

Subject: Clean Energy Strategies to Ensure Reliability, Combat Climate Change, Improve Equity, and Drive Economic Growth

Dear Governor Newsom:

Our clean energy, environmental, and environmental justice (EJ) organizations are offering solutions to the multiple public health, economic, and social justice crises facing Californians. Adding clean, reliable capacity to the electric grid, moving the state toward its climate goals, and creating investment and job opportunities in underserved communities will deliver multiple benefits to this state at a time when leadership, hope, and stability are critically needed.

Our organizations propose the attached solutions, in the form of a proposed Executive Order, to mitigate the impacts of climate change, balance electricity capacity shortfalls, and uplift vulnerable communities. We can address these challenges with existing knowledge and technology, but require enhanced leadership, focus, and immediate action. California's modern grid will ensure reliability and should provide 100 percent clean and renewable energy with a diverse portfolio of clean and renewable sources such as distributed and utilityscale solar, land-based and offshore wind, and geothermal energy deployed in a manner responsive to the potential benefits and burdens on disadvantaged communities. Clean energy generation will require advanced storage technologies to enable flexible and reliable operation of the grid. A suite of clean energy technologies is necessary as we increase electrification of structures and ground transportation and integrate these into the grid.

We recommend that you create and engage with a taskforce of statewide energy leaders to ensure coordination between state agencies. A Clean Energy and Environmental Justice Task Force will help California officials take appropriate actions to expedite permitting, procurement, development, and interconnection of clean, zero-carbon renewable energy and storage resources and infrastructure necessary to ensure grid reliability, and ensure communities most impacted by climate change are leading and benefiting from - rather than burdened by - the clean energy transition our state needs.

To ready the State for the scale of the transition necessary to achieve various goals, including the increased deployment of electric vehicles, we urgently recommend the following actions.

- Direct immediate procurement to ensure system reliability and benefits for EJ communities: Authorize procurement of clean, zero-carbon, renewable energy and storage at a level sufficient to replace planned gas and nuclear retirements and meet clean energy targets. Require the deployment of 25 GW of new clean, zero-carbon, renewable energy and storage resources by 2025, and do so in a manner that prioritizes benefits to EJ communities, prevents further environmental burdens on EJ communities, and phases out fossil fuel and alternative fuel power plants in EJ communities.
- Make Our Communities More Resilient, Improve Public Health, And Prioritize Benefits to EJ Communities: Accelerate the deployment of local clean, zero-carbon, renewable generation and demand management projects with a priority for EJ communities to make our public buildings and communities more resilient, while prioritizing public health benefits for EJ communities. Incentivize beneficial customer behavior, streamline permitting and interconnection, and move quickly to release available public funding, with an emphasis on how these projects can most benefit EJ communities.
- Raise Our Clean Energy Ambitions: Direct the California Public Utilities Commission to work with all electricity providers in their Integrated Resource Plan to equitably accelerate the date for 100% clean and carbon-free power, and identify the actions needed to achieve this target.
- Accelerate Construction of Clean Energy Resources and Infrastructure: Troubleshoot and expedite permitting of renewable energy and storage infrastructure while protecting public health and the environment. The state should initiate planning and development of the transmission and distribution infrastructure, as well as emerging clean, zero-carbon, renewable energy and storage technologies needed to achieve our 100% clean energy goal.
- Improve Reliability with Clean Energy Resources: Modernize California's energy market rules to enable renewable energy and storage projects to

provide reliability and grid services to meet anticipated load from increased electrification in the building and transportation sectors.

We cannot realize the benefits of clean energy until visions become actions. We urge you to take bold, decisive actions that mirror the commitments you have made to address climate change, stimulate the economy, and provide reliable power as California transitions away from fossil fuels.

Sincerely,

Danielle Osborn Mills American Wind Energy Association - California

Jose Torres California Environmental Justice Alliance

Esther Portillo Center for Community Action and Environmental Justice

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Ed Smeloff Vote Solar

Executive Actions to Address California's Capacity Shortfall and Clean Energy Requirements, While Prioritizing Environmental Justice Communities

WHEREAS impacts of climate change threaten California's public health, environment, and economy; and

WHEREAS extreme heat events exacerbated by climate change throughout the West are causing increased demand on the State and region's electrical grid, prompting emergency outages; and

WHEREAS a reliable, carbon-free electricity sector is a critical piece of California's strategy to mitigate sustained impacts of climate change; and

WHEREAS zero-carbon renewable energy and energy storage provide reliability and resilience benefits to the grid and our communities; and

WHEREAS California's leadership in combatting climate change and driving clean energy innovation has been a model for maximizing the economic benefits of environmental action; and

