

Various embodiments provide a battery, a bulk energy storage system including the battery, and/or a method of operating the bulk energy storage system including the battery. In various embodiment, the battery may include a first electrode, an electrolyte, and a second electrode, wherein one or both of the first electrode and the second electrode comprises direct reduced iron ("DRI"). in various embodiments, the DRI may be in the form of pellets. In various embodiments, the pellets may comprise at least about 60 wt% iron by elemental mass, based on the total mass of the pellets. In various embodiments, one or both of the first electrode and the second electrode comprises from about 60 % to about 90 % iron and from about 1 % to about 40 % of a component comprising one or more of the materials selected from the group of SiO_2 , AlO_3 , MgO , CaO , and TiO_2 .