

# **ANNUAL REPORT**



### STAGING THE Solar Comeback

If we play our cards right in 2024, the California distributed solar and storage industry could set the stage for one of the greatest comebacks in clean energy history.

Accomplishing this feat for the sake of consumers and for clean air will take tremendous effort. But try as they might to keep us down – and they will keep trying in 2024 - if we work together, we can accomplish great things.

The pages of this annual report speak to triumphs amidst the trials and tribulations of the worst year for California solar in four decades. While CALSSA fought hard and repeatedly defeated the solar tax while also advancing on issues like streamlined permitting, interconnection delays, NEM transition rules, and virtual power plants, the overriding story of 2023 was the cratering of the rooftop market brought about by a reckless policy decision – the so-called NEM 3 that went into effect in April 2023.

Due to the lack of a glidepath, intensified by high interest rates and other macro-economic headwinds, California's distributed solar and storage market saw an 80% decline in YOY sales beginning in May and lasting through December. No amount of NEM 2 backlog could shelter companies from that dramatic of a downturn and so the industry shed an estimated 17,000 jobs. Many good companies left the state for other markets deemed more stable and supportive than California or worse, they went bankrupt.

It would be easy to give up on California. The forces against distributed solar and storage are powerful and the political dynamics dysfunctional, at best. But giving up simply isn't an option, nor is it the right thing to do.

Our industry exists because consumers want choice. They want solutions that work for their everyday lives. They want progress and a better future for themselves and their families. And collectively we bring these solutions to the mainstream: a better way to power a lightbulb, to heat water, to move around on four wheels.

With the support of our membership, CALSSA will keep fighting for this vision in every decisionmaking forum that matters. From continuing to fight for fair and rational ratemaking at the California Public Utilities Commission, to pushing visionary and ambitious legislation within the State Capitol, to ongoing efforts to cut red tape at the local level, CALSSA is going to keep fighting for you and for consumers' rights to generate their own energy from the sun and to share it with their community.

Thank you for being a part of CALSSA. They can't keep a good idea down for long. Together, we'll come back stronger and better than before. Let's go solar!

Onward and upward,

BADAL

Bernadette Del Chiaro Executive Director

Edmond J. Murry

Ed Murray Board President

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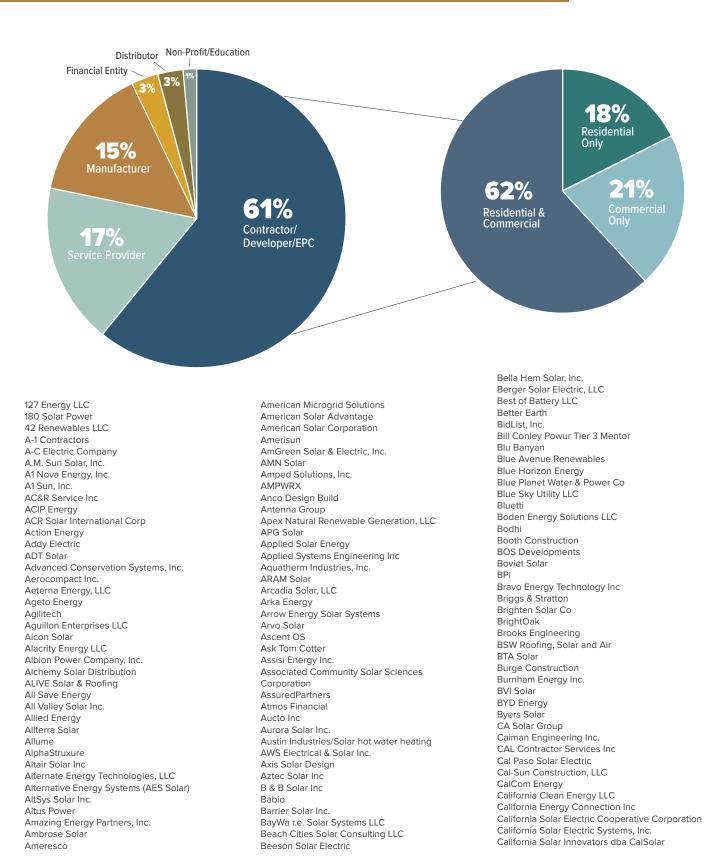






