Fortnightly Under Forty 2020

A Chess Board Filled With Rising Stars of Our Industry

What's the first whole number that's both a perfect square and a perfect cube? Why, it's 64, equal to 8 times 8 and 4 times 4 times 4 as well.

64 is the number of squares on a chess board, and also a Nintendo standard, as in Super Mario 64 and Mario Kart 64. It's the maximum number of strokes in any Chinese character (wow), and in the song about old age on the Beatles album Sgt. Pepper's Lonely Hearts Club Band.

The 64-bit register in computing can hold a whole lot of numbers, greater than 18 quintillion different values, or more precisely, 2 to the 64th power of them. The ASCII code 64 is the extremely useful symbol, @.

And, 64 is how many rising stars of our industry – each nominated for Fortnightly Under Forty 2020 – that we're celebrating in this year's feature on our next generation.

These 64 rising stars hail from twenty-seven different industry organizations. They're from ten investor-owned utilities, two public power utilities, two rural electric cooperatives, three associations of utilities, two technology groups, three vendors, four professional firms, and a state utility commission.

Thirty-six of the Fortnightly Under Forty class of 2020 are from investor-owned utilities throughout the country, from Arizona Public Service, NorthWestern Energy, and Xcel Energy in the west to CenterPoint Energy, Entergy, and Southern Company in the south to Con Edison in the northeast to Alliant Energy, Ameren, and ITC Holdings in the nation's middle. The 2020 class includes rising stars from public power utilities in the big state of Texas (CPS Energy) and the empire state of New York (the New York Power Authority). And Texas is represented again by a rising star in a rural electric cooperative there (Sam Houston Electric Cooperative). The neighboring state of Oklahoma is represented too (Northfork Electric Cooperative).

As you'll see on the following pages, we're celebrating rising stars from three associations of utilities, the American Public Power Association, the Edison Electric Institute, and the Smart Electric Power Alliance. And from two technology groups, the Electric Power Research Institute and Energy Impact Partners. And from three vendors, Burns & McDonnell, Itron, and Urbint. And from four professional firms, 1898 & Co., (the consulting arm of Burns & McDonnell), Dentons, Guidehouse, and Quarles & Brady.

See a brief video about some outstanding Fortnightly Under Forties by the PUF team at fortnightly.com

And finally, from the Illinois Commerce Commission. Next year, we're determined to have more representatives from our regulatory community. We know there are plenty of rising stars at the commissions and at the consumer advocate agencies as well.

Half of the Under Forties are women and half are men. This continues the trend we've seen in recent years.

This year, exactly half of the Under Forties are women and half are men. This continues the trend that we've seen in recent years of strong gender diversity.

Of the 64 rising stars, we selected eleven of them to highlight. These eleven exemplify the impressive record and pace of accomplishments of the best of our industry's next generation. The inspiring stories of Haben Goitom of Alliant Energy, Jennifer Wischnowsky of Ameren, Keegan Odle of Burns & McDonnell, Delevane Diaz of EPRI, Sean Meredith of Entergy, Illinois Commissioner Maria Bocanegra, Aaron Curtis of ITC, Ana Stachowiak of NYPA, Lisa Dailey of Northfork Electric Cooperative, Abbey Roy of Southern Company, and Brian Van Abel of Xcel Energy are told in part in the interviews that follow. These unique up-and-comers are already leading the industry's transformation and mission-critical groups within their organizations, in some cases as a COO, CFO or division VP.

Haben Goitom

Director, Business Transformation, Alliant Energy

PUF's Steve Mitnick: You're leading the company's Affordability Innovation Center. Talk about what you do there.

Haben Goitom: The team and my position were created about sixteen months ago to help accelerate our customer-focused strategy. We act as internal consultants. In the end, our role is to work alongside every part of our business.

We have a three-year road map that we're following to support our company's transformation. The cross-functional team has come together from different disciplines and backgrounds: IT, finance, program management, analytics, and human resources.

This team was brought together to partner with each area of the business to look at how we can fundamentally change some of the ways that we're working. Part of it is looking at certain things, such as business processes. That's a piece of it.

What we've found to be the most interesting and challenging about the work is the shift in mindsets and behaviors that's needed given our industry, the length that people have typically been in their roles, and how business has been run similarly for several years. We're thinking about how we can focus on our customers even more than we have in the past.

We're collaborating with small teams of employees from within each area of the business to look at what are the changes they'd want to make, how can we do that, and how can we empower employees differently.

We realized there are a lot of folks that are coming up with great ideas. We also see ourselves as a team that can remove roadblocks and translate ideas that are used in one area of the business to others. We've been able to advance some ideas more quickly. We see driving the pace of change as part of our role.

We're thinking about how we can focus on our customers even more than we have in the past.

PUF: What led you to this role?

Haben Goitom: I'm from Madison, Wisconsin. I went to law school here. I met my husband at law school. We'd been living in New York for a while. I loved the firm that I previously practiced at, and the people, but it was getting to be a bit of a grind.

At the time, I was looking at a lot of in-house counsel opportunities with various companies. I was excited to meet Alliant Energy's general counsel, Jim Gallegos. I happened to meet him when he was in New York. I was impressed with his background as a leader, his vision, experience, and candor when he talked about the law department. It was different than the other interviews I'd been in, quite frankly.

The legal team at Alliant Energy is comprised primarily of business lawyers. They are strategic partners. They're helping drive decisions. The picture that he painted for me was interesting and exciting from an opportunity standpoint.

I was a bankruptcy lawyer, which a lot of companies think is a specialty they won't ever need. Who wants a bankruptcy? But when Jim saw my background he said, well, that means you've sort of done it all, and you've done it in the context of pressure.

That's where it started for me with Alliant Energy. In the legal department, I had the opportunity to do a lot of interesting work, from commercial transactions, to supporting the development of our wind program that's taken off in Iowa, and even areas like cybersecurity and data privacy. I met a lot of people and learned about the business.

I went from that role to leading the supply chain organization for about a year. Then this role came up. Our CFO, Robert Durian, approached me and asked if I was interested in taking it on. It was a new role and I was excited to take on a new challenge. It's an incredible group of talented individuals. We've created something special.

I also appreciate the ability to learn from, and work for, people who are completely different from me. For example, Jim and I think similarly and have a similar working style. It is exciting to get a chance to work directly for somebody with a different style and approach than my own, I think that's how people grow, and Robert has been that person for me.

PUF: What do you tell people who are in their first few years?

Haben Goitom: One is to be open and flexible. There's a lot of opportunity in any company. A big part of it is the quality of the individual's work but also the ability to connect with other people, and to show up to work and feel comfortable. This is what I tell my team. It's important to show up to work as your complete self, and share ideas, ask questions, and be comfortable.

We've got some newer folks, not newer from a tenure perspective but newer to our company. I've recommended they go out, have conversations with people across the company, and get a sense of what they do to be able to connect the dots more. Those relationships within the company are critical, but also what you do outside of work matters quite a bit.

I encourage people to be involved in their communities to the extent they're able to. It's important to talk with others and to bring ideas in from the outside.

It's this notion of being a continuous learner. It may sound cheesy, but there's no end to what we can try to learn more about and understand. Being curious is important as well. Those are a few things I share with people in their first few years with the company.

PUF: You're involved in a number of things in the community, so that's a lot of investment of time. Is that difficult?

Haben Goitom: It makes a difference. I see what our company does for our communities, and it's tremendous. I feel fortunate to be able to have the capacity and the time, and with my legal background, there are other things I can bring to the table that helps these organizations.

It matters quite a bit. I'm on the board of directors for the Urban League, the board of visitors for UW Law School, and I work with the Dane County Restorative Justice program.

I encourage people to be involved in their communities to the extent they're able to. It's important to talk with others and to bring ideas in from the outside.

Working with these various organizations I'm interacting with all types of people. For example, volunteering with the Restorative Justice program, there are a lot of law enforcement folks that are on the Advisory Board with me, as well as our District Attorney. I'm hearing and seeing things about our community that I wouldn't be aware of and I'm able to help. It enriches my life and allows me to give back in a way that is meaningful.

Jen Wischnowsky

Director, Digital Strategy & Transformation, Ameren

PUF: What is your role at Ameren?

Jen Wischnowsky: I oversee the strategic planning and performance management team and innovation team for our digital – previously known as IT – organization. My transition from accounting into digital started a few years ago.

About three to five years ago, Ameren set up five innovation teams that were looking at different ways that we should evolve our business model to meet and exceed changing customer expectations and the industry landscape by 2030. I was able to participate part-time in one of the innovation teams. It was something we hadn't done before. We were looking out fifteen years compared to our normal five-year planning.

Through that, I was able to bring the idea of robotic process automation to the organization. It's software that automates manual work across the organization, and we have a number of opportunities for that at Ameren. I was part of that pilot.

Fast forward, about a year, and I had rolled off the innovation teams. Ameren had decided to establish a center of

automation, a full implementation of the technology with a team that would support it to roll it out across the enterprise.

They asked me to lead that team. It was my first official role shift into the technology world. I became, for a two-month period, the senior manager of the center for automation and that was announced the same day our new chief digital information officer, Bhavani Amirthalingam, joined Ameren.

A month or two into that role, we presented to her and other stakeholders what we were working on. We decided to move the center of automation under her in the digital organization; thankfully she took me with the team and expanded my role.

It started with me becoming chief of staff, as well as overseeing the center of the automation team. Then we expanded my role to include overseeing a strategic planning and performance management team and innovation and transformation team.

The more you can learn and understand what technology can do for the different areas of the business, the more value you're going to add.

We were able to establish a structured governance process around near- and long-term strategic planning for Digital. We are focused on understanding what the Ameren operating segments are looking to achieve over the next three to five years, ensuring Digital's strategies and planned investments are aligned with the business segment priorities, and we're driving outcomes. As we mature this process, we are aligning around Ameren's strategy, which includes a digital transformation, versus separate digital and operating segment strategies.

The strategy and performance management team were established to help that. Then performance management, the other side, is measuring the success of our strategies. How do we use metrics and scorecards across the digital organization to ensure we're executing and holding ourselves accountable to that strategy?

The center of automation team is scaling robotic process automation now while also expanding into a few emerging technologies that we're implementing this year.

I also oversee an innovation center at the University of Illinois in Champaign. That innovation center leverages intern and co-op talent to work on application development, data science and analytics, and emerging technology research projects.

That helps create a pipeline of technical talent from the university, as well as publicize Ameren in terms of emerging technology, and being an exciting place to work. We're also building an innovation center in the St. Louis area to do something similar, pulling from universities within the St. Louis region.

PUF: You were at Exelon in accounting, came as an accountant to Ameren, and now you're an IT robotics innovation person. How did you transition?

Jen Wischnowsky: It's an evolution, so I'm learning every day. Technology is integral to everything we do. The more you can learn and understand what technology can do for the different areas of the business, the more value you're going to add.

I had two degrees from the University of Illinois. I knew I wanted to do business. I got a marketing degree first and had that by the end of my sophomore year. I didn't want to graduate yet.

The University of Illinois was number one at the time for accounting. That's why I went into accounting. Everyone was getting jobs, and it wasn't the best time in the economy.

Enron had just collapsed. There was a focus for me in what areas can I work where I'll be able to get a good job and career. I got a job at PwC, which is a great place to start a career. After spending a number of years in audit, I realized I wanted to be on the other side where I was making decisions rather than checking decisions. I went into the more technical accounting practice at PwC.

I was traveling all the time. After a few years doing that and learning a lot, I found an opportunity in the Chicago area. I wasn't looking specifically in the

power and utilities industry, but I found the role at Exelon. It's a company with amazing leaders and I was impressed during my interviews with the leadership's passion around providing an essential service to customers.

During that role, Exelon acquired Constellation Energy Group. Through that merger, I took a leadership role on the integration team of the two companies. Once the deal closed, I moved into external reporting.

