Testimony of President Tracy Hartzler, President of Central New Mexico Community College

Joint Economic Committee Hearing
"Growing the Economy of the Future: Job Training for the Clean Energy Transition"
September 20th, 2023

Chairman Heinrich, Vice Chairman Schweikert, and members of the Committee – My name is Tracy Hartzler, and I am the President of Central New Mexico Community College, based in Albuquerque. I also serve on the Board of Directors for the American Association of Community Colleges based in Washington, D.C.

Thank you very much for the opportunity to be here to discuss the significant need for a much larger workforce pipeline to support the accelerating growth of the clean energy economy in New Mexico and across the country.

This testimony is intended to inform the Joint Economic Committee on how Central New Mexico Community College (CNM) is striving, along with the State of New Mexico and our fellow community colleges in the state, to address the need for a much larger workforce pipeline to support the accelerating growth of the clean energy economy.

Growing and Supporting New Mexico's Energy Workforce
With investments in clean energy continually increasing in my state and across the country, it's more important than ever to address the significant need for skilled workers to fill the growing workforce demand of the clean energy industry. That includes workers directly trained in solar, wind, and EV fields, as well as the more traditional skilled trades workers needed to support the infrastructure development of the clean energy sector. The current skilled trades workforce is ageing and retiring with insufficient numbers of new trades workers to replace them. We also know that we can provide millions of individuals nationally, and thousands in New Mexico, with accessible, affordable, and direct pathways to better careers, better lives and more financial stability for themselves and their families through the growth of the clean energy sector. Growing and supporting the clean energy workforce takes many forms – from employer assistance to direct aid and investments for employment.

In addition to assisting businesses, New Mexico officials are also taking steps to help reskill people for these opportunities. The state's Department of Workforce Solutions (DWS) has prioritized energy transition and climate resilience as top priorities in the Workforce Innovation and Opportunity Act statewide plan. All partner agencies will be focused on recruiting and training for these industries in the years to come. DWS applied for a $2 million grant from the U.S. Department of Energy for a project called "Building the EV Bridge." The goal of the project is to engage in proactive outreach to engage workers currently in fossil fuel industries with apprenticeship and training opportunities in the Electric Vehicle Infrastructure Industry. New Mexico's Environment Department and Energy, Minerals and Natural Resources Department are partners on this initiative.

New Mexico's Energy Transition Act (ETA) also established a Displaced Worker Assistance Fund for New Mexico residents who were terminated from employment due to the abandonment of a New Mexico facility producing electricity that resulted in displacement of at least 40 workers. My college, CNM, and CNM Ingenuity, a workforce development arm of the college, will be education and training partners in strategic planning for related technical training and classroom instruction for apprenticeship programs, skills training, and customized training in future phases of the statewide ETA plan.

DWS also partnered with the state's Department of Transportation to apply for the $2 million U.S. Department of Labor Building Pathways to Infrastructure Job Grant. This effort would fund public-private partnerships to develop, strengthen and scale evidence-based training models in occupations critical to meeting the goals of, and maximizing investments in, the Bipartisan Infrastructure Law. This program would train job seekers in advanced manufacturing, information technology, and professional, scientific, and technical services jobs that support renewable energy, transportation, and broadband infrastructure.

Through the Economic Development Department, New Mexico also has one of the most generous training incentive programs in the country. The Job Training Incentive Program (JTIP) funds classroom and on-the-job training for newly-created jobs in expanding or relocating businesses for up to six months. The program reimburses 50 to 90 percent of employee wages. Customized training at a New Mexico public education institution may also be reimbursed. Some clean energy industries are eligible for JTIP.

Apprenticeships are a very important component of training a clean energy workforce. Under the state's Energy Transition Act (ETA), DWS is charged with ensuring that renewable energy projects on the utility side employ apprentices. The Act requires 10% of a project's workforce to be apprentices now; 17.5% by January 2024; and 25% by January 2026. As mentioned above, CNM and CNM Ingenuity will be partners in supporting the growth of apprenticeships.

Community Colleges' Crucial Role in Addressing Skilled Workforce Challenges

Our nation's community colleges serve a key role in this crucial mission to boost our skilled workforce, meet the needs of the booming clean energy economy, and connect more Americans to careers that improve their quality of life. Community colleges provide individuals with quicker and more affordable access than four-year institutions to middle-class clean energy and skilled trades careers through two-year associate degrees, one-year certificates, and even shorter-term workforce training programs that continue to gain popularity among learners and employers. Workforce training programs, which are not considered academic credit programs, are an increasingly important option since there is less of a time commitment to complete the programs, often direct entry into quality careers, and a high return on investment for the learner.

