

[SQUEAKING] [RUSTLING] [CLICKING]

PROFESSOR: But I am really glad to invite Nikki Bruno up to speak, not about what keeps her awake at night, in the middle of the night. But instead-- well, I guess it is the same thing, isn't it? Different twist, yes. So thank you so much for sharing your perspective on scaling.

NIKKI BRUNO: Yeah, thank you. And hi, everyone. Thank you for having me. This has been a wonderful, wonderful day. And when you think about the utility, what I came into was the Power of the People panel. I missed the very first one. But there is a general mistrust and a general dislike or even worse, negligence about the utility. I don't know if it's better to be loved or hated. But if you don't feel anything, uh.

And I, before coming to work at the utility, I fell accidentally into the energy space. I have a degree in environmental science. But life goes on. And it looks beautiful on a resume, and all stitched together. But you realize the energy is, it's a commodity. It's so needed. And I never knew all the work that the utility workers-- gas or electric-- do, water for that matter.

But I think it's on us to continually change and evolve the perspective of. We have to earn our keep. We have a lot of beautiful touchpoints with a customer that many people do not. And that's a privilege.

And I think you would find-- I was just on the phone earlier this morning about it. A lot of people have ingrained and don't sleep at night around the fact that they have to provide safe and reliable service. And I know the gentleman earlier was mentioning, what does reliable mean? When I say reliable, it's there for them all the time, 24/7, 365. So that's why some of us don't sleep.

But on the geo front, it's been such a happy discussion. And I'm going to be blending in when we talk about scaling, scaling technical systems, certainly, how we're thinking about our pilot in Framingham and what's next, how it went, what we can learn, but also how we can scale back change management, because there has to be a cultural shift in not only the utility, but the folks we interact with, whether they're stakeholders, community partners, customers, regulators. Everybody has to adjust.

And we're in this enormous transition period. And we've always said this in various places. But this pictorial example does not get built with one group. And the reason this-- it may not feel like it's fast, if you look at this timeline. But being the first time we've certainly done this, it is fast.

And it only happened because there were a lot of groups involved. Certainly Zainab and the heat team right at the forefront really, I would argue, before I even came to Eversource, putting it out there in front of the DPU at the time to say, hey, the gas company could do this. Let's give them a shot.

And so what you see here is from 2019 when this was initially proposed, to we commissioned the system in Framingham in 2024, a lot of blood, sweat, and tears. And maybe when you-- hopefully, when you're picking up news articles online or otherwise, you see all the great heralding about how this has been successful. I will tell you, it's been tough. There's a lot of learning, a lot of scars. But everybody has done so with such grace. And what I mean by that is they are willing. And they want to show up to do this.

So I was asked earlier, do gas companies want to do this? Are they excited about this? How do they feel? And I think there, again, even within your own internal company constituents, you have to earn trust. You have to earn that. This is additive. This is a positive and a benefit.

And then, when you talk about the pace of change, how things can scale and take off, we have a lot of folks that we brought in that were gas personnel. That's all they did all day long, and were very proud of it, had a skill set, had a passion, had a career. And when we put them on things like oversight for construction, it was amazing to see just how they delved in open minded and took it on as if it were their own gas project.

And at the end of it, the most gratifying thing, certainly, is to hear wow, this was a pretty amazing project to work on. That's the ultimate. So we're consistently trying to educate internally, and even our electric brethren, I'll say. Now that goes beyond gas. Electric's got their work to do on the utility side. And because this is a true hybrid and has benefit across all systems, you've got to educate them, too. And they've got a lot going on.

So anyway, when you think about milestones on the timeline, you say, oh, this is a project, normal course of business. You do the feasibility. You get the budget, the estimate, put it together. You get customers. You start construction. You put it online. All of these steps, that flying the plane as you're building it, that was what was going on.

And not to shake anybody's confidence in the utility's ability or the partners, contractors, cetera, teammate's ability to do this, but as you heard from many speakers today, a lot of this is art and science. So when we think about site selection and evaluating, we had about 20 sites that we looked at.

And it was really unique because I think, from the get go, one of the big lessons learned about these networks and the ability to scale is we had a cross-functional group of people in the room. So where maybe our traditional infrastructure-- gas or electric-- you'd go to the DPW. You'd go to the permitting agencies. Then you'd engage the community, maybe at some level, depending on the project size.

We were with the community and key folks in government, community representatives. In some cases, in one location we didn't go with, there was an active resident who petitioned her legislator, gathered the neighborhood. That was an awful phone call to make, by the way, to call her and say, I'm sorry we're not bringing it to your city. But she respected the engagement.

And I think that early engagement troubleshoots a lot of problems down the road. So that's something we want to do, to continue building on the success that we think we've had with the community in Framingham. We talk about permitting. I heard a lot in the last presentation about rules and regulations. The US is a little bit of the Wild West. I mean, we don't even have the nomenclature set out. And that's confusing for people.