WHEREAS California is facing an unprecedented financial crisis due to the ongoing COVID-19 pandemic while also facing the existential threat of climate change, which poses sustained, systemic, and unprecedented challenges to public health, equity, and the environment; and

WHEREAS the impacts of COVID-19 and climate change have disproportionately affected, underserved and frontline communities; and

WHEREAS California's clean energy economy grew coming out of the Great Recession and the efforts undertaken then can serve as a model for today; and

WHEREAS prior to COVID-19, zero-carbon renewable energy had been one of the U.S. economy's biggest and fastest-growing employment sectors, with 3.4 million jobs at the end of 2019, and attracted over \$100 billion in investments to the State, a clean energy recovery provides an opportunity for further economic and job growth that is consistent with California's environmental and climate policies; and

WHEREAS taking action now to prioritize and expedite deployment of clean energy projects will benefit ratepayers by ensuring that California fully captures available federal funds and tax credits, including the production tax credit and investment tax credit before they expire.

WHEREAS to achieve its statutory and regulatory requirements and goals and

improve system reliability, California will need 60,000 megawatts of new zerocarbon renewable energy and energy storage, which constitutes a doubling of California's current renewable energy capacity, by 2030; and

WHEREAS to ensure disadvantaged communities that are the most vulnerable to climate change and blackouts are not further left behind in this transition, deployment should prioritize providing environmental and economic benefits to disadvantaged and vulnerable communities, with input from affected communities regarding environmental impacts; and

WHEREAS California has a proven track record of incubating emerging sustainable technologies provide opportunities for the state to attract private investment, create manufacturing and supply chain opportunities, and grow a clean energy workforce; and

WHEREAS wind and solar have become the cheapest form of electricity generation, and when balanced with a suite of clean energy technologies including energy storage, provide firm, reliable power in all periods of the day and season at a cost that can reduce customer rates; and

WHEREAS California has a long and proven history of attracting investment in carbon-free energy resources by establishing ambitious and consistent policy goals and driving solutions to meet those goals. Under California law, the governor's office and state agencies are best equipped to organize government, industry, and other stakeholders to design an implementation plan that will achieve the state's goals in a timely way; and

WHEREAS California's resource agencies and local governments must take immediate action on zero-carbon renewable energy and storage project deployment to revive California's economy and keep the State on track to ensure reliability and achieve its carbon reduction requirements; and

WHEREAS California's regulatory agencies and local governments must take immediate action to remove installation barriers and expedite activation approvals for zero-carbon customer-sited and utility-scale renewable energy and storage projects to provide critical power to customers and minimize the use of fossil fuels which requires little to no additional public investment and can attract massive private investment; and

WHEREAS scenario planning to procure the least-cost, most reliable portfolio of power available to decarbonize the California electricity sector can also minimize impact to high value conservation lands and critical habitats for endangered species; and

WHEREAS increased deployment of zero-carbon renewable energy and increased investment of demand-side reductions including energy efficiency and demand response programs can not only help reduce greenhouse gas emissions from the electric sector but will also enable reduction in emissions from the transportation, building, and other sectors of the economy; and

WHEREAS transmission and interconnection upgrades, and investment in microgrids and distributed solar and storage resources, can improve grid resilience and reliability, mitigate rolling blackouts, and decrease fire risk associated with aging infrastructure; and

WHEREAS California's modern grid will ensure reliability and provide 100 percent clean energy with a diverse portfolio of renewable sources such as distributed and utility-scale solar, land-based and offshore wind, and geothermal energy. Clean energy generation will require the most advanced storage technologies to enable flexible and segmented operation of the grid. We will increase electrification of structures and ground transportation and integrate these into the grid.

WHEREAS California must grow the clean energy workforce and target that growth to benefit communities of color, which will help transition those who have worked in the fossil fuels industry; and maintain the state's global leadership as a hub of clean energy innovation.

NOW, THEREFORE, I, GAVIN NEWSOM, Governor of the State of California, by virtue of the power vested in me by the Constitution and statutes of the State of California, do hereby order effective immediately:

- 1. Enhanced interagency coordination through the establishment of a Clean Energy and Environmental Justice Task Force ('Task Force'). The Task Force will be comprised of a designee from my office, the Chair of the Energy Commission (CEC), the President of the Public Utilities Commission (PUC), the Chair of the Air Resources Board (ARB), and the CEO of California Independent Systems Operator (CAISO) to ensure focused implementation the requirements of this Executive Order.
 - a. Creation of a Clean Energy and Environmental Justice Task Force. The Clean Energy and Environmental Justice Task Force shall ensure that State government agencies coordinate to take all appropriate actions to expedite permitting, procurement, development, and interconnection of zero-carbon renewable energy and storage resources necessary to ensure grid reliability and implement the State's renewable portfolio standard and greenhouse gas emission and air quality emission reduction requirements while prioritizing environmental

justice communities. The Task Force will designate an individual to convene and ensure execution on the tasks of the Clean Energy and Environmental Justice Task Force

