

GREEN INNOVATION FOR OUR SHARE OF MINNESOTA

House Climate and Energy Committee

January 11, 2023

Brian Burandt, Vice President Power Supply & Business Development

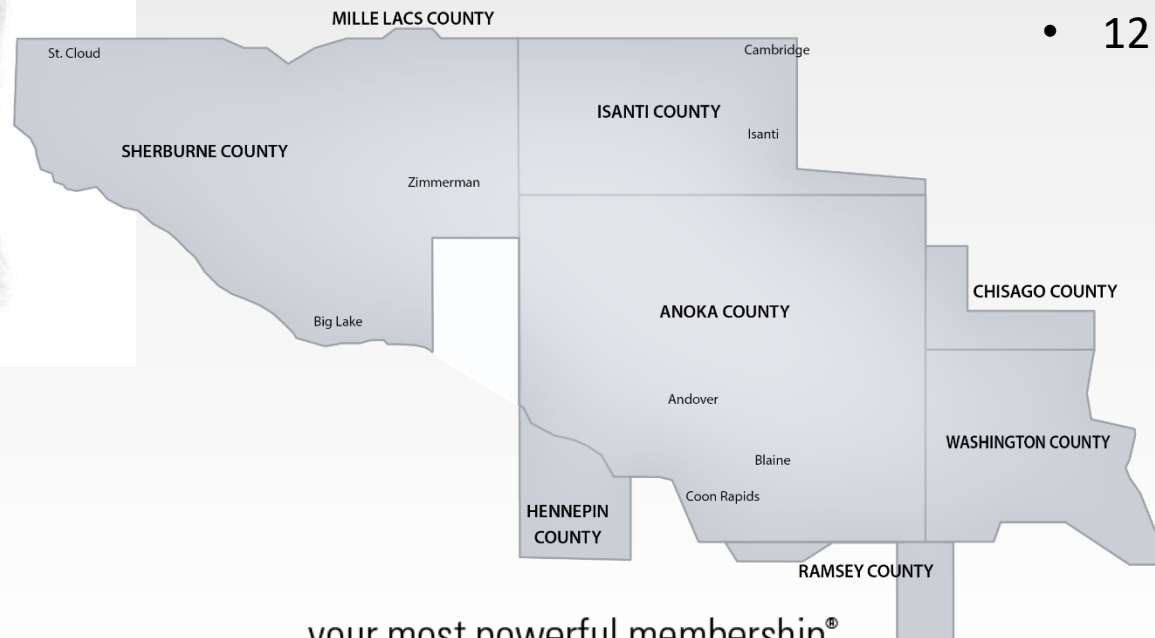
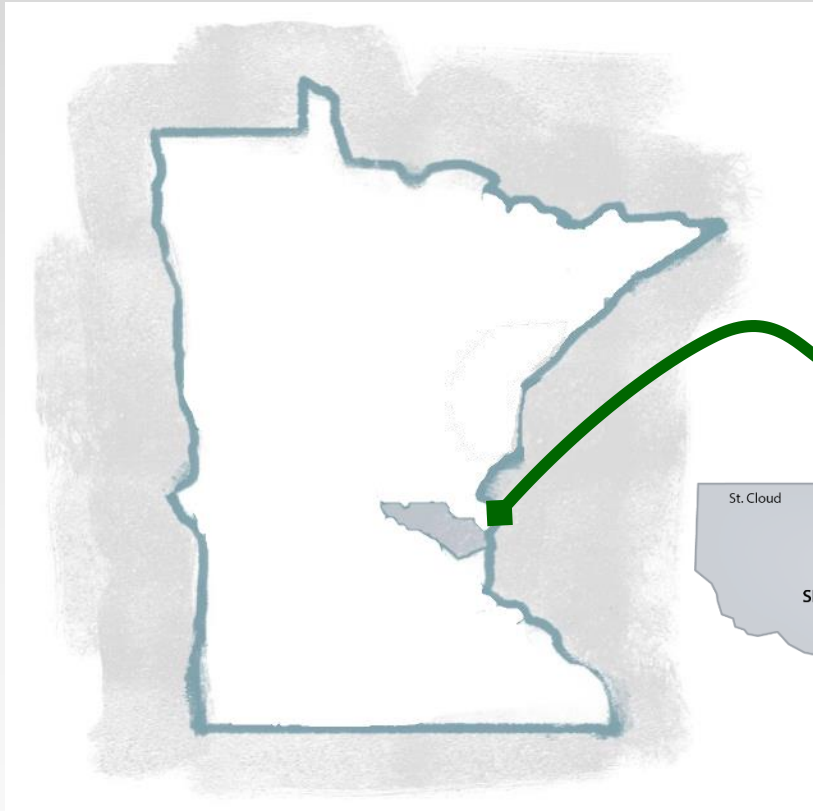
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- **Battery Storage**
 - Next Use-Case – Distribution Capital Deferral/Reliability
- **Solar – Brightfield Pilot with the State of Minnesota**
 - Anoka-Ramsey Closed Landfill
- **New Power Supply Structure**
 - Effective January 1, 2023

