplementary Overcurrent Protective Devices	Supplementary OCPDs

	425.72(C)	Overcurrent Protection	Fine as is
	425.72(D)	Overcurrent protection	Fine as is
	425.72(E). Title	Supplementary Overcurrent Protective Devices	Fine as is
	425.72(E)	Supplementary Overcurrent Protective Devices	Supplementary OCPDs
	425.72(E)	Overcurrent Protective Devices	OCPD
	425.72(F). (X3)	Supplementary Overcurrent Protective Devices	Supplementary OCPDs
	425.82	Overcurrent protective devices	OCPDs
17	**Article 427**		
	427.57	Overcurrent Protection	Fine as is
	427.57	considered protected against Overcurrent	considered to have overcurrent protection
17	**Article 680**		
	680.10.(A)& (B)(2)	Overcurrent protective devices	OCPDs
	680.23(F)(2)	Overcurrent Protection	Fine as is

CMP-10 TG-4 Review of Overcurrent Language for the Articles undeer the purview of CMP-18			
CMP	**NEC Section (using First Draft of 2026 NEC)**	**Current Language**	**"New" Language**
18	**Article 393**		
	393.45. Title	Overcurrent ..... Protection	Overcurrent Protection ....
	393.45(A)	Overcurrent Protection	Fine as is
18	**Article 406**		
	406.46(F)	Overcurrent Device	OCPD
18	**Article 410**		
	410.59(A)	Branch-circuit overcurrent devices	Branch-Circuit OCPD
	410.153	Overcurrent Protection	Fine as is
18	**Article 600**		
	600.41	Overcurrent	CMP to Review

Public Comment No. 1034-NFPA 70-2024 [Definition: Transformer.]

Transformer.

Equipment, either single-phase or polyphase, that uses electromagnetic induction to convert current and voltage in a primary circuit into current and voltage in a secondary circuit, or in the case of an autotransformer, achieves the same purpose using a single winding with taps . (CMP-9)

Statement of Problem and Substantiation for Public Comment

this is a copy of PI 462. The issue is that the current definition of Transformer specifically states that a transformer has a primary and secondary winding. Whereas regular transformers can be interconnected so they act like an autoformer, they still have two windings. Pure autoformers, on the other hand, only have a single winding. According to the current definition of a transformer, autoformers are not transformers, as they do not fit the definition. Figure 450.4(A), in the 2023 Code, shows a single winding Autotransformer (autoformer). The Committee Statement for rejecting PI 462 is that "the existing definition works for both standard transformers and autotransformers." It does not. Autoformers do not have secondary windings. As another example, Variacs (trade name for variable transformer) are autoformers. They only have a single winding.

Related Item

• 462-NFPA 70-2023

Submitter Information Verification

Submitter Full Name: Eric Stromberg
Organization: Los Alamos National Laboratory
Affiliation: Self
Street Address:
City:
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Zip:

Submittal Date: Sun Aug 11 20:34:26 EDT 2024
Committee: NEC-P09

Public Comment No. 1056-NFPA 70-2024 [Definition: Voltage, High. (High Voltage)]

Voltage,

~~High~~

Medium . (

~~High~~

Medium Voltage)

A potential difference over 1000 volts ac, 1500 volts dc, nominal

and less than 52,000 volts ac/dc, nominal (CMP-9)

~~Informational Note: Circuits and equipment rated at potential differences of more than 1000 volts ac, 1500 volts dc, and up to 52 kV, are also commonly referred to as medium voltage.~~

Voltage, High. (High Voltage)

A potential difference over 52,000 volts ac/dc, nominal. (CMP-9)

Statement of Problem and Substantiation for Public Comment

The informational note presently given under the definition of High Voltage is indicative that there is a class of voltages that are understood in industry as Medium Voltage. The NEC is in need of a definition that explicitly calls out Medium Voltage and sets it apart from High Voltage systems. Drawing this line more clearly will also allow for a more explicit delineation of the scope of the NEC to put a limit on the voltage levels that will be covered by the installation requirements therein.

Related Item

• FR-8537

Submitter Information Verification

Submitter Full Name: Samuel Fopma
Organization: Interstates
Affiliation: IEC
Street Address:
City:
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Zip:

Submittal Date: Tue Aug 13 09:51:43 EDT 2024
Committee: NEC-P09

Public Comment No. 1324-NFPA 70-2024 [Section No. 245.2]

245.2 Listing Requirements.

Overcurrent protection shall be listed.

Exception: Overcurrent protection that is integral to a listed assembly shall not required to be individually listed.

(A) The listing requirement for overcurrent protection systems rated over 1000 volts ac, 1500 volts dc, nominal, and not over 15,000 volts shall be ~~listed. The listing requirements shall be~~ effective January 1, 2029.

~~Exception: Overcurrent protection that is integral to a listed assembly shall not required to be individually listed~~

(B) The listing requirement for overcurrent protection systems rated over 15,000 volts shall be effective January 1, 2032 .

Statement of Problem and Substantiation for Public Comment

Challenges of the approval of unlisted electrical equipment, less than and greater than 15 KV, are identical. Hazards associated with equipment that does not comply with applicable standards are the same regardless of the voltage level. The technical committee and industry appear to have concerns that a January 1, 2029 effective date does not provide enough time to list (certify) all equipment above 1,000 volts ac. This comment acknowledges timing is a realistic concern and proposes an additional three years to complete the listing (certification) process for voltages above 15 KV without pretending that the hazards are somehow different above 15 KV. It simply provides additional time to complete the process. The comment also introduces a concept that realistic time frames should be included for significant changes. If 3 or 6 years is not a realistic time frame, industry should select the proper time frame for change rather than simply rejecting a concept that has merit.

Related Item

• FR8357

Submitter Information Verification

Submitter Full Name: Donald Cook
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City:
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Submittal Date: Tue Aug 20 15:42:47 EDT 2024
Committee: NEC-P09

Public Comment No. 1333-NFPA 70-2024 [Section No. 245.2]

245.2 Listing Requirements.

(A) Overcurrent Protective Devices Rated Not Over 15,000 Volts

Overcurrent protection for systems rated not over ~~1000~~ 15,000 volts ac ~~, 1500 volts~~ or dc, nominal, shall be listed. The listing requirements shall be effective January 1, 2029.

Exception: Overcurrent protection that is integral to a listed assembly shall not be required to be individually listed.

(B) Overcurrent Protective Devices Rated Over 15,000 volts

Overcurrent protection for systems rated over 15,000 volts ac or dc, nominal, ~~and~~ but not over ~~15~~ 52 ,000 volts ac or dc, nominal, shall be listed. ~~The~~ This listing ~~requirements~~ requirement shall be effective January 1, ~~2029~~ 2032 .

Exception: Overcurrent protection that is integral to a listed assembly shall not be required to be individually listed.

Statement of Problem and Substantiation for Public Comment

This Public Comment is submitted on behalf of a Correlating Committee Medium Voltage Task Group consisting of Robert Osborne (Chair), Paul Barnhart, Lou Grahor, Donny Cook, Scott Higgins, Mike Querry, Roger McDaniel, Dave Burns, Rod Belisle, Kevin Rogers, Tony Ricciuti, Paul Knapp, Paul Sullivan, George Smith, Eric Simmon, Kevin Arnold, Larry Wildermuth, and Kyle Krueger.

Requiring listing of overcurrent devices assists AHJ's and other interested parties in approving equipment in accordance with 110.2 & 110.3. CMP 9 limited the requirement to equipment rated no more than 15 kV, acknowledging that there may be limited options of listed products above 15 kV. The same concerns raised for equipment rated no more than 15 kV would exist for equipment rated above 15 kV. As noted in Article 100, "medium voltage" is generally circuits and equipment rated up to 52 kV. Listings do exist for equipment rated above 15 kV, but availability is more limited. Taking a stepped approach would allow time for manufacturers ensure certified equipment is available in the future, with a rollout of 2029 for equipment rated up to 15 kV, and another 3 year window of time for higher voltage equipment. There may be justification in the future to continue this expansion, but addressing the voltages commonly associated with "medium voltage" is a logical step in the right direction.

Related Item

• FR 8357

Submitter Information Verification

Submitter Full Name: Robert Osborne
Organization: UL Solutions
Street Address:
City:
State:
Zip:

Submittal Date: Tue Aug 20 16:50:43 EDT 2024
Committee: NEC-P09

Public Comment No. 117-NFPA 70-2024 [Section No. 245.3]

245.3 Reconditioned Equipment.

(A) Permitted to be Installed.

The following reconditioned equipment shall be permitted to be installed:

(1) Medium- and high-voltage circuit breakers

(2) Electromechanical protective relays and current transformers

(B) Not Permitted to be Installed.

Reconditioned medium- and high-voltage fuseholders and medium- and high-voltage nonrenewable fuses shall not be installed.

Additional Proposed Changes

File Name	Description	Approved
CN_4.pdf	NEC_CCN4	

Statement of Problem and Substantiation for Public Comment

NOTE: The following CC Note No. 4 appeared in the First Draft Report on First Revision No. 8365.

The Correlating Committee directs that CMP 9 review FR 8365 and consider revising the text to align with recommended wording regarding reconditioning. The recommended wording for the first sentence in (A) would be “The installation of the following reconditioned equipment shall be permitted:”. The recommended wording for(B) would be “The installation of the following reconditioned equipment shall not be permitted:

(1) Medium- and high-voltage fuseholders
(2) Medium- and high-voltage nonrenewable fuses”

Related Item

• First Revision No. 8365

Submitter Information Verification

Submitter Full Name: CC Notes
Organization: NEC Correlating Committee
Street Address:
City:
State:
Zip:
Submittal Date: Thu Jul 18 17:16:45 EDT 2024
Committee: NEC-P09

Correlating Committee Note No. 4-NFPA 70-2024 [Section No. 245.3]

Submitter Information Verification

Committee: NEC-AAC
Submittal Date: Tue May 07 09:38:30 EDT 2024

Committee Statement

Committee Statement: The Correlating Committee directs that CMP 9 review FR 8365 and consider revising the text to align with recommended wording regarding reconditioning. The recommended wording for the first sentence in (A) would be “The installation of the following reconditioned equipment shall be permitted:”. The recommended wording for (B) would be “The installation of the following reconditioned equipment shall not be permitted:

(1) Medium- and high-voltage fuseholders

(2) Medium- and high-voltage nonrenewable fuses”

First Revision No. 8365-NFPA 70-2024 [Section No. 245.2]

Ballot Results

✔ **This item has passed ballot**

12 Eligible Voters
1 Not Returned
11 Affirmative All
0 Affirmative with Comments
0 Negative with Comments
0 Abstention

Not Returned

McDaniel, Roger D.

Affirmative All

Ayer, Lawrence S.
Bowmer, Trevor N.
Hickman, Palmer L.
Holub, Richard A.
Jackson, Peter D.
Kendall, David H.
Manche, Alan

Osborne, Robert D.

Porter, Christine T.

Schultheis, Timothy James

Williams, David A.

Public Comment No. 118-NFPA 70-2024 [Section No. 245.21(C)]

(C) Distribution Cutouts and Fuse Links — Expulsion Type.

(1) Installation.

Cutouts shall be located so that they may be readily and safely operated and re-fused, and so that the exhaust of the fuses does not endanger persons. Distribution cutouts shall not be used indoors, underground, or in metal enclosures.

(2) Operation.

Where fused cutouts are not suitable to interrupt circuits manually while carrying load, the installation shall comply with 245.21(C)(2)(a) through 245.21(C)(2)(c).

(a) An approved means shall be installed to interrupt the load.

Exception: A permanently installed additional means to interrupt the load is not required where documented switching procedures are provided for qualified personnel to remove the load before operating the fused cutouts. The use of load-removal tools shall be permitted.

(b) A conspicuous sign shall be placed at the fused cutouts identifying that they shall not be operated under load.

(c) Access to any permanently installed operating means of the fused cutouts by unqualified persons shall be prohibited by lock or location.

(3) Interrupting Rating.

The interrupting rating of distribution cutouts shall not be less than the available fault current the cutout is required to interrupt, including contributions from all connected sources of energy.

(4) Voltage Rating.

The maximum voltage rating of cutouts shall not be less than the maximum circuit voltage.

(5) Identification.

Distribution cutouts shall have on their body, door, or fuse tube a permanent and legible nameplate or identification showing the manufacturer's type or designation, continuous current rating, maximum voltage rating, and interrupting rating.

(6) Fuse Links.

Fuse links shall have permanent and legible markings showing current rating and type.

(7) Structure Mounted Outdoors.

The height of cutouts mounted outdoors on structures shall provide safe clearance between lowest energized parts (open or closed position) and standing surfaces, in accordance with 110.34(E).

Additional Proposed Changes

File Name	Description	Approved
CN_5.pdf	NEC_CCN5	

Statement of Problem and Substantiation for Public Comment

NOTE: The following CC Note No. 5 appeared in the First Draft Report.

The Correlating Committee directs CMP 9 to review 245.21(C)(1) and the use of the term “safely”, and review 245.21(C)(7) and the use of the phrase “may be” and the term “safe”, as these terms are possibly unenforceable and vague and do not comply with the NEC Style Manual 3.2.1. Additionally, the Correlating Committee directs CMP 9 to reconsider the use of the parenthetical phrase (open or closed position) in 245.21(C)(7)as parenthetical expressions create confusion and misunderstanding and shall be avoided. Refer to NEC Style Manual Section 3.5.1.1.

Related Item

• Correlating Committee Note No. 5

Submitter Information Verification

Submitter Full Name: CC Notes
Organization: NEC Correlating Committee
Street Address:
City:
State:
Zip:
Submittal Date: Thu Jul 18 17:19:30 EDT 2024
Committee: NEC-P09

Correlating Committee Note No. 5-NFPA 70-2024 [Section No. 245.21(C)(7)]

Submitter Information Verification

Committee: NEC-AAC
Submittal Date: Tue May 07 09:40:46 EDT 2024

Committee Statement

Committee Statement: The Correlating Committee directs CMP 9 to review 245.21(C)(1) and the use of the term “safely”, and review 245.21(C)(7) and the use of the phrase “may be” and the term “safe”, as these terms are possibly unenforceable and vague and do not comply with the NEC Style Manual 3.2.1. Additionally, the Correlating Committee directs CMP 9 to reconsider the use of the parenthetical phrase (open or closed position) in 245.21(C)(7) as parenthetical expressions create confusion and misunderstanding and shall be avoided. Refer to NEC Style Manual Section 3.5.1.1.

Ballot Results

✔ **This item has passed ballot**

12 Eligible Voters
1 Not Returned
11 Affirmative All
0 Affirmative with Comments
0 Negative with Comments
0 Abstention

Not Returned

McDaniel, Roger D.

Affirmative All

Ayer, Lawrence S.
Bowmer, Trevor N.
Hickman, Palmer L.
Holub, Richard A.
Jackson, Peter D.
Kendall, David H.
Manche, Alan
Osborne, Robert D.
Porter, Christine T.
Schultheis, Timothy James

Williams, David A.

Public Comment No. 72-NFPA 70-2024 [Section No. 245.21(C)(1)]

(1) Installation.

Cutouts shall be located so that they ~~may be readily and safely operated and~~ are accessible to be operated and re-fused, and so that the exhaust of the fuses does not endanger persons. Distribution cutouts shall not be used indoors, underground, or in metal enclosures.

Statement of Problem and Substantiation for Public Comment

This Public Comment is submitted on behalf of a Correlating Committee Medium Voltage Task Group consisting of Robert Osborne (Chair), Paul Barnhart, Lou Grahor, Donny Cook, Scott Higgins, Mike Querry, Roger McDaniel, Dave Burns, Rod Belisle, Kevin Rogers, Tony Ricciuti, Paul Knapp, Paul Sullivan, George Smith, Eric Simmon, Kevin Arnold, Larry Wildermuth, and Kyle Krueger.

This Public Comment addresses the use of the term "safely" and the phrase "may be", as these terms are possibly unenforceable and vague (3.2.1 of the NEC Style Manual). The sentence is re-written to use the defined term "accessible" to maintain the original intent of the requirement.

Related Item

• CC Note No. 5 •

Submitter Information Verification

Submitter Full Name: Robert Osborne
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City:
State:
Zip:

Submittal Date: Mon Jul 15 15:21:21 EDT 2024
Committee: NEC-P09

Public Comment No. 310-NFPA 70-2024 [Section No. 245.21(C)(2)]

(2) Operation.

Where fused cutouts are not suitable to interrupt circuits manually while carrying load, the installation shall comply with 245.21(C)(2)(a) through 245.21(C)(2)(c).

(a) An approved means shall be installed to interrupt the load.

Exception: A permanently installed additional means to interrupt the load is not required where documented switching procedures are provided for qualified personnel to remove the load before operating the fused cutouts. The use of load-removal tools shall be permitted.

(b) A conspicuous sign shall be placed at the fused cutouts identifying that they shall not be operated under load.

(c) Access to any permanently installed operating means of the fused cutouts by unqualified persons shall be prohibited by lock or location.

Additional Proposed Changes

File Name	Description	Approved
CN_6.pdf	NEC_CN6	

Statement of Problem and Substantiation for Public Comment

NOTE: The following CC Note No. 6 appeared in the First Draft Report on First Revision No. 7546.

The Correlating Committee directs CMP 9 to review FR 7546 with respect to 245.21(C)(2) and the use of the term “suitable”. The term “suitable” is possibly unenforceable and vague and does not comply with the NEC Style Manual 3.2.1.

Related Item

• First Revision No. 7546

Submitter Information Verification

Submitter Full Name: CC Notes
Organization: NEC Correlating Committee
Street Address:
City:
State:
Zip:
Submittal Date: Mon Jul 29 16:23:11 EDT 2024
Committee: NEC-P09

Correlating Committee Note No. 6-NFPA 70-2024 [Section No. 245.21(C)(2)]

Submitter Information Verification

Committee: NEC-AAC
Submittal Date: Tue May 07 09:42:21 EDT 2024

Committee Statement

Committee Statement: The Correlating Committee directs CMP 9 to review FR 7546 with respect to 245.21(C)(2) and the use of the term “suitable”. The term “suitable” is possibly unenforceable and vague and does not comply with the NEC Style Manual 3.2.1.

First Revision No. 7546-NFPA 70-2024 [Section No. 245.21(C)(2)]

Ballot Results

✔ **This item has passed ballot**

12 Eligible Voters
1 Not Returned
11 Affirmative All
0 Affirmative with Comments
0 Negative with Comments
0 Abstention

Not Returned

McDaniel, Roger D.

Affirmative All

Ayer, Lawrence S.
Bowmer, Trevor N.
Hickman, Palmer L.
Holub, Richard A.
Jackson, Peter D.
Kendall, David H.
Manche, Alan
Osborne, Robert D.
Porter, Christine T.
Schultheis, Timothy James
Williams, David A.

Public Comment No. 70-NFPA 70-2024 [Section No. 245.21(C)(2)]

(2) Operation.