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# 2023 PROGRAM HIGHLIGHTS

#### **Net Metering**

Net metering dominated the policy landscape a fourth year in a row with the single-meter decision, aka "NEM 3", going into effect in April. Managing the transition to NEM-3 took an enormous amount of effort. Solar providers submitted a year's worth of projects to the utilities in the first three months of 2023 before the NEM-2 termination date. Many of those applications needed to be revised, and CALSSA assisted in keeping projects alive. In the end, the vast majority of applications were allowed to continue even when corrections or amendments were required. The utilities' efforts to catch up with application review after the surge was severely lacking and required constant prodding by CALSSA.

Further, while the NEM-3 decision for singlemeter properties came in December 2022, the actual tariff language wasn't approved until December 2023. CALSSA scrutinized the implementing language that was submitted by the utilities and filed protests on dozens of items. The CPUC favored our recommendations on some important issues related to system size calculations, trigger dates, and data availability, but sided with the utilities on other issues.

Throughout 2023 we had to re-litigate all of the issues around net metering for the decision on net billing for multi-meter properties. Despite intense efforts by CALSSA, the CPUC ended up destroying NEM-Aggregation and VNEM for commercial accounts. We generated widespread media coverage in our favor, thousands of comments to the CPUC, and letters from hundreds of school districts, renter groups, multifamily property developers, small businesses, and farming associations. This public input resulted in recovering behind-themeter netting for residential VNEM accounts, which maintains opportunities for a subset of multifamily properties, but was otherwise ignored.

Negotiations with the utilities over how to expand capacity at existing NEM properties lasted throughout the second half of 2023. In the end, this work will result in significant opportunities for solar installations, but we had to jump through many hoops to achieve it.

To complement our direct advocacy work, CALSSA also held a series of six webinars to explain net billing to our members. Recordings of those webinars are still available for members to watch, as are multiple fact sheets and tables of complex export rates.

#### **Residential Fixed Charge**

In response to language regarding a residential fixed charge that was snuck into the budget in 2022, the utilities and others submitted outrageous proposals in April 2023, with flat charges as high as \$189 per month. The proposals were effectively an income tax collected by the utilities.

Revisions to those proposals later in the year reduced many of the numbers, but even a charge of \$30 per month is not reasonable. Analysis commissioned by CALSSA showed these charges would not achieve the objective of avoiding an increase in utility costs for customers who convert to home electrification, and that changes to TOU rate structure would accomplish that goal more effectively. CALSSA spoke with many reporters about this issue, and the coverage was resounding in its criticism of the effort. We educated legislators about the trouble at the CPUC and built a



CALSSA's Solar & Storage Lobby Day at the Capitol, June 6, 2023

diverse coalition of statewide and community organizations opposed to a high fixed charge. We will continue to work on this important issue.

#### **Prevailing Wage**

It was a frustrating year for labor requirements because we knew most commercial projects would be subject to prevailing wage due to AB 2143 but month after month the relevant state agencies failed to produce guidance on important details, including which projects would be covered in the initial rollout. CALSSA pressed hard for the trigger to be submittal of a complete interconnection application by December 31, 2023. The CPUC accepted our recommendation, but not until the last minute. We have also had many conversations with the Division of Industrial Relations, which has chosen to leave enforcement questions open-ended.

#### **Storage Incentives**

Much of our advocacy with SGIP in 2023 was focused on the new infusion of funding into the program. The state budget contains \$280 million for storage incentives for low-income residential customers that was supposed to be available July 1. Month after month, we pushed the CPUC to implement the funding and worked through their questions about program details. Debates about incentive levels, customer eligibility, and the application process circled multiple times. After more than a year of deliberation the CPUC finally made decisions and got the program ready to launch. CALSSA also worked with several Community Choice Aggregators to develop plans for new storage incentive programs. We expect our work in 2023 to result in CCA programs becoming available in 2024.

