

6200207 GROUNDING AND LIGHTNING PROTECTION
COMMENTS FROM INTERNAL/INDUSTRY REVIEW

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Comments: (5-29-20, Internal)

Please see my two markups in the attached.

I couldn't find where we used the word "Subarticle" in front of the number in the attached. Please let me know if this has changed.

GROUNDING AND LIGHTNING PROTECTION
(REV 5-8-20)

SUBARTICLE 620-2.7.3 is deleted and the following substituted:

→ → **620-2.7.3 SPDs for Low-Voltage Power, Control, Data and Signal Systems:**
Install a specialized SPD on all conductive circuits including, but not limited to, data communication cables, coaxial video cables, and low-voltage power cables. Ensure that these devices comply with the minimum functional requirements shown in Table 620-1 for all available modes (i.e. power L-N, N-G; L-G, data and signal center pin-to-shield, L-L, L-G, and shield-G where appropriate).

Maxwell, Stefanie
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620-4 Ground Resistance Testing and Inspection.

→ **620-4.1 Testing:** Measure the ground resistance with an instrument designed specifically to measure and document earth/ground resistance, soil resistivity, and current flow. Conduct the test by using the fall-of-potential method as described in the Institute of Electronic and Electrical Engineers (IEEE) Standard 81. The fall-of-potential test is used to verify the minimum resistance required in Subarticle 620-3.2.1. If fall-of-potential tests cannot be performed, it is acceptable to measure resistance at each accessible ground rod using a clamp-on ground resistance tester. Submit to the Engineer certified test results for each testing location. Submit the following information on the test results:

Response: Change made to remove the word subarticle.

Bruce Boyd
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Comments: (5-21-20, Internal)

I had Rick Arnold, another PCS RCDD review and here is comments for Surge Spec & APL devices

Rick looked at the 4 Mfg on the APL (BTU, ASCO, CITEL, DITEK) Here are the differences for the POE Units

- All meet the 2kA Surge Cap.
- All capable of 1Gig
- DITek is the only one rated to 10Gig 6A.. BTU Says they are 10Gig but not on the spec sheet... only other is L-Com who isn't on APL that I can see
- Clamping Voltages - I don't think UL even recommends clamping before 72V
 - ASCO- 68V
 - BTU- 88.6
 - Ditek- 75V

- Citel- 90V L-G
- DiTek isn only APL vendor to handle ++ 100W.
 - BTU looking for an updated spec sheet but talked to the factory who could not produce one

All that to say... I'm not sure what the goal was but *NO ONE will meet a 60V clamp on L-G, L-L will all be significantly less like in the 1-30V range* and the table doesn't specify

Response: We removed the POE++ language from the spec.
