



# CALIFORNIA

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## ENERGY SUMMIT

October 28 - 30, 2020 | Virtual

### Wednesday, October 28, 2020:

8:20-8:30am PDT Introduction and Opening Remarks by Conference Chair

**Norman A. Pedersen**, Attorney, HANNA AND MORTON LLP

8:30-9:15 am **Panel: Meeting the Rooftop Solar Deployment Challenge**

*One key aspect of California’s long-term plans to both reduce GHG emissions and increase the resiliency of the grid is to greatly expand the deployment of rooftop solar and other distributed energy assets. From a mandate that new home construction incorporate solar PV to the new SGIP process, the state is laying the groundwork for a large increase in rooftop solar. From a developer’s perspective of designing and installing these projects, what are the considerations and challenges? This panel will explore:*

- What are the real opportunities and challenges?
- Potential impacts of the new Rulemaking on NEM 3.0
- Has the SGIP rollout worked successfully?
- What is the size of the opportunity?
- Potential impacts of mergers and other market dynamics on deployment
- How does the backup requirement in the SGIP affect qualifying for the adder?

Moderator:

**Michael Colvin**, Director, Regulatory and Legislative Affairs, California Energy Program, ENVIRONMENTAL DEFENSE FUND (EDF)

Panelists:

**Andrew Christensen**, Director, Markets & Regulatory Affairs, VIVINT SOLAR

**Meghan Nutting**, EVP of Policy and Communications, SUNNOVA ENERGY CORPORATION

**Walker Wright**, Vice President, Public Policy, SUNRUN

9:15-9:30 am Q&A

9:30-9:40 am Break/Transition

9:40-10:25 am **Panel Discussion: Role of Microgrids and Other Green Technologies**

*The proliferation of PSPSs and the realization that this could be the “new normal” in California for the foreseeable future has drastically increased interest in deploying local solar + storage and microgrid projects. However, it is unclear now what entities are best suited to procure these systems, as well as whether it makes more sense to deploy small, front of the meter systems or*

*more traditional rooftop solar plus BTM storage units that have proliferated in California over the past few years. This panel will explore:*

- What role could local solar + storage projects play?
- Is this an effective model for grid hardening?
- What are the advantages of small front of the meter solar + storage that can be used as a centralized source of power?
- Who will do the procurement of these systems—CCAs, IOUs or other parties?
- Is this a model that can serve the local community?
- What mechanisms are needed to incentivize and monetize these sorts of projects?

Moderator:

**Thomas McCann Mullooly**, *Of Counsel*, FOLEY & LARDNER LLP

Panelists:

**Jacqueline DeRosa**, *Vice President, Battery Energy Storage Systems*, AMERESCO

**Jon Going**, *Western Regional Sales Manager*, 2G ENERGY INC.

**Shea Hughes**, *Director of West Coast Operations*, SCALE MICROGRID SOLUTIONS

**Craig Lewis**, *Executive Director*, CLEAN COALITION

10:25-10:40 am

Q&A

10:40-10:50 am

*Break/Transition*

10:50-11:35 am

**Panel: Achieving an Equitable SB100: Advancing Community Solar in Disadvantaged Communities**

*In September of 2019 the CPUC announced sweeping changes to the budget of the Community Solar Green Tariff and Disadvantaged Communities programs that had been enacted to increase solar power saturation in low income communities. Starting in 2020 the program aims to cover nearly all of the costs of solar and battery installations for residents who live in a disadvantaged or low-income community. This panel will examine:*

- Will this revision trigger the development of community solar?
- What roles do community solar projects have to fulfill mandatory residential solar roof requirements?
- Will the new Equity Resiliency Program work to provide storage to disadvantaged and medically vulnerable residents to achieve greater energy resilience?

Moderator:

**Jon Bonanno**, *CXO*, NEW ENERGY NEXUS

Panelists:

**Stephanie Chen**, *Senior Policy Counsel*, MCE

**JR DeShazo**, *Professor, Department of Public Policy and Director, Luskin Center for Innovation*, UCLA

**Alana Mathews**, *Former Public Adviser*, CALIFORNIA ENERGY COMMISSION

11:35-11:50 am

Q&A

11:50-12:30

*Lunch Break*

12:30-1:15 pm

**Panel: Future of Natural Gas in California**

*The many roles natural gas currently play in the California energy market are to one degree or another threatened as the state moves to decarbonize and address environmental issues in disadvantaged communities. But by the same token it is not at all clear what could technically and economically replace gas for applications that range from firming renewable generation to home heating and cooking. This panel will explore the future of natural gas in the California market in both the short and long term.*

- Electrification and natural gas in the built environment
- Potential role in microgrids to assure reliability during PSPS events
- Does the closure of OTC plants need to be delayed?
- How should environmental justice for disadvantaged communities be addressed?
- Can carbon capture and sequestration technologies be applied to gas power plants to reduce their impacts?

