

Before the North Dakota Public Service Commission

**Laborers District Council of Minnesota and North Dakota
(LIUNA Minnesota and North Dakota)**

**Oliver Wind IV and Associated Transmission
Oliver and Mercer Counties**

Case No. PU-23-317, PU-23-318

Pre-filed testimony of Kevin Pranis

on behalf of LIUNA Minnesota and North Dakota

January 24, 2024

Q. Please state your name, the name of your employer, and your business address:

A. My name is Kevin Pranis. I currently serve as the Marketing Manager for LIUNA Minnesota & North Dakota, an affiliate of the Laborers International Union of North America, on behalf of my employer, the LIUNA Great Lakes Organizing Committee. My organization represents more than 13,000 skilled construction laborers engaged in the construction of building, civil, and energy infrastructure projects across Minnesota and North Dakota. My business address is 81 East Little Canada Road, St. Paul, Minnesota 55117.

Q. Please describe your qualifications:

A. For the past nine years, I have managed LIUNA's strategic growth programs and energy policy portfolio in Minnesota and North Dakota, including directing and conducting extensive research on a wide range of energy issues and projects. Prior to accepting my current position with LIUNA, I served as a directed national research and growth initiatives for LIUNA and the Change to Win Labor Federation.

I earned a Master of Arts degree in Social Sciences from the University of Chicago and have conducted quantitative and qualitative research on topics ranging from criminal justice policy to workforce to energy over the past 25 years. During that time, I have authored and participated in the development of numerous published reports and white papers.

Q. What is the purpose of your testimony?

A. First, I will summarize the findings of a research analysis that my colleague, Lucas Franco, and I produced to explore the likely socioeconomic impact of reliance on a local and non-local workforce to build the Oliver Wind IV project, which is provided as Attachment A.

Second, I will discuss the feasibility of building the Oliver Wind IV project and similar large wind projects in North Dakota using a construction workforce that consists of a majority local workforce.

Third, I will discuss the potential consequences of the approval of wind energy projects that employ few local construction workers to local workers, communities and the industry as a whole.

Fourth, I will discuss actions that the North Dakota Public Service Commission could take, consistent with its legal authority and the public interest, to maximize local benefits and minimize negative socioeconomic impacts of the Oliver Wind IV project and similar wind energy projects.

Q. Please describe the analysis that you and Mr. Franco produced on the potential economic impact of construction hiring on the proposed Oliver Wind IV project and explain the major findings of your analysis.

- A. Lucas Franco, our organization's Research Manager, and I undertook an analysis of the potential construction employment and associated economic impacts of the Oliver Wind IV project. We replicated a methodology that Mr. Franco developed with researchers from the North Star Policy Institute (NSPI) to examine the employment impacts of wind energy development in Minnesota. Our findings from the Oliver Wind IV project analysis are as follows:

First, we found that a project such as Oliver Wind IV that employs local workers can positively impact local residents and communities by generating career opportunities and injecting tens of millions of dollars in construction payrolls into the local economy. We project that building such a facility with a 70% local construction workforce would create 210 jobs for local workers and generate roughly \$25 million in local economic activity associated with construction payrolls when deferred fringe benefits are included.

Wind energy projects have the potential to create high-quality job opportunities for both experienced construction workers and new entrants to the industry. Our research indicates that North Dakota construction workers employed on wind energy construction projects will earn approximately \$56,000 in wages, roughly \$10,000 in health benefits and approximately \$10,000 in retirement benefits.

We find that the average local worker employed on a wind energy project can be expected to contribute roughly \$55,000 in direct local spending over the short term, after deducting taxes and savings and adding spending associated with health coverage. The same worker could contribute an additional \$10,000 over the long term as retirement savings are converted into retirement income. After applying a local spending multiplier, we expect each such job to generate almost \$92,000 in short-term economic activity and \$109,000 when retirement benefits are included.

Second, we found that employment of local construction workers to build a project like Oliver Wind IV Farm can be expected to deliver significant socioeconomic benefits

compared to the employment of non-local workers. We find that the typical local worker employed on a wind farm can be expected to contribute over three times more than a non-local worker in terms of local spending (\$56,000 vs. \$15,600), and their contribution can be four times greater over the long term (\$65,000 vs. \$15,600).