CONNEXUS AT A GLANCE



- COOPERATIVE BUSINESS MODEL
- 8-PERSON CONSUMER ELECTED BOARD
- 3RD LARGEST ELECTRIC UTILITY IN MN
 - 144,500 member accounts
 - \$254M revenue
 - 69% residential
 - 215 employees
 - 9,490 miles of line
 - 2/3 underground
- STATE LEGISLATIVE ENGAGEMENT
 - 12 senators, 20 representatives

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CONNEXUS EXPERIENCE WITH BATTERY STORAGE



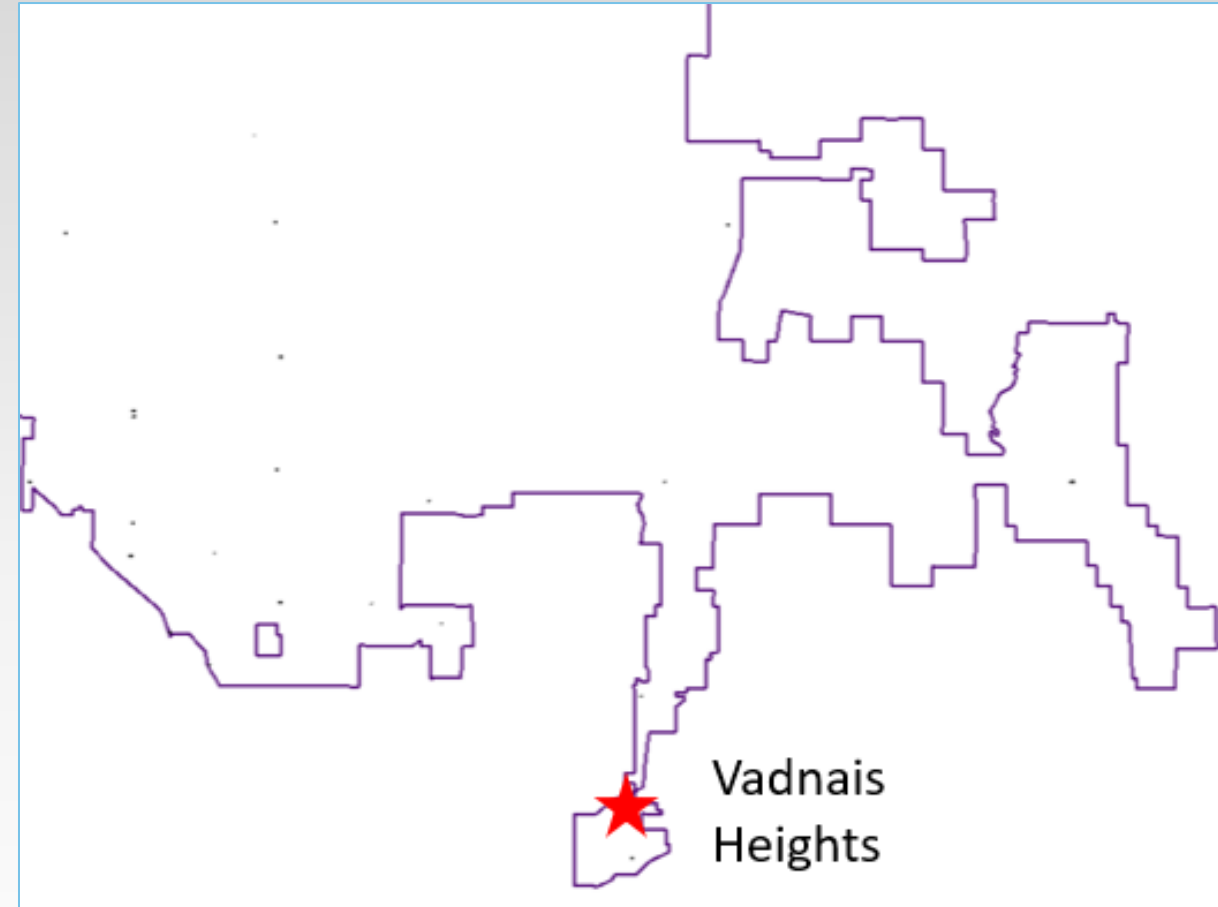
- Year 5 operating a 15 MW battery system entirely charged from solar for demand response
- 1st and only system of this type in the region
- Developed processes that drive grid benefits
 - Integrated into the system with widespread knowledge throughout Connexus





Capital construction deferment

- Right-size solution
- Low-growth areas
- Uncertainty of long-term needs
- Edge of the service territory

