

Minnkota

MESSENGER

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3D

engineering



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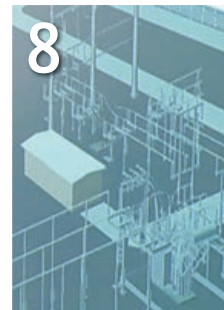
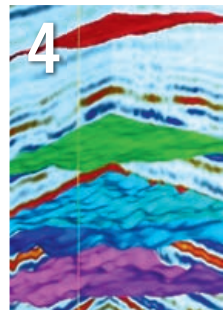
Project Tundra is another step closer to realization thanks to a robust seismic study of North Dakota's geologic formations. Minnkota's partners at the Energy and Environmental Research Center now have visual 3D data to reaffirm the subsurface suitability for carbon storage.

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From flat to fully dimensional, Minnkota's engineers are taking their designs to the next level. Learn how 3D software is helping the team reduce mistakes, provide better clarity and foster collaboration.

12 Every dimension of development

A man, a dream and a 3D printer. A Bemidji entrepreneur is using his skills and technology to help other business owners streamline their manufacturing and put down roots in Beltrami County.



On the cover: Minnkota engineers Wayne Lembke (left) and Ryan Brorby interact with a 3D substation model. Minnkota began using Autodesk Inventor 3D design software four years ago, which has since created a number of workflow benefits in the office and in the field.

Minnkota Messenger is published six times a year by Minnkota Power Cooperative. Its mission is to communicate Minnkota's perspectives and concerns to its members, elected officials, employees and other business audiences. For editorial inquiries, call (701) 795-4282 or email bfladhammer@minnkota.com.

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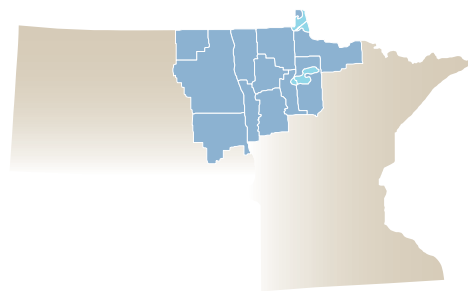
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Minnkota Power Cooperative is a generation and transmission cooperative headquartered in Grand Forks, N.D. It supplies wholesale electricity to 11 member-owner distribution cooperatives, three in eastern North Dakota and eight in northwestern Minnesota. Minnkota also serves as operating agent for the Northern Municipal Power Agency, an association of 12 municipal utilities in the same service region. Together, the Joint System serves more than 153,000 customers.

From the editor

Navigating COVID-19

As COVID-19 continues to spread throughout the United States, we find ourselves living in unprecedented times. The virus has required people to stay home unless absolutely necessary, including halting all gatherings, closing many businesses and requiring schools to operate online. It has disrupted nearly every aspect of our lives and will have a lasting impact on our world.

As families spend more time at home, Minnkota's dedicated team continues to create and maintain the electricity needed to find stability in unstable times. That will not change. We have also taken numerous precautions to help protect the health and safety of our employees. To learn more, please read the article on Minnkota's response to COVID-19 on page 11.

This is a difficult time for everyone and our hearts go out to all who have been impacted by the COVID-19 outbreak. In the next issue of Messenger, we hope to feature some of the ways our region has pulled together to face this crisis.

We want to thank our employees at the power plant, in the control centers, in the field and at home who are helping to safely and effectively energize our region. Our power will always be our people.

In this issue

In this issue of Messenger, we focus on how 3D technology is helping Minnkota advance important generation and transmission projects.

