

CREATING GOOD JOBS, A CLEAN ENVIRONMENT, AND A FAIR AND THRIVING ECONOMY

April 22, 2024

California Energy Commission 715 P Street Sacramento, CA 95814 Submitted Electronically

Re: California Energy Commission Draft Commission Report Assembly Bill 525 Offshore Wind Strategic Plan

On behalf of the BlueGreen Alliance (BGA), our partners, and the millions of members and supporters they represent, we thank the California Energy Commission (CEC) for the opportunity to comment on the draft assembly bill 525 offshore wind strategic plan (AB 525 report).

The mission of BGA is to unite labor unions and environmental organizations to solve today's environmental challenges in a way that creates and maintains quality jobs and builds a clean, prosperous, and equitable economy. Offshore wind is a vital clean energy solution that presents a once-in-a-generation opportunity to advance this mission, if projects are developed in an equitable and environmentally responsible manner, with high-road labor standards and attention to environmental justice. Offshore wind projects have the potential to lift up the working class with family-sustaining union jobs, deliver benefits to communities hardest hit by climate change and economic inequality, and protect wildlife and critical habitats at every stage of development.

We were pleased to see the CEC adopt the most ambitious offshore wind goal in the United States of two to five GW by 2030 and 25 GW by 2045. To achieve these goals California will need a comprehensive plan and coordination across diverse stakeholders. The AB 525 report provides an excellent high-level overview of the future of offshore wind development in California.

As the CEC works to develop the final report, we urge the agency to ensure that offshore wind equitably achieves the maximum beneficial impacts and meets the following standards:

- Maximize the creation of quality, high-paying union jobs over projects' lifetime;
- Expand U.S. manufacturing along robust domestic, regional, and local supply chains;
- Deliver community benefits with attention to improving access to systematically marginalized;
- Protect fisheries, wildlife, and marine ecosystems by utilizing data sharing, the best available science and data, and adaptive management strategies to avoid, minimize, mitigate, and monitor environmental impacts; and

• Are guided by robust and inclusive stakeholder engagement, including labor organizations, Tribal nations, systematically marginalized communities, low-wealth communities, communities of color, and impacted ocean users including fishing communities.

We strongly urge the CEC to provide additional details related to creating high-quality union jobs; training and employment benefits; developing a domestic supply chain; ensuring environmental justice; and environmental protection. It is also essential that all labor standards and community benefits are supported by a strong implementation and enforcement plan. Transparency is needed to ensure that the desired outcome is achieved and developers are held accountable for their commitments.

As required by law the AB 525 report:

- Identifies suitable sea space for offshore wind planning goals
- Includes discussion of economic and workforce development and port space and infrastructure
- Assesses transmission investments, upgrades, and associated costs
- Presents the permitting processes for offshore wind facilities
- Identifies potential impacts on coastal resources, fisheries, Tribes, underserved communities, and national defense

Offshore wind development relies on federal and state coordination and it is imperative that the state of California plays a role in ensuring that the positive impacts of offshore wind projects are maximized and delivered equitably while using the best available science and data to establish measures to avoid, minimize, mitigate, and monitor environmental and wildlife impacts as well as their social implications. This will require that all offshore wind permitting activities ensure the application of high-road employment practices, community benefit agreements (CBAs), best management practices, and other means to ensure that projects are developed in an environmentally responsible manner and that benefits are maximized and equitably distributed.

The AB 525 report emphasizes the potential for "significant economic and environmental benefits" from offshore wind development. These goals, paired with President Biden's commitments to union labor, environmental justice, and the protection of natural resources should result in thorough analysis and planning that ensures communities, workers, and Tribes realize project benefits while protecting communities, wildlife, and the environment from adverse impacts.

The potential impacts of offshore wind development on the environment and local communities are outlined well in the report, but more detail is needed on how to mitigate them. The workforce development recommendations in the report are strong and should be fully implemented to create high-road, equitable jobs in growing offshore wind industry:

• Identify immediate and long-term workforce needs, understand diversity gaps, develop targeted and equitable hiring standards, establish training curricula and programs, fund

training and education centers, recruit entry-level as well as experienced workers, set local, Tribal, and equitable hiring standards, and prioritize prevailing wage and union labor.

