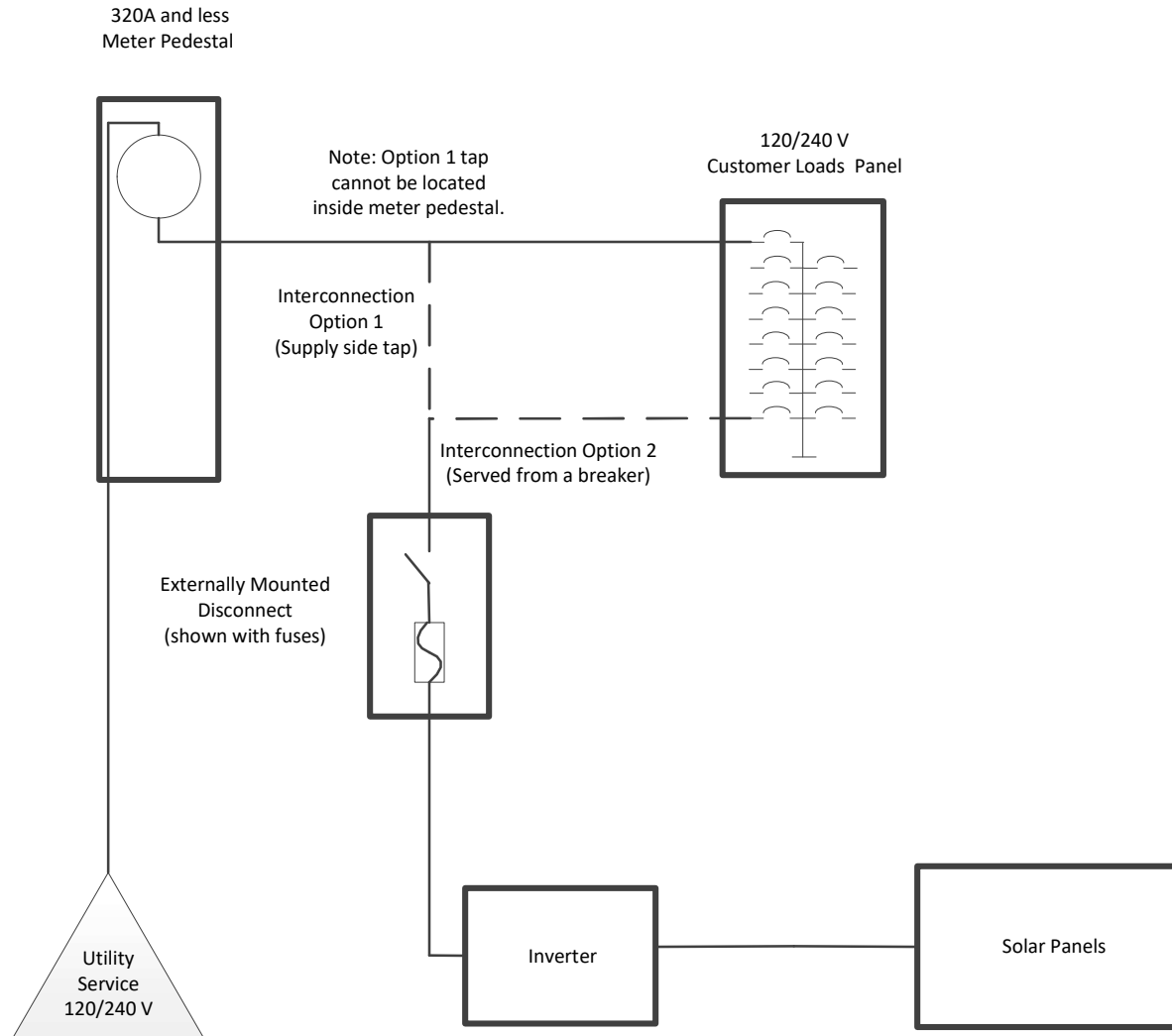


WPS underground service - customer owned generation solar one-line diagrams

- 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: “O3”) that is referenced on the submitted one-line diagram.
- Example one-line diagrams show the minimum required alternating current disconnects.
- One-line diagram must meet the minimum requirements of PSC 119.10
- One-line diagram should be located near metering equipment and protected from the environment.
 - A one-line diagram must be posted onsite for energy storage systems or systems with multiple disconnect switches.
- All new service entrance equipment shall have a minimum short circuit current rating or ampere interrupting capacity (SCCR/AIC) of 22kA.
- Any load additions using supply side taps shall not exceed the service capacity.

