



*BATTERY
ENERGY
STORAGE
SYSTEM*

AGENDA

Project Overview

Management Style

Task Decomposition

Milestones

Risks and Risk Management

Wrap up

PROJECT OVERVIEW





BATTERY ENERGY STORAGE SYSTEM

- Tasked by Burns and McDonnell to design a 25MW/100MWh Lithium-ion Battery energy storage system
- We are working with Doctor Zhaoyu Wang
- Project will include:
 - Site location and layout
 - One-line design
 - Equipment chosen (batteries, inverters, transformers, cables and more)
 - Technical documentation and Justifications



MANAGEMENT STYLE

WATERFALL

- With there being so much concern for safety, cost and due to our inexperience with BESS we have a rigid schedule that is guided by our Burns and McDonnell counterparts
- They understand what we will be able to accomplish in a week's time and give us weekly tasks accordingly



*TASK
DECOMPOSITION*



WHAT ARE WE DOING?



One-line drawing – Create an electrical schematic of the energy storage system



Technical Documentation – Write a report showing what we did with in-depth reasoning and math



Implementation – Create an AutoCAD site drawing of the site and show how it will run after installed



MILESTONES

WHAT WE'VE DONE SO FAR

1. Found a location
2. Chose batteries and inverters
3. Created AutoCAD site drawing
4. Created One-Line
5. Started on rough draft of technical documentation

We have many things left to do, including deciding on specific models for the fuses, breakers, cables, and much of the other equipment.

RISK

AND HOW IT'S MANAGED



RISK

- Safety considerations

- Minor environmental concerns

RISK MANAGEMENT

- Manage safety by following strict guidelines by governing organizations

- Contain the environmental concerns by isolating them in their own containers



THANK YOU

SSDEC24-18

502-555-0152