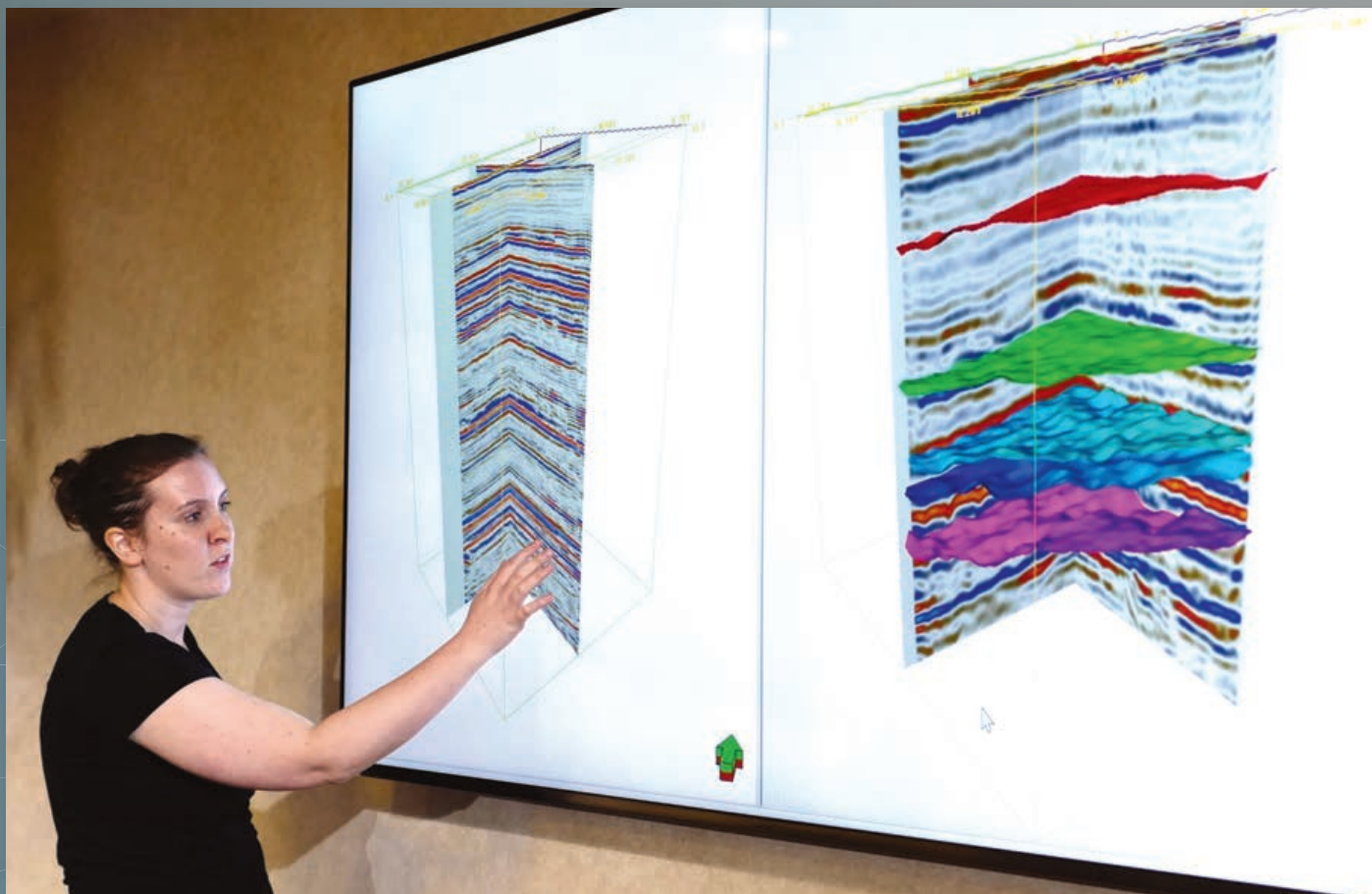
Minnkota continues to pursue Project Tundra, which aims to capture carbon dioxide (CO₂) from the Milton R. Young Station and permanently store it more than a mile underground. A 3D seismic survey was conducted late in 2019 to gather data and provide a clearer picture of the area's geology. The survey is one of many steps to ensure the safe injection of CO₂.

On the power delivery side of the business, engineers are moving toward 3D designs for new substations and other key projects. 3D design provides more detail to ensure accuracy and precision as projects move from the design phase to construction.

The potential of 3D printing technology is also taking shape in the service areas of our membership. The lower cost and faster production times for parts and equipment could help generate greater efficiencies. A Beltrami Electric Cooperative member business has a vision to use the technology to create everything from specialized prosthetic limbs to fully autonomous manufacturing facilities.

While 3D technology is already making an impact on the energy industry and other sectors, the future potential is virtually endless. The advancement of 3D design continues to give us a clearer vision of the future – whether it be a mile under our feet or in the wires that will be strung across the skyline.

Ben Fladhammer
Editor



EERC geophysicist Amanda Livers-Douglas presents her analysis of a geophysical survey conducted in November near Center, N.D. The seismic data is color-coded to show different layers in the subsurface.

Data from the depths

3D GEOPHYSICAL SURVEY RESULTS WILL HELP
CLEAR ANOTHER HURDLE FOR PROJECT TUNDRA'S FUTURE



One would assume a research geophysicist's days would be spent looking at a lot of rocks and scientific formulas – a bland assortment of optical stimulation. But lately, Amanda Livers-Douglas' eyes have locked on rock-layer rainbows.

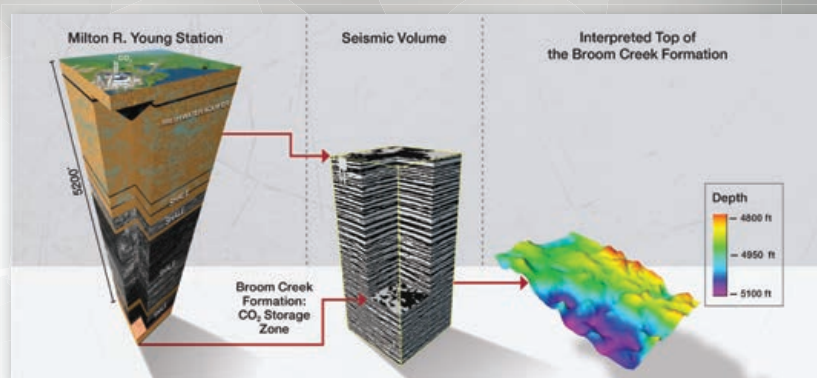
"Right here is the Broom Creek Formation," she said, pointing to a vivid 3D rendering of North Dakota's subsurface geology. "We can see between these two rock layer boundaries, determine how thick they are, at what depth they are and how that depth changes from this side to the other side."

This deep visual data comes from a November seismic survey conducted near Minnkota's coal-based Milton R. Young Station, south of Center, N.D. The survey, led by Minnkota with technical support from the Energy & Environmental Research Center (EERC), had several aims. Among those goals was confirming that the site's underground composition would be well suited for the safe carbon dioxide (CO₂) storage proposed with Project Tundra.

Project Tundra is a Minnkota initiative to capture 90% of the CO₂ emissions of its Unit 2 generator at the Young Station and store it permanently more than

“With the seismic survey, we essentially took a CAT scan of the earth, imaging down to 10,000-plus feet below the surface. I’m basically the ‘radiologist’ that reads the image that we get back.”