Note: Conductors exiting the meter pedestal are not allowed to re-enter pedestal.

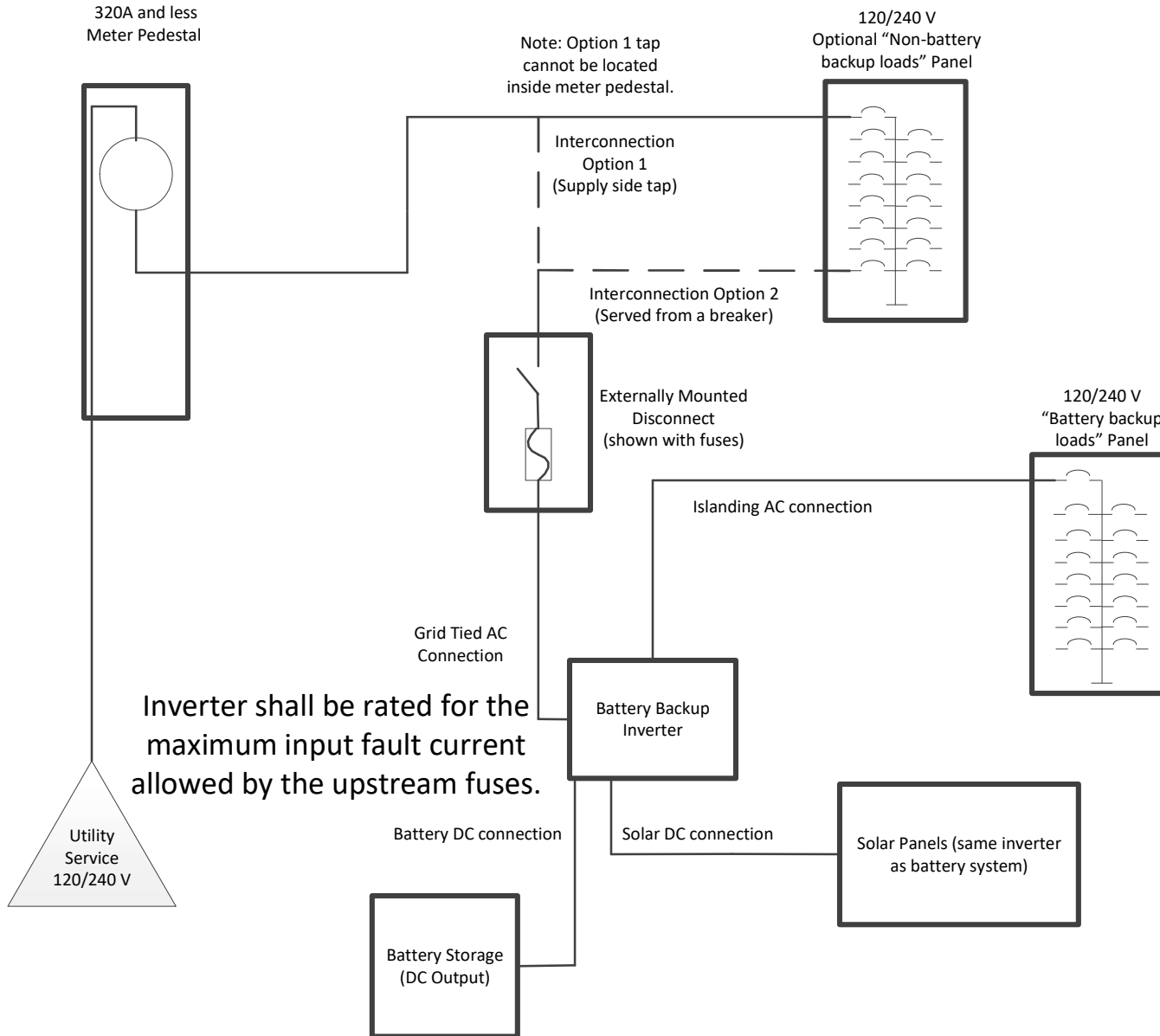


Inverter shall be rated for the maximum input fault current allowed by the upstream fuses.

