Crowned Ridge Energy Storage I, LLC

NextEra Energy Resources

South Dakota Public Utilities Commission: Public Input Meeting

Clay Cameron - Executive Director

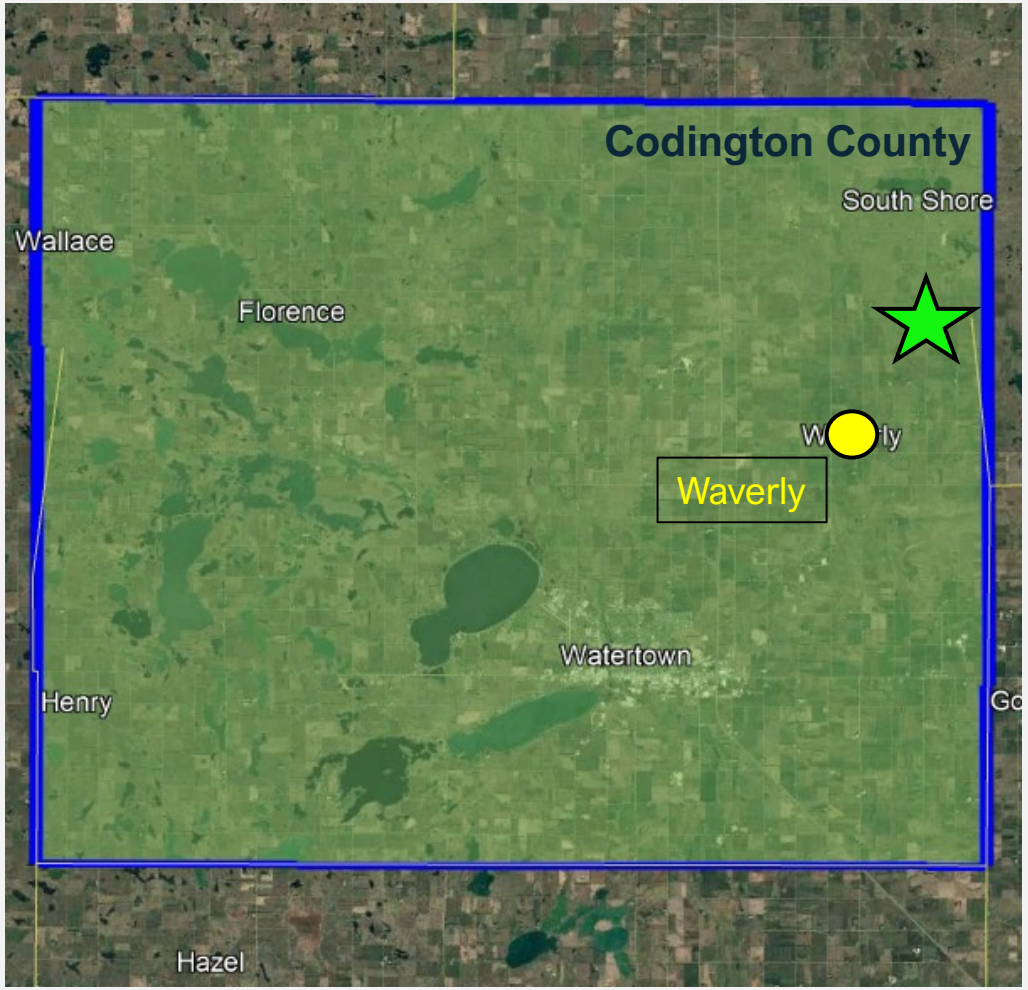
July 1st, 2026

Agenda

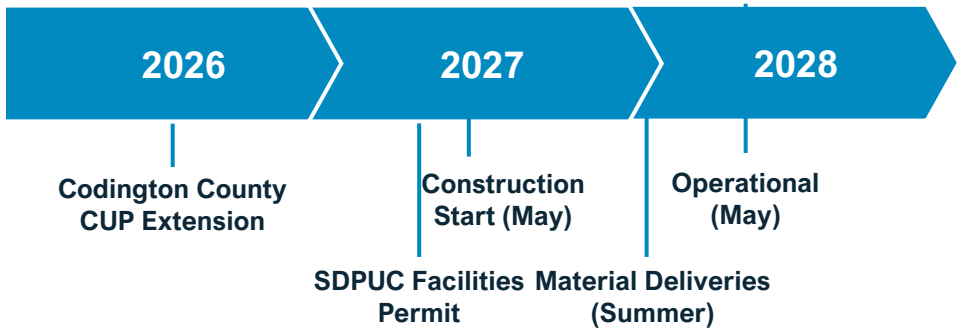
1. Project Overview
2. NextEra Energy Resources Introduction
3. Battery Energy Storage Benefits
4. Battery Energy Storage System Overview
5. Safety & Standards
6. Community Commitment

Crowned Ridge Energy Storage I Project Overview

- Located in Codington County
- Approximately 52.7-acre project area
- BESS expected to occupy 7.8 acres within the project area
- 120-megawatt, 4-hour battery energy storage project (480 MWh)
- Commercial operation targeted for May 2028
- 35-year project life



Crowned Ridge Energy Storage I: Project Timeline



NextEra Energy Resources, LLC

One of America's largest infrastructure developers, NextEra Energy Resources subsidiaries build all forms of energy across renewables, battery energy storage, natural gas and nuclear

NextEra Energy Resources subsidiaries:

- **American-owned and operated company** with more than **35 years** of energy infrastructure experience
- **Proven track record** of being a good neighbor through **$3.1 MM** invested local community programs (2025) and **$260 MM+** in property taxes and fees (2025).
- Committed to enhancing **energy reliability, sustainability, and safety** for communities nationwide
- **Trusted energy provider** working with local utilities in **41 states across 400+ projects**

22 GW Wind

10 GW Solar

5 GW Battery Storage

Enough wind and solar energy to power ~11 million homes

Crowned Ridge Energy Storage I, LLC

NextEra Energy Resources Subsidiaries in South Dakota

- Investing in South Dakota since 2003
- Own and operate 4 wind energy centers
- Two battery energy storage projects in development

Why battery energy storage systems (BESS) matter

Battery energy storage systems ensure your community has reliable power when you need it most

