



City of Grass Valley Building Department

125 East Main Street
Grass Valley, CA 95945
(530) 274-4340

www.cityofgrassvalley.com

Nevada County Building Department

950 Maidu Avenue
Nevada City, CA 95959
(530) 265-1222

www.mynevadacounty.com

"Partnering to Improve Consistency & Customer Service"

RESIDENTIAL GENERATOR PLAN SUBMITTAL CHECKLIST

**THE FOLLOWING ITEMS ARE REQUIRED FOR A COMPLETE PLAN SUBMITTAL. PLEASE READ CAREFULLY!
THIS COMPLETED FORM MUST ACCOMPANY RESIDENTIAL GENERATOR PLAN SUBMITTALS
[CLICK HERE](#) TO APPLY FOR PERMIT & SUBMIT PLANS. INCOMPLETE SUBMITTALS WILL NOT BE ACCEPTED.**

JOB ADDRESS: _____ **APN:** _____

<p align="center">SITE PLANS AND COMPLETE PLAN SETS ARE REQUIRED.</p> <p>Plans must be legible and drawn to scale in blue or black ink on clear unlined paper. Minimum Size is 11" x 17", Maximum Size is 24" X 36". The Scope of Work must be fully stated and detailed on the plans. Plans should be prepared with lettering of sufficient contrast to be readable when scanning. Photocopies or prints may be submitted.</p>
<p>SITE PLAN/COVER SHEET (Click Here for Example):</p> <ul style="list-style-type: none"> • <u>Owner's Name & Contact Info.</u> <u>Site Address</u> <u>Assessor's Parcel Number (APN)</u> <u>North Arrow</u> <u>Sheet Index</u> <u>Statement of Compliance</u> <u>CA Codes</u> <u>Plan Preparers Name, Address & Signature</u> <u>Project Scope of Work</u> • Identify all existing structures and proposed generator equipment (include Transfer Switch, Disconnects, Etc.) • Location of wells, water storage tanks, bodies of water and 100 yr floodplains. Include a setback from the generator (minimum 100 ft) • Location and types (above ground or underground) of electrical and gas utilities • Identify any easements (PG&E, water, road, driveway, etc.) • Setbacks from the generator to buildings, property lines, water sources and septic/leach lines/pumps • Location, size, and setbacks to propane tanks from the generator, property lines and structures. Indicate if new or existing. • All underground tanks require review & approval from the Grass Valley Fire Department.
<p>ELECTRICAL SINGLE LINE DIAGRAM:</p> <ul style="list-style-type: none"> • Amperage size and location of the main electrical panels and subpanels (Minimum 3 ft from gas meter) • Grounding/bonding conductor sizes/types for structure (main ground, water bonding, gas bonding, etc) • Equipment grounding conductor size, type and location for circuits and module/rack grounding • Complete NEC Load Electrical Load Calculations • Disconnect types, sizes and locations • Conduit sizes, types & distance from the generator to junction box locations, the transfer switch & power source • Transfer switch type, size and location • Conductor wiring types and sizes, system and generator
<p>SIGNAGE:</p> <ul style="list-style-type: none"> • Required signage for panels, disconnects, transfer switches, etc pursuant to California Electrical Code Article 702.7 • Permanent labels with red background and white lettering, lettering minimum 3/8" in height, and resistant to fading pursuant to CA Electrical Code Article 702.7
<p>EQUIPMENT/PAD ANCHORING SPECIFICATIONS:</p> <ul style="list-style-type: none"> • Provide cut sheets for all generator equipment and transfer switches. • Generator slab type, thickness, and anchoring information
<p>GAS LINES (PG&E Gas Service):</p> <ul style="list-style-type: none"> • Show underground and aboveground gas line locations, materials and sizes • Provide Gas Line Schematic (prepared by a licensed plumber or engineer) showing the sizing calculations include all equipment & appliances served by the gas source in accordance with the California Plumbing Code • Provide verification (service report or email) from PG&E showing whether the existing meter can service the minimum BTU's required to support the addition of proposed generator, or if a gas meter upgrade is required. See pages 4 & 5 below for more information about scheduling a service connection upgrade with PG&E.

THIS DOCUMENT IS INTENDED AS A GUIDE

SPECIFIC REQUIREMENTS OR DOCUMENTS MAY DIFFER BASED UPON YOUR SPECIFIC APPLICATION AND THE BUILDING CODE

NEC Standard Electrical Load Calculation for Single Family Dwellings

(Only for Service Ratings of 120/240V, 225 Amps Max)

Owner: _____ Location: _____

Total Floor Area of Dwelling (NEC 220.12) _____ SQFT.

