



# WELCOME TO CESA WEEK 2020: "THE NEXT 10 YEARS"



## ALEX MORRIS EXECUTIVE DIRECTOR

California Energy Storage Alliance

Welcome to CESA Week and the 11th Annual Market Development Forum, a convening of CESA members, policy makers, regulators, environmental advocates, utilities, Community-Choice Aggregators, grid operators, and more. Each year we to come together to

thoughtfully and collaboratively develop the California energy storage market, and in doing so, support the state's climate and electric system goals.

This year, we take a long-term focus and consider "The Next Ten Years." From 2020 to 2030, California's grid will evolve to a system powered primarily by clean energy resources and supported by energy storage. Energy storage solutions are broadly expected to play key roles in reliability, renewables integration, local area support, fire resiliency, microgrids, and more, and it will take massive amounts of energy storage to get there. Indeed, the CPUC modeled the need for at least 10,000 MW (Integrated Resources Plan) of deployed energy storage over the next ten years – a staggering amount.

Additionally, as the industry matures over the next ten years, storage projects and industry members will expand their focus beyond project development to longterm operations. Owners and operators will have to contend with and master vital functions including safe long-term operations, ongoing market participation, scheduling, maintenance, cyber-security, and more. California will want to ensure market products and pricing accommodate the operational needs of the storage fleet as it works to meet the needs of a rapidly evolving grid.

Planning for the future is hard, but at CESA we believe what you focus on is what you get. We are thus focused on how we can incorporate energy storage in building the low carbon grid of the next 10 years, and a no-carbon grid beyond that. I am confident that we will get there with the assembled brains and hearts in this room.

Thank you for your participation, input, and enjoyment of our CESA Week Events. We especially thank our sponsors, speakers, and CESA members for their leadership, dedication, and support.

Onward!





## **CESA OVERVIEW**

The mission of CESA is to make energy storage a mainstream resource to advance a more affordable, efficient, reliable, safe and sustainable electric power system for all Californians.

Founded in 2009, the California Energy Storage Alliance (CESA) is a non-profit membership-based advocacy group committed to advancing the role of energy storage in the electric power sector through policy, education, outreach and research.

CESA membership includes technology manufacturers, project developers, systems integrators, professional services firms, and other leaders from across the energy storage marketplace. CESA is technology and business-model neutral, and supported solely by the contributions and coordinated activities of its members.

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# MARKET DEVELOPMENT FORUM 2020 SPEAKERS



JASON BURWEN Vice President **Energy Storage Association** 



**ERIN CHILDS** Manager Strategen



**NORA HAWKINS** SGIP Program Manager California Public Utilities Commission



VICKEN KASARJIAN Chief Operating Officer Marin Clean Energy



**CLARK KELLOGG** Professor **UC** Berkeley Haas School of Business



**SHANA LAZEROW** Legal Director Communities for a Better Environment



**CARLA J. PETERMAN** Senior Vice President Regulatory Affairs Southern California Edison



**GABE PETLIN** Grid Reliability & Planning California Public Utilities Commission



LIANE M. RANDOLPH Commissioner California Public Utilities Commission



**JASON RONDOU** Director, Clean Grid LA Strategy Division Los Angeles Department of Water & Power



MARK ROTHLEDER Vice President Market Policy & Performance California Independent System Operator