I was advancing my skillset, working with hard deadlines and overseeing a dispersed team of fourteen people. I filed our first combined company 10K – it was the first time we were telling this combined company's story.

Then at Ameren I established our technical accounting group, which did not exist there. That was the first role I had done at Exelon, so I had a good understanding of the value it could bring to the company.

They created the job for me. I set up the governance and processes to build the technical accounting knowledge across the accounting organization, which has so many benefits.

I had been fairly involved with EEI at that point for a number of years, and that's when EEI asked if I would be vice chair of the Accounting Standards Committee. It's a two-year vice chair, and then one-year chair, so it's a three-year term. I'm finishing my chair year at this point. It's been a great path for me.

PUF: Do you ever get a chance to give advice to others that are new and starting out?

Jen Wischnowsky: I try to frequently connect with my teams at all levels. One of the benefits of working at PwC is that by year two or three you become a people leader, which is unique because of the way the model works.

Due to that opportunity, I learned early on I was going to learn as much from the people who I worked for as from the people who worked for me. There are brilliant people at PwC and being able to lead at such an early stage in your career, you realize it's not about reporting lines.

I learned early on I was going to learn as much from the people who I worked for as from the people who worked for me.

I've taken that with me throughout my career and continue to feel like it's important for me to engage at all levels of my team and to ask them how things are going, and what could I be doing better?

Often, it evolves into a new conversation of career paths and I hear, well, I don't exactly know what role I'm trying to get into next. I always support that because if you look at the evolution of my career, I wasn't picking out the roles I was going after one after another. It's more about am I being challenged, am I growing and developing, and am I adding value to the company?

If you have those factors, in general you're probably in a good place to continue to mature in your career. When you're earlier in your career, you question, okay, it sounds like that was just all done to you, but how much of it were you driving? There will be times in your career where you have to continue to make changes to get outside of the area that you're in.

An example of that for me was at Ameren. They probably would have been fine with me staying in the controller's group for my entire career, which would have been a great career path.

I want to keep as many doors open as I can and not get siloed into one area of the company for the majority of my career. That's when it's a balance of adding value but continuing to grow and develop. Ameren has a great culture and executive leadership team that lives and breathes the company's values, so I've been fortunate to have supportive leadership throughout my time here.

At times, you'll have to go outside of your day job and look for other opportunities to grow and develop, like take online courses as an example, or make sure you have mentors and sponsors in other parts of the business that understand what you've done and are looking to do. I have those conversations with all levels of my teams.

It's natural, because the number one goal in my career has been, and will be, establishing and helping drive empowered and engaged teams. When you have that, they're more productive. It is the foundation for success for them and you as a leader. That's my number one goal. ❍

James Clerk Maxwell was born on June 13, 1831, in Scotland. Maxwell's Equations have been referred to as the second great unification in physics after the first by Newton. Electricity, magnetism, and light! What more could you want? (Ask Albert Einstein that.) Arguably the third greatest physicist of all time, after Newton and Einstein, his impact was huge on the developments of electric utility service in the second half of the eighteenth century. In his spare time, he proved that the rings of Saturn were not solid but composed of numerous small particles. And he even invented color photography.

Maxwell, Carl Friedrich Gauss, Andre-Marie Ampere, Michael Faraday, and Charles-Augustin de Coulomb formulated the theory that the engineers like Thomas Edison and Nikola Tesla used to bring us engines, motors, transmission, and distribution. Maxwell's four equations include Gauss' Law on flux, Gauss' Law on magnetism, Faraday's Law on induction, and Ampere's Law on circuits. Gauss' Law on induction can be used to derive Coulomb's Law and vice versa.

Keegan Odle

Director of Substation Projects, Burns & McDonnell

PUF: You're the Director of Substation Projects, perhaps one of the biggest design groups at Burns & McDonnell. What do you and your team do?

Keegan Odle: I took over this position a couple of years ago and with great staff was able to grow it. We're sitting now at about three hundred and forty-five full time employees in Kansas City.

That includes engineers, project support, project managers, drafters, and designers that make up our substation group in Kansas City. We've been fortunate to come into the market at the right time. We've hired the right people. I've got a fantastic group of project managers that work on my team, and we have great clients.

I started in this market in January 2004, and that was after the blackout in the Northeast. That created a lot of opportunities throughout my career. We've been fortunate to be in the right markets at the right time with the right model, and that's led us to the growth and size we are today.

PUF: You worked on important projects on substation security, but one that was a turning point was after the attack on the Metcalf substation in California in 2013.

Keegan Odle: Absolutely. Leading up to that point, we trusted that the chain link fences with barbed wire and what we had around substations were enough to protect those assets.

When Metcalf happened, it turned the substation power world on its head, and I realized we have all these multimillion-dollar assets exposed out there, including power transformers and equipment. They're unguarded, and they take about a year for us to replace.

If bad actors were to be coordinated, they could do a lot of damage. We're dependent on consistent, ninety-nine plus percent reliable electricity in the U.S. The whole industry took a deep breath and said, we need to act.

East coast utilities, like one of our clients, have a unique footprint. What they cannot afford is to have a significant power outage with everything that lies between D.C. and the Norfolk Naval Base, which is basically their entire footprint.

All you need is your brain, your laptop, and an internet connection, and we can do our job from wherever we are.

When we got that call to help, we both realized we cannot afford to have the backbone of our grid go down due to an external attack, and this was going to be a part of their resiliency strategy. We said, let's come up with a robust design for substation security. They said, our teams are full with reliability improvements. We'd like you to come up with solutions.

That was exciting for me because it gave me an opportunity to do something that had never been done in the industry. You could feel the shift happening from all the major utilities across the U.S. that this was going to become standard practice.

But everybody was waiting for that first person to take the leap. This client, because of where they're situated and who their clients are, was the first to know they had to act. It was an opportunity to change the way we do design in our industry forever, and that only comes along once in your career. It was cool to get to create that.

PUF: You work on so many substation projects, and there's even a NERC CIP-014 on this, and you've got a big team. But how do you all work during this coronavirus crisis?

Keegan Odle: While a majority of our workforce has been instructed to work from home, Burns & McDonnell has always been focused on getting the work done wherever you are and whenever it needs to be done, as opposed to everybody sitting in an office. We're flexible on creating solutions wherever you are.

I put a video out to my team when we started working from home. I wanted everybody to know that Burns & McDonnell is not a building. It's not a structure. Burns & McDonnell is people. No matter where we are, our clients are going to depend on us to provide solutions and service.

They hire us to come up with creative ways to solve problems. This is another opportunity for us to continue to create innovative ways to solve problems. All you need is your brain, your laptop, and an internet connection, and we can do our job from wherever we are.

I keep checking in with all of our teams, and I keep asking, what are the hiccups, and what are the hurdles? I'm not going to say it's been perfect

But my main questions are, is work still coming in and are we still able to produce? As long as the answers are yes, we're fine. This is a part of the skillset we've created as a company. We can solve the problem from wherever we sit.

PUF: What led you to your current role?

Keegan Odle: I started as a design electrical engineer coming out of college. You prove yourself to be a good engineer, and

then somebody asks you to lead projects for multiple people.

When you get good at leading one team, they give you an opportunity to lead multiple teams. Then I became a project manager.

As you prove yourself by being good at something, being reliable, doing the right things and doing what needs to get done, you gradually work yourself up. Opportunities come along, and you have to make sure you take them.

The most important thing I tell people to do is be excellent at the job you have, and that will get you the opportunity to do the job you want. As long as you're doing excellent work, whatever you've been assigned to do, you'll get recognized.

I've had fantastic mentors that have helped me along the way. I believe in hard work. I believe in leading by example.

PUF: You have an unusual story I saw in a video about your teenage years when you first had your encounter with electrical engineering. What was that effect?

Keegan Odle: I grew up on a farm in North Central Kansas. A friend and I were leaving from a gathering literally out in a field, as ridiculous as that sounds. We came upon an accident where a kid had wrecked his car and slid off in the ditch, and he took out a twelve-kilovolt distribution pole.

My friend who was riding with me bailed out of the car to go see if the guy that had wrecked was injured, and he came in contact at that time with a live twelve-kilovolt line.

It lit the line on fire. He got the line trapped underneath his arm and the ground. I ran over to grab him to pull him off of it, and he was still live. It shocked me and threw me to the ground, and then I crawled over and grabbed him by the hoodie and pulled him off of it.

He had severe burns. It got me a night in the ICU, and it got two other kids, my friend and the driver of the wrecked car, in a burn center for months.

It was one of those things where I had grown up being a farmer, and I was good at fixing things. We didn't have a rich farm. We had a farm that worked. You had to put the time in and figure out how to fix what you had. I thought, well, I'll be a mechanical engineer, up until this point.

As long as you're doing excellent work, whatever you've been assigned to do, you'll get recognized.

But after that accident, I didn't understand it. I didn't know why things had happened the way they had. When I enrolled in Kansas State, I saw that they had a power option in electrical engineering. It would have been logical for me to go into mechanical engineering, but I couldn't get over the whole electrical component, and it drove me.

I talked to a couple of the professors and advisors, and thought, this is where I'm going to spend my career. I'm going to figure this out. Not everybody gets to have an origin story of something that drove them to where they are today. Fortunately, nobody died in that accident. But I wouldn't be in the power field had I not experienced that event.

PUF: What drives you to be involved with AABE and some of these other organizations?

Keegan Odle: When I started at Burns & McDonnell, Gabe Hernandez was my mentor. He was also my project manager. He's a vice president at Burns & McDonnell, and he instilled in me this mindset of, if you do good things, good things come back.

There's a concept here of giving back to your communities and doing more than the work you have. He said, everybody in this company is busy, but if you do good work out in the community, you'll find that to be more rewarding than any of the hours put in at the office.

Gabe also said, if you're going to be a part of something, you might as well lead it. He said, if you're going to join it, join it all the way and do it a hundred percent.

I wanted to get involved early on with mentoring and trying to drive STEM-related activities. We started

the Engineering Explorers program, and that shifted to an ACE Mentors' program. Then other people took that on. A part of growth is getting out of the way of others. I've always tried to move to the next project to see where I can contribute again.

AABE was one of those where if you look around, typically in our industry, the black engineer is underrepresented. We do a good job of providing mentors for our young black engineers and technicians.

I felt like with AABE that is a place where I can provide impact and eventually be more of a sponsorship level than a mentorship level. Sponsorship is when you have somebody from an executive level that has taken an interest in somebody's career, and they want to help bring them along and answer questions and give them the insight on how to get to an executive opportunity.

I want to take more leadership roles and help as much as I can.

I also believe that you can't effectively solve a problem with the same people from the same background with the same mindset. Diversity brings diversity of thought and mindset. If you want to get the best solution, you have to have people from a wide range of backgrounds and viewpoints.

PUF: What's next for you?

Keegan Odle: I'm focused on doing better at the job I've got. I'm hoping that eventually I'll be named an officer at Burns & McDonnell. From an outside perspective, I'd like to eventually chair the board for Sunflower House, which is a child advocacy center serving the communities around Kansas City, because I believe in the mission and what we're doing there. I want to take more leadership roles and help as much as I can. ❍

Delavane Diaz

Principal Technical Leader, EPRI

PUF: Yours is quite a story: U.S. Air Force officer, Stanford PhD., and now your work at EPRI with participants in New York State and Mexico's Comisión Federal de Electricidad or CFE. Tell us about that.

Delavane Diaz: As a principal technical leader, I lead research in the energy and environmental analysis domain, focused on the power sector. That includes technology assessments, environmental policy analysis, and questions dealing with climate risk management.

In a given year, I usually have about five projects underway that vary considerably in terms of duration of effort, budget, and resources involved, as well as the size of EPRI and external teams.

What's so gratifying is that the work covers so many topics of interest. It is at the intersection of many areas – the scientific sphere, public interest, industry needs – and how that might inform policy. I love that variety. Each project has its own complexities and nuances, but as the project manager, I have the ability to design and execute a research plan with a strong team that meets all those objectives.

