

**Written Testimony of Mark Simonin
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**Before the House Committee on Natural Resources
Subcommittee on Energy and Mineral Resources**

**Oversight Field Hearing:
“Power in the Pacific, Unlocking Offshore Wind Energy in the American West”**

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Chairman Lowenthal, Ranking Member Stauber, and Members of the Energy and Mineral Resources Subcommittee, thank you for giving me the opportunity to testify in today’s hearing. I appreciate this opportunity to discuss the important role that union labor, our construction industry contractor partners, and our jointly administered apprenticeship training programs have in unlocking the environmental and economic benefits of offshore wind energy on the west coast and around the country.

I began my career with the International Brotherhood of Electrical Workers (IBEW) in 1988 with IBEW Local 103 in Boston, where I completed a telecommunications apprenticeship in 1992. I later transferred to IBEW Local 629 in San Luis Obispo and, in 1997, completed the electrical apprenticeship program to become a state certified Inside Journeyman Wireman. That same year, I took on my first leadership role in the union when I was elected to the Executive Board of Local 639.

I continued to work as an Inside Journeyman Wireman until 2010, when I became a Business Manager for the union. Since 2010, I have also served as the Chair and an Executive Board Member of the San Luis Obispo Chapter of the Central Coast Central Labor Council, a Trustee of the Central California IBEW/NECA Pension Trust, and the Secretary of the San Luis Obispo County Joint Electrical Apprenticeship and Training Trust, which administers the electrical apprenticeship program I once trained in. Since 2012, I have served as an Executive Board Member of the California & Nevada State Association of Electrical Workers, a collaboration of IBEW local unions in California & Nevada. In addition, I have served as the Chair of the California Statewide Joint Apprenticeship and Training Committee since 2015.

As a Business Manager for IBEW Local 639, I have seen firsthand how IBEW members have been instrumental in the successful construction of renewable energy projects including wind, solar, and others since their arrival on the market. IBEW members routinely build and maintain all types of energy facilities throughout the United States, including both on and offshore wind facilities. IBEW members have been instrumental in the skilled construction of land-based wind installations for nearly 20 years. Whether on or offshore, the work of wiring, assembling, and cabling wind turbines and connecting them to the grid is an extension of the construction and linework that the IBEW’s trained professionals have been performing for over 100 years. While offshore wind projects occur in different environments and involve different materials than onshore construction, the basic work is the same, and the skills required to

perform this work are fundamental aspects of the training regimen that IBEW members have been adhering to for generations.

During my time as an Inside Journeyman Wireman and a Business Manager, I have seen time and again how my local and other IBEW locals in the region have come together to fill the need for skilled and trained electricians on clean energy projects here in California. Many IBEW members can and do travel for work, and our jointly-administered apprenticeship programs are well-equipped to respond to the needs of the market by taking in new apprentices as demand increases.

The IBEW and our affiliates in the union construction trades have a long and successful history of creating pathways to good, middle-class jobs, and our ability to do so is limited only by the number of projects we are engaged to build. As we transition to new forms of energy, it is essential that we protect public investments in energy infrastructure as well as the workforce building that infrastructure. Attaching strong labor standards and workforce training policies to federal investments in the energy market can achieve both these goals -- while also producing substantial and far-reaching economic and social benefits.

Meeting the challenge of the climate crisis requires that offshore wind and other clean energy development is carried by a highly skilled and trained workforce who can complete projects safely, on time and on budget without costly project overruns, work stoppages or delays. Requiring the use of project labor agreements (PLAs) on these projects is therefore essential to meeting this challenge.¹

Project Labor Agreements: Background

A PLA is a comprehensive multi-employer/multi-union unitary collective bargaining agreement designed to cover entire construction project(s). PLAs are generally negotiated by the entity that controls contracting for the project and a council of labor organizations that represent all the trades that will be employed on the project. Through PLAs, the parties set standard work rules, establish various forums for communication and coordination, and prevent work stoppages with no-strike, no-lockout provisions, and speedy dispute-resolution mechanisms. They also set standard pay and benefit rates for each trade and address labor supply issues through provisions that commit the signatory unions to use their job referral procedures to ensure a steady supply of highly skilled workers. Both union and nonunion workers can register for referrals, and typically any contractor – union or nonunion – may bid for work on a covered project, as long as they agree to abide by the agreement and thereby to be held to the same standards.