– Amanda Livers-Douglas, research geophysicist, EERC



(Left) Conceptualized image showing the subsurface geology near the Young Station. (Middle) The 3D seismic volume generated from processing nearly 7 square miles of data. (Right) The interpreted surface for the top of the Broom Creek Formation. The depth scale is exaggerated to highlight structural highs and lows. (Image courtesy of EERC)

a mile underground. The geologic formations Minnkota is examining for storage are thought to be optimal for securely locking the CO₂ between impermeable rock layers. However, only a system of geophysical tests and analysis can reaffirm that to acquire the permits necessary to move forward.

“With the seismic survey, we essentially took a CAT scan of the earth, imaging down to 10,000-plus feet below the surface. I’m basically the ‘radiologist’ that reads the image that we get back,” Livers-Douglas said.

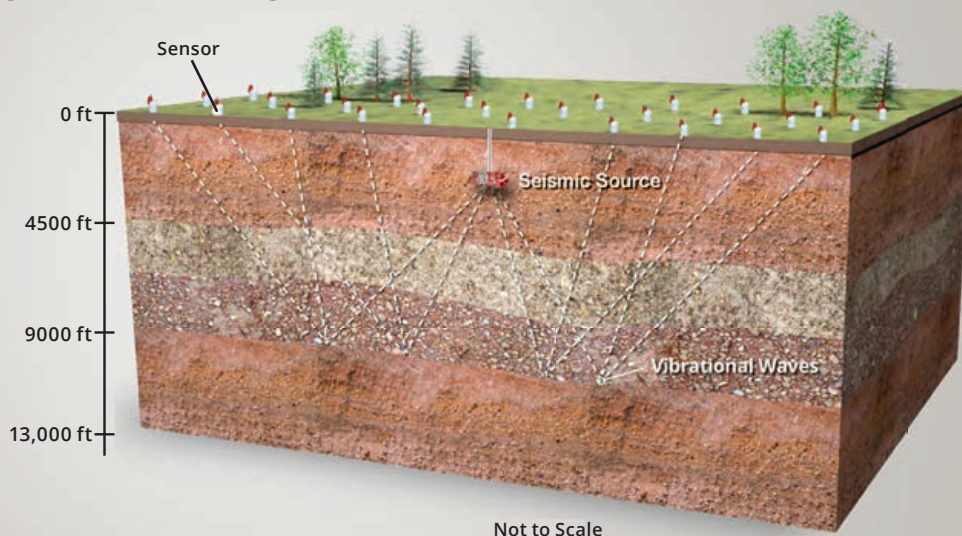
Livers-Douglas used existing data from a stratigraphic test well (drilled in a single vertical site to acquire core samples, pressures, etc. of rock layers) and extended those geologic properties out through the area that the seismic survey covers. She was then able to determine if there are bumps or structural highs that might trap CO₂.

The seismic data map will also show faults or cracks in the layers.

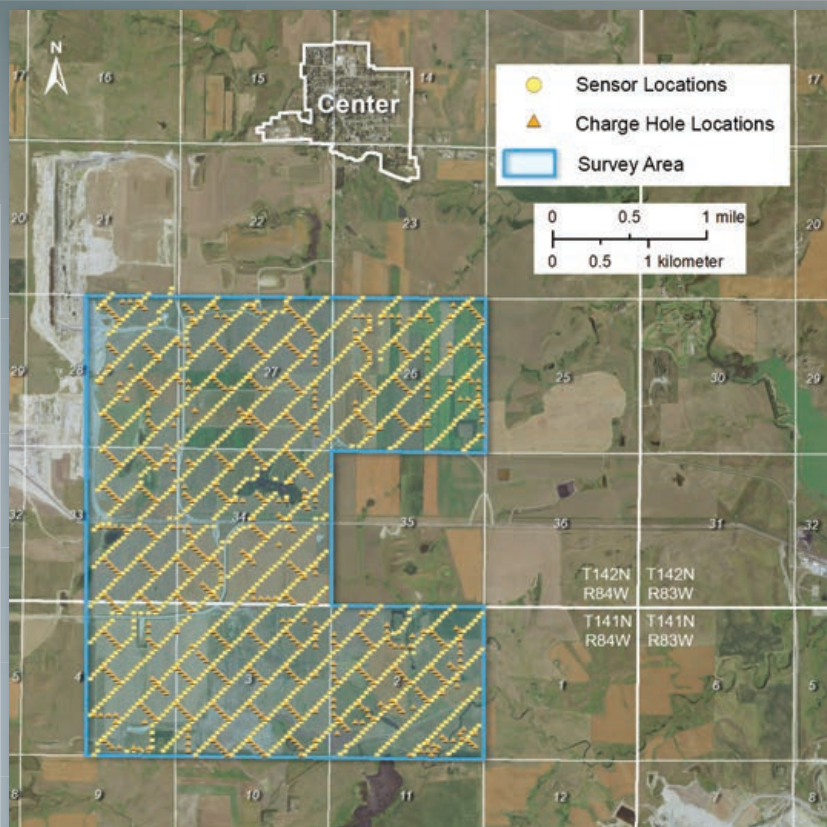
“If there were faults to be seen, those red and blue lines would be offset, and we don’t

What Is a Geophysical Survey?

Small amounts of deeply buried explosives, such as dynamite, generate low-level vibrations that travel deep into the earth and are reflected back to the surface. Sensors at the surface record the reflected vibrations. Geophysicists decipher these signals to learn about the subsurface rock layers.



