

Project Experience



2.4 GWh (DC)
installed,
contracted,
and in construction

Utility scale:

1.9 GWh

AC-coupled:

510 MWh

DC-coupled:

1.7 GWh

IHI Terrasun Solutions, Inc. has provided energy storage system solutions widely across North America and beyond. The projects range from stand-alone storage to DC and AC coupled solar + storage in a variety of sizes and use cases, supported by the advanced software Terrasun provides with each unique energy storage system.

Terrasun has 2.4GWh of deployed, in construction, and contracted energy storage projects across North America.

Sample Projects



Terrasun is providing energy storage system solutions and lifecycle services for two utility-scale solar-plus-storage projects. Upon completion, they will collectively be capable of generating 174MW of clean energy and have a storage capacity of 88MW / 352MWh.

Project Details:

Commissioning expected:
Q4 of 2022

Size: 88 MW/352 MWh

Use Case: Solar shifting, peak shaving, voltage regulation

Location: Kern County, California



By providing 50MW/ 50MWh AC-coupled solar plus storage, along with 10-year warranty and maintenance services, Terrasun will support Glidepath in their efforts to bring grid stability in ERCOT.

Project Details:

Commissioning expected:
Q2 of 2022

Size: 50 MW/50 MWh

Use case: ERCOT participation

Location: Byrd Ranch, Texas



DC-coupled solar plus storage solutions, Terrasun will supply system integration with overall power plant controls and lifecycle services that are connected with the 690MW solar to support Primergy's effort in reducing the system peaks + support the overall grid system in NV.

Project Details:

Commissioning expected:
Q3 of 2023

Size: 380 MW /1,406 MWh

Use case: Solar shifting, peak shaving, voltage regulation

Location: Clark County, Nevada

Project List

MWh (DC)	State	Project Type	Use Case	Status
1.0	AZ	AC-coupled PV+ESS	Solar shifting, peak shaving	Complete
2.5	Japan	Stand alone ESS	Peak shaving, microgrid support	Complete
4.3	MA	AC-coupled PV+ESS	Solar firming, MUNI peak shaving, ICAP participation, ACES program incentive	Complete
25.8	Ontario	Stand alone ESS	System peak reduction through forecasting and ESS dispatch	Complete
4.4	MA	Stand alone ESS	Peak shaving, ACES program incentive	Complete
4.0	MA	AC-coupled PV+ESS	Solar shifting, MA SMART program incentive	Complete
5.2	MA	AC-coupled PV+ESS	Solar shifting, MA SMART program incentive	Complete
2.6	MD	AC-coupled PV+ESS	Solar shifting, peak shaving	Complete
2.6	MD	AC-coupled PV+ESS	Solar shifting, peak shaving	Complete
4.4	MA	AC-coupled PV+ESS	Solar shifting, MA SMART program incentive	Complete
4.4	MA	Stand alone ESS	Peak shaving, ACES program incentive	Complete
2.2	MA	DC-coupled PV+ESS	Solar shifting, MA SMART program incentive	Complete
11.9	Ontario	Stand alone ESS	System peak reduction through forecasting and ESS dispatch	Complete
6.6	MA	DC-coupled PV+ESS	Solar shifting, MA SMART program incentive	Complete
4.4	NY	DC-coupled PV+ESS	Solar shifting, VDER program incentive	Complete
2.1	Ontario	Stand alone ESS	System peak reduction through forecasting and ESS dispatch	Complete
4.4	MA	DC-coupled PV+ESS	Solar shifting, MA SMART program incentive	Complete
2.9	Ontario	Stand alone ESS	System peak reduction through forecasting and ESS dispatch	Complete
3.7	Ontario	Stand alone ESS	System peak reduction through forecasting and ESS dispatch	Complete
1.5	Ontario	Stand alone ESS	System peak reduction through forecasting and ESS dispatch	Complete
5.7	Ontario	Stand alone ESS	System peak reduction through forecasting and ESS dispatch	Complete
10.3	Ontario	Stand alone ESS	System peak reduction through forecasting and ESS dispatch	Complete
10.9	NC	AC-coupled PV+ESS	Solar shifting, peak shaving	In construction
10.3	Ontario	Stand alone ESS	System peak reduction through forecasting and ESS dispatch	In construction
5.5	MA	DC-coupled PV+ESS	Solar shifting, VDER program incentive	In construction
6.6	Ontario	Stand alone ESS	System peak reduction through forecasting and ESS dispatch	In construction
1.1	MA	DC-coupled PV+ESS	Solar shifting, MA SMART program incentive	In construction
7.4	MA	AC-coupled PV+ESS	Solar shifting, MA SMART program incentive	In construction
4.4	MA	DC-coupled PV+ESS	Solar shifting, MA SMART program incentive	In construction
1.1	MA	DC-coupled PV+ESS	Solar shifting, MA SMART program incentive	In construction
4.4	NY	DC-coupled PV+ESS	Solar shifting, VDER program incentive	In construction
4.4	MA	DC-coupled PV+ESS	Solar shifting, MA SMART program incentive	In construction
11.0	NY	DC-coupled PV+ESS	Solar shifting, VDER program incentive	In construction