PLAs are authorized by two sections of the National Labor Relations Act (NLRA) that apply exclusively to the construction industry. First, the NLRA generally requires a union to demonstrate that it has the support of a majority of an employer's current employees before the employer may recognize it as the employees' representative and the parties may negotiate a

¹ Much of the information provided herein has been reproduced with permission from the IBEW's comments on the Bureau of Ocean Energy Management's (BOEM's) *Pacific Wind Lease Sale 1 (PACW-1) for Commercial Leasing for Wind Power on the Outer Continental Shelf in California*, Docket No. BOEM-2022-0017, 87 FR 32443 (May 31, 2022). The IBEW's comments are available at https://downloads.regulations.gov/BOEM-2022-0017-0034/attachment_1.pdf.

collective bargaining agreement. However, NLRA Section 8(f)² authorizes unions and employers in the construction industry to enter into pre-hire agreements that will apply after the employer hires workers and begins construction. Second, although NLRA Section 8(e)³ generally prohibits agreements that limit the parties with which an employer may do business, the Section's construction industry proviso permits agreements to limit work on a construction project to entities that agree to be bound by the contract.

Congress enacted these provisions to accommodate the unique characteristics of contracting and employment in the construction industry. First, contractors need predictable costs and a steady supply of skilled labor. Rather than carrying a stable workforce, contractors often hire employees on a short-term basis, making post-hire collective bargaining difficult.⁴ Second, work on a construction job is rarely, if ever, let to a single entity that performs all the work with its own employees. Instead, contracts are commonly let to multiple contractors and subcontractors, each performing part of the job.⁵ PLAs address these issues by establishing a single labor relations structure that applies to all contractors, subcontractors and employees operating on the construction project for the project's entire duration.

Value of PLAs Recognized by both Public and Private Sector

PLAs have been used in both the public and private sector for decades, and the value of ensuring high labor standards on offshore wind development has been recognized both by governments providing support for these projects and by developers undertaking them.

The Federal Government has used PLAs to systematize labor relations on its large and complex construction projects since at least 1938.⁶ The Department of Energy has long used PLAs for its construction projects at the Hanford Site in Washington State, the Savannah River Site in South Carolina, the Oak Ridge Reservation in Tennessee, the Nevada Test Site, and the Idaho National Laboratory. The Federal Acquisition Regulatory Council reported in 2010 that 21 of 25 DOE construction projects were either covered or slated to be covered by PLAs.⁷ The Tennessee Valley Authority has also long had a PLA in place for all its construction across its vast site. And during the Obama Administration, the Naval Facilities Engineering Command used a PLA for its P-990 Explosive Handling Wharf 2 project at Naval Base Kitsap at Bangor Trident Base in Silverdale, Washington; the Army, Navy, Coast Guard, and Air Force used PLAs

² 29 U.S.C. § 158(f).

³ 29 U.S.C. § 158(e).

⁴ *Building and Construction Trades Council v. Ass'd Builders and Contractors*, 507 U.S. 218, 231 (1993) (“*Boston Harbor*”).

⁵ *See Woelke & Romero Framing, Inc. v. NLRB*, 456 U.S. 645, 657 (1982).

⁶ *See, e.g.*, U.S. Gen. Accounting Office, *Project Labor Agreements: The Extent of the Use and Related Information* at 4, Pub. No. GAO/GGD-98082 (1998) (tracing the use of PLAs on federal and other publicly funded projects back to the construction of the Grand Coulee Dam in Washington State in 1938 and the Shasta Dam in California in 1940).

