

3 - 4 MARCH 2020 | SONESTA FORT LAUDERDALE BEACH, FORT LAUDERDALE, USA

AGENDA

THE LEADING SUMMIT
SUPPORTING DEPLOYMENT OF ENERGY STORAGE ACROSS USA

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#StorageSummit





Confirmed speakers include

EXCLUSIVE VENUE HOTEL RATES are available for speakers and attendees who book before February 13th



Randolph Mann President **ESVOLTA**



Steve Wheat Sr. Program Manager, **Grid Services** SUNRUN



John Lawhorn Sr. Director of Policy Planning **MIDCONTINENT** SYSTEM OPERATOR



Catherine Helleux Director, Head of Transactions Americas ALLIANZ GLOBAL **INVESTORS**



Kathryn Chelminski Senior Manager for Regulatory Affairs AMERESCO



Dirk van Ouwerkerk SVP of Storage Development SOLTAGE LLS



Steve Cummings Director, Sensors **Business Unit** LI-ION TAMER



Jay Baronowski Director of Portfolio and Asset Management DIAMOND **GENERATING CORP** (MITSUBISHI)



Jason Barrett VP Structured Finance & Investment **GAF ENERGY**



Ren Plastina Infrastructure and **Energy Finance** INVESTEC



Ion Powers Co- Founder & President **CLEANCAPITAL**



Zachary T Smith Manager, Capacity Market Design **NYISO**



Sanva Deitweiler Senior Project Manager, Islands Energy Program, Clinton Climate Initiative CLINTON



Danielle Mousseau Lead Project Manager **ECONOMIC** DEVELOPMENT FPL



Ana Sophia Mifsud Senior Associate, Building Electrification **ROCKY MOUNTAIN** INSTITUTE



Judy McElroy CEO FRACTAL ENERGY CONSULTANTS



Gary Dorris President and Co-Founder ASCEND ANALYTICS



Rohan Singh **Managing Director NEXTENERGY CAPITAL**



Gian Paul Handal Manager, Energy Storage ACCIONA



Kathryn Chelminski Senior Manager for Regulatory Affairs AMERESCO



Joan Fang Vice President ARES MANAGEMENT



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Angelina Galiteva Vice Chair **CAISO**



Daniel Dedrick Senior Manager, Technology and Product **CLEARWAY ENERGY GROUP**



Margaret O'Riley **Business Recruitment DUKE ENERGY**



Adam Nygaard CHP, Microgrids, & Energy Storage Development DUKE ENERGY -DISTRIBUTED ENERGY **TECHNOLOGIES**



Ken-Ichi Hino Director, Energy Storage **GERONIMO ENERGY**



Holly Christie General Counsel HECATE ENERGY



Michael Fabisiak Head of Project Finance. Americas INDUSTRIAL AND COMMERCIAL BANK OF CHINA (USA)



Michael Pantelogianis Power & Infrastructure Finance INVESTEC



John Freeman **Director Business** Development & Global Cities Initiative JAXUSA PARTNERSHIP



Steve Cummings Director, Sensors **Business Unit** LI-ION TAMER



Patricia Gomez Sustainability Program Manager MIAMI-DADE COUNTY



Andrew Medvedev **Executive Director &** Portfolio Manager MORGAN STANLEY



PJ Wilson President SOLAR + ENERGY STORAGE ASSOCIATION OF **PUERTO RICO** (SESA-PR)



Leslie Hufstetler VP of Development & Representative Director SONNEDIX SOLAR PUERTO RICO LLC



Michael Farrell Senior Manager, Solar Development SPOWER



J.B. Oldenburg Principal with the Renewable and Sustainable **Energy Fund** THE CARLYLE GROUP



Chris Kirkman Managing Director, Head of Project Finance TRUE GREEN CAPITAL



Kevin Lynn Director of Grid Integration US DEPARTMENT OF **ENERGY**



Lee Bailey **Managing Director** US RENEWABLES **GROUP**



Key insight on how to tap into storage markets



POLICY & REGULATION

What barriers need to be overcome to make way for deployment of storage projects? What gaps need to be bridged to get the most out of the market?



REVENUE OPPORTUNITIES

How can we provide clarity on the revenue streams available for storage, regardless of the model of choice? What are the opportunities for new entrants?