#### Permitting

Especially in light of NEM-3, CALSSA continues to work to lower soft costs by advocating for online automated permitting for standard residential solar and storage, by working through obstacles with jurisdictions that make it difficult to obtain permits, and by ensuring that jurisdictions do not charge excessive permit fees.

In 2022, CALSSA passed SB 379, which mandates that cities with a population of more than 50,000 people implement an online automated permitting platform for residential solar and storage by September 30, 2023. In 2023, we built partnerships with the Solar Rights Alliance and others on outreach for jurisdictions to comply with the new law. By the end of the first deadline, we were able to move 150 jurisdictions to either adopt or make meaningful progress towards adopting SolarAPP+, Symbium, or a jurisdiction's own custom software solution. By the end of the year, more than 75% of California's population lived in cities or counties that had achieved automated permitting or were in the implementation process.

On permit fees, a cap on fee levels that was established by earlier legislation sponsored by CALSSA was nearing expiration. In 2023, we passed another bill that extends the cap for nine more years for commercial and residential solar and storage.

#### **Codes and Standards**

Changes to building codes and fire codes are longterm efforts, but if we don't engage it could result in devastating restrictions. Debates about where batteries can be safely installed have raged in recent years. We worked with the state Fire Marshall to clarify rules around heat detectors and vehicle impact barriers for batteries in garages. Additionally, through the code making process we increased the total kWh limit for energy storage on a residential property from 280 kWh to 600 kWh.

CALSSA has hired a codes consultant to advance proposals to remove the double review of battery energy storage systems by both building and fire departments. We have also prepared proposals for the International Residential Code to solidify the standards and testing required to reduce spacing restrictions between battery units and to allow stacked units. This would further reduce the inconsistencies in permitting energy storage systems between different building and fire departments.

This year saw yet another change to inverter standards, with the transition from UL 1741-SA to 1741-SB. CALSSA had been helping to manage this change for two years. When the transition date was set to happen right before the NEM transition date and the utilities and CEC were not sufficiently prepared, we were able to get another delay of four months.

#### **Virtual Power Plants**

The biggest development in grid services in 2023 was the expansion of the Demand Side Grid Support program. This CEC program currently pays participants \$81-\$108 per year per kW of enrolled capacity for 2-4 hours of dispatch in the top-need hours when events are called. Previously, the program was not available for most behind-the-meter batteries. Through persistent engagement at CEC, we overhauled those rules and created a functional pilot for behind-the-meter battery VPPs. We expect increased participation by battery fleet operators.

CALSSA also engaged in discussions at the CPUC about other grid services programs. The utilities must be forced to treat customer-sited resources as grid assets that can help them avoid excessive spending on transmission and distribution. Optional participation pathways should be created for customers that are willing to respond to programs and price signals. It will take time before the market infrastructure is developed enough for this to be a widespread opportunity, but will be important in the long run.

#### Interconnection

The work of assisting with projects that are handled unfairly by utility interconnection departments is unending. CALSSA can't help on every project, but we do our best to escalate cases of mismanagement and have successfully resolved countless disputes. Much of our work on interconnection this year crossed over with NEM-2 grandfathering issues. Process improvements and clarifications were needed for submitting applications for new construction sites, justifying system size, making modifications to pending applications, replacing old systems, and much more. Negotiations on acceptable configurations for adding to grandfathered NEM systems also crossed over between net metering and interconnection work. In addition, we continued to work on inverter functionality, which should lead to opportunities to install larger systems in areas with limited grid hosting capacity.