Moderator:

**Norman A. Pedersen**, Attorney, HANNA AND MORTON LLP

Panelists:

**Michael Colvin**, Director, Regulatory and Legislative Affairs, California Energy Program, ENVIRONMENTAL DEFENSE FUND (EDF)

**Alana Mathews**, Former Public Adviser, CALIFORNIA ENERGY COMMISSION

**Judah Rose**, Chair, Executive Director, ICF RESOURCES, LLC

**Dr. Jonah Steinbuck**, Manager, Energy Generation Research Office, CALIFORNIA ENERGY COMMISSION (CEC)

1:15-1:30 pm

Q&A

1:30-1:40 pm

Break/Transition

1:40-2:25 pm

**Panel: Expanding California's Electric Vehicle (EV) Charging Network**

*The California Public Utilities Commission (CPUC) is working to create a more efficient process for transportation electrification programs. What regulatory guidance is being provided to investor-owned utilities? What types of infrastructure investments should utilities be making to best support EVE charging network expansion? Where are we now relative to state goals? This panel will explore the progress being made to expand EV charging networks in California.*

Moderator:

**Elliot Hinds**, Partner, SHEPPARD MULLIN

Panelists:

**Melodee Black**, Senior Policy Advisor, SOUTHERN CALIFORNIA EDISON (SCE)

**Miles Muller**, Attorney, Climate & Clean Energy Program, NATURAL RESOURCES DEFENSE COUNCIL (NRDC)

**Jigar Shah**, Manager of Distributed Energy & Grid Services, ELECTRIFY AMERICA, LLC

2:25-2:40

Q&A

2:40-2:50	<i>Break/Transition</i>
2:50-3:35 pm	<p><b>Panel: Deploying Charging Infrastructure for Zero-Emission Transit and Commercial Fleets</b></p> <p><i>One of the largest sources of GHG emissions are fleets of busses and medium to heavy-duty commercial vehicles. The CEC is launching programs to spur the development of infrastructure to support zero-emission vehicle fleets, but many challenges must be surmounted. What demands will large, high-powered fast-charging depots place on the grid? How are the impacts on operations being addressed? How are procurements being targeted to address emissions in industrial and low-income areas?</i></p> <p>Moderator:  <b>Lisa Mazur-White, Esq., MBA, 3 PHASES RENEWABLES</b></p> <p>Panelists:  <b>Jim Castelaz, Founder and CTO, MOTIV POWER SYSTEMS, INC.</b>  <b>Bryan Towe, Director, Strategic Growth, EDF RENEWABLES</b>  <b>Ariana Vito, EV Program Coordinator, Office of Sustainability &amp; the Environment, CITY OF SANTA MONICA, CA</b></p>
3:35-3:50 pm	<i>Q&amp;A</i>
3:50-4:50 pm	<i>Conference Platform Open for Virtual Networking</i>

**Thursday, October 29, 2020:**

8:15-8:30 am PDT	<p>Introduction and Opening Remarks by Conference Chair</p> <p><b>Norman A. Pedersen, Attorney, HANNA AND MORTON LLP</b></p>
8:30-9:00 am PDT	<p><b>Keynote Presentation: Zero Carbon, Renewables and System Resilience—What’s Next?</b></p> <p><b>Edward Randolph, Deputy Executive Director for Energy and Climate Policy, CPUC</b></p>
9:00-9:15 am	<i>Live Q&amp;A</i>
9:15-9:25 am	<i>Break</i>
9:25-10:10 am	<p><b>Panel 1: Impacts of the Changes to Procurement Policies on Meeting RA Requirements</b></p> <p><i>For the first time since 2001 California suffered through rolling blackouts, bringing to the forefront ongoing issues in RA procurement. The recent CPUC decision to centralize procurement for local Resource Adequacy gives PG&amp;E and SCE the purchasing responsibility for meeting the needs of many CCAs throughout Northern and Southern California to. Could other prospective changes to sourcing RA provide solutions to recent reliability problems? What might the impacts be on the cost of RA, market prices and existing contracts to provide RA? This panel will explore the future of assuring RA in California.</i></p>

- What changes in RA procurement processes be contemplated given the recent reliability events?
- How will the CCAs handle local RA that they have already procured, and will this process have impacts on their plans to procure community solar and storage?
- What impacts could even more profound changes, such as replacing RA with forward pricing contracts, have?
- What role should out-of-state resources have in California RA?
- How will proposed changes affect the handling of hybrid projects, storage and hydro resources?