Customer adoption of electric technologies will depend on a lot of unknown variables, such as the pace of technology advancement, cost declines, fuel prices, policy measures, and consumer preferences. We designed scenarios that could address this range of policy, economic, and technology factors.

PUF: Could you explain how EPRI identifies these projects?

Delavane Diaz: EPRI's member companies provide an advisory role in a number of formal and informal capacities. At the highest level there are external advisors from industry, and leaders at electric utilities, as well as external experts from the scientific domain, academic researchers, and government representatives.

This advisory structure helps to identify research priorities for EPRI and feeds down into the project level. For a project to be successful, we need an audience, most often within utilities, that can use this research to find value for its business and ultimately translate into a public benefit. At EPRI we call that technology transfer, and the main vehicle for that is the work that we do with our member advisors.

PUF: Give us an example of how this works, and what you do to get it going.

Delavane Diaz: The New York study ran for almost two years. At the completion of that project, we published an analysis called, Electrification Scenarios for New York's Energy Future. And note that this study is available to the public at EPRI.com.

I should take a step back. In 2018,

EPRI published its National Electrification Assessment, which was the foundational study for more than a dozen state-focused studies, including that New York State project.

In collaboration with key stakeholders, Con Edison, NYPA, and New York ISO, we set out to examine the potential for cost-effective electrification in New York state, over the next three decades.

The first step was to add state-specific and county level data into our US-REGEN model. US-REGEN is an EPRI-developed modeling tool capable of analyzing detail within electric power production and energy demand, including the buildings and transportation sectors, with coverage of the broader U.S. at the state level. To zoom in on the particulars of New York State, we wanted to capture those unique characteristics of the energy system, as well as households and the economy.

Together we designed a model that best represented Mexico's energy system. Then we worked with CFE on exploring issues such as Mexico's clean energy policy of fifty percent renewable generation by 2050.

What the modeling showed, was a potential for a large reduction in final energy use through efficient electrification – clearly important for states such as New York with ambitious clean energy targets. When you couple those final energy reductions through electrification with a source of electricity comprised of low carbon and renewable resources, the model shows significant carbon dioxide reductions.

Our team was comprised of expertise on the modeling and analytical side, and subject matter experts on the technology side. They included members of EPRI's electric transportation, buildings, and industrial electrification teams. That broad internal expertise was one aspect that gave our study a strong foundation for the findings.

Beyond the EPRI team, we engaged weekly – often daily by the end – with the New York State project team, comprising strategic planning folks and R&D leaders from those three companies to produce a study that was credible and meaningful. The external team helped shape the direction and helped us determine the key research questions.

Customer adoption of electric technologies will depend on a lot of unknown variables, such as the pace of technology advancement, cost declines, fuel prices, policy measures, and consumer preferences. We designed scenarios that could address this range of policy, economic, and technology factors. At the end of the project we identified research needs and opportunities in areas such as peak management, market design, grid modernization, and system planning that could enable benefits from electrification.

PUF: For you, what was important and rewarding in leading this effort with its large, diverse team?

Delavane Diaz: I'm proud to say that this was one of the biggest projects I've led over my career at EPRI in terms of the scope, and impact. The work was challenging, but I'm drawn to challenges and it's ultimately one of the most satisfying projects I've completed.

PUF: With Comisión Federal de Electricidad, what did you do there and what kind of team were you leading?

Delavane Diaz: This was quite different from the New York project. I mentioned the US-REGEN model earlier – REGEN is a platform with several modes and applications. It's a family of models that started with US-REGEN, and the next model we built was EU-REGEN to look at questions about renewable penetration in Europe, and has since been adapted to countries including Canada, Taiwan, Korea, and South Africa.

The Mexico REGEN or MX-REGEN model was developed in conjunction with our members at CFE. This project demonstrates how the modeling and analysis we do in my group can support strategic planning within utilities.

CFE was interested in enhancing its generation and transmission planning capabilities. CFE does a lot of its own modeling and planning in-house but wanted strategic insight on key issues related to clean energy goals and fuel markets.

For US-REGEN, we rely on a lot of

public data sets that are collected by the U.S. Energy Information Administration and other agencies. We didn't have the same luxury in developing MX-REGEN due to constraints of data availability, so we relied on our project team at CFE to supply some of those important details.

Together we designed a model that best represented Mexico's energy system. Then we worked with CFE on exploring some issues such as Mexico's clean energy policy of fifty percent renewable generation by 2050.

The initial requirement is a thirty-five percent renewable energy generation by 2024 – an ambitious target requiring a big upfront investment in renewables. Our modeling showed that would have a transformational impact on the grid.

This is a long-running project, whereas the New York project was one discreet study that unfolded over two years. I've been leading this work with CFE since 2016, so we're going into our fifth year. What's nice about that is the relationships and the research has matured over the years.

Currently, we're working to increase the spatial and temporal resolution of the model because we've realized that a lot of CFE's biggest needs, in terms of planning, are focused on the near term.

They have questions regarding operational impacts of variable renewables on existing thermal plants and some uncertain growth in electricity demand and peak load. Together we're able to chart a course that is mutually beneficial and allows us to develop our capabilities as a research institute.

PUF: You've been at EPRI for twelve years. You squeezed in a PhD at Stanford in there somewhere. You picked up the Chauncey Award, which is a prestigious award at EPRI named for the founder of EPRI. How did you manage all this in such a short time?

Delavane Diaz: I'm grateful that my immediate team and EPRI's leadership were supportive of me taking time out from my full-time job to pursue a PhD. It says a lot about the organization in terms of how they support and enable staff.

My path to EPRI was a bit unconventional. I started my career in the U.S. Air Force, though it was fairly unusual; fresh out of the Academy, I spent my first two years on active duty in graduate school at the University of Oxford in England.

Because I knew I would return to the Air Force to work as an engineer and fulfill my military service, I decided to take advantage of this time in grad school to do something completely off that well-defined path.

I decided to study environmental science, energy, and policy, because I recognized that this was an important area, but I didn't know much about it. I couldn't have known then that it would play a pivotal role in shaping my future.

After finishing my graduate degree, I returned to the U.S. and was working as a test engineer in defense acquisitions. The Air Force announced it was downsizing its engineering ranks and my six-year commitment became optional. It was a hard decision I hadn't seen coming.

I agonized over what to do – the commitment I'd made to our country was important to me, but at that point I was confident about my interest in serving society in a different way, focusing on energy and environmental strategies. At the time, I'd never heard of EPRI, but I was fascinated by the combination of analytical work, policy perspective, and industry audience.

I was lucky, first to have discovered the job posting, and second that EPRI took a chance on me because I didn't have much relevant experience for the work.

It's been a great fit and I felt nurtured along the way. When I joined EPRI in 2008, an internal organization called the Technical Women's Network had just been launched to support women in EPRI's technical programs to achieve the types of careers that they wanted – balanced, productive, and successful.

On my first day at EPRI, my manager encouraged me to get involved with this group. They had monthly meetings and soon held a two-day retreat focused on personal and professional development. This network set me up for success at EPRI – I made strong connections early in my career with a group of talented women who continue to inspire me today.

I'm grateful that my immediate team and EPRI's leadership were supportive of me taking time out from my full-time job to pursue a PhD. It says a lot about the organization.

A few years later, while I was down the road at Stanford during my PhD, the project that I stayed most closely engaged on with EPRI was working on the social cost of carbon, which provides a monetary estimate of climate change damages from one more ton of carbon dioxide.

This metric is used to better understand the magnitude of damages from climate change and the potential benefit of reducing carbon dioxide; it is often used in policymaking at a variety of national, state, and local levels.

The way the social cost of carbon is estimated using integrated assessment models can be a black box and can be difficult to understand. I focused on unlocking that box in my doctoral dissertation.

That project was a diagnostic exercise that examined three integrated assessment models used to quantify the social costs of carbon, and even though there's no direct application, the research helped to elucidate an important calculation. That work continues to be valuable to EPRI, our member companies, and the public. ❍

Sean Meredith

Vice President, Power Plant Operations, Entergy Louisiana

PUF: You have a large responsibility at Entergy. What is your role?

Sean Meredith: My previous role that I'm transitioning out of was the director of Entergy's Transmission Control Center North. The TCC is responsible for the bulk power operations of a four-state territory – Arkansas, Louisiana, Texas, and Mississippi.

We coordinate with Midcontinent Independent System Operator to support bulk power operations and reliability. We also perform the switching operations for Arkansas, Texas, and North Louisiana, and coordinate with our generation fleet to make sure we have the right generation balance to support the reliability of the system.

We have a heavy interface with our transmission customers to ensure we're meeting their needs and fulfilling our customer's expectations as well as to be a customer-centric organization. We meet with them regularly. It is a team effort to make sure we fulfill that on a daily basis.

Then I transitioned into vice president of power plant operations for Entergy Louisiana, where we have a large generation fleet. We recently went commercial with our newest power station at Lake Charles.

PUF: What kind of plant is it?

Sean Meredith: It's a combined-cycle gas turbine plant. It's an incredible plant, almost a thousand megawatts, completed ahead of schedule. It's a huge win for everybody. It's efficient, affordable power, and cutting-edge technology. Its sister plant, the J. Wayne Leonard Power Station, was commissioned last year.

We have another plant being built in Texas called the Montgomery County Power Station, which is identical to those two. We're building and running the latest and greatest combined cycle units to replace our legacy units, which in Louisiana are primarily natural gas. It's an exciting new job that I'm getting into, working with a great team that is responsible for operating and maintaining that fleet in Louisiana.

We recently went commercial with our newest power station at Lake Charles. It's a combined-cycle gas turbine plant, almost 1,000 MW, completed ahead of schedule. It's efficient, affordable power, and cutting-edge technology.

PUF: How have you all been working through this pandemic?

Sean Meredith: At the transmission control center, we limited our staff to essential personnel – our operations staff. With today's technology, our support engineers and support organizations, who are absolutely vital, are able to work from home to support the operators on shift.

We reduced our number of employees coming into the center to minimize that

risk exposure. We've implemented extra practices where operators don't share the same workstation and they're cleaning before and after every shift.

We have operators continually using hand sanitizer, we've reduced the amount of common areas, and implemented strict social distancing within the control center. Those operators are there 24/7/365 because they are crucial to ensuring reliable service to our customers.

This week, we had significant weather come through our service territory. That team right now is fully staffed, working through the restoration efforts in Mississippi, southern Arkansas, and northern Louisiana where we had severe weather. They're doing a great job with that while maintaining all those practices we put in place for the COVID-19 pandemic.

We have other plans developed if we need to implement depending on the severity of the crisis. But as of now we've been able to implement those practices and keep everybody safe and healthy, and it's working.

PUF: Entergy is in that Southern part of MISO. You all had to work across MISO all the way up to Canada or the border. How was that?

Sean Meredith: It's a great partnership. It's a good team. We're able to work on an everyday basis with that team to ensure that we're providing the best service to all our customers. We're fortunate to be partnered with them in that endeavor.

It's also interesting to know that they're headquartered out of Carmel, Indiana. For a lot of the folks, sometimes you're talking to a control center in Indiana. They have a control center here in Little Rock also that handles MISO South. That was our primary interface, but some of the folks we were interfacing with to help us were also out of Carmel.

PUF: You been promoted to VP of Power Plant Operations for Louisiana, which is quite a large fleet of power generation from being Director of Transmission. What led to your new role?

Sean Meredith: I kind of grew up in power plants. I was a submarine officer for about ten years. I was the Chief Engineer on a nuclear submarine. I was fortunate to have some power plant experience.

I have some commercial nuclear experience. I've had the chance to work with incredible teams at Entergy and, prior to this, in the Navy. I was fortunate that they said, this is a great opportunity for your personal growth and for our company. We'd like to offer you the position.

