

Kentucky Power Solar RFP Q&A #3 1/22/2019

Can you provide additional specification requirements in regards to the Battery Storage Option in Section 3.5 of the RFP?

Kentucky Power is looking for a 1MW battery that does not exceed 1MWh, but is open to other configurations as long as they do not exceed 1MWh.

Other specifications for proposals to adhere to:

- Battery and associated controls need to have the capability to respond to the Reg A and Reg D signals.
- The Battery needs to be capable of charging from both the site and the grid.

With regards to fire protection of batteries, at a minimum the proposals will be obligated to follow the Fire Code requirements for energy storage systems adopted by the jurisdiction where these batteries are installed (regardless of the battery technology selected).

In the absence of any regulatory requirements specifically for fire protection of battery technologies, Kentucky Power recommends the following:

- Containers housing batteries shall be separated by a minimum of 5 ft. from one another.
- Containers housing batteries shall be separated by a minimum of 5 ft. from any adjacent building.
- Containers housing batteries shall be separated from any oil-filled transformers in accordance with NFPA 850 (2015 edition) Table 5.1.4.3.
- Each container housing batteries shall be equipped with a passive or mechanical ventilation system designed to remove flammable and toxic gases during a failure event to mitigate an explosion hazard.
 - Mechanical ventilation systems designed to mitigate an explosion hazard shall be powered by a fault-tolerant source that will not be compromised in the event of a battery failure within the container/comportment that is being ventilated.
 - Failure of a mechanical ventilation system designed to mitigate an explosion hazard shall generate a distinct "critical ventilation failure" alarm that is transmitted to a constantly attended, Owner-approved location.
- Smoke detection shall be installed inside each compartment where batteries are installed.
 - Activation of any smoke detector shall result in a distinct "fire detected" alarm that is transmitted to a constantly attended, Owner-approved location.
- Fire suppression using gaseous, aerosol, or fluid extinguishing agents other than water shall not be installed for the protection of batteries.