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United States House of Representatives Committee on Small Business Subcommittee on Underserved, Agricultural, and Rural Business Development

Hearing on "Prioritizing Small Underserved and Rural Businesses in the SBIR/STTR Programs"

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Chairman Golden, Ranking Member Hagedorn, and Members of the Subcommittee, thank you for the opportunity to testify today on the topic of prioritizing small underserved and rural businesses in the SBIR/STTR programs. It is an honor to be here this afternoon.

My name is Nancy Min, and I am the Founder and CEO of ecoLong LLC based in Albany, New York. Our mission is to build interconnected and resilient communities. This mission is at the heart of everything we do including developing a blockchain based energy marketplace that provides communities equitable access to clean energy. We are fortunate beneficiaries of the SBIR/STTR program, having received U.S. Department of Energy SBIR Phase I and Phase II from the Solar Energy Technologies Office to build out the platform. The DOE SBIR funding provides critical support that is positioning us for growth.

My path to the SBIR/STTR program wasn't easy. It took a lot of trial and error. For ecoLong to exist today, it required the engagement and support of many communities. My entrepreneurial interests began in college when I first heard about a new technology called blockchain technology that was the underlying technology to this new thing called "Bitcoin". The technology and its application has evolved significantly since then. We now use blockchain technology to decentralize and democratize the energy market.

All small business owners will tell you starting a company is hard but knowing what's next is harder. Hearing about and participating in the National Science Foundation Innovation Corp or NSF I-Corp program was a pivotal moment for me. The NSF I-Corp program taught me how to articulate my business idea and forced me to "get out of the building" to validate that our technology was commercially viable. However, the closest site that the NSF I-Corp program was administered was in New York City at the New York City Regional Innovation Node (NYCRIN). That meant, we had to travel 3 hours from Albany to New York City or 6 hours roundtrip to attend classes.

The first time writing a SBIR/STTR proposal was daunting. Thankfully, the U.S. Department of Energy has a Phase 0 program that provides a variety of proposal support services for the first-time applicant. The Phase 0 program was critical in helping me figure out the proposal development process and creating a budget.

All these programs helped us to get the DOE SBIR awards. In addition to the financial support of the SBIR, the program managers at the Solar Energy Technologies Office provided integral support at every step of our development and commercialization process.

The support of these communities continues even to this day with the support we get from business networks such as the Clean Energy Business Network (CEBN) that plays a key role in advocating for clean energy research, promoting business partnerships across the nation, and nurturing small businesses, like ecoLong, for growth.

Although we were fortunate enough to work with these amazing communities, the journey to uncovering and engaging with them isn't easy, particularly for underserved and rural businesses. Today my testimony is about the power of communities and its role in accelerating small underserved and rural businesses in innovation driven programs such as the SBIR/STTR program.

Improving awareness and accessibility to federal innovation programs

Often the biggest challenge with early-stage technological innovations is to transform a technological concept into a viable business. The National Science Foundation Innovation Corp (NSF I-Corp) program addresses the knowledge gap with transformation of research into business ventures. However, awareness and accessibility of this program is often limited to innovators that are integrated with educational or research institutions or located in urban areas. It may be helpful to increase accessibility to this program for underserved and rural small business.

Writing a proposal takes a lot of effort for small underserved and rural businesses. The U.S. Department of Energy Phase 0 program provides a variety of proposal support services for the first-time applicant with no charge. Increasing the visibility and accessibility of such a program or resource for all applicants is very beneficial for innovative firms, particularly underserved and rural businesses. Additionally, DOE should consider making the Phase 0 available for at least one subsequent round to repeat applicants—particularly businesses who had promising ideas but were unsuccessful in their first applications—in order to help entrepreneurs learn how to navigate the complex application process.

Community based organizations are vital for innovators to extend their business network. These organizations or business networks are a great avenue to enhance the awareness and accessibility of federal innovation programs. The Clean Energy Business Network (CEBN) – the small business voice for the clean energy economy, with a network of more than 5,000 small and midsize business leaders across all 50 states and approximately 350 Congressional districts, has been critical to fostering inclusion and diversification among innovative firms. For example, CEBN, a Power Connector for the Department of Energy's American-Made Challenge has been promoting and enhancing the accessibility of the SBIR funding solicitations across their network and beyond. More support for regional or national support organizations that

serve as community hubs on the ground would help small underserved and rural businesses get the support they need to be competitive in SBIR/STTR programs.

Through CEBN, I have been part of stakeholder conversations on ways to make SBIR/STTR more impactful and accessible to small businesses, which would in turn increase their access to firms from underrepresented demographics. I would like to submit for the record with my testimony a <u>copy of a letter</u> signed by 115 small business and nonprofit leaders outlining these recommendations in detail.

Additionally, <u>a recent report</u> by Third Way highlights that only 7-8 % of SBIR recipients at the DOE are from woman-owned or disadvantaged firms, and highlights some recommendations to improve access.

<u>Promoting open collaboration and open source to reduce barriers to access</u> technological innovation

The barriers to small business innovation are not limited to access to entrepreneurship programs. The development of technology innovations often requires extensive technical community support and resources. This is an area where awareness of and access to technological innovation can support the development of more technology ventures. A great example is open source technology, businesses can significantly reduce the expenses and time to develop a product from scratch and focus their efforts on high impact uniqueness and innovation.

As the Chair of the Linux Foundation Hyperledger's, Social Impact Special Interest Group, an open source community that develops enterprise-grade blockchain technologies, I have seen first-hand small businesses rising from the open-source community. Open source is an opportunity to reduce the barriers for underserved and rural businesses that otherwise may not have the contacts or network to access technological innovation needed to make their businesses a success. For example, the Department of Energy has encouraged and supported various open-source projects:

- a. Pacific Northwest National Laboratory (PNNL) developed VOLTTRON™ an open-source distributed sensing and control software platform technology that joined the Eclipse Foundation.
- b. Researchers at Brookhaven National Laboratory (BNL) developed world leading privacy preserving Artificial Intelligence and will be contributing it to the open source PyTorch community.

Conclusion

At the end of the day, the mission of the SBIR/STTR programs is to support scientific excellence and technological innovation to build a strong national economy. This requires innovation on both the technical and the business or commercialization end. By improving awareness and access to federal entrepreneurship programs, small businesses will have the tools to build successful business ventures. By promoting open collaboration and open source, small underserved and rural businesses across the nation will have a launchpad to catapult their technological innovation, to do their part in building a strong national economy.

Thank you again for the opportunity to testify, I look forward to answering the committee's questions.