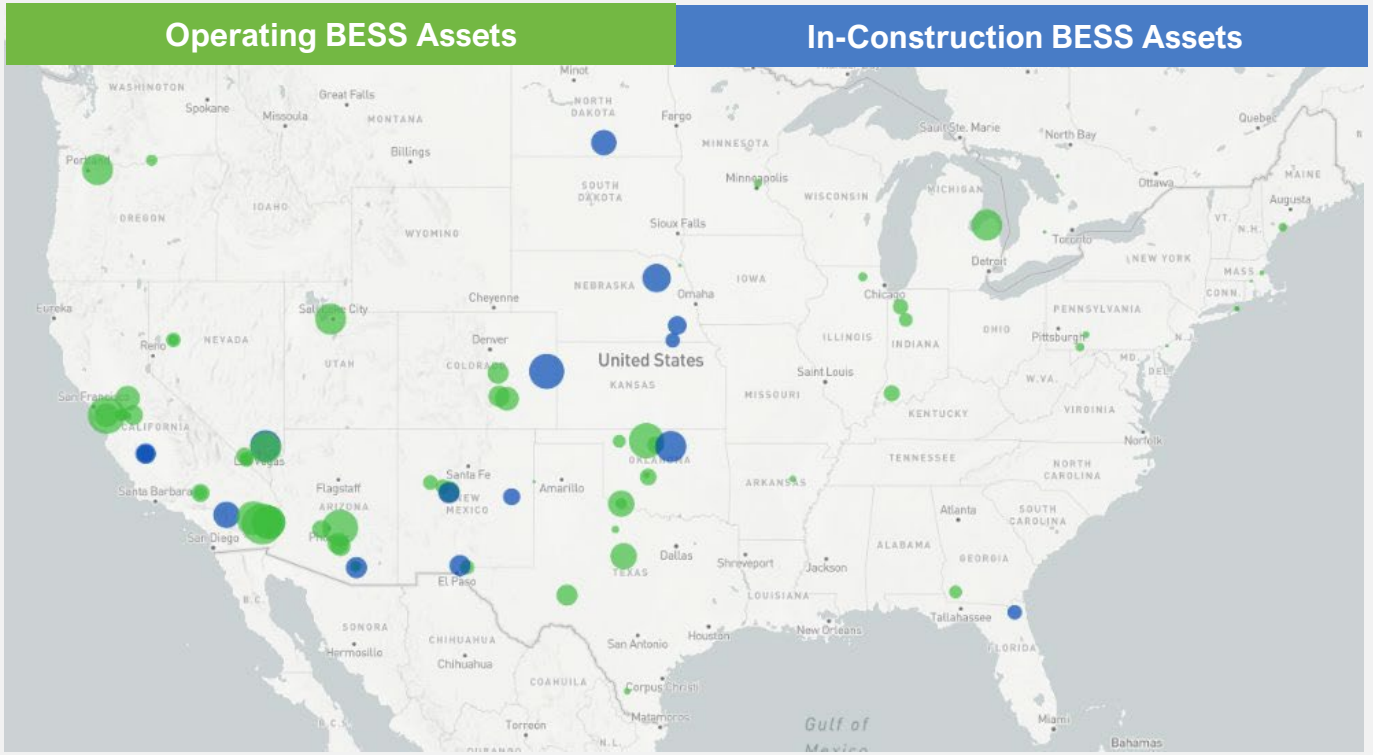
- **Keeps your power reliable:** Battery storage balances and improves grid operations
- **Strengthens energy independence:** Local energy supply reduces reliance on distant power sources
- **Supports American competitiveness:** Battery storage provides the reliable, clean energy US manufacturing needs to compete
- **Reduces costly upgrades:** By improving grid efficiency, delays power plant and transmission upgrades
- **Makes renewable energy work around the clock:** Stores wind and solar energy when it's plentiful and delivers it when your community needs it most

Why communities choose NextEra Energy Resources

Trusted by communities nationwide, NextEra Energy Resources benefits from over a decade of safe BESS operations

Collectively, NextEra Energy Resources subsidiaries are the largest developer, owner and operator of Battery Energy Storage facilities in the U.S.[1]

- **Industry expertise:** Over 60 battery energy storage systems safely operating across the U.S. and Canada
- **Proven safety record:** Decade+ of safe operations with rigorous safety protocols and emergency response planning
- **Community benefits:** Our projects increase grid reliability, create jobs, boost local tax revenue and contribute to affordable energy
- **Trusted relationships:** Built through decades of serving utility, commercial and industrial customers

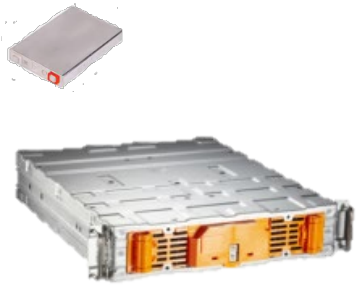


1. Wood Mackenzie BESS market study (2026) and NextEra Energy investor materials supplemental resources – Generation Portfolio 03/31/2026

Inside a battery energy storage system

Modular and outdoor battery energy storage cabinet simplifies site design and enhances safety

Cell & Module



- Battery cells are the basic building blocks
- Multiple cells are grouped into modules

Rack

- Multiple modules are stacked within racks
- Includes localized battery management system and protection systems

Cabinets

- Racks are housed in cabinets; outdoor design allows safe maintenance without entering cabinets
- Advanced thermal management system maintains optimal temperatures
- Multiple safety systems including fire detection and automatic shutdown
- Energy Management System manages charging, discharging and system safety

The flow of energy: from generation to grid integration

Understanding the process of electricity conversion within our battery energy storage systems is simple