- Coordinate with local communities, Tribes, workforce training centers, government agencies, community organizations, employers, high schools, community colleges, and universities to create career opportunities, workforce training, and economic development benefits.
- Support the development of project labor agreements (PLAs) that provide local and underserved communities and Tribes with meaningful economic benefits from offshore wind development.

California has a great opportunity to implement these recommendations and the CEC should create actionable plans for these activities including creating a plan to train and employ fossil fuel workers and help with job transition. It is also crucial that the offshore wind industry coordinate with all the partners mentioned above as well as labor unions. To fully realize the benefits of offshore wind development and achieve the goals of the state of California requires transparency and enforcement. Data should be made publicly available and there should be mechanisms in place to ensure developers follow through on their commitments.

We urge the CEC to consider the following recommendations to fully evaluate environmental and socioeconomic impacts.

Creating accessible, high-quality union jobs

The AB 525 report should analyze and provide information related to potential job creation—including direct, indirect, and induced jobs—from development in the lease areas. Furthermore, the CEC should analyze not only anticipated job creation, but the potential job quality impacts and benefits associated with this development.

The U.S. Department of Labor's (DOL) Good Jobs Initiative highlights equity and job quality principles and metrics that should be strongly considered by the CEC. The equity and job quality principles include proactively addressing racial equity; reducing barriers to opportunity; supporting the creation of good-paying jobs with the free and fair choice to join a union; providing opportunities for all workers—including underrepresented workers—to be trained and placed in good-paying jobs; utilization of PLAs and local hire provisions, training, and placement programs for underrepresented workers; and adopting an equity and inclusion program/plan focused on procurement, material sourcing, construction, inspection and hiring.¹ These are great examples of metrics related to equity and job quality and should be considered for evaluating the job creation benefits of offshore wind development. The AB 525 plan does a good job of describing the benefits of PLAs and the importance of working with local communities.

The final report should provide an assessment of the following categories related to job creation, job quality, and job training:

Manufacturing

Maximizing the creation of manufacturing jobs across a domestic offshore wind supply chain is key for this industry to fulfill its economic benefit potential. Supply chain constraints caused by global bottlenecks are one of the greatest risks for achieving the federal goal of 30 GW of offshore wind by 2030.ⁱⁱ

The CEC should analyze the potential for projects to source domestically manufactured components. CEC should specify job categories as well as associated potential direct, indirect, and induced jobs; gross state product; and anticipated personal income anticipated from the development. The analysis should also include an assessment of education and certifications necessary to access each job category; the training, average wages, hours, career advancement, physical demands, and safety information; as well as any commitments developers have made or secured from suppliers to ensure workers have the free and fair choice to join a union, such as through a union neutrality agreement. This information is essential for the U.S. workforce to have equitable access to employment opportunities.

The analysis should also include information about the material quality, standards, and certifications needed to secure a supplier contract with an offshore wind developer in the region. This information is critical for U.S. companies to access opportunities, especially minority, women, and veteran owned businesses. Finally, in order to understand the full potential of employment benefits from a mature domestic offshore wind supply chain, the AB 525 report should contain information about the offshore wind energy components that will be manufactured outside the United States.

Operations and Maintenance (O&M)

Similarly, for O&M job impacts, the report should specify O&M job categories, anticipated job numbers in each category, and associated potential direct, indirect, and induced jobs; gross state product; and anticipated personal income. It should also include an assessment of education and certifications necessary to access those jobs; training, average wages, career advancement, hours, physical demands, and safety information; as well as any commitments developers have made or secured from suppliers to ensure workers have the free and fair choice to join a union, such as through a union neutrality agreement. The CEC should also indicate the number of jobs, if any, that require specialized experience that workers in the United States must attain to access those jobs, and the specific experience and training that is required. When it comes to training, the assessment should specify whether workers will need to go overseas to receive training, and the duration of that training. The CEC should specify jobs categories related to the operation and maintenance of every aspect of offshore wind development, including the turbines, cables, and onshore and offshore substations.

