

# Prabhat Jain

**CEO-CTO** of Virginia  
Transformer Corp

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Interview with **Prabhat Jain**

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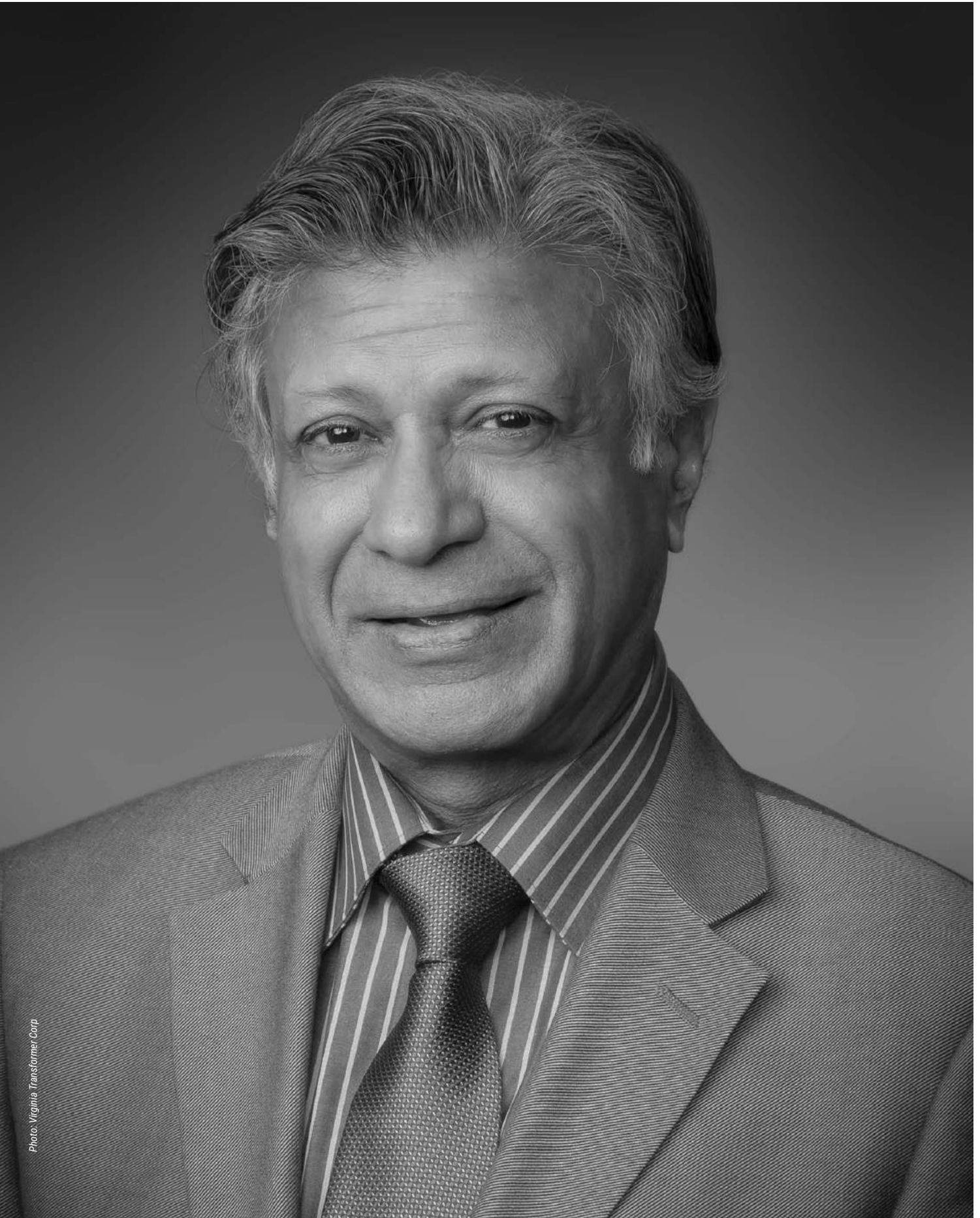


Photo: Virginia Transformer Corp

Transformer Technology talked to Prabhat Jain, CEO-CTO of Virginia Transformer Corp, a leader with a fascinating biography, a mechanical engineer with an MBA who originally worked in the company and had nothing to do with transformers but then turned a transformer guru as Virginia Transformer and Georgia Transformer (formerly Efacec), became arguably one of the very largest power transformer manufacturers in the world.



**Alan Ross:** Prabhat, welcome! This is an amazing accomplishment. How many years has it taken for you to do that?

**Prabhat Jain:** Thank you, Alan. It has taken 40 years now.

**AR** 40 years of anything with a committed vision can create growth. The vision of your company is to be “an internationally recognized manufacturer and supplier of high quality, specialized power transformers, associated equipment and services by fulfilling our commitments to the customer and our employees through continued growth and improvement.” This is a bold statement that says We are global and high quality. But as you were a mechanical engineer, from that time to now, a lot of people and companies have impacted you. So, your company is impacted by you, but who has impacted you?