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)		
Drawn: N. Bushman	Date: 3/21/2022	Page 1 of 9

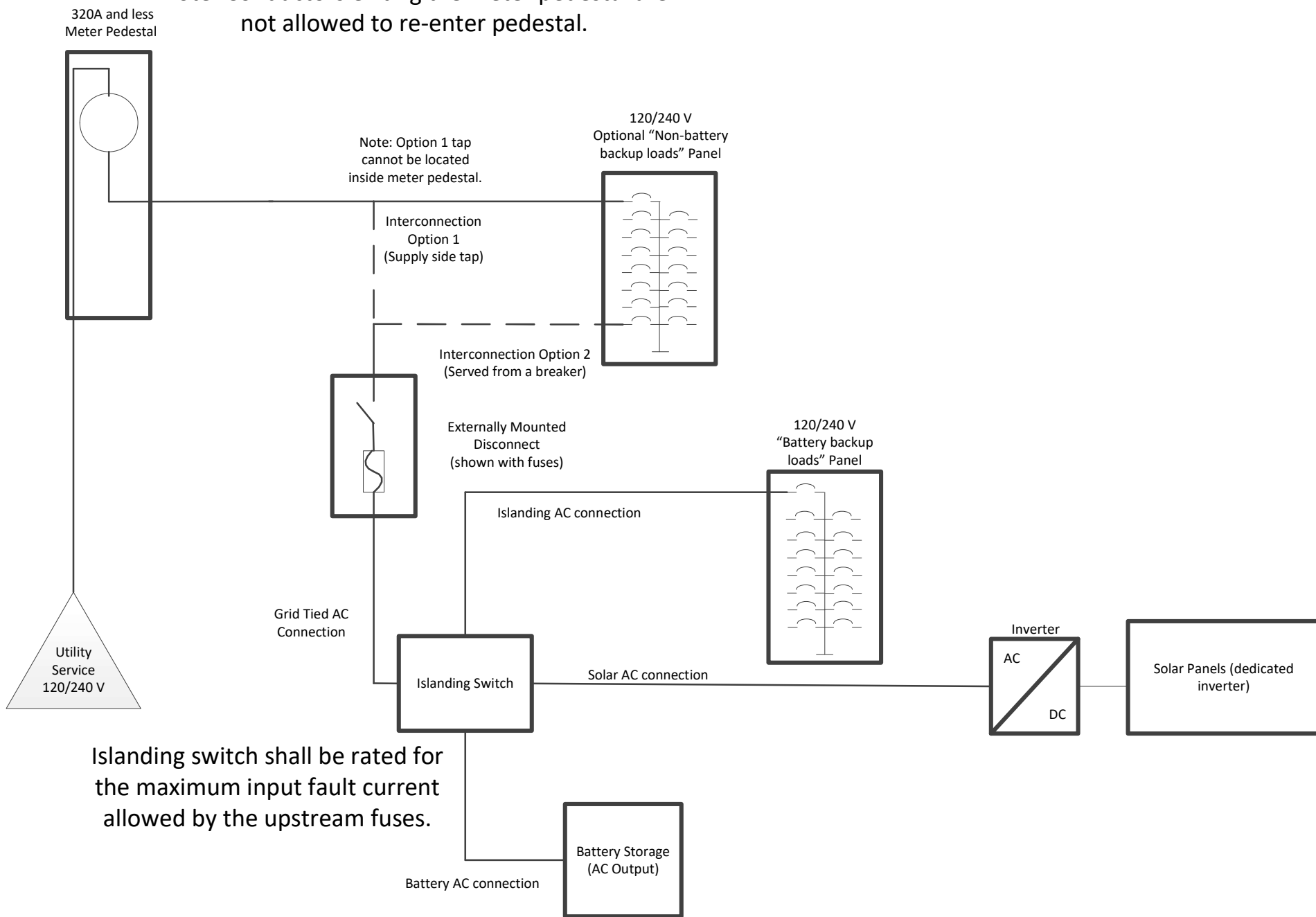
Note: Conductors exiting the meter pedestal are not allowed to re-enter pedestal.