Construction

The CEC should assess potential construction jobs associated with development in the lease areas, including any construction jobs anticipated to prepare ports for assembly, preparation of cable routes and interconnections, and the construction or site preparation of any manufacturing facilities. Consistent with the previous two categories, the CEC should specify job categories, job numbers in each category, and potential direct, indirect, and induced jobs; gross state product; and anticipated personal income. The report should also include an assessment of education and certifications necessary to access each job category, the training, average wages, hours, career advancement, physical demands, and safety information. If any construction jobs require specialized experience that workers in the United States must attain to access these jobs, that should also be detailed, including the number of jobs, as well as the training and experience required. The report should also specify whether workers will need to go overseas to receive training, and the duration of that training.

The report should include a discussion of how PLAs and Community Workforce Agreements (CWAs) will help ensure job quality and community benefits in the region. A PLA is an instrument to predict and control project timelines and labor costs. A PLA establishes the terms and conditions of employment of workers on specific construction projects, including wages, hours, working conditions, and dispute resolution methods. PLAs include local hire provisions, targeted hire of low-income or systematically marginalized workers, and the creation of pre-apprenticeship pathways. These agreements should be utilized at the state and local level to ensure high-road labor standards and timely project completion. PLAs promote safe, guality, cost-effective project delivery by providing project owners with unique access to the safest, most productive, best-trained skilled craft labor available in any given market. They can also help to ensure equitable access to jobs by including diversity, equity, and inclusion and local hire provisions. CWAs also address diversity, equity, and inclusion and are negotiated with both unions and community partners. According to the AFL-CIO, CWAs "go well beyond the traditional experience and use of PLAs to explicitly address the legitimate needs and interests of urban communities that have historically been excluded from the benefits of economic development." CWAs also frequently include local hire provisions, targeted hire of low-income or systematically marginalized workers, and the creation of pre-apprenticeship pathways.

Registered apprenticeship utilization should also be documented including the types of apprenticeships to ensure that they are union programs or DOL-certified and confirm the ratio of apprentices to journeymen in each program.

Training and Employment Benefits

The CEC should include an analysis of existing or potential developer strategies in the state or region for investing in workforce training programs to support offshore wind development and include detailed information regarding training. Developers should invest in training programs that are portable, accredited, have stackable credentials, include safety training standards and disaster response measures, and are industry recognized. The CEC should analyze opportunities for developers to invest in programs that prioritize the training of Justice40 communities, as well as disadvantaged and displaced workers, and provide wrap-around support services to support their enrollment. Disadvantaged workers include workers dislocated from fossil-fuel jobs, workers of color, women, formerly incarcerated workers, workers who live in environmental justice communities, workers with disabilities, and veterans. Workforce training investments should provide the option to enter into a memorandum of understanding with community stakeholders, unions, and companies and other strategies to support recruitment, retention, interviews upon completion, and successful placement of graduates in apprenticeships or internships. Lessees should consult with labor unions and community groups to ensure bidding credits result in increased equitable access to safe, quality jobs that will also provide more efficient operations.

Many unions run high-quality, registered workforce development programs that train participants in various trades that have transferable skills to the offshore wind industry. However, for a U.S. workforce to access opportunities in offshore wind, developers must share information about the specific skills training and certifications required as well as information about employment opportunities. This information, along with specific commitments to develop durable pathways for minority contractors and workers into training and employment is invaluable.

Union-affiliated training, registered apprenticeship, and pre-apprenticeship programs, many of which offer wrap-around services to support trainees through the programs, are the premier mechanisms for building career pathways and help ensure that workers have a clear path towards skills advancement and career development. These programs can also help promote equity and fairness in the workplace by providing training and career advancement to individuals from underrepresented groups.

