

## CITY OF ONTARIO BUILDING DEPARTMENT 303 East B Street Ontario, CA 91764 Phone (909)395-2023, Fax (909)395-2180 https://www.ontarioca.gov/building

INFORMATION BULLETIN 108 Effective: 02 /11 / 2019 Revised:

## TEMPORARY GENERATOR SUBMITTAL REQUIREMENTS

Temporary generator installation requires an electrical permit from the Building Department. Review and approval by the Fire Department is required prior to issuance of permit. All materials, equipment, installation and work shall comply with the latest edition of the California Electrical Code (CEC) and California Fire Code (CFC). The generator and all associated electrical distribution equipment shall be listed and labeled by an approved nationally recognized testing laboratory and must be installed according to the manufacturer's installation instructions and its listing.



## Submit 3 sets of plans to the Building Department including:

- Completed City of Ontario building permit application (available at Building Department web site).
- Copies of generator manufacturer's specifications.
- Plans must be prepared by a registered design professional or licensed electrical contractor for designbuild projects.
- Site plan showing location of the temporary generator, property lines with distances from the generator, street, the north orientation, buildings footprints showing the location of the building electrical service/main panelboard/distribution board that is to be energized, layout of other existing/proposed electrical equipment, feeder conduits/cable layout and required working clearances of electrical equipment.
- Load calculation analysis based on Article 220 for the loads to be supplied and to include adjustments for continuous loads and largest motor load.
- A single-line diagram of the electrical distribution system showing compliance with the CEC. It is to show, but not limited to the types of feeder/wiring methods (including cord/cable assembly and/or conductors gauge, type of material, insulation, conduit, etc...); equipment Voltages, Amps, VA/Watts and AIC ratings; grounding electrode and conductor types, amounts and sizes; circuit breakers and/or fuses; transformers; panelboard; disconnects; etc...
- Notes are to be provided indicating that "all of the unused loads are to be safely disconnected", "neutrals are to be isolated from any grounding connections in the fed panelboards/distribution boards" and "back-fed circuit-breakers shall have hold-down kits installed".
- The gallon capacity of the diesel tank must be indicated.

## **Common Corrections:**

- Provide copies of the generator manufacturer's specifications stating the ratings as required by 445.11, the generator is a separately derived system and has a system bonding jumper.
- Specify the generator type that it is suitable for its proposed location per 445.10.
- The frame of the vehicle mounted generator shall be connected to a grounding electrode per 250.34(C), 250.52 and installed per 250.53.
- The grounding electrode conductor (GEC) shall be sized per 250.66.
- GEC type of material shall be as indicated in 250.62.
- GEC shall be installed per 250.64.
- Provide bonding and grounding of generator as a separately derived system as applicable per 250.28(D)(3), 250.30 and 250.32.
- The grounding electrode system required by 250.32(A) at the supplied structure shall have its GEC connected per 250.32(B)(2); and the neutral conductor from the generator shall not be connected to the equipment grounding conductor or the grounding electrode in the building panelboard/distribution board per 250.32(D).
- A single rod, pipe or plate grounding electrode shall be supplemented by an additional electrode per 250.53(A)(2).
- Specify ratings of voltage and ampacity, number of phases, wire configurations for all electrical equipment; (e.g. 240 volt, single phase, 3 wire, etc...).
- Provide panelboard schedule for proposed distribution panelboards.
- Provide calculations to determine ampacity of cords/cables per 400.5 applying ambient temperature correction factor.
- Clearly and specifically specify cord/cable type per table 400.4 that is suitable for conditions of use and its location.
- Protection from physical damage of cords/cables is to be provided per 400.10, 400.14, 590.4(H), 590.4(I) and 590.4(J).
- Flexible cord or flexible cable shall be protected by an overcurrent device in accordance with their ampacity per 240.5. Conductors, other than flexible cord or flexible cable shall be protected by an overcurrent device in accordance with their ampacity per 240.4.
- Clarify location of conduits above ground or underground. Apply adjustment factors for ambient temperature for above ground per tables 310.15(B)(3)(c) and/or 400.5(A)(3) as applicable.
- Raceways and fittings above ground shall be suitable for wet location.
- Provide protective enclosure fencing, barriers, or other effective means to guard against accidental contact
  or access by unqualified persons. Identify the type of enclosure and installation method.
- All back-fed over-current devices in panelboards shall have hold-down kits installed as required per 408.36(D).

All Articles referenced in this document refer to the latest edition of the California Electrical Code