**PJ** People have. I learn from people, from everybody. I am sure I am going to learn from you as well, with what you have accomplished and the things you are doing. That is what I do. Even when I listen to news, it's always educational for me. When I watch sports, it's educational for me. When people are successful, I say “Well, it can be done.” As long as we have the desire, that's the most important thing.

The next thing is to put together teams of people, to encourage them and excite them. We give them a vision and then, Voila, things happen! That has been my life story as I have continued to grow. Have companies impacted me? Yes. I watch companies that have been very successful that have existed for the last 100 years in our economy. And I say “Well, they must have a system or a process in place which sustains them”. And then I say, “I must have that, too,” because process is what makes the companies grow and continue to thrive and then provide the product and the services. Without the process, we could be just a bunch of renegades trying to do a lot of different things. But unless we have a process and an organization, we are not going to achieve the results.

So, to answer your question, it has been a wonderful journey for me to learn from people who have been successful, learn from the people who work in the company and then, of course, work with and then learn from the companies that have been successful in the past. And I see the leaders of these companies on the news, I listen to the interviews, and I say, “Yes, that makes sense”.

**Process is what makes the companies grow and continue to thrive and provide products and services.**

**AR** You mentioned three things: teams, leadership, and process. The most successful organizations in my history, have a real major commitment to teams and collaboration around teams. Collaborative teams have a real commitment to build up leadership. And then they have a commitment to process. So, it's not all about Superman. For the most part, people come to work, and they want to participate.

You now have Virginia Transformer, and you have Georgia Transformer (formerly Efacec). Tell me a little bit about how you create and standardize a corporate culture around collaborative teams.

**PJ** It just evolves. Let's put it this way. It is not something which one would go out and say, “I'm going to do this collaborative team culture and team building.” It's an evolution, at least in my case. As people came to work for me, I see their skills and then their natural instinct. And then you work around people to make their world, as opposed to me saying “This is the world and I want you to fit in it.” This is how I have done it. You see the people, you see what they can do, and you go “Wow, this is great! Let's do this and let's do this.” And as they continue to grow, then you can say “Hey, Joe, you want to hire a couple





of people for yourself, and then you can do more of what you like to do, and continue to grow?" At that point it kind of evolves into teams that then grow bigger and bigger. And, of course, as you build with the success of the people that are leading, then certainly they enjoy what they are doing. And that is the substance of success, really: Making people enjoy what they do; giving them the intellectual satisfaction. That's how I think Virginia Transformer has grown continuously. Because accomplishment is an acceleration. I think when you accomplish, you say, "Well, it can be done, and I will do more of that." And then we find other things to do as well.

**AR** Did you find a different culture when you brought in Georgia Transformer (formerly Efacec)? Did you have to change that culture, or was that also much more of just an organic move? Because I know they had a different culture than what you had at Virginia Transformers

**PJ** They did, Alan, you are right. Because it was run by expat, for the most part. That was the big difference. Then the expat left, which was in 2014 or thereabouts, just before we bought the company. I didn't realize that when we bought the company, what we will find. And that was a challenge. The culture was that the expat would tell people what to do and they did it. And then when the expat left, we found that, yes, there were processes, paperwork, systems, but nobody knew how to follow them. That was the big thing. The other thing I found was, that in Portugal, and for that matter, other European countries as well, the longevity of people in their job is much longer. And thus, there is far less need for monitoring and oversight processes. By far less. I visited several plants in Europe, and I found that there are very few inspectors and technicians. People just do the work themselves because they've been there for 20, 30 years. Here we don't have people with 25-year experience, so that was the challenge.

**AR** I am passionate about safety and engaged, committed leadership. The CEO must lead the whole safety effort. And we are moving to what we call behavioral safety. Any organization has to have a behavioral safety mindset.

Talk a little bit about how you have been able to implement that. How do you take your passion for safety and push that down through the organization, not mandating it, but creating it as a behavioral safety model?

**PJ** You know, we are safe at home, we are safe when we travel, so obviously, it is ingrained in us. That's number one. Number two is the sense of caring for people that drives me to be safe. Because I believe that people who come to work for Virginia Transformer, they want to go home safe. That is what drives me and I always talk about it. I say, "We must be safe". When I'm on the floor, if I see something, I call the supervisor, I call the people and say, "Hey, this is not safe". So, this is how I really practice safety. And it has been very successful.



Certainly, we can always be safer, there's no question about that. But the primary thing is to not just talk the talk but to walk the walk as well. That's what we have to do. Just saying things and then just going away, won't have an impact. The impact comes from continuously communicating and monitoring. Saying "Okay, what did you do last month or last week for safety? Yes, we had talks. I understand we had talks, but talks are one thing. What did you actually do? Did you see things?" Then they will say, "Yes, we saw things." And I will say, "That's great. That means now we've seen things, we can change them." And they would say "I didn't see anything. Everything was right". I will say, "No, no, that's not the real world".

So, I think this is what we must keep doing as leaders, especially in manufacturing areas, which have a lot more safety hazards, if you will. Our plant has a 0.6 of what we call the experience factor.