- b. Interagency Coordination. The Clean Energy and Environmental Justice Task Force shall coordinate Commissioner- and Director-level leadership of all relevant State government agencies and the California Independent System Operator (CAISO) and other California balancing authorities, to carry out the actions set forth herein. Relevant state agencies include the Governor's Office of Business and Economic Development (GO-Biz), California Labor and Workforce Development Agency (LWDA), California Public Utilities Commission (CPUC), the California Energy Commission (CEC), California Environmental Protection Agency (CalEPA), the California Air Resources Board (CARB), the California Department of Fish and Wildlife (DFW), Office of Planning and Research (OPR), the State Lands Commission (SLC), the Coastal Commission, the Ocean Protection Council (OPC), and other State and local government agencies and departments, including municipal utilities, as necessary to commit to accelerated deployment of renewable energy resources and associated infrastructure to reduce emissions, enhance reliability, and ensure resiliency, and to carry out the actions set forth herein.
- c. Objectives of the Task Force. The Task Force shall coordinate relevant agencies to ensure necessary and accelerated deployment of clean energy to improve grid reliability and resilience, attract private investments, create jobs, and reduce greenhouse gas emissions. The Task Force shall have the authority to convene Commissioner- and Director-level leadership of all relevant State government agencies and balancing authorities in furtherance of the objectives herein.
- d. Accelerate California's Transition to 100% Clean Energy. A primary objective of the Task Force shall be to report to the legislature by January 1, 2021 on the need to accelerate an equitable transition to 100% Clean Energy.
- e. Coordination with other Western States. The Task Force shall coordinate with leadership and staff of the relevant state governments of Western states, as well as balancing authorities serving California customers to seek alignment on climate and zero-carbon renewable energy policies to rapidly deploy renewables, ensure the development of sufficient renewable and storage resources to provide reliability throughout the region, and to elevate economic growth and careers throughout the

state and region with a prioritization for development in environmental justice communities.

f. Coordination with Federal agencies. The Task Force shall coordinate with leadership and staff of the relevant Federal agencies as well as from stakeholders and local government officials involved in the siting and permitting process to ensure timely environmental review in consultation with affected low-income communities of color and Tribal authorities, and deployment of any zero-carbon renewable energy and energy storage projects on both private and public lands and in federal waters.

2. Immediate action to address the near-term capacity shortage and wildfire emergencies prioritizing environmental justice and vulnerable communities.

- a. Expedite approvals, interconnections, and upgrades to address supply deficiencies and prevent future outages. The Task Force and all relevant agencies shall work to fast-track all statewide, local, and utility processes associated with interconnection and permitting of zero-carbon renewable energy and energy storage resources of all scales between now and June 30, 2021 to address supply deficiencies and mitigate the impact of outages.
 - i. Within 90 days of issuance of this order, the Task Force shall work with all relevant agencies to identify all near-term distribution and transmission upgrades and interconnections necessary to unlock near-term zero-carbon renewable energy generation and energy storage to serve California, and establish deadlines and milestones for approvals, interconnection, and construction.
 - ii. Residential stand alone or paired solar and storage systems should be expedited for approval for permission to install between now and December 31, 2020. Notification of installation must, however, be given to the local permitting authority before the installation occurs.
 - iii. For resources interconnecting to the distribution system under utility Rule 21 of less than or equal to 30kW, the interconnecting utility shall schedule service disconnections within 5 business days of the request and in the event utility infrastructure cannot accommodate the resource(s) without service upgrade, the upgrade shall occur within 15 business days.
 - iv. In addition, the Task Force shall coordinate with the CPUC and GO-Biz to establish reasonable timeframes for utility energization of electric vehicle charging stations and measures to ensure utilities comply with those timelines.

