

# Microgrids for a More Resilient California: An update on key legislation and outlook for regulatory evolution

IDEA Webinar Series



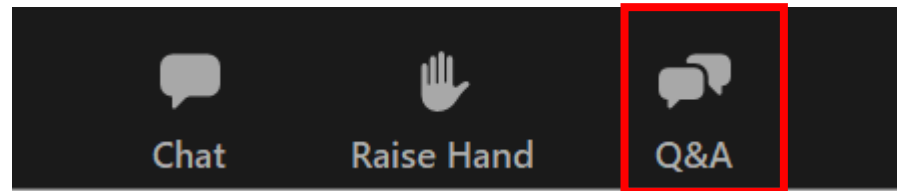
May 21, 2020

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# Microgrids for a More Resilient California

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- **Please submit comments or questions via “Q&A”** during the prepared remarks portion of our call. Presenters will respond at the conclusion of presentation. The Q&A icon can be found at bottom right of your screen.



- If you are having problems with video or audio, please send a note via the Chat. Once open, select **“Chat privately to Emily Riskalla (host)”**.
- The call will be recorded and made available to the public via download or streaming. Slides will be made available in pdf format at [www.districtenergy.org](http://www.districtenergy.org) and [www.microgridresources.com](http://www.microgridresources.com)

# Agenda

- Introduction MRC mission & membership
- Introduction of panelists
- Background on CA microgrid policy and legislation
- Recent activities and findings
- Near term objectives, next steps
- Question & Answers - Discussion

# MRC Mission Statement

The Microgrid Resources Coalition (“MRC”) promotes widespread implementation of microgrids through policy and regulatory reforms that recognize and value microgrid services for resilience and grid support.

# MRC Members

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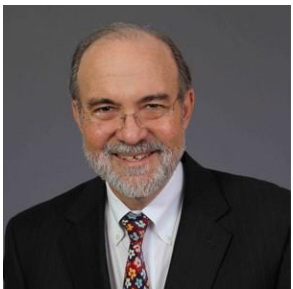
# Presenters



**Allie Detrio**, Chief Strategist, Reimagine Power



**Christopher Berendt**, Partner, Faegre Drinker



**Baird Brown**, Principal, eco(n)law

# State of the Capitol and Budget Turmoil

- Governor's original proposed budget released January 10<sup>th</sup>
  - Originally estimated \$5 billion surplus
  - Over \$12 billion allocated towards climate change and resiliency
- Governor's May Revise released May 15<sup>th</sup>
  - Bare bones budget – Pandemic decimated main sources of state revenue
  - Projected budget shortfall estimates vary wildly (\$23-54 billion)
- State budget must be passed by June 15<sup>th</sup> by constitution
  - August Revise will be issued – more comprehensive state budget
- Climate and resiliency budget significantly reduced



# Pandemic priorities impacting legislation

- **Session bill load drastically reduced**

- SB 1314 (Dodd) – Community Energy Resiliency Act of 2020
- SB 1240 (Skinner) – Open Access Distribution System Operator
- SB 947 (Dodd) – Performance Based Regulation
- AB 3251 (Bauer-Kahn) – DERs and Resource Adequacy (VPP bill)
- AB 3021 (Ting) – Resilient Schools
- SB 953 (Wiener) – DER Discriminatory Fees
- AB 2313 (Eggman) – Bioenergy resources (BioMAT fix bill)
- SB 1365 (Hertzberg) – Renewable Energy FIT (ReMAT fix bill)
- AB 2789 (Kalmager) – DER and power outage cost avoidance study
- SB 917 (Wiener) – NorCal Utilities District (PG&E Municipalization)

# Climate and Resiliency legislation still moving

- **SB 1215 (Stern)** – Microgrids
  - Currently in Senate Energy Committee; Hearing set for 5/26
- **AB 3256 (Garcia, et al)** – Wildfire Prevention, Safe Drinking Water, Climate Resilience, Drought Preparation & Flood Protection Bond Act of 2020
  - Currently authorizes \$6.8 billion climate and resiliency bond
  - Passed out of Asm. Natural Resources Committee on 5/13
- **SB 1258 (Stern)** – California Climate Technology & Infrastructure Financing Act
  - Passed out of Senate EU&C Committee on 5/18
- **AB 3163 (Salas)** – Biogas definition expansion
  - Passed out of Assembly U&E Committee on 5/14
- **SB 350 (Hill)** – Golden State Energy Act
  - Currently in Assembly U&E; Hearing set for 5/28
- **AB 1839 (Bonta)** – Green New Deal
  - Passed out of Assembly U&E Committee on 5/14