The teams I've been a part of have done a phenomenal job, and I've been fortunate to be a part of those teams up to this point. That's been the key.

That team is fully staffed, working through the restoration efforts in Mississippi, southern Arkansas, and northern Louisiana where we had severe weather. They're doing a great job while maintaining all practices we put in place for the COVID-19 pandemic.

PUF: What advice do you give a younger person just starting out?

Sean Meredith: Being the oldest of nine kids, I learned at an early age that my father was never interested in what I would call problems. As the oldest, I could bring him a problem and he would turn around and look at me like, why do you need me to fix that? He ingrained in me to be that person who brings solutions to the table.

There are always going to be challenges in anything you do in life. My advice is come to the table with, I know this is the challenge, and here's what I've got to do to hit this head on. When you take that approach on everything you do, it is infectious to the organization.

It helps because you are trying to make not just yourself better, but you're trying to make your team better, and you're trying to improve everything around you. The second thing I tell them is, if you're doing it with a smile on your face, I can assure you it will be better.

With anything you do in life, be positive. That is something else my dad imparted on me – it doesn't matter what you're doing, be positive, because it's infectious. It helps everybody around you. It helps the team because there are always going to be challenges.

I don't care what you do in life. But if you come into it with solutions and you've also got a good attitude it helps make the team better. That's important to me.

PUF: You were the Chief Engineering Officer for USS Hartford, a nuclear sub. I believe you won an award named after one of the great Admirals in Naval history. What was it like at a young age to be Chief Engineering Officer for a major ship?

Sean Meredith: It was an incredible opportunity and incredible team we had. It was nonstop, because if it's got a valve, a breaker, or a switch on that submarine, you own it. It was 24/7/365.

It was a rewarding job because you had these incredible young men on that submarine who volunteered to serve their country. They would go to the end of the world and back to make sure that ship was ready to deploy and ready to support any operation the country needed. It made me proud every day to go to work with those young men.

It was technical, which I loved, because you're always having to solve problems, and having to work through technical issues. You'd meet these young folks who were in their early twenties and they would come up with the most innovative solutions.

When you're underwater, you have a finite amount of parts. You can't pick up

the phone and call somebody and say, hey, I need help. We were able to come up with ideas for a carbon dioxide scrubber, for instance. That's one I remember the most.

That's what took the carbon dioxide out of the air. One of ours broke and we had to figure out how to fix it with what we had underwater. One of the young men came by and said, hey, you know the exhaust fan we use as damage control equipment? It has the same capacity as that fan.

We were able to make it work. Have you ever seen Apollo 13, where they make a square peg fit in a round hole? It's almost identical to that. That's what we had to do as a team to get that equipment working. These are young folks who are coming up with these ideas and being innovative.

PUF: It sounds like you're still applying the same approaches as on the USS Hartford.

Sean Meredith: I've been fortunate, and I've learned a lot through these experiences. That job taught me more in my life than any job since about the teamwork aspect and everything we do. It also taught me how powerful a solid team can be in achieving any goal.

Multiple times I'd walk in and say, I've got to lay another challenge in front of you. They would say, we've got it boss. Let's roll. Then they would hit another home run. It was a testament to their sheer will and determination. I keep in contact with a lot of those folks and I'm proud of them. ❍

Maria Bocanegra

Commissioner, Illinois Commerce Commission

PUF: What's the mix when working with others on Staff, the Commissioners, and outside parties? What's it like to be a Commissioner?

Maria Bocanegra: Being a Commissioner is the best job I've ever had. Before joining the Commission, I served as an Administrative Law Judge for the Illinois Worker's Compensation Commission, and I thought that was the best job.

But the sphere of participation and impact when making decisions on complex regulatory matters, implementing state policy, or exploring with stakeholders the future of our utility services is unlike what I could have ever imagined doing. I am honored to ensure that with every decision I make or initiative I facilitate or support, that it is done for the purpose of ensuring the citizens of Illinois safe, reliable, and affordable utility services.

One aspect of the job I love so much is that it is multifaceted. I do a little bit of everything.

First and foremost, the docket is of great priority to me. It is paramount above any other extra curriculars, as I like to say. At the ICC, as Commissioners, we collectively regulate gas, electric, water and wastewater investor-owned utility companies. In addition to public utilities, we regulate some aspects of telecommunications and transportation.

In addition to my team, the ICC has a highly knowledgeable and reliable Commission Staff.

The docket encompasses a variety of matters respective to each utility service, such as certificates to operate, tariff filings, etc. However, rate cases generally receive the greatest public attention. And rightfully so. Nevertheless, with every matter there is much to review, analyze, and conclude.

Luckily, I do not have to do this alone.

I have the benefit of two amazing advisors that assist me in managing the docket and all the other responsibilities. As a team we also evaluate industry trends and target specific ones to explore.

In addition to my team, the ICC has a highly knowledgeable and reliable Commission Staff. Whether it's discussing a topic that interests me or technical assistance in a docketed matter, Staff is always ready and willing to extend their institutional knowledge and expertise.

I should also mention that it is important to me to also seek the expertise of experts outside the ICC. I similarly reach out to consumer advocates, industry organizations, and our utilities for data, studies, and historical practices. The best way to learn is by doing and I enjoy learning what is important to all of our stakeholders.

PUF: There's a balance between judicial versus policy, but with your ALJ experience, maybe you lean a little more into the docket. Is that the way you see it?

Maria Bocanegra: Yes. That's a fair statement. I more often wear the judicial or legal hat than the policy hat. This is mainly due to my previous experience. When I was an ALJ, my considerations were narrower; meaning, facts are facts, and do they fit squarely within whatever the law is.

Now, it's not just about the facts, but about the practical implications at the local level, and state level. This role requires policy considerations such as impacts on financial markets, consumers, state policies and more.

When looking at litigated matters, I tend to evaluate cases in terms of what the evidence is presented in front of me. But I am much more comfortable to pivot and introduce policy considerations in my deliberation.

It's a tough job. There are calls you have to make that aren't going to please everybody, and I learned that fast when I was an ALJ. We are quasi-judicial and as judges, we must be able to make decisions that are fair, impartial, unbiased, and without the influence of public clamor or partisan interests. That said, I just do my best in executing the best judgment with information I am given at that time.

PUF: How did you become a Commissioner?

Maria Bocanegra: The opportunity came as a surprise, because when Governor Pritzker's Office approached me, I was in my last term as an ALJ and I was awaiting confirmation of my reappointment for that role. But little did I know that when I received a call one evening from one of the Deputy Governors in March 2019, it was not about moving my confirmation along, instead it was about a potential role with the Illinois Commerce Commission.

I enjoy bringing stakeholders together or inspiring stakeholders to evaluate hot topics.

The Deputy Governor shared with me that I came highly recommended, and after reviewing my resume, she wanted to interview me. Although I was nervous, I went in for the interview with confidence in my career as a dedicated public servant. The rest as they say, is history.

This was overwhelming – in a good way – not only because of the confirmation hearing status, but I was also exploring other judicial opportunities. I was in rounds of interviews for being a federal immigration judge and thought that's where my career on the bench would be.

Nevertheless, on April 8, 2019, I was appointed to the Commission. I am beyond thankful to the Governor and his administration for bestowing me the honor to continue serving the great State of Illinois, and the opportunity for engaging with tremendously smart, committed, and dynamic professionals in the utility industry.

PUF: How did you come up to speed?

Maria Bocanegra: Prior to arriving at the ICC, I had a short window of time to learn about the ICC, so I started researching anything and everything about the Commission. I looked at one of the Commissioners on the ICC's website and realized I knew her.

We'd run into each other in mutual circles, so I reached out to somebody, who reached out to somebody else, and they gave me Commissioner Oliva's cell phone number. I reached out to her and we met for lunch.

She explained the importance of our Commission, the important role that a Commissioner has and answered all of my questions. She was so supportive and so helpful.

Once I arrived at the Commission, I received the help and support of many at the Commission. Technical Staff, administrators, and other Commissioner's advisors generously gave their time and shared expertise to allow me to hit the ground running.

Shortly after arriving at the Commission, I was invited to present at the NAWC Conference for the Illinois Chapter. So how did I do it? By jumping right in and with the help of others.

PUF: You're allowed two assistants or advisors, and they're helpful to Commissioners. Did you get to pick yours?

Maria Bocanegra: I didn't have a pool to choose from, but there were a lot of suggestions. Some people suggested I bring over from the Workers Compensation Commission. In the end, I wanted somebody from the outside, like I was. I wanted somebody who was new, fresh, and could count on, and luckily for me I found two amazing advisors.

One is a recent graduate from Columbia, with a Master's in Public Policy. My other advisor is a lawyer with a JD from Northwestern. Interestingly enough, both are of Cuban descent, and both are from Miami.

I hired Jena first, and then I was

down to two individuals to fill the second position. It was between Alejandro and another woman. I took Commissioner Oliva's advice and myself and Jena went out to coffee with each of them. It was important to me we all connected as I knew this would be one of my closest relationships in my new role.

PUF: You've been there over a year. Do you feel like you've had an impact, and what's been most rewarding?

Maria Bocanegra: I do feel like I've had an impact, and this role is a responsibility I do not take lightly. I work hard at what I do, and always seek out learning opportunities. I am usually the one asking a million questions.

I enjoy bringing stakeholders together or inspiring stakeholders to evaluate hot topics. I have been successful in supporting stakeholders to continue exploring topics such as electrification, water, and diversity, for example. Undoubtedly, there is an opportunity and need for Illinois to expand the conversation on these topics.

What makes this role rewarding is the opportunity to make positive changes. It sounds cliché, but we're living in an exciting time right now. The traditional way that we thought of both the utility model and utility regulation is changing.

There are changes being driven by technology. There are new innovations. There are new things coming onto the grid. There are new gap technologies that probably weren't even thought of twenty years ago.

I am privileged to be a part of that and help make that change. Illinois has its own energy related goals and I'm honored to help in any way I can.

PUF: What do you tell young folks who are just starting out?

Maria Bocanegra: There are two key things I share with young professionals starting out. First, get committed. This means dive into the job and have a peripheral understanding of the subject matter you're in to evaluate where you are and where you need to go. It also means being on top of current of events, and not being afraid of asking lots of questions. A career can take many paths, but you cannot succeed without investing in yourself every step of the way.

Second, I also tell young professionals to, always do the right thing. Although simplistic and obvious, it is phrasing a mentor shared with me and has remained with me because having integrity is not learned or selective. Having integrity is a core value to live by. Whether it is managing people, dealing with opponents, trying a case, or coming to a resolution in an order, when you do the right thing, the rest will fall into place.

I am lucky to have the mentors that I do, so anyway I can pay it forward, I soar to do it.

Aaron Curtis

Senior Project Manager, ITC Midwest (Fortis)

PUF: Tell us about your job and the Cardinal-Hickory Creek project.

Aaron Curtis: I'm a Senior Project Manager, working on the development and construction of transmission line and substation projects in Iowa, Wisconsin, and Minnesota. With the scope of it in the utility world, it's definitely a once-in-a-lifetime project. We're working with two other utilities in two states and working through a federal environmental review process.

I'm fortunate to be leading the project. It's been a challenging yet rewarding project and I appreciate ITC's leadership and their trust in me.

I was the assistant project manager for a little while before taking over. When I started with the company, I worked closely with the former lead project manager here at ITC Midwest. Then he retired and, because I had the background already with the project, I was chosen to take over. I didn't take that lightly.

This is the last of the MISO MVP projects in the Midwest. That's another unique aspect. There were 17 projects approved.

Knowing the scope and the complexity of the project, I dove right into it. I've been fortunate to work with such a great team over the last six years. It has been their expertise and guidance that has gotten the project to where it is now.

This is the last of the MISO MVP projects in the Midwest. That's another unique aspect of the project. There were seventeen projects approved and even though it's denoted as MVP 5, it's the last project that will go in service.

