May 7, 2020

Re: Support if Amended AB 3256

Assembly member Garcia,

We are writing to express our support if amended position for AB 3256. While we are encouraged by the most recent amendments to the bill (May 4th), we would like to recommend further amendments that will reflect recent advances in climate science as well as the importance of clean energy resilience planning.

Proposed Amendments to Section 1

Section 1 of AB 3256 contains findings which should be strengthened. **Recent climate science indicates that we are approaching catastrophic global climate tipping points with alarming potential consequences**. This urgency should be conveyed with additional language, consistent with existing section 1(f) of the bill which states that "Planning, investment, and action to address current and future climate change impacts must be guided by the best available science."

Immediately following the current section 1(b), we recommend adding an additional paragraph which reads as follows:

Numerous recent studies are showing that climate change is worse than anticipated and is accelerating. Globally, nine of 15 tipping points have been activated that could lead to a domino effect and an inhospitable hothouse climate.[1] In the Southwest, global warming has exacerbated what would have been a moderate drought into a multi-decadal severe megadrought.[2] In California, the number of fall fire weather days has doubled since the 1980s and is expected to continue growing without significant emissions reductions soon.[3]

We recommend adding in "2018" before "Fourth Climate Change Assessment" in Section 1(b). We also recommend adding an additional sentence at the end of the findings in Section 1 which conveys the idea that the most effective expenditures of public funds will both mitigate warming emissions while they also help communities adapt to growing impacts. We recommend inclusion of an additional sentence in Section 1 which reads as follows:

Whenever possible, state investments should improve climate resilience while also increasing mitigation.

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[1] Lenton et al. **Climate tipping points — too risky to bet against: The growing threat of abrupt and irreversible climate changes must compel political and economic action on emissions**. *Nature*, November 27, 2019 https://www.nature.com/articles/d41586-019-03595-0

[2] Williams et al. **Large contribution from anthropogenic warming to an emerging North American megadrought**. *Science*, April 17, 2020 https://doi.org/10.1126/science.aaz9600

[3] Goss et al. C**limate change is increasing the risk of extreme autumn wildfire conditions across California**. *Environmental Research Letters*, March 26, 2020 DOI: 10.1088/1748-9326/ab83a7

This is the policy principle behind our second proposed amendment as explained below.

Currently, state funds are being used for infrastructure investments which directly contradict state climate and health goals. In the fall of 2019, the California Office of Emergency Services provided $75M to help local governments prepare for future Public Safety Power Shutoff (PSPS) events. In many cases, state funds are supporting installation of diesel back-up generators. Diesel generators emit high levels of asthma-inducing particulate matter, as well as toxic carbon monoxide and smog-producing, global warming pollutants. With experts suggesting that COVID-19 outbreaks will become seasonal and therefore still be with us during future fire seasons, we need to address future power outages without increasing stress on human respiratory systems.