⁷ “Use of Project Labor Agreements for Federal Construction Projects,” 75 Fed. Reg. 19168, 19169-70 (Apr. 13, 2010) (FAR Final Rule implementing President Obama's Executive Order 13502).

for a series of housing projects in Hawaii; and the GSA used PLAs on a number of its projects, including the A.J. Celebrezze Federal Building in Cleveland, Ohio, the Lafayette Building Modernization project in Washington, D.C., and a portion of the \$4 billion Department of Homeland Security Headquarters Campus in Washington, D.C., which the GSA describes as the largest construction project in the agency’s history.

The U.S. Department of Labor has described the first Federal PLAs as designed to “meet[] the needs of massive projects such as the construction of the St. Lawrence Seaway [and] the Alaska Pipe Line, which last for several years, pose special problems of manning and work rules, and involve huge sums of money, a consortium of several contractors, and a great deal of public interest and . . . public funds.”⁸ Offshore wind development will pose precisely these challenges, making the use of PLAs particularly appropriate: PLAs can help ensure that these projects, which will pose special problems and are being undertaken with considerable “public interest and . . . public funds,” enjoy a steady supply of skilled tradespersons, all working under a common and well-articulated set of rules.

Along with Maryland and New York, California has recently passed legislation conditioning approval of offshore development on commitments by the developers to use PLAs or, at the very least, to adhere to the kinds of labor standards commonly embodied in these agreements. California’s legislation, enacted in 2021, requires the State’s Energy Commission to evaluate and quantify the maximum feasible capacity of offshore wind to achieve certain benefits, including employment, reliability and decarbonization benefits, and to establish offshore wind planning goals – several of which can be accomplished by using a PLA. The legislation requires the Energy Commission to work with stakeholders, including labor organizations, state, local, and federal agencies, and the offshore wind energy industry to identify suitable wind energy areas in federal waters sufficient to accommodate the state’s offshore wind planning goals.⁹ In doing so, the Energy Commission is required to consider twelve factors, including “the need to develop a skilled and trained offshore wind workforce”¹⁰ and “the need for reliable renewable energy that accommodates California’s shifting peak load.”¹¹ The Energy Commission is also required to develop a plan to improve waterfront facilities to support a range of floating offshore wind development activities, including construction and staging of foundations, manufacturing of components, final assembly, and long-term operations and maintenance facilities.¹² In developing the waterfront facilities improvement plan, the Energy Commission is required to consult with “representatives of key labor organizations and apprenticeship programs that would be involved in dispatching and training the construction workforce...”¹³ This plan must also include “an analysis of the workforce development needs of

⁸ U.S. Dept. of Labor, Labor Management Services Administration, *The Bargaining Structure in Construction: Problems and Prospects* at 14 (1980).

⁹ Cal. Pub. Res. Code §§ 25991-25991.8.

¹⁰ *Id.* at § 25991.1(b)(2).

¹¹ *Id.* at § 25991.1(b)(4).

¹² *Id.* at § 25991.3(a).

¹³ *Id.* at § 25991.3(c).

the California offshore wind energy industry, including occupational safety requirements, the need to require the use of a skilled and trained workforce to perform all work...” and “recommendations for workforce standards for offshore wind facilities and associated infrastructure, including, but not limited to, prevailing wage, skilled and trained workforce, apprenticeship, local hiring, and targeting hiring standards, that ensure sustained and equitable economic development benefits.”¹⁴

Value of PLAs Recognized by the Offshore Wind Industry

The Block Island Wind Farm (BIWF), a pilot project consisting of 5 turbines, was the first offshore wind farm built off the United States’ coast. Deepwater Wind, its owner, determined at the outset to enter into PLAs with the Rhode Island Building and Construction Trades Council (RIBCTC) for construction of both an onshore turbine fabrication facility and the offshore wind farm. Jeffrey Grybowski, who served as Deepwater Wind’s CEO during BIWF’s planning and construction, explained the company’s reasons for entering into the PLA in a letter touting the project’s success:

As the BIWF was the first commercial offshore wind farm in the United States, there was no precedent to follow in constructing this project. Its challenges were unique and complex. It was therefore very important that we used the highest skilled craftsmen and women in the industry. Moreover, since our project was being completed in the Atlantic Ocean over 15 miles from the mainland coast, safety of the workforce was paramount.

