INFOCAST VIRTUAL | MASTER CLASS

— CO-HOSTED WITH —
Orrick

Storage Market Opportunities, Contracting & Finance

March 16 - 17, 2021 | 8:35 AM - 3:15 PM PDT | Digital Access

March 16, 2021:

8:45-9:00 am — Opening Announcement & Introductory Remarks:

Les Sherman, *Partner*, Orrick

Energy Storage Market Opportunities and Drivers

9:00-9:50 am — Session 1: **Utility, Muni/CCA and Co-op Storage Procurements: What the Offtakers Are Looking For**

Many load serving entities and other offtakers across the country have ramped up storage procurements in recent years. Investor-owned and municipal utilities, co-ops and community choice aggregators alike are contracting storage assets for a range of products and services. This panel discussion will focus on the opportunities and challenges present in today's energy storage offtake market, with input from representatives of leading offtakers, including the following topics:

- Do utilities and offtakers prefer to actively own and operate storage assets?
- What opportunities, products and services of storage are most attractive to utilities and other offtakers in today's market? Do they vary according to market or technology?
- Are offtakers focused on stand-alone storage, hybrid/co-located systems, or all of the above?
- How are utilities incorporating energy storage into their IRPs?
- What kind of deal structures are favored for both front-of-meter and behind-the-meter storage?
- Are there opportunities for utilities to partner with corporates in deploying storage?

Moderator:
Rohit Sachdev, *Partner, Energy, Infrastructure*, ORRICK

Panelists:
Erika Bierschbach, *Vice President, Energy Market Operations & Resource Planning*, AUSTIN ENERGY
Eric Kim, *Power Resources Planner*, SILICON VALLEY CLEAN ENERGY
Steve Peltier, *Director of Procurement*, NATIONAL GRID

9:50-10:05 am — Q&A

10:05-10:10 am — Break/Transition

10:10-10:45 am Session 2: **Contracting for Storage in Corporate Energy Procurements: What the Offtakers Are Looking For**

Corporate buyers initially began procuring renewable energy to meet clean energy goals, but soon realized they could better manage their exposure to energy cost increases by doing so. However, the trend is now to move beyond simply obtaining net capacity to more closely matching procurements to load shape, a task that storage is well suited to do. This presentation will explore how corporate energy users are looking at procuring storage in addition to solar and other renewable assets.

- What is driving corporate energy users to consider storage in their clean energy and decarbonization planning?
- How will shape risk play into the future?
- What capabilities are corporate offtakers looking for?
- What new developments are being seen in corporate renewable energy contracting?

Co-Presenters:
Giji John, *Partner, Corporate, Mergers & Acquisitions*, ORRICK
Mike Della Penna, *Project Lead, Carbon-Free Energy*, GOOGLE

10:45-11:00 Q&A

11:00-11:10 am Break/Transition

11:10 – 11:55 am Session 3: **Understanding How Changing Policy Initiatives and Regulations Impact Storage Development, Operation, and Revenue Streams**

Unlike most energy technologies, storage can serve as a productive asset in generation, distribution and transmission. However, the revenue potential from these applications varies widely across markets and regions. This session will discuss where and how federal policy and market rules impact project development, operation, revenue potential and project viability.

- Regulatory basics for energy storage projects
  - Front-of-the-meter v. behind-the-meter - FERC and state commission jurisdiction
- Interconnection of energy storage resources – including opportunities for "surplus" interconnection under FERC Order 845
- Federal storage policy drivers for storage applications and revenue streams
  - FERC Order 841 and integration of storage into wholesale energy markets
  - Update on FERC's July 23, 2020 Technical Conference on Hybrid (Generation + Storage) Resources
- FERC Order 2222—Emerging opportunities for aggregated distributed storage in organized wholesale markets

- Wholesale market rules affecting energy storage
  - Bidding Hybrid and Co-Located resources in CAISO markets
  - Minimum offer price rule in PJM and NYISO
  - Energy storage modeling in ERCOT

Co-Presenters:
Mike Berlinski, *Director, Emerging Technologies*, CUSTOMIZED ENERGY SOLUTIONS (CES)
A. Cory Lankford, *Partner, Energy & Infrastructure, Energy*, ORRICK

11:55 am-12:10 pm Q&A

12:10-12:50 pm Lunch Break

Energy Storage Offtake: Contract Structures and Merchant Project Analysis

12:50-1:45 pm Session 4: **Understanding Key Offtake Contract Structures and Risks**

Offtake arrangements for energy storage projects vary across deal structures and markets, and present unique challenges. This presentation will explore the most current offtake structures, revenue streams, and financeability issues for stand-alone and co-located battery storage projects, and for front-of-meter and behind-the-meter structures, and will address the following topics:

- The primary financeability factors for storage offtake contracts
- Structuring stand-alone storage tolling and capacity contracts
- The primary elements and issues in solar + storage offtake arrangements
- Current change in law concerns in the energy storage context
- Behind-the-meter energy storage revenue streams
- New frontiers, including virtual power plants (VPPs), hedges and shared savings contracts

Presenter:
Rohit Sachdev, *Partner, Energy, Infrastructure*, ORRICK

1:45-2:00 pm Q&A

2:00-3:00 pm Virtual Networking

March 17, 2021:

8:30-9:15 am Session 5: **Opportunities for and Assessing Merchant Storage Revenue Streams**

Assessing revenue flows can be difficult for storage projects. While most grid-connected storage has a primary contracted revenue flow, many also have the potential of taking advantage of secondary uses to capture additional revenues. In addition, as FERC Orders 841 and 2222 are implemented, storage may be able to provide products and services that it is not currently able to monetize, leading to a need to assess potential future revenues.

