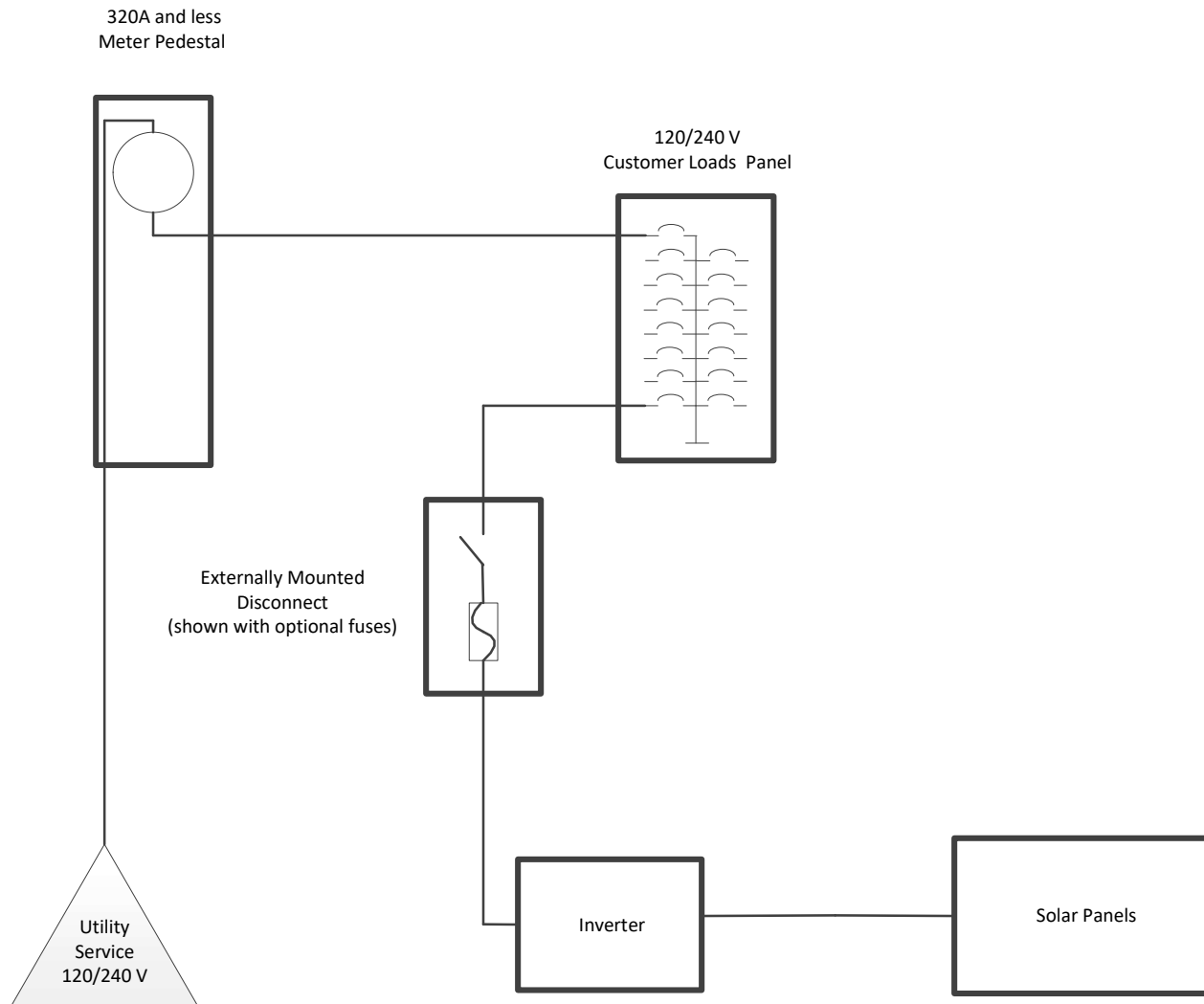


UMERC underground service - customer owned generation solar one-line diagrams

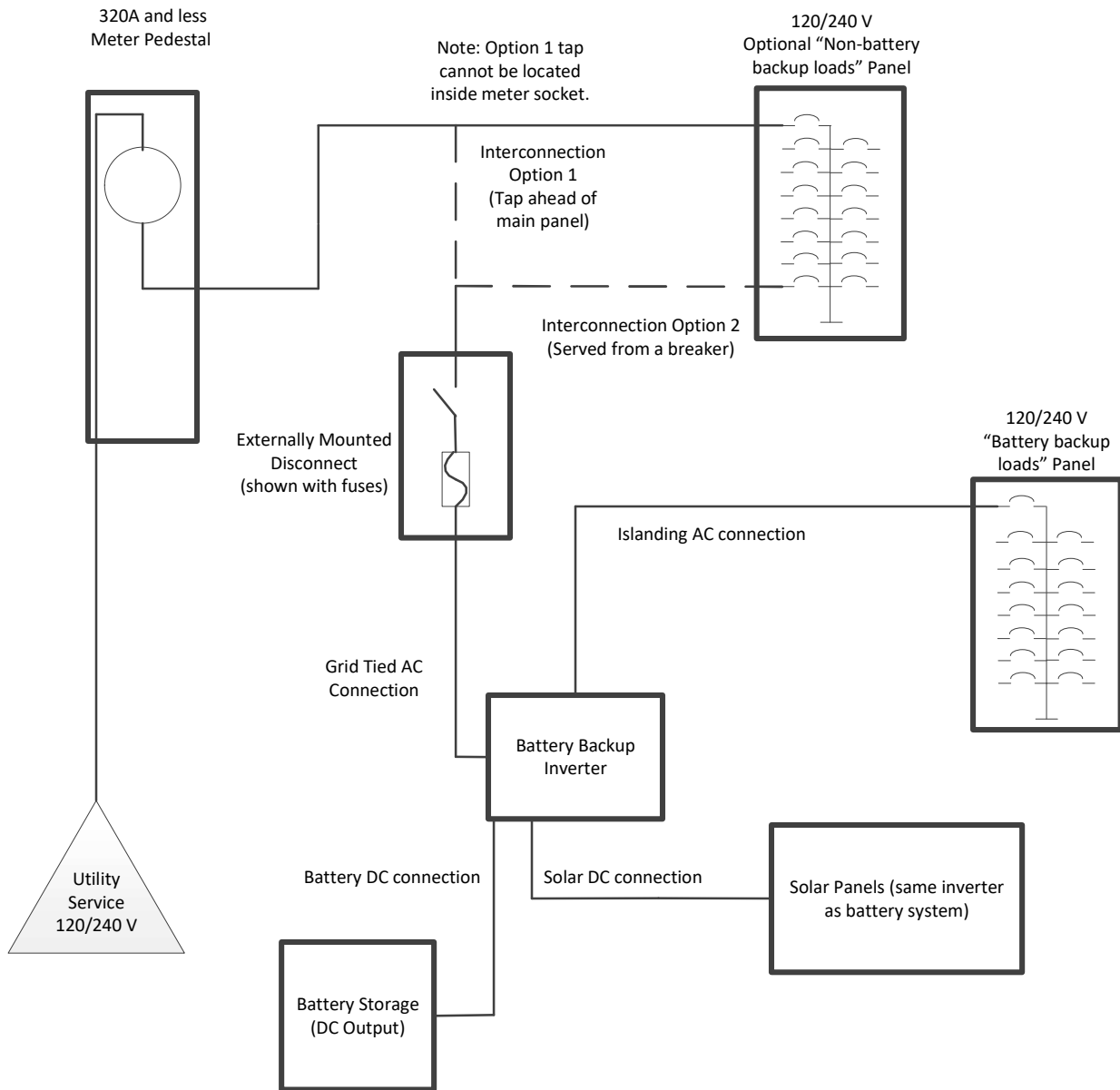
Notes:

- The inverter shall be UL 1741 compliant.
- The external disconnect shall provide a visible open between its contacts, have the ability to be locked in the open position and have 24/7 ready access for utility workers.
- Breakers (including breakers integrated in metering equipment) and air conditioner “pull out” disconnects are not acceptable.
- If the PV Disconnect Switch is not located within sight of the Utility Meter, a placard must be placed at both the meter and disconnect switch indicating the location with respect to the other.
- Please list the one-line diagram number (example: “U3”) that is referenced on the submitted one-line diagram.
- Example one-line diagrams show the minimum required alternating current disconnects.
- One-line diagram must be located near metering equipment and protected from the environment.