Geophysical surveys are a common data collection tool and have been used in every county in western North Dakota. (Image courtesy of EERC)



This map shows where nearly 1,200 sensors were placed across a 6.7-square-mile area to pick up vibrations from hundreds of deeply buried charges. (Image courtesy of EERC)

see that here,” said EERC principal geologist Wes Peck, gesturing to solid and parallel lines. “If you have an offset of the rocks that’s sharp, that means they’re probably not continuous – they’re broken – and there could be a pathway that fluids could move from your storage site up to where you don’t want them to be. There’s no evidence of that in the study area.”

EERC analysis of the seismic survey site showed nothing out of the ordinary in the potential storage zone’s composition and structure – essentially a green light for the carbon storage research’s next steps.

“Unexciting was exactly what we wanted,” Peck said.

Dynamite data

To explain a seismic geophysical survey simply, it is a process of setting off many small, deeply buried charges – in this case, 605 of them, 200 feet underground – around a given area, and then using hyper-sensitive surface sensors to record vibrational data as the waves travel down and up through

the subsurface. For the November survey, nearly 1,200 sensors were placed by hand in a 6.7-square-mile area in just a day and a half.

The method is safe and common in the energy industry. And now, with the latest software, the process of harvesting and analyzing the data is easier and more dynamic than ever.

The seismic data not only shows the 3D rock layer boundaries, but also the geological composition of those layers. “Are we going from a sand to a shale, or a shale to a sand? Or is that a shaley sand? All that information can be derived from this seismic signal,” Livers-Douglas said.

Having analyzed the survey’s findings, the EERC’s next step will be helping with the coring and geophysical logging of a stratigraphic test well Minnkota plans to drill in the spring. The well – placed within the survey area, 1.5 miles south of Center – will capture further geologic information about several potential CO₂ injection layers, as well as about the cap rock layers above and below that would seal the CO₂ in place.

Next steps

The seismic and test well data will be integrated into a computer model that simulates CO₂ injection and predicts how the CO₂ would move in the subsurface.

“This modeling helps us better understand injection rates and pressures needed to inject a certain amount of CO₂ into one of the proposed storage zones over a certain amount of time. It will also show how the



An example of the type of surface sensor that was placed by hand throughout the survey site.

“We’ve been working here at the EERC in the carbon capture and storage business for over a decade. It’s really exciting to see a commercial-scale project that looks so promising.”

– Wes Peck, principal geologist, EERC



CO₂ will spread out through the proposed storage zone over time,” Livers-Douglas explained.

These figures will give Project Tundra the data it needs to attain the next of multiple authorizations – a storage facility permit. Dan Laudal, Minnkota environmental manager and Project Tundra project manager, says the process to get a CO₂ storage facility permitted is more demanding than any other program for injecting fluids into the subsurface. Although geologic storage of CO₂ has safely occurred in the U.S. and across the world for decades, it is still rare at the scale of Project Tundra.

“When it’s relatively first-of-its-kind, you have to account for all the possible scenarios,” Laudal said.

The permit will document to the state Minnkota’s knowledge of the subsurface and CO₂. The next permit – a storage license – brings together all of the science, legal and pore-space ownership interests into a common package to allow Minnkota to license the entire facility to inject CO₂. Minnkota hopes to submit that application by the end of the year, where it faces an up-to-12-month review and approval process.

The decision to move forward on Project Tundra will be made in 2021. With a solid base of state and federal support, vibrant geologic data, and strong research and design partnerships, the future of the initiative looks positive.

“Working with the EERC’s expertise has been a huge asset for Minnkota,” Laudal said. “And it’s right here in Grand Forks,

which is fantastic.”