Moderator:

**Seth D. Hilton**, *Partner*, STOEL RIVES LLP

Panelists:

**Vidhi Chawla**, *Assistant General Manager, Energy Resource Planning*, ALAMEDA MUNICIPAL POWER

**Vitaly Lee**, *EVP, Development*, BAYWA R.E. SOLAR PROJECTS LLC

**Jan Smutny-Jones**, *CEO*, INDEPENDENT ENERGY PRODUCERS ASSOCIATION (IEPA)

**Manfei Wu**, *Senior Energy Markets Consultant*, ICF RESOURCES, LLC

10:10-10:20 am

*Live Q&A*

10:20-10:30 am

*Break*

10:30-11:00 am

**Presentation 2: Assessing the Resources Needed to Achieve SB100 Goals**

*As the rollout of renewable energy resources in California continues the very real technical and potential economic challenges of meeting the goal of 100% become starker. This presentation will explore the technical hurdles to achieving a 100% renewable energy system, as well as how investments might be monetized.*

**Arne Olson**, *Partner*, ENERGY AND ENVIRONMENTAL ECONOMICS

11:00-11:15 am

*Live Q&A*

11:15-11:25 am

*Break*

11:25 am-12:10 pm

**Panel 2: Translating the IRP Plans into Procurements**

*The California Public Utilities Commission and the California Energy Commission are using new IRP processes designed to incorporate global warming emissions targets into procurement planning by individual IOUs and POU's. The latest planning cycle resulted in 12 GW of new generation, but the CPUC Preferred System Portfolio (PSP) must now be translated into individual plans by IOUs and CCAs, while POU's are working to formulate their resource adequacy and capacity planning scenarios. This panel will discuss the lessons learned in the just-completed IRP cycle, and how the process might best incorporate:*

- The need for existing natural gas power plants to maintain reliability

- How to plan for 100% clean electricity
- With 12 GW of new renewable generation in the plan, what can be done to ensure delivery of this flexible capacity and more system efficiency?
- How to run a “procurement track” in parallel to the IRP process

Moderator:

**Seth D. Hilton**, *Partner*, STOEL RIVES LLP

Panelists:

**Scott Harding**, *Supervisor, Resource Planning and Acquisition*, IMPERIAL IRRIGATION DISTRICT (IID)

**Neil Raffan**, *Regulatory Analyst*, CALIFORNIA PUBLIC UTILITIES COMMISSION (CPUC)

**David Townley**, *Director of Public Policy*, CTC GLOBAL CORPORATION

12:10-12:25 pm

*Live Q&A*

12:25-1:30 pm

*Lunch*

1:30-2:15 pm

**Panel 3: Transformation of the California Retail Market – CCA Perspectives on Meeting Customer Demand in a Changing Wholesale Environment**

*The growth of CCAs is transforming the California energy market; in the near future the vast majority of the retail customer base will be served by CCAs. The shift to a more localized approach to meeting energy needs has so far both expanded the amount of renewable energy and reduced customer costs. However, this shift to a more decentralized market has many questioning who will be procuring renewables for the decarbonized future, and how. This panel will discuss the potential growth of CCAs and how their customers’ needs can best be met in the wholesale market.*

Moderator:

**Lloyd MacNeil**, *Partner*, MCDERMOTT WILL & EMERY

Panelists:

**Howard Chang**, *COO*, EAST BAY COMMUNITY ENERGY

**Jan Pepper**, *CEO*, PENINSULA CLEAN ENERGY

**Jeanne M. Solé**, *Deputy Director of Power Resources*, SAN JOSE CLEAN ENERGY

2:15-2:30 pm

*Live Q&A*

2:30-2:40 pm

*Break*

2:40-3:25 pm

**Panel 4: Publicly Owned Utility Procurement Plans and Initiatives**

*Publicly owned utilities (POUs) are facing challenges in terms of gearing up to procure renewables mandated by SB100. LADWP, for example, is currently evaluating several paths to renewables including additional distributed generation, added transmission, and increasing levels of demand response. Municipal and POU representatives will discuss the current challenges they face in buying renewables and potential solutions to meet SB100 goals.*

- How are POUs keeping up with aggressive renewables mandates?
- What role is storage playing in their plans?
- Is there enough customer engagement to support renewables programs?
- What type of policy changes need to happen to achieve clean energy goals?