FINANCE

How to choose between debt vs. equity for energy storage projects? How can developers minimise risk and engage with investors?



EVOLVING MODELS

How to make merchant storage investable?

What are the key issues surrounding this model and what partnerships do you need to take advantage of it?



BTM & FTM STORAGE

Distinct sessions looking at the pipeline of contracts for both BtM and FoM storage. Where do we see the greatest opportunity?



TECHNOLOGY & INNOVATION

How are emerging technologies being utilised in storage projects? What innovation is the industry looking to adopt to drive a new era for Energy?



CO-LOCATION OF STORAGE

With a ramp up in battery storage projects co-located with renewables. What are the market opportunities? How do the economics stack up?



SAFETY & STANDARDS

What lessons have been learnt regarding safety when developing or operating a storage project? What standards need to be expanded on or put in place to ensure safety requirements are met?



8:30

REGISTRATION & REFRESHMENTS

9:00

OPENING REMARKS FROM THE CHAIR

9:10

TRANSMISSION AND INTERCONNECTION

A RESILIENT GRID: INTERCONNECTING LARGE SCALE BATTERY STORAGE

Panel discussion by utilities, ISOs, and developers, followed by regional roundtables.

- · Battery storage as a market resource
- Planning for hybrid resources: solar + storage & wind + storage
- What are the biggest differences when you interconnect in different ISO markets?
- East vs. West vs. Midwest -- how long will you wait to connect?
- · Storage as a transmission and distribution asset -- what you should consider before connecting

Angelina Galiteva, Vice Chair, CAISO

Kevin Lynn, Director of Grid Integration, US Department of Energy

Adam Nygaard, CHP, Microgrids, & Energy Storage Development, Duke Energy - Distributed Energy Technologies

Zachary T Smith, Manager of Capacity Market Design, NYISO

John Lawhorn, Sr. Director of Policy Planning, Midcontinent Independent System Operator

9:40

REGIONAL ROUNDTABLES

Following the grid resilience discussion, regional roundtables will separate participants by regional focus, so that topics previously mentioned can be explored in depth.

- PIM
- · CAISO
- ERCOT
- · MISO
- NYISO
- · Southwest Power Pool
- New England ISO
- Hawaii

Kevin Lynn, Director of Grid Integration, US Department of Energy

Michael Fabisiak, Head of Project Finance, Americas, Industrial and Commercial Bank of China (USA)

Daniel Dedrick, Senior Manager, Technology and Product, Clearway Energy Group

Angelina Galiteva, Vice Chair, CAISO

Michael Farrell, Senior Manager, Solar Development, spower

John Lawhorn, Sr. Director of Policy Planning, Midcontinent Independent System Operator

Zachary T Smith, Manager of Capacity Market Design, NYISO







10:15

LARGE SCALE INVESTMENT

INVESTING IN AMERICAN INFRASTRUCTURE

- Why you should add storage to your portfolio
- What do you look for in a storage project when looking to invest?
- Adding storage money: the opportunity of hybrid projects with solar and wind generation
- Roofing as the new real estate

Chris Kirkman, Managing Director, Head of Project Finance, True Green Capital Catherine Helleux, Director, Head of Transactions Americas, Allianz Global Investors Jason Barrett, Vice President of Structured Finance & Investments, GAF Energy Rohan Singh, Managing Director, NextEnergy Capital Michael Pantelogianis, Power & Infrastructure Finance, Investec

11:00

REFRESHMENTS AND NETWORKING

11:30

BATTERY SAFETY

SAFETY IN URBAN ENVIRONMENTS

A standout panel from our 2019 launch event is back and supercharged for a second edition.

- · Review of codes, plans, and regulations to secure a safe grid with lithium ion batteries
- · Viewpoint from long-term investors: what do you need to find comfort in a project?
- · How do you diminish business interruptions with an energy storage system?
- · Who is driving the adoption of energy standards?
- How do you guarantee safe storage systems with the new storage mandates?

Steve Cummings, Director, Sensors Business Unit, Li-ion Tamer

REVENUE STACKING

HOW TO MAKE MONEY FROM STORAGE: ARE YOU STACKING TO MAKE MONEY?