CNM, and our fellow community colleges, are also very experienced and adept at quickly responding to the workforce needs of our regional economy. We take pride in working with

businesses and industries to create new programs or adjust current programs to meet their workforce needs.

In addition to the full range of trades programs that support the clean energy sector, New Mexico community colleges offer specialized associate degree and certificate programs focused on renewable energy technologies. They include:

- CNM: Electrical Trades Associate of Applied Science, Photovoltaic Concentration; Electrical Trades Solar Electric Certificate; Automotive Technology AAS (includes Intro to Hybrid and Electric Vehicles)
- Santa Fe Community College: Solar Technology (AAS and Certificate); SFCC also preparing to launch Renewable Energy Industry Technician program
- UNM-Los Alamos: Applied Technology AAS, Solar Technology Concentration
- NMSU-Dona Ana Community College: Solar Energy Technology Certificate
- NMSU-Alamogordo: Photovoltaic Grid Tie Certificate
- Navajo Technical University: Energy Systems AAS
- Clovis Community College: Industrial Technician, Wind Concentration (AAS and Certificate)
- Mesalands Community College Wind Energy Technology (AAS and Certificate)

Bachelor's Degrees include:

- Northern New Mexico College: Electromechanical Engineering, Concentration in Solar Energy
- Eastern New Mexico University: Electronics Engineering Technology, Renewable Energy Concentration

Since 2019, more than 1,300 New Mexicans have graduated with credentials in renewable energy production, maintenance, and engineering.

Governor Lujan Grisham also established the state's Center of Excellence for Renewable Energy and Sustainability to foster collaboration between New Mexico's public colleges and universities, industry partners, and state, tribal and federal agencies to meet New Mexico's ambitious carbon reduction goals. The center is based at San Juan College – a community college in the northwest part of the state – and is developing curricula to prepare students for careers in the solar and wind sectors, as well as the electric vehicle and hydrogen industries.

CNM is also in the process of building a new facility that will house our Automotive and Diesel Technology programs, including a new Electric Vehicle Technology program.

Last week, we also met with Maxeon Solar Technologies about the possibility of the company using part of our Workforce Training Center in Albuquerque as a training site for some of their solar panel manufacturing processes. Maxeon has committed to a $1 billion investment to build a 1.9 million-square-foot plant, where it will open the nation's first new domestic factory in over a decade to build both solar cells and panels for sale across the country.

Innovative Short-Term Workforce Training Programs at Community Colleges

At CNM, we also offer shorter term workforce training programs that support the clean energy sector. In addition to the associate degree and certificate pathways into the solar industry noted above, CNM Ingenuity can deliver customized, short-term workforce training programs for current energy-industry employees on topics such as Solar Electric Basics, National Electric Code Updates for Solar Installers, and Solar NABCEP Exam Prep. Shorter-term credentials like these that upskill current workers with clean energy knowledge and skills or reskill those who are transitioning to the industry are increasingly important and beneficial for employees to advance or transition in their careers.

In 2021, CNM completed construction of a 1.3 MegaWatt solar farm at our campus on the west side of Albuquerque. In addition to advancing CNM's sustainability goals by providing 50% of our energy for the campus, it serves as a training lab for our students in the Electrical Trades Photovoltaic Concentration program.

CNM Ingenuity also offers an Electric Lineworker Pre-Apprenticeship program in partnership with the New Mexico Rural Electric Cooperatives Association (NMRECA). It prepares learners over four to five months to become paid apprentices for NMRECA and then fill permanent critical energy and infrastructure jobs for NMRECA across New Mexico. CNM and NMRECA partnered to build an outdoor training facility for its Electric Lineworker apprentices at our Rio Rancho Campus.

And CNM's strong reputation for responsiveness in workforce development was useful during the successful recruitment of Maxeon Solar Technologies to Albuquerque. During visits arranged by the New Mexico Economic Development Department, the solar industry giant was very pleased after meeting with CNM leadership and learning that we would be fully committed to supporting their workforce needs with new programs or existing programs as needed.