Where fused cutouts are not ~~suitable~~ rated to interrupt circuits manually while carrying load, the installation shall comply with 245.21(C)(2)(a) through 245.21(C)(2)(c).

(a) An approved means shall be installed to interrupt the load.

Exception: A permanently installed additional means to interrupt the load is not required where documented switching procedures are provided for qualified personnel to remove the load before operating the fused cutouts. The use of load-removal tools shall be permitted.

(b) A conspicuous sign shall be placed at the fused cutouts identifying that they shall not be operated under load.

(c) Access to any permanently installed operating means of the fused cutouts by unqualified persons shall be prohibited by lock or location.

Statement of Problem and Substantiation for Public Comment

This Public Comment is submitted on behalf of a Correlating Committee Medium Voltage Task Group consisting of Robert Osborne (Chair), Paul Barnhart, Lou Grahor, Donny Cook, Scott Higgins, Mike Querry, Roger McDaniel, Dave Burns, Rod Belisle, Kevin Rogers, Tony Ricciuti, Paul Knapp, Paul Sullivan, George Smith, Eric Simmon, Kevin Arnold, Larry Wildermuth, and Kyle Krueger.

This Public Comment was developed to address the use of the term "suitable", as it is possibly unenforceable and vague (3.2.1 of the NEC Style Manual). The more appropriate term to use for this requirement would be "rated".

Related Item

• CC Note No. 6

Submitter Information Verification

Submitter Full Name: Robert Osborne
Organization: UL Solutions
Street Address:
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Submittal Date: Mon Jul 15 15:07:55 EDT 2024
Committee: NEC-P09

Public Comment No. 71-NFPA 70-2024 [Section No. 245.21(C)(7)]

(7) Structure Mounted Outdoors.

The height of cutouts mounted outdoors on structures shall provide ~~safe~~ clearance between lowest energized parts ~~(open or closed position)~~ and standing surfaces, in accordance with 110.34(E). Clearance shall be maintained with the cutouts in both the open and closed position.

Statement of Problem and Substantiation for Public Comment

This Public Comment is submitted on behalf of a Correlating Committee Medium Voltage Task Group consisting of Robert Osborne (Chair), Paul Barnhart, Lou Grahor, Donny Cook, Scott Higgins, Mike Querry, Roger McDaniel, Dave Burns, Rod Belisle, Kevin Rogers, Tony Ricciuti, Paul Knapp, Paul Sullivan, George Smith, Eric Simmon, Kevin Arnold, Larry Wildermuth, and Kyle Krueger.

This Public Comment was developed to remove the term "safe", as it is unenforceable and vague (3.2.1 of the NEC Style Manual), and to revise the requirement to not use the parenthetical phrase " (open or closed position)", as parenthetical expressions should be avoided (3.5.1.1 of the NEC Style Manual). The changes proposed are not intended to change the intent of the requirement.

Related Item

• CC Note No. 5

Submitter Information Verification

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Submittal Date: Mon Jul 15 15:12:30 EDT 2024
Committee: NEC-P09

Public Comment No. 234-NFPA 70-2024 [Section No. 245.27]

245.27 Additional Requirements for Feeders.

(A) Rating or Setting of Overcurrent Protective Devices and Circuit Interrupter Devices .

The continuous ampere rating of a fuse shall not exceed three times the ampacity of the conductors. The long-time trip element setting of a breaker or the minimum trip setting of an electronically actuated fuse shall not exceed six times the ampacity of the conductor. For fire pumps, conductors shall be permitted to be protected for overcurrent in accordance with 695.5(B)(2).

(B) Feeder Taps.

Conductors tapped to a feeder shall be permitted to be protected by the feeder circuit-interrupting device or an overcurrent protective device where that circuit-interrupting device or overcurrent protective device also protects the tap conductor.

Statement of Problem and Substantiation for Public Comment

Using the term "Circuit-interupting device" is better than "overcurrent device" as the former is identified as part of Section 245.21 which is titled "Circuit-Interrupting Devices". With all of the changes around overcurrent device being pursued in this cycle, correlating this language with 245.21 adds clarity and consistency.

Related Item

• FR 8857

Submitter Information Verification

Submitter Full Name: Thomas Domitrovich
Organization: Eaton Corporation
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Submittal Date: Wed Jul 24 15:56:17 EDT 2024
Committee: NEC-P09

Public Comment No. 77-NFPA 70-2024 [Section No. 265.19]

265.19 Conductors — Minimum Ampacity and Size.

The ampacity of conductors shall be in accordance with 310.14 and 315.60, as applicable. Branch-circuit conductors shall be sized in accordance with 265.19(A) or 265.19(B).

(A) General.

The ampacity of branch-circuit conductors shall not be less than 125 percent of the designed potential load of utilization equipment that will be operated simultaneously.

(B) Supervised Installations.

~~Branch~~
For supervised installations, branch -circuit conductor sizing shall be permitted to be determined by qualified persons under engineering supervision. Supervised installations

~~shall be~~
are considered to

~~be those~~
be those portions of a facility where

~~installation, maintenance, monitoring, and servicing the system are performed by qualified~~
all of the following conditions are met:

(1) The design of the installation is provided under engineering supervision.

(2) Qualified persons with documented training and experience in

~~systems of~~

over 1000

~~volts~~

-volt ac or 1500

~~volts dc~~

-volt dc systems install the system and provide the ongoing maintenance, monitoring, and servicing of the system .

Statement of Problem and Substantiation for Public Comment

This Public Comment is submitted on behalf of a Correlating Committee Medium Voltage Task Group consisting of Robert Osborne (Chair), Paul Barnhart, Lou Grahor, Donny Cook, Scott Higgins, Mike Querry, Roger McDaniel, Dave Burns, Rod Belisle, Kevin Rogers, Tony Ricciuti, Paul Knapp, Paul Sullivan, George Smith, Eric Simmon, Kevin Arnold, Larry Wildermuth, and Kyle Krueger.

This same requirement appears in 267.39, 268.23, 268.31, and 268.42 as a list item, but was changed to the paragraph format for this section. This revision will restore the list format. In accordance with 3.5.5 of the NEC Style Manual, requirements that are the same or similar shall use parallel construction for consistency.

Related Item

• FR 7932

Submitter Information Verification

Submitter Full Name: Robert Osborne
Organization: UL Solutions
Street Address:
City:
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Zip:

Submittal Date: Mon Jul 15 17:19:04 EDT 2024
Committee: NEC-P09

Public Comment No. 76-NFPA 70-2024 [Section No. 265.20]

265.20 Overcurrent Protection.

Branch-circuit conductors and equipment shall be protected by overcurrent protective devices that have a rating or setting that complies with 265.20(A) through 265.20(C).

(A) ~~Continuous and Noncontinuous Loads.~~

~~Where a branch circuit supplies continuous loads or any combination of continuous and noncontinuous loads, the rating of the~~

Simultaneous Loads.

The rating or setting of the overcurrent device shall not be less than ~~the noncontinuous load plus 125 percent of the continuous load.~~

~~Exception:~~ ~~Where the assembly, including the overcurrent devices protecting the branch circuit(s), is listed for operation at 100 percent of its rating, the ampere rating of the overcurrent device shall be permitted to be not less than the sum of the continuous load plus the noncontinuous load.~~

100 percent of the sum of all loads on the branch circuit that will be operated simultaneously.

(B) Conductor Protection.

Conductors shall be protected in accordance with the ampacities specified in ~~310~~ 265 . ~~14 or 315.60 , as applicable.~~ 19.

(C) Equipment.

The rating or setting of the overcurrent protective device shall not exceed that specified in the applicable articles referenced in Table 240.3 for equipment.

Statement of Problem and Substantiation for Public Comment

This Public Comment is submitted on behalf of a Correlating Committee Medium Voltage Task Group consisting of Robert Osborne (Chair), Paul Barnhart, Lou Grahor, Donny Cook, Scott Higgins, Mike Querry, Roger McDaniel, Dave Burns, Rod Belisle, Kevin Rogers, Tony Ricciuti, Paul Knapp, Paul Sullivan, George Smith, Eric Simmon, Kevin Arnold, Larry Wildermuth, and Kyle Krueger.

This revision was part of PI 3215, but appears to have been overlooked by CMP 9. As noted in PI 3215 - Requirements for overcurrent protection are revised to address the fact that MV equipment is rated for operation at 100% of their rating (as opposed to LV equipment, where the default is 80%). The load criteria for selecting the minimum overcurrent device rating or setting was also changed from “Continuous and Non-Continuous” criteria to “Simultaneous Loads” criteria to reflect MV practices.

Related Item

• PI 3215

Submitter Information Verification

Submitter Full Name: Robert Osborne
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Submittal Date: Mon Jul 15 17:02:14 EDT 2024
Committee: NEC-P09

Public Comment No. 79-NFPA 70-2024 [Section No. 266.4(C)]

(C) Supervised Installations.

~~Feeder~~
For supervised installations, feeder conductor sizing shall be permitted to be determined by qualified persons under engineering supervision

~~in accordance with 310 or 315.60(B) .~~

.

~~14(B)~~
Supervised installations are considered to

~~be those~~
be those portions of a facility where

~~installation, maintenance, monitoring, and servicing the system is performed by qualified~~
all of the following conditions are met:

(1) The design of the installation is provided under engineering supervision.

(2) Qualified persons with documented training and experience in

~~systems of~~
over 1000 - volt ac or 1500 - volt dc systems install the system and provide the ongoing maintenance, monitoring, and servicing of the system .

Statement of Problem and Substantiation for Public Comment

This Public Comment is submitted on behalf of a Correlating Committee Medium Voltage Task Group consisting of Robert Osborne (Chair), Paul Barnhart, Lou Grahor, Donny Cook, Scott Higgins, Mike Querry, Roger McDaniel, Dave Burns, Rod Belisle, Kevin Rogers, Tony Ricciuti, Paul Knapp, Paul Sullivan, George Smith, Eric Simmon, Kevin Arnold, Larry Wildermuth, and Kyle Krueger.

This same requirement appears in 265.19, 267.39, 268.23, 268.31, and 268.42 as a list item, but was changed to the paragraph format for this section. This revision restores the list format for this requirement. In accordance with 3.5.5 of the NEC Style Manual, requirements that are the same or similar shall use parallel construction for consistency.

Related Item

• FR 7932

Submitter Information Verification

Submitter Full Name: Robert Osborne
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Submittal Date: Mon Jul 15 17:27:46 EDT 2024
Committee: NEC-P09

Public Comment No. 1402-NFPA 70-2024 [New Section after 267.1]

Part I. General

Statement of Problem and Substantiation for Public Comment

This Public Comment is submitted on behalf of a Correlating Committee Medium Voltage Task Group consisting of Robert Osborne (Chair), Paul Barnhart, Lou Grahor, Donny Cook, Scott Higgins, Mike Querry, Roger McDaniel, Dave Burns, Rod Belisle, Kevin Rogers, Tony Ricciuti, Paul Knapp, Paul Sullivan, George Smith, Eric Simmon, Kevin Arnold, Larry Wildermuth, and Kyle Krueger.

Article 237 has a Part II, but no Part I. This Public Comment adds Part I to make the Article complete.

Related Item

• PI 3224

Submitter Information Verification

Submitter Full Name: Robert Osborne
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City:
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Submittal Date: Thu Aug 22 10:55:39 EDT 2024
Committee: NEC-P09

Public Comment No. 80-NFPA 70-2024 [Section No. 267.31(I)]

(I) Disconnection of Grounded Conductor in a Grounded System.

Where the building or structure disconnecting means does not disconnect the grounded conductor from the grounded conductors in the building or structure wiring, other means shall be provided for this purpose at the location of the disconnecting means. A terminal or bus to which all grounded conductors can be attached by means of pressure connectors shall be permitted for this purpose.

In a multisection switchgear, disconnects for the grounded conductor shall be permitted to be in any section of the ~~switchboard or~~ switchgear if ~~the switchboard~~ the switchgear section ~~or switchgear section~~ is marked to indicate a grounded conductor disconnect is contained within the equipment.

Statement of Problem and Substantiation for Public Comment

This Public Comment is submitted on behalf of a Correlating Committee Medium Voltage Task Group consisting of Robert Osborne (Chair), Paul Barnhart, Lou Grahor, Donny Cook, Scott Higgins, Mike Querry, Roger McDaniel, Dave Burns, Rod Belisle, Kevin Rogers, Tony Ricciuti, Paul Knapp, Paul Sullivan, George Smith, Eric Simmon, Kevin Arnold, Larry Wildermuth, and Kyle Krueger.

Since switchboards are only used in installations below 1000 volts, the inclusion of switchboards in this section is inappropriate.

Related Item

• FR 7932

Submitter Information Verification

Submitter Full Name: Robert Osborne
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Street Address:
City:
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Submittal Date: Mon Jul 15 17:33:25 EDT 2024
Committee: NEC-P09

Public Comment No. 1326-NFPA 70-2024 [Section No. 267.39(C)]

(C) Supervised Installations.

For supervised installations, the rating of the disconnect shall be permitted to be determined by qualified persons under engineering supervision. The rating shall not be less than the size of the feeder or branch circuit supplying the disconnect. Supervised installations are considered to be those portions of a facility where all of the following conditions as met:

(1) The design of the installation is provided under engineering supervision.

(2) Qualified persons with documented training and experience in over 1000- volt ~~systems make the installation and~~ ac or over 1500-volt dc systems install the system and provide the ongoing maintenance, monitoring, and servicing of the system.

Statement of Problem and Substantiation for Public Comment

This Public Comment is submitted on behalf of a Correlating Committee Medium Voltage Task Group consisting of Robert Osborne (Chair), Paul Barnhart, Lou Grahor, Donny Cook, Scott Higgins, Mike Querry, Roger McDaniel, Dave Burns, Rod Belisle, Kevin Rogers, Tony Ricciuti, Paul Knapp, Paul Sullivan, George Smith, Eric Simmon, Kevin Arnold, Larry Wildermuth, and Kyle Krueger.

Similar requirements appears in 265.19, 266.4, 268.23, 268.31, and 268.42, but those requirements indicate in list item (2) that the qualified person shall have "training" in addition to "experience". "Training" is added here for consistency, as well as the voltage demarcation of 1000 Vac, 1500 Vdc.

Related Item

• FR 7932

Submitter Information Verification

Submitter Full Name: Robert Osborne
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Submittal Date: Tue Aug 20 16:24:03 EDT 2024
Committee: NEC-P09

Public Comment No. 1327-NFPA 70-2024 [Section No. 268.23(C)]

(C) Supervised Installations.

For supervised installations, service conductor sizing shall be permitted to be determined by qualified persons under engineering supervision. Supervised installations are considered to be those portions of a facility where all of the following conditions are met:

(1) The design of the installation is provided under engineering supervision.

(2) Qualified persons with documented training and experience in over 1000- volt ac, 1500-volt dc systems install the system and provide ~~maintenance~~ the ongoing maintenance , monitoring, and servicing of the system.

Statement of Problem and Substantiation for Public Comment

This Public Comment is submitted on behalf of a Correlating Committee Medium Voltage Task Group consisting of Robert Osborne (Chair), Paul Barnhart, Lou Grahor, Donny Cook, Scott Higgins, Mike Querry, Roger McDaniel, Dave Burns, Rod Belisle, Kevin Rogers, Tony Ricciuti, Paul Knapp, Paul Sullivan, George Smith, Eric Simmon, Kevin Arnold, Larry Wildermuth, and Kyle Krueger.

Similar requirements appears in 267.39, 266.4, 267.39, 268.31, and 268.42, but those requirements indicate in list item (2) that the maintenance, monitoring, and servicing shall be "ongoing". "Ongoing" is added here for consistency, as well as the voltage demarcation of 1000 Vac, 1500 Vdc.

Related Item

• FR 7932 •

Submitter Information Verification

Submitter Full Name: Robert Osborne
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Submittal Date: Tue Aug 20 16:37:44 EDT 2024
Committee: NEC-P09

Public Comment No. 1329-NFPA 70-2024 [Section No. 268.31(C)]

(C) Supervised Installations.

For supervised installations, service conductor sizing shall be permitted to be determined by qualified persons under engineering supervision ~~in accordance with 310~~ . ~~14(B) or 315.60(B)~~ . Supervised installations are considered to be those portions of a facility where all of the following conditions are met:

(1) The design of the installation is provided under engineering supervision.

(2) Qualified persons with documented training and experience in over 1000- volt ac, 1500-volt dc systems install the system and provide the ongoing maintenance, monitoring, and servicing of the system.

Statement of Problem and Substantiation for Public Comment

This Public Comment is submitted on behalf of a Correlating Committee Medium Voltage Task Group consisting of Robert Osborne (Chair), Paul Barnhart, Lou Grahor, Donny Cook, Scott Higgins, Mike Querry, Roger McDaniel, Dave Burns, Rod Belisle, Kevin Rogers, Tony Ricciuti, Paul Knapp, Paul Sullivan, George Smith, Eric Simmon, Kevin Arnold, Larry Wildermuth, and Kyle Krueger.

Similar requirements appears in 265.19, 266.4, 267.39, 268.23, and 268.42, but those requirements indicate in list item (2) that the maintenance, monitoring, and servicing shall be "ongoing". "Ongoing" is added here for consistency, as well as the voltage demarcation of 1000 Vac, 1500 Vdc. The reference to 310.14(B) and 315.60(B) is unnecessary, as permission is already granted in those sections for "alternative designs".

Related Item

• FR 7932

Submitter Information Verification

Submitter Full Name: Robert Osborne
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Submittal Date: Tue Aug 20 16:44:36 EDT 2024
Committee: NEC-P09

Public Comment No. 81-NFPA 70-2024 [Section No. 268.33]

268.33 Spliced Conductors.

Service conductors shall be permitted to be spliced or tapped in accordance with 110.~~14~~ 40 , 268.46, ~~and~~ 305.15(D), 305.23, and 305.25.

Statement of Problem and Substantiation for Public Comment

This Public Comment is submitted on behalf of a Correlating Committee Medium Voltage Task Group consisting of Robert Osborne (Chair), Paul Barnhart, Lou Grahor, Donny Cook, Scott Higgins, Mike Querry, Roger McDaniel, Dave Burns, Rod Belisle, Kevin Rogers, Tony Ricciuti, Paul Knapp, Paul Sullivan, George Smith, Eric Simmon, Kevin Arnold, Larry Wildermuth, and Kyle Krueger.

With expanded requirements in Articles 110 and 305, references to the "low voltage" requirements should be replaced with the equivalent requirements written for installations over 1000 Vac, 1500 Vdc.

Related Item

• FR 7932

Submitter Information Verification

Submitter Full Name: Robert Osborne
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Street Address:
City:
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Submittal Date: Mon Jul 15 17:37:44 EDT 2024
Committee: NEC-P09

Public Comment No. 1330-NFPA 70-2024 [Section No. 268.42(C)]

(C) Supervised Installations.

For supervised installations, service entrance conductor sizing shall be permitted to be determined by qualified persons under engineering supervision ~~in accordance with 310.14(B) or 315.60(B) . Supervised~~ . Supervised installations are considered to be those portions of a facility where all of the following conditions are met:

(1) The design of the installation is provided under engineering supervision.

