



CITY OF NEWPORT BEACH

COMMUNITY DEVELOPMENT DEPARTMENT BUILDING DIVISION

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SOLAR VOLTAIC FIRE - ELECTRICAL PLAN REVIEW COMMENTS RESIDENTIAL

Project Description:

Project Address:

Plan Check No.:

Permit App. Date:

Plan Check Expires:

Use:

No. Stories:

Permit Valuation:

Architect/Engineer:

Phone:

Applicant/Contact:

Phone:

Plan Check Engineer:

Phone:

1st Review:

2nd Review:

Italic comments

3rd Review:

By Appointment

The code section references are from the 2019 California Building Code and 2019 California Electrical Code, unless otherwise stated.

- **TO EXPEDITE PROJECT APPROVAL:** Please provide a written response indicating how and where each comment was resolved on the plans.
- Resubmit all previously reviewed plans, updated plans and supporting documents with each subsequent review.
- **AFTER 2nd PLAN REVIEW:** Please call the plan check engineer listed above to schedule a plan review appointment, to expedite project approval.
- For clarification of any plan review comment, please call the plan check engineer listed above.
- Plan review status is available online at www.newportbeachca.gov. Project status is also available using the interactive voice response system at 949-644-3255, or by speaking with a permit technician at 949-644-3288 during business hours.

ELECTRICAL

1. Provide D.C. array solar panel Voc and Isc ratings, show calculations – Voc calculated @ x 1.13 [Temp Corr.] // Isc calculated @ x 125% [NEC – 690] x 125% [UL 1703].
2. System exceeds inverter maximum useable D.C. input current shown on inverter specification sheet.
3. Provide complete inverter and solar module manufacturer specification sheet.
4. Show all conduit and conductor sizes, include derating of conductors.
5. EMT is not allowed to be exposed outside to weather. Note on plans, and revise single line call outs accordingly. NBMC 15.06.040.
6. A.C. disconnect between inverter AC output and connection to utility to be a visible blade, lockable type disconnect listed for its use.
7. Provide maintenance AC disconnect within sight of inverter. CEC 690.15. and 705.21.
8. Provide rapid shutdown of PV system. CEC 690.12.
9. Provide minimum 3 feet working clearances in front of all solar – voltaic equipment and 3 feet working clearances at side yard setbacks.
10. Verify and show main electrical service overcurrent device and buss rating. For a dwelling unit, the sum of 125 % of the inverter(s) output circuit rating and the OCPD protection the busbar shall not exceed 120% of the busbar rating. Breakers to be located at opposite ends of the busbar. CEC 705.12 (B).
11. Provide residential load calculations to justify de-rating the main OCPD. CEC 220.
12. Show existing main electric service equipment and ground electrode system, conduit and conductor sizes.
13. Ground electrode conductor from inverter to ground electrode to be minimum protection of bare armor sheathed cable, # 8 awg. minimum.
14. Show all signage, labels, and directory required per 2019 CEC- Article 690, and 705. See California Solar Guide Book for central string inverters and micro inverter signage.
15. Conductors shall be protected in accordance with article 240. Provide protection from all sources CEC 705.30.
16. For new relocated wiring for back up load panel, or new sub panel, note to provide AFCI protection per 210.12.
17. Provide residential load calculations to justify feeder and OCPD size for back up load panel or new sub panel. CEC 220