After a thorough analysis of the marketplace, we decided that the best way to safely and timely complete this project was to utilize local union craftsmen and women. As a consequence, we implemented a PLA [which . . .] contractually bound the local trade unions to provide skilled labor in a timely and non- discriminatory basis; had mechanisms to expedite any potential disputes, and avoid work stoppages; and, included provisions that synchronize work schedules that overrode inconsistent or inefficient provisions of the trades' collective bargaining agreements.

These foregoing benefits of our PLAs ensured the cost, schedule, and time certainty challenges of our project were met. Moreover, it was essential to having our project completed safely, and within budget. Accordingly, these PLAs were essential tools in ensuring that Rhode Island had the first commercial offshore wind farm in the United States.¹⁵

Soon after BIWF was complete, the IBEW joined the Business Network for Offshore Wind, a nonprofit that connects groups looking to work in the offshore wind industry with some of the primary developers in this space. In 2021, Ørsted (which acquired Deepwater Wind in 2019 and now operates BIWF) entered into a PLA with the RIBCTC for construction of a facility

¹⁴ *Id.* at § 25991.3(b)(2)-(3).

¹⁵ January 31, 2020, Letter from Jeffrey Grybowski to Michael F. Sabitoni, President, Rhode Island Building & Construction Trades Council (Attachment to Comments filed by North America’s Building Trades Unions [NABTU] on BOEM’s NY Bight PSN, available at <https://www.regulations.gov/comment/BOEM-2021-0033-0074>).

at the Port of Providence, intended to fabricate and assemble platforms for wind farms throughout the Northeast.¹⁶

In May 2021, BOEM approved the first commercial-scale offshore wind farm to be built in the U.S. and permitted in federal waters. The 800 MW project will be located 15 miles off the coast of Martha's Vineyard, Massachusetts. The owner, Vineyard Wind, has entered into a PLA with the Southeastern Massachusetts Building and Construction Trades Council, which, like the BIWF PLAs, is designed to ensure the timely and successful completion of the project by establishing standardized working conditions tailored to offshore work; mechanisms for resolving disputes; commitments to avoid work stoppages; and systems to ensure consistent access to skilled workers. The agreement also commits Vineyard Wind to make substantial investments in training a workforce to perform turbine work and in pre-apprenticeship training and recruitment to provide low-income residents with the opportunity for employment on the project and a career in the construction industry.

US Wind, which holds a lease to establish offshore wind farms off the Maryland coast, has committed to building its projects with labor union workers and has signed labor agreements with the Baltimore-DC Building and Construction Trades Council, IBEW and other unions.¹⁷

On May 5, 2022, Ørsted North America, Inc. and North America's Building Trades Unions (NABTU) signed a National Offshore Wind Agreement (NOWA), a PLA to construct the company's offshore wind farms with an American union workforce.¹⁸ The first agreement of its kind, the NOWA "sets industry on a course to build an equitable offshore workforce with family-sustaining careers," "creates apprenticeship and career opportunities for communities most impacted by environmental injustice," and "ensures projects will be built with the safest and best-trained workers in America."¹⁹ The NOWA applies to all components of construction connected with any wind farm projects Ørsted undertakes along the Eastern Seaboard, from Florida to Maine. The NOWA built upon prior partnerships with the South Jersey Building and Construction Trades Council, the Rhode Island Building and Construction Trades Council, and the New York Greater Capital Region Council. It is designed to foster a diverse, equitable, and inclusive workforce, while expanding opportunities in offshore wind to frontline communities, and includes provisions for diversity targets, local training programs, and workforce diversity performance monitoring.²⁰

¹⁶ Alex Kuffner, *Offshore Wind Developers Announce ProvPort Facility*, The Providence Journal, (Apr. 14, 2021), <https://www.providencejournal.com/story/news/2021/04/14/offshore-wind-developers-announce-24-million-facility-provport/7220559002/>.