Factor	Quantity	Volt Amperes (VA)
“General Lighting”		
1. General Lighting (SQFT X 3 VA/SQ FT (Table 220.12))	3 X sqft.	
2. Small Appliance Circuits (1500 VA per circuit) (NEC 220.52(A)) (minimum 2)	1500 X	
3. Laundry Circuit (1500 VA per circuit) (NEC 220.52(B))	1500 X	
4. Total General Lighting Load (Add lines 1, 2 & 3):		
5. First 3000 VA @ 100%:		3000
6. Total General Lighting Load – 3000 = _____ @ 35%=		
7. Net General Lighting Load (Per NEC 220.42) (Add lines 5 & 6):		
*Fixed Appliances(if insufficient space, use back):		
	YES	NO
• Garbage Disposal	<input type="checkbox"/>	<input type="checkbox"/>
• Bathroom Fan	<input type="checkbox"/>	<input type="checkbox"/>
• Microwave	<input type="checkbox"/>	<input type="checkbox"/>
• Dishwasher	<input type="checkbox"/>	<input type="checkbox"/>
• Other:	<input type="checkbox"/>	<input type="checkbox"/>
• Other:	<input type="checkbox"/>	<input type="checkbox"/>
Total		
8. 3 or less Appliances, Total Appliance VA; 4 or more Appliances, 75% of Total Appliance VA (NEC 220.53):		
*Other Loads (including motors, EV charger(s), etc.)		
	YES	NO
9. Electric Range (8000VA or Nameplate)**	<input type="checkbox"/>	<input type="checkbox"/>
10. HVAC	<input type="checkbox"/>	<input type="checkbox"/>
11. Electric Oven	<input type="checkbox"/>	<input type="checkbox"/>
12. Electric Dryer (5000 VA minimum)**	<input type="checkbox"/>	<input type="checkbox"/>
13. Electric Vehicle Charger	<input type="checkbox"/>	<input type="checkbox"/>
14. Other:	<input type="checkbox"/>	<input type="checkbox"/>
15. Other:	<input type="checkbox"/>	<input type="checkbox"/>
16. 25% of largest motor (NEC 430.24)		
Total Service Load Volt-Amperes (VA) (Add lines 7, 8 & 9 thru 16) =		
Total Service Load Volt-Amperes / 240-volts = Amperes		
***Service Rating (Amperes)=		

* For every “YES” answer, indicate VA rating of equipment

** Nameplate rating must be used if larger oven combination. For cook-top use 3600VA

*** Service Rating shall be greater than or equal to the Service load

Note: If load management modules are used for all 240 volt loads a load calculation is not required.

Residential Generator Site Plan

Detail Attachments

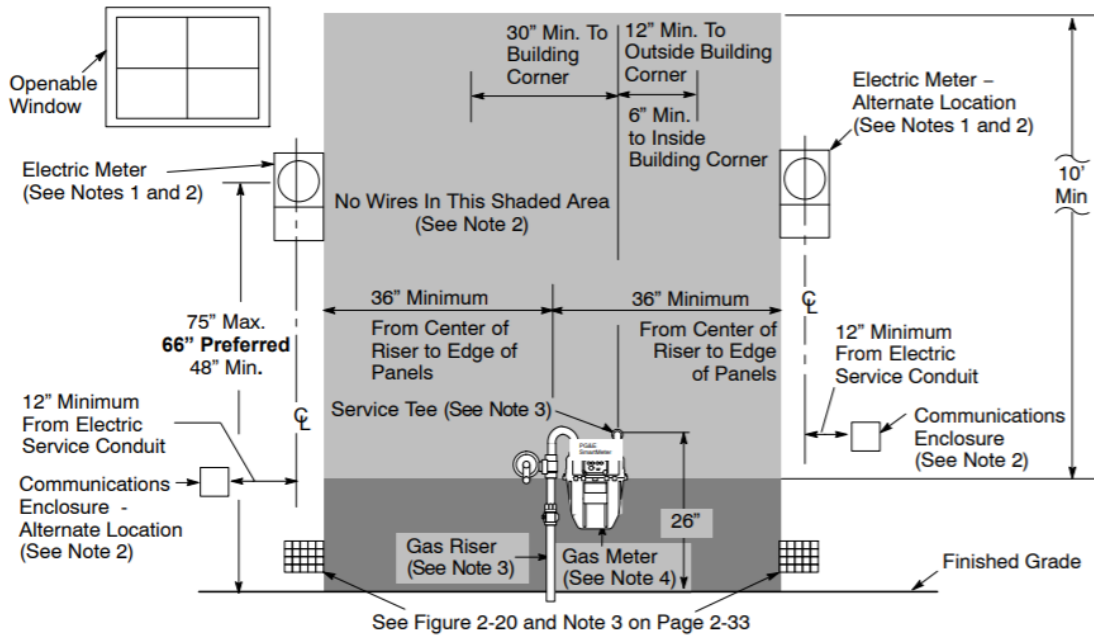


Figure 2-19
Electric and Gas Meter Set Separation Dimensions and Clearances

Notes in reference to Figure 2-19.