JENEA SCOTT Vice Chair & Commissioner California Energy Commission



**HENRY STERN** Senator California Senate



**MONA TIERNEY LLOYD** Senior Director Western Regulatory Affairs Enel X North | CESA Board Chairperson



**FERNANDO VALERO** Director of Advanced Clean Technology San Diego Gas & Electric



**BETH VAUGHN** Executive Director California Community Choice Association



# MARKET DEVELOPMENT FORUM SCHEDULE

TIME	SESSION	SPEAKERS
8:00 - 9:00 AM	Networking Breakfast	
9:00 - 10:00 AM	Welcome, Introductions, and Ground Rules	Alex Morris   Executive Director, CESA  Mona Tierney-Lloyd   Senior Director, Western Regulatory Affairs, Enel X North
10:00 - 10:30 AM	Breathtaking Opportunities Disguised as Insoluble Problems  An academic assessment of where grid-related storage is in the arc of its market development, and where it could go.	Clark Kellogg   Professor, UC Berkeley, Haas School of Business
10:30 - 11:00 AM	Networking Coffee Break	
11:00 - 11:30 AM	The Calculus of 6 + Hours Storage = ?  Hear Los Angeles Department of Water & Power decision calculus for long-duration, pump-hydro, and hydrogen storage solutions for meeting clean energy needs.	Jason Rondou   Director of Clean Grid LA Strategy, Los Angeles Department of Water & Power
11:30 - 12:15 PM	Beyond Pilot: Diversity or All-Source Solicitations for 6+ hour Storage  The state should explore and procure diverse durations, and perhaps types, of storage. When, by whom, and how should this occur?	Janea Scott   Vice Chair & Commissioner, California Energy Commission  Jason Burwen   Vice President, Energy Storage Association  Gabe Petlin   Grid Reliability & Planning, California Public Utilities Commission  Erin Childs   Manager, Strategen  Alex Morris   Executive Director, CESA
12:15 - 1:10 PM	<ul> <li>Luncheon with Break-Out Groups</li> <li>Tamalpais Room, 2nd Floor: "Planning the Future" Focused lunch discussion break-outs with option of two topics:</li> <li>1. Resiliency: How California can assign a value to resiliency.</li> <li>2. Letter from the Future: In 2030, California has exceeded its 60% renewable goals with the help of energy storage. This is how we did it.</li> <li>Hazel Wolf Gallery, 1st Floor: "Planning the Present" Networking lunch</li> </ul>	

TIME	SESSION	SPEAKERS
1:10 - 1:20 PM	Reflections: Valuing Resiliency	Lunch Breakout Groups share their ideas
1:20 - 1:45 PM	Resiliency: What it Means to the State  Hear of Sacramento's considerations and the real-world effects of fires and Public Safety Power Shutoffs.	Senator Henry Stern   California State Senate
1:45 - 2:30 PM	We Want Resiliency and We Want it Now!  Design, explore, and promote rapid adoption of storage-enabled resiliency solution by identifying and resolving barriers, identifying market accelerators, and addressing equity.	Vicken Kasarjian   Chief Operating Officer, Marin Clean Energy  Shana Lazerow   Legal Director, Communities for a Better Environment  Nora Hawkins   SGIP Program Manager, California Public Utilities Commission  Fernando Valero   Director of Advanced Clean Technology, San Diego Gas & Electric  Jin Noh   Policy Manager, CESA
2:30 - 3:00 PM	Networking Coffee Break	
3:00 - 3:40 PM	Electrification and Energy Storage: A Vision of the Future by SCE	Carla Peterman   SVP Regulatory at Southern California Edison
3:40 - 3:50 PM	Reflections: Letters from the Future	Lunch Breakout Groups share their letters
3:50 - 4:45 PM	10 Years Out: Growing Pains, Reliability and Resiliency Planning for 2030  Learn key goals and needs for our electric systems and how storage can take on more roles for ensuring a reliable grid to benefit all Californians.	Liane Randolph   Commissioner, California Public Utilities Commission  Mark Rothleder   Vice President, California ISO  Beth Vaughan   Executive Director, California Community Choice Association  Alex Morris   Executive Director, CESA
4:45 - 5:15 PM	Wrap-Up and Reflection	Alex Morris   Executive Director, CESA
6:00 - 9:00 PM	Back to the Future: 80's Bash! A Networking Party with Music, Dinner & Dancing	Located at Revival Bar + Kitchen, 2102 Shattuck Avenue, Berkeley, CA



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