¹⁷ Lorraine Mirabella, *US Wind moves ahead with Sparrows Point manufacturing hub for offshore wind farms in Ocean City and East Coast*, Baltimore Sun, (Feb. 11, 2022), (<https://www.baltimoresun.com/business/bs-bz-us-wind-progress-offshore-wind-sparrows-point-manufacturing-20220211-kugi3orm5zfs3m7nfce7ngqqxm-story.html>).

¹⁸ Press Release, Ørsted, North America's Building Trades Unions and Ørsted Agree to Build an American Offshore Wind Energy Industry with American Labor, (May 5, 2022), <https://us.oreded.com/news-archive/2022/05/national-offshore-wind-agreement>.

¹⁹ *Id.*

²⁰ *Id.*

PLAs Provide a Mechanism for Facilitating Expeditious and Orderly Development

A recent study found that contractors who are signatories to craft labor agreements are 21 percent less likely to experience delays in project completion times due to worker shortages and 14 percent less likely to have trouble filling craft worker positions. In addition, signatories were 8 percent more likely to add workers over the past year, indicating a stronger ability to staff up and recruit new workers, even in a tight labor market. Conversely, nonunion firms reported greater difficulty in filling craft worker positions: they were 27 percent more likely to report that their local pipeline for supplying well-trained craft workers was “poor” compared to signatory contractors.²¹ As explained above, PLAs mitigate the risk of project delays and work stoppages with no-strike, no-lockout, and speedy dispute-resolution provisions.

Ensuring a high level of coordination and cooperation is particularly crucial for wind farm projects on which workers will be operating far offshore. As Mr. Grybowski explained in describing Deepwater Wind’s experience with the BIWF’s PLA, the agreement’s provisions committing the unions to providing labor on a timely and non-discriminatory basis, its dispute resolution mechanisms, the commitments by both labor and management not to engage in work stoppages, and the ability to synchronize work schedules, were all critical to ensuring that the project was completed on time and within budget.

Requiring PLAs is also completely consistent with competition. Competition on publicly funded offshore wind projects has been keen: New York State’s procurement for its first wind farm projects, which required prospective lessees to enter into good faith negotiations for a PLA, garnered a total of 18 proposals from four developers, “the most competitive market response to date among all U.S. state offshore wind solicitations.”²² Moreover, as already described, major companies engaged in offshore wind farm construction – Ørsted North America, Inc., Equinor, Vineyard Wind, and US Wind -- have either already used, or have committed to use, PLAs on their projects.

Furthermore, when it comes to contractors and subcontractors, nothing in the PLAs negotiated for offshore work precludes any contractor from bidding for work on a covered project. Anyone qualified to perform the work can bid, as long as they are willing to abide by the agreement’s terms – terms the owner or general contractor has determined will best ensure the project’s safe and expeditious completion.

PLAs Ensure Access to a Well-Trained Workforce

²¹ Frank Manzo, Larissa Petrucci, and Robert Bruno, *The Union Advantage During the Construction Labor Shortage: Evidence from Surveys of Associated General Contractors of America Member Firms* (May 10, 2022), <https://illinoiseipi.files.wordpress.com/2022/02/ilepi-pmcr-construction-labor-shortage-agc-report-final.pdf>.

²² NYSERDA, *Launching New York's Offshore Wind Industry: Phase 1 Report*, Rep. No. 19-41 at 32 (Oct. 2019, rev’d) at S-2.

The organized sector of the construction industry operates one of the largest post-secondary education programs in the country, with construction unions and contractors jointly operating over 1,600 registered apprenticeship programs that invest \$1.3 billion annually in training programs. These programs have prepared hundreds of thousands of workers for good, middle-class careers. The unions are therefore poised to deploy well-trained, skilled workers to construct the wind farms and their associated facilities. Apprenticeships are vital to creating a strong economy and rebuilding the middle class, and are the most effective, time-tested method of training construction workers in an industry replete with physical hazards. In addition, these programs provide a reliable supply of workers that can successfully complete construction projects, thereby ensuring a return on the public investment. Furthermore, PLAs also provide for healthcare, pension contributions, and training. The apprenticeship programs funded through the PLA and other union agreements in the area provide both classroom and on-the-job training, enabling apprentices to “earn while they learn,” which is particularly important for new entrants from disadvantaged communities.

