Thorbjørn Fors knows all about the inner workings of Siemens Energy. For the past 17 years, Fors has been under the Siemens umbrella in several senior management positions. From 2009 to 2013, he served as executive vice president of global marketing and sales for the New Equipment division. From October 2013 to April 2015, he held the title of executive vice president and general manager of medium-size steam and gas turbine service, responsible for the growth and development of the industrial power generation and compression business. In 2017, he became CEO of the service distributed generation and oil and gas business unit, the same year Siemens merged Dresser-Rand Services, Rolls-Royce Energy Services and Siemens Distributed Generation Services. Fors obtained the role of executive vice president again on April 1, 2020, this time for the Industrial Applications division of Siemens Energy. While he’s seen his share of changes at the company during his tenure, he embraces them and anticipates several more on the horizon. The key, he said, is evolving with the changes.

From October 2013 to April 2015, he held the title of executive vice president and general manager of medium-size steam and gas turbine service, responsible for the growth and development of the industrial power generation and compression business. In 2017, he became CEO of the service distributed generation and oil and gas business unit, the same year Siemens merged Dresser-Rand Services, Rolls-Royce Energy Services and Siemens Distributed Generation Services.

Fors obtained the role of executive vice president again on April 1, 2020, this time for the Industrial Applications division of Siemens Energy. While he’s seen his share of changes at the company during his tenure, he embraces them and anticipates several more on the horizon. The key, he said, is evolving with the changes.

Siemens Energy focused on compression technology, decarbonization

Investments target rotating equipment, electrification, automation and digitalization. By DJ Slater

Thorbjørn Fors, Executive Vice President, Siemens Energy, Industrial Applications division

From October 2013 to April 2015, he held the title of executive vice president and general manager of medium-size steam and gas turbine service, responsible for the growth and development of the industrial power generation and compression business. In 2017, he became CEO of the service distributed generation and oil and gas business unit, the same year Siemens merged Dresser-Rand Services, Rolls-Royce Energy Services and Siemens Distributed Generation Services.

Fors obtained the role of executive vice president again on April 1, 2020, this time for the Industrial Applications division of Siemens Energy. While he’s seen his share of changes at the company during his tenure, he embraces them and anticipates several more on the horizon. The key, he said, is evolving with the changes.

You took the helm of the oil & gas (now industrial applications) division of Siemens Energy back in April. How has the role been thus far for you? I imagine the timing (April being right in the middle of the pandemic) made for an interesting start.

Thorbjørn Fors: It certainly has been an interesting few months. COVID-19 has magnified the supply and demand imbalance across the globe, creating a challenging environment, particularly for upstream producers. On top of this, we also see an aggressive push towards decarbonization.

Together, these factors have presented the industry with many challenges. However, it has also given organizations opportunities across the supply chain to leverage new technologies and drive towards a more sustainable and viable future. Siemens Energy is uniquely qualified to help our customers achieve these goals. As the head of the Industrial Applications division, I look forward to leading that charge and am excited about what the future holds.

Siemens Energy was spun off and publicly-listed as an independent company in September. What sort of challenges did COVID-19 present during this process?

There were undoubtedly some unique factors we had to contend with. As I’m sure you can imagine, not being able to travel extensively and limiting interaction with stakeholders did not exactly facilitate the listing process. I’m very proud that we were able to stay on schedule with our initial timeline, which was established well over a year ago.

I’m also pleased with the fact that we’ve been able to maintain operational continuity for our customers during these trying times. Much of this can be attributed to our adoption of new and digitally-enabled ways of working.

For instance, one of our North Sea oil and
Siemens’ SGT-800 gas turbine is suited for power generation and oil & gas applications.

gas customers was unable to travel to their offshore platform, which made it impossible for them to participate in a traditional witness test. Instead of waiting until travel restrictions were lifted, which could delay start-up, we used digital collaboration tools to successfully perform a remote factory acceptance test (FAT) of the facility’s automation system. The customer now uses our approach as a best practice example internally and will continue to perform digital FATs even after traveling is permissible again.

For another customer in China, we leveraged remote services to support onsite teams with a full compressor section inspection of two gas turbines.

It’s examples like these that demonstrate how we’ve used technology and digitalization to remain agile and avoid significant disruptions to our day-to-day operations and our customers’.

THERE DON’T APPEAR TO BE TOO MANY PLAYERS THAT CAN COMPETE FROM UPSTREAM TO DOWNSTREAM IN QUITE THE SAME WAY AS SIEMENS ENERGY. WHAT ADVANTAGES ARE THERE FOR SIEMENS ENERGY BECAUSE OF THAT CAPABILITY, AND WHERE ARE THE CHALLENGES?

You are correct. Siemens Energy is a pure-play energy company whose portfolio spans not only upstream, midstream and downstream oil and gas, but also renewable energies, such as wind and hydrogen, and the marine and fiber markets. Our reach extends across almost the entire energy value chain.

This – coupled with our broad capabilities in the areas of digitalization, rotating equipment, automation and electrification – uniquely positions us to help the oil and gas industry decarbonize and facilitate the world’s transition to a lower-carbon energy system.

The challenge and excitement we face are in our own transformation. Like many companies across oil and gas and other industries, we are committed to decarbonization and emissions reductions. However, with intentions to achieve carbon neutrality by 2030, the timeline we have laid out for ourselves is much more aggressive.

ARE THERE SPECIFIC DIRECTIONS YOU WANT TO TAKE SIEMENS ENERGY’S INDUSTRIAL APPLICATIONS DIVISION? WILL THINGS LIKE THE PIPELINE 4.0 AND DIGITAL PROGRAMS REMAIN A SIGNIFICANT FOCUS?