(2) Qualified persons with documented training and experience in over 1000- volt ac, 1500-volt dc systems install the system and provide the ongoing maintenance, monitoring, and servicing of the system.

Statement of Problem and Substantiation for Public Comment

This Public Comment is submitted on behalf of a Correlating Committee Medium Voltage Task Group consisting of Robert Osborne (Chair), Paul Barnhart, Lou Grahor, Donny Cook, Scott Higgins, Mike Querry, Roger McDaniel, Dave Burns, Rod Belisle, Kevin Rogers, Tony Ricciuti, Paul Knapp, Paul Sullivan, George Smith, Eric Simmon, Kevin Arnold, Larry Wildermuth, and Kyle Krueger.

Similar requirements appears in 265.19, 266.4, 267.39, 268.23, and 268.31, but those requirements indicate in list item (2) that the maintenance, monitoring, and servicing shall be "ongoing". "Ongoing" is added here for consistency, as well as the voltage demarcation of 1000 Vac, 1500 Vdc. The reference to 310.14(B) and 315.60(B) is unnecessary, as permission is already granted in those sections for "alternative designs".

Related Item

• FR 7932

Submitter Information Verification

Submitter Full Name: Robert Osborne
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Submittal Date: Tue Aug 20 16:47:14 EDT 2024
Committee: NEC-P09

Public Comment No. 82-NFPA 70-2024 [Section No. 268.46]

268.46 Spliced and Tapped Conductors.

Service-entrance conductors shall be permitted to be spliced or tapped in accordance with 110.~~14~~ 40 , 305.15(D), ~~300~~ 305 .~~13~~ 23 , and ~~300~~ 305 .~~15~~ 25 . Pressure connectors, and devices for splices and taps shall be listed.

Statement of Problem and Substantiation for Public Comment

This Public Comment is submitted on behalf of a Correlating Committee Medium Voltage Task Group consisting of Robert Osborne (Chair), Paul Barnhart, Lou Grahor, Donny Cook, Scott Higgins, Mike Querry, Roger McDaniel, Dave Burns, Rod Belisle, Kevin Rogers, Tony Ricciuti, Paul Knapp, Paul Sullivan, George Smith, Eric Simmon, Kevin Arnold, Larry Wildermuth, and Kyle Krueger.

With expanded requirements in Articles 110 and 305, references to the "low voltage" requirements should be replaced with the equivalent requirements written for installations over 1000 Vac, 1500 Vdc.

Related Item

• FR 7932

Submitter Information Verification

Submitter Full Name: Robert Osborne
Organization: UL Solutions
Street Address:
City:
State:
Zip:

Submittal Date: Mon Jul 15 17:46:07 EDT 2024
Committee: NEC-P09

Public Comment No. 83-NFPA 70-2024 [Section No. 268.50(B)]

(B) All Other Service-Entrance Conductors.

Open wiring on insulators and Type MC cable shall not be installed within 3.0 m (10 ft) of grade level or where exposed to physical damage.

Exception: Type MC cable shall be permitted within 3.0 m (10 ft) of grade level where not exposed to physical damage or where protected in accordance with ~~300~~ 305 .~~5~~ 15 (~~D~~ C).

Statement of Problem and Substantiation for Public Comment

This Public Comment is submitted on behalf of a Correlating Committee Medium Voltage Task Group consisting of Robert Osborne (Chair), Paul Barnhart, Lou Grahor, Donny Cook, Scott Higgins, Mike Querry, Roger McDaniel, Dave Burns, Rod Belisle, Kevin Rogers, Tony Ricciuti, Paul Knapp, Paul Sullivan, George Smith, Eric Simmon, Kevin Arnold, Larry Wildermuth, and Kyle Krueger.

With expanded requirements in Article 305, references to the "low voltage" requirements should be replaced with the equivalent requirements written for installations over 1000 Vac, 1500 Vdc.

Related Item

• FR 7932

Submitter Information Verification

Submitter Full Name: Robert Osborne
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Submittal Date: Mon Jul 15 17:50:13 EDT 2024
Committee: NEC-P09

Public Comment No. 1394-NFPA 70-2024 [Section No. 305.1(C)]

~~(C) Metric Designators and Trade Sizes.~~

~~Metric designators and trade sizes for conduit, tubing, and associated fittings and accessories shall be in accordance with Table 305.1(C) .~~

~~Table 305.1(C) Metric Designators and Trade Sizes~~

~~Metric Designator Trade Size 12 3/8 16 1/2 21 3/4 27 1 35 1 1/4 41 1 1/2 53 2 63 2 1/2 78 3 91 3 1/2 103 4 129 5 155 6~~

~~Note: The metric designators and trade sizes shall be for identification purposes only and are not actual dimensions.~~

Statement of Problem and Substantiation for Public Comment

The scope is not the proper location for this mandatory requirement. Relocating this requirement and the table to 305.27(B) is more user friendly and a better location for requiring conduits, tubing, and associated fittings and accessories to be in accordance with the table for metric designators and trade sizes

Related Public Comments for This Document

Related Comment	Relationship
Public Comment No. 1392-NFPA 70-2024 [Section No. 300.1(C)]	
Public Comment No. 1393-NFPA 70-2024 [Section No. 300.19]	
Public Comment No. 1396-NFPA 70-2024 [Section No. 305.27]	
Public Comment No. 1392-NFPA 70-2024 [Section No. 300.1(C)]	
Public Comment No. 1393-NFPA 70-2024 [Section No. 300.19]	
Public Comment No. 1396-NFPA 70-2024 [Section No. 305.27]	

Related Item

- FR-8012

Submitter Information Verification

Submitter Full Name: David Hittinger
Organization: Independent Electrical Contractors
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Submittal Date: Wed Aug 21 22:11:52 EDT 2024
Committee: NEC-P09

Public Comment No. 1720-NFPA 70-2024 [Section No. 305.12(A)]

(A) Voltage.

Wiring methods, as specified in Table 305.12(A), shall be permitted as identified in the table.

Table 305.12(A) Wiring Methods Permitted for Use in Systems Rated Over 1000 Volts ac, 1500 Volts dc, Nominal

Wiring Methods Permitted for Use Above 1000 Volts ac, 1500 Volts dc	Voltage Levels	
Pull and junction boxes, conduit bodies, and handhole enclosures	Over 1000 ac or dc	
Metal-clad cable (Type MC) when also identified as Type MV	1000–35,000 ac	
Type MV cable, MV cable joints, MV cable terminations	2001–35,000 ac	
		2001–2500 dc
Type P cable	1000–2000 ac or dc	
Intermediate metal conduit (IMC)	Over 1000 ac or dc	
Nonmetallic underground conduit with conductors (NUCC)	Over 1000 ac or dc	
High-density polyethylene conduit (HDPE)	Over 1000 ac or dc	
Rigid metal conduit (RMC)	Over 1000 ac or dc	
Rigid polyvinyl chloride conduit (PVC)	Over 1000 ac or dc	
Reinforced thermosetting resin conduit (RTRC)	Over 1000 ac or dc	
Electrical metallic tubing (EMT)	Over 1000 ac or dc	
Auxiliary gutters	Over 1000 ac or dc	
Busway	Over 1000 ac or dc	
Cablebus	1000–35,000 ac	
	2001–2500 dc	
Cable trays	1000–35,000 ac or dc	
Messenger-supported wiring	1000–35,000 ac	
Outdoor overhead conductors	Over 1000 ac or dc	
Insulated bus pipe (IBP)	1000–35,000 ac	
Liquid Tight Flexible Metal Conduit (LFMC)	Over 1000 ac or dc	
Flexible Metal Conduit (FMC)	Over 1000 ac or dc	

Exposed runs of Type MV cables, bare conductors, and bare busbars shall be permitted in locations accessible only to qualified persons. Busbars shall be permitted to be either copper or aluminum.

Exception: Airfield lighting cable used in series circuits that are powered by regulators and installed in restricted airport lighting vaults shall be permitted as exposed cable installations.

Informational Note: An example of a common application is FAA L-824 cables installed as exposed runs within a restricted vault area.

Statement of Problem and Substantiation for Public Comment

This Public Comment is submitted on behalf of a Correlating Committee Medium Voltage Task Group consisting of Robert Osborne (Chair), Paul Barnhart, Lou Grahor, Donny Cook, Scott Higgins, Mike Querry, Roger McDaniel, Dave Burns, Rod Belisle, Kevin Rogers, Tony Ricciuti, Paul Knapp, Paul Sullivan, George Smith, Eric Simmon, Kevin Arnold, Larry Wildermuth, and Kyle Krueger.

The table has been updated to reflect all current wiring methods and cable types suitable for use over 1000 volts. This included the addition of Liquid Tight Flexible Metal Conduit and Flexible Metal Conduit, as each type is presently allowed in motor applications (reference 430.203). The entry for "Type MC cable" is updated to reflect the fact that Type MC cable rated for higher voltages are also identified as Type MV cable. Lastly, the table is revised to clarify where there is a upper voltage limit what that limit is, and if there is a limit on use with either alternating or direct current, or both.

Related Item

• FR 8012

Submitter Information Verification

Submitter Full Name: Robert Osborne
Organization: UL Solutions
Street Address:
City:
State:
Zip:

Submittal Date: Mon Aug 26 16:11:38 EDT 2024
Committee: NEC-P09

Public Comment No. 1729-NFPA 70-2024 [Section No. 305.12(A)]

(A) Voltage.

Wiring methods, as specified in Table 305.12(A), shall be permitted as identified in the table.

Table 305.12(A) Wiring Methods Permitted for Use in Systems Rated Over 1000 Volts ac, 1500 Volts dc, Nominal

Wiring Methods Permitted for Use Above 1000 Volts ac, 1500 Volts dc	Voltage Levels	-
Pull and junction boxes, conduit bodies, and handhole enclosures	Over 1000	-
Metal-clad cable (Type MC)	1000–35,000	-
Type MV cable, MV cable joints, MV cable terminations	2001–35,000 ac	-
		2001–2500 dc
Type P cable	1000–2000	-
Intermediate metal conduit (IMC)	Over 1000	-
Nonmetallic underground conduit with conductors (NUCC)	Over 1000	-
High-density polyethylene conduit (HDPE)	Over 1000	-
Rigid metal conduit (RMC)	Over 1000	-
Rigid polyvinyl chloride conduit (PVC)	Over 1000	-
Reinforced thermosetting resin conduit (RTRC)	Over 1000	-
Electrical metallic tubing (EMT)	Over 1000	-
Auxiliary gutters	Over 1000	-
Busway	Over 1000	-
Cablebus	1000–35,000 ac	-
	2001–2500 dc	
Cable trays	1000–35,000	-
Messenger-supported wiring	1000–35,000	-
Outdoor overhead conductors	Over 1000	-
Insulated bus pipe (IBP)	1000–35,000 ac	-
Liquidtight Flexible Nonmetallic Conduit		

Exposed runs of Type MV cables, bare conductors, and bare busbars shall be permitted in locations accessible only to qualified persons. Busbars shall be permitted to be either copper or aluminum.

Exception: Airfield lighting cable used in series circuits that are powered by regulators and installed in restricted airport lighting vaults shall be permitted as exposed cable installations.

Informational Note: An example of a common application is FAA L-824 cables installed as exposed runs within a restricted vault area.

Statement of Problem and Substantiation for Public Comment

Liquidtight flexible nonmetallic conduit is already allowed in article 600.32 for over 1000 volts.

Related Item

• FR-8012

Submitter Information Verification

Submitter Full Name: Dennis Querry
Organization: Trinity River Authority
Street Address:
City:
State:
Zip:

Submittal Date: Mon Aug 26 18:30:16 EDT 2024
Committee: NEC-P09

Public Comment No. 385-NFPA 70-2024 [Section No. 305.14(A)]

(A) Cables and Raceways Through ~~Wood~~ Framing Members and Furring Strips .

(1) ~~Bored~~ Holes.

In both exposed and concealed locations, ~~where~~ if a raceway-type wiring method is installed through ~~bored~~ holes in joists, rafters, or other wood or steel framing members ~~, holes shall be bored so that~~ or furring strips, the edge of the hole ~~is~~ shall be not less than 32 mm (1¼ in.) from the edges of the ~~wood~~ framing member. Where this distance cannot be maintained, the raceway shall be protected from penetration by screws or nails by a steel plate(s) or bushing(s) at least 1.6 mm (1⁄16 in.) thick, and of appropriate length and width, installed to cover the area of the wiring.

Exception No. 1: Steel plates shall not be required to protect rigid metal conduit, intermediate metal conduit, rigid PVC conduit, RTRC, or electrical metallic tubing.

Exception No. 2: A listed and marked steel plate less than 1.6 mm (1⁄16 in.) thick that provides equal or better protection against nail or screw penetration shall be permitted.

(2) Notches ~~in Wood~~ .

Where there is no objection because of weakening the building structure, in both exposed and concealed locations, raceways shall be permitted to be laid in notches in ~~wood~~ studs, joists, rafters, or other ~~wood~~ framing members or furring strips where the raceway at those points is protected from penetration by nails or screws by a steel plate at least 1.6 mm (1⁄16 in.) thick, and of appropriate length and width, installed to cover the area of the wiring. The steel plate shall be installed before the building finish is applied.

Exception No. 1: Steel plates shall not be required to protect rigid metal conduit, intermediate metal conduit, rigid nonmetallic conduit, or electrical metallic tubing.

Exception No. 2: A listed and marked steel plate less than 1.6 mm (1⁄16 in.) thick that provides equal or better protection against nail or screw penetration shall be permitted.

Statement of Problem and Substantiation for Public Comment

The submitter of PI 2220 has a valid point. It is easy to think of steel framing members as "traditional" 2x4 or larger, but smaller members are not uncommon. Hat channel, fo example, is commonly used as a furring material. If wiring is installed parallel to it, 300.4(D requires protection. If wiring is installed perpindicular, however, no such requirement exists. In addition to hat channel, steel studs that are smaller than 2x4 are sometimes utilized, and protecting the wiring is just as important there as it is for wood construction.

Related Public Comments for This Document

Related Comment	Relationship
Public Comment No. 375-NFPA 70-2024 [Section No. 300.6(A)]	

Related Item

- FR 8012

Submitter Information Verification

Submitter Full Name: Ryan Jackson

Organization: Self-employed

Street Address:
City:
State:
Zip:
Submittal Date: Tue Jul 30 13:30:59 EDT 2024
Committee: NEC-P09

Public Comment No. 115-NFPA 70-2024 [Section No. 305.16]

305.16 Protection Against Corrosion and Deterioration.

Raceways, cable trays, cablebus, auxiliary gutters, cable armor, boxes, cable sheathing, cabinets, enclosures (other than surrounding fences and walls), elbows, couplings, fittings, supports, and support hardware shall be of materials suitable for the environment in which they are to be installed.

(A) Ferrous Metal Equipment.

Ferrous metal raceways, cable trays, cablebus, auxiliary gutters, cable armor, boxes, cable sheathing, cabinets, enclosures (other than surrounding fences and walls), elbows, couplings, nipples, fittings, supports, and support hardware shall be suitably protected against corrosion inside and outside (except threads at joints) by a coating of approved corrosion-resistant material. Where corrosion protection is necessary and the conduit is threaded anywhere other than at the factory where the product is listed, the threads shall be coated with an approved electrically conductive, corrosion-resistant compound.

Exception: Stainless steel shall not be required to have protective coatings.

(1) Protected from Corrosion Solely by Enamel.

Where protected from corrosion solely by enamel, ferrous metal raceways, cable trays, cablebus, auxiliary gutters, cable armor, boxes, cable sheathing, cabinets, enclosures (other than surrounding fences and walls), elbows, couplings, nipples, fittings, supports, and support hardware shall not be used outdoors or in wet locations as described in 305.14(D).

(2) Organic Coatings on Boxes or Cabinets.

Where boxes, cabinets, or enclosures (other than surrounding fences and walls) have an approved system of organic coatings and are marked “Raintight,” “Rainproof,” or “Outdoor Type,” they shall be permitted outdoors.

(3) In Concrete or in Direct Contact with the Earth.

Ferrous metal raceways, cable armor, boxes, cable sheathing, cabinets, enclosures (other than surrounding fences and walls), elbows, couplings, nipples, fittings, supports, and support hardware shall be permitted to be installed in concrete, in direct contact with the earth, or in areas subject to severe corrosive influences where made of material approved for the condition or where provided with corrosion protection approved for the condition.

(B) Aluminum Metal Equipment.

Aluminum raceways, cable trays, cablebus, auxiliary gutters, cable armor, boxes, cable sheathing, cabinets, enclosures (other than surrounding fences and walls), elbows, couplings, nipples, fittings, supports, and support hardware embedded or encased in concrete or in direct contact with the earth shall be provided with supplementary corrosion protection.

(C) Nonmetallic Equipment.

Nonmetallic raceways, cable trays, cablebus, auxiliary gutters, boxes, cables with a nonmetallic outer jacket and internal metal armor or jacket, cable sheathing, cabinets, enclosures (other than surrounding fences and walls), elbows, couplings, nipples, fittings, supports, and support hardware shall be made of material approved for the condition and shall comply with 305.14(C)(1) and 305.14(C)(2) as applicable to the specific installation.

(1) Exposed to Sunlight.

Where exposed to sunlight, the materials shall be listed as sunlight resistant or shall be identified as sunlight resistant.

(2) Chemical Exposure.

Where subject to exposure to chemical solvents, vapors, splashing, or immersion, materials or coatings shall either be inherently resistant to chemicals based on their listing or be identified for the specific chemical reagent.

(D) Indoor Wet Locations.

In portions of dairy processing facilities, laundries, canneries, and other indoor wet locations, and in locations where walls are frequently washed or where there are surfaces of absorbent materials, such as damp paper or wood, the entire wiring system, where installed exposed, including all boxes, cabinets, enclosures (other than surrounding fences and walls), fittings, raceways, and cable used therewith, shall be mounted so that there is at least a 6 mm (¼ in.) airspace between it and the wall or supporting surface.

Exception: Nonmetallic raceways, boxes, and fittings shall be permitted to be installed without the airspace on a concrete, masonry, tile, or similar surface.

Informational Note: In general, areas where acids and alkali chemicals are handled and stored might present such corrosive conditions, particularly when wet or damp. Severe corrosive conditions might also be present in portions of meatpacking plants, tanneries, glue houses, and some stables; in installations immediately adjacent to a seashore and swimming pool areas; in areas where chemical deicers are used; and in storage cellars or rooms for hides, casings, fertilizer, salt, and bulk chemicals.

Additional Proposed Changes

File Name	Description	Approved
CN_2.pdf	NEC_CCN2	

Statement of Problem and Substantiation for Public Comment

NOTE: The following CC Note No. 2 appeared in the First Draft Report on First Revision No. 8012.

The Correlating Committee directs that CMP 9 to review FR 8012 and reconsider the use of the parenthetical phrases (other than surrounding fences and walls) and(except threads and joints) in 305.16 and 305.16(A)(1)(2)(3).