# Microgrid Policy in the Works

- **SB 1339 (Stern) – 2018**
  - Directs the CPUC to create a standardized interconnection process for microgrids and separate rates and tariffs as necessary to facilitate the commercialization of microgrids by December 2020.
  - Passed and signed into law September 2018
- **R.19-09-009 – CPUC Implementation of SB 1339**
  - Proceeding opened September 2019
  - Scoping Ruling issued December 2019
  - IOU and Staff Proposals issued January 2020
  - Track 1 Proposed Decision issued April 29, 2020
  - Commission may vote on PD at earliest June 11, 2020

# Commercializing Microgrids – Opportunities

- **Microgrid project siting at facilities that provide communities essential services**
  - Hospitals, schools, community centers, first responders, local govt, grocery stores, pharmacies, gas stations, etc.
- **Blue sky conditions:**
  - Dynamic grid services supporting a range of goals
  - Cost savings and clean energy to customers
- **Black sky conditions:**
  - Long-duration, robust islands
  - Resilient essential services for communities
- **Microgrid Services:**
  - Shift burden of microgrid construction costs away from ratepayers
  - Ratepayers benefit from microgrid services
  - Utilities conduct the dispatchable DER concert by contracting with microgrids for services

# Commercializing Microgrids – Challenges

- **Financial barriers**
  - Departing load and standby charges are onerous and outdated
- **Regulatory barriers**
  - PUC 218(b) over-the-fence rule needs to be reexamined
  - Tripping utility status
- **Interconnection**
  - Complex process with lengthy timelines
  - Uncertainty and lack of transparency with interconnection costs
  - Unified approach for microgrid resources in the future
- **Market Participation**
  - No easy pathway for microgrids to serve hosts while also accessing and participating in wholesale markets and providing services to utilities. Need to encourage multiple use applications.
  - The Commission needs to develop tariffs specifically for microgrids

# CPUC Implementation of SB 1339

## Scoping Ruling issued December 2019

- Amended topic to include “and resiliency strategies” to address issues with PSPS
- Breaks proceeding into 3 tracks: short, medium, and long-term solutions
- Track 1 to focus on critical facilities, local government data access, and short-term resiliency actions that can be taken before 2020 fire season
- IOUs and Energy Division Staff directed to develop proposals for short term resiliency strategies
- Over 50 parties intervening in proceeding

# CPUC Implementation of SB 1339

## IOUs and CPUC Staff proposals submitted January 2020

- **CPUC Energy Division**
  - Interconnection streamlining prioritizing and staffing
  - Modify storage sizing and charging requirements for small NEM microgrids
  - Local government data access and communications
- **PG&E**
  - Permanent Generation – significant stakeholder opposition
  - Make Ready Program – 300 MW mobile diesel generation
  - Community Microgrid Enablement Program (CMEP) – \$60.75M incentive program
- **SCE**
  - BTM microgrids at 6 schools
- **SDG&E**
  - Ahead of the game on interconnection
  - Local Area Distribution Controller with Affiliate

# CPUC Implementation of SB 1339

## Track 1 Proposed Decision issued April 29, 2020

- Adopts many staff recommendations
  - **Interconnection**
    - Increase interconnection IT and staffing resources
    - Create dedicated local government resiliency project team for applications
    - Work with industry to develop standardized templates for systems under 30 kW
  - **Modify existing NEM tariffs for resiliency**
    - Remove sizing restrictions for energy storage
    - Allow batteries to charge during announced pre-PSPS timeframes
  - **Local government relations**
    - Create restricted access portal for grid infrastructure data and other relevant info
    - Create resiliency project guides for local governments
    - IOUs must conduct semi-annual resilience planning meetings at county level with OES