As an organization, we will continue to remain obsessive about listening to our customers’ needs and helping them address their challenges. As far as our portfolio goes, our focus will be on investing in solutions in the areas of rotating equipment, electrification, automation and digitalization, or “R-EAD” as we call it. Pipelines 4.0 is one of many examples that illustrate the value that can be generated by bringing all of these facets together into a single offering.

With Pipelines 4.0, we can offer operators a solution that addresses not only the entire midstream value chain but also the complete project lifecycle. This multi-dimensional approach allows our customers to unlock value and take advantage of new services and capabilities that would otherwise not be possible using traditional tools and methodologies.

WHAT ABOUT YOUR COMPRESSION OFFERINGS? WILL THEY CONTINUE TO BE A FOCUS AREA OF SIEMENS ENERGY AS WELL?

Yes it will be. When Siemens acquired Dresser-Rand in 2015, we became a global leader in compression for industrial applications. With the formation of Siemens Energy earlier this year, the integration of our two businesses is now fully complete.

Some of our recent project wins speak to our strength in the compression market. For example, earlier this year, we were awarded a large contract to supply 20 centrifugal compressor systems for Saudi Aramco’s Hawiyah Unayzah Gas Reservoir Storage (HUGRS) project in the city of Riyadh. The plant will take surplus pipeline gas in the winter months and inject it into an existing depleted field. From there, it can be withdrawn when needed to meet high summer demand.

We also had a notable win in the LNG space where we were selected to provide a cryogenic boil-off gas (BOG) compression train for a plant expansion project in West Africa. The solution will play a key role in reducing emissions from the plant by capturing boil-off gas from warm LNG tankers that would otherwise be flared. In fact, Siemens Energy retains more than 90% share in the BOG market.

And finally, we had a significant win in the midstream sector, where we were awarded a contract to supply two SGT-400 gas turbine compression packages for Midcoast Energy, LLC’s CJ Express pipeline expansion project in east Texas.

These projects, and many others, speak to our extensive reach and capabilities in the compression market, and also to the value our technology can provide customers across the oil and gas value chain.

DECARBONIZATION CAN BE SEEN AS BOTH A CHALLENGE AND AN OPPORTUNITY FOR THE OIL & GAS INDUSTRY. HOW DO YOU VIEW IT?

I view it as more of an opportunity. There are certainly hurdles that we (Siemens Energy) and our customers face on the decarbonization journey, but through the application of new technologies and approaches, for example – increased electrification, digitalization and the burning of hydrogen fuel in gas turbines – we can overcome these challenges.

I think most companies now realize that the extent to which they can decarbonize is becoming a competitive advantage, and this will continue to be the case in the coming...
years. I, for one, think it is fascinating to see how organizations across oil and gas and other industries are transforming to remain viable in a low-carbon world, and overall, I remain very optimistic about the future.

**THERE APPEARS TO BE A GROWING ENVIRONMENTAL CONCERN ABOUT THE USE OF NATURAL GAS. DO YOU THINK THOSE CONCERNS ARE VALID, AND HOW DO YOU SEE THEM POTENTIALLY IMPACTING THE INDUSTRY – AND SIEMENS ENERGY SPECIFICALLY?**

Let me first start by saying that I think natural gas will be a crucial pillar of the global energy system in the coming decades.

There are still roughly 850 million people on the planet who do not have access to reliable power. The global population is also increasing and is expected to reach 9.7 billion by 2050. At the same time, countries are facing pressure to reduce greenhouse gas emissions by moving away from feedstocks like coal and heavy fuel oils in favor of renewables, like wind and solar. However, the transition cannot happen overnight.

Natural gas will be needed to meet the world’s growing demand for power in the coming years. It can serve as a sustainable bridge fuel to a future where renewables dominate the energy system. With that said, the industry does need to look at how it can apply new technologies to reduce emissions associated with producing gas and transporting it to destination markets – whether that is through pipelines or in the form of LNG. At Siemens Energy, and particularly within the Industrial Applications group, this is something we are focused on helping customers achieve.

For example, we recently entered into an agreement with global energy leader, Total, to advance new concepts for green LNG. As part of the contract, we are conducting studies to explore a variety of possible liquefaction and power generation plant designs, with the ultimate goal of decarbonizing the LNG production. More recently, we were selected to implement a low-emissions power generation solution using our SGT-800 turbines for an LNG project in East Africa.

In the future, I believe there will be more opportunities for this type of co-creation and collaboration. With our extensive portfolio of emissions-reducing technologies, Siemens Energy is positioned to serve as a strategic partner that can facilitate the industry’s transformation.

**HOW DOES YOUR CURRENT ROLE COMPARE TO THOSE THAT YOU’VE SERVED IN BEFORE? DID THOSE PAST ROLES PREPARE YOU WELL FOR THIS ONE, AND HAVE THERE BEEN ANY SURPRISES OR UNEXPECTED CHALLENGES?**

I started my career with ABB and then joined Alstom, which Siemens acquired in 2003. While every role has been different, they all provided me with the opportunity to work alongside very talented people, and that is something I thoroughly enjoy.

In the end, I believe it is all about people. I can’t say enough about the fantastic team we have here in the Industrial Applications division. Transitioning into this new role during the pandemic has not been easy. Travel restrictions and social distancing have limited the extent to which I have interacted with colleagues face-to-face. But the process of finding new solutions and innovations, and the flexibility the team has shown in handling the daily work has truly been inspiring.

I’m curious by nature. I like turning over every stone and talking with employees and customers about how we can solve problems and develop solutions to today’s pressing issues. At Siemens Energy, we are now addressing one of the biggest dilemmas, and that is how we can meet the world’s growing demand for power sustainably and economically. I think I can speak for all our employees when I say that no matter how difficult it may be, we are up to the challenge.