Project List

MWh (DC)	State	Project Type	Use Case	Status
12.8	NY	DC-coupled PV+ESS	Solar shifting, VDER program incentive	In construction
12.8	NY	DC-coupled PV+ESS	Solar shifting, VDER program incentive	In construction
12.8	NY	DC-coupled PV+ESS	Solar shifting, VDER program incentive	In construction
4.0	MA	DC-coupled PV+ESS	Solar shifting, MA SMART program incentive	In construction
3.3	MA	DC-coupled PV+ESS	Solar shifting, MA SMART program incentive	In construction
7.4	MA	AC-coupled PV+ESS	Solar shifting, MA SMART program incentive	In construction
4.4	NY	DC-coupled PV+ESS	Solar shifting, VDER program incentive	In construction
8.8	NY	DC-coupled PV+ESS	Solar shifting, VDER program incentive	In construction
4.4	NY	DC-coupled PV+ESS	Solar shifting, VDER program incentive	In construction
28.9	MA	DC-coupled PV+ESS	Solar shifting, MA SMART program incentive	In construction
5.2	MA	AC-coupled PV+ESS	Solar shifting, MA SMART program incentive	In construction
3.5	MD	AC-coupled PV+ESS	Solar shifting, peak shaving	In construction
3.5	MD	AC-coupled PV+ESS	Solar shifting, peak shaving	In construction
8.5	MA	DC-coupled PV+ESS	Solar shifting, MA SMART program incentive	In construction
7.3	MA	AC-coupled PV+ESS	Solar shifting, MA SMART program incentive	In construction
21.9	MA	DC-coupled PV+ESS	Solar shifting, MA SMART program incentive	In construction
5.5	MA	DC-coupled PV+ESS	Solar shifting, MA SMART program incentive	In construction
7.3	MA	AC-coupled PV+ESS	Solar shifting, MA SMART program incentive	In construction
5.2	MA	AC-coupled PV+ESS	Solar shifting, MA SMART program incentive	In construction
5.8	MA	DC-coupled PV+ESS	Solar shifting, MA SMART program incentive	In construction
5.2	MA	AC-coupled PV+ESS	Solar shifting, MA SMART program incentive	In construction
4.3	MA	DC-coupled PV+ESS	Solar shifting, MA SMART program incentive	In construction
5.5	MA	DC-coupled PV+ESS	Solar shifting, MA SMART program incentive	In construction
68.2	TX	Utility Scale	ERCOT participation	In construction
7.8	MA	DC-coupled PV+ESS	Solar shifting, MA SMART program incentive	Contracted
7.8	MA	DC-coupled PV+ESS	Solar shifting, MA SMART program incentive	Contracted
5.2	MA	AC-coupled PV+ESS	Solar shifting, MA SMART program incentive	Contracted
4.5	MA	DC-coupled PV+ESS	Solar shifting, MA SMART program incentive	Contracted
6.7	MA	DC-coupled PV+ESS	Solar shifting, MA SMART program incentive	Contracted
7.8	MA	DC-coupled PV+ESS	Solar shifting, MA SMART program incentive	Contracted
3.4	MA	DC-coupled PV+ESS	Solar shifting, MA SMART program incentive	Contracted
170	CA	Utility Scale PV+ESS	Solar shifting, peak shaving, voltage regulation	Contracted
247.5	CA	Utility Scale PV+ESS	Solar shifting, peak shaving, voltage regulation	Contracted
1,494	NV	Utility Scale PV+ESS	Solar shifting, peak shaving, voltage regulation	Contracted