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

One Line Diagram -U2		
Solar with Battery Back-up with shared inverter (320A and less, 240V 3-wire single phase service)		
Drawn: N. Bushman	Date: 3/21/2022	Page 2 of 9

Note: Conductors exiting the meter pedestal are not allowed to re-enter pedestal.



Islanding switch shall be rated for the maximum input fault current allowed by the upstream fuses.

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

320 A and less Meter Pedestal
with integrated main breaker

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

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

Interconnection
Option 1
(Supply side tap)

Interconnection Option 2
(Served from a breaker)

120/240 V
"Battery backup
loads" Panel

Grid Tied AC
Connection

Islanding AC connection

Islanding switch shall be
rated for the maximum
input fault current of the
service.

Solar AC connection

Externally Mounted
Disconnect

Utility
Service
120/240 V

Externally Mounted
Disconnect

Battery AC connection

Battery Storage
(AC Output)

Inverter

AC

DC

Solar Panels (dedicated
inverter)

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

One Line Diagram – U4

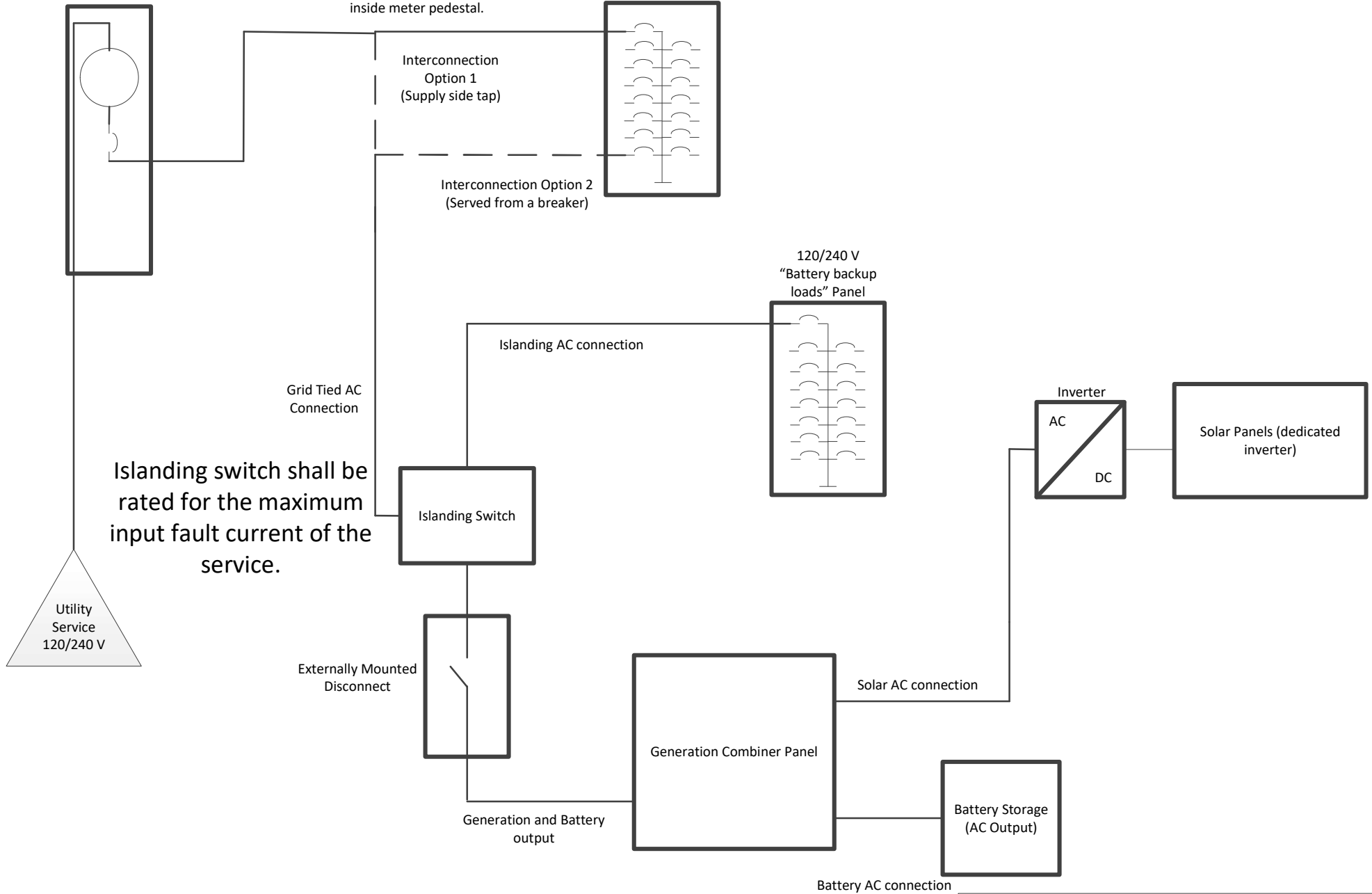
Solar with Battery Back-up with dedicated inverter
(320A and less, 240V 3-wire single phase service)