When this incremental difference is applied to a project similar to Oliver Wind IV Farm, we find utilization of a largely local workforce (50% to 70% local) is associated with roughly \$7.6 million in incremental short-term economic activity compared to utilization of a largely non-local workforce (10% to 30% local) -- a figure that grows to \$9.8 million over the long term as retirement savings become retirement income.

Third, we found that thousands of North Dakota residents could benefit from new construction career opportunities created by a large energy project such as Oliver Wind IV. There are more than 6,780 workers employed in food preparation and serving related jobs that pay an average of \$15 per hour and typically offer few, if any, fringe benefits in North Dakota Planning Region 7.

Further, there are thousands of construction workers who could gain higher pay, better benefits, and career opportunities by working on the project. A job on the Oliver Wind IV project could be an opportunity for career advancement for such workers. Finally, Oliver Wind IV could provide opportunities for workers who build and maintain conventional coal and gas-fired power plants to expand their skill sets and maintain stable employment as North Dakota's energy supply becomes more diverse.

Like large pipeline projects, wind energy can create opportunities for new entrants and advancement in the construction industry. These projects do so directly in the form of entry-level jobs on a project, and indirectly, by attracting local workers from other sectors of the construction industry whose positions must be backfilled. These opportunities are only generated, however, to the extent that contractors employ local rather than non-local construction workforce.

The construction of large energy facilities such as the proposed Oliver Wind IV project can offer unique opportunities for current construction workers to advance their careers and for new workforce to get a foot in the door. Wind and other large energy projects create jobs with skill and experience requirements ranging from a small number of entry-level positions that can be filled by men and women with no background in the industry who are willing to show up on time, work hard, and follow directions; to positions that can be filled by men and women with some experience working on

building or highway projects; to positions that can only be filled by men and women who have extensive wind industry experience.

Q. Do you conclude that it is feasible for a project such as Oliver Wind IV can be built using a largely local workforce? And if so, what is the basis for your conclusion?

- A. We are confident that Oliver Wind IV can be built using local workers because our members have participated in construction of similar projects where locals made up a majority of the workforce. We also know from past experience with other large energy projects, including the Dakota Access Pipeline, that our union and our brothers and sisters in other crafts are capable of recruiting and training local workers to fill positions that do not require extensive industry experience.

LIUNA has a roster of skilled local construction workers, including members with wind industry experience. The same is true of unions that represent Operating Engineers, Iron Workers, Millwrights, and Electricians. In addition to current membership, our organizations have a proven ability to recruit new workforce and to deliver state-of-the-art classroom and hands-on training to both new members and current members learning specialized skills ranging from concrete placement to the operating and rigging of the heavy cranes used to install wind turbines. There are also thousands of lower-paid construction workers in North Dakota who might welcome the opportunity to work on such a project.

Oliver Wind IV could draw from a pool of experienced construction workers in North Dakota, including residents of central North Dakota who have historically performed coal-plant maintenance, but who could benefit from a chance to expand their skills and employment opportunities. We have seen wind developers step up to the plate and deliver projects that employ majority-local workforce in rural areas of Southwest Minnesota, and other North Dakota wind project owners have indicated plans to follow that example, including Apex Clean Energy, EDF Renewables and Xcel Energy.

Q. What is the basis for your concern about the potential reliance on non-local workers to build the Oliver Wind IV project?

- A. Two recent wind energy projects, NextEra's Northern Divide Wind and Enel's Aurora Wind, have expanded North Dakota's wind generation capacity by 499 megawatts (MW) and yet each created relatively few local job opportunities based on our research. These projects had the potential to create hundreds of jobs for local residents in the midst of a

COVID-induced economic crisis. Instead, they appear to have created just a handful of local jobs while employing hundreds of workers from across the country.

We estimate based on field observations that North Dakotans account for fewer than 10% of construction workers on each project. Collectively, we estimated that the use of less than 10% local workers on these two projects cost North Dakota communities \$20-\$29 million in economic investment. We hope that Oliver Wind IV will significantly improve on the performance of these projects with respect to local construction hiring.

Q. Why is the employment of a local workforce on wind energy construction projects a concern for your organization and your members, and why should it be a concern for the Commission?

- A. Our organization is concerned about employment of local workers on wind energy projects for two key reasons. First, we believe that outsourcing construction of wind energy jobs undercuts benefits to North Dakota residents causing local workers to miss out on good family-supporting jobs and local communities to miss out on millions in socioeconomic investment. Second, we believe that a reliance on non-local workers undercuts community support for wind energy development.