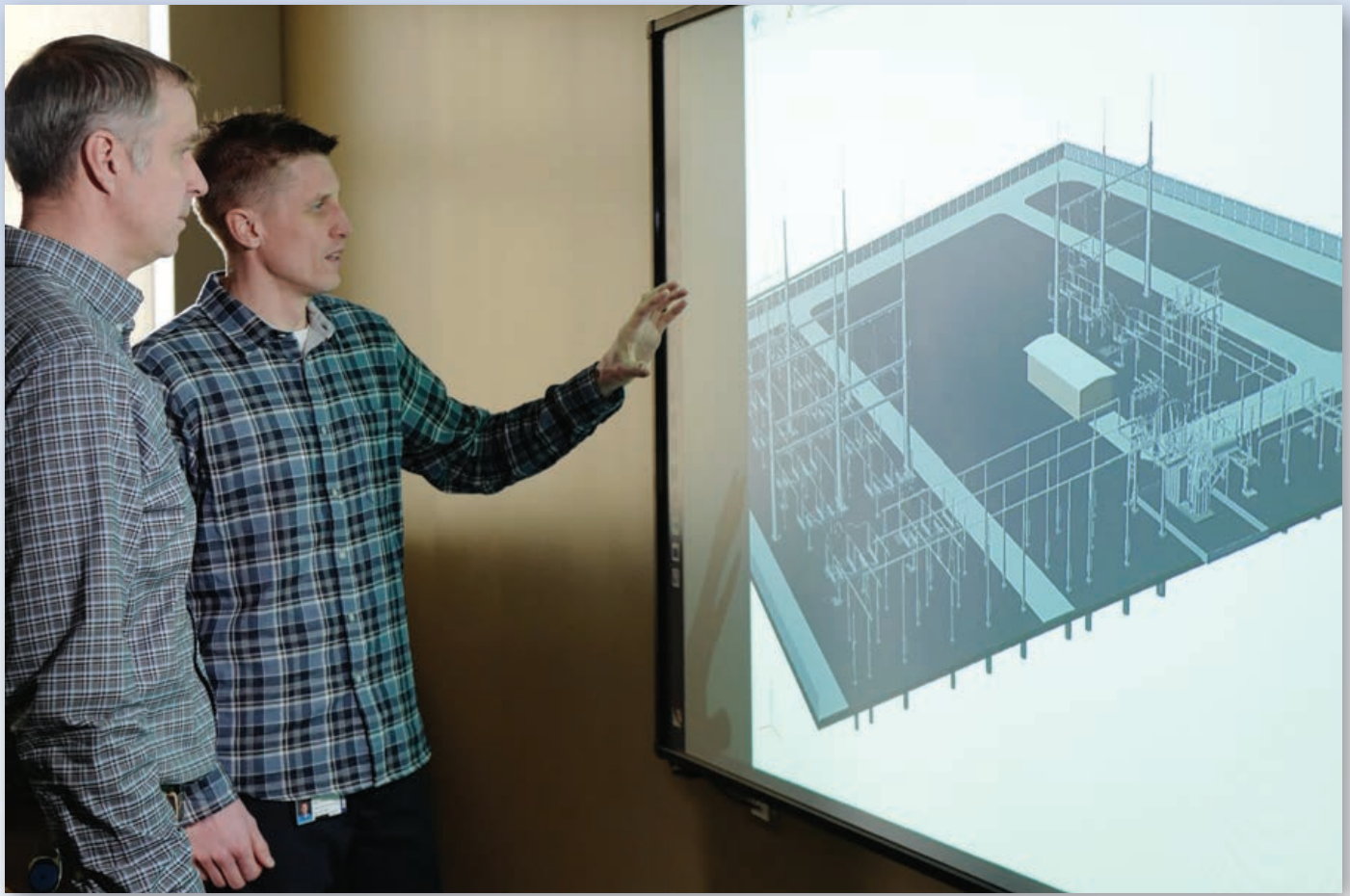
“We’ve been working here at the EERC in the carbon capture and storage business for over a decade. It’s really exciting to see a commercial-scale project that looks so promising,” Peck said. “Minnkota is one of only a few facilities across the U.S. that are on a path to implementing carbon capture and storage in the next several years.”

By Kaylee Cusack / Photography Kevin Jeffrey

(Right) A member of the field crew places one of the more than 600 charges needed to successfully complete the seismic study. (Submitted photo)

(Below) Small drill rigs were used to help place the charges. Landowners were compensated for any damage to their crops. (Submitted photo)





Minnkota engineers Wayne Lembke (left) and Ryan Brorby use an interactive smart board to make their 3D substation design tangible. The software and technology combination allows them to move, flip or zoom in on the image with their hands.

Substation creation transformation

3D DESIGN SOFTWARE GIVES MINNKOTA OPPORTUNITIES
FOR MORE EFFICIENT ENGINEERING AND CONSTRUCTION

When high school students are embracing a trend, it's time to start looking into it.

That's what Wayne Lembke thought when his son's freshman engineering class started using Autodesk Inventor 3D computer-aided design (CAD) software.

"I realized at that point that the next generation of our staff is going to expect this as a standard," said Lembke, Minnkota civil engineering manager. "The students are learning 2D, but they're also learning the next level of design. We needed to start moving in that direction, so I really latched onto it."

Minnkota engineers began testing 3D drafting methods around four years ago.

The team designing substation and load management projects was the first to dive into the digital upgrade, and they started seeing the benefits immediately – better clarity, a reduction in mistakes and built-in material information.

The Autodesk Inventor program allows users to move beyond the flat, 2D designs that have been used by engineers for years. The program shows a completed structure as one would see it in real life, with the ability to rotate it, zoom in and visually assess spacing of elements.

"We've lived up until this point in a 2D world where everything was on paper," said Minnkota civil engineer Ryan Brorby. "To me, that's been the biggest upgrade with 3D

software, is being able to see it. You just visualize things better, and you can streamline the designs as a result.”

From file to field

Minnkota has already designed four transmission and two distribution substations with Inventor, as well as two load management projects. This summer, Berg substation in Grand Forks, N.D., will become the third distribution substation conceived in the program.

Now that the design team has a grasp on the 3D workflow, they are moving their conceptions out into the worksite. Operations field crews started to use the 3D designs on mobile devices in 2019 with smaller load management projects, but Berg substation will be their first large-scale construction without the need for the 2D prints of the past.

Minnkota senior electrician Mike Vetsch says his crews have appreciated the interactive ease of pulling up the digital image on a tablet while on-site.

“You can see everything from every angle,” Vetsch said. “When we used it at the Valley City load control project, we just turned it on and set it up in the control house. Then, whoever wanted to look at it and see how things went together could just go in there, spin it, and get right in there and see it.”

Vetsch noted benefits beyond the at-your-fingertips simplicity. Builders don’t have to come to him to flip through 2D prints for their next steps, allowing him to focus on his particular task at hand. They can even click on a component to pull up its specifications.