320 A and less Meter Pedestal with integrated main breaker

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

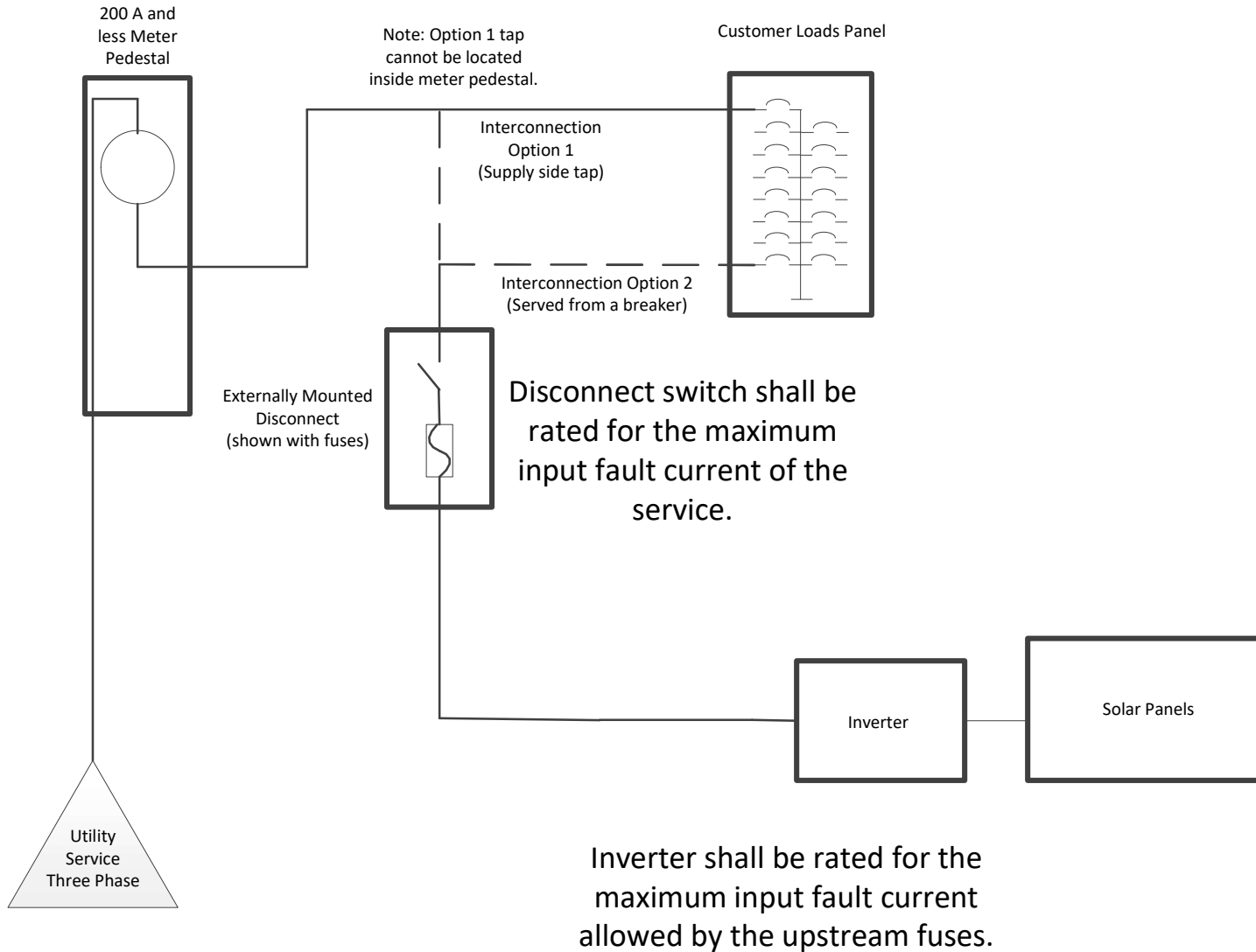
120/240 V Optional "Non-battery backup loads" Panel

Note: Conductors exiting the meter pedestal are not allowed to re-enter pedestal.