Pre-apprenticeship programs aim to ensure that workers can qualify for entry into an apprenticeship program and have the skills and support they need to succeed. These programs are generally designed to target certain populations or demographics such as low-income workers, workers of color, women, and other marginalized communities. Additionally, many unions offer training throughout a member's career to enable them to stay up to date with changes in technology. The most successful pre-apprenticeship programs are those affiliated with registered apprenticeships or other contractually agreed on-the-job training programs.

Apprenticeships are registered through a state apprenticeship agency or through the DOL. Registered apprenticeships are paid positions that combine on-the-job training with classroom instruction in a trade. Construction unions operate robust registered apprenticeship programs while industrial unions work with employers on joint labor management training programs that also provide a combination of classroom and on-the job skills training. When these programs are paired with recruitment strategies such as partnering with a community group to provide information about workforce and training opportunities and providing wrap-around services, the benefits can be even greater. Many examples of programs providing such services can be found in the November 2022 workforce development White House fact sheet.ⁱⁱⁱ

The CEC should also analyze language access needs for local communities to access jobs benefits and how to address the needs. Demographics such as language or education should be taken into account to ensure jobs and training are accessible to a diverse workforce. Any agreements that developers have made to increase access—be it to jobs in manufacturing, O&M, construction, or otherwise—should be detailed to increase transparency and the local community's ability to access these resources and benefits.

Ensuring Environmental Justice

CBAs are an important way to ensure that development projects provide real and meaningful community benefits. CBAs can be expansive in scope and are often negotiated with both union and community partners. Because they are legally-binding agreements, they provide a higher level of accountability and enforceability and can therefore help ensure that specific workforce and community benefits are provided. CBAs can ensure that developers are held accountable for providing the benefits they promise, and that community groups have a say in the development process. Local Hire provisions, often included in CBAs, are another important tool to support the hiring of workers from within the state or local community. Without this provision, work crews from out of state can be brought in, minimizing the job creation benefits for the local community. The CEC should analyze the benefits of requests made by local communities, such as requests for CBAs or community governance of offshore wind projects.

The CEC should detail information related to air and water quality impacts in the region associated with potential manufacturing, port activities, construction, and ongoing operations and maintenance. It should also include analysis of the benefits of community consultation related to adverse impacts and methods for continued community engagement around the oversight, monitoring, and structuring of mitigation plans including adaptive management strategies. The CEC should analyze the benefits derived from offshore wind developers conducting appropriate benthic surveys for cable routes and other activities that may exacerbate existing contamination from urban and storm runoff, industry, or historic use of the site. Pre-construction, construction, and post-construction monitoring should be conducted, especially in areas of known vulnerability such as those adjacent to known sources of contaminants or near environmental justice communities.

The CEC should analyze the extent of needed Tribal consultation. In line with the lease stipulations, developers must ensure that all impacted Tribes are properly consulted, including state-recognized Tribes and non-federally recognized Tribes in a geographic

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analysis area that is representative of their historical presence in the region. Robust consultation with Tribes should be extended to relevant activities that take place out of the state or region. Ensuring the consultation of Tribes and ensuring the preservation of cultural resources is critical for advancing the environmental justice goals set by the Biden-Harris administration. In addition to federal goals, California leads the nation in climate solutions. AB 32, also known as the California Global Warming Solutions Act (2006), establishes a comprehensive program to reduce greenhouse gas emissions from all sources. In 2016, AB 32 was strengthened by SB 32 which codified the goal to reduce emissions to 40% below 1990 levels by 2030. Today, California continues to build upon these commitments.