Moderator:

**Norman A. Pedersen**, *Attorney*, HANNA AND MORTON LLP

Panelists:

**Lincoln Bleveans**, *Assistant GM, Power Supply*, BURBANK WATER AND POWER

**Barry Moline**, *Executive Director*, CALIFORNIA MUNICIPAL UTILITIES ASSOCIATION (CMUA)

**Simon Zewdu**, *Director of Power Regulatory Compliance and Specifications Division*, LADWP

3:25-3:40 pm

*Live Q&A*

3:40-4:40 pm

*Conference Platform Open for Virtual Networking*

### **Friday, October 30, 2020:**

8:50-9:00 am PDT

Introduction and Opening Remarks by Conference Chair

**Norman A. Pedersen**, *Attorney*, HANNA AND MORTON LLP

9:00-9:30 am PDT

**Keynote Presentation 2: Driving the Development of Technologies to Meet SB100 Goals**

**Commissioner Karen Douglas**, CALIFORNIA ENERGY COMMISSION (CEC)

9:30-9:45 am PDT

*Live Q&A*

9:45-9:55 am PDT

*Break*

9:55-10:40 am PDT

**Panel 5: Storage and Hybrid Resources in the California Market**

*IOU storage procurement in California is well underway to meeting the CPUC's current mandates, while public power and CCAs have made recent splashes with their procurements. Additionally, independent developers are now not only adding storage to solar to create hybrid projects, and the BTM market is booming. With all the renewables coming online, what are the best opportunities for storage in California?*

- How should hybrid generation + storage projects be treated in wholesale markets?
- What market structures will ensure energy storage can participate and be compensated in the CAISO?
- How soon can hybrid projects tap into multiple value streams?

- What pathways are opening for accelerating energy storage deployment as generation, transmission, and grid services assets?
- How is storage value as capacity being handled in the markets?
- How will reliability concerns be addressed?
- How will storage on the distribution level be addressed?

Moderator:

**Elliot Hinds**, *Partner*, SHEPPARD MULLIN

Panelists:

**Sandeep Arora**, *Senior Vice President, Transmission & Markets*, LS POWER

**Kevin Galke**, *Manager, Portfolio Analytics*, THE ENERGY AUTHORITY

**Carl Stills**, *Vice President, Imperial Valley Development & Storage Integration*, 8MINUTE SOLAR ENERGY

10:40-10:55 am *Live Q&A*

10:55-11:05 am *Break*

11:05am-11:30pm **Presentation 4: CAISO Perspective on Meeting Demand as the Grid Greens**

Presenter:

**Mark Rothleder**, *COO, as of November 6<sup>th</sup>, 2020*, CAISO

11:30-11:40 am *Live Q&A*

11:40-12:40 pm *Lunch*

12:40-1:25 pm **Panel 6: Expansion of EIM Capabilities and the Role of Import RA in Meeting CA Energy Goals**

*It is widely recognized that meeting the vastly increasing climate goals of not only California but other western states economically and reliably will likely involve forming a larger, more capable regional market. This panel will assess the progress being made and the challenges which remain, including:*

- Where does the CAISO Energy Day-Ahead Market (EDAM) effort stand?
- How are changes in RA procurement likely to affect the potential to import energy from out-of-state resources to meet needs?
- How are western states working to resolve disparate GHG accounting, tracking and source requirements?
- What lessons are being learned from the EIM?
- How are changes in California impacting regional power sales and the need for more interstate transmission?

Moderator:

**David Townley**, *Director of Public Policy*, CTC GLOBAL CORPORATION

Panelists:

**Carrie Bentley**, *Committee Chair*, WESTERN POWER TRADING FORUM

**Doug Marker**, *Intergovernmental Affairs*, BONNEVILLE POWER ADMINISTRATION (BPA)  
**Phil Pettingill**, *ISO Director, Regional Integration*, CAISO

1:25-1:40 pm

*Live Q&A*

1:40-1:50 pm

Break

1:50-2:35 pm

**Panel 7: Developing Long-Duration Storage**

*Many studies have identified the need to deploy energy storage assets with much longer discharge durations than is feasible with lithium ion technologies to support the fleet transition to non-emitting generation. This likely will include non-battery technologies to meet seasonal requirements. This panel will explore the possibilities for both flow batteries and non-battery technologies to meet future needs, as well as what might be needed to smooth their entry into the market.*

- Are longer duration battery solutions getting close to being financeable at scale?
- What is the status of implementation on pumped hydro, thermal, and other non-lithium storage projects?
- Are pumped hydro storage projects possible for smaller scale LSEs?
- How can non-lithium storage projects gain traction?

Moderator:

**Jeremy Twitchell**, *Energy Research Analyst, Energy Policy and Economics Group*, PACIFIC NORTHWEST NATIONAL LABORATORY (PNNL)

Panelists:

**Javier Cavada Camino, PhD**, *President & CEO*, HIGHVIEW POWER

**Jon Norman**, *President and COO*, HYDROSTOR INC.

**Marco Terruzzin**, *Chief Product Officer*, ENERGY VAULT

2:35-2:50 pm

*Live Q&A*

2:50-2:55 pm

*Closing remarks*

2:55-3:55 pm

*Conference Platform Open for Virtual Networking*