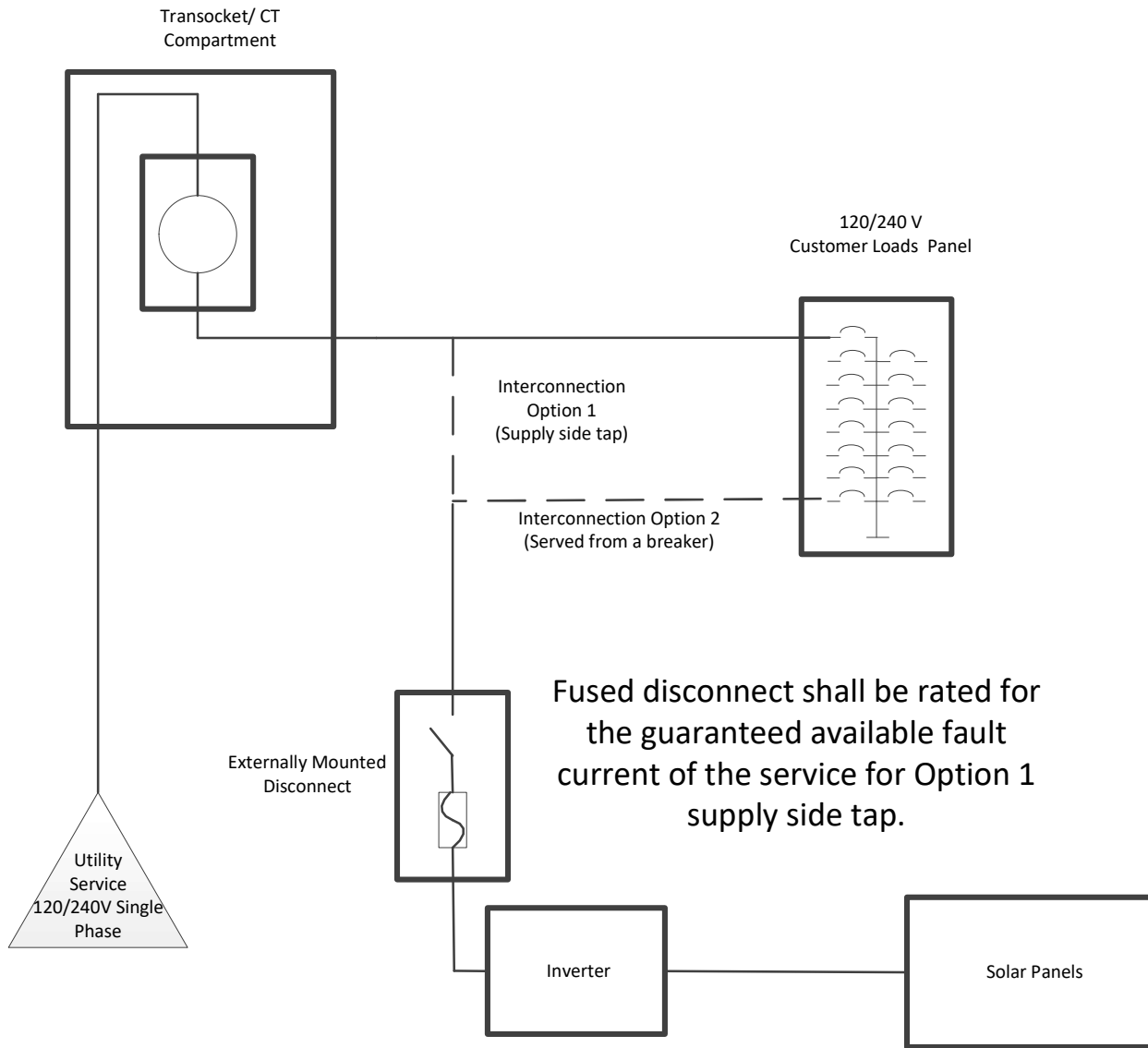


Note: One-line diagram must show the metering equipment and disconnect catalog numbers.

