

In 1922, they were looking at how are we going to get this electricity down to the Bay Area. That started everything in motion.

It was definitely a story for the ages. I think they totally understood what they were undertaking.

After World War I, they started to break ground here at Vaca-Dixon. It was part of that \$100 million being spent to electrify Northern California.

This engineering feat was a statement of not just who PG&E was but what California was going to be.

You would have seen hundreds of men working horse teams and mule teams as they broke ground. You would have looked up and saw a sign that said they were going to be putting in the highest voltage in the world.

They knew that this was something that was going to change, for sure, California but have an impact on the world.

At Pit 1 Powerhouse, you would have seen hundreds of men on scaffolds as they built what they call the castle power plant. It was absolutely an amazing effort. Can you see this picture here? Can you see what they were doing? They were changing the world. This was the backbone of the Western grid.

September 30 will be the 100th anniversary of Pit 1 Powerhouse commissioning and Vaca-Dixon substation. Looking back at the 100 years, to be part of this company that helped provide opportunities and helped with innovation, the takeaway is that without PG&E, there really wouldn't be expansion in the greater Bay Area and beyond.

I am third generation PG&E Hydro. My grandfather was with a company that merged with PG&E, and he started in 1928. We haven't changed the way they did it back in 1922. We've upgraded. We rewind units. We replace bearings, but we're still doing it how they designed it 100 years ago.

This is the original dam out here. It's been modified a little bit to give us a little bit more height and changes. And this is the tunnel that goes into Pit 1 Powerhouse. We pull water out of the Fall River. We divert it, run it through the Powerhouse. We can get about 2,000 cubic feet per second through the Powerhouse.

We harness that energy of the falling water. It spins the turbine. It's generated 11,000 volts. As soon as it comes out of the Powerhouse, we step it up through a transformer to 230,000 volts and send that down the transmission line.

The backbone of the company is the 230 system. We have what a lot of us refer to as the Western cranking path and the Eastern cranking path. The Western cranking path is the pit vaca lines. We're firing up these generators clear up Northeast of Redding, and all of a sudden, that power is coming all the way down here in a blink of an eye. It was a pretty tremendous undertaking, especially when you think of the day that they did it in.

As part of the planning phase of, well, where would we put Pit 1? What does that look like? Where would we have the substation? Our engineering teams, our hydro teams drew it out essentially doing surveys and going, nope, this is the best place.

Vaca-Dixon, in and of itself at that time, right around the 1920s, was not the Vacaville that we know of today.

You think of the impacts. And all these locations that we can now build. Businesses can come in. Agriculture can do their thing because we can provide electricity where we hadn't been able to before this.

I mean, it sounds hokie from like *Field of Dreams*. But if we build it, they will come. And that's exactly what happened.

I walked through that Powerhouse, and the architecture is incredible, the things they did for the aesthetics. I think they wanted to show the world that hydro generation was good and electricity was good at that time.

Just prior to building this-- I think it was 1895-- you had Folsom Powerhouse, right? It was an engineering feat to transmit 11,000 volts 22 miles. And so now, you're not that many years further. You're transmitting 220,000 volts over 200 miles. So it was a big deal at the time.

Reading these articles, going into the archives, seeing these photos, yes, they're amazing. But it's not until I came here to actually see it up close with my own eyes that it became very real to me. I feel like every building actually has its own story.

Every station I go to, especially if it's an older one-- if I go up to Pit 1-- you go upstairs, and you just see the history of things. My grandfather was an operator, Powerhouse foreman. He probably switched that. Sometimes, it's hard to stop and think about what was before.

I'm totally blessed with the fact that I grew up here. I grew up with this being a part of my life, right? With my dad working for the company, I got to see everything that he got to see. And now, to still be a part of it, and it'd be 100 years old. Even though I've operated it, I've supervised it. Now I manage it, I'm still in awe. I'm totally blessed.

This is who I am. This is my job. I want to continue that pride in ownership. You just think of that time because they really realized the significance of what this meant. I think that's why they celebrated it so big.

September 30 in 1922, they had finished, and they were getting ready to energize. John Britton was on the front steps of the Vaca-Dixon substation right in front of the observatory window addressing 6,000 people. It was a holiday for Dixon and Vacaville. Everybody was here.

The company's president, Wiggington Creed at Pit 1 Powerhouse was on the phone with John as he began to energize. He had 600 people on the turbine deck. The Pit 1 Powerhouse was packed. John Britton was getting them excited, and they were cheering to energize the circuit.

So Wiggington Creed looked over to his 15-year-old daughter and had her throw the knife switch that closed the circuit breaker that energized a 200-mile-long circuit. Here at Vaca-Dixon, the circuit became energized. The transformer began to hum-- automatically raised the American flag in front of the 6,000 people, and the crowd cheered. And John Britton led them in the National anthem.

I'm sure they had moments where they felt like it was absolutely impossible, insurmountable. But I believe every hill and every peak that they reached, it empowered them for the next. If you talk to people right now about undergrounding 10,000 miles of distribution circuits through our high-fire areas, a lot of folks will say that that might be impossible. But that's how you become possible. It's just trying to reach that next peak and letting that empower you for the next.

[MUSIC PLAYING]