PUF: It's three hundred and forty-five kilovolts, approximately one hundred miles, and it's over the Mississippi River. How does that work? The Mississippi River isn't a little stream.

Aaron Curtis: The teams started the project in 2012. The project underwent an extensive study and analysis over many years with close coordination with different federal, state, and local agencies to determine the preferred crossing of the river and how we could mitigate or reduce

In my new role I will be a Stakeholder Relations representative, with the responsibility for maintaining good working relationships with our customers.

impacts to these important resources.

It's been an iterative process from one step to the next, trying to get to the final result. We are almost there. In February of this year, the Rural Utilities Service, along with the USFWS, Army Corps of Engineers, and U.S. EPA, completed their environmental impact statement and issued a Record of Decision for the Project.

It's a robust document that has a ton of information evaluating nearly every aspect of the project from an environmental standpoint.

We're still working through some of the regulatory requirements on the Iowa side of the project. We're hoping some of that will get concluded in the next couple of months.

PUF: You've also got a fifty-mile project.

Aaron Curtis: Yes, Huntley to Wilmarth in Minnesota. We're working with Xcel Energy on that one. We own half of the project and they own the other half.

Xcel Energy is the primary entity leading most of the pre-construction, real estate, and all the heavy tasks, including construction.

But with a project that size, fifty miles, three hundred and forty-five kilovolts, there's still quite a bit of work to do. It's coming along well, too. We're anticipating the project will start construction this year.

PUF: You graduated six years ago. What led you to this role?

Aaron Curtis: I started with ITC Midwest right out of school. I took some project management courses in college and found it fit with my strengths more than a typical engineering route.

I was fortunate that I got into project management right out of college. Typically, with some companies, you would try to build toward a project management role, as you are given more authority.

I was given that authority early in my career. As an outsider coming into the industry, I had an open mind toward new processes and trying to seek creative solutions.

While some of these ideas were not viable in practice, people started to catch on that I was making an effort, and I was willing to put myself out there.

Being able to work effectively with people, understanding people, being organized, and self-sufficient are all things that I strive to do. I try to listen and hear people out because if someone's not being listened to properly, they're not empowered. My style of management might be different, but I tend to see the best in the people working on projects and work to achieve agreeable solutions.

PUF: You're also pursuing your MBA at the University of Iowa.

Aaron Curtis: Yes. It was something I've been looking to do for a long time, and I've been trying to determine how I want my career to progress.

There's no better time than the present. I thought an MBA would complement my engineering background. In the engineering world you don't get a lot of management-type interactions or business negotiations, so you're coming at it from a different angle. This will help me become more well-rounded in things other than technical engineering.

PUF: Where are you aiming long term?

Aaron Curtis: That's an interesting question because within the last two weeks, I've accepted another position within the company that will provide some growth opportunities. I've been on the project management side for six and a half years now, but in my new role I will be a Stakeholder Relations representative, with the responsibility for maintaining good working relationships with our customers, including investor-owned utilities, electric cooperatives, and municipal utilities. I took this new role within ITC Midwest to focus on the business side of our company.

I'm eager to start this new path to find opportunities to solve problems and provide benefits to our customers, while at the same time continuing to be involved with capital projects. I'm excited for what's to come. ❍

Ana Stachowiak

Senior Program Director, NYPA

PUF: You have this big energy storage project, and this massive transmission project, called the Smart Path project. Tell us about your job.

Ana Stachowiak: I spend most of my time talking on the phone and attending meetings. One of the reasons why I came to NYPA about three years ago is because this organization has so much happening. In terms of energy goals, NYPA and the Cuomo Administration are headed in a great direction that will create a greener and cleaner energy mix for future generations.

I knew that there would be many opportunities in project management, and I would be able to contribute to a series of large capital projects. While there is definitely the mundane task of reviewing contracts, everyone became more excited for the Smart Path project when we finally got the first material delivered to site and sent around pictures capturing what we had achieved.

That's part of the joy of being in project management in this field. You have a real product at the end of the day, a three-dimensional reality that fills you with enormous pride. You can say, I helped take a concept from the blueprints to construction.

For probably ten years now, when people ask me what I do, I am thrilled to be able to say, I am helping to keep your lights on. It's literally what we are doing.

I'm not on the distribution side, but you need these big projects to keep the grid up, running and reliable. It's an exciting position that challenges me daily, sometimes hourly.

PUF: The Smart Path project is almost a hundred miles. You're upgrading two hundred and thirty kilovolts to three hundred and forty-five kilovolts. It's complex. You're crossing wetlands and farms. Are a lot of Staff involved?

Ana Stachowiak: I have a fantastic team working in the project management office. Together we have gone above and beyond to get the project where it is today.

We work closely with our internal departments to achieve our objectives. It took a lot of hard work to get the project to where it is today; that was especially true for the Article Seven process.

There was a long period of back-and-forth with regulators and coming to terms about what will be in the certificate conditions.

You have to be mindful that those conditions are going to last for the life

That's part of the joy of being in project management in this field. You have a real product at the end of the day, a three-dimensional reality that fills you with enormous pride.

span of the project, so you always have to keep that in the back of your mind. There's a depth of expertise within the NYPA organization, so we've got great people to help get through some of that complexity.

PUF: The North Country Energy Storage project is not small either. It's a twenty-megawatt lithium ion battery system that you're going to put in. Twenty megawatts is large by the standards of today, so far, for storage. That's state-of-the-art too.

Ana Stachowiak: There's a big learning curve on that. The only other one that I'm aware of in the State of New York was installed by a developer. All the other battery storage throughout the state has been on a smaller scale, a couple of megawatts here and there.

It's complex and you learn throughout the duration of the project. That's how you grow. Because you keep doing projects that are a little bit different, you learn more and do better on the next project that comes your way.

PUF: What led you to this role?

Ana Stachowiak: I worked at PSE&G, in New Jersey. PSE&G had a large, capital, strategic plan that started around 2007 and still is doing some of it. I got to be involved in some of its large transmission capital projects. That is what helped me in my interview with NYPA and my subsequent selection.

PUF: Did you have some mentors that helped you get where you are?

Ana Stachowiak: Yes. I have been fortunate throughout my career. Especially once I started at PSE&G, I've always had managers who have been supportive, who have trusted that I could go and get the work done.

All the other battery storage throughout the state has been on a smaller scale, a couple of megawatts here and there.

But I had people along the way who helped me develop into the manager that I am today. The key to success is often having somebody who you can go to for advice and then take that advice and be successful with it. I've been fortunate that I've always had managers and others who have been there to guide me and help me grow.

PUF: What kind of advice do you give people who are just starting out?

Ana Stachowiak: First, work hard. Then, always be thorough. Look at the details and ask as many questions as you can because that's how you're going to learn. Especially, when you're right out of school, don't pretend that you know it all. You really don't!

Be willing to step back and let your managers lead. Then with what you've heard, make sure that you're digesting it and asking more questions, and that will help you gain the understanding that you need to move forward.

PUF: Where are you trying to aim in the future as you further develop?

Ana Stachowiak: My goal is to ensure that those projects are successful. I am, as expected, looking ahead at the next step within the organization that I'm in right now and thinking about where I can go.

I have great leaders as examples in front of me and I plan to continue to learn from them. Exactly where that might be, I don't exactly know yet. That said, I am definitely headed on a good path and hope to follow in their impressive footsteps. ❍

Lisa Dailey

COO, Northfork Electric Cooperative

PUF: Tell us about your role at Northfork Electric Cooperative. Also, where are you located and how big is the company?

Lisa Dailey: I'm chief operating officer at Northfork Electric Cooperative. We're located in the Southwest part of Oklahoma. We're situated on I-40 about an hour and a half from Oklahoma City and about an hour and a half from Amarillo.

We're a small, rural electric distribution co-op. We have thirty-three full time employees. We have about sixty-five hundred meters and around thirty-two hundred members. We serve all the way to the Texas state line. That's our western border.

We've formed an LLC with another co-op in Southwest Oklahoma called NuEra Energy Services to look at ways of capturing non-traditional revenue, doing some shared services. We're also working on a proposal to serve a load together. Trying to get the LLC up and going has been taking a lot of my focus recently.

I oversee all the office and administrative related functions of the cooperative. That includes marketing, HR, communications, accounting and finance, member services, customer service, billing, and procurement. I also provide direction for strategic planning and safety.

I'm a certified public accountant in Oklahoma. But I didn't take the traditional route, coming up on the accounting and finance side. Now I'm working my way out of accounting, so I do less of that. I issue the financials and oversee the accounting side, but more from an analytical aspect of the financials, and less from a process side.

You would think somebody with an accounting degree would have entered at a clerk position on the accounting side and moved through that way. I started in 2002 at my first co-op, Kiwash Electric. The year prior they had a major ice storm.

Back in those days for FEMA, you had to have three copies of everything. It felt like I literally ran the copy machine for the first year because I didn't have a lot of technical knowledge. I helped them a lot with that paperwork.

After that ice storm project was over, I did a lot of secretarial work for the general manager at the time because he didn't have an assistant. Then I did a lot of customer service, member services, cashiering, and whatever was needed, I would do it.

During that time, I was studying for the CPA exam and passed. They knew their billing person was getting ready in the next couple of years to retire. They focused my efforts on learning billing, service orders, and all those processes.

I did that for a while. Then I started training somebody else to learn a lot of the billing functions and moved into more of an accounting role. But most of my career has been spent on the member service side.

We've formed an LLC with another co-op in Southwest Oklahoma called NuEra Energy Services to look at ways of capturing non-traditional revenue, doing some shared services.

When I was hired at Northfork, I supervised member services, customer service billing, and then communications was added. That came about because in 2014 communications was becoming more important. We were also wanting to increase our presence online and in our communities. At the time, we had a Facebook page, but it was not updated consistently and didn't have much of a following.

I found out we had a young employee who was a member service rep that had a communications degree. He and I started working together and building out the communications program we have today.

We had the talent here. There was just nobody that was identifying, capitalizing, and aligning talents, abilities, and skills with some of the jobs that needed to be done.

When I got here, they had been aggressive on building out technology as far as the operations side, but the office side was behind. I got to oversee the digital transformation of the office, realign processes, and get the office operation up to speed.

We went from printing bills in house on post cards to sending out full color statements, from all service orders being completed on paper to fully implementing work management, from having a clerk key all time for payroll to one hundred percent employee time entry, from approving AP on hardcopies to APP.

PUF: Talk about how you and your CEO work with the members to let them know what's going on and hear their views.

Lisa Dailey: We've got a good social media following. We've branched out into Instagram and we're doing a lot of video for communications. We are working on putting together a video series for communications for our members.

We have our annual meeting, like a stockholder type meeting. Members own the co-op. We have it every August in the city park. We have the pool and miniature golf open, live band, vendors. It is a fun day of celebration. Several years ago, for

Northfork Electric Cooperative linemen at work.

Northfork Electric Cooperative headquarters.

A lot of it is hard work, looking for opportunities, and being willing to do the things that nobody else wants to do.

our seventy-fifth anniversary, we upped the game on our annual meeting as far as having a better grand prize drawing and doing a lot more radio type communications around it. We also started promoting it heavily on our Facebook page.

Some co-ops can't even get enough members for their annual meeting to conduct business.

You have to have a quorum, which is five percent. We get around fourteen to fifteen percent every year. When you include family of members and guests, we end up serving around twelve hundred plates of BBQ.

That's something we're proud of. We do a lot of communications around that. We have a newsletter we send out each month. We talk about the typical kind of programs, like billing services, payment options, rebates, youth programs, industry changes, and community involvement, and we try and do a few feature stories a year about members.

One thing that we added a couple of years ago is a new software system. It's got a lot of messaging capabilities. We're doing more messaging through it.

It does text messaging, emails, and push notifications. We added the ability a few years ago to receive outage notifications.