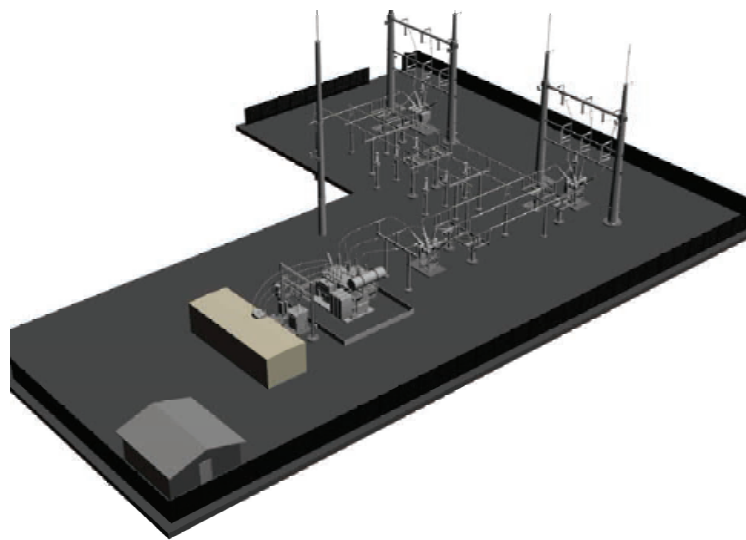
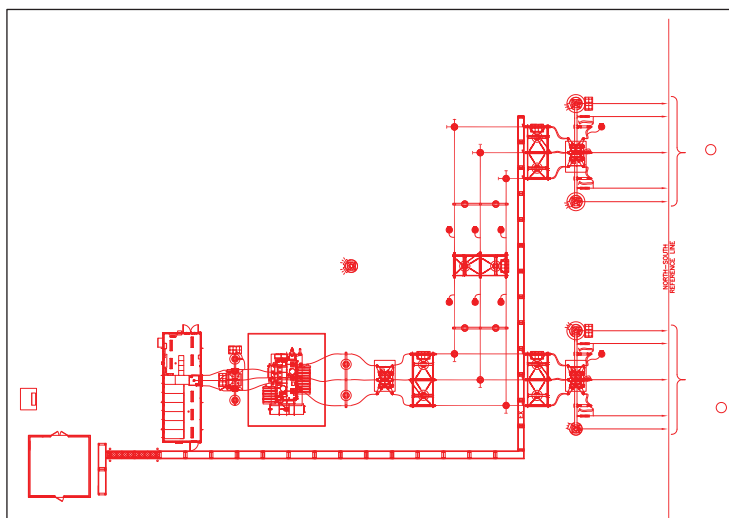
Plus, the depth of the design allows the team to see how the finished product will actually look when the pieces are properly connected and spaced.

“I’m very visual. You can tell me some-

thing, but I have to see it,” Vetsch said. “I think a lot of people are like that in our field. We work with our hands, so we’re pretty visual people.”

Minnkota construction teams work through some rough Midwest weather, so the tablet holds an added advantage. “We can unplug it and walk outside with it to

From 2D to 3D



(Top) The Grager substation shown in the 2D design style utilized heavily in the past. (Bottom) The Grager substation depicted in the Autodesk Inventor 3D design file that is being used currently.



3D environmental renderings like this one of the Grager substation (completed in Photoshop) have been useful in communicating energy projects to community leaders.

compare it with what we're doing," Vetsch said. "With prints, if it's windy or something, the prints will start flying or they'll rip."

Easier collaboration

The Inventor 3D program has opened easier channels of collaboration between Minnkota departments, vendors and even public entities.

If field operations needs to make a note or adjustment to the engineer's design, they can do that within the program's file reader.

"Engineers like to aim for perfection, but you're always going to have changes throughout the project. We like to see those changes so we can update the drawings after the fact," Brorby said, selecting the pen tool onscreen. "They can take this pen and draw, on here, whatever they are changing within that file."

Many of Minnkota's material vendors are now providing their parts and equipment in 3D models as well, so engineers don't have to spend time drafting those pieces themselves. Once the team has built up a bank of 3D-modeled parts they use consistently, they will experience even more time savings.

Brorby says the ability to see a 3D image of a completed substation has already made it easier to communicate development plans with local leaders. He points to Grager substation discussions with the City of West

Fargo as an example. Minnkota integrated Grager's 3D design file into a photo rendering of the proposed substation site, creating a clear picture of the anticipated landscape.

"We received really good feedback, because they don't often experience people going above and beyond to show them what a finished project will look like. It can be a lot more legwork," he said. "If you show them ahead of time visually what a substation will look like, it helps the permitting process flow more easily."

Several Minnkota teams are finding new ways to leverage the Inventor system for better efficiency in time, material and communication. Lembke says that once the software is proven in the field this summer with the construction of the Berg substation, he could see its use evolve even more.

For now, they are taking it slow and building best practices and high-quality, consistent designs. But the excitement and promise of a new era of design has them feeling like high school students again.

"In the early nineties, we transitioned to AutoCAD. Before that, we were working with Mylar paper and drafting tables. I'm sure they went through the same sort of excitement, that there's this new way of drafting," Lembke said. "That's what's cool – we get to develop, set up and implement something new that will probably be around for many years at Minnkota."



A 3D rendering of the Lund load control project completed last year. This was one of the first projects in which the operations crew used the 3D software in the field.

By Kaylee Cusack / Photography Kevin Jeffrey

Minnkota prepared with COVID-19 response plan

Minnkota and its system of member cooperatives and municipals are committed to serving their more than 153,000 consumers through any difficult time. As national and regional public health recommendations were released in March to prevent the spread of the coronavirus, this dedication to service did not change.

