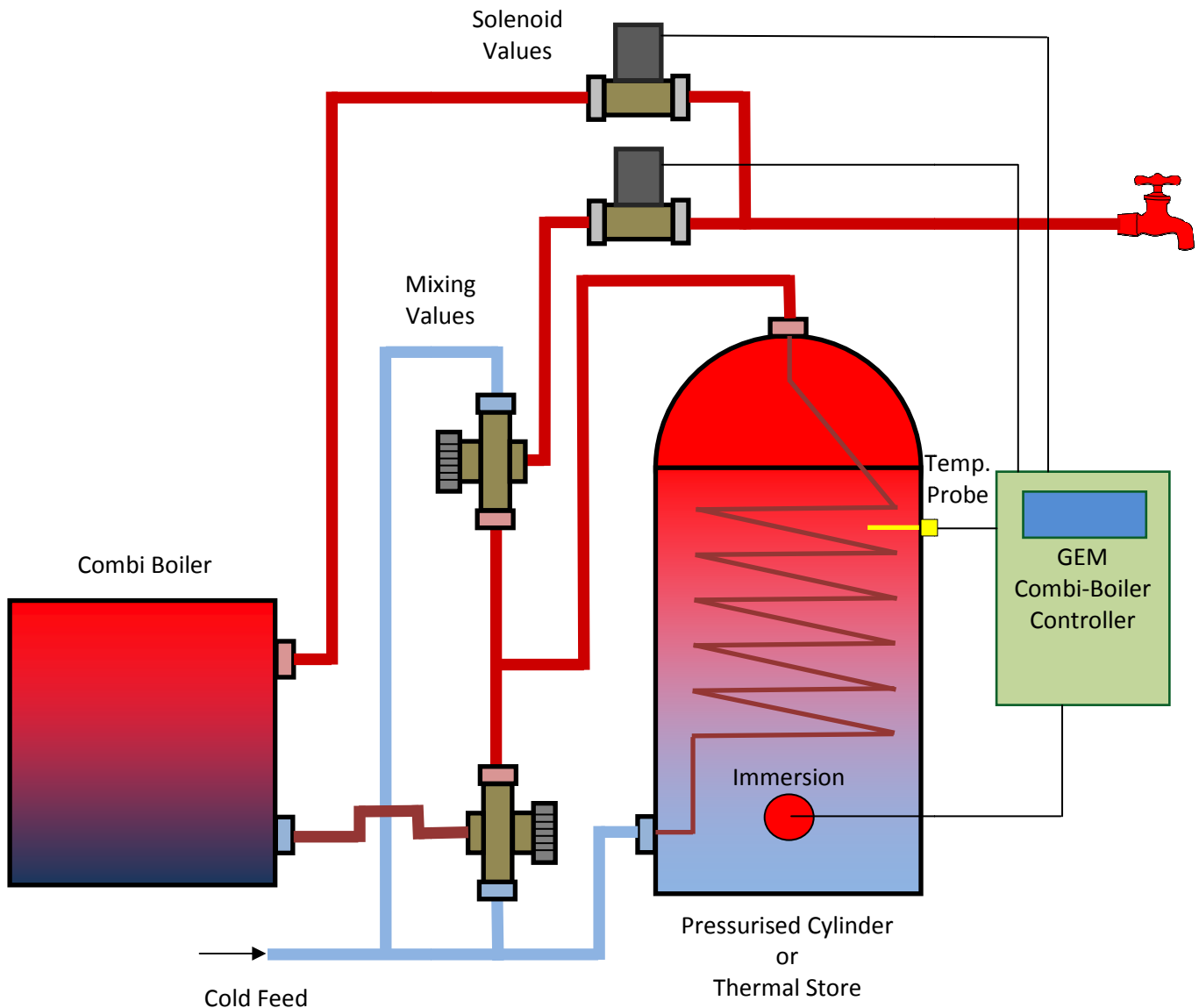


## Using the GEM PV optimiser with a combi boiler system



### System Operation

When Excess PV power is available the cylinder is heated by the GEM Controller via the immersion heater.

1. When the cylinder temperature is sufficient to supply useable hot water, water is drawn directly from the cylinder without the boiler firing.
2. Once the tank temperature drops below a useable level, hot water is drawn from the combi boiler outlet. Although the cylinder temperature is insufficient to directly supply hot water, the water is still warm and the cylinder supplies pre-heated water to the combi boiler reducing gas consumption.
3. Once the cylinder has cooled completely, cold water is supplied to the combi boiler inlet in the normal way and hot water is drawn directly from the combi boiler outlet.