#### **Contractor Licensing**

For years, CALSSA has been fighting the CSLB's efforts to restrict C-46 contractors from installing energy storage systems. In 2023, the CSLB finally began the regulatory process on this matter, releasing proposed regulations in the summer to prohibit solar contractors from doing maintenance work or repairs on all solar and storage systems regardless of system size, including those they installed themselves. The regulations would prohibit a solar contractor from adding a battery to a solar system that has already been built. The CSLB also proposed that solar contractors be prohibited from installing a battery greater than 80 kWh.

In the summer, CALSSA mobilized dozens of contractors to speak and submit written testimony at a public hearing held at the CSLB at our request. In addition, we alerted the Solar Rights Alliance, which notified their membership and rallied hundreds of solar users to defend their ability to work with their solar contractor of choice and protect their solar investments. Finally, we submitted letters outlining a potential compromise and putting the CSLB on notice that the regulations, as proposed, would cause severe harm to small businesses in California and would have a major impact on the environment, triggering the need for a full CEQA analysis. The CSLB is still reviewing all the comments they received, and changes have not been made.

#### **Solar Water Heating**

CALSSA worked with CEC to develop an update to Title 24 mandating that newly installed pool heating be either solar thermal or a heat pump. This applies to residential pools and many commercial pools. The requirement will be formally proposed and considered in 2024.

A new SoCalGas incentive program for residential systems became available, and we have been pushing to expand this to multifamily.

At the federal level, CALSSA is helping to coordinate advocacy to press the Treasury Department to clarify that solar water heating will continue to be eligible for the Investment Tax Credit after 2024. A poorly worded section in the Inflation Reduction Act makes this ambiguous.

#### **New Construction Mandate**

With the change from virtual net metering to virtual net billing, CEC is considering blanket exemptions from the requirement to install solar on new construction for multifamily properties and shopping centers. CALSSA is working to make sure the mandate is maintained for any building type with acceptable cost effectiveness. We also helped secure a program for storage incentives for new residential construction.

#### **Consumer Protection**

The Commission made significant changes to their Public Watch List, which has consisted of residential contractors that were alleged to have violated consumer protection rules during the utilities' semi-annual spot audits, most often related to the administration of the Consumer Guide. Contractors were notified of their inclusion after the list had already been published, meaning contractors were afforded no due process even though their inclusion was sometimes due to utility error. Other contractors were included on the list because of simple clerical errors.

CALSSA pushed back hard and achieved a new decision that will create a new uniform checklist for determining inclusion on the Watch List. If an application is found to be non-compliant, the contractor will have an opportunity to remedy the application. Only if they are unable to do so will the contractor be placed on the Public Watch List. Time spent on the published list will be reduced from six months to three months as well.

#### Recycling

Two bills on solar module recycling advanced in the 2023 legislative session – one for stricter enforcement of recycling requirements and the other to ease the rules for recycling in California and shipping to other states. In the end, legislators wanted to pass the enforcement bill without making the safe handling rules more reasonable. CALSSA convinced the relevant committees not to do one without the other, and the bills will be taken up again in 2024.

#### **Legislative Watchdog**

CALSSA sponsored or took positions on dozens of bills in the 2023 legislative session. This includes bills on interconnection timelines, permit fees, recycling, SOMAH, budget allocations, incentives for solar on carports, SGIP, the new construction solar mandate, grid services, and state energy planning. We also fought against bills that would have rolled back solar building codes, taxed solar panels on consumer's roofs, and harmed the multi-family housing solar market. Whether playing offense or defense, the solar and storage industry must be in the room when legislators debate policies relevant to our market. CALSSA provides that service throughout California's 9-month long legislative season.

More than 300 solar workers showed up at the State Capitol in June for CALSSA's annual Lobby Day, an essential part of what it takes to protect distributed solar and storage in California. We held more than 100 meetings and were a visible presence, putting faces to the jobs that are on the line.



CALSSA members from the East Bay meet with Assembly member Mia Bonta during CALSSA's 2023 Lobby Day

Our fact sheets and webinars are available on our website at **www.calssa.org/members-only.** Be sure to use these resources to stay informed.