Additionally, in 305.16(B)(C) and (D) (other than surrounding fences and walls) as parenthetical expressions create confusion and misunderstanding and shall be avoided. Refer to NEC Style Manual section 3.5.1.1

Related Item

• First Revision No. 8012

Submitter Information Verification

Submitter Full Name: CC Notes
Organization: NEC Correlating Committee
Street Address:
City:
State:
Zip:
Submittal Date: Thu Jul 18 17:07:32 EDT 2024
Committee: NEC-P09

Correlating Committee Note No. 2-NFPA 70-2024 [Section No. 305.16]

Submitter Information Verification

Committee: NEC-AAC
Submittal Date: Tue May 07 09:33:56 EDT 2024

Committee Statement

Committee Statement: The Correlating Committee directs that CMP 9 to review FR 8012 and reconsider the use of the parenthetical phrases (other than surrounding fences and walls) and (except threads and joints) in 305.16 and 305.16(A)(1)(2)(3).

Additionally, in 305.16(B)(C) and (D) (other than surrounding fences and walls) as parenthetical expressions create confusion and misunderstanding and shall be avoided. Refer to NEC Style Manual section 3.5.1.1

First Revision No. 8012-NFPA 70-2024 [Global Input]

Ballot Results

This item has passed ballot

12 Eligible Voters
1 Not Returned
11 Affirmative All
0 Affirmative with Comments
0 Negative with Comments
0 Abstention

Not Returned

McDaniel, Roger D.

Affirmative All

Ayer, Lawrence S.
Bowmer, Trevor N.
Hickman, Palmer L.
Holub, Richard A.
Jackson, Peter D.
Kendall, David H.
Manche, Alan
Osborne, Robert D.
Porter, Christine T.

Schultheis, Timothy James

Williams, David A.

Public Comment No. 384-NFPA 70-2024 [Section No. 305.16]

305.16 Protection Against Corrosion and Deterioration.

Raceways, cable trays, cablebus, auxiliary gutters, cable armor, boxes, cable sheathing, cabinets, enclosures ~~(other than surrounding fences and walls)~~ , elbows, couplings, fittings, supports, and support hardware shall be of materials suitable for the environment in which they are to be installed. For the purposes of this section, fences and walls surrounding electrical equipment shall not be consided enclosures.

(A) Ferrous Metal Equipment.

Ferrous metal raceways, cable trays, cablebus, auxiliary gutters, cable armor, boxes, cable sheathing, cabinets, enclosures ~~(other than surrounding fences and walls)~~ , elbows, couplings, nipples, fittings, supports, and support hardware shall be suitably protected against corrosion ~~inside and outside (except threads at joints)~~ by a coating of approved corrosion-resistant material. Where corrosion protection is necessary and the conduit is threaded anywhere other than at the factory where the product is listed, the threads shall be coated with an approved electrically conductive, corrosion-resistant compound.

Exception: Stainless steel shall not be required to have protective coatings.

(1) Protected from Corrosion Solely by Enamel.

Where protected from corrosion solely by enamel, ferrous metal raceways, cable trays, cablebus, auxiliary gutters, cable armor, boxes, cable sheathing, cabinets, enclosures ~~(other than surrounding fences and walls)~~ , elbows, couplings, nipples, fittings, supports, and support hardware shall not be used outdoors or in wet locations as described in 305.14(D).

(2) Organic Coatings on Boxes or Cabinets.

Where boxes, cabinets, or ~~enclosures (other than surrounding fences and walls) have~~ enclosures have an approved system of organic coatings and are marked “Raintight,” “Rainproof,” or “Outdoor Type,” they shall be permitted outdoors.

(3) In Concrete or in Direct Contact with the Earth.

Ferrous metal raceways, cable armor, boxes, cable sheathing, cabinets, enclosures ~~(other than surrounding fences and walls)~~ , elbows, couplings, nipples, fittings, supports, and support hardware shall be permitted to be installed in concrete, in direct contact with the earth, or in areas subject to severe corrosive influences where made of material approved for the condition or where provided with corrosion protection approved for the condition.

(B) Aluminum Metal Equipment.

Aluminum raceways, cable trays, cablebus, auxiliary gutters, cable armor, boxes, cable sheathing, cabinets, enclosures ~~(other than surrounding fences and walls)~~ , elbows, couplings, nipples, fittings, supports, and support hardware embedded or encased in concrete or in direct contact with the earth shall be provided with supplementary corrosion protection.

(C) Nonmetallic Equipment.

Nonmetallic raceways, cable trays, cablebus, auxiliary gutters, boxes, cables with a nonmetallic outer jacket and internal metal armor or jacket, cable sheathing, cabinets, enclosures ~~(other than surrounding fences and walls)~~ , elbows, couplings, nipples, fittings, supports, and support hardware shall be made of material approved for the condition and shall comply with 305.14(C)(1) and 305.14(C)(2) as applicable to the specific installation.

(1) Exposed to Sunlight.

Where exposed to sunlight, the materials shall be listed as sunlight resistant or shall be identified as sunlight resistant.

(2) Chemical Exposure.

Where subject to exposure to chemical solvents, vapors, splashing, or immersion, materials or coatings shall either be inherently resistant to chemicals based on their listing or be identified for the specific chemical reagent.

(D) Indoor Wet Locations.

In portions of dairy processing facilities, laundries, canneries, and other indoor wet locations, and in locations where walls are frequently washed or where there are surfaces of absorbent materials, such as damp paper or wood, the entire wiring system, where installed exposed, including all boxes, cabinets, enclosures (other than surrounding fences and walls), fittings, raceways, and cable used therewith, shall be mounted so that there is at least a 6 mm (¼ in.) airspace between it and the wall or supporting surface.

Exception: Nonmetallic raceways, boxes, and fittings shall be permitted to be installed without the airspace on a concrete, masonry, tile, or similar surface.

Informational Note: In general, areas where acids and alkali chemicals are handled and stored might present such corrosive conditions, particularly when wet or damp. Severe corrosive conditions might also be present in portions of meatpacking plants, tanneries, glue houses, and some stables; in installations immediately adjacent to a seashore and swimming pool areas; in areas where chemical deicers are used; and in storage cellars or rooms for hides, casings, fertilizer, salt, and bulk chemicals.

Statement of Problem and Substantiation for Public Comment

These changes are intended to satisfy the requirements of the NEC Style Manual as it relates to the use of parenthetical language. By indicating that this section does not apply to fences and walls used as enclosures, most of the parenthetical language of this section can be removed. The language about protection from corrosion both inside and outside except at joints can be deleted because it is handled by the product standards of either the fitting (UL 514B) or the wiring methods (such as UL 6). If the corrosion resistance required by the product standards has been removed due to the threads being cut in the field, this section already has requirements that it be applied in the field.

Related Item

• CN 2

Submitter Information Verification

Submitter Full Name: Ryan Jackson
Organization: Self-employed
Street Address:
City:
State:
Zip:

Submittal Date: Tue Jul 30 13:26:39 EDT 2024
Committee: NEC-P09

Public Comment No. 1396-NFPA 70-2024 [Section No. 305.27]

305.27 Number and Size of Conductors and Cables in Raceway.

(A) Raceway Fill

The number and size of conductors and cables in any raceway shall not be more than will permit dissipation of the heat and ready installation or withdrawal of the conductors or cables without damage to the conductors or cables, or to their insulation.

(B) Metric Designators and Trade Size

Metric designators and trade sizes for conduit, tubing and asscociated fittings and accessories shall be in accordance with Table 305.27(B).

Statement of Problem and Substantiation for Public Comment

The scope is not the proper location for this mandatory requirement. Relocating this requirement and the table to 305.27(B) is more user friendly and a better location for requiring conduits, tubing, and associated fittings and accessories to be in accordance with the table for metric designators and trade sizes

Related Public Comments for This Document

Related Comment	Relationship
Public Comment No. 1392-NFPA 70-2024 [Section No. 300.1(C)]	
Public Comment No. 1393-NFPA 70-2024 [Section No. 300.19]	
Public Comment No. 1394-NFPA 70-2024 [Section No. 305.1(C)]	
Public Comment No. 1392-NFPA 70-2024 [Section No. 300.1(C)]	
Public Comment No. 1393-NFPA 70-2024 [Section No. 300.19]	
Public Comment No. 1394-NFPA 70-2024 [Section No. 305.1(C)]	

Related Item

• FR-8012

Submitter Information Verification

Submitter Full Name: David Hittinger
Organization: Independent Electrical Contractors
Affiliation: IEC Codes and Standards
Street Address:
City:
State:
Zip:

Submittal Date: Wed Aug 21 22:14:56 EDT 2024
Committee: NEC-P09

Public Comment No. 386-NFPA 70-2024 [Section No. 305.28(B)]

(B) Welding.

Metal raceways shall not be supported, terminated, or connected by welding to the raceway ~~unless specifically designed to be or otherwise specifically permitted to be in this code~~ .

Statement of Problem and Substantiation for Public Comment

There are no allowances for welding raceways in the NEC. This option was removed by CMP 3 in FR 8797 and should be removed here for consistency.

Related Item

• FR 8797

Submitter Information Verification

Submitter Full Name: Ryan Jackson
Organization: Self-employed
Street Address:
City:
State:
Zip:

Submittal Date: Tue Jul 30 13:35:10 EDT 2024
Committee: NEC-P09

Public Comment No. 1755-NFPA 70-2024 [Section No. 315.2]

315.2 Listing Requirements.

Type MV ~~cables,~~ cables and associated fittings shall be listed. Type MV cable joints, Type MV cable terminations ~~, connectors, and associated fittings shall be listed. The listing requirement~~ and connectors shall be tested in a laboratory accredited to ISO 17025 or similar accreditation with the ability to test to the relevant IEEE standards within that accreditation scope.

T he testing requirement for Type MV cable joints, cable terminations, and connectors shall be effective January 1, ~~2029~~ 2032 .

Statement of Problem and Substantiation for Public Comment

Given the limited number of NRTL certified laboratories capable of performing the required testing, and limited time availability, the listing requirement and 2029 timeline are more than likely to be difficult to meet. Failure to provide manufacturers with enough time to hire laboratories to perform this testing may result in work disruptions, up to and including project delays and potentially increased costs, once the requirement goes into effect. Testing to industry standards should therefore be allowed to be performed in any laboratory that is accredited to ISO 17025 or similar accreditation with the ability to test to the IEEE standards within that accreditation scope.

Related Public Comments for This Document

Related Comment	Relationship
Public Comment No. 1757-NFPA 70-2024 [Section No. 315.17(A)]	

Related Item

• FR n 7577, PI 3419

Submitter Information Verification

Submitter Full Name: Paolo Rocca
Organization: 3M
Affiliation: 3M
Street Address:
City:
State:
Zip:
Submittal Date: Tue Aug 27 07:54:53 EDT 2024
Committee: NEC-P09

Public Comment No. 311-NFPA 70-2024 [Section No. 315.3]

315.3 Reconditioned Equipment.

Reconditioned Type MV cables and conductors shall not be installed.

Additional Proposed Changes

File Name	Description	Approved
CN_7.pdf	NEC_CN7	

Statement of Problem and Substantiation for Public Comment

NOTE: The following CC Note No. 7 appeared in the First Draft Report on First Revision No. 7577.

The Correlating Committee directs that CMP 9 review FR 7577 and consider revising the text to align with recommended wording regarding reconditioning. The recommended wording for 315.3 is: “The installation of reconditioned Type MV cables and conductors shall not be permitted.”

Related Item

- First Revision No. 7577

Submitter Information Verification

Submitter Full Name: CC Notes
Organization: NEC Correlating Committee
Street Address:
City:
State:
Zip:
Submittal Date: Mon Jul 29 16:25:16 EDT 2024
Committee: NEC-P09

Correlating Committee Note No. 7-NFPA 70-2024 [Section No. 315.3]

Submitter Information Verification

Committee: NEC-AAC
Submittal Date: Tue May 07 09:44:36 EDT 2024

Committee Statement

Committee Statement: The Correlating Committee directs that CMP 9 review FR 7577 and consider revising the text to align with recommended wording regarding reconditioning. The recommended wording for 315.3 is: “The installation of reconditioned Type MV cables and conductors shall not be permitted.”

First Revision No. 7577-NFPA 70-2024 [New Section after 315.1]

Ballot Results

✔ **This item has passed ballot**

12 Eligible Voters
1 Not Returned
11 Affirmative All
0 Affirmative with Comments
0 Negative with Comments
0 Abstention

Not Returned

McDaniel, Roger D.

Affirmative All

Ayer, Lawrence S.
Bowmer, Trevor N.
Hickman, Palmer L.
Holub, Richard A.
Jackson, Peter D.
Kendall, David H.
Manche, Alan
Osborne, Robert D.
Porter, Christine T.
Schultheis, Timothy James
Williams, David A.

Public Comment No. 74-NFPA 70-2024 [Section No. 315.3]

315.3 Reconditioned Equipment.

~~Reconditioned~~ The installation of reconditioned Type MV cables and conductors ~~shall~~ , MV cable joints, MV cable terminations, connectors, and associated fittings, shall not be ~~installed.~~ permitted. This shall not prohibit the rejuvenation of Type MV cables and conductors.

Informational Note: Rejuvenation is a process that differs from reconditioning. The rejuvenation process is only applied to cables and conductors at the site of installation and does not involve the removal of cable.

Statement of Problem and Substantiation for Public Comment

This Public Comment is submitted on behalf of a Correlating Committee Medium Voltage Task Group consisting of Robert Osborne (Chair), Paul Barnhart, Lou Grahor, Donny Cook, Scott Higgins, Mike Querry, Roger McDaniel, Dave Burns, Rod Belisle, Kevin Rogers, Tony Ricciuti, Paul Knapp, Paul Sullivan, George Smith, Eric Simmon, Kevin Arnold, Larry Wildermuth, and Kyle Krueger.

This public comment restructures the sentence to align with the recommendation from the Correlating Committee. Additionally, the text from the First Draft did not address the other equipment covered by Article 315 (the cable joints, cable terminations, connectors, and associated fittings). Similar to the Type MV Cable, the other equipment covered by this Article are not suitable for reconditioning and the requirement should clearly state this. Lastly, cable and conductor rejuvenation is a process that may be considered by some to be "reconditioning"; however, it is a process that has been permitted in the past. Therefore, this revision would indicate that rejuvenation is permitted, with an Informational Note to explain what constitutes 'rejuvenation'.

Related Item

• CC Note No. 7

Submitter Information Verification

Submitter Full Name: Robert Osborne
Organization: UL Solutions
Street Address:
City:
State:
Zip:

Submittal Date: Mon Jul 15 15:52:55 EDT 2024
Committee: NEC-P09

Public Comment No. 186-NFPA 70-2024 [Section No. 315.10(C)(2)]

(2) 133 Percent Insulation Level.

Cables with 133 percent insulation shall be applied in situations where the clearing time requirements of the 100 percent level category cannot be met and the faulted section will be de-energized in a time not exceeding 1 hour. Cables with 133 percent insulation shall be permitted where only 100 percent level categories are required.

Statement of Problem and Substantiation for Public Comment

Cables surpassing the "code minimum" should be permitted to be used. Engineers/owners often specify above the code minimum for their systems and the way the first draft appears would prohibit exceeding code minimum. To be specific, 133% insulation would surpass code minimum where only 100% insulation is required. For example: for extra insulation and reduced voltage stress, some clients do not allow 100% and opt for 133% for all installations onsite.

Related Item

• PI No. 3386-NFPA 70-2023

Submitter Information Verification

Submitter Full Name: Michael Lee
Organization: PEC
Street Address:
City:
State:
Zip:

Submittal Date: Tue Jul 23 15:28:01 EDT 2024
Committee: NEC-P09

Public Comment No. 187-NFPA 70-2024 [Section No. 315.10(C)(3)]

(3) 173 Percent Insulation Level.

Cables with 173 percent insulation shall be applied where the conditions of 315.10(C)(2) cannot be met. Cables with 173 percent insulation shall be permitted where the application only requires 100 percent insulation level or 133 percent insulation levels.

Informational Note: See UL 1072-2023, *Medium-Voltage Power Cable*, ANSI/ICEA S-93-639-2022, *American National Standard for 5-46kV Shielded Power Cable for Use in the Transmission and Distribution of Electric Energy*, and ICEA S-94-649-2021, *Standard for Concentric Neutral Cables Rated 5 through 46 kV for Medium Voltage Cables*.

Statement of Problem and Substantiation for Public Comment

Cables surpassing the "code minimum" should be permitted to be used. Engineers/owners often specify above the code minimum for their systems and the way the first draft appears would prohibit exceeding code minimum. To be specific, 173% insulation would surpass code minimum where only 100% or 133% insulation is required. For example: for extra insulation and reduced voltage stress, some engineers/owner may prefer 173% cable be installed.

Related Item

• PI No. 3389-NFPA 70-2023

Submitter Information Verification

Submitter Full Name: Michael Lee
Organization: PEC
Street Address:
City:
State:
Zip:

Submittal Date: Tue Jul 23 15:43:16 EDT 2024
Committee: NEC-P09

Public Comment No. 1757-NFPA 70-2024 [Section No. 315.17(A)]

(A) Required Information for Type MV Cable Joints, Terminations, and Connectors.

All Type MV cable joints, cable terminations, and connectors shall be marked to indicate the following information, using one or more of the methods described in 315.17(B)(1) or 315.17(B)(2), and shall be permitted to be optionally marked as described in 315.17(C):

(1) The maximum or nominal rated voltage.

(2)

(3) The ~~proper type letter or letters for the type of wire or cable as specified elsewhere in this *Code* that the cable joint or cable terminations is listed for use with.~~

(4) ~~The~~ manufacturer's name, trademark, or other distinctive marking by which the organizations responsible for the product can be readily identified.

(5)

(6) The ~~conductor AWG size or circular mil area size, or range of sizes, that the cable joint or cable terminations is listed for use with.~~

(7) ~~The cable~~ cable insulation outer diameter size, or size range, that the cable joint or cable termination is listed for use with.

(8) Connectors shall be marked with the following information~~; the marking shall also be on the unit container (the smallest container in which the connector is packaged)~~ :

(9) The manufacturer's name, trademark, or other distinctive marking by which the organization responsible for the product can be readily identified

(10) The manufacturer's catalog number

(11) The conductor AWG size or circular mil use range, and die number if applicable

(12) The type of conductor material(s) the connector is for use with

Statement of Problem and Substantiation for Public Comment

315.17.A.1 - adding "nominal":
IEEE 48 and IEEE 404 do not define maximum rated voltages for accessories, but simply the voltage class or nominal operating voltage. IEEE 386, on the other hand, does define a maximum voltage.

315.17.A.2 - removal:
Letters, and designations are always subject to changes and revisions and cables are likewise subject to change and improvement over time, creating new types. It is best to leave the cable types that are compatible with the accessory defined (in the form of a description) in the product instructions or literature and/or the IEEE testing standards, where applicable.

