

# FIVE



**Stephanie Kilgore,**  
environmental manager,  
leads a team tasked with  
providing Cooperative  
Energy Members with a  
cleaner future.

# WOMEN

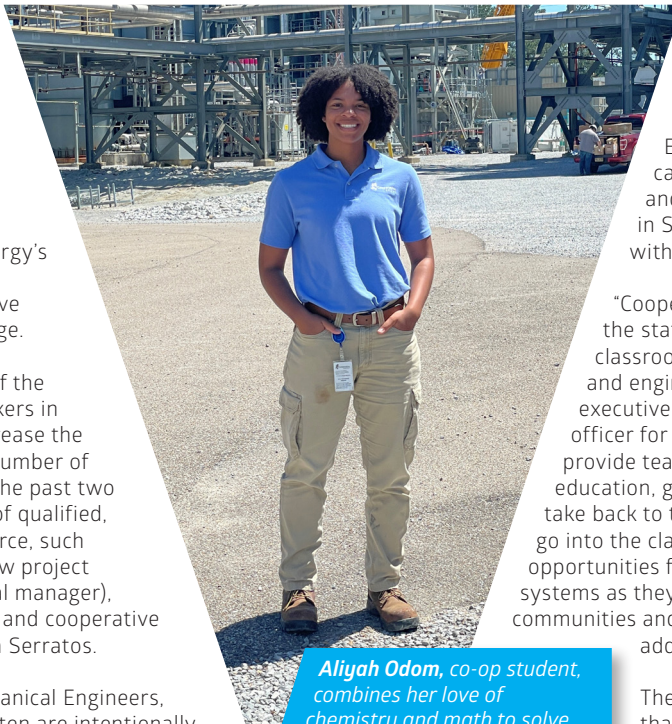
## ADVANCE THE FIELD

# OF ENGINEERING

**F**ive women in the Cooperative Energy workforce are changing the face of engineering, a career field long dominated by men. Engineering is one career path in which women continue to be under-represented despite tremendous efforts in gender equality over the last century. This team of female engineers is changing that trend, though, and programs like Cooperative Energy's STEM (science, technology, engineering, and mathematics) education and cooperative education program aim to foster that change.

Females currently represent 57.4 percent of the U.S. labor force but only 14 percent of workers in the engineering field despite efforts to increase the number of females in STEM careers.\* The number of female engineers has been on the rise for the past two decades, however, adding a large number of qualified, talented women to the engineering workforce, such as Cooperative Energy's Belle Failla (Morrow project engineer), Stephanie Kilgore (environmental manager), Ana Silveira (electrical projects engineer I), and cooperative education students Aliyah Odom and Maria Serratos.

According to the American Society of Mechanical Engineers, many school systems as early as kindergarten are intentionally devising curriculum and activities to expose female students early to STEM opportunities and hands-on learning. Making



**Aliyah Odom,** co-op student,  
combines her love of  
chemistry and math to solve  
engineering problems as a  
student and build her future as a  
professional engineer.

these subjects come alive for young girls has encouraged them to be more likely to pursue engineering careers. Many professional organizations are partnering in these efforts, such as the Society of Women Engineers, the world's largest advocate and catalyst for change for women in engineering and technology. Like other businesses rooted in STEM, Cooperative Energy also collaborates with schools on these efforts.

"Cooperative Energy partners with schools across the state to create exciting STEM curriculum for the classroom to hopefully inspire our future chemists and engineers and scientists," said Christa Bishop, executive vice president and chief communications officer for Cooperative Energy. "In some instances, we provide teachers with materials and instruction in STEM education, giving them hands-on experiences that they take back to their classrooms. Other times our employees go into the classroom to expose the students to different opportunities for their future. We also support our Member systems as they sponsor STEM education in their local communities and partner with their local schools to provide additional education opportunities."

The STEM education program is just one way that Cooperative Energy encourages females to consider engineering careers. The cooperative education program provides an opportunity for female engineering students to gain on-the-job



*Belle Failla, project engineer, is the first full-time female engineer at the R.D. Morrow, Sr. Generating Station.*

experience while pursuing their degree. Cooperative Energy's recruiters work closely with university career offices to meet and recruit female engineering students to work in a three-semester rotation as a cooperative education student in the areas of electrical, mechanical, chemical, and civil engineering. Through their work experience, the students gain valuable knowledge in their field and increased confidence in their university studies and career outlook.

While female engineers may still be the minority in the field, many women have achieved success in the industry and are setting the bar for the next generation of female engineering students. Engineering principles are the same regardless of who is applying them and by creating an atmosphere that is conducive to all kinds of engineers, the industry will become stronger as a whole.