"We take our role as the region's rural electricity supplier seriously," said Minnkota president and CEO Mac McLennan. "The public can be assured that we will continue to provide reliable power to our communities during the time they need it most. Accordingly, we are adjusting operations to make sure we stay ahead of the coronavirus."

Minnkota developed a multifold response plan to protect the health and well-being of its employees. A pandemic preparedness team communicates daily to evaluate the rapidly changing situation and convey updates to staff in the office, at home and in the field.

In mid-March, the cooperative implemented the following precautions:

- Employees who were able to work from home were asked to do so to minimize exposure.
- Facility access to Minnkota's Grand Forks campus and the Milton R. Young Station was limited to business-essen-

tial personnel only.

- Tours and large meetings at Minnkota facilities have been postponed until further notice, including the Minnkota and Square Butte Electric Cooperative joint annual meeting originally scheduled for April 3.
- Only business-essential travel is permitted.

Minnkota has been proud of the response of our member cooperatives and businesses across the region. Cooperatives were swift in changing their operations to serve members digitally as they were forced to close their lobbies. Companies such as Digi-Key and Anderson Fabrics reprioritized to help support the nation's growing health care needs. This response truly has shown the cooperative principle of Commitment to Community.

Electricity is a critical, 24/7 component of everyday life. Minnkota remains vigilant in monitoring the situation and keeping its workplace safe and functional so that our members can do the same at their homes, farms and businesses.

For more information about the coronavirus and how to prevent the spread, please visit the Centers for Disease Control and Prevention website – www.cdc.gov.



Mike Block stands alongside his Stratasys 3D printer within the ELITE Additive offices in Bemidji, Minn. Block founded the company in 2017 and has worked with clients from industries around the globe.



Every dimension of development

3D PRINTING ENTREPRENEUR
FINDS COMMUNITY SUPPORT IN PRINTING
A FUTURE FOR BEMIDJI BUSINESSES

How is the garage treating you?" The words rang in Mike Block's ears, voiced by the entrepreneurial success story across the lunch table – LaValley Industries founder and CEO, Jason LaValley.

It was 2018 and the two were discussing Block's 3D printing startup venture, ELITE Additive. As the company's founder and CEO, Block had been running ELITE out of his garage since November 2017. He told his business mentor that things were going well, but it was getting harder to make phone calls with the background noise of his growing kids.

"Jason said he might have a space for me. We came here and walked in the door," Block recalled from what is now his office, 3D printers tucked against the wall. "He said, 'If you want to move in here, you can.' And I did."

It was the start of a relationship that would give Block the space, resources and guidance necessary to grow ELITE Additive into an asset for companies in Bemidji, Minn. Block now works with around a dozen local and national businesses at any given time, offering services spanning 3D printed prototypes for visual verification, end-use part applications, computer-aided

design (CAD), production consulting and more. His clients cross several sectors, including powersports, energy, dental, automotive, agriculture and aerospace.

"3D printing fits into just about every industry," Block said. "ELITE Additive's mission is to provide advanced manufacturing solutions to the area, promoting more product ideation and faster market entry. We're not only providing 3D printing for companies looking to get their products to market faster. We're also taking current companies who are using 3D printing and helping them increase their throughput."

Local companies have already seen results from ELITE Additive's on-demand manufacturing capabilities. Block said by offering more, faster, these companies have won more business.

"The type of business Mike is building is a vision of what we believe to be the future of manufacturing," LaValley said. "New technologies in 3D printing and automation manufacturing are becoming more of a reality every day."

Living in a material world

Block has been in the 3D printing world since 2008. He attended Bemidji State University (BSU) – one of the first schools in the U.S. with a tailored 3D printing program – and worked several years with 3D printer manufacturing company Stratasys before bringing his expertise back home.

"When I first wanted to start ELITE Additive here in Bemidji, the vision was to have companies use me as a local resource – to be able to leverage the technology and increase further adoption," he said.

ELITE is the only company of its kind in the Bemidji area. However, Block says

the 3D printing industry is making considerable strides.

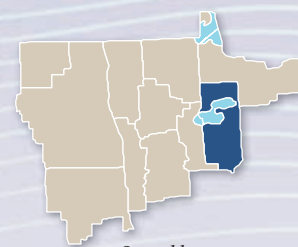
At its base, 3D printing is the practice of taking a digital design file and using a machine to make that design a real object, layer by layer. There are now more than eight different printing technologies available, with the ability to print with plastics, metals, hybrids and beyond. With that flexibility, the industry is evolving from simple prototypes to manufacturing-level applications. Companies can now have parts designed and printed locally, cutting out long overseas lead times and avoiding the risk of waiting weeks for a part that ultimately does not fit the bill.

One of Block's pinnacle projects was working with LaValley Industries engineers to design and print a UV-resistant monitor shroud housing for the inside of excavators. (The LaValley product line includes heavy excavator attachments that enhance the precision and safety of pipe and utility pole handling.)

"The innovation Mike has brought to the table using 3D print manufacturing is a work in process, but has begun to lower lead times and cut costs of some of our legacy products," LaValley said. "It has also helped us lower prototyping costs and lead times in some of our research and development projects."

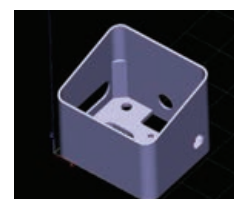
Design for development

Jorge Prince, LaValley Industries chief financial officer, knows firsthand how audacious innovators change the face of a community. He served as the executive director of the Small Business Development Center at BSU and helped Jason start LaValley Industries. Jason eventually recruited him to the LaValley team, but Prince retained his eye for Bemidji development.