We are confident that the project developer can work with their EPC contractor to employ a majority local workforce because we have seen projects like Tatanka and Sunflower Wind successfully employ a majority local workforce. Unfortunately, this commitment to local communities is not always the case. In a 2019 investigation, we found that local workers accounted for fewer than 20 percent of wind energy construction jobs on large wind projects under construction in 2018, while a more recent analysis found that local workers accounted for less than 10% of the workforce on Northern Divide Wind and Aurora Wind.

This reliance on non-local labor represents more than just a missed opportunity. We are in the midst of a transmission capacity crunch across the upper Midwest. It is unlikely that all of the proposed projects in North Dakota will be about to move forward given this limited transmission capacity, as well as the limited investor capital available to finance projects. Under these conditions, approval of one project can “crowd out” other projects that must compete for customers, financing or transmission.

Approving a project with limited local employment not only has short-term negative impacts by undercutting the socioeconomic benefits of the project, but it can end up hurting local workers and communities down the road by crowding out better projects that could have delivered many more jobs and much greater economic stimulus.

Additionally, we are worried that the approval of projects that create few local jobs could undermine public support for wind energy development and confidence in the permitting process.

Q. To what extent does the use of non-local workers impact displaced coal industry workers?

- A. The wind energy industry's continued reliance on non-local workers comes at a time when the future is uncertain for many conventional energy workers. North Dakota coal and oil industries have historically created a significant number of high-quality local jobs. The decline of the coal industry in particular could displace thousands of workers. The Lignite industry currently provides employment to approximately 15,000 North Dakotans. While Minnkota and Rainbow Energy propose to invest in carbon capture at coal-fired power plants, the feasibility of the proposals remains uncertain. Coal has declined from 67% of total power production to just 19% over the past decade, and North Dakota workers that rely on the coal economy cannot afford to continue to be left behind by the wind industry

As the reliance on coal declines in North Dakota, North Dakota workers will lose family-supporting jobs. It is critical that these workers have opportunities to work on major renewable energy projects. This is particularly true in the case of Oliver Wind IV due to the project's proximity to Bismarck and other central North Dakota communities that are home to workers who have historically made their living building and maintaining coal-fired coal plants.

Q. What can the North Dakota Public Service Commission do, consistent with its legal authority, to maximize the local benefits and minimize unintended consequences of wind energy development?

- A. The North Dakota Public Service Commission has authority to consider local workforce impacts, including utilization of local construction labor, when evaluating the suitability of proposed wind energy projects for a site permit under Title 69, Article 6, Chapter 8 of the North Dakota Administrative Code. The Commission is further authorized under Chapter 68 to condition the issue of a permit, in proper cases, on the adoption of policies and practices that the Commission finds necessary to maximize such benefits. We believe that the Commission can and should exercise its authority where it finds local job impacts to be relevant to its consideration of site permit applications.

Q. Have any neighboring states taken similar steps to maximize the local employment benefits and increase transparency in wind energy development?

A. Minnesota's Public Utilities Commission has recently taken action in both areas. In late 2018, Minnesota's Commission began requiring successful applicants for permits to build or retrofit wind energy facilities to submit quarterly reports on the number of Full-Time Equivalent workers (FTE) or hours worked by local workers -- including both Minnesota residents and residents of neighboring states living within 150 miles of the project -- and non-local workers.

Minnesota's Commission recognized that it made little sense to require collection of detailed information on environmental impacts, but no information on how many local residents were eventually employed on projects that promised to create hundreds of new construction jobs. Permits have been issued for multiple wind and solar energy construction projects since the Commission began requiring local hire reporting.

In December of 2018, Minnesota's Commission also made employment of local construction workers an explicit consideration in a case where the Commission referred applications for a Certificate of Need and Site Permit to contested case hearings based on concerns over expected reliance on non-local construction labor. The proposed project was subsequently sold to another different developer and is expected to create many more employment opportunities for local workers.

Use of local workforce has increased substantially in Minnesota since 2018 according to MPUC Chair Katie Sieben who testified before a U.S. Senate Subcommittee on Rural Development and Energy in 2021 that local participation in utility-scale wind and solar installation had jumped "from 20 to upwards of 70 percent".