If we're doing a planned outage, we'll send out a text and an email. We do your typical surveys. In addition, when we're working on different projects, like a few years ago when we did a rate increase, we do different focus groups with members. We've found that those have been successful, especially with certain segments of our membership that like to be more involved and informed.

PUF: As you've progressed in your career, what was the reason you were given more responsibility time after time? What advice would you give to folks that are just starting out?

Lisa Dailey: A lot of it is hard work, looking for opportunities, and being willing to do the things that nobody else wants to do. You learn so much through the struggles, having a sense of urgency, and not being afraid to act.

My first boss, Dennis, would give me a project when I was his assistant. He'd say, here it is. I'd be thinking, I have no clue how to even go about this. It wasn't like I could ask him. He just expected it to be done. I had to do the research and call colleagues at other co-ops. I'd ask, how would you go about this, or, have you done this before?

Many times, in supervising people over the years, I find that people don't take ownership of their careers. They want you to map it out for them. I would say to anyone starting out to dream, create a vision for your career. Go big and surround yourself with people who believe in you.

However, know that there will be times that you will struggle and that's ok, because that's where you learn. I've always had a vision for my career. I never saw it as just a job.

Know where your strengths are, and where your weaknesses are. It's rare sometimes with people to understand where their strengths lie and where their weaknesses are, and face those. ❍

Abbey Roy

Managing Director, Southern Company

PUF: What do you do at Southern Company?

Abbey Roy: Southern Company is the parent of several regulated electric utilities and gas utilities as well as several unregulated businesses. We have an interesting view where we see what's going on in the broader energy industry.

My job is to look for opportunities for growth whether that be some type of business transformation within the regulated utilities or new technology coming at us that could be beneficial for growth.

I spend a good amount of my time looking at how we can grow businesses outside of our core regulated footprint creating new customer offerings.

We are trying to look at it from our customers' viewpoint. They buy energy products in different ways today. Twenty years ago, you were dealing with a single entity at a large retail chain. Today, energy managers are looking at what's going on with their energy portfolio across the United States.

We're focusing on how we can provide better service and product offerings, whether it's distributed generation or resiliency products behind the customer meter or it's a large scale renewable PPA where they want to procure three hundred megawatts of wind. We are able to offer that suite of services.

PUF: What is your specific role?

Abbey Roy: We purchased a company in 2015 called PowerSecure that's based in Raleigh, North Carolina. They are a fantastic group of people on the cutting edge of developing behind the meter microgrid technology.

I spend a lot of my time with that team. It's learning from them, spending time with the product development engineers, seeing what they're doing, and trying to help promote the innovation that is coming out of there across our company without hindering them or slowing them down in their ability to innovate.

I have a passion for bringing technology innovation to market.

I spend a lot of time with other technology companies seeking partnerships for new technologies we can deploy. We spend a lot of time looking at the technology providers and startups.

We are the founding member of a large energy venture fund. Where I fit in the equation is if there are companies that we've made investments in, or that we're looking at making investments in through our venture fund, my team forms execution strategies and teams required to pull through that commercialization into our company.

I meet with those companies, understand the technology, come back to Southern, and put together a project team where we're going to implement some kind of pilot or a test scenario or even start to scale a program. It could be anything from a new technology company

to a new commercial model where we're offering something like energy as a service versus just a traditional turnkey product or traditional retail energy.

It's a broad spectrum of where I'm traveling and who I'm meeting with. But the end goal is the same, and it's how do we bring this back to our company and implement this at one of our operating companies.

PUF: How do you pick who to work with?

Abbey Roy: It's hard because there are a lot of great companies out there. We don't have one winner. We try to diversify and offer multiple piloting opportunities. We have a lot of needs. Sometimes we might need long duration storage, but in another scenario, we might need short duration storage.

We are trying to establish relationships that vary and then we will also bring in our core subject matter experts from within our company. Southern has a large engineering and construction technical services organization. We bring those subject matter experts in to work with the technology company and help us determine who is furthest along and who is the best fit for our specific needs at the time.

We have to stay open minded enough that we continuously want to let new people in, but we also have to do enough diligence that we know that the people that we're working with are far enough along technologically that we're protecting our shareholder base and utilizing those funds appropriately.

PUF: After graduating from the University of Alabama, what led you to this role?

Abbey Roy: I worked twelve years at KBR, a fantastic company where I learned a lot. I have a heavy commercial background in business development from that time period. At KBR we weren't infrastructure owners, we were executing projects on behalf of infrastructure owners.

As we were looking at extending products, services, and growth in unregulated, I saw an opportunity when I was at KBR for a company like Southern that had an unregulated arm, a super strong balance sheet, a hardcore operations team, and engineering expertise to come in to some of these on-site behind the meter situations that we were thinking were going to occur. I came in with some preconceived thoughts in my head of what Southern could do.

I spend a lot of time with other technology companies seeking partnerships for new technologies we can deploy.

I had no idea when I came that several members of the Southern leadership were already thinking about those things and working on the acquisition of PowerSecure. When I met our CEO, Mark Lantrip, we realized we were thinking along the same lines. That brought me into my current role and the work we're doing with PowerSecure.

Mark is a visionary and sees these things but also understands the complexity of the utility industry and how to navigate it successfully. He's been a great mentor for me because I came from an unregulated space and had to understand how we get things done in the regulated space.

It's been fun. I have a passion for bringing technology innovation to market. That's another fun thing I get to do. How do we take things to the next level and appropriately manage the risk, because that's a risky endeavor for a conservative company. Southern in the utility space is cutting edge with regard to how much innovation they help pull to market.

PUF: What advice do you give to young people who are starting out?

Abbey Roy: I love working with younger people. I learn from them. They are eager. I love the energy they bring to the team. I feed off of the new ways of doing things.

I encourage them to speak up because a lot of times that's where they're scared. The reality is they know so much and don't realize it and that we can learn from them.

My teams today are filled with younger people and I encourage them to be involved. I want them to not be scared to bring new tools to the table because if they know a better way, we want to know it.

I encourage them to continue learning, because the learning journey never stops. You need to do your day to day job, but you also need to learn what other people do in their jobs. The knowledge that we can cross-share across the company is important. They also need to stay open-minded.

PUF: In five to ten years, some of these things that you're bringing are going to change the customer experience in Southern Company. It that right?

Abbey Roy: Yes. That's part of the success of a company.

That's something that we can't be scared of. If we're not continuously thinking about how to reinvent ourselves and how to offer new products and services, we become irrelevant. If we are successful, then it should look different in five to ten years. Five to ten years from then it should look different again, because that will mean we've been successful, and that is exciting. ❍

On May 11, grid-connected solar in California generated 12,214 MWh at 2 p.m., an impressive 51.5% of generation on California's grid. On May 4, solar reached 12,271 MWh at noon, for an even more impressive 59.2% of the state's generation.

Brian Van Abel

CFO, Xcel Energy

PUF: You've recently become the CFO of Xcel Energy at a young age. What do you do there and what's your typical day like?

Brian Van Abel: The day is a little less typical than I expected it to be when it was announced earlier this year before we felt the full impact of coronavirus. My typical day now is, like all of us and many of our employees, about working from home, or at least the ones of us that can. I greatly appreciate all the hard work that our frontline employees are doing out there and ensuring that the lights stay on and the gas keeps flowing.

When working from home I spend a lot of time on conference calls and Zoom and Skype video calls. These are the tools we use to stay connected. It's even more important to stay in touch with my new team while stepping into a new role.

We did our quarterly close remotely for the first time. The team did a great job and found a lot of ways to improve efficiencies. It's not what I envisioned, not being in the office, but we've found creative ways to stay connected and be effective.

PUF: Do you get involved with contracts and some of the strategy that's behind the company's clean energy vision?

Brian Van Abel: Absolutely. Being a leader in the industry and rolling out our vision to provide one hundred percent carbon free electricity by 2050 with an interim goal of eighty percent by 2030, I'm heavily involved in the resource planning aspects of that. How do we deliver renewables and make that transition work for our customers and communities from a cost perspective?

We've spent a lot of time thinking about that. We're building and putting in more than two gigawatts of wind this year. We're focused on delivering these projects for our customers, but also ensuring that our employees and contractors are safe while we're building during this pandemic.

It's been a fluid situation and we've learned a lot on how statewide shelter-in-place orders impact each customer class as we've gone through April.

Thinking toward the future, what do the next five to ten years look like? We're looking at the next wave of renewables as we start to shut down our coal plants. There's a lot of interesting and great work taking place – we're also focused on system reliability as we make this transition. It's great to be part of a company that's leading.

PUF: How did your background lead you to this role?

Brian Van Abel: I've been fortunate and have been working here about a decade. That seems like a long time, but in the utility world that can seem like a short time given the decisions we make can last decades.

When I joined the company, I worked in a regulatory role where I stepped right into a rate case proceeding. Not coming from a regulated background, that's the best way to learn the guts of a utility, when you're knee deep in a rate case and are helping the company through that.

After that, I had the opportunity to step into the treasury organization. I grew up there by moving into the assistant treasurer role and then the treasurer role. Xcel Energy has a centralized treasury function, so I got to work with all of our states and regulatory jurisdictions. I got exposed to broad swaths of the company and was

fortunate to have the job opportunities open up when they did.

Then Bob [Frenzel] came on board and has been a great CFO. He has helped push the company to where we are today, and I look forward to working with him in his new role as president and COO. I'm fortunate again to be in the right place at the right time to step into this opportunity. And it's great to have a strong team in place. We've coalesced as a team to make sure that we manage through this unprecedented time.

PUF: You're almost like the glue between different parts of the company. How do you prioritize and figure out what to drill down on and what to delegate?

Brian Van Abel: It's a balance. Externally, all of our stakeholders are important. I interface with our investors, and they have a lot of questions in this uncertain time.

I recently had the chance to have a discussion with one of our Commission Chairs and talk about the challenges facing our customers and communities and how we can help be a solution as we go from crisis to recovery mode, helping people return to work, while helping the businesses and communities that we serve. There are a number of stakeholders, and I try and make time for them all. It's important to have those conversations to get insight to what they're thinking and what their perspectives are and to try to work together.

Internally, having a strong team in place really helps since I can turn my attention to any challenges at hand and I know that my team has everything else covered. As you can imagine, right now I'm spending a lot of time on the quarter close and earnings materials and thinking through the potential impacts that this could have on us in the near and long term.

PUF: Folks outside the Company are pressing for impacts of COVID-19 on the Company. How do you evaluate the risks and future earnings per share? How do you stand up to that?

Brian Van Abel: That's a good question. Whether it's investors or analysts or other stakeholders, they are interested in our perspective about what's going on and how we see it impacting the industry.

For us, it's been a fluid situation and we've learned a lot on how statewide shelter-in-place orders impact each customer class as we've gone through April. We've spent a lot of time analyzing customer level data to get a better grasp of the downturn, but obviously the question of how long this might last is a difficult one to answer, so we spend a lot of time thinking about different scenarios. You hear a lot of people talk about V, U, L, and W shapes.

Good leaders don't want to have a bunch of folks that just agree with them.

We have our earnings call coming up where we can answer a lot of those questions more definitively with our investors. It'll be a good opportunity to talk through some of what we see and how we think about things as we move forward this year.

PUF: What advice do you give young folks who are starting out?

Brian Van Abel: That's probably one of the favorite parts of my job – the people and working with them. I have an open-door policy, well, I guess I should say when we're in the office, I have an open-door policy. I'm happy for them to stop by or grab a cup of coffee for a chat or to take a quick call. I love hearing from people, getting a perspective, and providing advice when I can.

One of the things I tell people is to work hard and be humble. Those go hand in hand, because I believe good things will come with that type of attitude. But I also tell the younger folks, and this is a lesson I learned early on, is don't be afraid to speak your mind or let your voice be heard. You're the ones that are in the details and are doing the analytics.