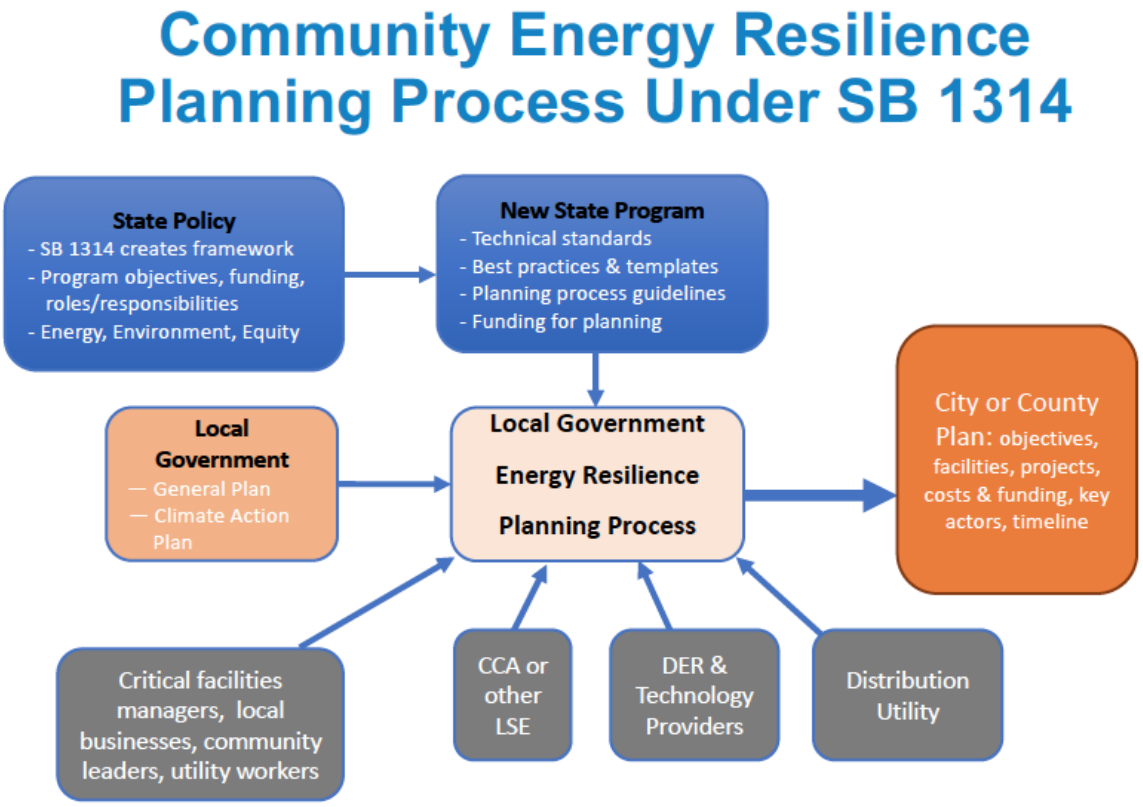
There is a better way to enhance community energy resilience while also reducing unhealthy emissions: through clean energy microgrids and distributed energy resources. With rapidly declining prices for solar and battery storage -- as well as advances in fuel cells, combined heat and power, and other energy efficient power generation technologies -- distributed clean energy can provide a more sustainable path to resilience.[4] California already has over one million solar roofs installed, most of which cannot be used during power outages because they are not paired with energy storage.[5] Solar plus storage is often more cost effective than fossil fuel backup generators when factoring in use over time, and can provide revenue and load shifting benefits on a daily basis,[6] unlike diesel generators which are only useful during a grid outage.

Proposed Amendments to Section 2 and Section 6

Section 2 of AB 3256 provides pre-hazard mitigation grant funds. Section 6 calls for new grants administered by the Strategic Growth Council to reduce the risk of climate impacts to communities.

We believe that wherever funds are being allocated to local governments to help them prepare for climate impacts – including future power outages – there should be a provision supporting the use of these grant funds for Community Energy Resilience Planning. This is a unifying policy framework which was called for in Senator Dodd's bill, SB 1314, the Community Energy Resilience Act, which proposed a new state grant and technical assistance program to achieve energy resilience needs in alignment with state environmental and health goals (see related schematic below).

[4] For a detailed discussion, see the Vox article here, "Wildfires and blackouts mean Californians need solar panels and microgrids," Oct 28, 2019.
[5] See the recently-released paper by Sunrun, "Smart, Clean Neighborhood Grids: Redesigning Our Electric System to Help Communities Power Through Blackouts" which explains how distributed energy resources can reliably supply the same services as gas-powered microgrids. The idea is to disconnect distribution substations from the transmission grid during planned outages and use energy stored in batteries at the distribution substation to re-energize individual distribution circuits on the local level. This re-energization could be triggered by a substation-sited energy storage installation.
[6] See the recently-released Vote Solar report, "Resilient Clean Energy for California."



