

Project Experience



483+ MWh
installed, contracted,
and in construction

Utility scale:

68 MWh

AC-coupled:

92 MWh

DC-coupled:

231 MWh

Stand alone:

92 MWh

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 405+ MWh of deployed, in construction, and contracted energy storage projects across North America.

Sample Projects



This 10MW/25MWh energy storage system leverages hardware and software from Terrasun. The system lowers the Ontario Global Adjustment charge, a system peak related charge, of a large industrial customer by reducing the electricity used during grid peak periods without affecting facility activities.



Terrasun supplied this 2MW/4MWh storage system for the Braintree Electric Light Department (BELD) with a grant from the Massachusetts Clean Energy Center (MassCEC) through the Advancing Commonwealth Energy Storage (ACES) program. The system decreases BELD's capacity and transmission costs by improving resiliency and efficiency, providing key benefits to ratepayers. Additionally, the system stores excess solar generation and increases the amount of distributed energy resources available.

Project Details:

Commissioned June 2018

Size: 10 MW/25 MWh

Use case: Global Adjustment charge management

Scope: Complete ESS system, control platform (ESWare), system integration, advanced warranty

Project Details:

Commissioned June 2018

Size: 2 MW/4 MWh

Use case: Peak load management

Scope: Complete ESS system, control platform (ESWare), system integration, advanced warranty

Project List

MWh	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	In construction
4.4	NY	DC-coupled PV+ESS	Solar shifting, VDER program incentive	In construction
2.1	Ontario	Stand alone ESS	System peak reduction through forecasting and ESS dispatch	In construction
10.9	NC	AC-coupled PV+ESS	Solar shifting, peak shaving	In construction
4.4	MA	DC-coupled PV+ESS	Solar shifting, MA SMART program incentive	In construction
2.9	Ontario	Stand alone ESS	System peak reduction through forecasting and ESS dispatch	In construction
3.7	Ontario	Stand alone ESS	System peak reduction through forecasting and ESS dispatch	In construction
1.5	Ontario	Stand alone ESS	System peak reduction through forecasting and ESS dispatch	In construction
10.3	Ontario	Stand alone ESS	System peak reduction through forecasting and ESS dispatch	In construction
5.7	Ontario	Stand alone ESS	System peak reduction through forecasting and ESS dispatch	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	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
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
68.2	TX	Utility Scale	ERCOT participation, utility project	Contracted