Need to Intentionally Recruit More Diverse People for Clean Energy and Trades Training Programs

There is a clear and pressing need to recruit and retain more individuals into programs that deliver the skills needed to fill these jobs, such as solar panel installers, wind turbine technicians, and solar panel and wind turbine manufacturing technicians. In order to meet the demand, we need to draw people from a wide variety of demographics, including women, people of color, and more young people, including high school students.

At CNM, we have received support from state government in efforts to attract more women into the trades. For the past two years, we've hosted a Women in Trades Summit, highlighting the successes of women currently in the trades and providing women considering a career in the skilled trades with information on why it's a wise choice for many women – a minimal investment provides quick access to a middle-class career with financial stability, as well as an alternative to office jobs that some women may not covet. Our first Women in Trades Summit in 2022 drew approximately 100 participants and 17 employer booths recruiting women to

address their workforce needs. In 2023, participants quadrupled to more than 400 and employer booths nearly doubled to 32. We'll host the event again in 2024.

One of our female graduates, Rita Johnson, from our Electrical Trades program recently spoke at a CNM event about how learning a skilled trade transformed her life. A high school dropout, she started working at restaurants but quickly realized she couldn't raise two kids on minimum wage and tips. She was interested in working in the solar industry, so she enrolled in our Electrical Trades program. She's now a journeyman with an Albuquerque-based electrical firm, making enough money to support herself and her two kids, and has full financial independence. "I have my own house, my own car, can afford to go on vacations, provide for my kids, whatever I need," she says. "Getting in the trades has been a game-changer for me."

CNM has also forged a groundbreaking partnership with Rio Rancho Public Schools (RRPS) in our region. We have agreed to share a Career Technical Education Complex at the high school, where CNM's trades programs will be embedded into the high school experience. The high school students will be able to take trades courses for free taught by CNM faculty that count for both high school and college credit. RRPS high school students will be able to participate in internships and apprenticeships with local employers. And they'll be able to graduate from high school with CNM certificates or credentials in programs like solar panel installation and immediately enter the clean energy or skilled trades workforce with a middle-class income.

In alignment with our partnership with Rio Rancho Public Schools, we are supportive of the Apprenticeship Pathway Act of 2023, co-sponsored by Chairman Heinrich. It would help increase apprenticeship pathways for high school students, putting them on a fast track to quality careers and productive lives while helping our country address our skilled workforce shortages. CNM also has a strong partnership with a local non-profit called Future Focused Education. We are coordinating programs and leveraging funding across both organizations for work-based learning opportunities, including paid internships for young people across in-demand industries and the development of the first youth registered apprenticeship program in the state.

CNM uses the federal Strengthening Career and Technical Education for the 21st Century Act (Perkins V) for targeted recruiting of underrepresented populations into trades programs each year. We have also received state funding to support our recruitment of women into trades programs and the annual Women in Trades Summit. CNM also manages the statewide chapter of SkillsUSA, a national organization focused on supporting the development of a skilled workforce in high schools and two-year colleges. Last year, CNM received state funding to support high schools that have underserved, low-income populations needing financial support to participate in trades programs and competitions. New Mexico is a minority-majority state and CNM is a Hispanic-Serving Institution. CNM also serves a large population of Native American students. CNM regularly ranks as a national leader in the number of associate degrees and certificates awarded to Native Americans and Hispanics each year.

Providing the Robust Supports Learners Need to Persevere and Complete Training Programs

For many people who have limited means, including adults who have been out of school for years but desire a better career, they are hesitant to commit the time needed to education or training due to various life challenges, ranging from financial concerns to childcare issues to food insecurity.

At CNM, we have extended the same wrap-around support services that have been available to our academic credit students to our non-credit, workforce training learners. Through our work with leading national foundations that are focused on removing barriers that prevent many individuals from taking the leap into community college education and training, we have learned a great deal and are transforming our approaches.

To achieve consistently successful outcomes, we know that a significant percentage of learners need extensive support systems to overcome financial and personal challenges, especially older adults returning for education or training to make a career change or improve their upward mobility. Through partnerships and funding support from partner organizations, CNM provides a free bag of groceries, including fresh fruits, vegetables and non-perishable items, as well as hygiene products, to students in need once every week. We also offer childcare vouchers that can help students pay for up to 100 percent of their childcare costs while attending school.

We have also transformed our advising model, placing even more focus on career counseling from the time they register for a program and continuing regularly throughout their learning journey. While these types of supports are essential for many learners to persevere and complete an academic or training program, we have also learned through our work with foundations and other college partners that learners, especially for workforce training programs, need and want assurances that they will be connected to paid work-based learning opportunities (i.e. internships and apprenticeships) – and most importantly – direct links to quality permanent employment upon completion of their program. CNM is addressing this important factor as well through employer partnerships.

