

Minimum Generator Plans Review Requirements NEC 445

(Additional Documentation may be requested at any time)

Generator:

1. Provide **Factory Spec Sheets** and designate size for the **Generator** and which model **number (ATS) Automatic Transfer Switch** and any load shedding **Modules** that will be used with the ATS.
2. Provide the **(AIC) Maximum Available Fault Current rating** of the **(ATS) Automatic Transfer Switch** that is installed in a **commercial building**. AIC rating must be **verified by a dated letter** from the local Serving Utility Company for all new equipment installed. Per. Art. 110.24
3. Provide a summarized **load calculation** of the home or building. If load shedding is required, provide **load shed calculations** for the actual load(s) that will be shed. If there will be a separate emergency panel, designate the load(s) for this panel.
4. Provide an **Electrical Riser Diagram** of all **service equipment**: (Example: Grounding, Meter, ATS, Main Distribution Panel, and Generator with Controls noted) with conductor size/type and conduit size/type. (Note the **Existing and New Equipment**). **Information listed on the equipment should include**: Volts, Amps, Phase, and **(AIC Rating if Commercial)**. AIC Rating for Meter is excluded.
5. Generator, ATS, meter, panels, and service equipment locations shall be provided on the **site plans**.
6. **If the ATS switches the Neutral conductor** from the Utilities it is considered a **separately derived system** and will need a Grounding Electrode Conductor sized per Table 250.66 at the Generator and this same size will be fed through until it reaches equipment containing an Overcurrent Protection Device (OCPD). Per. Art. 250.30 (Info Note 1), 250.30(A), and Table 250.66
7. **If it is NOT considered a separately derived system** then the Generator will receive an Equipment Grounding Conductor sized accordingly to Table 250.122
8. **If Generator has an internal Overcurrent Protection Device** then the **Conductors** from the Generator shall not be less than **100% of the current rating** of the nameplate. Per. Art. 445.13 Exception
9. **If Generator does not have an internal Overcurrent Protection Device** then the **Conductors** from the Generator shall not be less than **115% of the current rating** of the nameplate. Per. Art. 445.13
10. Permitted **reduction of the Neutral Conductor** is allowed based on specific permitted loads. Per. Art. 445.13 and 220.61 and 250.30(A)
11. A **ground rod** may be required if manufacturer's specs call for it.
12. **Schedule 80 PVC** will be used where conduit(s) could be subject to physical damage.

Fuel Source:

1. Designate LP (Liquid Propane) or NG (Natural Gas), as this will determine the power rating of the generator.
2. Mechanical Plans Review is required for all connections.
3. Provide Gas Plumbing Isometric.