Measures to promote quality training for the next generation of construction workers are critical. In a recent survey of construction firms across the country, over 70 percent of respondents reported that they anticipate a labor shortage to be the biggest hurdle in coming years.²³ According to the Centers for Disease Control and Prevention, the industry’s average age of retirement is 61, and more than one in five construction workers are currently older than 55. Skilled craft labor variability poses major risks to project safety and leads to significantly higher growth in cost overrun, time overrun, and reduced productivity.²⁴ These risk factors compound each other. For example, because projects with skilled craft worker shortages face scheduling constraints, workers are frequently scheduled to work overtime, which “can cause physical fatigue on craft workers [and] seriously affect the implementation of construction site safety.”²⁵ As such, research has shown a *positive exponential relationship* between increased skilled craft labor recruiting difficulty and Occupational Safety and Health Administration (OSHA) incidents.²⁶ Union apprenticeship programs mitigate this risk. Empirical studies have shown that registered apprenticeship requirements on public works projects produce significant benefits for procurement authorities because apprentices always work under the supervision of experienced journey-level workers.²⁷ In addition to mitigating the risk factors discussed above, research has

²³ See Associated General Contractors of America, 2020 Construction Outlook Survey.

²⁴ Hossein Karimi, *Quantitative Analysis of the Impact of Craft Labor Availability on Construction Project Performance*, University of Kentucky (2017), https://uknowledge.uky.edu/cgi/viewcontent.cgi?article=1059&context=ce_etds; see also Allison L. Huang, et al., U.S. Department of Commerce, National Institute of Standards and Technology, Office of Applied Economics, *Metrics and Tools for Measuring Construction Productivity: Technical and Empirical Considerations* (Sept. 2009), http://www.nist.gov/customcf/get_pdf.cfm?pub_id=903603.

²⁵ Karimi, *supra* note 24 (internal citations omitted).

²⁶ *Id.*

²⁷ See Washington State Department of Labor and Industry & Washington State Department of General Administration, *Apprenticeship Utilization 2009 Legislative Update* (Dec. 2009); Washington State Department of Transportation, *Apprenticeship Utilization Advisory Committee Report* (Jan. 2008). See also U.S. Office of Management and Budget, *Task Force on Apprenticeship Expansion: Final Report to the President of the United States* (2018), <https://omb.report/icr/201812-1205-001/doc/88448201> (apprenticeship programs increase

shown that apprenticeship requirements generally increase the number of project bidders and reduce bid costs for affected projects.²⁸

Union referral systems provide the project's contractors with easy access to workers whom the unions have screened, according to objective criteria, to ensure they meet the job requirements. While the contractors maintain final say over who they hire, the referral system is designed to quickly bring them qualified applicants. When local workers are in short supply, unions put out the call to their affiliates around the country, whose members have similarly been trained with portable skills.

The unions and companies embarking on these projects are nonetheless cognizant that there are aspects of offshore wind farm construction that present new challenges to even the most skilled of America's tradespersons. To address that reality and prepare for the future, for example, the Vineyard PLA obligates Vineyard Wind to recruit a certain number of workers to be given on-the-job training in offshore turbine construction, and Vineyard Wind and the original equipment manufacturer's prime contractor have each committed to invest \$500,000 to establish a national training center "to accelerate the development of a U.S.-based workforce for future offshore wind projects."²⁹

PLAs Ensure Safe Workplaces

PLAs commonly include sophisticated health and safety provisions that dictate overall safety practices, create safety committees and mandate safety trainings to avoid costly delays associated with injuries and poor safety records. Moreover, construction unionization is associated with lower industry and occupational fatality and injury rates.³⁰ A Canadian study of institutional, commercial and industrial construction found unionization 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.³¹ A recent report from New York found that of investigated workplace incidents, 78% of construction fatalities in the State and 68% of construction fatalities in New York City were non-union employees. The reasons are numerous, but two are obvious: First, construction firms with union workers are more likely to engage in

productivity and are a "key tool for addressing America's skills gap."); U.S. Department of Commerce and Case Western Reserve University, *The Benefits and Costs of Apprenticeship: A Business Perspective* (2016), <https://files.eric.ed.gov/fulltext/ED572260.pdf> (apprenticeship programs are cost-effective due to higher worker productivity, improved safety and project quality, reliable project staffing, and reduction in employee turnover).