We recommend that $50M from AB 3256 be specifically allocated for Community Energy Resilience Planning. With new state support, local governments could identify areas most likely to experience a loss of electrical service during future PSPS events and develop plans to ensure that a reliable electricity supply is maintained at critical facilities, prioritizing use of clean energy options. This will require collaboration between local governments, utilities and interested stakeholders, consistent with recommendations in the State's draft Integrated Energy Policy Report[7] as well as the CPUC's proposed decision issued on April 29th.[8] With resiliency plans developed and technical pre-feasibility completed, local governments will be positioned to make informed decisions about how best to meet their resilience needs, including how to take advantage of related public[9] and private funds[10] for project implementation.

Funds provided pursuant to AB 3256 should prioritize enhancing resilience planning for low-income communities, for whom power outages are particularly difficult. While all communities are disrupted and suffer from power outages, lower income households are likely to suffer most. Low-income households have fewer resources to rely on in the event of an emergency, and less

[7] See page 134 of the draft IEPR report, which notes that "The California Energy Commission, in partnership with the Integrated Climate Adaptation and Resilience Program, should work to develop guidance and resources to support successful engagement of local government and utility stakeholders in energy sector resilience planning."
[8] See the CPUC proposed decision issued April 29, 2020 in the SB 1339 Microgrid Proceeding (R. 19-09-009).
[9] Local governments are eligible applicants for SGIP funds which can pay for local renewable energy generation as well as storage.
[10] Multiple vendors offer energy-as-a-service offerings which can potentially make it possible for local governments to procure clean energy resilience infrastructure without requiring expenditure of public funds for construction.

ability to absorb financial losses from outages.[11] Closed businesses can mean no work and no pay for hourly employees. School closures can leave families scrambling to find childcare with lost wages as parents stay home with kids. Medical care, including access to prescription drugs, can be compromised. Transportation is compromised when public transport hubs or gas stations don't function. Communities with high rates of respiratory problems are especially vulnerable to harmful pollution when fossil backup generators are widely used during a power outage. Food security is an especially acute problem for low-income households that rely on school meal programs.

Community energy resilience planning acknowledges the political reality that local governments must approve siting of new energy resources. Installation of any new energy infrastructure -- including clean options such as photovoltaics, battery storage, fuel cells and EV charging stations -- will necessarily need to comply with local land use and planning requirements. Local governments need to be in charge.

Community energy resilience planning aligns energy resilience goals with other state policy mandates. California can accelerate its progress on meeting transportation electrification, energy and emissions reduction goals by addressing resilience needs with an integrated perspective. For example, the expected increase in market penetration for electric vehicles provides a future back-up power source for homes, businesses and local governments.[12] These could eventually provide thousands of megawatts of mobile energy storage assets in California which could provide electricity during outages.

Absent state leadership and investment in community energy resilience planning based on clean energy, public investment in energy resilience will likely continue to focus on new fossil fuel generation – an outcome which endangers public health and safety and which is contrary to California's greenhouse gas emissions reduction goals.

Also, given the urgency of completing resilience planning in order to help local governments prepare for future power outages and other climate-related impacts, we urge the Strategic Growth Council to begin work on related adaptation program guidelines ASAP, and thus we recommend deleting the following language in Section 6, section 2 (e), stating that:

e) Funds from this section may not be appropriated for at least one year following the Strategic Growth Council's adoption of guidelines for qualified climate adaptation plans.

Developing guidance and appropriating funds for this section should be accelerated due to the growing threat of fire and related events that imperil local economies, and the health and well-being of our communities.

[11] See the NAACP Environmental and Climate Justice Program report, Lights Out in the Cold: Reforming Utility Shut-Off Policies as if Human Rights Matter, March 2017

[12] See "All The Energy Storage The Grid Needs Will Soon Be Under Our Noses," Forbes, November 12, 2019

If you have any technical questions regarding this letter, please contact Kurt Johnson at The Climate Center (kurt@theclimatecenter.org). For any policy questions related to this letter, please contact Lea-Ann Tratten (LTratten@TrattenPrice.com) or Jena Price (JPrice@TrattenPrice.com) of TrattenPrice Consulting. Thank you very much.

Sincerely,

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