1. Electric meter panel locations are subject to utility approval and must comply with the applicable code requirements. PG&E does **not** have specific requirements for the distance from the electric panel to the outside building corner. See [Section 5](#), "Electric Metering: General," for properly locating the electric meters. See Subsection 5.4.4., "Working Space," on Page 5-12, for electric meter working space.
2. Applicants must **not** install any electrical devices or equipment, including wires, cables, metering enclosures, telecommunication enclosures, bond wires, clamps, or ground rods within the shaded area around the gas meter. The 36-inch distance can be reduced to 18 inches for electrical devices or equipment certified for NEC Class I, Division 2 locations.
3. Place the gas service riser 6 inches to 9 inches from the finished wall. The completed customer house line at the service delivery point must extend a minimum of 4 to 6 inches from the finished wall where the meter is to be set, and must be 26 inches above the finished grade. See Figure 2-14 on Page 2-27, Figure 2-15 on Page 2-28, and Subsection 2.5. on Page 2-43.

Table 2-1 Minimum Separation and Clearance Requirements for Trenches¹

		G	Duct T	DB T	C	S	P	SL
(In Inches)								
G	Gas ²	—	12	12	12	6	12	6
T	Telephone (Duct)	12	—	1	1	12	12	12
T	Telephone (Direct Bury)	12	1	—	1	12	12	12
C	CATV	12	1	1	—	12	12	12
S	Electric Secondary	6	12	12	12	1.5	3	1.5
P	Electric Primary	12	12	12	12	3	3	3
SL	Streetlight ³	6	12	12	12	1.5	3	1.5
NE	Foreign Electric Sources, Non-PG&E ⁴	12	12	12	12	12	12	12

¹ All separation clearance distances are in inches.

² For more information about this table, see [PG&E Bulletin TD-5453B-002](#), "Updated Separation Requirements For Conduit in Joint Trench," located in [Appendix B](#).

³ Streetlight circuits **not owned** by PG&E must be installed to meet the requirements in PG&E's [Joint Trench Configurations & Occupancy Guide](#). Specifically, applicants must review the requirements for working with a second utility company.

⁴ Considered a "utility" as defined in [PG&E Standard S5453](#), "Joint Trench."



Gas Service

Change Existing Service



Getting started guide for your home

If you are starting a home construction project, such as adding a room, building a swimming pool, or installing a tankless water heater you may be required to upgrade or move your gas service meter. Let Pacific Gas and Electric Company (PG&E) help you meet technical requirements and coordinate your service change. Once you submit your application to PG&E we will create a schedule to meet your service connection needs.

Follow these steps to get started:

1 Obtain any necessary permits

Before contacting PG&E, you must secure the appropriate permits required by your city or county building and planning department. Be sure to have all approved documentation ready to submit to PG&E, this will help save time as you begin your project.

2 Apply for relocation of gas service

Apply for or change your existing gas service using [Customer Connections Online](http://www.pge.com/CustomerConnections) at www.pge.com/CustomerConnections. You will be assigned a dedicated PG&E customer service representative who becomes the point of contact for you or your contractor. PG&E recommends you contact a contractor to help you plan your service change.

3 PG&E will contact you within three days

A PG&E representative will contact you within three days. You or your contractor will be asked to supply details of the project including scope, timeline, blueprints, and load requirements for the appliances or equipment you plan to install. Your PG&E representative can answer your questions and inform you of issues you may not have taken into account, such as potential costs or technical standards. If necessary, a field meeting will be scheduled. PG&E uses the information you supply during a phone or on-site meeting to prepare a project design.

4 PG&E will prepare project design

During the project design phase, we identify your costs and prepare construction drawings. At this time, you may be asked to pay a design deposit, which would be credited toward the final amount you pay for the work.

5 Additional resources

You or your contractor may need to refer to the GREENBOOK at www.pge.com/greenbook, which is a reference manual containing helpful information such as technical specifications and drawings. The [Gas Service](#) section may be especially useful when making changes to your gas service.

Upgrading gas lines may require the excavation of a trench. Your PG&E representative will provide you with drawings that illustrate the trench route and specifications. Refer to the Getting Started Guide: Trenching at www.pge.com/GettingStarted. Before you dig, call Underground Service Alert at 811, Monday through Friday from 6 a.m. to 7 p.m. except for holidays.

6 Approve contract and mail with payment

You will receive a contract for the full amount of the project work. If you would like PG&E to proceed, mail the signed contract along with your payment in the pre-addressed envelope provided to expedite processing and minimize delays.

7 Schedule construction

Work with your PG&E representative to schedule any construction work to be completed by PG&E.

8 Schedule inspection and meter connection

If required, arrange for the appropriate local government agency to inspect your gas lines. Once it has passed inspection contact PG&E to schedule the meter connection.

For more information on how PG&E can help with building and renovation projects for your home visit www.pge.com/building or call **1 877 743 7782**.