Q. Does this conclude your testimony?

A. Yes

Pranis Testimony - Appendix A

**Maximizing The Benefits of Wind Energy
Development Through Local Construction Hiring:
The Oliver Wind IV Project Case Study**

January 2024

Lucas Franco and Kevin Pranis



Maximizing The Benefits of Wind Energy Development Through Local Construction Hiring: The Oliver Wind IV Project Case Study

January 2024

Executive Summary

North Dakota's wind energy economy is booming. The state ranks ninth in the nation in net generation from wind energy. In 2021, North Dakota had 4,302 megawatts of installed wind energy capacity.¹

The proposed Oliver Wind IV project will expand North Dakota's clean energy portfolio, while potentially creating 300 family-supporting construction jobs, of which more than 150 could potentially be filled by local workers.² Yet the full economic benefits of the project will only be realized to the extent that local workers are given the opportunity to fill well-paid construction jobs generated by the project. The wages and fringe benefits paid to local workers help to boost local economies, while non-local workers typically take their paychecks home with them when the project is complete.

To better understand the consequences of using local versus non-local workers on the Oliver Wind IV project, we have analyzed the potential economic impact of the project. We find the following:

- If between 50% and 70% of construction work on a wind installation the size of the proposed Oliver Wind IV Project is performed by local workers, construction payrolls can be expected to generate approximately \$17.7 million to \$21.5 million in local economic activity.
- If just 10% to 30% of construction work is performed by local workers, consistent with patterns on recent wind projects, the estimated economic impact would be just \$10 million to \$13.9 million.
- The use of a largely non-local construction workforce (10% to 30% local) to build Oliver Wind IV could cost local communities \$7.6 million in lost payroll and local economic activity compared to a project that employs a largely local workforce (50% to 70%).
- When retirement benefits are included, the expected difference between a largely local and non-local project grows by more than \$2 million to approximately \$9.8 million.

The reliance on non-local workers to build North Dakota wind farms is an all too common problem that has cost local communities millions of dollars in lost economic benefits in recent years. The two most recent wind energy projects, NextEra's Northern Divide Wind and Enel's Aurora Wind, expanded North Dakota's wind generation capacity by 499 megawatts

¹ Nebraska Department of Environment and Energy, "Wind Facilities' Installed Capacity by State," <https://neo.ne.gov/programs/stats/inf/205.htm>.

² Oliver Wind IV, LLC, "Application for a Certificate of Site Compatibility," submitted September 2023, page 3-10, available here: <https://www.psc.nd.gov/database/documents/23-0317/001-010.pdf>.

(MW), and yet each appears to have created relatively few local job opportunities based on our research. These projects had the potential to create hundreds of jobs for local residents in the midst of a COVID-induced economic crisis. Instead, the projects evidently created a handful of jobs for North Dakotans and residents of neighboring states, while employing hundreds of workers from across the country.

We estimate based on field observations that North Dakota residents accounted for fewer than 10% of construction workers on each project.³ Collectively, we estimated that the use of less than 10% local workers on these two projects costs North Dakota communities \$20-\$29 million in lost economic activity.

The wind energy industry's continued reliance on non-local workers comes at a time when many conventional energy workers are facing layoffs. North Dakota's coal and oil industries have historically created high-quality local jobs. The decline of the coal industry in particular could displace thousands of workers. Currently approximately 15,000 people work in jobs that are tied to the lignite industry in North Dakota.⁴

While plans by Minnkota and Rainbow Energy to install carbon capture technology at existing coal plants could deliver a win for North Dakota workers, the prospects are far from certain. Coal accounted for 67% of total power production in 2010, while it accounted for only 19% in 2021.⁵ As the reliance on coal declines in North Dakota, local workers will lose good family-supporting jobs. It is critical that these workers have opportunities to work on major renewable energy projects. Unfortunately, our research indicates that, in most cases, a large majority of wind energy construction jobs have gone to non-local workers in recent years.

North Dakota Public Service Commission ("Commission") has authority to consider local workforce impacts, including utilization of local construction labor, when evaluating the suitability of proposed wind energy project for a site permit under Chapter 69-06-08 of the North Dakota Administrative Code. But ultimately it is developers such as NextEra that have the power to maximize the local benefits of wind energy projects by committing to greater efforts to prioritize employment of local workers.

Economic Impact of Local versus Non-local Hiring on Construction of the Proposed Oliver Wind IV project

Wages and Benefits

³ Lucas Franco, "The High Cost of Labor Outsourcing: A Case Study of Two North Dakota Wind Projects," Local Jobs North Dakota and Minnesota, January 2021.

