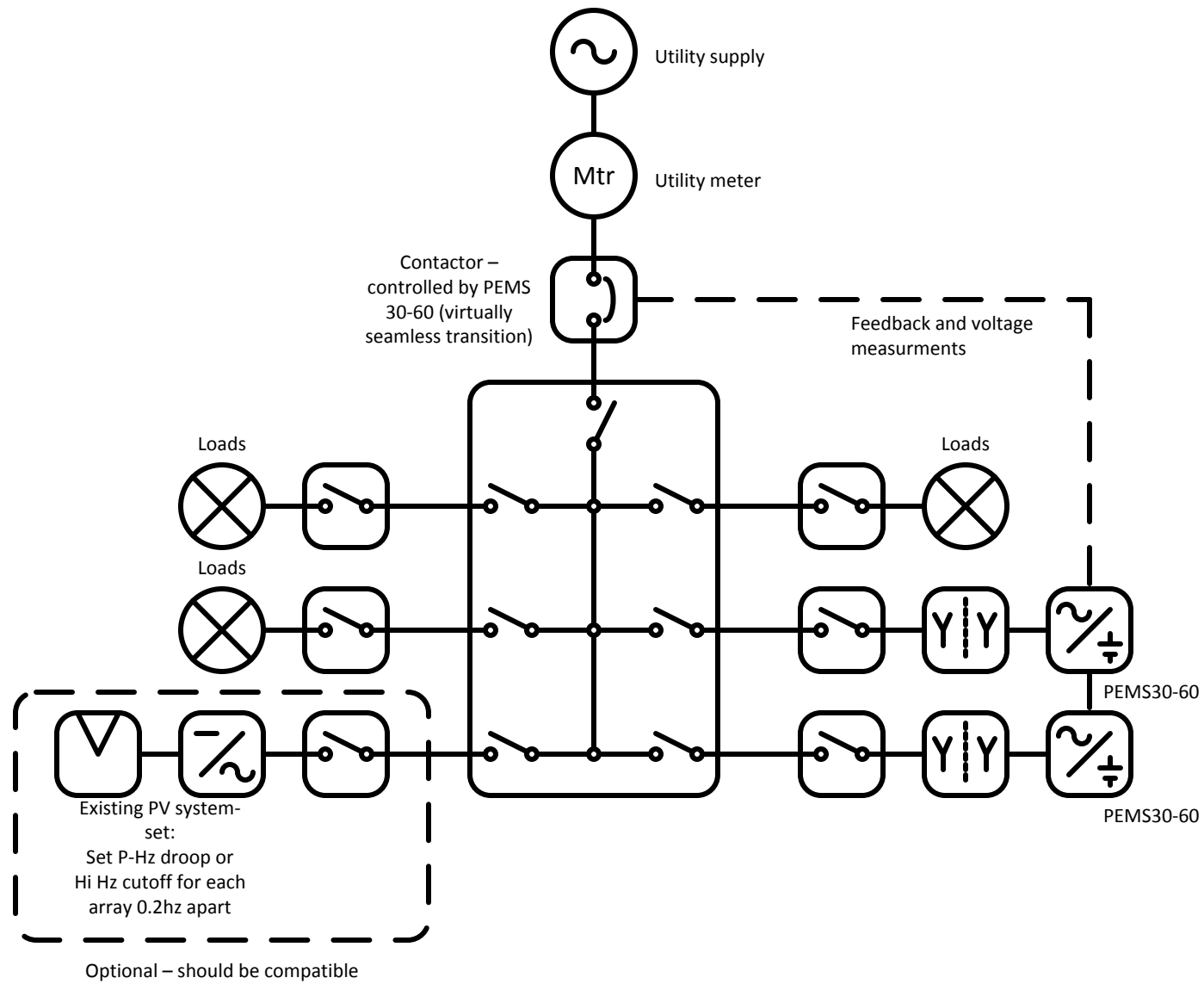



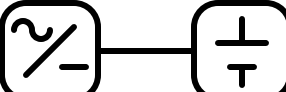













Microgrid, demand response and photo-voltaic application ADVANCED
 On grid dispatch constantly adjusted by remote or 3rd party client site based controller or plant PLC
 Off grid operation controlled by PEMS and PV inverter P(f) function



Legend

-  Generator or utility
-  Load
-  PEMS unit, inverter and self contained battery system component
-  Inverter with 1:1 D:Y transformer on transformer port in UL approved configuration connected to battery system
-  Inverter
-  Battery pack
-  Delta : Wye transformer isolated
-  Auto transformer – not isolated
-  Wye : Wye transformer neutral ground referenced
-  Motorized power breaker/contacter with logic
-  Self contained switch located at load or source
-  Switch in load panel
-  Mtr
Electricity meter, for control or utility metering
-  PLC/
CTRL
Third party controller, typically a mix of cloud and local control. Provider of dispatch power levels. Typically not in control of microgrid breaker
-  Photo-voltaic array