The Power Source
Igniting the Future of Florida

December 2023

Power Profile: Hala Ballouz, P.E.

President

Electric Power Engineers, LLC | Ener-i.AI, Inc.

Hala, your personal story and transition into the energy industry are unique and inspirational. Provide some personal background on you, your studies, and how you arrived at Electric Power Engineers, a company you now own.

I grew up in Lebanon in a small town of "poetry and wind" in the heart of a beautiful valley. I remember walking near the river with my dad as a little kid and hearing him talk about the power of our footsteps and speculating on harnessing that power. That led me to a fascination with energy, the power of what we could do, and to eventually becoming an electrical engineer.

Being a visionary has always been part of my DNA, looking at everything, thinking of the possibilities and connecting the dots. My electrical engineering studies at Texas A&M University played an important role in my career, particularly the topic of my master's thesis with Dr. A.D. Patton in 1992 on "The Impact of Superconductive Magnetic Energy Storage on unit availability and grid reliability." That work allowed me to form an early and solid understanding of the significance of shaping the balance of resources on the grid and the power of new technologies. Such technologies can be used to enhance reliability and the economics of the grid. Understanding what that means holistically and being able to help developers and utilities shape their future with these technologies are the reasons I built EPE.

You have a good understanding of how the current opportunities in energy generation and delivery are impacting the grid and what companies should be doing prospectively to address supply, security, and resilience. When you are speaking to a utility company about your work, how do you explain how they can integrate your planning studies into their strategic planning?

Absolutely key to a discussion with a utility is first understanding what challenges they are facing in their strategic planning. At EPE, we have close to 200 power systems subject matter experts focused on grid planning studies, from distribution and transmission planning, to grid modernization, to digital transformation, to electrification, to NERC compliance, and even to "owners" engineering (where we imbed one or more of our engineers at a utility). *Continued on next page*

Our grid study capabilities are holistic across T&D and include a deep understanding of renewable, DER and technology integration, while also keeping reliability and affordability front and center. EPE's ENER-i.AI Energy Intelligence and InSights platform also brings great value to utilities starting with GIS/grid model-centric visibility across T&D – from granular modeling of the impact of aggregated DERs and EVs on the grid all the way up to the bulk power system.

Your work is not limited to Texas, a state that has deregulated the provision of energy. How does your work differ in states where the provision of electricity remains regulated.

Our skillset serves both regulated and deregulated utilities. With our regulated utility clients, we also apply a deep understanding of the end-to-end product of generating, transmitting, distributing and delivering power to the end consumer, where we help connect all elements of T,D&G to build strategic roadmaps supported by holistic planning studies. Our engineers also understand every aspect of the integrated utility system.

Can you tell us one of the biggest challenges you have faced in your career and how you overcame it?

Balancing family/personal life and that of owning and growing a business. There are wins and losses in it no matter what you do, and I can say that different phases of your family and career life have different dynamics. Where I was successful are the phases where I made sure the time spent with my family was intentional and quality personal time.

What advice would you give to a second-year college student looking to start a career in the energy industry?

Seek advice from people who are in the industry in the choice of a few elective courses if they are not part of the curriculum. Internships with the right entity has become more important than ever to learn about this amazing industry. I think collaboration with universities and the electric sector is happening everywhere, so look for those opportunities by consulting with your professors and other trusted advisors (I work with my alma mater, Texas A&M quite a bit, for example). And come intern at EPE to get an early understanding of all the exciting things we do, but also on the ecosystem and stakeholders we work with.