²⁸ *Id.*

²⁹ Vineyard Wind PLA, Art. XX.

³⁰ Roland Zullo, "Right-to-Work Laws and Fatalities in Construction," 14 THE JOURNAL OF LABOR AND SOCIETY 225, 232 (Jun. 2011), <https://deepblue.lib.umich.edu/bitstream/handle/2027.42/98283/j.1743-4580.2011.00334.x.pdf?sequence=1>.

³¹ Institute for Work & Health, *Updating a Study of the Union Effect on Safety in the ICI Construction Sector* (Jan. 2021), https://www.iwh.on.ca/sites/iwh/files/iwh/reports/iwh_report_union_safety_effect_construction_update_2021.pdf.

safety best practices and are more likely to offer or require safety training.³² Second, because union members are more likely to come to the workplace after completing a registered apprenticeship program, they are more likely to engage in safe work practices.

This second point is demonstrated by comparing statistics in states with prevailing wage laws with those without, where there are fewer apprenticeship programs. A series of research studies shows that fatal and nonfatal injury rates in construction are substantially lower in states with prevailing wage laws.³³ For example, one peer-reviewed study found that nonfatal injury rates were up to 10 percent lower in states with a prevailing wage law.³⁴ Another found that in addition to increasing construction injury rates by up to 13.1 percent, repeals of state prevailing wage laws were associated with an increase in both the prevalence and severity of injuries, due in part to the lower investment in the kind of safety training provided in apprenticeship programs.³⁵

In short, PLAs ensure that employers will follow best practices when working on an organized worksite; that there is a commitment to fund programs to train workers to perform their work safely; and that those trained workers are referred to the projects in sufficient numbers so work can proceed safely.

PLAs Improve Diversity, Equity and Inclusion in the Construction Workforce

Numerous studies of Registered Apprenticeship Programs around the country show that these programs can significantly improve diversity and equity in the workforce.³⁶ One such study

³² Xuanwen Wang, PhD, Rebecca Katz, MPH, Xiuwen Sue Dong, DrPH, CPWR Data Report: Union Effect on Safety Management and Safety Culture in the Construction Industry (First Quarter 2018) (“The results confirm that labor-management cooperation is a win-win solution for improving safety management and safety culture at workplaces . . . , which benefits not only construction workers, but also construction contractors.”), <https://www.cpwr.com/wp-content/uploads/2018/05/Quarter1-QDR-2018.pdf>.

³³ Hamid Azari-Rad, *Prevailing Wage Laws and Injury Rates in Construction*, in *The Economics of Prevailing Wage Laws* 169-187 (Hamid Azari-Rad, Peter Philips, and Mark Pruseds, Ashgate Publishing 2005); Allison Dickson Quesada, Frank Manzo, Dale Belman, & Robert Bruno, *A Weakened State: The Economic and Social Impacts of Repeal of the Prevailing Law in Illinois*, Labor Education Program, School of Labor & Employment Relations, Univ. of Illinois at Urbana-Champaign (2013); Zhi Li et al., *The Effect of Prevailing Wage Law Repeals and Enactments on Injuries and Disabilities in the Construction Industry*, Public Works Management & Policy (2019).

³⁴ Azari Rad, *supra* note 33.

³⁵ Zhi Li, *supra* note 33.

