

EMERGENCY STANDBY GENERATORS (NO STORAGE BATTERIES)

Submittal Requirements:

The permit application and construction documents for the installation of a permanent emergency stand-by generator must be submitted as a package to the Bullhead City Building Division; to contain the following:

1. Completed City building permit application.
2. Site Plan (8 ½ x 11) to include:
 - Property boundary dimensions, monuments, elevations, proposed and existing building dimensions and distances to all structures and property lines, all easements and setbacks.
 - Location of existing electric service line and service panel(s).
 - Location of generator and fuel source (natural gas, propane, diesel storage tank, etc.) Location of the generator shall conform to local Zoning requirements as well as adopted Building codes.
3. Construction Documents: Residential (2 copies), Commercial and Multi-family (3 copies). Permit will include the associated Electrical and Fuel Gas systems and must include the following:

Expanded Site Plan to include:

- Locations of buildings directly adjacent to the generator location.
- The location of the generator. (A minimum of 5' clearance is required from any structure, overhang or projections from the wall unless stated otherwise per generator manufacturer installation instructions.)
- Location of the existing electrical and proposed fuel source (natural gas, propane, diesel storage tank, etc.)
- Location of all operable windows and operable doors near the generator exhaust. (Generator spacing from the building shall meet manufacturer's specifications for all openings and operable doors, including those buildings nearby. No operable doors, windows or openings are permit on the wall within 5' of any point of the generator.)
- Finished slab elevation of the generator. Elevation is to be above the applicable base flood level elevation.

Construction documents to include:

- Generator:
 - Provide two copies of the manufacturer specifications and installation instructions for the proposed generator.
 - Provide applicable structural slab details. Include the size and depth of the slab, the type of reinforcement used and the generator anchoring details.
 - Provide information for the generator showing KW rating, ampacity, voltage, phase, fuel source and dimensioning. All loads connected to generator shall be identified.

- Provide electrical riser diagram, service, panel(s), transfer switch(s), main disconnect(s), generator installation, overcurrent protection, grounding, conduit sizes, wire sizes, location of the transfer switch and over current protection, etc.
- Provide load calculations for the generator. Generator shall be sized for the load served. NEC Article 220 shall be used to calculate existing loads. Where the generator is connected to the load through a cord-and-plug (exposed metal parts shall be non-current carrying), the receptacle shall be sized for the corresponding overcurrent protection at the generator or other overcurrent protection device in front of the receptacle.
- Transfer Switch: Required for All Generators, shall be rated for the connected load.
 - The local utility provider, Mohave Electric Cooperative (MEC), requires that the automatic transfer switch must be outdoors and readily-accessible to MEC crews.
 - Manual Transfer Switch (options): Sized for the intended load on the electrical service or sized for optional standby panel(s) which may be built into the panel(s) and transfer switch(s).
 - Automatic Transfer Switch (options): Sized to transfer the entire load on the electrical service or pre-select the loads to be served with an optional standby panel(s) and transfer switch(s) or provide automatic load shedding equipment to reduce total load imposed on generator.
- Signage: A permanent sign shall be placed at the electrical service entrance equipment that indicates the location of on-site optional standby power sources. A permanent sign shall be placed at the transfer switch location indicating the sequence of operation to start the generator and transfer the electrical loads.
- Natural or LP Gas Generators:
 - Provide an isometric riser diagram and show piping material, length, sizes, depth, type, etc. Provide BTU demand and shut off valve location to verify proper pipe sizing. Provide the KW hours being produced by this generator. Or, provide the manufacturer specifications for the generator that addresses these same items.
- Diesel Fuel Tank Generators:
 - Provide the fuel piping, piping size, piping material, tank specifications. If inside of a building provide make-up air and exhaust termination.

4. Outside Agency Approvals:

- If the generator uses a separate diesel fuel tank or propane tank the applicant is responsible to obtain written approval from the Bullhead City Fire Department prior to permit issuance. A separate fee may apply.
- The City will scan the documents submitted and notify MEC staff requesting their review. Written approval from MEC is required prior to permit issuance.

5. Inspections (once permit is issued):

- City inspection staff will perform inspections as prescribed by the Building code.
- The generator is to be completely operational at the time of final inspection. The contractor is to coordinate with Bullhead City and Mohave Electric Cooperative inspection staff for them to observe the test of the complete system at the same time.