⁴ State Historical Society of North Dakota, "How Coal Production Affects the People of North Dakota," North Dakota Studies, module available here: <https://www.ndstudies.gov/energy/level2/module-3-coal/how-coal-production-affects-people-north-dakota>.

⁵ Karin Rives, "ND plant sale a rare win for coal-fired generation boosters," S&P Global Market Intelligence, July 1, 2021.

The creation of construction jobs is not the only local benefit of wind energy development, but it is among the most significant, in terms of economic impacts alongside the lease and tax revenues that wind energy projects typically deliver to local residents and host communities. Wind energy construction jobs can provide middle-class wages and high-quality health and retirement benefits.

Construction job opportunities are frequently cited as a benefit of wind energy development in both media coverage and permitting processes. But until recently, little attention has been paid to the impact of decisions by developers and contractors to build projects with a largely local or non-local construction workforce. In 2018, North Star Policy Institute, a policy think tank based in St. Paul, undertook a study of wind energy construction in Minnesota and found that tens of millions of dollars in anticipated local economic benefits are at risk due to use of non-local labor. The findings are published in *Catching the Wind: The impact of local vs. non-local hiring practices on construction of Minnesota wind farms*, a report that was published in June of 2018.⁶

In this brief, the authors have employed the methodology used in *Catching the Wind* to estimate the local economic impact of the use of local and non-local labor on the construction of a wind energy facility, such as the proposed Oliver Wind IV project. Our analysis begins by estimating the wages and benefits that would be paid to construction workers.

We can estimate pay and benefits rates based on the prevailing wage rates established by the U.S. Department of Labor for heavy industrial construction projects in North Dakota. These prevailing wage rates are calculated based on wage surveys submitted by local construction employers and trade unions. In this case, we believe that the prevailing wage rates provide a conservative, low-end assumption since industry sources indicate that higher levels of fringe benefits are typically paid to Operating Engineers and Laborers on energy construction projects in central North Dakota.

Wind farm construction requires the skills of construction laborers, ironworkers, millwrights, operating engineers, and electricians. Workers in these trades typically earn between \$24 and \$36 per hour in wages and \$12 to \$23 in hourly fringe benefit contributions (e.g. healthcare, pension and vacation payments) depending on their trade. We estimate the average wage of a wind energy construction worker based on an average of the rates for each craft.

⁶ Katie Hatt and Lucas Franco, "Catching the Wind: The impact of local vs. non-local hiring practices on construction of Minnesota wind farms," North Star Policy Institute, June 2018, available here: <https://northstarpolicy.org/catching-the-wind-the-impact-of-local-vs-non-local-hiring-practices-on-construction-of-minnesota-wind-farms>

TABLE 1: Prevailing Wage North Dakota (Oliver County)		
North Dakota Prevailing Wage		
Craft	Wage	Fringe Rate
Laborer	\$20.47	\$0.00
Millwrights/Ironworker	\$38.92	\$25.52
Operator	\$32.35	\$13.83
Electrician	\$35.58	\$15.39
AVERAGE (standard)	\$31.83	\$13.68
Overtime	\$47.74	

Based on interviews with wind construction workers and contractors, we found that overtime work is common as wind energy construction workers typically work long hours. In northern climates where the construction season is limited, our research indicates that the typical wind energy project may last six months, during which time workers average 60 hours per week, for a total of roughly 1,500 hours -- 1,000 hours of straight time (\$31.83 per hour) and 500 hours of overtime (\$47.74 per hour).

Spending Patterns of Local and Non-Local Workers

Local and non-local workers are assumed to perform similar work and earn similar wages on a wind farm construction project. Non-local workers are defined as workers that do not maintain a permanent residence within a daily commuting distance of the project. Non-local workers secure temporary lodgings and generally receive per-diem payments from employers to offset lodging and food costs.

Workers on wind energy projects in North Dakota typically receive per diem payments of roughly \$100 according to interviews with workers and other industry professionals.⁷ Per diems are generally provided on working days, so non-local workers on a North Dakota wind project could be expected to receive per-diem payments six days per week over the six-month duration of a project. Thus, we estimate the total value of per-diem payments to a non-local worker employed on a North Dakota wind project to be \$15,600 (\$100 x six days a week x 26 weeks).

We expect local workers on a North Dakota wind project to earn approximately \$55,700 in pay, excluding benefits, while non-local workers should receive gross pay totaling \$71,300, excluding benefits. These estimates are calculated based on 1,000 hours of work at the standard pay level (1000 x \$31.83) plus 500 hours of overtime (500 x \$47.74). For non-local workers, we add per-diem to their total pay (\$55,700 + \$15,600).