- · What revenue streams are available for storage technologies?
- Bidding strategies: man vs. machine for real-time storage optimization
- Storage as a physical insurance for price reliability and grid hardening
- Finding arbitrage opportunities for storage
- · Ancillary services adding to your bottom line
- Credit capacity for batteries

Joan Fang, Vice President, Ares Management **Ren Plastina,** Infrastructure and Energy Finance, **Investec** Gary Dorris, CEO & Co-Founder, Ascend Analytics









13:00 **LUNCH BREAK AND NETWORKING**

14:30

CASE STUDY - PUERTO RICO

REACHING RESILIENCE: PUERTO RICO AS A CASE STUDY FOR RAPID POWER DEPLOYMENT AND DISTRIBUTED ENERGY

- Is Puerto Rico the perfect example of why distributed energy works?
- Microgrids and minigrids community and residential solutions
- Transmission problems and decentralization opportunities
- Review of Puerto Rico's Integrated Resource Plan is 1GW of storage enough?
- Resilient grids what's being built today?

PJ Wilson, President, Solar + Energy Storage Association of Puerto Rico (SESA-PR)

Leslie Hufstetler, VP of Development & Representative Director, Sonnedix Solar Puerto Rico LLC

Sanya Detweiler, Senior Project Manager, Islands Energy Program, Clinton Climate Initiative

Ana Sophia Mifsud, Senior Associate, Building Electrification, Rocky Mountain Institute

15:15

STORAGE AS AN ECONOMIC DRIVER IN FLORIDA

DRIVING DEVELOPMENT: LEVERAGING PARTNERSHIPS FOR US MANUFACTURING

- Advantages of working with economic developers
- · How to connect with state and local economic development organizations
- · Leveraging supply chain relationships in location decisions
- Market development outlook for 2020-2023
- · Achieving scale with energy storage projects

Margaret O'Riley, Business Recruitment, Duke Energy

John Freeman, Director Business Development & Global Cities Initiative, JAXUSA Partnership

Danielle Mousseau, Lead Project Manager, Economic Development, Florida Power and Light Company

16:00 REFRESHMENTS AND NETWORKING

16:30

ANALYSIS OF CHEAP BATTERIES

DROPPING COSTS: THE SUPPLY AND DEMAND CONSIDERATIONS FOR CHEAPER BATTERIES

- · Understand why batteries are getting cheaper are EVs the real power behind stationary battery advancements?
- EVs transforming technology, costs, and battery chemistry mix
- The role of lithium ion tech in dropping costs
- · How to compete with lithium ion are there new, safer technologies that can make you more money?
- · A case for solid state batteries

Daniel Dedrick, Senior Manager, Technology and Product, Clearway Energy Group









17:00

STORAGE CODES AND STANDARIZATION

NET ZERO NEW YORK CITY: BATTERY POWERED BUILDINGS

- · Case studies of New York City buildings
- · How to interconnect batteries and related tech into buildings to reach net zero
- · Prop tech: data to make smart buildings
- · Optimizing interconnection design to capture both sides of the meter
- · Case studies: Manhattan BTM Storage, TWA Hotel

Dirk van Ouwerkerk, Senior Vice President of Storage Development, Soltage LLC

17:30 **DRINKS RECEPTION**







Agenda Day 2: March 4th, 2020

8:30

RE-REGISTRATION AND REFRESHMENTS

9:00

OPENING REMARKS FROM THE CHAIR

9:10

MARKET UPDATE: THE START OF A NEW ENERGY DECADE

- · What is driving deployment and plummeting costs?
- · Review of investment tax credits and their effect on the market
- · Renewables + storage deployment review
- · The new era of flexibility

09:40

SMART GRID FOR A CARBON-FREE FUTURE

ACCELERATING US STORAGE: UNLOCKING HYBRID PROJECTS

- Unlocking the high demand for solar + storage and wind + storage projects
- · How to access and deploy storage in a way that is familiar to capital providers
- · Taking advantage of investment tax credits by adding storage
- · How do developers manage the new hybrid contract structures?