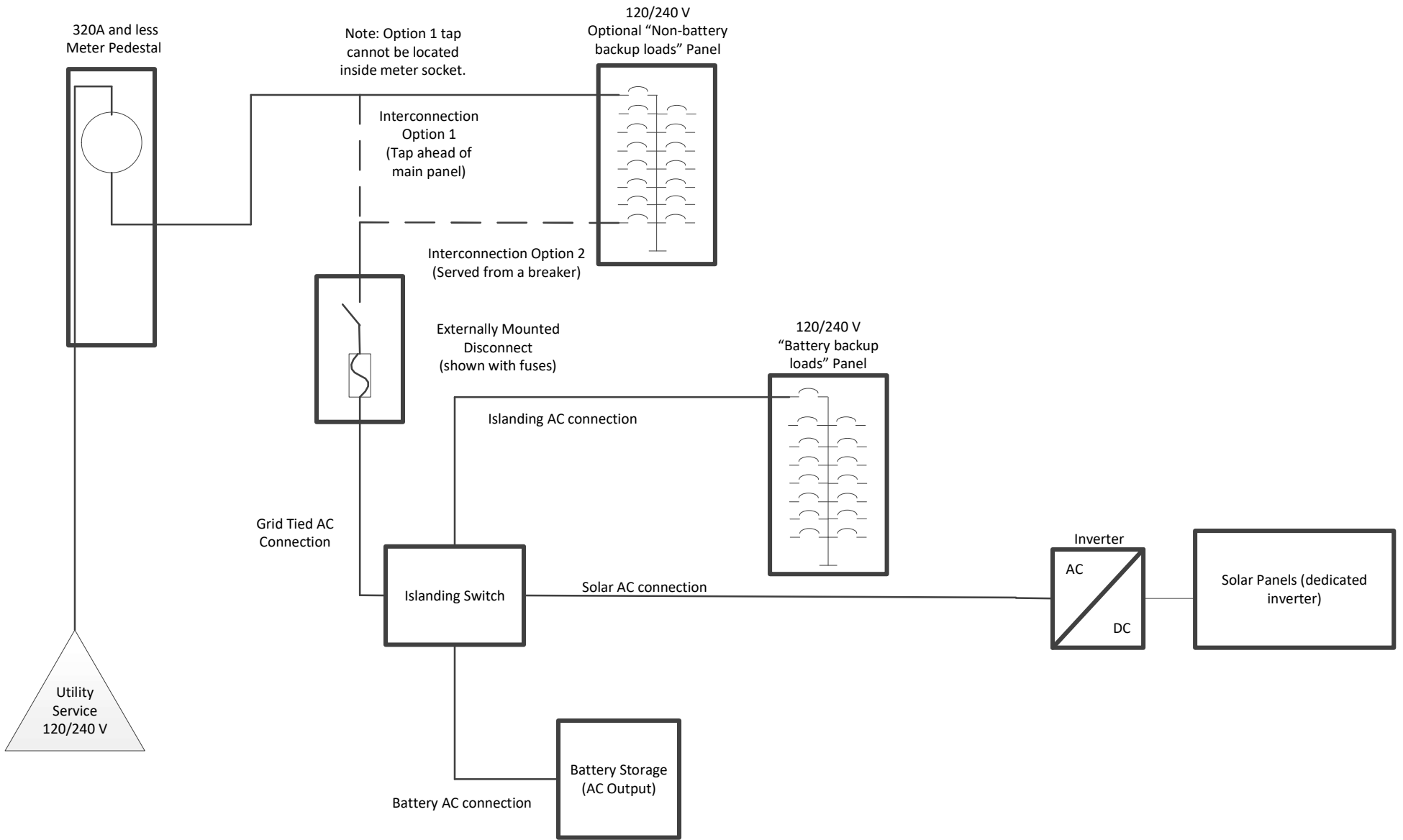


Note: One-line diagram must show the metering equipment and disconnect catalog numbers.