- b. Identify and procure renewable energy and storage necessary to replace planned retirements of conventional generation to ensure system reliability, and reduce impacts to and ensure benefits for frontline communities.
 - i. Within 30 days of issuance of this order, the Task Force, in consultation and coordination with relevant agencies, shall initiate a process to ensure that the Integrated Resource Planning process and related policy processes drive rapid procurement and development of clean energy projects that meet energy system and local area needs currently served by "once-through" cooling power plants, other natural gas-fired generation, and the Diablo Canyon nuclear power plant, with an emphasis on prioritizing environmental justice communities. This process shall consider near-term procurement of at least 15,000 megawatts of new zero-carbon renewable energy and energy storage capacity statewide by 2025 to provide carbon-free replacement power.
 - ii. By June 1, 2021, the Task Force shall deliver to the Governor and Legislature a summary of the replacement roadmap for these retirements, including a timeline with key milestones and recommended actions to be taken by all California utilities and load serving entities, including investor owned utilities, community choice aggregators, and municipally owned utilities.
 - iii. Within 30 days of issuance of this order, the CPUC shall report on its determination whether to adopt the 38 MMT greenhouse gas emissions planning target in the 2019-2020 Preferred System Plan and the 30 MMT areenhouse aas emissions planning target for the electric sector in the 2021-2022 California Public Utilities Commission (CPUC) Integrated Resource Planning (IRP) process. The CPUC shall report on its efforts to better align planning and procurement with the State's greenhouse gas reduction requirements, including its actions to direct procurement aligned with those targets and the requirement for long-term RPS contracts in the 2021-2023 compliance period; and its planning. approval and implementation of distribution and transmission resources reasonably required to facilitate that procurement, including consideration of subseg transmission and other resources and infrastructure needed to deliver long lead-time resources.
- c. Reduce unnecessary barriers that are prohibiting renewable energy and storage projects from providing grid services. The Task Force in coordination with all relevant agencies, shall identify barriers preventing renewable energy, hybrid renewable-plus-storage, contracted carbon-free imports, and standalone storage resources, both those behind the customer meter and in front of the meter, from

providing local, system and flexible reliability and capacity, and other grid needs.

- i. Within 90 days of the issuance of this order, the Task Force shall deliver a report to the Governor and Legislature, detailing the following:
 - 1. Steps that the relevant agencies intend to take to ensure renewable energy and storage receive full value for these contributions, inclusive of an assessment and timeline to ensure alignment across all relevant agencies and the CAISO.
 - 2. Recommendations on how to redesign California's reliability rules and procurement practices to reflect California's changing resource mix, ensuring that renewable energy and storage at all scales receive their full and fair value for their ability to contribute to resource adequacy, provision of grid services, and resiliency.
- d. Accelerate construction of clean local generation and demand management projects to make our public buildings and communities more resilient. Within 60 days of the issuance of this order, the Task Force shall adopt, in consultation with disadvantaged, front-line and other communities a list of recommended actions that can be taken to accelerate the deployment of clean energy resources to make our communities safer and more resilient from the impacts of climate change, with priority given to schools, hospitals, community centers and other public buildings, with emphasis on disadvantaged communities or areas with poor air quality, and identify deployment funding sources (including existing funds, new federal or state stimulus funds, and potential bond measures). This shall include developing pathways to accelerate investment in and the development clean energy microgrids, heat pump water heaters, and electric vehicle charging to increase customer access to clean energy and enhance community resilience.
- e. Enable customer-sited storage to provide clean capacity through aggregation and Virtual Power Plants. Within 90 days of issuance of this order, the Task Force shall develop a plan to reform existing Demand Response programs or create new programs that allow customer-sited batteries to be aggregated into Virtual Power Plants that can be dispatched in response to system grid needs, and can be used to meet Load-Serving Entities' Resource Adequacy requirements. To facilitate this action, existing rules prohibiting or discouraging exported energy from the battery to the grid should be reformed.

- f. Expedite deployment of state clean energy funds. The Task Force shall work with the relevant agencies to expedite release of alreadyauthorized clean energy funds including, but not limited to, energy efficiency, Self Generation Incentive Program (SGIP) and Solar on Multifamily Affordable Housing (SOMAH) programs; direct deployment of a significant proportion of SGIP funds to wait-listed equity projects that benefit disadvantaged areas and groups, including schools, residential and municipal energy users; monitor progress of fund disbursement and consider opportunities to extend funds to new homes and businesses as available; take corrective action if funds are not fully disbursed and utilized; and adopt reforms for the SGIP process to reduce delays, excessive requirements, and administrative burdens, and to increase its efficiency.
 - i. Within 30 days of the issuance of this order, the Task Force shall deliver a report to the Governor and Legislature, detailing the existing clean energy funds to be disbursed, including a milestone schedule.
- g. Troubleshoot and expedite permitting of renewable energy and storage infrastructure while protecting public health and the environment. The Task Force shall convene the relevant local, state, and federal agencies to prioritize renewable energy and storage projects eligible for state or federal funding or needed urgently to meet system needs, identify and troubleshoot siting and permitting issues, and work together to shepherd projects simultaneously through multiple permitting processes with the shared objective of permitting the renewable energy, storage, and associated distribution and transmission upgrades necessary to decarbonize California's economy in a timely manner.
 - i. To enable rapid deployment of energy storage technologies paired with zero-carbon renewable energy sources, state agencies shall use their existing discretion to consider a battery energy storage system as an accessory structure when colocated with a zero-carbon renewable energy project that does not involve combustion. Projects that enable the retirement of fossil-fueled resources should receive priority.
 - ii. By March 1, 2021, the Task Force shall conduct a survey, which shall be made available for public review, of state and local government-owned and utility-owned real estate within close proximity of the CAISO-controlled grid that may be suitable for solar and/or energy storage development and formulate a plan for development.
 - iii. Within 90 days of issuance of this order, the Task Force, in coordination with OPR, , shall develop model rules for virtual