Note: Conductors exiting the meter pedestal are not allowed to re-enter pedestal.

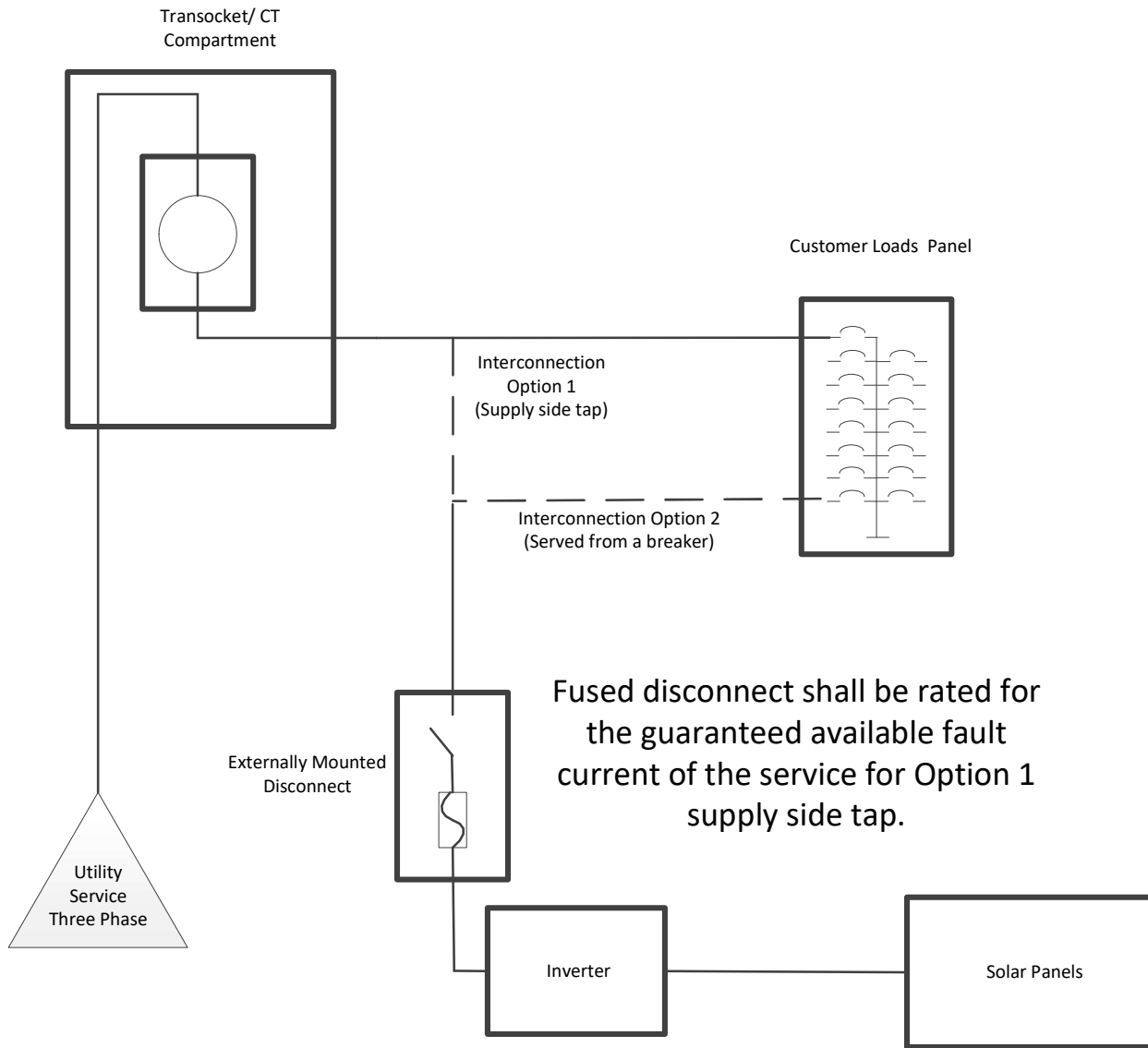


Note: One-line diagram must show the metering equipment and disconnect catalog numbers.