One Line Diagram - U1		
Solar with a meter pedestal (320A and less, 240V 3-wire single phase service)		
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Note: One-line diagram must show the metering equipment and disconnect catalog numbers.



Note: One-line diagram must show the metering equipment and disconnect catalog numbers.

One Line Diagram – U3		
Solar with Battery Back-up with dedicated inverter (320A and less, 240V 3-wire single phase service)		
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320 A and less Meter Pedestal with integrated main breaker

Note: Option 1 tap cannot be located inside meter socket.

120/240 V Optional "Non-battery backup loads" Panel

Interconnection Option 1 (Tap ahead of main panel)

Interconnection Option 2 (Served from a breaker)

120/240 V "Battery backup loads" Panel

Islanding AC connection

Grid Tied AC Connection

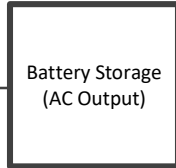
Islanding Switch

Solar AC connection

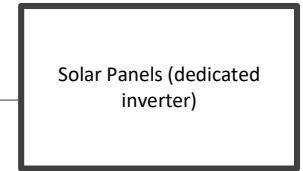
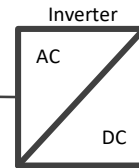
Externally Mounted Disconnect

Externally Mounted Disconnect

Utility Service 120/240 V



Battery AC connection



Note: One-line diagram must show the metering equipment and disconnect catalog numbers.

One Line Diagram – U4

Solar with Battery Back-up with dedicated inverter (320A and less, 240V 3-wire single phase service)

320 A and less Meter Pedestal with integrated main breaker

Note: Option 1 tap cannot be located inside meter socket.

120/240 V Optional "Non-battery backup loads" Panel

Interconnection Option 1 (Tap ahead of main panel)

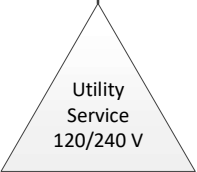
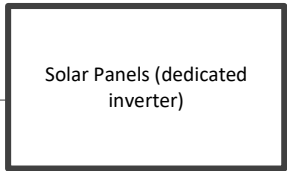
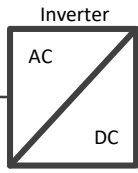
Interconnection Option 2 (Served from a breaker)

120/240 V "Battery backup loads" Panel

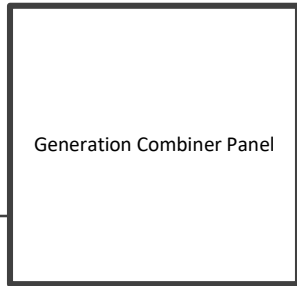
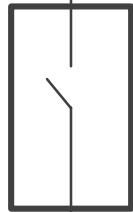
Islanding AC connection