Served by
**Beltrami Electric
Cooperative**
Bemidji, Minn.

- Incorporated – July 20, 1940
- Board members – 9
- General manager – Jared Echternach
- 2019 members – 21,219
- Miles of line – 3,518
- Capital credits returned to members – \$24.8 million



From technical to tactile – ELITE Additive works with clients to make their digital designs a reality. Block teamed up with LaValley engineers to complete a computer-aided design file (top) of a monitor shroud that he was then able to print on-site (bottom).



ELITE Additive CEO Mike Block (right) joins LaValley Industries CFO Jorge Prince in the LaValley shop. The two companies collaborated on a monitor shroud for LaValley products and continue to find ways to support each other's goals.

"At LaValley, we talk to a lot of entrepreneurs, especially in the early stage. They see us as a successful model," Prince said. "It was encouraging to see a young person with a vision and an idea for a new business in our community that was moving new types of technology forward."

Prince said renting space to Block has allowed them to not only mentor ELITE Additive, but also examine additional opportunities to utilize 3D printing.

"Having him here allows us to dream a little," he said. "We're learning. But the likelihood that we would be exploring or studying it in house without Mike being here is pretty low."

That ability to dream is what Prince believes can draw more high-impact businesses to the Bemidji area. He says companies that are on the forefront of technology – such as in manufacturing, automation, etc. – also create better-paying jobs that give people greater opportunities and the desire to stick around.

"Bemidji has so many amenities that other places don't have, but what we need is that good industrial base. If we had it, in combination with everything else we have, we could really slingshot this community," Prince said. "But it takes risk takers. It takes people like Jason and Mike and others like them."

Support from all sides

Beltrami Electric Cooperative, which serves LaValley Industries, ELITE Additive

and many neighboring businesses, has also become a partner in growing the city's economy. President and CEO Jared Echternach says it's essential that cooperatives help communities prosper.

"Support can be as simple as connecting manufacturer to buyer or as complex as property acquisition and financing," he said. "Either way, we are here to help facilitate that process."

Echternach remembers when Block first introduced ELITE to the Greater Bemidji Development Corporation. "I thought, wow – this guy has an amazing talent, is passionate about what he creates and, even more important, he wants to put that talent and passion to use in Bemidji because of our quality of place."

"Bemidji is where we've planted our feet. We've dug in, because of the mindset for economic development and supporting new technology for future manufacturing," Block said. "My hope is to have someone say, 'You printed this prototype for us, and now we're a company of 10,000.' That, to me, would be exciting and fulfilling."

Block has big goals for the future of ELITE Additive. He wants to expand awareness of 3D printing capabilities to grow his client base, create a facility to be fully autonomous in manufacturing, and become involved in life-changing projects like printing prosthetic limbs for veterans.

For now, he is grateful for Jason, Jorge, and the local network of support that pulled him out of his Bemidji garage and into partnerships across the region.

"There were so many people in the community that surrounded me and wanted to help – you don't see that elsewhere," he said.

By Kaylee Cusack / Photography Kevin Jeffrey



Dan Inman (middle) joins GGFYP president Kyle Kvamme (left) and GGFYP executive director Kathryn Kester (right) onstage to receive the Grow Grand Award on behalf of Minnkota.

Minnkota named GGFYP “Best Place to Work”

Minnkota Power Cooperative has been named the best workplace for young professionals in the Greater Grand Forks area.

The Greater Grand Forks Young Professionals (GGFYP) organization presented Minnkota with the Grow Grand Award during its 2020 Annual Launch event. The annual award recognizes a company that has a high percentage of young professionals in its workforce, has appealing and unique benefits, offers competitive compensation, supports employee professional development and is generally attractive to young professionals.

Approximately half of Minnkota’s Grand Forks employees are considered young professionals, a percentage that has risen dramatically over the past decade. Several have worked their way into leadership positions, taking an active role in guiding the future of the cooperative.

Nominations for the Grow Grand Award came from GGFYP members and those familiar with the organization. All employers around the Grand Forks region are eligible for the honor, but only one nomination is chosen each year.

Minnkota, Square Butte annual meetings postponed

The Minnkota Power Cooperative and Square Butte Electric Cooperative annual meetings have been postponed indefinitely. The meetings, originally scheduled for April 3, provide reports on operations and year-end results, the election

of directors and adoption of policy resolutions on issues of importance to the membership. Information will be provided to members and guests when a new date is selected by the boards of the cooperatives.

Minnkota’s Integrated Resource Plan accepted

Minnkota’s Integrated Resource Plan (IRP) was accepted by the state of Minnesota’s Public Utilities Commission (PUC) on Feb. 27.

Jamie Overgaard, Minnkota’s rates, load and planning manager, helped lead the effort in developing the 15-year plan, which is established to show that Minnkota’s generation, transmission and demand response resources are adequate in meeting the cooperative’s forecasted energy requirements.

“It’s definitely a team effort,” Overgaard said of the IRP process. “It takes roughly six months to put it together and a lot of effort from many different departments. We’re happy to move forward with a positive outcome.”

Minnkota staff met with the PUC in St. Paul Feb. 27 to answer questions and discuss how Minnkota will maintain or improve electric service to consumers, maintain low electric rates and minimize environmental impacts and the risk of adverse effects from financial, social and technological influences. Minnkota will submit its next IRP in 2022.



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