Environmental Protection

Environmental protection is a key requirement under the Outer Continental Shelf Lands Act (OCSLA) and the National Environmental Policy Act, and rigorous plans must be in place for offshore wind projects to comply with various state and federal statutes that projects are subject to. Offshore wind energy must be developed in an environmentally responsible manner that avoids, minimizes, and mitigates impacts to marine life and ocean users, meaningfully engages stakeholders from the start, and uses the best available science and data to ensure science-based and stakeholder-informed decision making. The CEC should analyze potential cumulative impacts; benefits of mitigation measures; and adaptive management strategies. The analysis should include all relevant data and acknowledge relevant scientific disagreements and data gaps. Avoiding sensitive habitat areas, requiring strong measures to protect wildlife throughout each state of the development process, and comprehensive monitoring of wildlife and habitat before, during, and after construction, are all essential for the responsible development of offshore wind energy. Mitigation strategies should be employed to ensure communities, wildlife, and the environment are protected while maximizing the creation of quality, high-paying jobs, and economic benefits.

We support the CEC's recommendation to develop a comprehensive mitigation framework that prioritizes avoidance. The AB 525 report includes many effective mitigation strategies to protect the environment, but they can be strengthened, and more detail is needed. The AB 525 report can elaborate on opportunities to directly shape mitigation and research requirements for developers, advancing environmentally responsible offshore wind development. Throughout the power procurement process and consistency review, state agencies and utilities could wield considerable influence in supporting conservation goals and initiatives. This could be achieved by integrating funding for environmental research into power agreements, incorporating environmental conditions as a bid criterion in competitive solicitation processes, and employing other strategic measures.

Securing the best available science to inform decision making around management and use of the ocean requires continuous coordination across diverse stakeholders, sufficient allocation of resources, and a collaborative platform for data-sharing. Designating a single

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entity to guide these processes can help ensure the development—and coherent and consistent use—of best available science in all phases of offshore wind development. The AB 525 report refers to an expert science entity to be developed and established by the Ocean Protection Council. We request additional specificity on the intended vision and process for setting up this body. Forming a science entity to guide monitoring and research would be incredibly valuable to inform comprehensive monitoring guidance currently in development, and critical comprehensive baseline monitoring that has yet to get underway.

High-road, Equitable, Environmentally Responsible Development

BGA believes that standards for high-road, equitable, and environmentally responsible development are consistent with state and federal goals.

Commitments to Domestic Manufacturing, Environmental Justice, and Union Labor

California SB 150, which passed last year as part of the budget infrastructure package, embeds labor standards and community benefits requirements in state procurement and investment mechanisms for federally funded climate projects. If implemented as intended, it will ensure that we have the equitable, high road workforce needed to build California's infrastructure and manufacturing projects to meet our climate goals.

President Biden has reinforced in various executive orders that it is the policy of the federal government to pursue solutions to the climate crisis with attention to union labor, domestic manufacturing, environmental justice, and protection of natural resources. The announcement of the national offshore wind target to deploy 30 gigawatts (GW) of offshore wind by 2030 further underscored this approach. The White House fact sheet containing that announcement declared:

"The President recognizes that a thriving offshore wind industry will drive new jobs and economic opportunity up and down the Atlantic Coast, in the Gulf of Mexico, and in Pacific waters. The industry will also spawn new supply chains that stretch into America's heartland, as illustrated by the 10,000 tons of domestic steel that workers in Alabama and West Virginia are supplying to a Texas shipyard where Dominion Energy is building the Nation's first Jones Act compliant turbine installation vessel.

"Federal leadership, in close coordination with states and in partnership with the private sector, unions and other key stakeholders is needed to catalyze the deployment of offshore wind at scale.

"...the Administration is taking coordinated steps to support rapid offshore wind deployment and job creation:

- 1. Advance ambitious wind energy projects to create good-paying, union jobs
- 2. Investing in American infrastructure to strengthen the domestic supply chain and deploy offshore wind energy

3. Supporting critical research and data-sharing."iv

In Executive Order 14008, *Tackling the Climate Crisis at Home and Abroad*, issued January 27, 2021, President Biden stated that it is the policy of the United States:

"to organize and deploy the full capacity of its agencies to combat the climate crisis to implement a Government-wide approach that reduces climate pollution in every sector of the economy; increases resilience to the impacts of climate change; protects public health; conserves our lands, waters, and biodiversity; delivers environmental justice; and spurs well-paying union jobs and economic growth, especially through innovation, commercialization, and deployment of clean energy technologies and infrastructure."