**AR** Your value statement says: "We pride ourselves on premium quality customer service and our expert engineering staff that works from 15,000 designs. We have an archive to assist us in designing the perfect transformer to meet your specific needs. We supply Transformers for utility, industrial transit, commercial alternative energy. Engineers making Transformers for engineers."

Could you talk about how you build quality into the systems? I know Virginia Transformer is committed to quality. But how do you build it today when we deal with specifications and often the customer's purchasing department will say, "We're going to get the cheapest cost."

Reliability begins at design. And today, design is often purchasing driven, which leaves a lot of room for quality problems. How do you battle that in the marketplace?

**Quality is the essence of success and growth. It has three components: one is the design, another is the process, and the last one is oversight by engineers.**

**PJ** That is the essence of success and growth. Quality has, I would say, just three components. One is the design, and the design is based upon experience and analytical tools to make sure that we are going to be successful; that the design will work for what it is intended to do. Number two is the process in the shop, how the product is put together. It's a custom-made product. There's very little opportunity to automate. What that means is that the training of the people, their knowledge of what they're doing, has to be adequate. But as I mentioned earlier, it is difficult because the longevity of shop people is very short here. So, we supplement that by engineers on the shop floor. So, it's the engineers designing, it's the engineers overseeing the product being built and then the product being handled. Product handling is critical.

Then we have another layer of engineers who have been around for 15 or 20 or 30 years. They have a set of experienced eyes and they can spot things faster than a younger engineer or a technical person who is going through a check sheet. Check sheets will only take you so far and will not deliver the quality and the reliability that exceeds the marketplace and that excites the customer who will then say, "This company gives me a more reliable product than others."

That's where we are. So, it's three components: One is the design, one is the process, and the last one is oversight by engineers. That's a part of quality.

Now, besides quality, what differentiates Virginia Transformer is also customer satisfaction. You mentioned specifications. It's a significant effort within our company all the way from the sales engineer to the field service technician, the last person. And then I profess, I train, I encourage all the people who are, as I call it, customer facing, to make sure that we understand and we respect and we service the customer. Engineers, technology, people. That's the mixture. But at the end of the day, a transformer is a highly involved design machinery, even though there are no moving parts. It has invisible forces which are causing the stresses. We develop the designs and

us to achieve our no-field-failure rate. I mean, it's a huge effort, and it is very satisfying when engineers learn that my product works well. It is the engineers who are the key to success and reliability and quality. As you said, everybody says, "We have quality", and it's a relative term.

**I launched an initiative 'Pursuit of Perfection', and I wrote a series of six articles called 'Legacy of Excellence' to share with my employees what I have seen and achieved in the last 40 years.**



analyze them on a continuous basis. Continuous basis means every time all the time. We then analyze the data, we analyze the results of the tests, the results from the field, et cetera. We do this to assess, to see why we had this situation. Through this analysis we have been able to bring these stresses to a uniform level. So, that there is far less variation of either dielectric or mechanical stresses, so there are no what we call high points. That has been one of the keys for

I launched an initiative three-four years ago, called Pursuit of Perfection. And I wrote a series of six articles called Legacy of Excellence to share with my employees what I have achieved in the last 40 years and to share what I have seen. How do we achieve excellence? People have to learn that. They have to learn what made Virginia Transformer successful, so they understand the company and what the measure of success is for us. There are many

small measures of success. Low sound is one, low partial discharge is another, very low failure rate, the field issues or lack thereof, performing on time and so on. Those are some of the measurements. However, as you said, there is no one lever which says, "This is the quality lever and if you twiddle it, it will go up." No. But it is easy, it is not difficult.

**People coming to Virginia Transformer have to learn what made the company successful, so they understand the company and what the measure of success is for us.**



you damage it. I mean, that's how simple it is. And these principles are not difficult to understand, but they must be practiced continuously because we have new people coming all the time. And that's also part of the challenge. So, the challenge is communication and upkeep of the flow of handling and assembling and designing. We have lots of tools. As many tools as you can ever imagine for analysis. They are so wonderful that we can see all these color graphs, the red and the green and so forth. You can identify this is the hot spot or this is the high stress. Now, how do I make it uniform, so this will go away and everything will work at the same safety level?

**There are many small measures of our success: low sound, low partial discharge, very low failure rate, lack of field issues, performing on time and so on.**

**AR** You just hit onto two major hot topics for me. Engineer to engineer. You have engineers out at the customers' site that are engineering a system. So, they're buying transformers to engineer that system, and then by having more engineers involved at your site. That ought to be your new tagline: Engineers serving engineers.

Prabhat, thank you so much for talking to us.

**PJ** Thank you very much for taking an interest and allowing me to speak to the industry as to how we and every other transformer manufacturer should function, so we can service our country's grid with more reliable transformers. That's my goal.

The difficult part is to communicate and to get the whole team together and saying, "We are going to build a better quality". That's the difficult part - Communication and getting people on board, getting people to get going and understanding the principle and then to work as a team. So, the engineer, the designer, the technical and the operator and then the trainer of the operator need to understand why the insulation is so critical. If you fold the insulation,