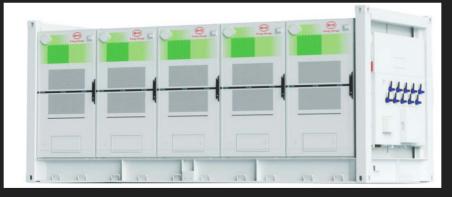


## **Project Overview**

- Burns and McDonnell needs a 25 MW/100 MWh Lithium-ion Battery energy storage system
- Project will include:
  - Site location and layout
  - One-line diagram
  - Equipment chosen (batteries, inverters, transformers, cables and more)
  - Technical documentation and justifications

## Ideation

- Battery and inverter technology
  - Approach: Comparing datasheets
  - Implementation: Create excel spreadsheet for easier comparison
- Prioritize cost or reliability with inverter technology
  - o Approach: Weigh options
  - Implementation: What do we want to get out of this design process?

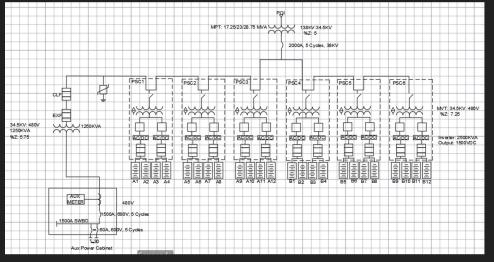




## Solution

- 10-15 acres of land
- Connect to local substation
- Temperature ratings: -30°C ~ +55°C
- 24 BYD Batteries
- 6 Gamesa Inverters





## Market Research

- There are very few companies that design large scale battery energy storage systems.
- The current demand for large energy storage systems is low, but is expected to increase rapidly along side of renewable energy.









Image courtesy of ChatGPT