You know the information the best, and we want to hear from you. Good leaders don't want to have a bunch of folks that just agree with them. We look to you for the analytics and the answers, and that's a great opportunity and a great role they can play.

PUF: What's most rewarding about where you are now in your career?

Brian Van Abel: It's funny, when I talk to people and tell them I work for a utility, I often get quizzical looks. They're like, that sounds boring.

But it's the absolute opposite of boring. I love the industry. I love what we're doing and how we're leading the clean energy transition. I grew up in Minnesota and am an outdoorsman. I love that we are the first to come up with our 80 by 30 goal, and the 100 by 50 vision.

I enjoy seeing the new technologies that could change our industry. Whether it's going to be beneficial or present challenges, we're seeing what's coming down the pipeline and what these startup companies are doing to offer technologies that can change the way we work or the way our industry operates.

If you think back a decade ago or twenty years ago, customer expectations have changed tenfold. They expect more out of us, for products, services and offerings. How do we become easier to do business with and provide them what they want? The next decade is going to be fascinating.

I have two young daughters – six and four years old. When they ask me what I do, I tell them I help build windmills and transmission lines. When we drive by a windmill, they always ask, Daddy, did you help build that one? They know I help make the lights go on and I'm proud of that. I'm not actually out there building them, but it's easier for them to understand than spreadsheets and PowerPoint presentations.

I work for a great company. I enjoy it and am fortunate to be here. Hopefully, I have a long road ahead of me. ❍

Haben Goitom, Alliant Energy, Director – Business Transformation, heads the Affordability Innovation Center, which advances customer affordability initiatives across the company. Her team leads the evolution to new business processes, culture and capabilities, with the goal of making sustainable changes that help customers. See the interview of Haben within this issue of Public Utilities Fortnightly for more details on her outstanding accomplishments.

Melissa Kehoe, Alliant Energy, Assistant Controller, is responsible for the completeness, accuracy, and timeliness of Alliant Energy's internal and external financial reporting. Melissa has enabled the development strategy for bringing robotic process automation to Alliant's financial processes, which results in eliminating lower value manual work, and in lower cost processes and improved engagement with employees.

Sarah Martz, Alliant Energy, Team Lead – Engineering Solutions, is spearheading several research and pilot efforts related to energy storage integration with power distribution. She showcased her problem-solving ability when she approached a situation in which customers had connected so much solar to a distribution system that additions were not possible. Sarah led the charge on finding a solution that not only solved the problem, it provided research findings and future studies that would come to benefit others in a similar situation.

Gisele Antonelli Tallman, Alliant Energy, Senior Strategic Project Manager, helped lead some of Alliant's largest strategic projects, such as the Golden Plains Wind Project and the Kossuth Wind Project. Gisele also led the Ottumwa Generating Station Selective Catalytic Reduction project, with an excess of seven hundred and fifty thousand manhours, without a single recordable injury.

Bill Davis, Ameren (Missouri), Director – Energy Solutions, leads Ameren Missouri's energy solutions efforts to save customers money, protect the environment, and generate economic benefits for the region. He leads Ameren Missouri's two hundred and twenty seven million dollar cash incentive program for homeowners and businesses who install energy-efficient upgrades, as well as its voluntary renewable energy options. He is an Eisenhower Fellowship participant, having spent a month in China in 2018 exploring energy issues and solutions, as well as exchanging best practices in renewable energy and energy efficiency.

Ryan Gibbs, Ameren, Director – Governance, Risk, and Compliance/Cybersecurity, leads several governance, risk, and compliance teams at Ameren and has established a governance model enabling digital transformation across the enterprise to manage cyber and digital risks while meeting regulatory standards. Ryan has championed a security culture across Ameren, ensuring his coworkers understand how to watch out for potential security threats.

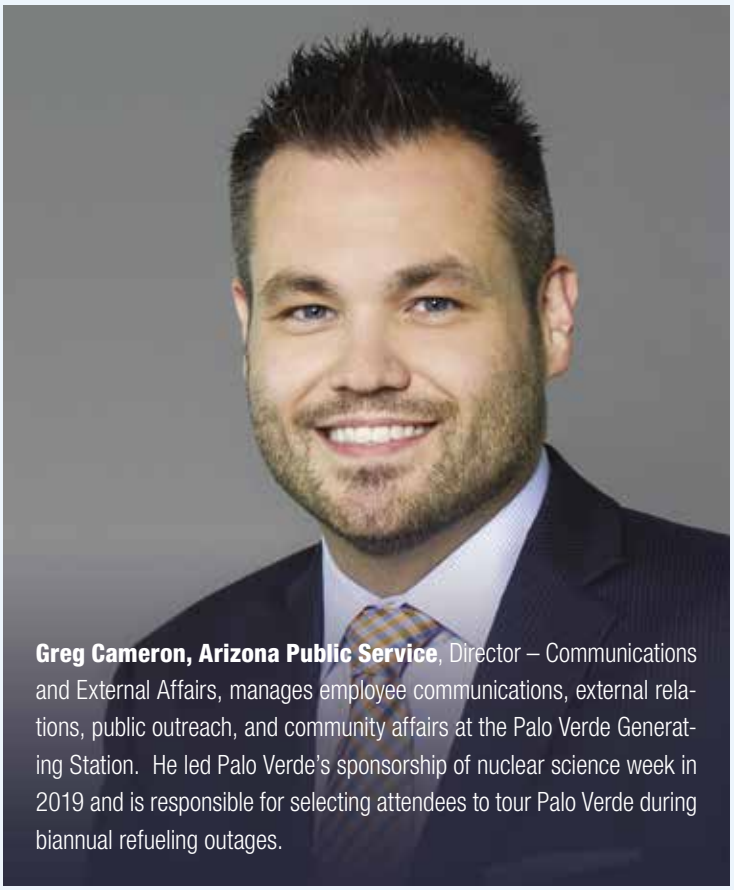
Andy Parker, Ameren (Illinois), Supervising Engineer, provides leadership and support for the Ameren Illinois voltage optimization program, which will deploy and operate more than one thousand cost-effective distribution circuits to produce one-and-a-half percent cumulative energy savings by 2025. He works with groups to determine optimal circuit selection, completion of engineering activities, and implementation of circuits to ensure cost-effective voltage optimization investments, so these changes maximize energy savings for the company.

Marco Tipton, Ameren (Missouri), Community Development Executive, assists Ameren Missouri programs promoting economic development, sustainability, renewable energy, and electrification efforts. He organized a twenty five thousand dollar effort to provide new Ring cameras outside of homes to reduce crime in low-income neighborhoods in north St. Louis County.

Semir Vajzovic, Ameren (Illinois), Supervising Engineer – Illinois Asset Management, coordinates with stakeholders to aid in analysis and management of a seven hundred million dollar annual capital budget. He is responsible for support of capital investment planning, capital budget management, investment planning software administration, business case review, and various studies and analytics related to asset performance and lifecycle cost analysis.

Jennifer Wischnowsky, Ameren, Director – Digital Strategy and Transformation, and also strategic advisor to the chief digital information officer, oversees four teams of thirty employees responsible for the design, development, deployment, and measurement of the company's digital strategy, as well as the center for excellence for robotic process automation. See the interview of Jen within this issue of Public Utilities Fortnightly for more details on her outstanding accomplishments.

Sam Rozenberg, American Public Power Association, Director – Engineering Services Security, has been instrumental working in cyber and physical security on behalf of the nation's more than two thousand not-for-profit, community-owned public power utilities. Starting mid-March, Sam served as the incident commander for APPA's COVID-19 response. He worked with member utilities, the Electricity Subsector Coordinating Council, industry, and government partners to help facilitate the public power utility response during the crisis.



Greg Cameron, Arizona Public Service, Director – Communications and External Affairs, manages employee communications, external relations, public outreach, and community affairs at the Palo Verde Generating Station. He led Palo Verde's sponsorship of nuclear science week in 2019 and is responsible for selecting attendees to tour Palo Verde during biannual refueling outages.

Melissa Cole, Arizona Public Service, Chemistry Operations Supervisor at the Palo Verde nuclear power plant, leads a group of nuclear professionals responsible for the preservation of essential plant equipment. She is a founding member of the station's Engaged, Thinking Chemist, which is an employee engagement group aiming to connect nuclear professionals focused on chemistry with the broader success of her company.

Katy Gil, Arizona Public Service, Manager – System Engineering at the Palo Verde nuclear power plant, leads a group of nuclear professionals responsible for the long-term reliability of equipment important to both nuclear safety and electricity production. In 2015, she became Palo Verde's first female shift manager.

Nathan Hogue, Arizona Public Service, Director – Radiation Protection at the Palo Verde nuclear power plant, leads a team of nuclear professionals responsible for the safe and effective use of radioactive materials. Under his leadership, the department achieved numerous accomplishments, such as record lows in cumulative radiation exposure for station employees and record-setting low cumulative occupational exposures for workers during refueling and maintenance outages.

John Hernandez, Arizona Public Service, Director – Controls and Innovation Engineering at the Palo Verde nuclear power plant, leads the engineering group responsible for management of instrumentation and control systems, physical security systems, and cybersecurity.

Mallory Lebovitz, Arizona Public Service, Chief of Staff to the CEO, played a key role in the company's announcement of its commitment to become one hundred percent clean by 2050. She manages an executive support staff and is responsible for representing CEO Jeff Guldner's perspective on issues and initiatives.

Meagan Vamos, Arizona Public Service, Senior Attorney, provides recommendations, collaboration, and advice for balancing risk mitigation steps with her company's goals. She investigates safety incidents and contributes to the development of process improvements.

Alyssa Koslow, Arizona Public Service, Director – Federal Affairs and Compliance, maintains regulatory compliance, while ensuring her company and its more than sixty-three hundred employees understand the federal regulatory rules and standards of conduct.

Matthew Lind, Burns & McDonnell's 1898 & Co., Director – Resource Planning and Market Assessments, and his team specialize in system planning and market congestion studies. He worked with municipal, cooperative, investor owned utilities, and regional transmission organizations on projects such as FERC Order 1000 and competitive regional transmission development.

Keegan Odle, Burns & McDonnell, Director – Substation Projects, oversees the largest substation design group in the U.S., with three hundred and forty project managers, engineers, designers. and project assistants that complete more than a thousand projects annually. Following the physical attack on a substation in the western U.S. in 2013, Keegan pioneered a new approach to substation security. See the interview of Keegan within this issue of Public Utilities Fortnightly for more details on his outstanding accomplishments.

Jamie Herdocia, CenterPoint Energy (Texas), Director – Gas Engineering, leads a team that is responsible for a three hundred million dollar capital budget and ensuring the safe and reliable delivery of natural gas to nearly two million customers in the Texas region. She also leads a group that validates technology and business cases to provide monitoring deeper into the gas distribution system than currently available.

Nathan Turner, Burns & McDonnell, Director – Sales and Regional Operations, is responsible for the management of more than seven hundred people in the firm's regional offices. He manages sales of five hundred million dollars and grew sales by twenty four percent from 2018 to 2020. He serves on the EEI executive committee, is actively engaged with IEEE, and recently completed the two-year Kansas City Tomorrow civic leadership development program.

Alex Buell, Consolidated Edison, Manager – Strategy and Planning Department, Energy Efficiency & Demand Management, was instrumental in shaping the electric utility's 2030 vision, by working with senior leaders and operating organizations to develop a long-term strategy outlining the grid and customer of the future. Alex currently leads the development and implementation of a rapid energy efficiency growth strategy. As a result of his leadership, Con Edison more than doubled the savings customers achieve through the company's energy efficiency programs.

Dana Lazarus, Consolidated Edison, Project Manager – Energy Markets Policy Group, has successfully advocated for Con Edison's positions on transmission issues at the New York ISO and the New York Department of Public Service. She has taken the task of coordinating with stakeholders and the evaluation of jurisdictional models for siting, owning, building, and recovering costs for the construction of transmission needed to support offshore wind.