315.17.A.4 - removal:
Conductor size ranges can be misleading, if taken on their own, when it comes to medium voltage accessories. For example, the same accessory can be used on lower voltage cables at larger gauges. Another example, when using pre-molded products like separable connectors, can cause confusion as the same product may work with a particular gauge at 100% insulation, but not if a 133% insulation cable with the same gauge was used. Because of all of the above, gauge ranges should be taken in context and fit best in product literature.

315.17.A.5 - "insulation diameter":
It is the cable insulation range, not the outer jacket range, that typically defines medium voltage accessory ranges, since the jacket OD can be affected by many other factors, including type of shielding, presence of armor, 1C vs 3C, etc.

315.17.A.6 - removal of second part:
Information is already available on the connector. Unit containers may include additional info like instructions.

Related Public Comments for This Document

Related Comment	Relationship
Public Comment No. 1755-NFPA 70-2024 [Section No. 315.2]	
Public Comment No. 1759-NFPA 70-2024 [Section No. 315.17(B)]	
Public Comment No. 1762-NFPA 70-2024 [Section No. 315.17(C)]	
Public Comment No. 1764-NFPA 70-2024 [Section No. 315.32(B)]	

Related Item

• FR 7577, PI 3419

Submitter Information Verification

Submitter Full Name: Paolo Rocca
Organization: 3M
Affiliation: 3M
Street Address:
City:
State:
Zip:

Submittal Date: Tue Aug 27 08:15:58 EDT 2024
Committee: NEC-P09

Public Comment No. 1759-NFPA 70-2024 [Section No. 315.17(B)]

(B) Method of Marking for Type MV Cable Joints, Terminations, and Connectors.

One or both of the methods in 315.17(B)(1) or 315.17(B)(2) shall be used for the marking of cable joints, terminations, or connectors.

(1) Surface Marking.

Type MV cable joints, terminations, or connectors shall be durably marked on the surface.

(2) Tag Marking.

Type MV cable joints, terminations, or connectors shall be ~~marked by means of a durably~~ supplied with a durably printed tag or label that can be attached to joint or termination or cable where the accessory is installed .

Statement of Problem and Substantiation for Public Comment

Tags and/or external marking may not be able to be attached to products, in certain situations. For example, when using tubular indoor terminations, any surface molding, feature or tag that is attached to it will alter its creepage distance and normal ability to perform.

Related Public Comments for This Document

Related Comment	Relationship
Public Comment No. 1757-NFPA 70-2024 [Section No. 315.17(A)]	
Public Comment No. 1762-NFPA 70-2024 [Section No. 315.17(C)]	
Public Comment No. 1764-NFPA 70-2024 [Section No. 315.32(B)]	

Related Item

• FR 7577, PI 3419

Submitter Information Verification

Submitter Full Name: Paolo Rocca
Organization: 3M
Affiliation: 3M
Street Address:
City:
State:
Zip:

Submittal Date: Tue Aug 27 08:25:30 EDT 2024
Committee: NEC-P09

Public Comment No. 1762-NFPA 70-2024 [Section No. 315.17(C)]

(C) Optional Markings.

Type MV cable joints and cable terminations shall be permitted to be marked to indicate special characteristics, such as limited smoke and sunlight resistance either using one of the methods in 315 .17(B)(1) or 315.17(B)(2) or in the product documentation.

Statement of Problem and Substantiation for Public Comment

The number of potential optional markings, and the combination of the same, would become impractical to execute and create large “instruction-like” text on tags or products. Instead, this information is best placed in instructions that accompany the product.

Related Public Comments for This Document

Related Comment	Relationship
Public Comment No. 1757-NFPA 70-2024 [Section No. 315.17(A)]	
Public Comment No. 1759-NFPA 70-2024 [Section No. 315.17(B)]	
Public Comment No. 1764-NFPA 70-2024 [Section No. 315.32(B)]	

Related Item

- FR 7577, PI 3419

Submitter Information Verification

Submitter Full Name: Paolo Rocca
Organization: 3M
Affiliation: 3M
Street Address:
City:
State:
Zip:

Submittal Date: Tue Aug 27 08:30:25 EDT 2024
Committee: NEC-P09

Public Comment No. 1764-NFPA 70-2024 [Section No. 315.32(B)]

(B) Type MV Cable Joints and Terminations.

Type MV cable joints and terminations shall be permitted for use on power systems rated up to and including 35,000 volts, nominal, as follows:

(1) Type MV cable joints and terminations, used where exposed to direct sunlight, shall be identified for the use.

(2) Direct buried.

(3) Where used intermittently or continuously submerged in water at a depth not exceeding 7 m (23 ft) type MV cable joints and terminations shall be identified for the use.

(4) ~~The environmental operating temperature range shall be identified.~~

(5)

(6) Where used in one or more of the following conditions Type MV cable joints and terminations shall be identified for the use:

(7) Underground chambers

(8) Tunnels

(9) Conduits

(10) Manholes

(11) Vaults

(12) Corrosive conditions where exposed to oils, greases, vapors, gases, fumes, liquids, or other substances having a deleterious effect on the joint or termination shall be of a type suitable for the application.

(13) In cable trays, where identified for use, in accordance with 392.10, 392.20(B), 392.20(C) and 392.20(D), 392.22(C), 392.30(B)(1), 392.46, 392.56, and 392.60.

Informational Note No. 1: The “uses permitted” is not an all-inclusive list.

Informational Note No. 2: See IEEE-404, *IEEE Standard for Extruded and Laminated Dielectric Shielded Cable Joints Rated 2.5kV to 500kV*, for more information on cable joints. Cable joints are often referred to as splices. However, the term *splice* includes many other applications not included in the definition of a cable joint.

Informational Note No. 3: See IEEE-48, *IEEE Standard for Test Procedures and Requirements for Alternating-Current Cable Terminations Used on Shielded Cables Having Laminated Insulation Rated 2.5 kV through 765 kV or Extruded Insulation Rated 2.5 kV through 500 kV*, for information on terminations. Type MV cable terminations include terminations used to connect directly to equipment or insulators.

Informational Note No. 4: See IEEE-386, *IEEE Standard for Separable Insulated Connector Systems for Power Distribution Systems Rated 2.5kV through 35 kV*, and IEEE-1215, *IEEE Guide for the Application of Separable Insulated Connectors*, for more information on separable insulated connectors. Type MV cable terminations also include separable insulated connectors, which are a type of pluggable cable termination and can be used for connection to equipment, such as switchgear or transformers. A separable connector has a matching interface that the separable connector plugs into on the equipment, such as switchgear or transformers. Separable connectors can also be ganged together to form a distribution junction using specialized junction brackets.

Statement of Problem and Substantiation for Public Comment

IEEE Standard Operating Conditions already cover an operating temperature range. Anything outside this range is not directly addressed or tested in the IEEE standards.

Related Public Comments for This Document

Related Comment	Relationship
Public Comment No. 1757-NFPA 70-2024 [Section No. 315.17(A)]	
Public Comment No. 1759-NFPA 70-2024 [Section No. 315.17(B)]	
Public Comment No. 1762-NFPA 70-2024 [Section No. 315.17(C)]	

Related Item

• FR 7577, PI 3419

Submitter Information Verification

Submitter Full Name: Paolo Rocca
Organization: 3M
Affiliation: 3M
Street Address:
City:
State:
Zip:

Submittal Date: Tue Aug 27 08:33:30 EDT 2024
Committee: NEC-P09

Public Comment No. 313-NFPA 70-2024 [Section No. 450.4]

450.4 Interconnection of Transformers.

Transformers shall individually comply with the requirements of this article unless specific provisions allow for interconnection and operation as a single unit.

Additional Proposed Changes

File Name	Description	Approved
CN_12.pdf	NEC_CN12	

Statement of Problem and Substantiation for Public Comment

NOTE: The following CC Note No. 12 appeared in the First Draft Report on First Revision No. 7900.

The Correlating Committee directs CMP 9 to review FR 7900 and consider restructuring 450.6(A) into a list format or short, simple declarative sentences (NEC Style Manual Section 3.5.1.1) to improve clarity.

Related Item

• First Revision No. 7900

Submitter Information Verification

Submitter Full Name: CC Notes
Organization: NEC Correlating Committee
Street Address:
City:
State:
Zip:
Submittal Date: Mon Jul 29 16:30:35 EDT 2024
Committee: NEC-P09

Correlating Committee Note No. 12-NFPA 70-2024 [Section No. 450.4]

Submitter Information Verification

Committee: NEC-AAC
Submittal Date: Tue May 07 10:26:07 EDT 2024

Committee Statement

Committee Statement: The Correlating Committee directs CMP 9 to review FR 7900 and consider restructuring 450.6(A) into a list format or short, simple declarative sentences (NEC Style Manual Section 3.5.1.1) to improve clarity.

First Revision No. 7900-NFPA 70-2024 [Section No. 450.4]

Ballot Results

✔ **This item has passed ballot**

12 Eligible Voters
1 Not Returned
9 Affirmative All
2 Affirmative with Comments
0 Negative with Comments
0 Abstention

Not Returned

McDaniel, Roger D.

Affirmative All

Ayer, Lawrence S.
Hickman, Palmer L.
Jackson, Peter D.
Kendall, David H.
Manche, Alan
Osborne, Robert D.
Porter, Christine T.
Schultheis, Timothy James
Williams, David A.

Affirmative with Comment

Bowmer, Trevor N.
This CN is tagged incorrectly in Terra at 450.4 instead of 450.6. .

Holub, Richard A.

This CN appears to be inserted in Terra in the wrong spot, tagged to 450.4 instead of 450.6. I believe it should be moved to avoid confusing the panel and anyone else reviewing the First Draft.

Public Comment No. 314-NFPA 70-2024 [Section No. 450.11]

450.11 Ventilation.

(A) General.

Ventilation shall dispose of the transformer full-load heat losses without creating a temperature rise that is in excess of the transformer rating.

(B) Ventilation Openings.

Transformers with ventilating openings shall be installed so that the ventilating openings are not blocked by walls or other obstructions.

(C) Marking.

The required clearances shall be clearly marked on the transformer. Transformer top surfaces that are horizontal and readily accessible shall be marked to prohibit storage.

Informational Note No. 1: See IEEE C57.12.00-2015, *General Requirements for Liquid-Immersed Distribution, Power, and Regulating Transformers*, and IEEE C57.12.01-2020, *General Requirements for Dry-Type Distribution and Power Transformers*, for additional information.

Informational Note No. 2: See IEEE C57.110-2018, *Recommended Practice for Establishing Liquid-Filled and Dry-Type Power and Distribution Transformer Capability When Supplying Nonsinusoidal Load Currents*, for more information where transformers are used with nonlinear loads that have nonsinusoidal currents that can result in additional losses and transformer heating.

Additional Proposed Changes

File Name	Description	Approved
CN_13.pdf	NEC_CN13	

Statement of Problem and Substantiation for Public Comment

NOTE: The following CC Note No. 13 appeared in the First Draft Report on First Revision No. 7891.

The Correlating Committee directs CMP 9 to review FR 7891 and consider whether Informational Note 1 to 450.11(C) is accurate regarding the date of the IEEE standard. IEEE C57.12.00 is on the 2021 version, and is the date identified in Annex A.

Related Item

• First Revision No. 7891

Submitter Information Verification

Submitter Full Name: CC Notes
Organization: NEC Correlating Committee
Street Address:
City:
State:
Zip:
Submittal Date: Mon Jul 29 16:32:23 EDT 2024

Committee:	NEC-P09

Correlating Committee Note No. 13-NFPA 70-2024 [Section No. 450.11]

Submitter Information Verification

Committee: NEC-AAC
Submittal Date: Tue May 07 10:27:57 EDT 2024

Committee Statement

Committee Statement: The Correlating Committee directs CMP 9 to review FR 7891 and consider whether Informational Note 1 to 450.11(C) is accurate regarding the date of the IEEE standard. IEEE C57.12.00 is on the 2021 version, and is the date identified in Annex A.

First Revision No. 7891-NFPA 70-2024 [Section No. 450.9]

Ballot Results

✔ **This item has passed ballot**

12 Eligible Voters
1 Not Returned
11 Affirmative All
0 Affirmative with Comments
0 Negative with Comments
0 Abstention

Not Returned

McDaniel, Roger D.

Affirmative All

Ayer, Lawrence S.
Bowmer, Trevor N.
Hickman, Palmer L.
Holub, Richard A.
Jackson, Peter D.
Kendall, David H.
Manche, Alan
Osborne, Robert D.
Porter, Christine T.
Schultheis, Timothy James
Williams, David A.

Public Comment No. 97-NFPA 70-2024 [Section No. 450.12(A)]

(A) Dry-Type Transformer Enclosures.

Where separate equipment grounding conductors and supply-side bonding jumpers are installed, a terminal bar(s) for all grounding and bonding conductor connections shall be secured inside the transformer enclosure. The terminal bar(s) shall be bonded to the enclosure in accordance with 250.12 and shall not be installed on or over any vented portion of the enclosure.

Exception: Where a dry-type transformer is equipped with wire-type connections (leads), the grounding and bonding connections shall be permitted to be connected together using any of the methods in 250.8 and shall be bonded to the enclosure if of metal.

Statement of Problem and Substantiation for Public Comment

The panel rejected my PI with the statement “The text was not revised as the requirement is to have one terminal bar. If additional connections are necessary, it can be increased in size to allow additional connections. It is not prohibited to have multiple bars as long as they are interconnected with a jumper of appropriate cross-sectional area.”

It appears that the CMP is in agreement with me that it’s not always practical to limited one terminal bar for grounding and bonding conductors. Example, a 300 kVA 480 – 208Y/120V transformer with a 1,000A secondary OCPD would require four secondary 2/0 AWG EGCs, a 2/0 AWG GEC, a 2/0 AWG SBJ, and a 3 AWG for the primary EGC (400A primary OCPD). A total of no less than seven terminals. Note: Transformers are not limited to 300 kVA…
Please reconsider limiting the grounding and bonding of conductors in a transformer to one terminal bar.

Related Item

• 2225

Submitter Information Verification

Submitter Full Name: Mike Holt
Organization: Mike Holt Enterprises Inc
Street Address:
City:
State:
Zip:

Submittal Date: Tue Jul 16 18:14:42 EDT 2024
Committee: NEC-P09

Public Comment No. 1021-NFPA 70-2024 [Section No. 495.2]

495.2 Listing Requirements.

Switchgear and industrial control assemblies shall be listed.

(A) The listing requirement for equipment operating up to 15,000 volts ac shall be ~~listed.~~ effective January 1, 2029.

(B) The listing requirement for ~~this~~ equipment operating above 15,000 volts ac shall be effective January 1, ~~2029~~ 2032 .

Statement of Problem and Substantiation for Public Comment

Challenges of the approval of unlisted electrical equipment, less than and greater than 15 KV, are identical. Hazards associated with equipment that does not comply with applicable standards are the same regardless of the voltage level. The technical committee and industry appear to have concerns that a January 1, 2029 effective date does not provide enough time to list (certify) all equipment above 1,000 volts ac. This comment acknowledges timing is a realistic concern and proposes an additional three years to complete the listing (certification) process for voltages above 15 KV without pretending that the hazards are somehow different above 15 KV. It simply provides additional time to complete the process. The comment also introduces a concept that realistic time frames should be included for significant changes. If 3 or 6 years is not a realistic time frame, industry should select the proper time frame for change rather than simply rejecting a concept that has merit.

Related Item

• PI3474 and FR8490

Submitter Information Verification

Submitter Full Name: Donald Cook
Organization: Self
Street Address:
City:
State:
Zip:

Submittal Date: Sun Aug 11 14:08:05 EDT 2024
Committee: NEC-P09

Public Comment No. 1338-NFPA 70-2024 [Section No. 495.2]

495.2 Listing Requirements.

Switchgear and industrial control assemblies operating ~~up to~~ not over 15,000 volts ac shall be listed. The listing requirement for this equipment shall be effective January 1, 2029.

Statement of Problem and Substantiation for Public Comment

This Public Comment is submitted on behalf of a Correlating Committee Medium Voltage Task Group consisting of Robert Osborne (Chair), Paul Barnhart, Lou Grahor, Donny Cook, Scott Higgins, Mike Querry, Roger McDaniel, Dave Burns, Rod Belisle, Kevin Rogers, Tony Ricciuti, Paul Knapp, Paul Sullivan, George Smith, Eric Simmon, Kevin Arnold, Larry Wildermuth, and Kyle Krueger.

This modification is made to drive consistency with other text where voltage limitations are identified.

Related Item

• CC Note No. 14

Submitter Information Verification

Submitter Full Name: Robert Osborne
Organization: UL Solutions
Street Address:
City:
State:
Zip:

Submittal Date: Tue Aug 20 17:21:28 EDT 2024
Committee: NEC-P09

Public Comment No. 1339-NFPA 70-2024 [Section No. 495.2]

495.2 Listing Requirements.

(A) Equipment Rated Not Over 15,000 Volts

Switchgear and industrial control assemblies operating up to 15,000 volts ac or dc, nominal, shall be listed. The listing requirement for this equipment shall be effective January 1, 2029.

(B) Equpment Rated Over 15,000 Volts

Switchgear and industrial control assemblies operating over 15,000 volts ac or dc, nominal, but not over 52,000 volts ac or dc, nominal, shall be listed. This listing requirement shall be effective January 1, 2032.

Statement of Problem and Substantiation for Public Comment

This Public Comment is submitted on behalf of a Correlating Committee Medium Voltage Task Group consisting of Robert Osborne (Chair), Paul Barnhart, Lou Grahor, Donny Cook, Scott Higgins, Mike Querry, Roger McDaniel, Dave Burns, Rod Belisle, Kevin Rogers, Tony Ricciuti, Paul Knapp, Paul Sullivan, George Smith, Eric Simmon, Kevin Arnold, Larry Wildermuth, and Kyle Krueger.

Requiring listing of equipment assists AHJ's and other interested parties in approving equipment in accordance with 110.2 & 110.3. CMP 9 limited the requirement to equipment rated no more than 15 kV, acknowledging that there may be limited options of listed products above 15 kV. The same concerns raised for equipment rated no more than 15 kV would exist for equipment rated above 15 kV. As noted in Article 100, "medium voltage" is generally circuits and equipment rated up to 52 kV. Listings do exist for equipment rated above 15 kV, but availability is more limited. Taking a stepped approach would allow time for manufacturers ensure certified equipment is available in the future, with a rollout of 2029 for equipment rated up to 15 kV, and another 3 year window of time for higher voltage equipment. There may be justification in the future to continue this expansion, but addressing the voltages commonly associated with "medium voltage" is a logic step in the right direction.

Related Item

• FR 8490

Submitter Information Verification

Submitter Full Name: Robert Osborne
Organization: UL Solutions
Street Address:
City:
State:
Zip:

Submittal Date: Tue Aug 20 17:22:32 EDT 2024
Committee: NEC-P09

Public Comment No. 315-NFPA 70-2024 [Section No. 495.2]

495.2 Listing Requirements.

Switchgear and industrial control assemblies operating up to 15,000 volts ac shall be listed. The listing requirement for this equipment shall be effective January 1, 2029.