- Understanding the typical contracted cash flows by type of project
- Incorporating merchant cash flows outside of primary contracted revenues in projections
- Assessing the impacts of key contractual issues related to technology and project structures on revenue flows – commissioning, warranties and operational limitations
- Understanding how collateral security and other requirements can affect storage project financeability

Moderator:
Paul Zarnowiecki, *Partner, Energy & Infrastructure, Renewable Energy*, ORRICK

Panelists:
Daniel Crotzer, FRACTAL ENERGY STORAGE CONSULTANTS
Gary Dorris, PhD, *President*, ASCEND ANALYTICS
Kush Patel, *Partner*, E3

9:15-9:30 am Q&A

9:30-9:35 am Break/Transition

9:35-10:10 am Session 6: **Understanding the Potential Impacts of International Trade and CFIUS Restraints on Energy Storage Supply Chains**

Within the past few years, the use of equipment commonly sourced from overseas in storage projects has become particularly fraught with uncertainty due to national security and foreign trade policies. The use in the bulk power system of commonly employed components such as inverters and batteries from some of the world's largest suppliers may soon be prohibited due to an Executive Order announced in May 2020, while tariffs are having their own impacts. This session will review the status of these potential disruptions to supply chains, and what the future might hold under the Biden Administration.

- Trump Import Tariffs on China and Elsewhere (Section 301, Section 201, antidumping)
- Expanded Tariffs for Human Rights Reasons
- CFIUS – Treatment of Foreign Investment in Energy Storage as Security Challenge
- Bulk Power Executive Orders

Presenter:
Harry Clark, *Partner, International Trade & Compliance, Mergers & Acquisitions*, ORRICK

10:10-10:25 am Q&A

10:25-10:30 am Break/Transition

Energy Storage Procurement, Operations and Financing

10:30-11:25 am

Session 7: **The Evolving Storage EPC/O&M Contractual Structures: Managing the Technical Issues and Risks**

This session will provide a brief overview of the timelines for moving a storage project from concept to operation, and how to manage and mitigate risks in the 3 stages: development, construction and operation.

- Contracting, actors and responsibilities
- Hybrid vs. stand-alone storage project timelines and risks
- Construction and Operational Risks
  - Safety, health and environmental aspects
  - Design risks
  - Warranty terms
  - Non-warranty operational risks
  - Applicable standards

Co-Presenters:
Michael Kleinberg, PhD, *Head of Department, Energy Storage Advisory*, DNV GL - ENERGY NORTH AMERICA
Eric Stephens, *Partner, Renewable Energy, Mergers & Acquisitions*, ORRICK

11:25 11:40 am

Q&A

11:40 am-12:10 pm

Lunch Break

12:10- 1:00 pm

Session 8: **Key Tax Issues for Battery Storage ITC**

Leveraging a solar ITC to help monetize co-located storage has created opportunities for projects to cost-effectively add batteries to increase revenue streams, but also introduces potential pitfalls if the interplay between battery charging and claiming federal tax credits isn't carefully considered. This session will address the following questions:

- Understanding tax credit issues with solar + storage projects
- Qualifying for ITC while you still have the option- what is needed?
- Is the tax credit needed to make solar + storage project finance possible?
- How do you wrap the tax equity structure for the storage component?
- Understanding the interplay of storage charging with the solar ITC

Co-Moderators:
Michael J. Masri, *Partner, Tax, Energy*, ORRICK
Wolfram Pohl, *Partner, Tax*, ORRICK

Panelists:
Shirley Chin, *Vice President, Tax*, SUNRUN INC.
Daniel Nelson, *Vice President, Tax*, 8MINUTE SOLAR ENERGY LLC

1:00 -1:15 pm

Q&A

1:15-1:20 pm Break/Transition

1:20-2:10 pm Session 9: **Financiers' Advice on Creating Bankable Energy Storage Projects**

Opportunities for a raft of storage projects are accelerating; but what will drive the investment community to put their dollars behind a particular project or technology? This panel, featuring some of the most active and savvy investors in energy, will discuss storage projects featuring a variety of technologies and business models, picking out which they consider winners and exploring how changing some parameters affect financing decisions.

- What makes energy storage different to finance?
- How are thermal management and safety aspects affecting financeability?
- Considerations in financing BTM vs FTM storage projects
- How are financiers' risk appetites changing in 2021?

Moderator:
Louise Gibbons, *Partner, Energy, Renewable Energy*, ORRICK

Panelists:
Ali Amirali, *Senior Vice President*, STARWOOD ENERGY GROUP GLOBAL, INC.
Samantha Buechner, *Director, Renewable Energy & Environmental Finance*, WELLS FARGO BANK
Josh Dale, CFA, *Executive Director, Project Finance*, RABOBANK

2:10-2:25 pm Q&A

2:25 – 2:40 pm Break/Transition

2:40-3:40 pm Session 10: **Office Hours: Interactive Live Zoom Session**
This Interactive Live Zoom Session at the class conclusion allows you to get your most pressing questions answered, and to interact with Master Class Instructors in real time.

3:40-4:40 pm Virtual Networking