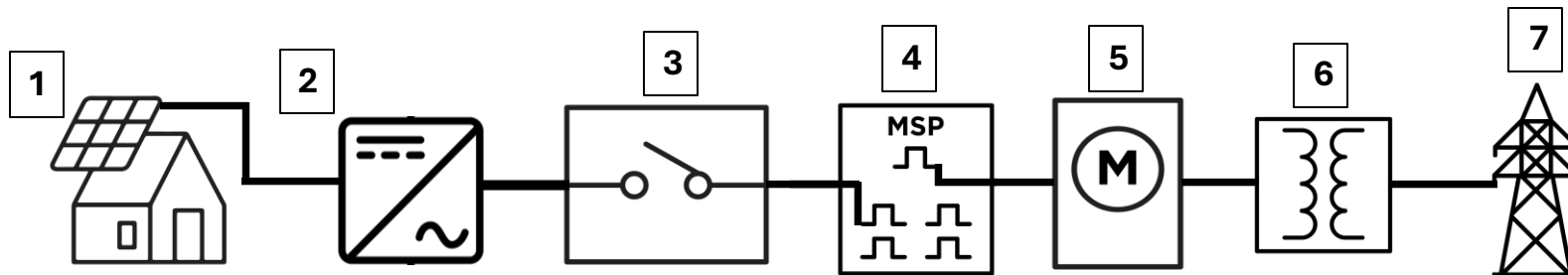


# Example One Line Diagram & Requirements for Solar Generation Interconnection to LPEA's Grid for PV only systems for LPEA

Single phase & smaller than 50kW



Revised on 2/25/2025 by  
La Plata Electric Association



## KEY

- 1 = Solar Panels
- 2 = Inverter
- 3 = AC Disconnect
- 4 = Main Service Panel
- 5 = Utility Meter
- 6 = Transformer
- 7 = LPEA's Grid

## Things that must be included in the diagram

- (1) Number of PV Modules, Make & Model and PV System size with DC and AC ratings
- (2) Make and Model. Must be UL 1741 SB Compliant
- (3) Labeled as "LPEA Accessible AC Disconnect"
- (4) Info on the service panelboard voltage, amperage rating, and main disconnect(s) size
- Member's (owner's) name
- Address (include units #'s)
  - Make sure the address matches exactly what's on LPEA's Energy Bil
- Indicate size of wires connecting components
- Date of revised drawing

## Other notes

- (1) Panel DC size must be projected (using LPEA approved methods) to produce less than 150% of the energy consumed by the service.
- (2) Inverter must be programmed with LPEA's required settings. See LPEA's most recent Interconnection Standards on the [Installers Resources page](#) of our website. All inverters must be UL 1741 SB listed.
- (2) Must be UL 1741 SB Compliant
- (2/6) Non-export modes or export limited inverter settings may be used to address transformer loading or feeder capacity issues.
- (3) An AC disconnect must be unobstructed, labeled, and accessible by LPEA. The AC disconnect must be capable of de-energizing the inverter (2). AC disconnect must be clearly labeled.
- (4) Service panel breakers may be used as an accessible AC disconnect (3) if they are outdoors and if the inverter (or combiner for microinverters) is visible from and near the service panel.
- (5) Line side taps may be approved on load side of main disconnect.
- (6) Systems will not be approved if their AC capacity in aggregate with other generation on the transformer exceeds 100% of the nameplate capacity of the LPEA transformer serving the service.