permitting and inspection for distributed energy resources (DERs), clean energy microgrids, heat pump water heaters and electric vehicle charging and shall urge local governments to implement the model rules. This shall include working directly with the National Renewable Energy Lab (NREL) and support local government AHJs to adopt automated permitting processes, including the SolarApp to expedite installation upon submission of a code compliant application, with the objective these applications and approvals shall always be processed online, alongside virtual inspections when possible.

iv. OPR shall work with all relevant state and federal agencies to develop a comprehensive and efficient State and federal permitting program for floating offshore wind in federal waters by December 31, 2021, that clearly defines agency jurisdiction, roles and responsibilities, decision-making authority, and ensures efficient environmental review and permitting decisions for offshore wind facilities and associated electricity and transmission infrastructure off the coast of California.

3. Plan for a reliable and equitable transition 100% clean, zero-carbon energy.

- a. Initiate planning and development of distribution and transmission infrastructure to meet the requirements of SB 100. By June 1, 2021, the Task Force shall work with balancing authorities serving California customers to deliver a plan to the Governor and Legislature, detailing the steps that the relevant agencies intend to take to ensure timely and sufficient development of distribution and transmission approval and construction to enable delivery of a diverse suite of renewable energy and storage resources needed to meet California's 2030 and 2045 requirements, including a milestone schedule that comports with the other elements of this order.
- b. Prepare now for the future deployment of emerging zero-carbon renewable energy and energy storage resources. The Task Force shall work with all relevant agencies, and other balancing authorities serving California customers, to develop an action plan for the deployment of long lead-time renewable energy and storage technologies, as well as associated energy infrastructure that will serve a critical role in California's carbon-free grid. This includes, but is not limited to floating offshore wind, long duration storage, and geothermal resources.
 - i. By December 31, 2021, the Task Force, with leadership from the CEC, shall meet regularly with the SLC, OPC, and OPR to develop an implementation plan to achieve an offshore wind development goal of 10,000 megawatts by 2040, with an interim

target of 3,000 megawatts by 2030, as part of the State's overall renewable and greenhouse gas emission reduction requirements, and as indicated by SB 100 Joint Agency planning. The implementation plan shall address permitting, transmission planning, economic development, and sea-space identification.

- The CEC, in conjunction with the offshore wind work group, shall work with the U.S. Department of Interior and the U.S. Department of Defense to encourage the federal Bureau of Ocean Energy Management to conduct lease auctions for responsible offshore wind development in wind energy areas off California's North and Central coasts by September 1, 2021.
- 2. The Task Force, in consultation with SLC, OPR, and OPC, and in partnership with the Department of the Interior and the Department of Defense, the offshore wind work group shall identify at least 1,200 square miles of sea space on the Outer Continental Shelf to accommodate offshore wind development with a plan to assess and address environmental impacts and use-conflicts in accordance with California's long-term renewable energy and greenhouse gas reduction goals.
- c. Maximize Economic Opportunities: By December 31, 2021, the Task Force, in coordination and consultation with the Governor's Office of Business and Economic Development, the California Labor and Workforce Development Agency and other relevant state, local and federal agencies, shall establish a process to set goals for the creation of long-term careers and pay family-sustaining wages that prioritize and support communities and populations that have long been underrepresented in the workforce.
- d. Electrify with renewables. The Task Force shall coordinate with other California balancing authorities to ensure that electrification of the building and transportation sectors are codified, met, and served with renewable energy. Within 90 days of the issuance of this order, the Task Force shall deliver a report to the Governor and Legislature, detailing the steps that the relevant agencies intend to take to ensure building and transportation electrification are served with renewable energy. To enable accurate long-term planning, CARB shall update and convey sector-specific greenhouse gas emissions targets to the CPUC that account for electrification of the building and transportation sectors.