Update to 2020 - 2021 Electric & Gas Service Requirements (Greenbook)

SUMMARY

This bulletin provides new updates to the 2020 - 2021 Greenbook. These new requirements are effective upon publication of this document and supersede all existing requirements.

AFFECTED DOCUMENT

2020 - 2021 Electric & Gas Service Requirements (Greenbook)

TARGET AUDIENCE

PG&E employees that design, estimate, review and inspect to Greenbook requirements

Non-PG&E employees that design, build, and install equipment to Greenbook requirements.

WHAT YOU NEED TO KNOW

The following are updates to the applicable 2020 - 2021 Greenbook sections. To identify the updates the added or modified black text has been underlined. The corrected figure updates are encircled in red and the incorrect items have been marked with a red X.

1. The following corrections to Figure 5-3 are shown below in red.

5.4.3. Meter Set Clearance Requirements

![Figure 5-3: Electric and Gas Meter Set Separation Dimensions and Clearances]
The following corrections to Figure 5-6, Detail B are shown below in red.

5.4.4. Working Space

5.4.5. Barricades

B. Within an area that has, in PG&E’s judgement, an unusually high risk of vehicular damage, the applicant must install a system of barrier posts that meet PG&E’s specifications.

A suitable barricade for vehicular traffic is concrete-filled steel pipes, either 3 inches or 4 inches in diameter, securely set in an adequate concrete footing for support. Also suitable for some conditions is a sleeve-mounted vehicle barricade where the sleeves are set in concrete. This type of sleeve with removable barrier posts must also be installed outside of the working space.

See Figure 5-7, “Meter Panel Clearance and Protection From Residential Vehicle Driveway or Parking Space,” on Page 5-19, and Figure 5-8, “Nonresidential or Multifamily Metering and Service Equipment Clearance and Protection From Nonresidential or Multifamily Vehicle Areas,” on Page 5-20.

For information on ordering and installing bollards, see Numbered Document 051122, “Clearances and Location Requirements for Enclosures, Pads, and Underground Equipment,” Page 25 through Page 27. This document is included in Appendix C, “Electric and Gas Engineering Documents.”
Contact your local PG&E inspector and project coordinator to determine if a barricade is required.

4 This section has been updated with the following underlined text.

5.7.2. Main Service Disconnect Switch Rated for Amperes Interrupting Capacity (AIC)

State and local codes require the service equipment’s main disconnect switch and fuse, or the circuit breaker, to be rated at the available short-circuit current value.

PG&E typically designs its facilities so that the short-circuit duty at the service termination will not exceed 10,000-amps symmetrical for new, single-family, residential applicants that are supplied by an individual service drop or lateral that is rated at 225 amps or less. This service includes mobile homes and duplexes.

For short length service drops or laterals to service termination equipment that are rated at 225 amps or less it is not feasible for PG&E to design its facilities to limit the short-circuit duty to 10,000 amps. For these installations and for all service termination equipment rated greater than 225 amps, PG&E will provide, upon request by the applicant, the maximum available short-circuit current, based on the service equipment’s capacity. If the applicant increases the service equipment’s capacity, the maximum-available short-circuit current may be higher.

5 This section has been updated with the following underlined text and paragraphs.

5.10. Connecting Non-Utility Power Sources to Utility Services

By enacting California Health and Safety Code, Division 104, “Environmental Health,” Part 15, “Miscellaneous Requirements,” Chapter 5, “Electrical Hazards,” Sections 119075 through 119090, the legislature of the state of California intended to prevent electricity generated by permanent or portable electric generators from backfeeding into a utility’s electrical distribution system. In addition, California Code of Regulations (CCR) Title 8, Section 2320.9, “Backfeeding or Interconnection,” says that electrical power sources, both permanent and temporary, can not be connected to a premises’ wiring system, or parts of such a system, unless positive means are used to prevent electricity from being transmitted beyond the premises’ wiring system, or beyond any intentionally segregated parts of such a system.

EXCEPTION: The service utility can authorize an interconnection.

A positive means is defined in this CCR subpart as a device that, when used or operated, interrupts or prevents the flow of current to or from the electrical system. Also, a positive means provides the device operator or user with a visual or definite indication of the existing condition or state of the electrical system.

Before installing an applicant-owned and operated, generation system that operates in parallel and backfeeds energy into the PG&E’s system, or has an energy storage capabilities, or is a make before break closed transition backup generator transfer scheme, the applicant must contact PG&E’s Electric Generation Interconnection (EGI) department at Rule21gen@pge.com.
If the applicant-owned and operated generator will not backfeed energy and operate in parallel with PG&E’s system, or is fueled by natural gas connected to PG&E’s gas meter, the applicant must contact the PG&E Business Customer and Renovation Center at 877-743-7782 for the interconnection requirements specific to the location where it will be used.

Customers installing applicant-owned and operated generators that will not backfeed energy and run in parallel with PG&E's system, do not have an energy storage system, and is not fueled by natural gas connected to a PG&E gas meter must call the PG&E Customer Service Line at 800-743-5000 to have their generator noted on the service point at their premise.

This section has been updated with the following underlined text and Figure notes.

5.10.1. Specific Interconnection Requirements for Services Up to 600 Volts

D. Requirements for Generators That Are Connected Either Permanently or Periodically to an Electrical Service and Used on a Planned, Routine, or Scheduled Basis, but Do Not Operate in Parallel with the PG&E System.

Generators falling under this category do not have to have a disconnect switch installed if a break before make open transfer scheme is utilized.

These generators must be connected as described in PG&E’s Electric Rule 2, “Description of Service,” Item E.6, and in the California Health and Safety Code, Division 104, Part 15, Chapter 5, Section 119075(c). These rules state that any electrical generator that can be permanently connected to an applicant’s electrical system must be connected only by means of a double throw switch (see Figure 5-23 on Page 5-41). This switch isolates the applicant’s electrical system from that of the electrical corporation or state or local agency.

![Diagram of interconnection requirements](image-url)
Notes in reference to Figure 5-24.

1. Ensure that automatic or manual transfer (safety) switch is a double-pole, double-throw switch certified to U.L. 1008.

2. Do not reroute line side cables or modify any part of the PG&E-sealed sections.

3. The disconnect switch may be exempt if, the blades in the automatic or manual transfer switch have a visible air gap of separation and automatic transfer switch has a break before make open transfer scheme.

The following corrections to the Greenbook figure are shown below in red. This correction also affects Figure 10 on page 9 of 11 in engineering document 058817.

9.10. Underground Service Cable-Termination Compartments or Sections

![Figure 9-14: Typical Underground Service Termination Section and Pull Box, Wall-Mounted or Pad-Mounted (Floor-Standing)](image)
APPLICATION CRITERIA

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<th>Activity Type</th>
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<tr>
<td>Re-Construction Work</td>
<td>These requirements apply for like for like and relocation work.</td>
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<tr>
<td>Maintenance</td>
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<tr>
<td>Emergency</td>
<td>These requirements apply for new construction, like for like, and relocation work.</td>
</tr>
</tbody>
</table>

DOCUMENT APPROVER

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INCLUSION PLAN

The information and requirements in this bulletin will be included in the next version of PG&E’s Electric & Gas Service Requirements Manual (Greenbook).