

# The Life Cycle of a Battery Energy Storage System (BESS)

While the following phases and activities tend to run in sequence, some overlap might occur, with BESS projects averaging 5-6 years from site analysis to end of construction.

## Phase 1: Site Review

1



**3-6 months**

### **Preliminary Site Analysis**

The development process begins by identifying and assessing suitable sites for projects. Once identified, we prioritize establishing a relationship with landowners.

2



**3-6 months**

### **Site Control**

The developer retains exclusive rights to develop the land through a lease option or purchase option. The objective is to create a partnership with landowners and compensate them for exclusive development rights.

3



**6-12 months**

### **Due Diligence**

While executing an agreement with landowners, we conduct a transmission due diligence analysis and a series of field studies. These studies analyze the site's environmental conditions, sensitive areas, and surrounding land uses.

4



**3-5 years**

### **Interconnection**

The interconnection process is what allows the energy storage facility to connect to the electrical grid. Every power generation plant must apply for interconnection and complete required studies in order for connection to occur. Once required studies are finalized and after construction is complete, the energy storage facility can safely provide renewable energy to the electrical grid.



## Phase 2: Site Planning and Permitting

5



**6-12 months**

### **Project Permitting**

Once due diligence and the interconnection process are underway, our project team works with community representatives and local government officials to navigate permitting and gather input on the project. This may include participating in community open houses and public hearings with governing bodies. The project must also obtain applicable required state approvals.

6



**3-6 months**

### **Engineering**

Our engineering team develops the battery storage facility system layout and design for maximum efficiency and safety while incorporating details such as site topography, soil characteristics, surrounding land uses, and viewshed. This is done during permitting in order to make adjustments based on feedback from local stakeholders and the local jurisdiction.

7



**8-12 months**

### **Electricity Sales**

As the development of the project nears completion, our power marketing team finds creditworthy counterparties to buy the energy stored at the battery facility. This transaction usually takes place through a “power purchase agreement” and the counterparty could be a local utility, a large national corporation, or a regional customer with high energy needs such as a university, hospital, or data center.

## Phase 3: Construction and Project Launch

8



**12-18 months**

### **Construction**

Once pre-construction is complete, our construction team will find a qualified contractor to build the project. Our battery storage facilities typically generate construction jobs, and we strive to utilize qualified local contractors whenever possible.

9



**Throughout the life of a project**

### **Operations & Maintenance**

Following construction, our operations and maintenance team provides active 24/7 remote monitoring. Our Remote Operations Control Center (ROCC) team has full visibility of the project’s operations to ensure timely maintenance and repairs. Their focus is on maximizing production while maintaining reliability of the electrical grid and ensuring a safe working environment for the field technicians.

10



**3-6 months following the life of the project**

### **Decommissioning**

Once a battery storage facility approaches the end of its lifecycle, the storage equipment will be removed and recycled, and the land returned to its prior state per the guidelines provided by the local jurisdiction.