



RESIDENTIAL STANDBY GENERATOR (GEN SET) PERMIT & INSPECTION GUIDE

PURPOSE:

This handout provides guidance on the permit and inspection process for installing PV systems. It outlines the necessary permits, the materials required for a plan review and inspections, and the key items plan reviewers and inspectors will check during the process.

IMPORTANT NOTICE:

Anyone proposing to install a generator within Waco city limits must review the noise and sound level regulations outlined in ARTICLE VII Chapter 16 – NUISANCES of the Waco Code of Ordinances. Approval to install a standby generator does not exempt the installation from these noise regulations. It is important to understand and comply with all relevant noise and sound level limitations.

PERMIT REQUIREMENTS: (Electrical) (Plumbing if Natural Gas)

1. Property owners contact phone and email.
2. A scaled and dimensioned site plan/plat/proposed location which shall comply with the following requirements: (please submit original legible copy along with a legible marked up copy)
 - a. Pad Location: The pad location shall be at least 5 feet away from: (*NFPA 37 Section 4.1.4.*)
 - I. any openings in walls, including operable windows, doors, or other wall openings,
 - II. vents, soffit vents, and window wells,
 - III. orientation in relation to the existing gas meter, and any other equipment such as condensing units, pool or other equipment that requires access for maintenance.
3. Gen Set Clearance from Walls: (also includes private property lines)
 - a. A minimum of 18 in. of clearance must be maintained between the back of the GEN SET and any stationary wall or building, or as required by manufacturers installation instructions (MIA).
4. Whole Home Sizing calculations per NEC Article 220 Part III. Indicate load shedding.
5. Smoke alarms are required per *2018 IRC Sections R314.2.2, R314.3, R314.4. and 314.6.*

6. Electric One-line diagram to detail:
 - a. Current Meter and Service disconnect locations.
 - b. New proposed Meter and Service Disconnect Means (SDM or MSP) locations as applicable.
 - c. Transfer Switch (TS) location.
 - d. Overcurrent Current Protective Device(s) sizes, conduit sizes, and conductor sizes.
 - e. Surge Protective Device installation per NEC Section 230.67 (A)(1), (B), (C), (D) and (E).
7. Plumbing One-Line diagram to detail:
 - a. Gas meter and gas line route on site plan or plat,
 - b. indicating the size, calculations, and type of gas line to be run to the GEN SET, to include the BTU rating for sizing the gas service line to the meter,
 - c. flex fuel line size, regulator size, and specifications, to include developed length of gas line connected to the GEN SET from a regulator as required by MIA.
 - d. LNG (Propane). To be reviewed as proposed to determine applicable requirements.
8. Permit Package submittal to include:
 - a. MIA and specs for the GEN SET, to include UL listing and labeling per *NEC Section 110.3* info.
 - b. TS specifications, to include UL listing and labeling per *NEC Section 110.3* info.
 - I. Installed as the SDM or MSP, shall be labeled and comply with NEC Section 230.66(A).
9. Photographs: (front and side views)
 - a. Showing existing elevations marked with proposed GEN SET location,
 - b. Showing existing electrical meter and SDM or MSP,
 - c. Showing existing panelboard location and existing breakers,
 - d. Showing proposed marked location(s) of new equipment.

INSPECTIONS REQUIRED:

1. Electric and/or Plumbing underground ditch for conduit or gas pipe depth(s).
2. Electric and/or Plumbing rough inspections.
3. If the electric and/or gas service(s) are being de-energized and/or shut off:
 - a. Coordination shall be done with permit techs (254) 750-5612 to schedule inspection(s).
 - b. Temporary Final letter to be submitted, reviewed, and approved before re-energization.
 - c. Inspection scheduled and coordinated as per (3)(a) above to restore power or release gas.
 - d. Please see COW SOPs for Temporary Power Letter and Down and Occupied Electric and Gas requirements.
4. Electric and/or Plumbing finals.

GENERAL REQUIREMENTS:

1. All installations subject to field inspection and corrections for Code compliance.
2. Electrical installation shall be by properly qualified TDLR electrician license holder(s).
 - a. All personnel are required to possess a valid TDLR, apprentice registration, residential wireman, journeyman, or master licenses.
3. Working space about electrical equipment shall comply with Sections 110.26(A)(1), (A)(2), (A)(3), and (A)(6).
 - a. Section 110.26(A)(6) also requires that the working space that is required be as flat and level as practical for the entire required depth and width of the working space.
4. Section 230.62 Service Equipment — Enclosed or Guarded.
(C) Barriers. Barriers shall be placed in service equipment such that no uninsulated, ungrounded service busbar or service terminal is exposed to inadvertent contact by persons or maintenance equipment while servicing load terminations
5. Section 250.53(A)(4).
(4) Rod and Pipe Electrodes. The electrode must be installed with at least 8 feet in contact with the soil and driven to a depth of at least 8 feet. If rock is encountered, the electrode should be angled no more than 45 degrees from vertical, or it can be buried in a trench at least 30 inches deep. The upper end of the electrode should be flush with or below ground level.

ACKNOWLEDGEMENT

By checking each requirement, it is confirmed that the information provided is accurate and complete. If any required information is missing, notification will be provided. Failure to submit the missing information within thirty (30) working days may result in delays or the application being discarded. A new application, complete plans, and a new checklist will be required for re-submission, which will be processed as a new application in the order received.

I have read the above information and acknowledge that all required documents have been provided.

Signature _____ **Date** _____

Please note that staff cannot accept incomplete applications or illegible construction documents.