Charging the Batteries

- Energy produced by solar, wind, and gas-fired power generation facilities is safely housed in battery storage cabinets

Converting DC ⟷ AC

- Smart inverters efficiently convert DC energy to AC energy, which is ready to be used by the grid

Voltage increase with transformers

- Transformers step up the voltage of AC energy at substations, to match transmission requirements

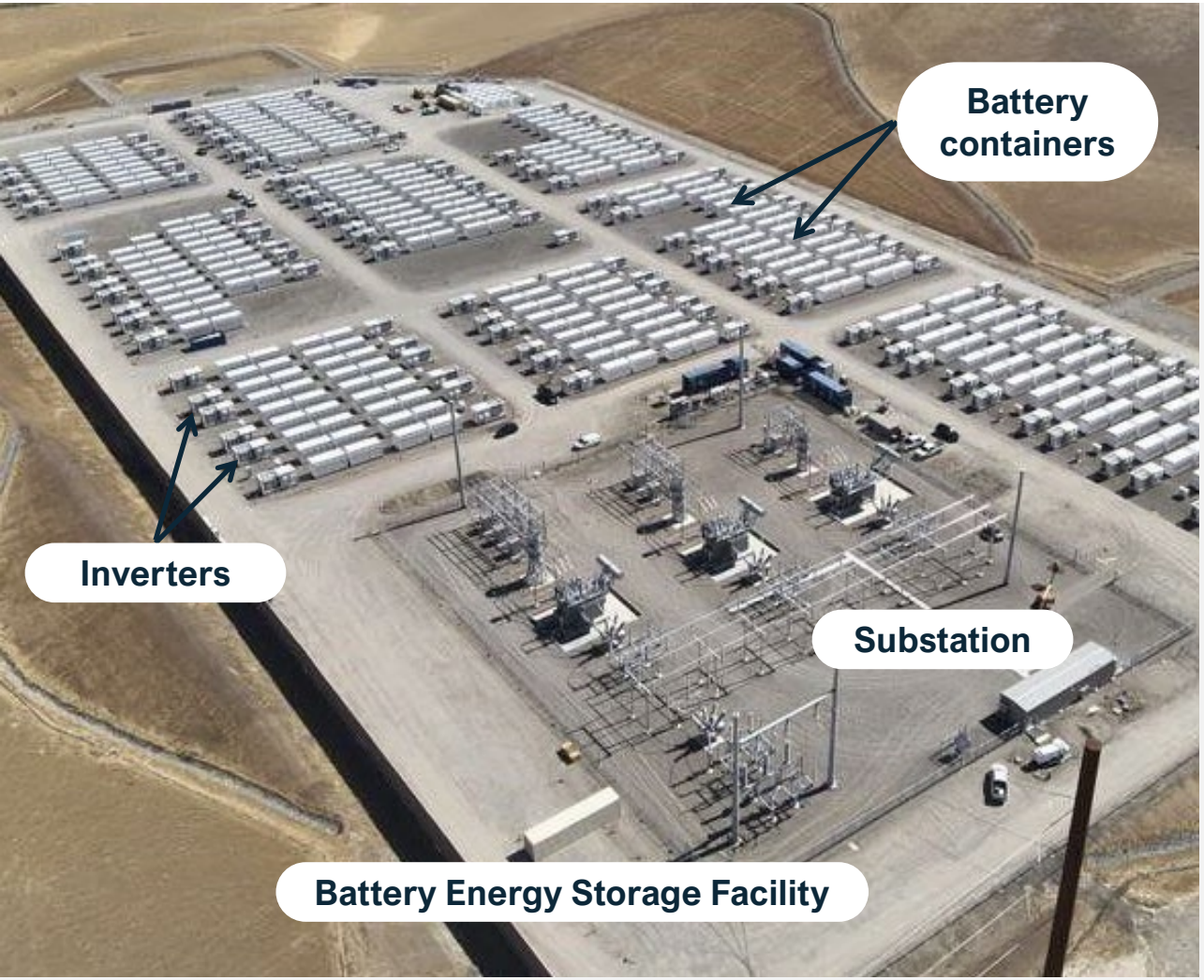
Grid interconnection

- Converted AC energy is delivered into the grid, providing reliable electricity when it's most needed