And so I think, what kind of environmental permits do we need? What kind of city planning, zoning-type permits do you need? This gets very local very fast. And I think what happened in Framingham is really a testament to the city, in this case, figuring it out with us. So we spent a ton of time meeting with them. In fact, I would argue, in all truth, we talked to them more than daily. And, everyone knows what's going on the project and their personal lives. It's like the customers.

And with that kind of trust, we were able to say, OK, we don't know what permits apply. This is a closed-loop system. Do we really need to go for that board of health water-type permit? Do we really need to go for that? We'll gladly come before whatever council or permitting body. But maybe it doesn't apply right now. And they were like, maybe that's right.

And with the right protections, with the right construction methodology, we avoided a lot of time, I feel like, spent on permitting. Or if we had to get a permit, we had educated so much that it moved through in a manageable fashion. And certainly in the state of Massachusetts, there was recent legislation passed.

I was really excited about the geo work, but within that, a lot of expedited permitting and siting for clean energy, because it does bog down schedules and timelines. And so I'm really enthused from that perspective. And, again, another component from a scaling perspective that we want to take and bring forward.

When we think about what we're going to learn here, though, that's really what excites me. And I want to spend just a few minutes talking about the customer side of this. Eric Bosworth will be here tomorrow to talk about all the tech commissioning, construction, drilling, all of that, which is very important. But to me, I should say, and to me, it's a combination of customer and technical. It is playing out that way in a lot of the dockets and a lot of the discussion around NPAs, around integrated planning.

The planning is crucial and needs to be sound, based on data, et cetera. You need to have the customer piece. You need to have the execution ability to go out there and actually build what you're talking about, because otherwise we're just talking about it. And so in Framingham, as I move to the next slide here, we have taken the momentum of the pilot and are now on a grant that even optimistic, even with the administration, geothermal is a very bipartisan discussion.

And because I think we've thought about it from a customer perspective just in our world in Massachusetts and Connecticut, if it can make fiscal sense and provide environmental benefits, if we can get this whole thing to work, it doesn't just have to work for climate advocates. It doesn't just have to work for folks concerned about future generations. It's going to be an ant. It's going to be for people who want effective heating and cooling from a cost perspective.

So what we're trying to do on this grant, in effect, is get data back from both a customer perspective, technical performance perspective, to see those economies of scale as you build on this. And we've already seen it in our design. Costs have come down. We're smarter, leaner, faster, all that good stuff. And I'm so excited and hope the grant comes in, certainly.

But at Eversource, at least, we're thinking about, how do we make a coherent rate proposal, project proposal using examples? We still have to learn, but to make sure that we're advancing this so it can stand on its own eventually. It's not on subsidies. Just a pictorial of it, doubling the size of the pilot. This is the expansion.

And we don't talk a lot about delivered fuels, customers, oil, propane, a lot of them here. So this could be accretive to a business. We could gain customers that we're not cannibalizing or we're not netting out net neutral. We are actually adding. And for folks like me that to build things, that's exciting.

So let me just wrap with some of the opportunities and challenges. And I'm happy to take questions later. Strong emissions goals here, targets here in Massachusetts. In a lot of the states we operate in, regardless of where the federal government goes, we see, being good stewards, that we want to provide solutions and options for our customers.

And when you go into more of a, I call it the subsidy vs. tax. If you go into more of a positive mindset to give customers more choice, we find that naturally puts them-- it doesn't back them into a corner. We talked about obligation to serve and customer choice. It gives them more to choose from. And they feel like they are in control of their destiny.

A lot of customers and communities have expressed interest. We had to turn people away with the pilot. Now we were paying for quite a bit on our tab around the ratepayers'-- collectively-- tabs. But it begs the question of, who else will go into this with us? And how can we leverage that excitement, that momentum, that desire to bring this to whatever municipality we're in? The data will provide the learnings. And I think the DOE liftoff report was really key.

New construction, we have all these policies to stymie gas growth. And what do we replace it with if folks don't want air source heat pumps? This is like a natural fit we see. So we're trying to attack the new construction market, work with our existing relationships with those customers-- in this case builders, developers who give them another option, give them hopefully a better option.

The challenges, I think, on the other side, as you think about scaling, are really things that have been mentioned already, but certainly workforce. Who can do this work? There's a variety of work streams that we know how to do that are transferable. Something like drilling, we don't have that skill set. And that's largely the bottleneck, the cost certainly, too.

This is an upfront CapEx investment that you make that we have to figure out a way to manage and spread so that folks can enjoy the savings on the back end. And I think the utility is actually a great vehicle because folks are talking about putting in their own systems. It's expensive. It really is.

And so in wrapping, we're trying to identify locations that are best suited from a technical perspective to deploy that the customers want, that we can make the argument for them on a couple of different fronts, not just environmental emissions reductions, so that we could ultimately lower the cost of the project on a whole.

And so with that, I guess I'll say we're already seeing acceleration here. We're still in that data collection. I'm a scientist. So we're still in that data collection mode, certainly. But the company and I, certainly, am very, very excited to be bringing this to more and more communities.

[APPLAUSE]