Additional Proposed Changes

File Name	Description	Approved
CN_14.pdf	NEC_CN14	

Statement of Problem and Substantiation for Public Comment

NOTE: The following CC Note No. 14 appeared in the First Draft Report on First Revision No. 8490.

The Correlating Committee directs CMP 9 to review FR 8490 and consider revising “up to” to “not over” to be consistent with how voltage limitations are specified in other areas of the code. Refer to the title of Article 210 as an example of this wording.

Related Item

- First Revision No. 8490

Submitter Information Verification

Submitter Full Name: CC Notes
Organization: Notes
Street Address:
City:
State:
Zip:
Submittal Date: Mon Jul 29 16:34:04 EDT 2024
Committee: NEC-P09

Correlating Committee Note No. 14-NFPA 70-2024 [Section No. 495.2]

Submitter Information Verification

Committee: NEC-AAC
Submittal Date: Tue May 07 10:29:40 EDT 2024

Committee Statement

Committee Statement: The Correlating Committee directs CMP 9 to review FR 8490 and consider revising "up to" to "not over" to be consistent with how voltage limitations are specified in other areas of the code. Refer to the title of Article 210 as an example of this wording.

First Revision No. 8490-NFPA 70-2024 [New Section after 495.1]

Ballot Results

✔ **This item has passed ballot**

12 Eligible Voters
1 Not Returned
11 Affirmative All
0 Affirmative with Comments
0 Negative with Comments
0 Abstention

Not Returned
McDaniel, Roger D.

Affirmative All
Ayer, Lawrence S.
Bowmer, Trevor N.
Hickman, Palmer L.
Holub, Richard A.
Jackson, Peter D.
Kendall, David H.
Manche, Alan
Osborne, Robert D.
Porter, Christine T.
Schultheis, Timothy James
Williams, David A.

Public Comment No. 103-NFPA 70-2024 [Section No. 495.3]

495.3 Reconditioned Equipment.

(A) Permitted to be Installed.

~~Reconditioned~~ The installation of reconditioned switchgear, or sections of switchgear, shall be permitted~~ to be installed~~ .~~ If~~ If equipment has been damaged by fire, products of combustion, or water, it shall be specifically evaluated by its manufacturer or a qualified testing laboratory prior to being returned to service.

(B) Not Permitted to be Installed.

Except as modified within this article, reconditioned equipment shall not be installed.

Statement of Problem and Substantiation for Public Comment

This Public Comment is submitted on behalf of a Correlating Committee Medium Voltage Task Group consisting of Robert Osborne (Chair), Paul Barnhart, Lou Grahor, Donny Cook, Scott Higgins, Mike Querry, Roger McDaniel, Dave Burns, Rod Belisle, Kevin Rogers, Tony Ricciuti, Paul Knapp, Paul Sullivan, George Smith, Eric Simmon, Kevin Arnold, Larry Wildermuth, and Kyle Krueger.

This public comment restructures the sentence to align with the recommendation from the Correlating Committee.

Related Item

• CC Note No. 15

Submitter Information Verification

Submitter Full Name: Robert Osborne
Organization: UL Solutions
Street Address:
City:
State:
Zip:

Submittal Date: Wed Jul 17 13:47:24 EDT 2024
Committee: NEC-P09

Public Comment No. 1463-NFPA 70-2024 [Section No. 495.3]

495.3 Reconditioned Equipment.

(A) Permitted~~- to be Installed~~ .

Reconditioned switchgear, or sections of switchgear, shall be permitted~~- to be installed~~ . If equipment has been damaged by fire, products of combustion, or water, it shall be specifically evaluated by its manufacturer or a qualified testing laboratory prior to being returned to service.

(B) Not Permitted~~- to be Installed~~ .

Except as modified within this article, reconditioned equipment shall not be ~~installed~~ permitted .

Statement of Problem and Substantiation for Public Comment

the suggested language change in (A) is necessary to ensure clarity that this equipment is permitted to be reconditioned in place. Medium voltage equipment that is installed is not removed, sent away, recondtitioned and then installed. This equipment is reconditioned in place. Without this change the AHJ has to make the call on permitting or not permitting reconditioning of equipment in place.

Related Item

• FR 8494

Submitter Information Verification

Submitter Full Name: Thomas Domitrovich
Organization: Eaton Corporation
Street Address:
City:
State:
Zip:

Submittal Date: Fri Aug 23 09:34:33 EDT 2024
Committee: NEC-P09

Public Comment No. 316-NFPA 70-2024 [Section No. 495.3]

495.3 Reconditioned Equipment.

(A) Permitted to be Installed.

Reconditioned switchgear, or sections of switchgear, shall be permitted to be installed. If equipment has been damaged by fire, products of combustion, or water, it shall be specifically evaluated by its manufacturer or a qualified testing laboratory prior to being returned to service.

(B) Not Permitted to be Installed.

Except as modified within this article, reconditioned equipment shall not be installed.

Additional Proposed Changes

File Name	Description	Approved
CN_15.pdf	NEC_CN15	

Statement of Problem and Substantiation for Public Comment

NOTE: The following CC Note No. 15 appeared in the First Draft Report on First Revision No. 8494.

The Correlating Committee directs that CMP 9 review FR 8494 and consider revising the text to align with recommended wording regarding reconditioning. The recommended wording for the first sentence in (A) is “The installation of reconditioned switchgear, or sections of switchgear, shall be permitted.”

Related Item

• First Revision No. 8494

Submitter Information Verification

Submitter Full Name: CC Notes
Organization: NEC Correlating Committee
Street Address:
City:
State:
Zip:
Submittal Date: Mon Jul 29 16:35:43 EDT 2024
Committee: NEC-P09

Correlating Committee Note No. 15-NFPA 70-2024 [Section No. 495.3]

Submitter Information Verification

Committee: NEC-AAC
Submittal Date: Tue May 07 10:33:32 EDT 2024

Committee Statement

Committee Statement: The Correlating Committee directs that CMP 9 review FR 8494 and consider revising the text to align with recommended wording regarding reconditioning. The recommended wording for the first sentence in (A) is “The installation of reconditioned switchgear, or sections of switchgear, shall be permitted.”

First Revision No. 8494-NFPA 70-2024 [Section No. 495.2]

Ballot Results

✔ **This item has passed ballot**

12 Eligible Voters
1 Not Returned
11 Affirmative All
0 Affirmative with Comments
0 Negative with Comments
0 Abstention

Not Returned

McDaniel, Roger D.

Affirmative All

Ayer, Lawrence S.
Bowmer, Trevor N.
Hickman, Palmer L.
Holub, Richard A.
Jackson, Peter D.
Kendall, David H.
Manche, Alan
Osborne, Robert D.
Porter, Christine T.
Schultheis, Timothy James
Williams, David A.

Public Comment No. 555-NFPA 70-2024 [Section No. 495.3]

495.3 Reconditioned Equipment.

~~**(A)** Permitted to be Installed.~~

Reconditioned switchgear, or sections of switchgear, shall be permitted to be installed.

~~If equipment~~

If equipment has been damaged such as by fire, products of combustion,

~~or~~

corrosive influences, or water,

~~it~~

it shall be specifically evaluated by its manufacturer or a qualified testing laboratory prior to being returned to service.

~~(B)~~

~~Not Permitted to be Installed.~~

~~Except as modified within this article, reconditioned equipment shall not be installed.~~

Statement of Problem and Substantiation for Public Comment

Equipment may be damaged by fire, products of combustion, corrosive influences, or water but these are not the only factors that should be considered for evaluation before returning equipment to service. Adding "such as" does not limit "damage" to only four factors. "Corrosive influences" is added to mirror this requirement that appears in 408.3 and 404.3. List item (B) is confusing and can be deleted since there are no references within the article to modify the rule. This revision will clarify that damaged equipment shall be evaluated prior to returning to service.

Related Public Comments for This Document

Related Comment	Relationship
Public Comment No. 1190-NFPA 70-2024 [Section No. 404.3]	
Public Comment No. 1188-NFPA 70-2024 [Section No. 408.3]	
Public Comment No. 1188-NFPA 70-2024 [Section No. 408.3]	
Public Comment No. 1190-NFPA 70-2024 [Section No. 404.3]	

Related Item

- FR-8494

Submitter Information Verification

Submitter Full Name: David Hittinger
Organization: Independent Electrical Contractors
Affiliation: IEC Codes and Standards
Street Address:

City:
State:
Zip:
Submittal Date: Wed Jul 31 14:06:18 EDT 2024
Committee: NEC-P09

Public Comment No. 1108-NFPA 70-2024 [Section No. 495.26]

495.26 Grounding Switches.

Where grounding switches are installed, they shall comply with 495.26(A)

~~and 495.26~~
, (B) and (C) .

(A)

~~Interlocking~~

Interlocking .

Grounding switches shall be interlocked with the disconnecting means for all sources of power to the location where the ground switch is applied, so that the disconnecting means must be open prior to moving the grounding switch to the grounded position and the disconnecting means cannot be closed while the grounding switch is in the grounded position.

Exception:

~~Interlocking~~

Interlocking shall not be required for installations under single management where documented safe switching procedures are established and maintained.

(B)

~~Sign~~

Sign .

A sign in accordance with 110.21(B) shall be installed at the grounding switch location indicating that a grounding switch is present and the designation and locations of all disconnecting means which must be opened prior to moving the grounding switch to the grounded position. This sign shall be permitted to be field- or factory-installed.

Exception:

~~A~~

A sign shall not be required when a grounding switch is interlocked with a disconnecting means in accordance with 495.26(A) , and there is no other source of power to the grounding switch location.

(C) Service Equipment

Where grounding switches are included on service-entrance equipment, the grounding positions on circuits connected to the utility shall be locked as inoperable and labeled accordingly such that the grounding switch at the service entrance equipment cannot be used to ground the utility.

Statement of Problem and Substantiation for Public Comment

Where a grounding switch is used on the premises wiring system for service equipment, the grounding switch on the utility feed may need to be blocked to keep from placing the utility feed into a grounded position. It would be beneficial to a user to include text to clarify this requirement.

Related Item

- FR-7733

Submitter Information Verification

Submitter Full Name: David Hittinger
Organization: Independent Electrical Contractors
Affiliation: IEC Codes and Standards
Street Address:
City:
State:
Zip:
Submittal Date: Thu Aug 15 07:57:03 EDT 2024
Committee: NEC-P09

Public Comment No. 317-NFPA 70-2024 [Section No. 495.26]

495.26 Grounding Switches.

Where grounding switches are installed, they shall comply with 495.26(A) and 495.26(B).

(A) Interlocking.

Grounding switches shall be interlocked with the disconnecting means for all sources of power to the location where the ground switch is applied, so that the disconnecting means must be open prior to moving the grounding switch to the grounded position and the disconnecting means cannot be closed while the grounding switch is in the grounded position.

Exception: Interlocking shall not be required for installations under single management where documented safe switching procedures are established and maintained.

(B) Sign.

A sign in accordance with 110.21(B) shall be installed at the grounding switch location indicating that a grounding switch is present and the designation and locations of all disconnecting means which must be opened prior to moving the grounding switch to the grounded position. This sign shall be permitted to be field- or factory-installed.

Exception: A sign shall not be required when a grounding switch is interlocked with a disconnecting means in accordance with 495.26(A), and there is no other source of power to the grounding switch location.

Additional Proposed Changes

File Name	Description	Approved
CN_16.pdf	NEC_CN16	

Statement of Problem and Substantiation for Public Comment

NOTE: The following CC Note No. 16 appeared in the First Draft Report on First Revision No. 7733.

The Correlating Committee directs CMP 9 to review FR 7733 with respect to the phrase “ground switch” and whether this is intended to be a “grounding switch” in the first sentence of 495.26(A).

Related Item

• First Revision No. 7733

Submitter Information Verification

Submitter Full Name: CC Notes
Organization: NEC Correlating Committee
Street Address:
City:
State:
Zip:
Submittal Date: Mon Jul 29 16:40:32 EDT 2024
Committee: NEC-P09

Correlating Committee Note No. 16-NFPA 70-2024 [Section No. 495.26]

Submitter Information Verification

Committee: NEC-AAC
Submittal Date: Tue May 07 10:37:08 EDT 2024

Committee Statement

Committee Statement: The Correlating Committee directs CMP 9 to review FR 7733 with respect to the phrase “ground switch” and whether this is intended to be a “grounding switch” in the first sentence of 495.26(A).

First Revision No. 7733-NFPA 70-2024 [New Section after 495.25]

Ballot Results

✔ **This item has passed ballot**

12 Eligible Voters
1 Not Returned
11 Affirmative All
0 Affirmative with Comments
0 Negative with Comments
0 Abstention

Not Returned
McDaniel, Roger D.

Affirmative All
Ayer, Lawrence S.
Bowmer, Trevor N.
Hickman, Palmer L.
Holub, Richard A.
Jackson, Peter D.
Kendall, David H.
Manche, Alan
Osborne, Robert D.
Porter, Christine T.
Schultheis, Timothy James
Williams, David A.

Public Comment No. 778-NFPA 70-2024 [Section No. 495.26(A)]

(A) Interlocking.

Grounding switches shall be interlocked with ~~the disconnecting~~ the disconnecting means for all sources of power to the location where the ~~ground~~ grounding switch is applied, so that the disconnecting means must be open prior to moving the grounding switch to the grounded position and the disconnecting means cannot be closed while the grounding switch is in the grounded position.

Exception: Interlocking shall not be required for installations under single management where documented safe switching procedures are established and maintained.

Statement of Problem and Substantiation for Public Comment

This Public Comment is submitted on behalf of a Correlating Committee Medium Voltage Task Group consisting of Robert Osborne (Chair), Paul Barnhart, Lou Grahor, Donny Cook, Scott Higgins, Mike Querry, Roger McDaniel, Dave Burns, Rod Belisle, Kevin Rogers, Tony Ricciuti, Paul Knapp, Paul Sullivan, George Smith, Eric Simmon, Kevin Arnold, Larry Wildermuth, and Kyle Krueger.

This Public Comment corrects the term "ground switch" to "grounding switch".

Related Item

• CC Note No. 16

Submitter Information Verification

Submitter Full Name: Robert Osborne
Organization: UL Solutions
Street Address:
City:
State:
Zip:

Submittal Date: Mon Aug 05 10:54:20 EDT 2024
Committee: NEC-P09

Public Comment No. 772-NFPA 70-2024 [Section No. 495.30]

495.30 General.

~~Article 495, Part III, covers assemblies of~~ The requirements of this part shall apply to assemblies of switchgear and industrial control equipment, including, but not limited to ~~;~~ ~~switches~~ the following:

(1) Switches and interrupting devices and their

~~control, metering, protection, and regulating equipment~~

(1) controls

(2) Metering equipment

(3) Protection equipment

(4) Regulating equipment where they are an integral part of the assembly, with associated interconnections and supporting structures.

Statement of Problem and Substantiation for Public Comment

This Public Comment is submitted on behalf of a Correlating Committee Medium Voltage Task Group consisting of Robert Osborne (Chair), Paul Barnhart, Lou Grahor, Donny Cook, Scott Higgins, Mike Querry, Roger McDaniel, Dave Burns, Rod Belisle, Kevin Rogers, Tony Ricciuti, Paul Knapp, Paul Sullivan, George Smith, Eric Simmon, Kevin Arnold, Larry Wildermuth, and Kyle Krueger.

This, along with other Public Comments, will create a parallel structure for the first section in each Part of Article 495. This aligns with the NEC Style Manual requirement 3.5.5 for parallel construction of similar requirements.

Related Public Comments for This Document

Related Comment	Relationship
Public Comment No. 784-NFPA 70-2024 [Section No. 495.70]	

Related Item

• CC Note No. 18 • PC 771 • PC 780 • PC 784

Submitter Information Verification

Submitter Full Name: Robert Osborne
Organization: UL Solutions
Street Address:
City:
State:
Zip:
Submittal Date: Mon Aug 05 09:49:36 EDT 2024
Committee: NEC-P09

Public Comment No. 318-NFPA 70-2024 [Section No. 495.36]

495.36 Switchgear Enclosure and Mounting.

Switchgear shall consist of a substantial metal structure and a sheet metal enclosure. Where installed over a combustible floor, suitable protection thereto shall be provided.

Additional Proposed Changes

File Name	Description	Approved
CN_17.pdf	NEC_CN17	

Statement of Problem and Substantiation for Public Comment

NOTE: The following CC Note No. 17 appeared in the First Draft Report on First Revision No. 7745.

The Correlating Committee directs CMP 9 to review FR 7745 with respect to 495.36and the use of the terms “substantial” and “suitable” that are unenforceable and vague and do not comply with the NEC Style Manual 3.2.1. Additionally, the term “suitable” is used in 495.40 and the use of that term should be reviewed.

Related Item

• First Revision No. 7745

Submitter Information Verification

Submitter Full Name: CC Notes
Organization: NEC Correlating Committee
Street Address:
City:
State:
Zip:
Submittal Date: Mon Jul 29 16:42:28 EDT 2024
Committee: NEC-P09

Correlating Committee Note No. 17-NFPA 70-2024 [Section No. 495.36]

Submitter Information Verification

Committee: NEC-AAC
Submittal Date: Tue May 07 10:38:55 EDT 2024

Committee Statement

Committee Statement: The Correlating Committee directs CMP 9 to review FR 7745 with respect to 495.36 and the use of the terms “substantial” and “suitable” that are unenforceable and vague and do not comply with the NEC Style Manual 3.2.1. Additionally, the term “suitable” is used in 495.40 and the use of that term should be reviewed.

First Revision No. 7745-NFPA 70-2024 [New Section after 495.35]

Ballot Results

✔ **This item has passed ballot**

12 Eligible Voters
1 Not Returned
11 Affirmative All
0 Affirmative with Comments
0 Negative with Comments
0 Abstention

Not Returned

McDaniel, Roger D.

Affirmative All

Ayer, Lawrence S.
Bowmer, Trevor N.
Hickman, Palmer L.
Holub, Richard A.
Jackson, Peter D.
Kendall, David H.
Manche, Alan
Osborne, Robert D.
Porter, Christine T.
Schultheis, Timothy James
Williams, David A.

Public Comment No. 319-NFPA 70-2024 [Section No. 495.61]

495.61 General.

(A) Covered.

The requirements of this part shall apply to installations and use of high-voltage power distribution and utilization equipment that is portable, mobile, or both, and include but not be limited to the following:

(1) Substations and switch houses mounted on skids

(2) Trailers or cars

(3) Mobile shovels

(4) Draglines

(5) Cranes

(6) Hoists

(7) Drills

(8) Dredges

(9) Compressors

(10) Pumps

(11) Conveyors

(12) Underground excavators

(B) Grounding and Bonding.

Grounding and bonding shall comply with Article 250, Part X.

(C) Protection.

Approved enclosures or guarding, or both, shall be provided to protect portable and mobile equipment from physical damage.