⁷ Per diem rates are based on interview and survey data from past and current wind farm construction workers.

TABLE 2: Gross Pay for Local and Non-Local Workers		
	Local Worker at 1500 hours	Non-Local Worker
Wages	\$55,700.31	\$55,700.31
Per Diem	\$0.00	\$15,600.00
Gross Earnings	\$55,700.31	\$71,300.31

We can estimate the amount the average local worker spends in their local area by deducting taxes and savings, and by applying an estimated share income that will be spent in a local area based on the work of economists that have studied the economic impact of local payrolls. The following table presents expected tax payments and savings for each worker:

TABLE 3: Deductions		
Deductions	Local Worker	Non-Local Worker
Effective Federal (8.62%)	\$4,802.00	\$4,802.00
Effective FICA (7.65%)	\$4,261.00	\$4,261.00
Effective State (.0%)	\$0.00	\$0.00
Total Tax (16.27%)	\$9,063.00	\$9,063.00
After Tax Income	\$46,637.31	\$46,637.31
Savings (4.1%)	\$1,912.13	\$1,912.13
After Savings	\$44,725.18	\$44,725.18
Current Fringe Benefits	\$10,261.11	\$10,261.11
Deferred Fringe Benefits	\$10,261.11	\$10,261.11
Total Local Spending Per Worker	\$52,236.97	\$15,600.00
Difference in Local vs. Non-Local Spending	\$36,636.97	

These calculations are based on standard tax rates for North Dakota. The “effective” tax rate is based on an analysis of the income bracket in which workers in this income bracket are situated. Per diems are generally not treated as taxable income.⁸

⁸ Tax estimates corroborated by Smart Asset’s online tax estimator. The full estimator is available at: <https://smartasset.com/taxes/income-taxes#SRQvQjkXhc>.

The average American currently saves approximately 4.1% of their income.⁹ If we assume this trend holds, the average after-tax and after-savings income of both local and non-local workers would be about \$44,725. On top of this income, non-local workers are expected to receive \$15,600 in per-diem payments.

The economic contribution of local workers to local economies is not limited to their paychecks. Fringe benefits, which for construction workers typically include health care coverage, and retirement, training, and vacation benefits can also contribute to local economic activity. Among these benefits, health care and retirement benefits account for the lion's share.

Health care contributions are usually spent in the short-term in local economies as workers and their families patronize local clinics, hospitals, and pharmacies. Retirement funds, on the other hand, are deferred and will only contribute to local economies once a worker retires and begins to draw on pension payments or retirement savings.

For this reason, we conclude that half of fringe benefit contributions have a similar impact to post-tax, post-savings income, and the other half are treated as income that is deferred to be spent after retirement.

In past efforts to measure the local economic impact of local employment, economists have estimated that, on average, local workers spend 95% of their income within the region in which they live.¹⁰ Thus, we would expect a construction job on a North Dakota wind energy project that is filled by a local worker to directly contribute \$52,237 in the regional economy (95% of after tax /after savings income + 50% of fringe benefits in the near term, and an additional \$10,261 in differed fringe benefits over the long term.

Our research indicates that non-local workers, on the other hand, seek to restrict their local spending to the amount of their per diem and can be expected to spend the remainder of their wages and benefits in their primary place of residence.¹¹ Thus, we expect that a non-local worker employed on a North Dakota wind energy project will spend \$15,600 locally over the duration of the project.

The near-term difference in local spending patterns between a local and a non-local worker employed on a North Dakota wind energy project is \$36,637. This is \$36,637 less per worker than non-local workers can be expected to spend at neighborhood grocery stores, car dealerships, restaurants and clothing stores. This amount is the economic stimulus gained or lost by decisions to hire local or non-local workers. The gap grows to approximately \$52,237 when deferred spending associated with retirement benefits are taken into account.

⁹ James Chen, "Savings Rate," May 15, 2018, Investopedia, available here: <https://www.investopedia.com/terms/s/savings-rate.asp>

¹⁰ Bruce Nissen and Yue Zhang, "Hiring Our Own? The impact of local vs. non-local hiring practices in two county GOB projects," August 16, 2006, Research Institute on Social and Economic Policy at Florida International University.

