Building Safety Division

Informational Handout

PV Solar Installations on Detached Single-Family Residential Structures

The City of Eastvale supports and encourages the use of alternative energy sources such as on-site photovoltaic "solar panel" systems. The purpose of this informational handout is to assist the applicant submitting plans for a rooftop PV solar system to be installed on a detached, single-family residence. To facilitate the installation of these "green" type projects the Building Safety Division has developed an expedited permitting process to make it easier to obtain the necessary approvals, permits and inspection for detached single-family residential PV solar installations. This handout applies only to "detached, single-family residential rooftop PV systems" no larger than 10 kilowatts AC in size.

Single-family residential rooftop PV system submittals (application and plans) will be reviewed for completeness in no more than four working days from the date of submittal. If the submittal is determined to be complete (approved) the plans will be "stamped" by the Building Safety Division and the applicant will be notified that the permit is ready for issuance. If it is determined that the submittal is incomplete, the reason(s) will be written in a correction list and the applicant will be notified that submittal needs to be picked-up for correction(s).

Providing the following documentation will facilitate the review and permit issuance process:

1. Completed City of Eastvale "Combination Building Permit" application.

Application is complete when it contains:

- Project address
- Owner's name
  - Mailing address
- Applicant's name
  - Mailing address
  - Contact information
- Contractor's name
  - Mailing address
  - State license classification & number
  - City business license number
  - Contractor's contact information
- Designated contact
- Description of work
- Applicant's signature
- Application date

2. Two complete sets of plans

Cover sheet contains:

- Table of contents
- Property owner's name
- Project address
- Contractor's name & address
- System size in kilowatts
- Module(s) manufacturer's name, model number & number of modules in system
- Inverter(s) manufacturer's name & model number
- Mounting system type, manufacturer's name & model number
- Applicable California Codes and Editions

Site plan sheet contains:

- Project address
- Graphic representation of property boundary lines
- Graphic representation of structure roof configuration
- Proposed location of solar panels (modules)
- Identification of panel setbacks required by C.R.C.
- Location of existing electrical service panel
- Location of inverter
- Location of photovoltaic AC disconnect
- Location of sub-panel (if utilized)

Module layout sheet contains:

- Project address
- Scalable graphic representation of portion of roof containing modules
- Graphic representation of modules
- Graphic representation of all roof penetrations within portion of roof containing modules (plumbing vents, mechanical vents, appliance vents, etc.)
- Location of mounting system attachment points (mounting system to roof) and module attachment points (modules to mounting system)

Mounting details sheet contains:

- Project address
- Graphic cross sectional representation of roof structure including substructure (rafter or truss chord), roof sheathing, roof covering, solar module, module mounting system, mounting system fasteners, etc.
- Racking & attachment information (racking weight, max. attachment span, max. uplift, max. downforce, design parameters (snow load, wind load, exposure category) & applicable ASCE standard(s), etc.)

Electrical schematic sheet contains:

- Project address
- Single line diagram indicating all components of PV system including main service panel
- Size and type of components in system (conductors (i.e. #8 THWN-2), conduit (i.e. 1" EMT), circuit breakers (i.e. 40 A-2P), disconnects (i.e. 60A/240V 2P Rated AC), Junction boxes (NEMA 3R), etc.
- Module electrical specifications
- Inverter electrical specifications
- Weather data
- Derating calculations

Label Sheet contains:

- Graphic representation, including verbiage, of all warning labels required by the C.E.C. & C.F.C.
- Indication of label location within the system.

3. Appropriate fee amount.

Permit fees are as follows:

Processing Fee	$49.00
Permit Fee	203.00
"Green" Fee – up to 25 panels (state mandated fee)	1.00
"Green" Fee – more than 25 panels (state mandated fee)	2.00
"SMIP" Fee – per panel (state mandated fee)	0.13

Example

15 Panel, 6.35 kilowatt rooftop photovoltaic system

Processing Fee	$ 49.00
Permit Fee	203.00
"Green" Fee	1.00
"SMIP" Fee	1.95
Total	**254.95**