The Need to Expand Paid Work-Based Learning Experiences and Employer Partnerships

While paid internships and apprenticeships have always been a part of the community college experience, they have typically been very limited in numbers for most colleges. At CNM, we recently created a totally new Division of Workforce & Community Success, squarely focused on greatly increasing paid work-based learning opportunities and making them available to all students and learners in all programs, both academic and workforce training. A high percentage of community college learners are low-income and at-risk, and need additional financial support to persevere and complete a program to secure the skilled job they desire. A major part of executing on this effort has been strengthening our connections, partnerships and relationships with employers in our region. Our Division of Workforce & Community Success has made great progress on this front, getting buy-in from many employers who are committing to providing work-based learning opportunities for our students and learners, since it also benefits them to help these individuals complete and fill their workforce needs. We recently launched a HireCNM portal where employers can post jobs and connect with our students and faculty members to identify student workers.

As President of our college, I have personally increased the frequency of my meetings with business and industry leaders to fully understand their workforce needs so our college can adjust curriculum or create new programs as needed to provide workforce solutions. Our community college also has Advisory Committees for our skilled trades programs that are made up of local business and industry leaders. They regularly provide input and guidance to our deans and program directors to ensure our curriculum equips students and learners with the skills and knowledge needed to succeed in the workplace, not just the classroom. A local company called Affordable Solar participates on our Electrical Trades advisory committee.

CNM Ingenuity, through a workforce development training program partnership with the City of Albuquerque called Job Training Albuquerque, has provided four local solar energy employers with short-term trainings in Solar Electric Basics and the NABCEP Exam Prep certification for 30 of their employees. The solar companies include SolAero, Solar Works, Positive Energy Solar and OE Solar. The Job Training Albuquerque program provides the trainings for free to employers and employees through funds from the City's Economic Development Department.

Addressing Funding Challenges for a Clean Energy Skilled Workforce

Another challenge we face in increasing the pipeline of clean energy workers and skilled trades workers, and that we're addressing, is the limitations of traditional federal and state funding models for the shorter-term workforce training programs. The shorter-term workforce training programs are increasingly necessary for Americans looking to quickly obtain a new or improved job, while also laying the groundwork for them to pursue higher level education. However, the lack of Pell Grant eligibility for these shorter-term workforce training programs prevents many potential learners from taking advantage of the programs that would provide them quick access to a quality, high-demand job. Opening up greater access to this type of federal funding would be an important step in addressing our clean energy and skilled trades workforce shortages. The American Association of Community Colleges is advocating for Workforce Pell legislation to extend Pell Grant eligibility to financially needy students in shorter-term workforce training programs.

CNM, however, has been actively seeking alternative and diverse funding sources. We've forged strategic partnerships and we've piloted innovative initiatives to address this challenge. By collaborating with local industries and government agencies, CNM has been securing resources to advance solutions and provide more financial support for learners in workforce training programs. CNM is currently leading New Mexico's first significant investment in workforce training. With a $20 million, one-time appropriation that was effective July 1, the New Mexico Higher Education Department's High-Demand Workforce Training Investment expands workforce training and work-based learning to prepare individuals to be competitive in the labor market and support workforce needs. CNM's plans for nearly $5 million of the funding builds on our participation in various efforts, such as the U.S. Department of Education's Experimental Site Initiative to pay work-study wages to students for employment with private businesses and non-profit organizations.

Also, CNM Ingenuity is developing new short-term training programs and revising current training programs in employer-directed, high-demand areas. CNM Ingenuity is expanding tested efforts to provide learners in these programs with direct financial assistance; supplemental financial training assistance for employers to send their employees to upskilling trainings; and providing more non-traditional apprenticeships and work experiences for learners.

These efforts replicate successes we've experienced in our 10-week coding bootcamps. Our coding bootcamp curriculum is built specifically to meet employer needs in high-demand areas. Completers of this workforce training bootcamp are averaging a 47% wage increase; 86% of learners are meeting their employment goals within one year; and more than 300 employers have hired from the program.