¹¹ This assumption is based on survey analysis and interviews with current and past wind energy construction and other sectors that typically employ traveling workforce.

The potential gain or loss in local spending is considerable when we consider total anticipated employment on a large wind energy development such as the proposed Oliver Wind IV project. The applicant indicates that the project is expected to create 300 construction jobs, but the local economic impact of the project will differ greatly depending on how many of the workers come from the local area, or from hundreds or even thousands of miles away.

It is rare for a wind energy project to employ an entirely local workforce. The leading U.S. wind energy EPCs pursue national business models and employ a national workforce that includes key personnel who are essential to the safe and successful execution of the company's wind energy projects. There can be significant differences, however, between projects built by EPCs that partner with local workforce providers and deliver projects where a large majority (50% to 70%) of hours worked on the project are performed by local workers, and projects that rely largely on out-of-state crews where local workers account for a small share of hours worked (10% to 30%).

The following table lays out estimates of total payroll and total local spending for a project similar to Oliver Wind IV at different hypothetical levels of local and non-local construction hiring:

TABLE 4: Total Spending		
Percent Local Workers	Total Payroll	Total Local Spending
100%	\$22,866,757.50	\$15,671,092.35
70%	\$24,270,757.50	\$12,373,764.64
50%	\$25,206,757.50	\$10,175,546.17
30%	\$26,142,757.50	\$7,977,327.70
10%	\$27,078,757.50	\$5,779,109.23
0%	\$27,546,757.50	\$4,680,000.00

The projected difference in cumulative local spending between a project that relies on a 70% local workforce and 30% a local workforce would be roughly \$4.4 million in current spending. When spending associated with deferred retirement benefits is included, the projected difference grows to approximately \$5.6 million.

The differences in local impacts continue to grow when we account for multiplier effects of local spending. Wages earned by local construction workers are re-circulated within local economies through secondary purchases and other economic transactions. This spending creates additional jobs via multiplier effects that have been well-documented by economists.¹²

¹² The following is an example of using multiplier effects on a major pipeline project in Minnesota: Bureau of Business and Economic Research (BBER) at the University of Minnesota Duluth (UMD) Labovitz School, "Enbridge Pipeline Construction: Economic Impact Study," prepared for Area Partnership for Economic Expansion (APEX), April 18, 2017.

In this report, we focus on the earnings multiplier. In Nissen and Zhang’s 2006 study of the economic impact of local hiring on two major construction projects in Florida, they provide an earnings multiplier of 1.7377 for new construction work. This means that every dollar spent in a local economy will result in an additional 73.77% in economic activity, beyond the earnings of those employed on the project.¹³

If we replicate the multiplier used by Nissen and Zhang (2006), total local spending would be as follows:

TABLE 5: Total Local Spending with Multiplier	
Percent Local	Total Economic Impact with Multiplier
100%	\$27,231,657.17
70%	\$21,501,890.82
50%	\$17,682,046.59
30%	\$13,862,202.35
10%	\$10,042,358.12
0%	\$8,132,436.00

When we include economic multipliers, the present value difference in total economic impact of using 50% to 70% local workers versus 10% to 30% rises to \$7.6 million. When deferred retirement benefits are included, the total difference in economic impact between 70% and 30% local increases to \$9.8 million. For rural areas of North Dakota, these differences in local economic impacts could amount to meaningful boosts to local household and business incomes and tax base for local schools and governments.

The Availability of Local Workers

Prioritizing local hiring on the Oliver Wind IV project can not only create good, family-supporting jobs for local workers and millions of dollars in local economic activity, but can also provide a pathway into a career in the construction industry for many local workers. In the region surrounding the Oliver Wind IV project, North Dakota Planning Area 7, there are thousands of

¹³ Bruce Nissen and Yue Zhang, “Hiring Our Own? The impact of local vs. non-local hiring practices in two county GOB projects,” August 16, 2006, Research Institute on Social and Economic Policy at Florida International University, pg. 8. Nissen and Zhang use an earnings multiplier specific to their region of analysis – Miami-Dade County, Florida. We do not have a regionally specific RIM II earnings multiplier for Southern Minnesota. However, we expect only minor variation from the regionally specific earnings multiplier used by Nissen and Zhang. Additional research is needed to determine the exact earnings multiplier for North Dakota.

