



County of Santa Clara
Development Services Office

Building Inspection Office

Land Development Engineering and Surveying

FUEL CELL POWER GENERATING SYSTEM PERMIT APPLICATION GUIDELINES

Submit 2 sets of plans for residential, 3 sets for commercial.

Plan size - Plans shall be minimum 18" x 24" to maximum 24" x 36" (see expedited process for exception). Drawings shall be signed by the architect or engineer(s), or by the contractor (electrical C-10 or solar C-46) or by the owner who designed and will install the system. Include the following:

Project description – Provide a detailed description of the proposed work. And indicate if the system has batteries or no batteries.

Title block – Job address; owner's name, address and phone number; engineer or contractor name, address, phone number and license number.

Site plan to scale – Show the location of the proposed fuel cell power system. Show the location of all existing buildings, structures and property lines. Show layout, conduit runs, and location of all new and existing equipment associated with the installation (coordinate with single line drawing). Show distances to property lines and buildings.

Elevations – Provide at least two elevation drawings of the system to scale showing the height, design and configuration of the fuel cell power system and distance to all existing structures, buildings, electrical lines and property lines.

Single line drawing – Include all electrical, mechanical and plumbing components of the system in sufficient detail to establish that the installation conforms to all applicable electrical codes. Including:

All disconnects inverters, sub panels, main service, batteries, heat exchangers water heating appliances etc. Show conductor sizes, quantities and insulation type, conduit sizes and type, and equipment ratings. Show rating of main service and any sub panels involved. Show point of connection method that complies with the 2013 California Electrical Code Section 705.12. Show equipment grounding. Show all associated plumbing line sizes and types. Provide calculations to support selection of conductors, and for voltage drop calculations for runs over 100 feet.

Structural calculations – Professional designers must sign and stamp plans and calculations for systems exceeding 400 lbs.

Foundation plan- A standard foundation and anchor design along with soil condition and specifications for the soil conditions at the site. A soils report and engineering design may be required depending on the extent of work and soil conditions.

Specification sheets – Provide manufacturers informational sheets showing specifications and listings for fuel cell, inverters, combiner boxes, transfer switches, racking, and any other specialty equipment. Specification sheets may be 8 1/2" x 11".