Elizabeth Griffin, Consolidated Edison, Manager – Electric Transmission, helped develop new electric transmission projects that will facilitate clean energy supply to meet current and increasing demand for clean electricity. She played a critical role in the creation of Con Ed Transmission, leading a team that established the HR policies, IT and financial systems, and initial budget.

Matthew Bly, Dentons, Managing Associate, represented one of the largest wholesale generation and transmission cooperatives in the U.S. in its transition to becoming a FERC-jurisdictional public utility.

Devi Kumar-Nambiar, CPS Energy, Director – Managing Senior Counsel, oversees regulatory mandates and recently helped propel the move into solar and battery storage development in Texas. With her expertise and insight, the company announced the Flexible Path generation model providing actionable flexibility to integrate additional renewables and new technologies.

Ivy Lyn, Edison Electric Institute, Director – State Regulatory Affairs, leads EEI's engagement with state utility commissioners, commission staff, and other industry stakeholders. She organized and hosted a women's leadership breakfast during NARUC's Winter Policy Summit, where two hundred enthusiastic attendees listened to a panel of successful women in the energy industry.

Brian Reil, Edison Electric Institute, Director – Media Relations, plays a critical role in coordinating unity of message among key industry and government stakeholders during business continuity exercises and emergency situations. After Hurricane Maria destroyed much of Puerto Rico's energy grid, Brian spent more than fifty days on the island, helping to tell the industry story that we were one team, with one mission, restoring power for the people of Puerto Rico.

Richard Ward, Edison Electric Institute, Senior Director – Government Relations, is the point person between the electric and telecommunication sectors. Rich educates members of Congress and Hill staff, as well as state policymakers, on security, resilience, and preparedness issues.

John Bistline, Electric Power Research Institute, Principal Technical Leader – Energy Systems and Climate Analysis, leads analysis and development of EPRI's Regional Economy, Greenhouse Gas and Energy (US-REGEN) energy-economic model. He was on an EPRI team that created state-of-the-art modeling to understand drivers and impacts of highly electrified futures.

Ashley Lindeman, Electric Power Research Institute, Senior Technical Leader, Nuclear Sector – Fire Probabilistic Risk Assessment, developed, led, and delivered on an aggressive two-year research plan to improve realism in nuclear plant assessments.

Bobby Noble, Electric Power Research Institute, Program Manager – Combined Cycle Turbomachinery, leads EPRI's participation in ground-breaking work in areas such as combustion monitoring, combustion monitoring, understanding, and mitigating effects of autotuning on combustion health signatures, developing testing protocols to understand compressor blade lock-up that can lead to devastating blade liberation, and building digital twin simulations to produce better diagnostic and prognostic capabilities. He holds a patent for applying data analytics and machine learning in combustion monitoring.

Ben Clarin, Electric Power Research Institute, Senior Project Manager, is responsible for managing community-scale demonstration projects and the collection of operational data to better understand how customers and their devices are impacting energy system planning, operations, and management.

Sara Mullen-Trento, Electric Power Research Institute, Strategic Issues Lead – Technology Innovation, is leading a new project focused on integrated energy system modeling tool development and linking. Sara is the lead for EPRI's new Resilience Valuation Interest Group.

Delavane Diaz, Electric Power Research Institute, Principal Technical Leader – Energy Systems and Climate Analysis, leads initiatives on climate resiliency and risk management strategies as well as the social cost of carbon. She recently led a team of EPRI technical experts and diverse industry stakeholders in a high-impact two-year study on New York State's electrification opportunities through the year 2050. See the interview of Delavane within this issue of Public Utilities Fortnightly for more details on her outstanding accomplishments.

Jeremy Renshaw, Electric Power Research Institute, Program Manager, Nuclear Sector – Used Fuel and High-Level Waste, led several impactful projects, such as the High Burnup Demonstration project, Aging Management of Dry Casks Storage Systems, and the Used Fuel Thermal Modeling Project, all of which had global industry-wide impacts.

Cassie Bowe, Energy Impact Partners, Vice President, played a crucial role in shaping EIP's investment in the electric transportation sector, having a hand in EIP's first investment in this sector with Greenlots, and managing cash flow while growing its business platform.

Michelle Bebrin, Guidehouse, Associate Director – Energy, Sustainability and Infrastructure, currently leads NYSERDA's REV Connect facilitation team, and has helped REV Connect engage fourteen hundred companies on three hundred and fifty innovative ideas for partnerships between utilities and the market.

Jeffery Preece, Electric Power Research Institute, Program Manager – Water Management Technology R&D, named a 2019 Fortnightly Top Innovator, leads a team of five subject matter experts responsible for developing technology roadmaps and conducting research, development, and demonstration activities for water treatment and cooling system applications.

Sean Meredith, Entergy, Vice President – Entergy Louisiana Power Plant Operations, called on his experience as chief engineer on a submarine in the United States Navy to transition into this new role. Sean oversees the evaluation of the plants, making sure they are operating to his company's standards. See the interview of Sean within this issue of Public Utilities Fortnightly for more details on his outstanding accomplishments.

Maria Bocanegra, Illinois Commerce Commission, Commissioner, was appointed by the Governor on April 8, 2019 and confirmed a few weeks later by the Illinois Senate on May 31. In her first year she has focused on electrification policy and of course the dockets before the five-person regulatory body. See the interview of Maria within this issue of Public Utilities Fortnightly for more details on her outstanding accomplishments.

Joseph Stephanoff, ITC Holdings (Fortis), Manager – Financial Services, develops and maintains his company's five-year business plan and has taken on several special projects, such as modeling regulatory and complicated tax changes and its impact on the business. He leads ITC's corporate new business development efforts, including developing and managing economic project models.

Luke Scheidler, Itron, Senior Product Manager, in his work with Itron Idea Labs created possibilities for increasing clean energy in the home by giving smart appliances the data needed to automate load shifting decisions based on availability of clean energy.

Aaron Curtis, ITC Holdings (Fortis), Senior Project Manager, is responsible for Cardinal-Hickory Creek, a hundred mile, 345 kV transmission line in Iowa and Wisconsin, crossing the Mississippi River. This high-profile and complex project is in the last stages of approvals from several regulatory authorities. Aaron also manages the Huntley-Wilmarth project, to construct a fifty mile, 345 kV line in southern Minnesota. See the interview of Aaron within this issue of Public Utilities Fortnightly for more details on his outstanding accomplishments.

Karen Gibbons, ITC Holdings (Fortis), Director – Accounting Policy and Transmission Revenue, managed a large project that included the implementation of the new Revenue and Lease accounting standards. She oversees accounting for all technical accounting areas and transmission revenue and settlements.

Ana Stachowiak, New York Power Authority, Project Manager, led the team for the North Country Energy Storage project, a twenty megawatt lithium-ion battery system to be integrated at a transmission yard, and the Smart Path project, rebuilding a hundred mile, 230 kV transmission line. See the interview of Ana within this issue of Public Utilities Fortnightly for more details on her outstanding accomplishments.

Lisa Dailey, Northfork Electric Cooperative, Chief Operating Officer, led the co-op's transition to a new software protocol, harnessing the data from the automated metering infrastructure, and had a key role in the partnership with a neighboring rural electric cooperative in southwest Oklahoma to form a limited liability corporation to develop a stream of non-traditional revenue opportunities. See the interview of Lisa within this issue of Public Utilities Fortnightly for more details on her outstanding accomplishments.

Brandi Hellwinkel, NorthWestern Energy, Asset Management System Integrity Superintendent, and her team created a new standard for its capital budgeting process for portfolio management. This asset management group utilizes a scoring system that prioritizes one hundred and eighty million dollars of annual capital expenditures. Brandi is a mentor for engineers in the asset management group.

Jordan McNaught, NorthWestern Energy, Billings Division Supervisor – Electric Operations, leads a team of twenty-six employees in Billings Montana, ensuring they have sufficient inventory and the correct equipment to keep the lights on for their customers. He works closely with the communities served, working with customers to find solutions, and supporting STEM education opportunities in local schools.

Gerardo Delgado, Quarles & Brady, Associate, has worked in diversity, traditional ratemaking, rulemaking, natural gas, and nuclear. He was formerly the legal and policy advisor to Commissioner Oliva at the Illinois Commerce Commission.

Lori Shaw, NorthWestern Energy, Government Relations Specialist, embraced her role through building relationships with policymakers in Montana, and advocating for policies that ensure there is reliable, responsible, and affordable energy for the people of Montana.

Danie Williams, NorthWestern Energy, Manager – Energy Efficiency and Demand Side Management Services, leads a team that provides efficiency plus offerings to NorthWestern Energy's Montana customers. Her team offers incentives for energy efficiency upgrades and renewable energy installations, training for customers and trade allies, energy audits and weatherization programs, among many others. Danie is a key figure in providing testimony and data request responses to regulators during rate reviews.

Rachel Frey, Sam Houston Electric Cooperative, Communications Specialist, is involved in NRECA's young adult member engagement, developing strategies for reaching electric cooperative members in the twenty-five to forty-five year old age group. She led successful efforts to educate the co-op's fifty five thousand member-consumers through implementation of an AMI project, which included installation of seventy three thousand meters in six months. Rachel developed a messaging campaign to inform member-customers about a rate restructure that included a seven dollar base charge increase.

Brenda Chew, Smart Electric Power Alliance, Senior Manager – Research, although relatively new to the role, has had tremendous impact as leader of the research team. Brenda and her team launched her company's utility carbon reduction tracker, which provides visibility into utility self-initiated and stated emission reduction goals.

Jim Heath, Southern Company, Director – New Ventures, is a key player in strategic investing and the development of new products and services, and leads cross-functional digital initiatives aimed at reimagining the customer experience, providing customers with enhanced tools for DERs and sustainability, and empowering customers and Southern Company with data and analytics.

Abbey Roy, Southern Company, Director – New Ventures, is responsible for developing the company's commercialization strategy for energy storage, distributed generation, and microgrids. She supported the development and deployment of more than eight hundred million dollars in energy technology projects, deployed a first-of-its-kind technology to market, and provided oversight to the most complex microgrid in North America. See the interview of Abbey within this issue of Public Utilities Fortnightly for more details on her outstanding accomplishments.

John Smola, Southern Company, Director – New Development and Growth at Alabama Power, led successful recruitment efforts to bring startup accelerator Techstars to Alabama. John and his team focus on providing customers with solutions for energy efficiency, connectivity, and smart cities.

Lauren Gilliland, Xcel Energy, Director – Gas Governance, provides strategic leadership for gas compliance and quality assurance/control programs across Xcel Energy. She solidifies her team's understanding of new policies and procedures that have been put into place. She was a team leader for her company's day of service, an event where employees and customers volunteer their time and effort in delivering charitable projects.

Mishal Thadani, Urbint, Director – Market Development and Policy, leads his company's regulatory strategy, working with state utility commissions across the country on issues such as performance-based regulation for safety, regulatory treatment of cloud-based computing technology, and new standards for pipeline risk modeling.

Corey Capasso, Urbint, Founder and CEO, named a 2019 Fortnightly Top Innovator, helps utilities change how they think about and address risk. His company uses artificial intelligence so utilities and infrastructure operators can predict and prevent threats.

Brian Van Abel, Xcel Energy, Chief Financial Officer, has held several important roles at his company. Starting at Xcel in 2012 in the regulatory group, Brian was promoted to treasurer, then vice president of finance, planning and analysis. The board recently elected him chief financial officer. See the interview of Brian within this issue of Public Utilities Fortnightly for more details on his outstanding accomplishments.

Megan Scheller, Xcel Energy, Senior Director – Customer Strategy and Experience, has been with her company since 2016 and has worked her way into the customer experience function. She redesigned Xcel's digital channels, launched the mobile app, and led the cross-functional transformation of the Outage Experience. With her leadership, the company brought the customer to the front of every process, allowing delivery of high value experiences and technology. PUF