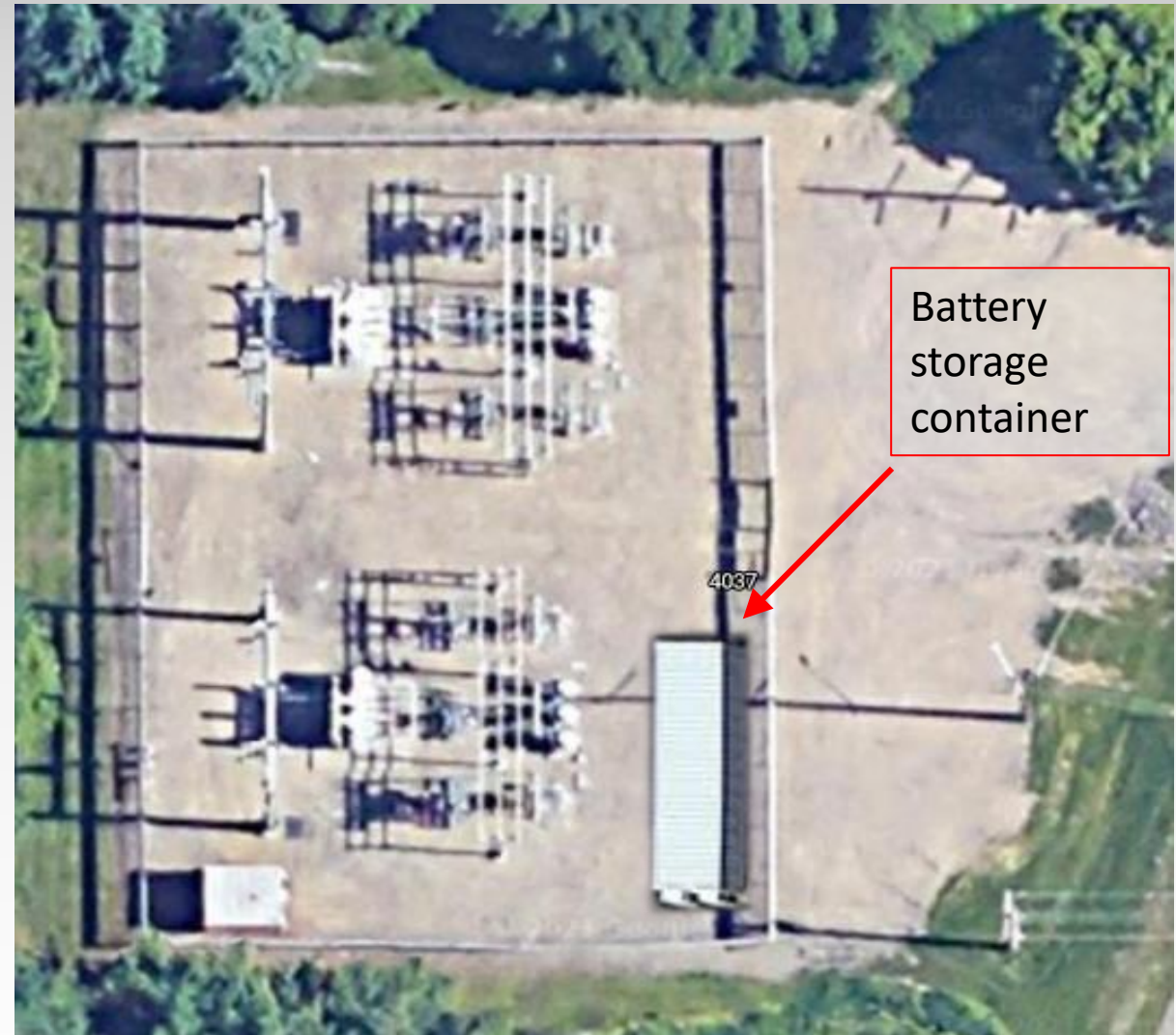


NEXT USE-CASE...VADNAIS HEIGHTS BATTERY



2024 Commercial operation

- **2 MW / 8 MWh battery**
 - Demand response = 1,000 houses for 4 hours
- **Sophisticated strategy in lieu of traditional distribution investment**
- **1st project of its kind in the region**



CONNEXUS SOLAR...20 MW DISTRIBUTION INTERCONNECTED



2018 Projects

- 10 MW fixed tilt
- Coupled with battery storage



2020 Projects

- 10 MW single axis tracking bi-facial panels
- No battery storage



4 site Total

- 120 acres planted in pollinator habitat



- **Site controlled by MPCA**
- **267 acre – total site area**
 - 128 acres – buffer/buildable area
- **Top 5 development score of the 110 landfills studied in the:**
 - 2020 Feasibility of Solar Development on State-Managed Closed Landfills: A Report to the Legislature





- **Option land to be included a in 2023 Request for Proposal (RFP) for 10 MW of solar in the Connexus service area**
 - Execute agreements with the Minnesota Pollution Control Agency to facilitate the beneficial reuse of the closed Anoka-Ramsey landfill with 4-6 MW of solar
- **Bringing 10 MW of solar into commercial operation by year-end 2024**



- **Effective January 1, 2023 => Connexus transitioned to a Customer and exited Great River Energy membership**
- **Connexus is now solely responsible for all future resource additions**
 - Developing a Resource Plan in 2023 for our board's approval to serve the membership with affordable and reliable electricity
- **Connexus will continue to innovate by greening the grid and sharing those practices with others**