workers employed in low-wage, part-time jobs with few opportunities for upward mobility.¹⁴ For example, in 2022, there were approximately 45,406 workers in the region including 10,830 employed in low-wage retail, accommodations, and food service jobs. Many of these workers might welcome an opportunity for a well-paid, 40+ hour per week job with generous benefits.¹⁵

TABLE 6: Total Employment and Wages in ND Planning Region 7				
Industry	Average Employment	Average Hourly Wage	Average Weekly Wage (40 hrs)	Average Annual Wage (2,080 hrs)
Office and Administrative Support	9,560	\$22	\$879	\$45,700.00
Sales and Related	6,810	\$22	\$897	\$46,630.00
Healthcare Practitioners and Technical	6,790	\$37	\$1,476	\$76,730.00
Food Preparation and Serving Related	6,780	\$15	\$613	\$31,890.00
Transportation and Material Moving	6,200	\$22	\$888	\$46,160.00

We estimate that the average construction worker on a North Dakota wind energy project would earn approximately \$2,230 per week (40 hours at a straight time rate of \$31.83 per hour and 20 hours at an overtime rate of \$47.74 per hour) excluding fringe benefit payments. This is three to six times the average weekly earnings of a worker in accommodation, food service or retail work.

There are jobs on a project like the Oliver Wind IV project that require little construction experience. Some of the roughly 13,500 workers employed in the sales or food service industries could begin work on such a project as soon as construction begins. Those employed by contractors that participate in registered apprenticeship programs would also benefit from classroom, hands-on, and on-the-job training to improve their skills and career prospects. Further, Oliver Wind IV will create jobs that could be filled by workers who currently hold lower-paid positions with building and civil contractors, which would in turn create openings for new workers.

We expect that many of the workers employed in industries that pay substantially less than wind energy project jobs would be eager to seize an opportunity to earn higher wages in the construction industry. Regional building and construction trades unions are ready and willing to

¹⁴ We define the area surrounding the Northern Divide Wind Energy project as North Dakota Planning Region 2. This is a designation defined by the State of North Dakota. This region includes Burke, Bottineau, Pierce, McHenry, Mountrail, Renville, and Ward counties. You can find more information about North Dakota planning regions here: <https://www.business.nd.gov/data/regional/>

¹⁵ Arne L. Kalleberg, "Good Jobs, Bad Jobs: The Rise of Polarized and Precarious Employment Systems in the United States, 1970s-2000s," 2011, Russell Sage Foundation.

work with wind developers and contractors to help dispatch the existing skilled workforce, and to recruit and train a new workforce.

Conclusion

The Badger Wind Farm project has the potential to create hundreds of family-supporting jobs for North Dakota residents and to inject millions of dollars into the region's economy. NextEra can maximize the benefit of the project to North Dakota by working with the EPC contractor selected to build the project to prioritize local hiring and ensure that the majority of construction work on the project is performed by local workers.

Minnesota wind energy developers and policymakers recently began taking steps to maximize the local benefits of wind energy development. The Minnesota Public Utilities Commission ("MPUC") has made the submission of quarterly reports on the employment of local and non-local construction workforce a standard feature of site permits for wind energy facilities. MPUC has also expressed a strong preference for wind energy projects that maximize employment opportunities for local construction workers, including a recent case where an application for a site permit was referred to a contested case hearing over local hiring concerns.

In June 2021, MPUC Chair Katie Sieben testified before a U.S. Senate Subcommittee on Rural Development and Energy on the success of these efforts, observing that local participation in utility-scale wind and solar installation had jumped "from 20 to upwards of 70 percent".¹⁶ We see no reason to believe that similar results could not be achieved in North Dakota.

¹⁶ Sieben, Katie. Testimony before the U.S. Senate Subcommittee on Rural Development and Energy. June 22, 2021. <https://www.agriculture.senate.gov/hearings/renewable-energy-growth-and-opportunities-for-our-rural-economies>

About the Authors

Lucas Franco is the Research Manager for LIUNA Minnesota & North Dakota, which represents more than 13,500 unionized construction laborers across Minnesota and North Dakota and is affiliated with the 500,000 member Laborers' International Union of North America. He holds a Ph.D. in Political Science from the University of Minnesota. He has published numerous articles and reports on employment trends in the construction industry.

Kevin Pranis is Marketing Manager for LIUNA Minnesota & North Dakota, where his responsibilities include managing the organization's growth initiatives and representing LIUNA in permitting and other energy regulatory matters before the North Dakota Public Service Commission and the Minnesota Public Utilities Commission.