Grid Tied AC Connection

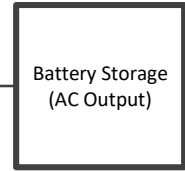
Islanding Switch



Externally Mounted Disconnect



Solar AC connection

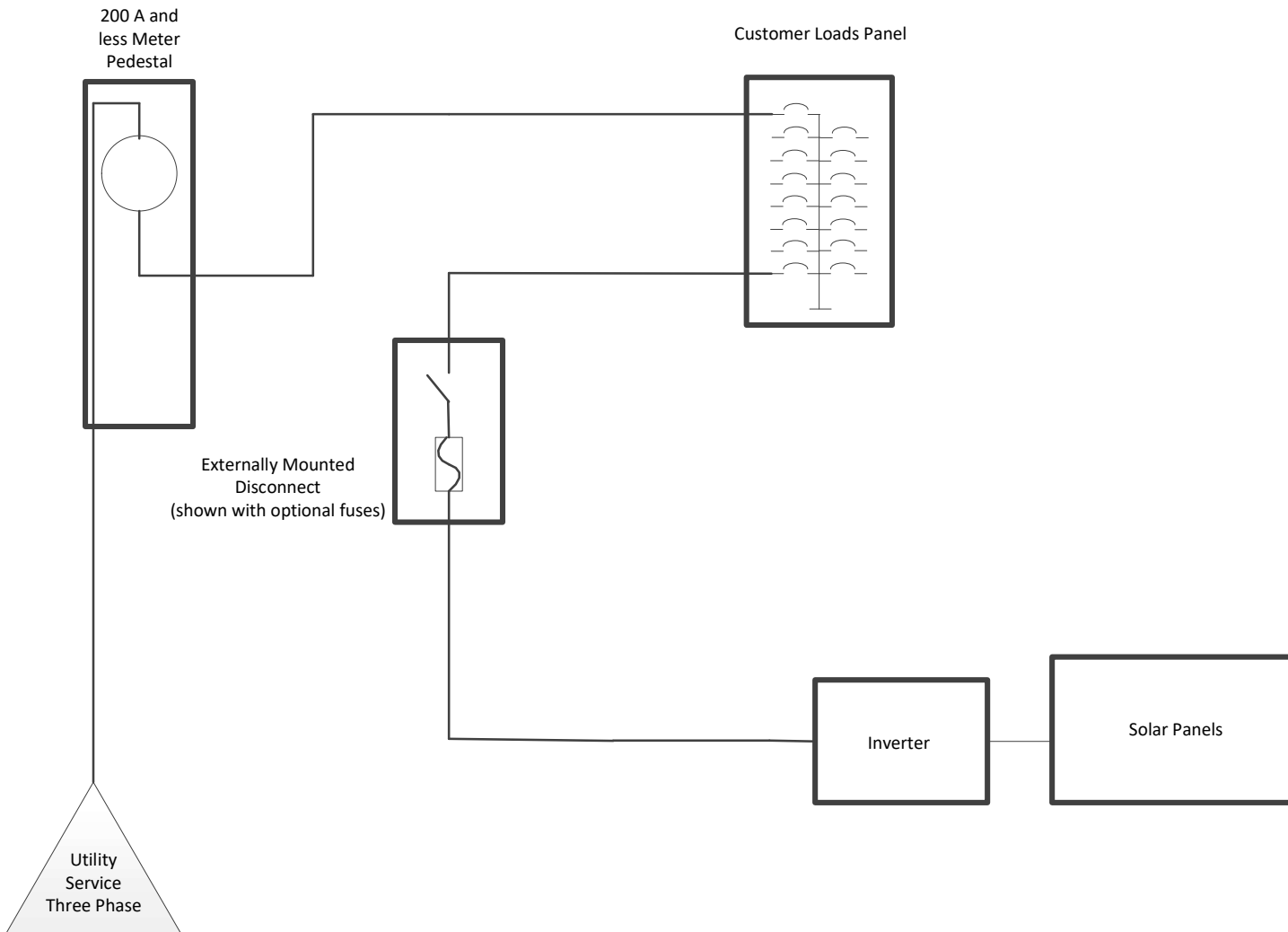


Generation and Battery output

Battery AC connection

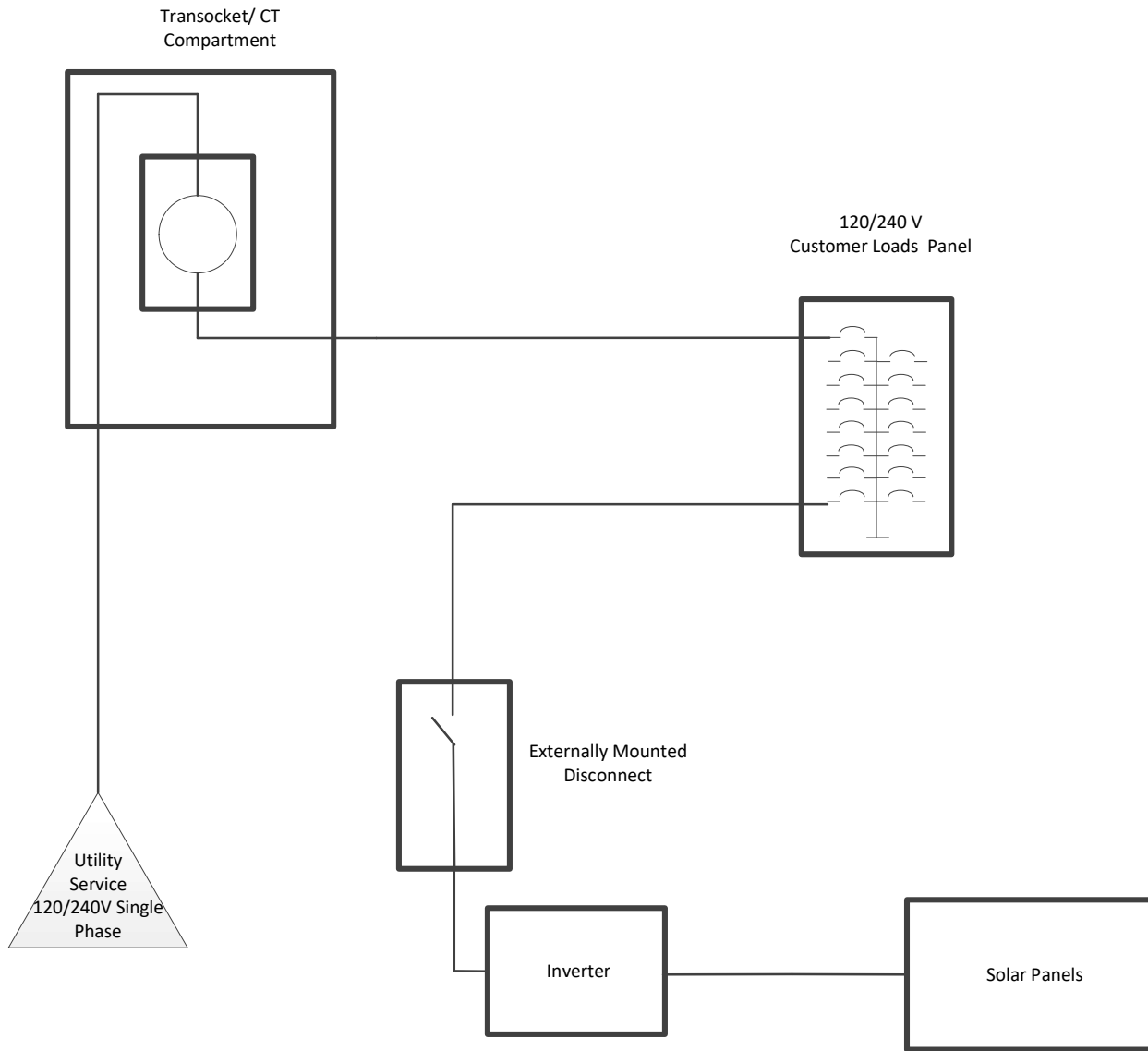
Note: One-line diagram must show the metering equipment and disconnect catalog numbers.

One Line Diagram – U5		
Solar with Battery Back-up with dedicated inverter (320A and less, 240V 3-wire single phase service)		
Drawn: N. Bushman	Date: 3/24/2021	Page 5 of 9