Process happens automatically and safely, ensuring the grid receives reliable power without disruption

Battery energy storage facility – typical site layout

Battery energy storage systems are flexible and scalable, tailored to meet site needs

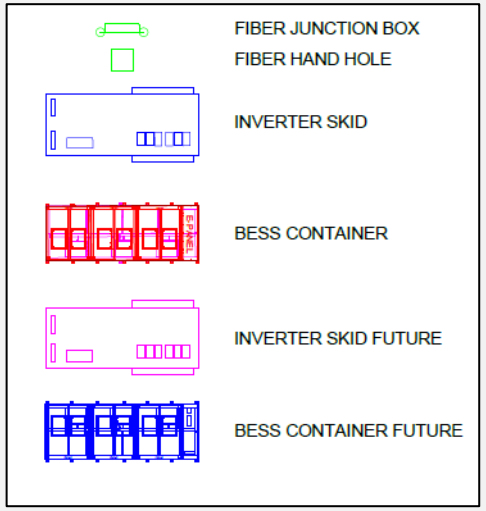


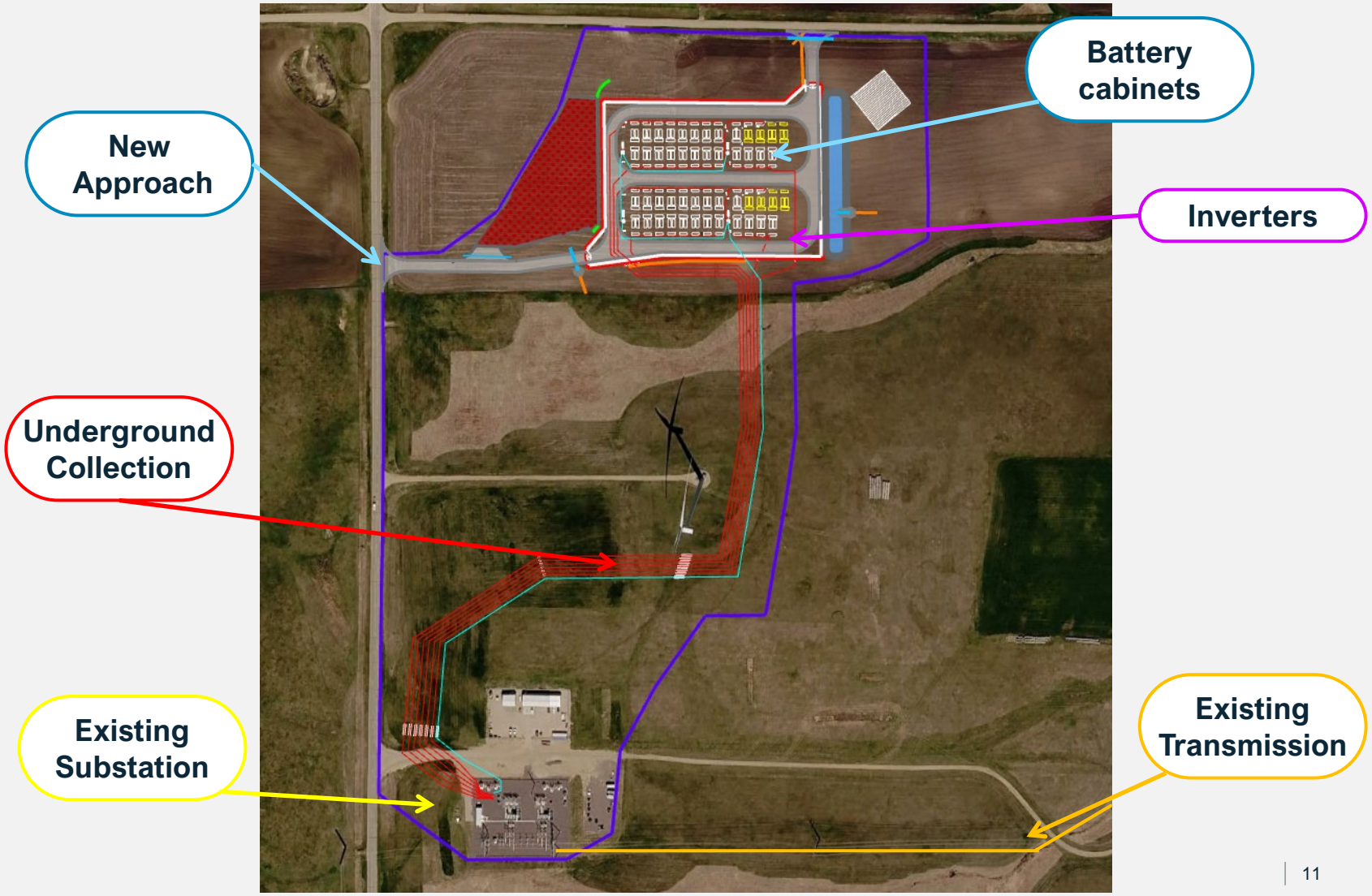
- **Minimal community impact**
  - Small footprint - only ~10 acres for 100 MW (4hr), minimizing land disturbance
  - A single cabinet can provide energy for over 700 homes for 4 hours daily(1)
  - Designed to adhere to specific site requirements
  - NextEra Energy Resources complies with local and county noise ordinances, and we carefully design the battery site to minimize sound impacts.
- **Strategically located near existing infrastructure to reduce disruption**
  - Close to substation
  - May be standalone or co-located with energy projects
- **Safety features**
  - Entire site fenced with security gates
  - Access roads for operations, maintenance and safety

