

1. 240.87 requires arc flash reduction, the installer had them retrofitted and installed them at the top of the gear at 8', is this a violation?
2. 410.36(B) requires luminaires installed in suspended ceilings to be attached to the ceiling members. Some jurisdictions require independent support wires instead. Are the wires allowed and/or required?
3. Can I use the 110.24-required available short-circuit current marking to determine my arc-flash PPE? Some experts have told me yes and other experts have told me no
4. Is it permissible to install LFNC underground for a feeder raceway from one structure to another such as a house to a detached garage?
5. Is it a violation to hang a 10' stick of rigid conduit to a 4" square box that an exit sign is attached to without supporting the box at the exit sign?
6. I am wiring a new home that is slab on grade so I got there ahead of time and ran a PVC conduit from the exterior wall out to where the island will be. I slipped a piece of NM cable through the pipe and had it rolled up lying on the floor when I called for my rough-in inspection. The inspector said I have to change it. Why?
7. Can a main breaker with a spare lug be used to attach a line side connection from a solar inverter? Can a main breaker with a spare lug be used to attach other service conductors to feed a small service disconnect next to each other?

8. A residential house with NM cable run throughout with spray foam insulation applied to the walls. Is the spray foam compatible with the NM cable insulation? Does the NM cable have to be de-rated because of the bundling of cables above the circuit breaker panel?
9. I keep finding that some electricians like to run the NM cables across the trusses, they consider the trusses are support. But 334.30 requires that NM cable needs to be secured no more than 4-1/2 ft. apart. And when run them at extreme angles there may be a lot longer between trusses. Can they do this without violating 334.30?
10. A 200-amp circuit is increased from 3/0 copper to 500 kcmil copper to compensate for voltage drop. What size copper equipment grounding conductor would be required for this circuit?
11. How are grounding and bonding conductors counted when derating conductors for ampacity?
12. A church undergoes a service change, the previous gear was rated at 800a and was replaced with the same size gear, and the personnel doors to the area do not comply with Article 110.26(C)(3), should the doors be updated to panic hardware and egress door swing?

13. I installed an optional standby system for a customer that wants to just run heat off from the generator to keep pipes from freezing, it is an automatic transfer switch but the customer will shut off breakers before he leaves to control the load. The inspector rejected this system and said it would be required to have load shedding, is he right?

14. Can a receptacle behind a TV (below 5.5 feet) count for wall space above a work area/counter or is it considered not accessible?

15. Is it required that 'reconditioned' equipment now be 'listed' or only marked?

16. I have a pull box that has multiple sets of 4/0 Copper coming in and going various directions. The customer now wants to tap off another set. Do I have to bond the box now that there is a tap and if so, how do I do it?

17. When doing the load calculations in accordance with Article 220, does the result need to be multiplied by 125% if it is a lighting load? If so, what is the NEC reference? The 125% is found in the branch circuit, feeder, etc. Articles; however, it is not to be found in Article 220.

18. Does an increase in distance from the breaker increase incident energy? Does an increase in distance from the secondary side of a transformer decrease incident energy?

19. Does the size of breaker matter in calculating incident energy? I.E. if we go through several breakers is it the fact that the breakers get smaller the further into the system you go decrease incident energy or is it the clearing times that are decreasing incident energy? Example: 200 Amp Main Breaker, 100 Amp Feeder Breaker to next panel, 20 Amp branch circuit breaker

20. Is a servicing disconnect required on the side of a furnace in a house, even if it is in the same room as the panel?

21. Does the coffee maker and the roller dog machines require GFCI protection on the serving counter of a convenience store?

22. Can I feed a multi-wire feeder to a detached garage and then put in a panel board with 3 single-pole breakers and 3 double-pole breakers and without main breaker?

23. I have a 1200-amp main service with a 400-amp feed to a subpanel. This feeder is a parallel run set in two separate raceways. The ungrounded conductors are 250 kcmil aluminum. What is the minimum size equipment grounding conductor required in each raceway?

24. I was called to do a service change on an older home. I have to move the panel over to the right about 6 feet to gain proper working clearances and dedicated space issues. Am I required to install AFCI breakers in this new panel?