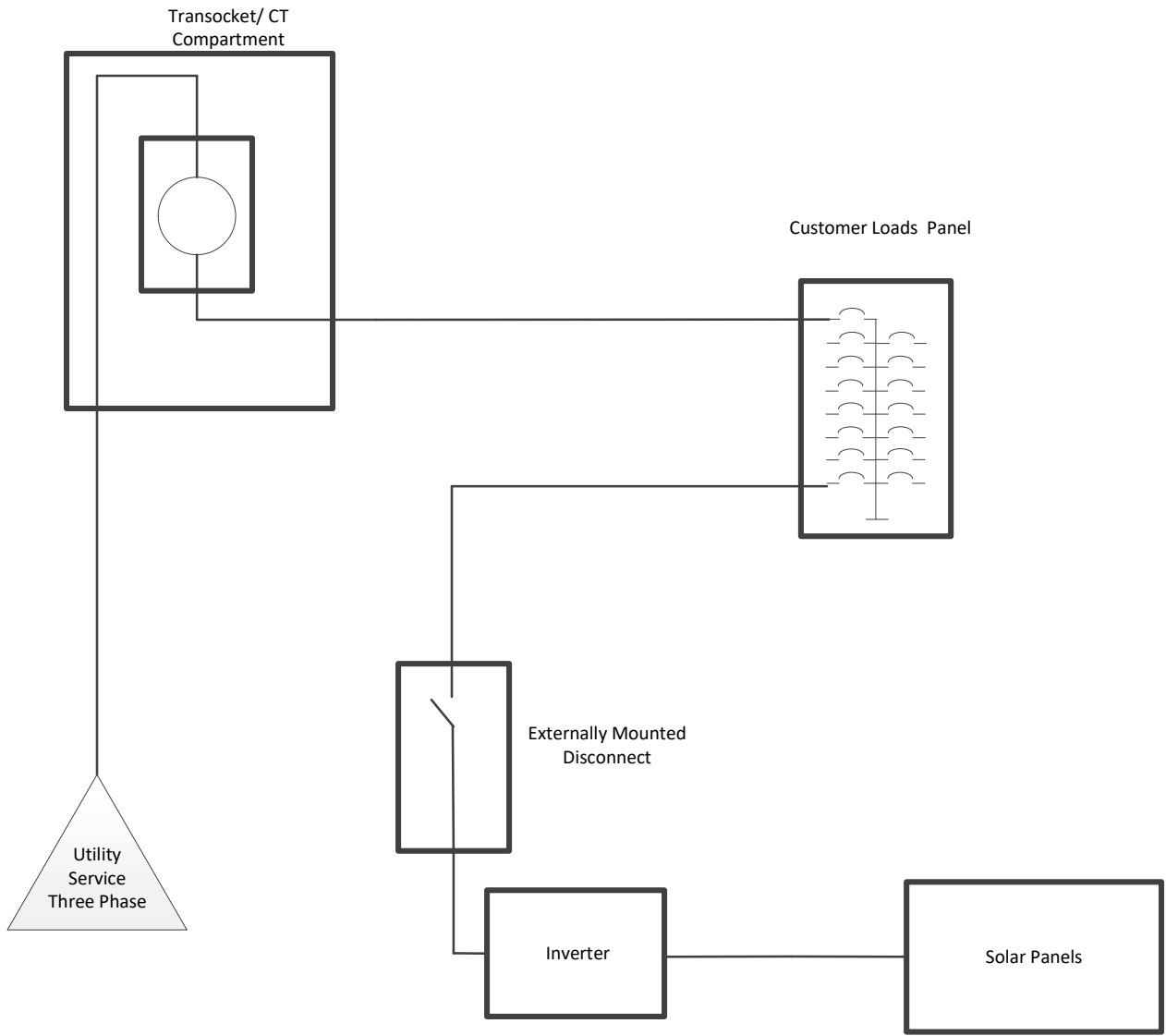
Note: One-line diagram must show the metering equipment and disconnect catalog numbers.

One Line Diagram – U6		
Three phase solar (Three phase 200A and less Service)		
Drawn: N. Bushman	Date: 3/24/2021	Page 6 of 9