³⁶ See, e.g., Frank Manzo and Robert Bruno, *The Apprenticeship Alternative: Enrollment, Completion Rates, and Earnings in Registered Apprenticeship Programs in Illinois*, Illinois Economic Policy Institute (Jan. 2020), <https://illinoisepi.files.wordpress.com/2020/01/ilepi-pmcr-the-apprenticeship-alternative-final.pdf> (finding that between 2000 and 2016, more than 74,000 construction apprentices (97 percent) were enrolled in joint labor-management programs, compared to less than 2,000 in employer-only programs, with joint programs enrolling 98 percent of all women, 99 percent of all African American apprentices, 98 percent of all Latino apprentices, and 97 percent of all military veterans); Building Trades of Minnesota, “Registered Apprenticeship in the Construction Trades,” <https://mntrades.org/apprenticeship/> (Approximately 5 percent of the total construction workforce were people of color, compared to 20.5 percent of union construction apprentices; apprenticeship completion rates for

compared union and nonunion construction apprenticeship programs in the Portland, Oregon area, and found that union apprenticeship programs provide significantly better outcomes overall for women and people of color compared to nonunion programs, and that union programs have greater apprenticeship diversity in terms of both gender and race.³⁷

The parties to the PLAs and MOUs negotiated for offshore wind farms have fully embraced these programs and the mission to ensure that members of disadvantaged communities share in the opportunities the wind farm projects bring. The Block Island PLA committed the parties to work with Building Futures, which operates an apprenticeship readiness program, to recruit and place low-income applicants from Rhode Island's urban areas and veterans into both pre-apprenticeship and apprenticeship programs. The parties also established a goal that at least 15% of the labor hours worked under the agreement would be performed by Building Futures graduates, with a particular emphasis on graduates from Providence. NABTU and Ørsted North America, Inc.'s PLA, which encompasses all of Ørsted North America's offshore wind development, includes provisions regarding the referral of women, minorities, and veterans for the projects. NABTU's Baltimore-DC Building and Construction Trades Council's agreement with US Wind contains similar commitments to establishing goals for women, minority and veteran participation in the projects and fostering apprenticeship, apprenticeship-readiness, and other training opportunities for these historically neglected groups.

Conclusion

A substantial body of research shows that the benefits of labor standards outweigh the costs.³⁸ Studies on the actual impacts of increases in minimum and living wages have found the price and employment effects to be negligible, while worker incomes have been substantially improved. In construction, numerous studies have shown that mandates for high-road labor standards have not raised costs where they have been implemented, as productivity improvements make up for higher wages and benefits. Moreover, cost increases due to higher compensation may lead to negligible or minimal overall cost increases, since labor costs are often a small percentage of production costs.

Meeting the challenge of the climate crisis will be determined by how quickly and efficiently renewable and low-carbon energy sources reach the public. Requiring PLAs on federal investments in the energy market can provide steady supply of skilled labor to build these

minority apprentices increased 339 percent between 2012 to 2019); Lawrence Mishel, Economic Policy Institute, *Diversity in the New York City union and nonunion construction sectors* (Mar. 2017), <https://www.epi.org/publication/diversity-in-the-nyc-construction-union-and-nonunion-sectors/>.

³⁷ Larissa Petrucci, PhD, *Constructing a Diverse Workforce: Examining Union and Non-Union Construction Apprenticeship Programs and their Outcomes for Women and Workers of Color*, University of Oregon, Labor Education and Research Center (2021), https://cpb-us-e1.wpmucdn.com/blogs.uoregon.edu/dist/a/13513/files/2021/11/Constructing_A_Diverse_Workforce.pdf.

³⁸ See, e.g., Carol Zabin and Jenifer MacGillvary, *Putting California on the High Road: A Jobs and Climate Action Plan for 2030* (June 2020), <https://laborcenter.berkeley.edu/wp-content/uploads/2020/08/Chapter-2-Demand-Side-Workforce-Policy-Levers-Putting-California-on-the-High-Road.pdf> (internal citations omitted).

projects and ensure a solid return on public investment, while also promoting safety, reliability and economic growth through worker empowerment.

Thank you for the opportunity to provide testimony on the essential role of union labor in bringing offshore wind energy to the west coast.