This executive order further emphasizes that "[t]his Nation needs millions of construction, manufacturing, engineering, and skilled-trades workers to build a new American infrastructure and clean energy economy."^v President Biden further states, "Agencies...shall seek to increase the Federal Government's resilience against supply chain disruptions. Such disruptions put the Nation's manufacturing sector at risk, as well as consumer access to critical goods and services." Additionally, President Biden directed all agencies to "adhere to the requirements of the Made in America Laws in making clean energy, energy efficiency, and clean energy procurement decisions" consistent with Executive Order 14005, Ensuring the Future Is Made in All of America by All of America's Workers.^{vi}

President Biden has also emphasized the need to maximize utilization of domestic content as we advance climate and clean energy solutions in order to strengthen U.S. manufacturing. President Biden's executive order on America's supply chains issued February 24, 2021 states, "[t]he United States needs resilient, diverse, and secure supply chains to ensure our economic prosperity and national security." It continues to say, "resilient American supply chains will revitalize and rebuild domestic manufacturing capacity, maintain America's competitive edge in research and development, and create well-paying jobs. They will also support small businesses, promote prosperity, advance the fight against climate change, and encourage economic growth in communities of color and economically distressed areas."

Utilizing Domestic Content Maximizes Benefits and Supports National Security

It is evident that utilization of domestic content in offshore wind projects is imperative for reaching our federal goals. The March 2022 offshore wind energy supply chain report by the National Renewable Energy Laboratory states that supply chain constraints caused by global bottlenecks are one of the greatest risks for achieving our national offshore wind goals.^{vii} The modeling in the report also shows that average and maximum job creation utilizing 25% domestic content versus 100% domestic content in offshore wind projects results in a difference of approximately 30,000-40,000 jobs from 2023-2030.^{viii} In addition, across renewables, even a modest increase in manufacturing produces an additional 45,000 good manufacturing jobs per year and an additional \$5 billion in wages through the 2020s as the United States continues greening its electricity grid.^{ix} Further, domestic content requirements are unlikely to influence wind power capital costs.^x And, as emphasized in a

number of President Biden's executive orders, national security is also protected by utilizing domestic content.

Recent global events have made it abundantly clear that our national security is strongly tied to our energy security, to which domestic manufacturing plays a critical role. The U.S. Department of Energy and the North American Electric Reliability Corporation jointly-commissioned a report assessing risks to the U.S. electricity generation and distribution infrastructure. The summary of the report observed that the "bulk power system is dependent on long supply chains, often with non-domestic sources and links" and determined that the "increased reliance on foreign manufacturers, with critical components and essential spare parts manufactured abroad (e.g. HV transformers)" means the "supply chain itself represents an important potential vulnerability."^{xi} The report recommends that "efforts should be considered to bring more of the supply chain and manufacturing base for these critical assets back to North America."^{xii}

Strengthening the nation's supply chains can result in environmental benefits as well. Energy intensive manufacturers in the United States are relatively clean compared to competitors. As one example, "[s]teel exporters to the U.S. emit 50-100+% more CO₂ emissions per ton than U.S. producers on average."^{xiii} Use of domestic content can also reduce shipping distance, and thus emissions resulting from long-distance maritime transportation. The International Maritime Organization estimates that maritime shipping generated 1 billion tons of greenhouse gases per year from 2007-2012. Another study estimates that maritime shipping emissions are forecasted to rise between 35% and 210% by 2050. ^{xiv}

Supporting U.S. manufacturing also has equity implications. Data shows that the decline in U.S. manufacturing has been devastating to the middle-class, especially for Black and Hispanic workers and other workers of color who disproportionately do not hold college degrees, and who experience discrimination limiting access to better-paying jobs.^{xv} Manufacturing wages are substantially larger than in non-manufacturing industries for median-wage, non-college-educated employees, with Black workers in manufacturing earning 17.9% more; Hispanic workers earning 17.8% more, Asian American Pacific Islander (AAPI) earning 14.3% more; and white workers earning 29% more.^{xvi}