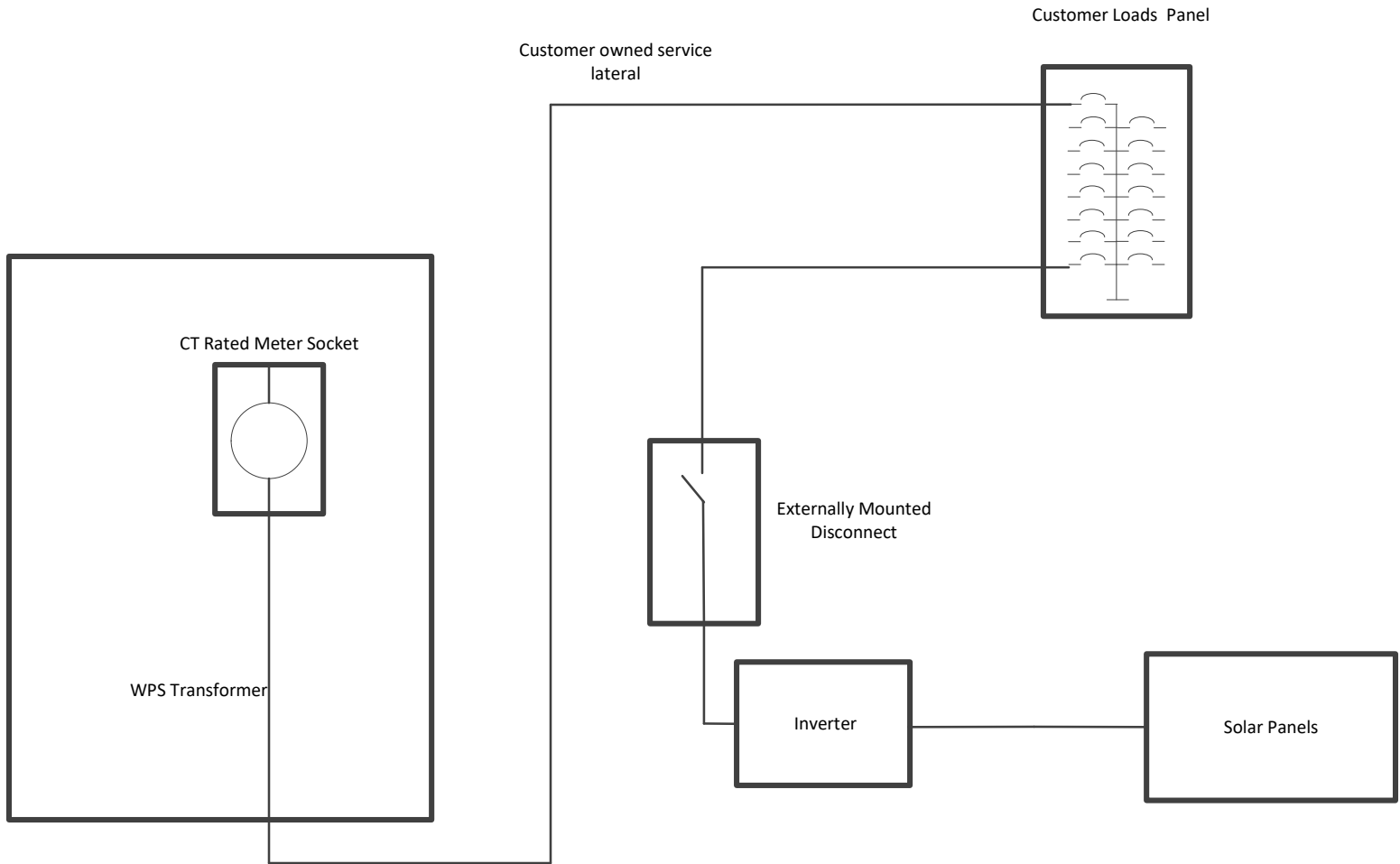
Note: One-line diagram must show the metering equipment and disconnect catalog numbers.

One Line Diagram – U7 Solar with transocket (Single Phase Service 400-800A)		
Drawn: N. Bushman	Date: 3/24/2021	Page 7 of 9



Note: One-line diagram must show the metering equipment and disconnect catalog numbers.

One Line Diagram – U8 Solar with transocket (Three Phase Service 400-3000A)		
Drawn: N. Bushman	Date: 3/24/2021	Page 8 of 9



Note: One-line diagram must show the metering equipment and disconnect catalog numbers.

One Line Diagram – U9		
Solar with metering in the transformer (Three Phase Service 400-3000A)		
Drawn: N. Bushman	Date: 3/24/2021	Page 9 of 9