# CPUC Implementation of SB 1339

## Track 1 Proposed Decision issued April 29<sup>th</sup>

- Approves certain IOU proposals with modifications
  - **PG&E**
    - Permanent Generation RFO withdrawn, revised proposal blocked
    - Temporary Generation approved for 2020 only – stopgap for this fire season
    - Community Microgrid Enablement Program approved through 2022
  - **SCE**
    - Utility owned microgrid proposal withdrawn – hastily prepared, “expensive”
  - **SDG&E**
    - Local Area Distribution Controller proposal conditionally approved pending final review of Affiliate Transaction Requirements

# Track 1 Takeaways: Progress being made

- **Local governments and CCAs are main beneficiaries of Track 1**
  - Lets local communities be included in grid energy planning and project development
  - Many staff proposals adopted – data access, communications, support and collaboration
- **Solar + storage industry also benefitting from Track 1**
  - NEM tariffs and energy storage requirement changes favorable for solar industry
  - Beefed up interconnection resources speed up application processing and streamlining overall process are potentially helpful for all
- **CPUC focused on lowest hanging fruit**
  - Solar + Storage had an easy interconnection fix and helps medically vulnerable customers
  - Communication and relations between utilities and local governments needed immediate attention and substantial improvement

# Track 1 Takeaways: Reservations

- **Interconnection streamlining useful but:**
  - Standardized template should be available for all technologies
  - All microgrid applications for critical facilities should be prioritized with targets
- **Community empowerment is great but:**
  - Utilities should co-ordinate but not try to limit or dictate design
  - Private owners and operators of critical facilities and contractors and consultants for communities and critical facilities must also have access to information
- **Utility action can block development:**
  - Sectionalization is good, but “Make-Ready” or controller architecture can limit competition
  - Microgrid tariffs required by SB 1339 shouldn’t be done piecemeal by utilities

# Track 2: Tariffs must be prioritized

- ***SB 1339 was written to facilitate the commercialization of the customer microgrids through separate rates and tariffs.***
  - This will enable the state to mitigate the impacts of PSPS, increase community resiliency, and build a new sustainable economy for the state
- **Track 2 must focus on the original intent of the bill:**
  - Prioritize interconnection improvements and tariff modifications for the larger, more sophisticated microgrid resources that can provide multi-day resilience
  - Include all CARB approved distributed energy resources
  - Focus on the “single controllable entity” not individual components
  - Critical facilities like hospitals can’t just depend on solar + storage

# Track 2: Tariffs must be prioritized

- **Develop microgrid tariff framework**
  - Standardized interconnection based on aggregate performance
  - Access to planning information
  - Access to all markets for grid services
  - Compensate contributions to resiliency
  - Framework for utility collaboration with microgrid project participants – use of utility assets and distribution system support agreements
- **Reduce the financial barriers to microgrids:**
  - Eliminate departing load charges - they are the single largest barrier to microgrids
  - Modernize standby charges - develop clear rules for maximum charges not based on improbable worst-case scenario

# Equitable Resiliency

- Eliminating backward-looking Departing Load Charges and modernizing Stand-by Charges supports community resilience and enables dynamic microgrid services.
- Values mitigate stranded-cost and ratepayer cost-shifting issues.
- Making it more difficult for ratepayers to directly benefit from resilient essential community services in the name of protecting those ratepayers from indirect cost-shifts is a poor scoring of value

# Time to get real ...

- Microgrids are not simple demand destruction, not negative load.
- Resource diversity and internal load-shedding make microgrid operations far more flexible than the simple operational models currently used for charges.
- The grid is not a fixed asset that ratepayers are paying for like a mortgage
- State and local governments have forward-looking goals that require lots of new investment
- Customers and communities are prepared to make those investments
- Removing updated burdens and barriers will stimulate private capital to finance microgrid construction and shift resilience costs away from ratepayers that can still benefit from microgrid resilience and grid services.

# Moderated Q&A

Please submit your questions  
via Q&A



# Thank You

Full webinar will be available for streaming

[www.microgridresources.com](http://www.microgridresources.com)

## Contacts

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