

WAC 296-46B-517 Health care facilities.

001 Health care facilities.

In health care facilities, the following methods must be used to determine adequate capacity and ratings of equipment providing electrical power for the essential electrical systems defined in Article 517 NEC:

(1) Systems in new facilities:

(a) Essential electrical system: The essential electrical system must consist of three branches known as:

(i) Life safety branch: The feeder conductors and equipment used to supply electrical power to the life safety branch must be determined by summation of the connected loads as determined by Article 220 NEC and may not be subjected to any reduction due to the diversity of the loads. Feeder and equipment will be subject to a 125 percent multiplier for continuous loads in accordance with Article 220 NEC.

(ii) Critical branch: The feeder conductors and equipment must be calculated in accordance with Article 220 NEC, including a level of diversity as determined by such article.

(iii) Equipment branch: The feeder conductors and equipment used to supply electrical power to the equipment branch of the essential electrical system must be calculated in accordance with Article 220 NEC, including a level of diversity as determined by such article.

(b) Generator sizing: The rating of the generator(s) supplying electrical power to the essential system of a health care facility must meet or exceed the summation of the loads determined in (a) of this subsection with no additional demand factors applied. Momentary X-ray loads may be ignored if the generator is rated at least 300 percent of the largest momentary X-ray load connected.

(2) Existing essential systems in facilities to which additional load is to be added:

(a) Existing loads: The existing loads of the separate branches of the essential electrical system may be determined by WAC 296-46B-900 (3)(j).

(b) Added loads: Added loads to the separate branches of the essential electrical system must be determined by subsection (1) of this section.

(c) Generator sizing: The rating of the generator(s) supplying electrical power to the essential electrical system must meet or exceed the summation of the loads determined by (a) and (b) of this subsection with no additional demand factors applied.

013 Wiring methods.

(3) The last sentence of NEC 517.13(A) is modified to read: The metal raceway system, or metallic cable armor, or sheath assembly shall itself qualify as an equipment grounding conductor in accordance with 250.118 with the exception of 250.118 (10)(a).

017 Ground-fault protection of equipment.

(4) The applicability of NEC 700.31 ground-fault protection of equipment, specified by NEC 517.26 for the life safety branch, will also apply to the NEC 517 essential electrical system's critical branch(es) and equipment branch(es).

[Statutory Authority: Chapter 19.28 RCW, RCW 19.28.031 and 19.28.251. WSR 24-05-085, § 296-46B-517, filed 2/21/24, effective 4/1/24. Statutory Authority: Chapter 19.28 RCW, RCW 19.28.010 and 19.28.031. WSR 17-12-021, § 296-46B-517, filed 5/30/17, effective 7/1/17. Statutory Authority: Chapter 19.28 RCW. WSR 14-11-075, § 296-46B-517, filed

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