

Schedule

8:30 AM ET
Breakfast and registration

9:00
Welcome and opening remarks
Jessie Ma

9:10
Welcome from NESTNet’s board chair
Neetika Sathe

9:20
Introduction of morning session
Sean Conway

9:30
Keynote: Energy system transformation
Eric Gebhardt

The electric power industry is undergoing a transformation. The growth of distributed energy resources such as rooftop PV, battery energy storage and electric vehicles, coupled with advances in information technology, is changing the way the distribution system is being operated. At the same time, new business models are changing the way electricity is sold and purchased by retail customers. As a result, the grid and utility of the future will be different from what we know today.

10:00
Break and networking

10:15
Presentation: Energy storage at the transmission and distribution level — A California ISO perspective
Jill Powers

Energy storage connected directly to the California Independent System Operator grid and resources connected directly to the distribution grid are growing and will represent an increasingly important part of California’s future resource mix. Integrating these resources will help lower carbon emissions and can offer operational benefits including provision of flexibility in balancing the grid.

Discover how the California ISO is undertaking a variety of efforts to facilitate market participation of storage and aggregated distributed energy resources and how those efforts have revealed remaining challenges to overcome for them to realize their full economic value to the California electricity system.

10:30
Presentation: Trends in energy storage technology and prosumer use cases
Michael Maiello

The old world of energy is moving from a unidirectional flow of energy from a central source to distributed consumption. Today’s new energy world is a more complex and bidirectional flow of energy, where consumers are now also producers. Energy storage becomes a key asset in this and other use cases behind the meter.

10:45
Panel discussion: Lessons on energy storage from south of the border
Eric Gebhardt, Michael Maiello and Jill Powers (moderated by Sean Conway)

The three presenters from our morning session convene to discuss the impacts to date of energy storage in the United States. They will consider a range of challenges — practical, technological, political and geographical — to the wider adoption of these transformative technologies, both in front and behind the meter.

11:10
Break and networking

11:25
Keynote: The IESO — Embracing and encouraging disruption
Leonard Kula (introduced by Bala Venkatesh)

Innovation is driving the need for significant change in the electricity sector. Mr. Kula will talk about how the IESO is managing this change and integrating new and innovative technology — including grid-scale energy storage — into its plans for the renewal of Ontario’s electricity market.

12:00 PM
Lunch (served on West Concourse)

1:00
Panel discussion: Commercializing energy storage — The road to success
Daniel McCormick, Matthew Sachs and Hari Suthan (moderated by Jane Kearns)

Energy storage has arrived. Storage is now the fastest growing segment of the solar market, utilities are actively including energy storage in their long-term planning, and property owners are installing storage to manage onsite solar and take advantage of time-of-use pricing. As companies navigate this expanding market, what are the potential pitfalls and opportunities, and what needs to be considered as they build their businesses?

2:00
Break and networking

2:15
Panel discussion: NESTNet outcomes and impact — The story so far
Claudio Cañizares, Liuchen Chang and F. Handan Tezel (moderated by Ian Rowlands)

The NSERC Energy Storage Technology Network’s mission is to bring together leading academic, industry, utility and government stakeholders to develop, test, demonstrate and ultimately commercialize innovative energy storage technologies. Three years into the network’s five-year mandate, our panelists — representing the network’s four research themes: storage technologies, power converters, systems integration, and economics and policy — will discuss the impact of the network so far and highlight some of its key success stories.

2:55
Closing remarks
Bala Venkatesh

3:00–4:00
Reception