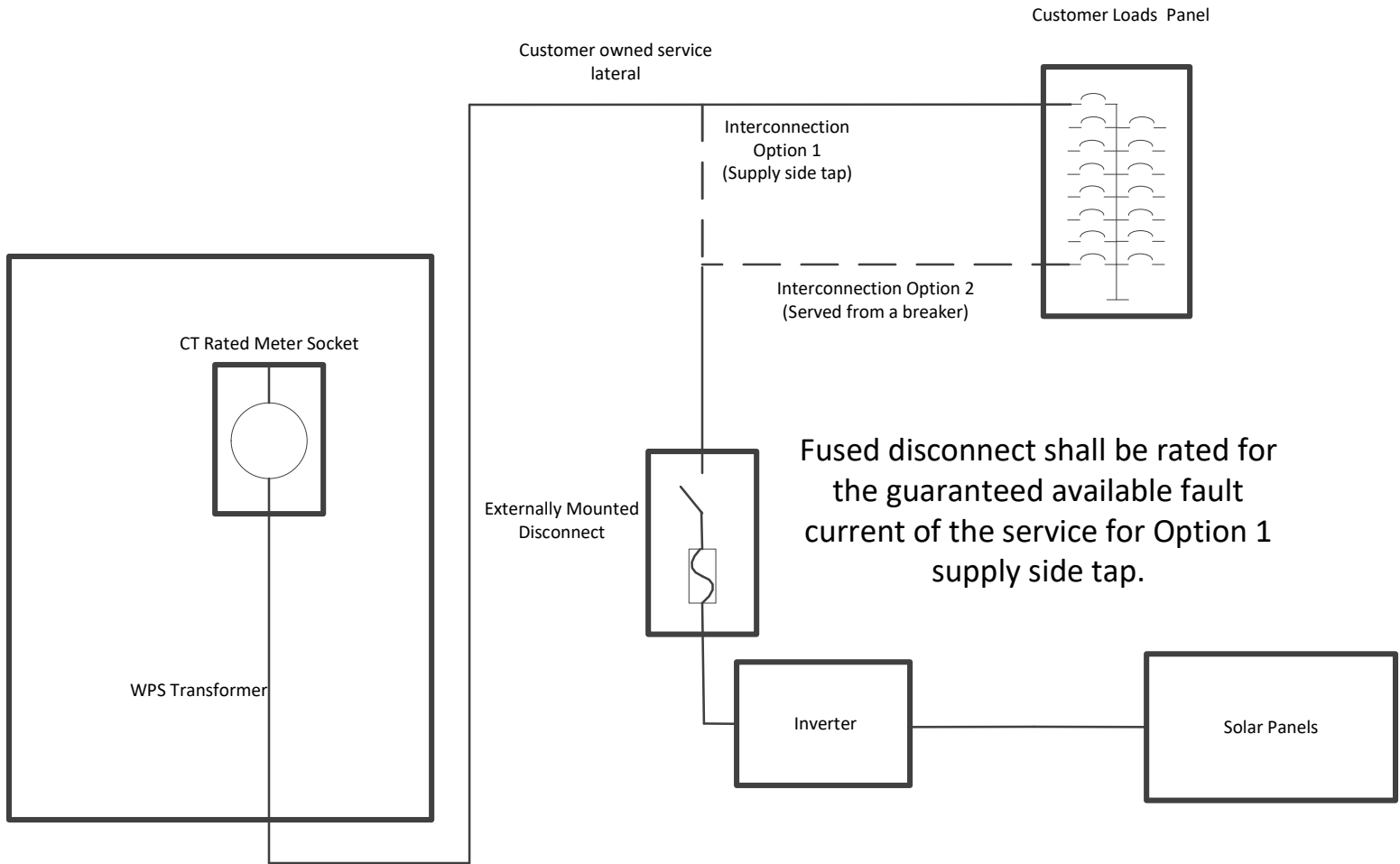
Note: One-line diagram must show the metering equipment and disconnect catalog numbers.

One Line Diagram – U7 Solar with transocket (Single Phase Service 400-800A)		
Drawn: N. Bushman	Date: 3/21/2022	Page 7 of 9



Fused disconnect shall be rated for the guaranteed available fault current of the service for Option 1 supply side tap.

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.