Learning Facilities for Skilled Trades and Clean Energy Fields

Skilled Trades facilities that are modernized and outfitted with the latest technology are also an important factor in training the clean energy workforce. CNM recently broke ground on our new Skilled Trades Facility that will replace our current trades facility that was built in the 1970s. We collaborated with the local trades industry, government agencies, public school districts and many others to incorporate the needs of the community and economy into the design of the facility. The new facility will provide much more flexibility in adapting spaces as technology continues to quickly evolve in clean energy and related skilled trades programs. When CNM needs to create a new program to meet new workforce needs – or when we need to adjust current programs to incorporate new technology or changing industry needs – the spaces will allow for easier modification. The modernized and high-tech learning environments will also be a key component in attracting more students into these programs, especially younger generations. The $58.7 million facility is paid for through voter-approved bonds.

CNM also plans to partner with schools and businesses to offer broader education opportunities in this facility. There will be partnerships designed to create an inclusive pathway for K-12 students through dual-credit opportunities, apprenticeships, and internships, and community partners will be able to use the facility to help their employees upskill so that they can meet evolving industry needs.

In regards to all of the efforts taking place at CNM, we are making strong progress. But all of these efforts need to be scaled up significantly at our college, and colleges across the state and country to realistically meet the fast-increasing workforce needs of the clean energy economy. To accomplish this, community colleges need the support and partnership of government officials at the federal, state and local level.

Background on New Mexico's Energy Transition

While New Mexico ranks second in the nation for the amount of oil and gas produced, our state is also a national leader in moving our country toward a clean-energy future. Upon taking office in 2018, New Mexico Governor Michelle Lujan Grisham identified the clean and sustainable energy sector as a critical target industry for diversifying New Mexico's economy. In

addition to reducing the state's reliance on fossil fuels, the clean energy industry is a source of good paying jobs that require many of the same skills that workers use in oil and gas fields and fossil fuel-based power plants.

Energy Transmission in New Mexico

In 2019, Governor Lujan Grisham signed the New Mexico Energy Transition Act (ETA) into law. This act – widely recognized as one of the nation's most ambitious plans for moving to a clean-energy future – requires New Mexico's investor-owned utilities to produce 50% of their power from renewable sources by 2030; 80% renewables by 2040; and 100% zero-carbon by 2045. And it's working. In 2022, renewable resources provided 42% of New Mexico's in-state electricity generation, a five-fold increase in the state's electricity generation from renewable sources since 2015. According to the U.S. Energy Information Administration, New Mexico currently ranks 5th among states for in-state renewable energy generation.

Renewable Energy Projects and Opportunities in New Mexico

Solar and wind energy currently lead New Mexico's renewable energy transition. However, hydrogen is expected to be a major contributor to this sector moving forward, and funding included in the 2021 Bipartisan Infrastructure Law can support this transition. New Mexico joined Colorado, Wyoming and Utah to form the Western Interstate Hydrogen Hub, recently submitting a $1.25 billion grant application to the U.S. Department of Energy to create a clean hydrogen hub focused on power generation and transportation. If awarded, the hub will bring more than $9.1 billion in private capital for 26,000 jobs to the four states. Hydrogen Hub funding is also coming from the Infrastructure Investment and Jobs Act.

Since 2018, New Mexico's solar production has grown 46%. In August of this year, Maxeon Solar Technologies announced plans to build a $1 billion solar cell and panel manufacturing facility in Albuquerque, thanks in part to the tax credits for clean energy manufacturing included in last year's Inflation Reduction Act. This makes New Mexico the first state to attract a company looking to move solar manufacturing back to the U.S.

Pattern Energy's Western Spirit Wind includes four wind energy project sites in central New Mexico. Western Spirit represents the most wind power ever constructed as a single phase in the Americas, totaling 1,050 MegaWatts of installed capacity. It became operational in 2021, with approximately 35 full-time, permanent jobs. Over 1,000 workers were on site during a 15-month construction period.

More renewable energy development is coming to New Mexico. SunZia Wind and Transmission begins construction this year for over 3,500 MegaWatts of new wind power capacity. The SunZia Transmission project – a 550-mile High-Voltage Direct Current line stretching from central New Mexico into Arizona, will supply approximately 3 million Americans with clean power annually.

There are many other renewable projects taking root across the state. New Mexico continues to advance a clean energy economy on many fronts. The state has a Local Economic

Development Act that empowers the New Mexico Economic Development Department to administer grants to local governments to assist expanding or relocating businesses that will stimulate economic development and produce public benefits. Maxeon Solar received $18 million under this act.