(D) Disconnecting Means.

Disconnecting means shall be installed for mobile and portable high-voltage equipment according to the requirements of Article 230, Part VIII, and shall disconnect all ungrounded conductors.

Additional Proposed Changes

File Name	Description	Approved
CN_18.pdf	NEC_CN18	

Statement of Problem and Substantiation for Public Comment

NOTE: The following CC Note No. 18 appeared in the First Draft Report on First Revision No. 7754.

The Correlating Committee directs CMP 9 to review FR 7754 and in addition 495.30 and 495.70 for compliance with NEC Style Manual requirement 3.5.5 for parallel construction of similar requirements. Section 495.61 should be renumbered as 495.60.

Related Item

• First Revision No. 7754

Submitter Information Verification

Submitter Full Name: CC Notes
Organization: NEC Correlating Committee
Street Address:
City:
State:
Zip:
Submittal Date: Mon Jul 29 16:49:32 EDT 2024
Committee: NEC-P09

Correlating Committee Note No. 18-NFPA 70-2024 [Section No. 495.61]

Submitter Information Verification

Committee: NEC-AAC
Submittal Date: Tue May 07 10:42:26 EDT 2024

Committee Statement

Committee Statement: The Correlating Committee directs CMP 9 to review FR 7754 and in addition 495.30 and 495.70 for compliance with NEC Style Manual requirement 3.5.5 for parallel construction of similar requirements. Section 495.61 should be renumbered as 495.60.

First Revision No. 7754-NFPA 70-2024 [Section No. 495.61]

Ballot Results

This item has passed ballot

12 Eligible Voters
1 Not Returned
11 Affirmative All
0 Affirmative with Comments
0 Negative with Comments
0 Abstention

Not Returned

McDaniel, Roger D.

Affirmative All

Ayer, Lawrence S.
Bowmer, Trevor N.
Hickman, Palmer L.
Holub, Richard A.
Jackson, Peter D.
Kendall, David H.
Manche, Alan
Osborne, Robert D.
Porter, Christine T.
Schultheis, Timothy James
Williams, David A.

Public Comment No. 782-NFPA 70-2024 [Section No. 495.61]

~~(D)~~

495.61 ~~General.~~

~~(A) Covered.~~

~~The requirements of this part shall apply to installations and use of high-voltage power distribution and utilization equipment that is portable, mobile, or both, and include but not be limited to the following:~~

(1) ~~Substations and switch houses mounted on skids~~

(2) ~~Trailers or cars~~

(3) ~~Mobile shovels~~

(4) ~~Draglines~~

(5) ~~Cranes~~

(6) ~~Hoists~~

(7) ~~Drills~~

(8) ~~Dredges~~

(9) ~~Compressors~~

(10) ~~Pumps~~

(11) ~~Conveyors~~

(12) ~~Underground excavators~~

~~(B) Grounding and Bonding.~~

~~Grounding and bonding shall comply with Article 250 , Part X.~~

~~(C) Protection.~~

~~Approved enclosures or guarding, or both, shall be provided to protect portable and mobile equipment from physical damage.~~

Disconnecting Means.

Disconnecting means shall be installed for mobile and portable high-voltage equipment according to the requirements of Article ~~230~~ 270 , ~~Part VIII~~ Part VI , and shall disconnect all ungrounded conductors.

Statement of Problem and Substantiation for Public Comment

This Public Comment is submitted on behalf of a Correlating Committee Medium Voltage Task Group consisting of Robert Osborne (Chair), Paul Barnhart, Lou Grahor, Donny Cook, Scott Higgins, Mike Querry, Roger McDaniel, Dave Burns, Rod Belisle, Kevin Rogers, Tony Ricciuti, Paul Knapp, Paul Sullivan, George Smith, Eric Simmon, Kevin Arnold, Larry Wildermuth, and Kyle Krueger.

Subsection (A) is relocated to new Section 495.60 to create a parallel structure for the first section in each Part of Article 495. Subsection (B) is deleted, as it is both an outdated reference (Article 250, Part X has been relocated to Article 270) and the reference is unnecessary based on the Code Arrangement, as detailed in 90.3. Subsection (C) is deleted, as the requirements for "protection" covered in this subsection are addressed in 110.31 and 495.63. The requirements in subsection (D)

become the only requirements of 495.61, making the subsection structure unnecessary. Therefore, 495.61 is reformatted to only cover "Disconnecting Means" and the reference to 230, Part VIII is revised to reflect the new location of requirements in Article 268.

Related Public Comments for This Document

Related Comment	Relationship
Public Comment No. 784-NFPA 70-2024 [Section No. 495.70]	

Related Item

• CC Note No. 18 • PC 780

Submitter Information Verification

Submitter Full Name: Robert Osborne
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Submittal Date: Mon Aug 05 11:11:48 EDT 2024
Committee: NEC-P09

Public Comment No. 320-NFPA 70-2024 [Section No. 495.66]

495.66 High-Voltage Portable Cable for Main Power Supply.

Flexible high-voltage cable supplying power to portable or mobile equipment shall comply with the grounding and bonding requirements in Article 250, Parts V, VI, and X, and the flexible cable requirements in Article 400, Parts III and IV.

Additional Proposed Changes

File Name	Description	Approved
CN_19.pdf	NEC_CN19	

Statement of Problem and Substantiation for Public Comment

NOTE: The following CC Note No. 19 appeared in the First Draft Report on First Revision No. 7755.

The Correlating Committee directs CMP 9 to review FR 7755 regarding the reference to Article 250. With the creation of Article 252 covering Grounding and Bonding of Systems over 1000 Volts ac, 1500 Volts dc, Nominal, consideration should be made to reference Article 252.

Related Item

• First Revision No. 7755

Submitter Information Verification

Submitter Full Name: CC Notes
Organization: NEC Correlating Committee
Street Address:
City:
State:
Zip:

Submittal Date: Mon Jul 29 16:51:19 EDT 2024
Committee: NEC-P09

Correlating Committee Note No. 19-NFPA 70-2024 [Section No. 495.66]

Submitter Information Verification

Committee: NEC-AAC
Submittal Date: Tue May 07 10:44:22 EDT 2024

Committee Statement

Committee Statement: The Correlating Committee directs CMP 9 to review FR 7755 regarding the reference to Article 250. With the creation of Article 252 covering Grounding and Bonding of Systems over 1000 Volts ac, 1500 Volts dc, Nominal, consideration should be made to reference Article 252.

First Revision No. 7755-NFPA 70-2024 [Section No. 495.66]

Ballot Results

✔ **This item has passed ballot**

12 Eligible Voters
1 Not Returned
11 Affirmative All
0 Affirmative with Comments
0 Negative with Comments
0 Abstention

Not Returned

McDaniel, Roger D.

Affirmative All

Ayer, Lawrence S.
Bowmer, Trevor N.
Hickman, Palmer L.
Holub, Richard A.
Jackson, Peter D.
Kendall, David H.
Manche, Alan
Osborne, Robert D.
Porter, Christine T.
Schultheis, Timothy James
Williams, David A.

Public Comment No. 785-NFPA 70-2024 [Section No. 495.66]

495.66 High-Voltage Portable Cable for Main Power Supply.

Flexible high-voltage cable supplying power to portable or mobile equipment shall comply with the grounding and bonding requirements in Article ~~250~~ 270 , Parts V and VI , ~~VI,~~ and ~~X, and~~ the flexible cable requirements in Article 400, Parts III and IV.

Statement of Problem and Substantiation for Public Comment

This Public Comment is submitted on behalf of a Correlating Committee Medium Voltage Task Group consisting of Robert Osborne (Chair), Paul Barnhart, Lou Grahor, Donny Cook, Scott Higgins, Mike Querry, Roger McDaniel, Dave Burns, Rod Belisle, Kevin Rogers, Tony Ricciuti, Paul Knapp, Paul Sullivan, George Smith, Eric Simmon, Kevin Arnold, Larry Wildermuth, and Kyle Krueger.

References to Article 250 require updates to reflect the introduction of new Article 270.

Related Item

• CC Note No. 19

Submitter Information Verification

Submitter Full Name: Robert Osborne
Organization: UL Solutions
Street Address:
City:
State:
Zip:

Submittal Date: Mon Aug 05 11:31:48 EDT 2024
Committee: NEC-P09

Public Comment No. 784-NFPA 70-2024 [Section No. 495.70]

495.70 General.

The ~~provisions of Article~~ ~~495~~ ~~, Part V, shall~~ requirements of this part shall apply to boilers ~~operating over 1000 volts ac, 1500 volts dc, nominal,~~ in which heat is generated by the passage of current between electrodes through the liquid being heated.

Statement of Problem and Substantiation for Public Comment

This Public Comment is submitted on behalf of a Correlating Committee Medium Voltage Task Group consisting of Robert Osborne (Chair), Paul Barnhart, Lou Grahor, Donny Cook, Scott Higgins, Mike Querry, Roger McDaniel, Dave Burns, Rod Belisle, Kevin Rogers, Tony Ricciuti, Paul Knapp, Paul Sullivan, George Smith, Eric Simmon, Kevin Arnold, Larry Wildermuth, and Kyle Krueger.

This, along with other Public Comments, will create a parallel structure for the first section in each Part of Article 495. This aligns with the NEC Style Manual requirement 3.5.5 for parallel construction of similar requirements. Since this is a Part in Article 495, there is no need to restate the voltage limitations in this Section.

Related Public Comments for This Document

Related Comment	Relationship
Public Comment No. 771-NFPA 70-2024 [New Part after II.]	
Public Comment No. 772-NFPA 70-2024 [Section No. 495.30]	
Public Comment No. 782-NFPA 70-2024 [Section No. 495.61]	

Related Item

- CC Note No. 18

Submitter Information Verification

Submitter Full Name: Robert Osborne
Organization: UL Solutions
Street Address:
City:
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Submittal Date: Mon Aug 05 11:22:14 EDT 2024
Committee: NEC-P09

Public Comment No. 1756-NFPA 70-2024 [New Section after 495.74]

Article 495

Part VI. Equipment with Insulating Liquids

495.80 General.

This part covers installation requirements for equipment, other than transformers, that contain more than 10 gallons of insulating fluid in a single volume within the equipment.

Informational Note: See Part II of Article 450 for installation requirements for insulating fluid filled transformers and their associated internal equipment.

495.81 Equipment Containing Less-Flammable Liquid.

Equipment containing listed less-flammable liquids that have a fire point of not less than 300°C shall be permitted to be installed in accordance with 495.81(A) or 495.81(B).

(A) Indoor Installations.

Indoor installations shall be permitted in accordance with one of the following:

(1) In Type I or Type II buildings, in areas where all of the following requirements are met:

a. The equipment is rated 35,000 volts or less.

b. No combustible materials are stored.

c. A liquid confinement area with enough volume to contain the volume of oil contained in the equipment is provided.

d. The installation complies with all the restrictions provided for in the listing of the liquid.

Informational Note No. 1: See NFPA 220-2021, *Standard on Types of Building Construction*, for definitions of Type I and Type II building construction.

Informational Note No. 2: Such restrictions in 495.81(1)(d) can include, but are not limited to, maximum pressure of the tank, use of a pressure relief valve, appropriate fuse types, and proper sizing of overcurrent protection.

(2) Where an automatic fire extinguishing system in the immediate area of the equipment and a liquid confinement area with enough volume to contain the largest volume of oil contained in a single tank within the equipment is present, provided the equipment is rated 35,000 volts or less.

(3) If the installation complies with 495.83.

(B) Outdoor Installations.

Less-flammable liquid-filled equipment shall be permitted to be installed outdoors, attached to, adjacent to, or on the roof of buildings, if installed in accordance with either of the following:

(1) For Type I and Type II buildings, the installation of the equipment and construction of the building shall comply with all the restrictions provided for in the listing of the liquid.

Informational Note No. 1: See NFPA 220-2021, *Standard on Types of Building Construction* , for definitions of Type I and Type II building construction.

Informational Note No. 2: Such restrictions can include, but are not limited to, maximum pressure of the tank, use of a pressure relief valve, appropriate fuse types, and proper sizing of overcurrent protection.

(2) In accordance with 495.84 .

Informational Note No. 3: See 495.84 for examples of additional safeguards that can be required for installations adjacent to combustible material, fire escapes, or door and window openings.

495.82 Equipment Containing Nonflammable Fluid.

Equipment containing a dielectric fluid identified as nonflammable shall be permitted to be installed indoors or outdoors. Equipment installed indoors shall be installed per the following.

(1) Equipment rated over 35,000 volts shall be installed in a vault meeting the requirements of Part VII of Article 495.

(2) Furnished with a liquid confinement area with enough volume to contain the volume of oil within the equipment and a pressure-relief vent.

(3) Furnished with a means for absorbing any gases generated by arcing inside the tank, or the pressure-relief vent shall be connected to a chimney or flue that will carry such gases to an environmentally safe area.

For the purposes of this section, a nonflammable dielectric fluid is one that does not have a flash point or fire point and is not flammable in air.

495.83 Equipment Containing Oil Installed Indoors.

These requirements apply to equipment that use insulating liquids other than less-flammable, nonflammable, or askarel insulated liquids.

Oil-insulated equipment installed indoors shall be installed in a vault constructed as specified in Part VII of this article.

Exception No. 1: Equipment shall be permitted to be installed in a detached building that does not comply with Part VI of this article if neither the building nor its contents present a fire hazard to any other building or property, and if the building is used only in supplying electric service and the interior is accessible only to qualified persons.

495.84 Equipment Containing Oil Installed Outdoors.

These requirements apply to equipment that use insulating liquids other than less-flammable, nonflammable, or askarel insulated liquids.

Combustible material, combustible buildings, and parts of buildings, fire escapes, and door and window openings shall be safeguarded from fires

and oil spills originating in equipment installed on roofs, attached to or adjacent to a building or combustible material.

In cases where the equipment installation presents a fire hazard, one or more of the following safeguards shall be applied according to the degree of hazard involved:

(1) Space separations

(2) Fire-resistant barriers

(3) Automatic fire suppression systems

(4) Enclosures that confine the oil of a ruptured equipment tank

Oil enclosures shall be permitted to consist of fire-resistant dikes, curbed areas or basins, or trenches filled with coarse, crushed stone. Oil enclosures shall be provided with trapped drains where the exposure and the quantity of oil involved are such that removal of oil is important.

Informational Note: See ANSI/IEEE C2-2023, National Electrical Safety Code, for additional information on oil-filled equipment installed on poles or structures or underground.

495.85 Modification of Equipment.

When modifications are made to equipment in an existing installation that change the type of the insulating liquid in the equipment, such equipment shall be marked to show the new type of insulating liquid installed, and the modified equipment installation shall comply with the requirements for that type of insulating liquid.

Part VII. Equipment Vaults

495.90 General.

This article covers requirements for vaults for equipment, other than transformers, that contain more than 10 gallons of insulating fluid in a single volume within the equipment.

Informational Note: See Part III of Article 450 for vault requirements for transformers and associated internal equipment with insulating fluid.

495.91 Location.

Vaults shall be located where they can be ventilated to the outside air without using flues or ducts wherever such an arrangement is practicable.

495.92 Walls, Roofs, and Floors.

The walls and roofs of vaults shall be constructed of materials that have approved structural strength for the conditions with a minimum fire resistance of 3 hours. The floors of vaults in contact with the earth shall be of concrete that is not less than 100 mm (4 in.) thick, but, where the vault is constructed with a vacant space or other stories below it, the floor shall have approved structural strength for the load imposed thereon and a minimum fire resistance of 3 hours. For the purposes of this section, studs and wallboard construction shall not be permitted.

Exception: Where equipment is protected with automatic sprinkler, water spray, carbon dioxide, or halon, construction of 1-hour rating shall be permitted.

Informational Note No. 1: See ASTM E119-20, *Standard Test Methods for Fire Tests of Building Construction and Materials*, for additional information.

Informational Note No. 2: A typical 3-hour construction is 150 mm (6 in.) thick reinforced concrete.

495.93 Doorways.

Vault doorways shall be protected in accordance with 495.93(A), (B), and (C).

(A) Type of Door.

Each doorway leading into a vault from the building interior shall be provided with a tight-fitting door that has a minimum fire rating of 3 hours. The authority having jurisdiction shall be permitted to require such a door for an opening in a vault wall that is on the exterior of the building.

Exception: Where equipment is protected with automatic sprinkler, water spray, carbon dioxide, or halon, construction of 1-hour rating shall be permitted.

Informational Note: See NFPA 80-2019, *Standard for Fire Doors and Other Opening Protectives*, for additional information.

(B) Sills.

A door sill or curb that is of a height that will confine the oil from the largest equipment insulating liquid volume within the vault shall be provided, and in no case shall the height be less than 100 mm (4 in.).

(C) Accessibility.

Doors shall be equipped with locks, and doors shall be kept locked, with access being allowed only to qualified persons. Personnel doors shall be capable of opening not less than 90 degrees in the direction of egress and be equipped with listed fire exit hardware.

495.94 Ventilation Openings.

When ventilation openings are required to prevent a vault temperature rise that is in excess of the equipment rating, openings for ventilation shall be provided in accordance with 495.94(A) through (F).

Informational Note No.1: Vaults with halon systems may have additional requirements concerning ventilation system operation and openings.

Informational Note No. 2: See NFPA 12A, *Standard on Halon 1301 Fire Extinguishing Systems*, for additional information on halon systems.

(A) Location.

Ventilation openings shall be located as far as possible from doors, windows, fire escapes, and combustible material.

(B) Arrangement.

A vault ventilated by natural circulation of air shall be permitted to have roughly half of the total area of openings required for ventilation in one or more openings near the floor and the remainder in one or more openings in the roof or in the sidewalls near the roof, or all of the area required for ventilation shall be permitted in one or more openings in or near the roof. Openings near the floor in the containment area must be installed above the containment wall.

(C) Size.

The minimum size of a vault and any ventilation openings shall be determined based on recommendations from the equipment manufacturer.

(D) Covering.

Ventilation openings shall be covered with durable gratings, screens, or louvers to avoid unsafe conditions.

(E) Dampers.

All ventilation openings to the indoors shall be provided with automatic closing fire dampers that operate in response to a vault fire. Such dampers shall possess a standard fire rating of not less than 1 1 / 2 hours.

Informational Note: See ANSI/UL 555-2020, *Standard for Fire Dampers*, for additional information on fire dampers.

(F) Ducts.

Ventilating ducts shall be constructed of fire-resistant material.

495.95 Drainage.

Vaults shall be provided with a drain or other means that will carry off any accumulation of oil or water in the vault unless local conditions make this impracticable. The floor shall be pitched to the drain where provided.

495.96 Water Pipes and Accessories.

Any pipe or duct system foreign to the electrical installation shall not enter or pass through an equipment vault. Piping or other facilities provided for vault fire protection, or for equipment cooling, shall not be considered foreign to the electrical installation.

495.97 Storage in Vaults.

Combustible materials shall not be stored in equipment vaults.