In celebration of International Women in Engineering in June, we would like to highlight our own female engineers making a difference right here in Mississippi – full-time employees and co-op students, all with different journeys, but with common themes, including a love of learning, overcoming "old-school" perceptions, and taking advantage of opportunities for women engineers.

#### Meet Belle Failla

Belle Failla, a native of Picayune, began work at Cooperative Energy as a co-op student at the R. D. Morrow, Sr. Generating Station before joining the staff full time in 2020 as a project engineer at Plant Morrow. Failla graduated from Mississippi State University (MSU) with a bachelor's degree in mechanical engineering, although her original studies were in the medical field. "Because I rode with my brother to classes and had to sit through some of his labs, group studies, and classes, I fell in love with the mindset he was acquiring in mechanical engineering, and I quickly changed my major," she said. The engineering field influenced Failla in the area of mechanical maintenance where she has gained an appreciation for machines and the importance of maintaining them. The Morrow Repower Project has highlighted her work at Cooperative Energy so far. "I feel very fortunate to be a project engineer during the construction phase of the Repower Project," added Failla. She also enjoys the opportunity to supervise current Plant Morrow co-op students following in her footsteps.

#### Meet Stephanie Kilgore

Stephanie Kilgore joined Cooperative Energy as environmental manager in June 2018. She graduated from MSU with a degree in chemical engineering and served as a co-op student at Georgia Pacific in Monticello. Kilgore chose engineering because of her father's influence, and chemical engineering specifically because she enjoyed chemistry in high school. Kilgore says it is hard to know if engineering has impacted her personality or if her personality is why she is an engineer. She credits engineering for boosting her problem-solving skills. "My first thought is to not wait for someone else to solve a problem," said Kilgore. Currently, one of her favorite projects is her team's involvement with the Morrow Repower Project. The team is tasked with closing the coal assets at Plant Morrow, including the landfill and two ponds, and assisting with permitting the new gas-fired operations. The permitting includes a construction air permit, modifications to the water discharge permit, and storm water construction

permits. "It is exciting to be involved in closing one chapter and starting a new one at Cooperative Energy," added Kilgore.

#### Meet Ana Silveira

Ana Silveira began working at Cooperative Energy in May 2021 as electrical projects engineer I at Headquarters. She is originally from Pirapora, Minas Gerais, Brazil, and currently lives in Mobile, Alabama. Silveira earned her bachelor's degree in electrical engineering from the Federal University of Sao Joao del-Rei in Brazil, and both her master's degree in electrical engineering and her doctorate in systems engineering from the University of South Alabama. "I chose engineering because it is a career full of challenges. Consequently, it offers a tremendous opportunity for lifelong personal growth and community service," Silveira said. In this role, her duties pertain to the operation, maintenance, design, installation, inspection, testing, and troubleshooting of electrical power equipment and associated control systems in electric power generating facilities at Cooperative Energy. Silveira is enthusiastic to see what new challenges Cooperative Energy will bring.

#### Meet Aliyah Odom

Aliyah Odom is a native of Mobile, Alabama, and will graduate in chemical engineering from the University of South Alabama in May 2023. She began as a co-op student with Cooperative Energy in August 2020 at J.T. Dudley, Sr. Generation Complex. Odom always enjoyed chemistry and especially math, so choosing chemical engineering seemed like a perfect combination of the two. "Engineering has helped me become more confident in my decision making and shown me there's about a thousand and one different ways to do something correctly," she said. Her favorite task as a co-op student thus far was being part of a team tasked with solving a combustion issue. She was able to use instruments related to her field that she had never seen before and was able to apply her knowledge of chemistry in a way she had never thought of. "I'm now quite confident I can be successful as an engineer in the future because of these experiences," she said.



*Ana Silveira's, electrical projects engineer I, engineering quest led her to obtain three degrees in various disciplines of the field.*

#### Meet Maria Serratos

Maria Serratos was born and raised in Metepec, Estado de México, México, and moved to Mississippi in summer 2015. She is currently a junior at MSU pursuing a degree in civil engineering with a minor in mathematics. Serratos began as a co-op student in January 2021 with Cooperative Energy's transmission design team. "I chose civil engineering because I believe that, besides being a very versatile field, it is one of the most noble branches in engineering," Serratos said. She also feels like engineering has provided her with a more structural perspective of the world and as she continues to pursue her degree, she has made a personal commitment to serve and protect the health, safety, and welfare of her community. Surveying has highlighted her work as a co-op student. She has also enjoyed learning that the extent of the design process is not limited to transmission lines, but to earth work as well. Serratos will continue a three-semester education/work rotation with the team at the Field Operations Center.

*\*Source: Congressional Joint Economic Committee*

*Maria Serratos, co-op student, views her engineering expertise as a path to serving her community. Here, Serratos is pictured surveying alongside Drew Harper, design engineer I, using their Bad Elf GPS to perform work for the betterment of others.*