1) Based on average energy use by U.S. household from the EIA in 2021.

Crowned Ridge Energy Storage I: Preliminary Site Layout

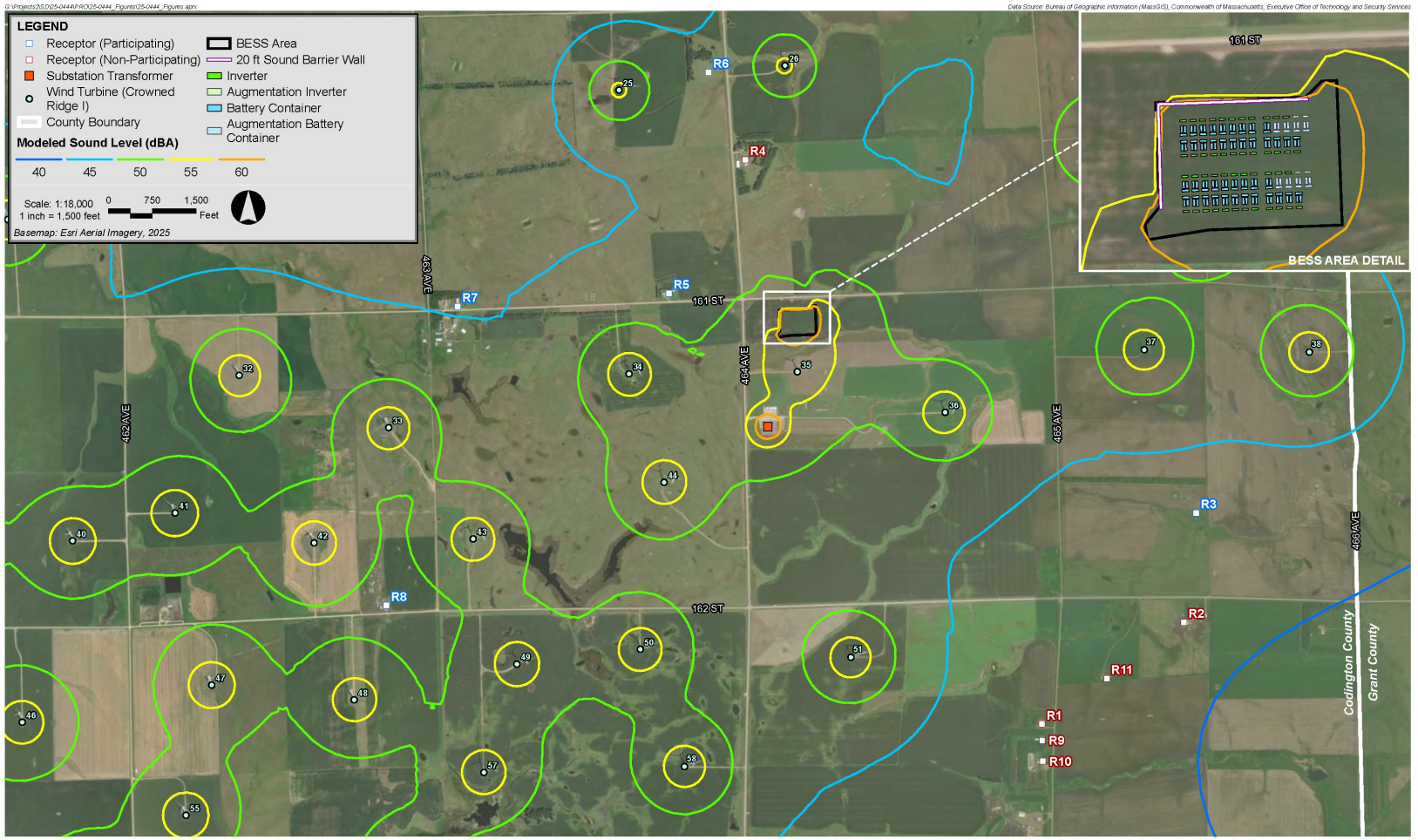
- Project anticipates 126 batteries during initial build
- 150 batteries by the end of the project's life
- Utilizes existing collection substation and transmission via underground connection





