

## Diagram Checklist

Application #: \_\_\_\_\_

Premise #: \_\_\_\_\_

Date: \_\_\_\_\_

### The following criteria may require further review:

1. Complex systems that do not fit APS Sample Drawings.
2. Backup generation (Separate Service)
3. Customer's utilizing new technologies (e.g., gateways, power controllers, etc.)
4. Large 100kW+ systems, and Systems over 100kW requiring a study (supplemental review, feasibility study, System impact study, etc.)
5. Abnormal interconnection points that are not the typical load/supply side connection (e.g., Center fed panels)

## Three Line Diagram

### Generating Facility System

#### 1. Diagram Review:

- a.  Yes  No; does the diagram omit any copyrighted, proprietary or confidential language?
- b.  Yes  No  N/A; (**Commercial Only**) are diagrams P.E. Stamped?
- c.  Yes  No; does the diagram install address match the application?
- d.  Yes  No  N/A; if the system is an expansion, is the location of the connection point for the existing system shown?
- e.  Yes  No; does the diagram show a Supply Side Tap in the SES? If yes, a letter from the Panel Manufacturer stating the tap does not violate the UL Listing is required or a field evaluation letter from an authorized NRTL program provider. NRTL providers: <https://www.osha.gov/nationally-recognized-testing-laboratory-program/current-list-of-nrtls>.
- f.  Yes  No; if a tap is shown, is it identified correctly on the application?

#### 2. Service Entrance Section (SES) Information:

- a.  Yes  No; the SES is labeled new or existing.
- b.  Yes  No; is the SES amperage, voltage, and phase shown?
- c.  Yes  No  N/A; is the Main Breaker amperage shown?
- d.  Yes  No; is the PV (Backfed) Breaker amperage shown?
- e.  Yes  No; does the SES amperage match the application?
- f.  Yes  No  N/A; does the Main Breaker amperage match the application?
- g.  Yes  No; does the PV (Backfed) Breaker amperage match the application?
- h.  Yes  No; does the inverter voltage rating match the SES voltage (**For Commercial Applications**)?
- i.  Yes  No  N/A; if h. is answered No, does the diagram show a transformer to convert the voltage to match (**For Commercial Applications**)?

#### 3. System Utility and Meter Disconnect Switch(s) information:

- a.  Yes  No; is the correct orientation shown?
- b.  Yes  No; is the make and model shown?
- c.  Yes  No; is the amperage shown?
- d.  Yes  No; is the new/existing disconnect label shown correctly (Utility Disconnect, Meter Disconnect..., 1 of X, etc.)?
- e.  Yes  No; does the make and model match the application?

#### 4. Production Meter(s) Information:

- a.  Yes  No; is the socket make, model shown?
- b.  Yes  No; is the meter form number, ring type, and amperage shown?
- c.  Yes  No; is the new/existing meter label shown correctly (Bi-Directional, Uni-Directional, 1 of X, etc.)?

#### 5. Inverter Information:

- a.  Yes  No; is the number of inverters shown?
- b.  Yes  No; is the make and model shown?
- c.  Yes  No; is the AC kW rating of each individual inverter provided on the drawing?
- d.  Yes  No; is the total AC kW of the proposed system shown?
- e.  Yes  No; does the number of inverters, make, model, and AC kW match the application?

**6. Photovoltaic Module Information:**

- d.  Yes  No; is the number of panels shown?  
 e.  Yes  No; is the make and model shown?  
 f.  Yes  No; is the total DC Wattage/kW shown?  
 g.  Yes  No; does the number of panels, make, model, and DC wattage/kW match the application?

**Site Plan Drawing****1. Drawing Review**

- f.  Yes  No; does the drawing omit any copyrighted, proprietary, or confidential language?  
 g.  Yes  No; is the site address match the application?

**2. Notes**

- a.  Yes  No; are these required notes shown?  
 • 24hr Unrestricted Access Notes  
 • Workspace Notes  
 • Meter Separation from Gas/Water Notes

**3. Labels**

- Yes  No; are the following Utility equipment clearly labeled:  
 • Billing Meter & SES  
 • PV/ESS Production Meter(s) (New and/or existing)  
 • System Utility Disconnect Switch(es) (New and/or existing)  
 • PV/ESS System Metering Disconnect Switch(es)  
 • Backup Sub-panel meter disconnect switch(es)  
 • Backup load Sub-panel meter(s)
- b.  Yes  No; is the following equipment clearly labeled:  
 • Inverter(s) (New and/or existing)  
 • Photovoltaic Modules (New and/or existing)  
 • Sub-panel(s) with Backfed breaker (if applicable)  
 • Energy Storage (if applicable)?  
 • Existing system: Disconnects & PV Modules (if applicable)?
- c.  Yes  No  N/A; are the following structures clearly labeled:  
 • Carport  
 • Breezeway  
 • Patio  
 • Porch  
 • Any other structures
- d.  Yes  No; are the following items clearly labeled?  
 • Gates  
 • Fences  
 • Any other items that would create obstructions on the property
- e.  Yes  No  N/A; if 3.d.is answered No; does the drawing show a note stating no fences or gates or obstructions?
- f.  Yes  No; is the street clearly labeled and shown?  
 g.  Yes  No; is driveway clearly labeled and shown?

**4. Access to Equipment**

- a.  Yes  No; does APS have 24-hour unrestricted access to APS required Utility Disconnect Switch(s) and Utility Production Meter(s)?  
 b.  Yes  No; is APS route to equipment clearly shown?

**Review Complete.**