# **OUR TEAM**



Bernadette Del Chiaro Executive Director



Brad Heavner Policy Director



**Elise De Grande** Operations Director



Josh Buswell-Charkow Deputy Director



Kate Unger Senior Policy Advisor



Kevin Luo Interconnection Advisor



**Dara Yung** Permitting Director



Justin McCarthy Membership Director



Meghan Vincent-Jones Marketing Director



Leo Wallach Public Relations RALLY



Kim Stone Lobbyist Stone Advocacy



Donald Simon Legal Counsel Stratagem LLP

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Meghan Stimmler SolarHut



**Erin Weber Kiel** Sunnova Energy Corporation



Kenneth Wells O&M Solar Services



Howard Wenger NEXTracker



**Tom Werner** SunPower Corporation

# **2023** CALSSA EVENTS

### **Chapter Events**

CALSSA's Chapter Events bring together professionals from across the storage, PV, and thermal value chain to network, share best practices, and learn about the latest industry developments. In 2023, CALSSA held 21 chapter events in the Bay Area, Central Valley, Los Angeles, North Bay, Sacramento and San Diego regions. We also held bonus events in Chico, Corona and Ventura. These events typically saw 40-100 people in attendance.

### Lobby Day

Our Solar & Storage Lobby Day returned in 2023 for the first time since 2019 and was a huge success with 300 participants. This event brought hundreds of solar businesses and workers across the state to meet face-to-face with lawmakers. 2023's event also featured a booth fair so attendees could learn from various manufacturers and software companies about their offerings in between legislator meetings.

### Webinars

CALSSA organized ten webinars in 2023 on the policy and regulatory landscape of the California market, covering topics such as the NBT transition, the changes to VNEM/NEMA, AB 2143 and much more. These events were consistently well attended, with attendance sometimes exceeding 1,000 participants.

### **Annual Dinner**

The CALSSA Annual Dinner also returned for the first time since 2019. The evening is one of our association's premier networking events, and this year did not disappoint. The sold-out event was our most successful fundraiser, bringing in more than \$300,000 for CALSSA. We also awarded our "Member of the Year" to Greentech Renewables' Jake Marshall.

CALSSA thanks all the sponsors who helped to make these events possible.

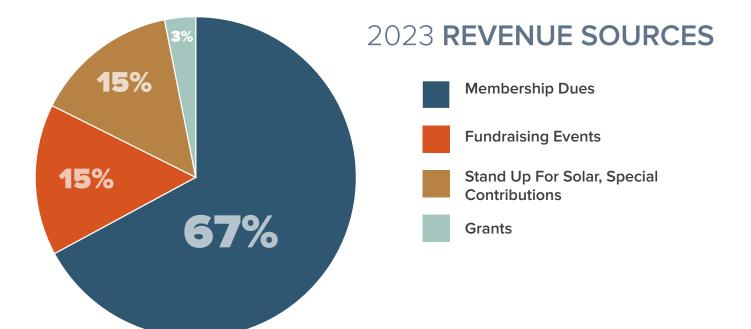


Zvi Lando (far right), CEO of SolarEdge, and his team pose for a photo from their sponsored table at the Annual Dinner.

CALSSA members enjoy happy hour and listen to speakers at a LA Chapter Event.

Jake Marshall, of Greentech Renewables, received CALSSA's Member of the Year Award at the 2023 Annual Dinner.

## **RESOURCES** & EDUCATION



### MEMBER EDUCATION

Member companies stayed ahead of the competition in 2023 by getting timely, detailed, and reliable information to navigate the tumultuous California market. In 2023, CALSSA members benefited from:



# 2023 MEMBERS (con't)

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### 84%

OF CA STORAGE PROJECTS INSTALLED **BY A CALSSA** MEMBER

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### 70%

OF CA PV PROJECTS INSTALLED BY A CALSSA MEMBER

• • • MEMBERS MEMBERS

743

146

NEW

15

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