Crowned Ridge Energy Storage I: Sound Levels

Project is compliant with sound regulations requested by Codington County - 50dBA sound level limit from participating occupied residences and 45dBA sound level limit for non-participating occupied residences



Crowned Ridge I BESS Codington County, South Dakota

Epsilon

Figure 3
Sound Level Modeling Results

Battery energy storage systems – a layered approach to safety

Our comprehensive safety systems protect your community through multiple layers of protection

Codes & Standards

- **NFPA 855 and International Fire Code compliance** standards specifically designed for energy storage systems
- **UL 1973 and UL 9540 certified batteries** with rigorous thermal runaway testing
- **Regulatory coordination** with government officials to meet community's safety needs

Physical Safeguards

- **Advanced detection systems** with smoke and gas monitoring alerts both our control center and local site
- **Thermal management** and fire prevention technology maintain safe operating temperatures
- **Strategic spacing and ventilation** with backup power systems ensure secure operations

Controls

- **Smart battery monitoring** continuously tracks voltage, temperature & performance to detect any changes
- **Remote safety capability** allows safe system shutdown from our control center if needed
- **Site controllers** manage power flows and all safety systems

Planning and Monitoring

- **24/7 monitoring** from our Renewable Operations Control Center (ROCC) tracks all facilities around the clock
- **Emergency action plans** include detailed response procedures
- **Comprehensive training** and resources for your local fire department

Key takeaways: safe and reliable energy solutions for your community

NextEra Energy Resources subsidiaries are committed to shaping America's energy future, providing reliable, low-cost energy solutions

With our industry leadership and depth of experience we ensure:

- **Regional grid reliability:** Our systems stabilize the power grid and support greater renewable penetration
- **Community enhancement:** We contribute to local economies by increasing tax revenue, supporting local programs, improving grid reliability and creating jobs
- **Safety excellence**: Over a decade of safe operations with 24/7 monitoring and comprehensive emergency response
- **Collaborative relationships**: As America's battery storage leader, we're committed to being a good neighbor for years to come

Thank you