Union Labor Benefits Workers and Projects

Across sectors, DOL reports that unions raise wages for all workers^{xvii} and the Bureau of Labor Statistics reports that non-union workers earn just 83% of what unionized workers earn.^{xviii} It's no wonder that union approval is at its highest since 1965, with 68% approving of labor unions and even higher numbers of support specifically among young people and people of color.^{xix} The White House report on "Worker Organizing and Empowerment" says that support for a union increases to 74% for workers aged 18 to 24, 75% for Hispanic workers, 80% for Black workers, and 82% for Black women workers.^{xx} The report also contains guidance for how unions advance equity for underserved populations, including greater transparency around pay and higher wages, greater job security, and increased access to career pathways for women and workers of color.^{xxi} PLAs are a proven way to

ensure workers in the construction sector have access to the benefits and protections of unions.

PLAs have been demonstrated to reduce project costs for developers, save public funds in the long run, and produce increased economic benefits for the local community.^{xxii} In addition, PLAs often lead to safer working conditions as a result of the more skilled workforce that union training programs provide.^{xxiii} A 2021 Canadian study found that unionization in institutional, commercial, and industrial construction, maintenance, and repair work was associated with a 25% lower lost-time injury rate, 23% lower incidence of musculoskeletal lost-time injury claims, and 16% lower incidence of critical lost time injury claims.^{xxiv} Data also suggests that accidents in the construction industry are more common in states with low-road contractors.^{xxv} Union firms are also 16% less likely to report difficulty in filling open positions, 13% less likely to fail in retaining skilled workers and 21% less likely to report project delays due to retention issues, which is key to timely and efficient deployment during construction labor shortages.^{xxvi} Because PLAs often include provisions around apprenticeship utilization and recruitment of women, minorities, veterans, and other underrepresented workers, they also contribute to more equitable career pathways for a diverse workforce.

Conclusion

When done right, offshore wind power will create thousands of high-quality, familysustaining jobs in manufacturing, construction, and O&M while also avoiding, minimizing, and mitigating environmental impacts. Thank you for considering how the CEC might further strengthen its role in ensuring that offshore wind energy is developed responsibly, with attention to equity, maximizing quality jobs and career pathways, and protecting the environment by including our recommendations in the final AB 525 report. We appreciate your effort to solicit stakeholder input to inform the offshore wind energy leasing process. Signed,

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Tamina Chowdhury, Ph.D. California State Policy Manager BlueGreen Alliance

ⁱ U.S. Department of Labor (DOL), Previous Bipartisan Infrastructure Law (BIL) grants with focus on equity and job quality. <u>https://www.dol.gov/general/good-jobs/making-good-jobs-through-federal-investments</u>

ⁱⁱ National Renewable Energy Laboratory (NERL), The Demand for a Domestic Offshore Wind Energy Supply Chain, January 2022. <u>https://www.nrel.gov/docs/fy22osti/81602.pdf.</u>

ⁱⁱⁱ The White House: FACT SHEET: President Biden Celebrates New Commitments toward Equitable Workforce Development for Infrastructure Jobs, November 2, 2022. <u>https://www.whitehouse.gov/briefing-room/statements-releases/2022/11/02/fact-sheet-president-biden-celebrates-new-commitments-toward-equitable-workforce-development-for-infrastructure-jobs/</u>

^{iv} White House, FACT SHEET: Biden Administration Jumpstarts Offshore Wind Energy Projects to Create Jobs, March 29, 2021. <u>https://www.whitehouse.gov/briefing-room/statements-releases/2021/03/29/fact-sheet-biden-administration-jumpstarts-offshore-wind-energy-projects-to-create-jobs/</u>

^v White House, Executive Order on Tackling the Climate Crisis at Home and Abroad, Jan. 27, 2021. <u>https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/27/executive-order-on-tackling-the-climate-crisis-at-home-and-abroad/</u>

^{vi}White House, Executive Order on Ensuring the Future Is Made in All of America by All of America's Workers, Jan. 25, 2021. <u>https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/25/executive-order-on-ensuring-the-future-is-made-in-all-of-america-by-all-of-america-workers/</u>

^{vii}NERL, The Demand for a Domestic Offshore Wind Energy Supply Chain, January 2022. <u>https://www.nrel.gov/docs/fy22osti/81602.pdf.</u>

^{viii} Ibid.

