

GIRL POWER Elizabeth Lopez

When Elizabeth Lopez was in high school she liked mathematics, but also English and writing. Then an exciting program came to her high school: Powerful Opportunities for Women Eager and Ready for Science, Engineering & Technology (POWER SET). Today she has a Master's degree in nuclear engineering.

"When they recruited me, I didn't know what I wanted to do," said Lopez, now 26, "They took us around to these plants." The tours included many of the industrial centers in the Gulf Coast of Texas, where Lopez lives: chemical and oil plants, the NASA headquarters, and the South Texas Project, a nuclear power plant.

Among the high points was a visit to the POWER SET program at her high school by Rick Perry, then Governor of the U.S. state of Texas and now Secretary of Energy for the United States. "They asked one of us in POWER SET to write a speech and to give it. I was the one who did that, and I got to meet him there. The principal took some pictures. They always joke around that we're like good pals.

"That was pretty impressive," she said.

The program, run by the Nuclear Power Institute at Texas A&M University, is offered at eighteen high schools in Texas, and is not limited to nuclear power. But it demonstrates the appeal of a nuclear energy program in stimulating young people's interest in technical fields. Often these are people who might not ordinarily gravitate in that direction; in the United States and in many other countries around the world, women are still under-represented in technical fields.

POWER SET offers technology and engineering mentorship opportunities to girls, including trips to universities. Perhaps most influential for Lopez were the talks with engineers working at all the places they

visited. "They brought out people to talk to us, to answer questions. They set up all of us with someone from the South Texas Project to talk to. We could ask questions about the power plant or just work in general," she said.

"That's when I decided I wanted to do engineering," she said.

Today, Lopez has a bachelor's degree in mechanical engineering and physics, in addition to her Master's degree. She was hired on at the South Texas Project power plant nearly four years ago as a mechanical engineer but today she designs reactor cores, one of the most technically skilled jobs at the plant. This spring she assisted in moving used fuel from a holding pool into casks that were being pumped full of inert gas and welded shut—the fuel will stay there for a few decades of storage before final burial.

"It's a great job and I recommend it," said Lopez.

She is the first in her family to work in the nuclear field. Her family is supportive, she says, although it sometimes takes people time to understand the benefits of the technology.

Lopez sees a bright future in the sector. She is certain that it will grow around the world because it is clean, safe and reliable. From where she sits, nuclear energy provides opportunities for good jobs for women and men of all backgrounds.