Holly Christie, General Counsel, Hecate Energy

Ken-Ichi Hino, Director, Energy Storage, Geronimo Energy

J.B. Oldenburg, Principal with the Renewable and Sustainable Energy Fund, The Carlyle Group

Andrew Medvedev, Executive Director & Portfolio Manager, Morgan Stanley

Jon Powers, Co-Founder and President, CleanCapital

11:00

REFRESHMENTS AND NETWORKING

11:30

STORAGE POLICY UPDATES

GROWING PAINS IN STORAGE REGULATION: WHAT YOU NEED TO KNOW TODAY TO PREPARE FOR TOMORROW

- New wave of builds for 2020-2021: what regulations are opening markets for storage?
- Which states are encouraging storage as part of their policy?
- · How do credit capacity rules affect storage?
- · How does regulation change for different market segments? Residential vs. C&I vs. utility scale
- FERC 841
- ITC news

Michael Farrell, Senior Manager, Solar Development, sPower

Randolph Mann, President, esVolta

Kathryn Chelminski, Senior Manager for Regulatory Affairs, Ameresco

Gian Paul Handal, Manager, Energy Storage, Acciona







Agenda Day 2: March 4th, 2020

12:20

DATA

TECHNOLOGIES OF THE FUTURE: THE POWER OF DATA

The future is now – are you aware of what technology your competitors are using? Join the discussion to be up to date on the latest advancements in the industry.

- · Your storage unit is installed are you managing your data efficiently?
- · Cybersecurity could your systems be exposed?
- · Storage management systems in review
- · Blockchain, AI, IoT and more

Lee Bailey, Managing Director, US Renewables Group Judy McElroy, CEO, Fractal Energy Storage Consultants

13:00 **LUNCH BREAK AND NETWORKING**

14:30

VIRTUAL POWER PLANTS

THE GRID OF THE FUTURE: VIRTUAL POWER PLANTS

- · Case study: Sunrun virtual power plant with solar + storage
- · Utilizing behind the meter storage in wholesale markets
- · Review of corporate virtual PPAs in the market today

Steve Wheat, Sr. Program Manager, Grid Services, Sunrun

15:15

CHEMISTRIES OF THE FUTURE: DEVELOPING WITH THE BEST BATTERIES IN THE MARKET

Are you choosing the right battery for your project?

- Tried and tested: what do utilities look for in batteries?
- Varying technologies for different environments/loads/generation how to choose?
- · Can lithium ion alternatives compete in a li-ion dominated market?
- · When you should consider solid-state batteries
- Responsible sourcing: are the batteries you are buying doing more harm than good?
- Review of new technologies like hydrogen, flywheel, flow, gravity, vanadium, and solid-state tech among others
- Supply and demand: you've chosen the best but is delivery guaranteed?
- · Hydrogen fuel cell technology what markets make sense? Which problems are being solved?

16:00 REFRESHMENTS AND NETWORKING







Agenda Day 2: March 4th, 2020

16:30

DEVELOPER CASE STUDIES

DEVELOPER CASE STUDY: COLLECTING AND USING DATA WITH AI FOR SMART ENERGY TRADING

- Kearny Mesa Project 30MW / 120MWh Energy Storage project in San Diego
- · The benefits of the first energy storage project to have behind and in front of the meter capabilities
- How to participate in multiple energy markets with one energy storage project
- · Retrofitting done right: adding batteries to existing solar projects
- · Using artificial intelligence in energy trading

Jay Baronowski, Director of Portfolio and Asset Management, Diamond Generating Corp.

17:15

STANDARDS FOR ENERGY STORAGE

THE FUTURE STANDARD: NEW YORK'S LEADERSHIP IN FINDING THE NEW INTERNATIONAL STORAGE STANDARD

Typically, code standards are adopted in 3-year cycles – but recent catastrophes have called for a faster adoption of storage safety standards. Join us to discover the newly accepted IFC 2020 and NFPA 855 codes and ensure your batteries, projects, and investments are secure.

- · Hear first-hand why Tokyo, Singapore, Frankfurt, and others are waiting for New York City to announce their standards
- The new urban standard: why firefighters, city officials, lenders, and insurance companies are pushing for fast adoption
- What's new? Review of IFC 2020 and NFPA 855 with UL the body responsible for writing, testing, and promoting the new future storage safety standards
- · Using data to design fail-proof systems









Meet the Team & Get Involved



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