Statement of Problem and Substantiation for Public Comment

The proposed additional Parts to Article 495 are the result of work from a CMP 9 task group. The task group consisted of Paul Barnhart, Fred Hartwell, Sharon Mullen, Mike Querry, Rob Roettgers, Tim Schultheis, and Paul Sullivan. The purpose of the task group was to look at the liquid filled equipment requirements in Article 450, bring the appropriate content into Article 495, and edit that content to be appropriate for Article 495. There was a reference in Article 495 to Article 450 for requirements for liquid filled equipment, but that reference was removed in the first draft as that reference was not effective since Article 450 was about transformers. The reference was removed with the expectation the task group would work to provide requirements to be added during the Public Comment stage of

the NEC revision process. The requirements in Article 450 did not translate properly to equipment like switchgear so this work was necessary.

Related Item

• Public Input No. 2716

Submitter Information Verification

Submitter Full Name: Paul sullivan
Organization: DuPont
Street Address:
City:
State:
Zip:

Submittal Date: Tue Aug 27 08:11:06 EDT 2024
Committee: NEC-P09

Public Comment No. 771-NFPA 70-2024 [New Part after II.]

TITLE OF NEW CONTENT

495.20 General.

The requirements of this part are specific provisions that shall apply to all equipment.

Statement of Problem and Substantiation for Public Comment

This Public Comment is submitted on behalf of a Correlating Committee Medium Voltage Task Group consisting of Robert Osborne (Chair), Paul Barnhart, Lou Grahor, Donny Cook, Scott Higgins, Mike Querry, Roger McDaniel, Dave Burns, Rod Belisle, Kevin Rogers, Tony Ricciuti, Paul Knapp, Paul Sullivan, George Smith, Eric Simmon, Kevin Arnold, Larry Wildermuth, and Kyle Krueger.

A General section is added to introduce Part II. This, along with other Public Comments, will create a parallel structure for the first section in each Part of Article 495. This aligns with the NEC Style Manual requirement 3.5.5 for parallel construction of similar requirements.

Related Public Comments for This Document

Related Comment	Relationship
Public Comment No. 784-NFPA 70-2024 [Section No. 495.70]	

Related Item

• CC Note No. 18 • PC 772 • PC 780 • PC 784

Submitter Information Verification

Submitter Full Name: Robert Osborne
Organization: UL Solutions
Street Address:
City:
State:
Zip:

Submittal Date: Mon Aug 05 09:42:57 EDT 2024
Committee: NEC-P09

Public Comment No. 1253-NFPA 70-2024 [Sections Part III., 265.63]

~~**Sections Part III., 265.63**~~

~~**Part III.** Required Outlets~~

~~**265.63** Equipment Requiring Servicing.~~

~~A 125-volt, single-phase, 15- or 20-ampere-rated receptacle outlet shall be installed at an accessible location within 7.5 m (25 ft) of the equipment as specified in 265.63(A) and 265.63(B) .~~

~~Informational Note: See 210.8(E) for requirements on GFCI protection.~~

~~**(A)** Heating, Air-Conditioning, and Refrigeration Equipment.~~

~~The required receptacle outlet shall be located on the same level as the heating, air-conditioning, and refrigeration equipment. The receptacle outlet shall not be connected to the load side of the equipment's branch-circuit disconnecting means.~~

~~**(B)** Other Electrical Equipment Located Indoors.~~

~~A receptacle outlet shall be located within the same room or area as indoor equipment requiring servicing. The required receptacle outlet shall not be connected to the load side of the disconnecting means for the equipment requiring servicing.~~

~~*Exception: Where there is no branch circuit available from another source, the receptacle outlet shall be permitted to be supplied from the load side of the disconnecting means for the equipment requiring servicing.*~~

Statement of Problem and Substantiation for Public Comment

This entire section is outside the scope of this article. The article covers medium voltage branch circuits, this rule is for a 120V circuit. Because this is the only section in this article part, all of Part III should be deleted.

Related Item

• PI 273

Submitter Information Verification

Submitter Full Name: Ryan Jackson
Organization: Self-employed
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City:
State:
Zip:

Submittal Date: Sun Aug 18 17:03:47 EDT 2024
Committee: NEC-P09

Public Comment No. 780-NFPA 70-2024 [New Part after IV.]

TITLE OF NEW CONTENT

495.60 General.

The requirements of this part shall apply to installations and use of high-voltage power distribution and utilization equipment that is portable, mobile, or both, and include but not limited to the following:

(1) Substations and switch houses mounted on skids

(2) Trailers or cars

(3) Mobile shovels

(4) Draglines

(5) Cranes

(6) Hoists

(7) Drills

(8) Dredges

(9) Compressors

(10) Pumps

(11) Conveyors

(12) Underground excavators

Statement of Problem and Substantiation for Public Comment

This Public Comment is submitted on behalf of a Correlating Committee Medium Voltage Task Group consisting of Robert Osborne (Chair), Paul Barnhart, Lou Grahor, Donny Cook, Scott Higgins, Mike Querry, Roger McDaniel, Dave Burns, Rod Belisle, Kevin Rogers, Tony Ricciuti, Paul Knapp, Paul Sullivan, George Smith, Eric Simmon, Kevin Arnold, Larry Wildermuth, and Kyle Krueger.

This, along with other Public Comments, will create a parallel structure for the first section in each Part of Article 495. This aligns with the NEC Style Manual requirement 3.5.5 for parallel construction of similar requirements.

Related Item

• CC Note No. 18 • PC 771 • PC 772 • PC 782 • PC 784

Submitter Information Verification

Submitter Full Name: Robert Osborne
Organization: UL Solutions
Street Address:
City:

State:
Zip:
Submittal Date: Mon Aug 05 11:06:25 EDT 2024
Committee: NEC-P09

Public Comment No. 327
Assigned to CMP - 1 Referred to CMPs 2 - 17

Public Comment No. 327-NFPA 70-2024 [Global Input]

CMP 1 has deleted the definition for “In Sight From”, and the requirements that were part of that definition are now located in 110.29. This global Correlating Committee Note directs all CMP’s to review occurrences of the phrase “in sight from”, “within sight from”, and “within sight” and consider whether references to 110.29 or 110.39 should be included.

Additional Proposed Changes

File Name	Description	Approved
CN_26.pdf	NEC_CN26	✓

Statement of Problem and Substantiation for Public Comment

NOTE: The following CC Note No. 26 appeared in the First Draft Report on First Revision No. 9187.

CMP 1 has deleted the definition for “In Sight From”, and the requirements that were part of that definition are now located in 110.29. This global Correlating Committee Note directs all CMP’s to review occurrences of the phrase “in sight from”, “within sight from”, and “within sight” and consider whether references to 110.29 or 110.39 should be included.

Related Item

• First Revision No. 9187

Submitter Information Verification

Submitter Full Name: CC Notes
Organization: NEC Correlating Committee
Street Address:
City:
State:
Zip:
Submittal Date: Mon Jul 29 17:05:29 EDT 2024
Committee: NEC-P01

Correlating Committee Note No. 26-NFPA 70-2024 [Global Input]

Submitter Information Verification

Committee: NEC-AAC

Submittal Date: Tue May 07 14:23:07 EDT 2024

Committee Statement and Meeting Notes

Committee Statement: CMP 1 has deleted the definition for “In Sight From”, and the requirements that were part of that definition are now located in 110.29. This global Correlating Committee Note directs all CMP’s to review occurrences of the phrase “in sight from”, “within sight from”, and “within sight” and consider whether references to 110.29 or 110.39 should be included.

First Revision No. 9187-NFPA 70-2024 [Section No. 225.41]

Ballot Results

✔ **This item has passed ballot**

12 Eligible Voters
1 Not Returned
11 Affirmative All
0 Affirmative with Comments
0 Negative with Comments
0 Abstention

Not Returned

McDaniel, Roger D.

Affirmative All

Ayer, Lawrence S.

Bowmer, Trevor N.

Hickman, Palmer L.

Holub, Richard A.

Jackson, Peter D.

Kendall, David H.

Manche, Alan

Osborne, Robert D.

Porter, Christine T.

Schultheis, Timothy James

Williams, David A.

Public Comment No. 443-NFPA 70-2024 [Global Input]

The Correlating Committee directs all Code-Making Panels to verify cross-references to Article 200 are accurate due to the renumbering of the article.

Additional Proposed Changes

File Name	Description	Approved
CN_84.pdf		✓

Statement of Problem and Substantiation for Public Comment

NOTE: The following CC Note No. 84 appeared in the First Draft Report.

The Correlating Committee directs all Code-Making Panels to verify cross-references to Article 200 are accurate due to the renumbering of the article.

Related Item

• Correlating Committee Note No. 84

Submitter Information Verification

Submitter Full Name: CC Notes
Organization: NEC Correlating Committee
Street Address:
City:
State:
Zip:
Submittal Date: Tue Jul 30 17:35:49 EDT 2024
Committee: NEC-P05

Correlating Committee Note No. 84-NFPA 70-2024 [Global Input]

Submitter Information Verification

Committee: NEC-AAC
Submittal Date: Wed May 08 08:49:53 EDT 2024

Committee Statement

Committee Statement: The Correlating Committee directs all Code-Making Panels to verify cross-references to Article 200 are accurate due to the renumbering of the article.

Ballot Results

✔ **This item has passed ballot**

12 Eligible Voters
1 Not Returned
11 Affirmative All
0 Affirmative with Comments
0 Negative with Comments
0 Abstention

Not Returned

McDaniel, Roger D.

Affirmative All

Ayer, Lawrence S.
Bowmer, Trevor N.
Hickman, Palmer L.
Holub, Richard A.
Jackson, Peter D.
Kendall, David H.
Manche, Alan
Osborne, Robert D.
Porter, Christine T.
Schultheis, Timothy James
Williams, David A.

Public Comment No. 503
Assigned to CMP-10, Referred to CMP 7 & 9

Public Comment No. 503-NFPA 70-2024 [Definition: Transformer Secondary Conductor.]

Transformer Secondary Conductor.

A conductor, other than a service conductor, that originates at the secondary winding terminals of a transformer. (CMP-10)

Additional Proposed Changes

File Name	Description	Approved
CN_156.pdf		✓

Statement of Problem and Substantiation for Public Comment

NOTE: The following CC Note No. 156 appeared in the First Draft Report on First Revision No. 8885.

The Correlating Committee directs CMP 10 to review FR 8885 and ensure the new definition is appropriate for the places in the NEC where the term is used. Additionally, CMPs 7 and 9 (having purview for requirements where the proposed new term is used) are requested to review the new definition to ensure it is accurate with respect to the requirements under their purview.

Related Item

- First Revision No. 8885

Submitter Information Verification

Submitter Full Name: CC Notes
Organization: NEC Correlating Committee
Street Address:
City:
State:
Zip:
Submittal Date: Tue Jul 30 22:27:10 EDT 2024
Committee: NEC-P10

Correlating Committee Note No. 156-NFPA 70-2024 [Definition: Transformer Secondary Conductor.]

Submitter Information Verification

Committee: NEC-AAC
Submittal Date: Thu May 09 08:40:17 EDT 2024

Committee Statement

Committee Statement: The Correlating Committee directs CMP 10 to review FR 8885 and ensure the new definition is appropriate for the places in the NEC where the term is used. Additionally, CMPs 7 and 9 (having purview for requirements where the proposed new term is used) are requested to review the new definition to ensure it is accurate with respect to the requirements under their purview.

First Revision No. 8885-NFPA 70-2024 [New Definition after Definition: Transformer.]

Ballot Results

✔ **This item has passed ballot**

12 Eligible Voters
1 Not Returned
11 Affirmative All
0 Affirmative with Comments
0 Negative with Comments
0 Abstention

Not Returned

McDaniel, Roger D.

Affirmative All

Ayer, Lawrence S.
Bowmer, Trevor N.
Hickman, Palmer L.
Holub, Richard A.
Jackson, Peter D.
Kendall, David H.
Manche, Alan
Osborne, Robert D.
Porter, Christine T.
Schultheis, Timothy James

Williams, David A.

Public Comment No. 504
Assigned to CMP-18, Referred to CMPs 1 - 17

Public Comment No. 504-NFPA 70-2024 [Global Input]

The Correlating Committee directs the CMPs to review the revision of the title of Article406 (Wiring Devices) and the new definition for the term "wiring device" in Article 100 forcorrelation of existing terminology using the newly define term in their articles.

Additional Proposed Changes

File Name	Description	Approved
CN_157.pdf		✓

Statement of Problem and Substantiation for Public Comment

NOTE: The following CC Note No. 157 appeared in the First Draft Report on First Revision No. 7965.

The Correlating Committee directs the CMPs to review the revision of the title of Article 406 (Wiring Devices) and the new definition for the term "wiring device" in Article 100 for correlation of existing terminology using the newly define term in their articles.

Related Item

• First Revision No. 7965

Submitter Information Verification

Submitter Full Name: CC Notes
Organization: NEC Correlating Committee
Street Address:
City:
State:
Zip:
Submittal Date: Tue Jul 30 22:29:14 EDT 2024
Committee: NEC-P18

Correlating Committee Note No. 157-NFPA 70-2024 [Global Input]

Submitter Information Verification

Committee: NEC-AAC

Submittal Date: Thu May 09 08:59:03 EDT 2024

Committee Statement and Meeting Notes

Committee Statement: The Correlating Committee directs the CMPs to review the revision of the title of Article 406 (Wiring Devices) and the new definition for the term "wiring device" in Article 100 for correlation of existing terminology using the newly define term in their articles.

First Revision No. 7965-NFPA 70-2024 [New Definition after Definition: Wireways, Nonmetallic. (No...]

Ballot Results

This item has passed ballot

12 Eligible Voters
1 Not Returned
11 Affirmative All
0 Affirmative with Comments
0 Negative with Comments
0 Abstention

Not Returned

McDaniel, Roger D.

Affirmative All

Ayer, Lawrence S.

Bowmer, Trevor N.

Hickman, Palmer L.

Holub, Richard A.

Jackson, Peter D.

Kendall, David H.

Manche, Alan

Osborne, Robert D.

Porter, Christine T.

Schultheis, Timothy James

Williams, David A.

Public Comment No. 527
Assigned to CMP- 2, Referred to CMPs 1 - 18

Public Comment No. 527-NFPA 70-2024 [Global Input]

The CMPs are directed to review references to Article 220 in the articles under their purview and make necessary revisions based on Article 220 being relocated to Article120.

Additional Proposed Changes

File Name	Description	Approved
CN_212.pdf		✓

Statement of Problem and Substantiation for Public Comment

NOTE: The following CC Note No. 212 appeared in the First Draft Report.

The CMPs are directed to review references to Article 220 in the articles under their purview and make necessary revisions based on Article 220 being relocated to Article 120.

Related Item

• Correlating Committee Note No. 212

Submitter Information Verification

Submitter Full Name: CC Notes
Organization: NEC Correlating Committee
Street Address:
City:
State:
Zip:
Submittal Date: Tue Jul 30 23:08:41 EDT 2024
Committee: NEC-P02

Correlating Committee Note No. 212-NFPA 70-2024 [Global Input]

Submitter Information Verification

Committee: NEC-AAC

Submittal Date: Thu May 09 11:53:08 EDT 2024

Committee Statement and Meeting Notes

Committee Statement: The CMPs are directed to review references to Article 220 in the articles under their purview and make necessary revisions based on Article 220 being relocated to Article 120.

Ballot Results

✔ **This item has passed ballot**

12 Eligible Voters
1 Not Returned
11 Affirmative All
0 Affirmative with Comments
0 Negative with Comments
0 Abstention

Not Returned

McDaniel, Roger D.

Affirmative All

Ayer, Lawrence S.
Bowmer, Trevor N.
Hickman, Palmer L.
Holub, Richard A.
Jackson, Peter D.
Kendall, David H.
Manche, Alan
Osborne, Robert D.
Porter, Christine T.
Schultheis, Timothy James
Williams, David A.

Public Comment No. 542
Assigned to CMP-3, Referred to CMPs 1 - 18

Public Comment No. 542-NFPA 70-2024 [Global Input]

The Correlating Committee directs the CMPs to review all references to requirements in Chapters 7 & 8 for accuracy in light of the relocation of requirements occurring in the First Draft.

Additional Proposed Changes

File Name	Description	Approved
CN_401.pdf		✓

Statement of Problem and Substantiation for Public Comment

NOTE: The following CC Note No. 401 appeared in the First Draft Report.

The Correlating Committee directs the CMPs to review all references to requirements in Chapters 7 & 8 for accuracy in light of the relocation of requirements occurring in the First Draft.

Related Item

• Correlating Committee Note No. 401

Submitter Information Verification

Submitter Full Name: CC Notes
Organization: NEC Correlating Committee
Street Address:
City:
State:
Zip:
Submittal Date: Tue Jul 30 23:39:04 EDT 2024
Committee: NEC-P03

Correlating Committee Note No. 401-NFPA 70-2024 [Global Input]

Submitter Information Verification

Committee: NEC-AAC
Submittal Date: Fri May 10 12:35:51 EDT 2024

Committee Statement

Committee Statement: The Correlating Committee directs the CMPs to review all references to requirements in Chapters 7 & 8 for accuracy in light of the relocation of requirements occurring in the First Draft.

Ballot Results

This item has passed ballot

12 Eligible Voters
1 Not Returned
11 Affirmative All
0 Affirmative with Comments
0 Negative with Comments
0 Abstention

Not Returned

McDaniel, Roger D.

Affirmative All

Ayer, Lawrence S.
Bowmer, Trevor N.
Hickman, Palmer L.
Holub, Richard A.
Jackson, Peter D.
Kendall, David H.
Manche, Alan
Osborne, Robert D.
Porter, Christine T.
Schultheis, Timothy James
Williams, David A.

Public Comment No. 649-NFPA 70-2024 [Global Input]

Delete the words, "to be installed" everywhere they appear in the First Draft.

Statement of Problem and Substantiation for Public Comment

The term "to be installed" is always redundant. 90.2(C) says, "This code covers the installation and removal of electrical conductors, equipment, and raceways...". Every requirement of the NEC is about installation or removal (and requirements about removal are a very small minority). "Shall be permitted" and "shall not be permitted," as applied to equipment, mean that the subject equipment either is or is not allowed to be installed.
The new First Draft restrictions on reconditioned equipment seem to have overlooked the scope and purpose of the NEC. Adding the superfluous term "to be installed" also does not conform to 3.1.1, 3.1.2, and 3.5.1.1 of the NEC Style Manual.

Related Item

• FR-9197 • FR-9236 • FR-7868 • PI-3713 • FR-8938 • FR-7970 • FR-8831 • FR-8941 • FR-8944 • FR-8947 • FR-7925 • FR-7585 • FR-8136 • FR-8148 • FR-8984 • FR-8293 • FR-8362 • FR-8348 • FR-8360 • FR-7614 • FR-7658 • FR-7734 • FR-7746 • FR-8150 • FR-7717

Submitter Information Verification

Submitter Full Name: William Fiske
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Zip:
Submittal Date: Fri Aug 02 09:19:44 EDT 2024
Committee: NEC-P01