

5-6 March 2019
Renaissance Fort Lauderdale, USA



Energy Storage

SUMMITAMERICAS

60SECOND
INTERVIEW

www.storageamericas.solarenergyevents.com

Summit Sponsors:



HYDROSTOR



The Energy Storage Americas Summit is now just under a month away so we thought we'd share some insight with you, having spoken to our fantastic panel of speakers which includes ISOs/RTOs, developers, funds, banks and more. Designed to offer you best-in-class content, high-level networking opportunities with deal-makers and breadth of insight into different technologies, not offered elsewhere, attendees at the summit will get deals done.

Which Markets Speakers Are Active In



Q What's driving the market forward?

A Firstly, we asked selected speakers their thoughts on what was driving the market for storage forward. We've seen firm aspiration from FERC through order 841 but will it stimulate the market? Speakers thought that policy mandates such as SGIP, VDER, MA Smart and a push towards utility procurement would help. A move towards fossil fuel retirements and stability of regulation were also highlighted as necessary to give investors comfort. That being said, there are some potential clouds amassing over the issue of global trade wars, and we have seen the impact of the import tax on solar panels in 2018. One speaker questioned whether the global economic recovering was "past its peak". That remains to be seen. Falling prices for equipment and EPC services could ameliorate this to some extent and storage as an aid to the networks might well be recession-proof.

FERC's Order 841 may well be a bright spot but the respondents were split over its possible impact. We will need RTOs to get on board with implementation and there is uncertainty, depending on the use of the battery - the FERC definition of energy storage resource in 841 is charging from the grid for later injection. It's unclear how much impact it will have in other cases. However, in terms of allowing storage projects to compete with other assets and stimulating deployment in new markets, this was seen as a positive.

Q What are the main obstacles?

A In terms of obstacles, these fall into three main camps; firstly, and as ever with low carbon projects, there is a lack of bankable projects reaching NTP/COD. Number two is scale and it seems to be the impediment most often quoted by debt pro. Will 2019 see a move towards aggregation of portfolios? We see this as one effective solution.

Thirdly, regulation. Speakers questioned its speed – are the regulators keeping up with the pace of the industry and allowing the utilizing storage in all of its use-cases? There is also uncertainty around market rules, particularly for companies working across jurisdictions.



Q What technologies are speakers comfortable with?

A In terms of technology, speakers are comfortable with lithium-ion and eager to find well-designed projects using longer-duration batteries. There is deep experience when it comes to low-carbon generation, namely wind and solar PV. That said, companies are looking to other chemistries and need to understand how improvements in lithium batteries, stack up against different technologies in terms of LCOE, warranties, use cases and so on. As investment trickles in, project owners are really keen to ensure that they pick the right technologies now, and future-proof projects.

Q What's the appetite like from capital providers?

A 2019 will see speakers moving ahead with battery storage projects and the appetite from capital providers is certainly here, including several speakers who can assist with clients' journey through the market. However, 100% of the respondents see competition hotting up this year, both on the developer and the capital provider sides given the hunt for returns as we see increased compression in wind and solar. More bidders are coming to the market and an increase in project delivery may see physical bottlenecks emerge.

As we go into 2019, investors are getting more educated with storage and have better access to data now that it has a longer track record, and we see strong interest among investors to participate in storage projects, but we also expect them to conduct very thorough due diligence, and only to invest in well-structured projects with credible partners.



Q What advice do speakers have for would-be developers?

We asked our speakers to give a few pieces of advice to anyone trying to deliver projects. What did they say?

- A**
- The economics of energy storage are not well understood by project developers therefore, associated costs for complete project implementation are not always reflected, there is a need for developers to really step this up
 - If you think it's too early to sell, it is! Take developments as far as financially possible towards NTP.
 - Aggregate several project together and the portfolio must be capable of providing essential grid services.
 - We feel that the key is to bring a consistent set of smaller projects together in a portfolio with a similar technology stack and business model to simplify due diligence and speed the review process.

Q What does the future hold for utilities?

A A decentralized utility that maintains the integrity of the grid but with many distributed assets, customer-sited assets and rate-based storage to allow for greater penetration of RE and EVs. The utility of the future must create ancillary service products to take advantage of the capability of storage very fast response time to grid events. Also, storage devices must be able to accept and follow instructions from the grid operator and must be able to provide essential services such as (1) frequency control, (2) regulation services, and (3) voltage control.

The future of power provision is going to have some basis in microgrids built to provide a baseload type service with renewables and storage. This is going to bring about a flurry of distributed generation projects, but needs the storage component to come with a complete end to end warranty that covers the entire technology chain.

Join our experts speakers at the Energy Storage Summit 2019 to discuss the latest news on standardization, compare battery technologies, meet financiers and investors and hear cutting edge project case studies.

15%
discount using
code **SPINT15**



Energy Storage

SUMMITAMERICAS

5-6 March 2019
Renaissance Fort Lauderdale, USA

www.storageamericas.solarenergyevents.com