City of Colton

ELECTRIC UTILITY
Residential and Commercial PV Requirements

Please review Colton Electric Utility Requirements below for the project to be approved. Plans must be signed by a California Registered Electrical Engineer or a California Licensed Electrical (C-10) or Solar (C-46) Contractor and comply with CEC Articles 690 and 705. New Residential and Commercial PV installations will go through an interconnection study which might incur additional fees. **Also refer to our Electric Rules and Regulation Rule 24.**

Plan Requirements

- Site plan – Fully dimensioned site plan showing property lines, all structures, and the location of the main electrical service, all photovoltaic inverters and disconnects, etc.
- Roof Plan – Provide a roof plan showing the location of the photovoltaic panels and any required walkways to roof mounted equipment.
- Electrical Single Line Diagram – Provide a complete electrical single line diagram showing all electrical equipment, conductor size and type, conduit sizes, overcurrent protection location and ratings, grounding electrode type and location, point of interconnection to existing service panel (i.e backfed breaker), etc.
- Load calculations must be provided.
- Spec sheets – Provide **specifications** on the **panel (new panels), inverters, solar panels, disconnect boxes and solar panel anchorage system** to be used.
- Panel should comply with Colton approved EUSERC configurations and shall obtain permit(s) for equipment installation
- Signage Specs – Provide legend showing the locations and wording of all required signs or placards at various photovoltaic system components.
- Written guarantee saying the PV will disconnect from the grid during an outage or need bases.

Connection Requirements

- Line side taps (connection between the service entrance conductors and the main overcurrent device downstream of the meter) are **NOT** allow in the City of Colton. Only load side connection.
- The sum of the ampere ratings of the main service breaker and the back-fed breaker from the PV source, shall not exceed 120 percent of the rating of the busbar or conductor.
- Provide two AC disconnects, one before the Production Meter and after the Production Meter when using a Colton Production Meter. Can have one AC disconnect if using own Production Meter. A revenue grade Production Meter is **REQUIRED** in all Solar installments in the City of Colton.
- Main service breaker may only be downsized with supporting electrical load calculations.

Interconnection Study Data requirements from the Customer

- Load Schedules
- PV name plate data
- Protection scheme and trip time at the Main Breaker and Solar Breaker. Including data sheet and TCC table (Time Current Curve)
- PV spec sheets and inverter spec sheets
- Single Phase and Three Phase Short Circuit Values.
- Transformer(s) name plate data (if applicable)

Interconnection study turn around is about 3 weeks or less once all information is provided.

Panel Upgrades

If a panel upgrade is required, a meter application for an upgrade is required. Fill out application at 150 S 10th St, Colton CA.

Initial Review Fee:

Residential: $225.00
Commercial: $360.00
Commercial TOU/Flat & Demand: $865.00

If supplementary review is required: Fees will be as needed.