^{ix} Princeton University, Working Paper: Influence of High Road Labor Policies and Practices on Renewable Energy Costs, Decarbonization Pathways, and Labor Outcomes, April 13, 2021. <u>https://netzeroamerica.princeton.edu/img/Working Paper-High Road Labor and Renewable Energy-</u> <u>PUBLIC RELEASE-4-13-21.pdf</u>

^x Ibid

^{xi} North American Electric Reliability Corporation, High-Impact, Low-Frequency Event Risk Impact to the North American Bulk Power System, at page 30 (June 2010). <u>https://www.energy.gov/ceser/downloads/high-impact-low-frequency-risk-north-american-bulk-power-system-june-2010.</u>

^{xii} Ibid, at 27

^{xiii} CUR Consulting, Leveraging a Carbon Advantage: Impacts of a Border Carbon Adjustment and Carbon Fee on the US Steel Industry, 2021. <u>https://clcouncil.org/reports/leveraging-a-carbon-advantage.pdf?v1</u>

^{xiv} Stockholm Environment Institute Calculating Maritime Shipping Emissions Per Traded Commodity, April 2019. <u>https://www.sei.org/publications/shipping-emissions-per-commodity/</u>

^{xv} Economic Policy Institute (EPI), Botched policy responses to globalization have decimated manufacturing employment with often overlooked costs for Black, Brown, and other workers of color, January 31, 2022. <u>https://files.epi.org/uploads/239189.pdf</u>

 xvi lbid.

^{xvii} DOL, The Union Advantage. <u>www.dol.gov/general/workcenter/union-advantage</u>

xviii Bureau of Labor Statistics (BLS), Union Members, 2021. <u>www.bls.gov/news.release/pdf/union2.pdf</u>

^{xix} The White House, White House Task Force on Worker Organizing and Empowerment Report, February 2022. <u>www.whitehouse.gov/wp-content/uploads/2022/02/White-House-Task-Force-on-Worker-Organizing-and-Empowerment-</u> Report.pdf

^{xx} ibid.

^{xxi} DOL, How the Task Force is advancing equity across underserved communities by supporting worker organizing and collective bargaining. <u>www.dol.gov/sites/dolgov/files/general/labortaskforce/docs/508_union-fs-1.pdf</u>

^{xxii} Illinois Economic Policy Institute (ILEPI), Efficiencies of Project Labor Agreements, May 18, 2015. <u>https://illinoisepi.org/site/wp-content/themes/hollow/docs/wages-labor-standards/Illinois-PLAs-in-CDB-Projects-FINAL.pdf</u>

^{xxiii} The Journal of Labor and Society, Right-to-work Laws and Fatalities in Construction, June 2011. <u>https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1743-4580.2011.00334.x</u>

^{xxiv} Institute for Work and Health, Updating a study of the union effect on safety in the ICI construction sector, January 2021. <u>www.iwh.on.ca/sites/iwh/files/iwh/reports/iwh_report_union_safety_effect_construction_update_2021.pdf</u>

^{xxv} UC Berkeley Labor Center, Workforce Issues and Energy Efficiency Programs: A Plan for California's Utilities, May 2014. <u>https://laborcenter.berkeley.edu/pdf/2014/WET-Plan-Appendices14.pdf</u>

xxvi ILEPI, The Union Advantage During the Construction Labor Shortage: Evidence from Surveys of Associated General Contractors of America Member Firms, May 10, 2022. <u>https://illinoisepi.files.wordpress.com/2022/02/ilepi-pmcr-construction-labor-shortage-agc-report-final.pdf</u>